



## Examples of Common Tasks

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## Password Change

### Changing the Password After Restore Factory Default

#### Request

#### Login:

```
curl -k -d "<aaaLogin inName='admin' inPassword='xyz' />"  
https://10.10.10.10/nuova  
<aaaLogin cookie="" response="yes" outCookie="7a62a55062/c4966684-e05e-42f3-3034-27aa36ab3689"
```

```
outRefreshPeriod="600" outPriv="admin" outSessionId="3"
outVersion="531.04.558-dev-abcd.202209141408"
outStatus="Warning : Please change default password."> </aaaLogin>
```

### Changing Password

```
curl -k -d '
<configConfMo cookie="cc6532f3e0/6211cc8e-391a-0ca0-91aa-27fa3454bd40"
dn="sys/user-ext/user-1" inHierarchical="false">
<inConfig>
<aaaUser name="admin" id="1" pwd="xyz@123" ></aaaUser>
</inConfig>
</configConfMo>
' https://10.10.10.10/nuova
<configConfMo dn="sys/user-ext/user-1"
cookie="cc6532f3e0/6211cc8e-391a-0ca0-91aa-27fa3454bd40" response="yes">
<outConfig>
<aaaUser id="1" accountStatus="active"
name="admin" priv="admin" pwd="" adminAction="no-op"
dn="sys/user-ext/user-1" status="modified" ></aaaUser></outConfig>
</configConfMo>
```



#### Note

- After the password is updated, the session is closed and no more queries are processed using this same cookie. Any open sessions in other user interfaces is also closed.

## Changing Password on Password Expiry

### Request

#### Login:

```
curl -k -d "<aaaLogin inName='admin' inPassword='xyz@123'/>"
https://10.10.10.10/nuova
<aaaLogin cookie="" response="yes"
outCookie="48d3bbb79b/ab09da3b-61f5-a4e0-23ae-f943ab37be95"
outRefreshPeriod="600" outPriv="admin" outSessionId="1"
outVersion="531.04.558-dev-abcd.202209141408"
outStatus="Warning : Your Cisco-IMC password has expired.
Please reset your password IMMEDIATELY to be able to access your service.">
</aaaLogin>
```

#### Changing Password:

```
curl -k -d '
<configConfMo cookie="ab52d8fd5b/6927984f-86da-cf8f-7208-714d76291f9c"
dn="sys/user-ext/user-1" inHierarchical="false">
<inConfig>
<aaaUser name="admin" id="1" pwd="Cisco@1234" ></aaaUser>
</inConfig>
</configConfMo>
' https://10.10.10.10/nuova
<configConfMo dn="sys/user-ext/user-1"
cookie="ab52d8fd5b/6927984f-86da-cf8f-7208-714d76291f9c" response="yes">
<outConfig>
<aaaUser id="1" accountStatus="active" name="admin" priv="admin"
pwd="" adminAction="no-op" dn="sys/user-ext/user-1" status="modified" >
</aaaUser></outConfig>
</configConfMo>
```

**Note**

- After the password is updated, the session is closed and no more queries are processed using this same cookie. Any open sessions in other user interfaces is also closed.

# Secure Boot Certificate Management

## Getting the Secure Boot Certificate Management Class ID

**Request**

```
curl -k -d '<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-7a0c6f23fc90"
inHierarchical="false" classId="secureBootCertificateManagement"/>'
https://10.10.10.10/system
```

**Response**

```
<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-7a0c6f23fc90"
response="yes" classId="secureBootCertificateManagement">
<outConfigs>
<secureBootCertificateManagement dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt"
uploadStatus="NA" uploadProgress="0%" errorDescription="NA"/></outConfigs>
</configResolveClass>
```

## Getting the Upload Secure Boot Certificate Class ID

**Request**

```
curl -k -d '<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-xxxxxxxxx"
inHierarchical="false" classId="uploadSecureBootCertificate"/>'
https://10.10.10.10/system
```

**Response**

```
<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-xxxxxxxxx" response="yes"
classId="uploadSecureBootCertificate"> <outConfigs> <uploadSecureBootCertificate
dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/upload-secure-boot-cert" adminAction="no-op"
protocol="none" remoteServer="" remotefile="" user="" pwd="" certificateId="" certificateContent="Certificate
Content" uploadStatus="NA" uploadProgress="0%"/></outConfigs> </configResolveClass>
```

## Uploading a Secure Boot Certificate

**Request**

```
<configConfMo cookie="ab9ff990fd/605f202e-3d2e-6522-260b-xxxxxxx"
dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/upload-secure-boot-cert"
inHierarchical="false">
<inConfig>
<uploadSecureBootCertificate adminAction="content-cert-upload" certificateContent="
```

```
-----BEGIN CERTIFICATE-----
```

```
Paste Certificate Content here
```

```
-----END CERTIFICATE-----
```

```
" certificateId="7" dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/upload-secure-boot-cert">
</uploadSecureBootCertificate>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/upload-secure-boot-cert"
cookie="a931ba8e05/1303a82b-1a09-8264-a823-xxxxxxxxxx" response="yes">
<outConfig>
<uploadSecureBootCertificate dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/
upload-secure-boot-cert" adminAction="no-op" protocol="none" remoteServer="" remoteFile=""

user="" pwd="" certificateId="" certificateContent="Certificate Content"
uploadStatus="Completed"
uploadProgress="100%" status="modified"/></outConfig>
</configConfMo>
```

## Viewing the Secure Boot Certificate

### Request

```
curl -k -d '<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-7a0c6f23fc90"
inHierarchical="false" classId="secureBootCACertificateInfo"/>' https://10.10.10.10/system
```

### Response

```
<configResolveClass cookie="2bb52d05c9/f17b33c3-ce33-51fe-c2af-7a0c6f23fc90" response="yes"

classId="secureBootCACertificateInfo">
<outConfigs>
<secureBootCACertificateInfo certificateId="1" serialNumber="" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-1"/>
<secureBootCACertificateInfo certificateId="2" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-2"/>
<secureBootCACertificateInfo certificateId="3" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-3"/>
<secureBootCACertificateInfo certificateId="4" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-4"/>
```

```

<secureBootCACertificateInfo certificateId="5" serialNumber="04" countryCode="IN"
state="State"
locality="Locality" organization="ORGCSR" commonName="*Certificate_Name"
issuerCountryCode="US"
issuerState="California" issuerLocality="Newyork" issuerOrganization="Digicert"
issuerCommonName="*Certificate_Name" validFrom="Apr 28 04:25:36 2020 GMT"
validTo="Apr 28 04:25:36 2022 GMT"
dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-5"/>
<secureBootCACertificateInfo certificateId="6" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-6"/>
<secureBootCACertificateInfo certificateId="7" serialNumber="NA" countryCode="NA"
state="NA" locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA"
issuerState="NA" issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA"
validFrom="NA" validTo="NA"
dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-7"/>
<secureBootCACertificateInfo certificateId="8" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-8"/>
<secureBootCACertificateInfo certificateId="9" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-9"/>
<secureBootCACertificateInfo certificateId="10" serialNumber="NA" countryCode="NA" state="NA"

locality="NA" organization="NA" commonName="NA" issuerCountryCode="NA" issuerState="NA"
issuerLocality="NA" issuerOrganization="NA" issuerCommonName="NA" validFrom="NA" validTo="NA"

dn="sys/rack-unit-1/bios/secure-boot-cert-mgmt/secure-boot-cert-info-10"/>
</outConfigs>
</configResolveClass>

```

# Managing Remote Syslog Certificate

## Setting Secure Remotesyslog Primary Server



**Note** TCP protocol must be set to enable Secure syslog.

### Enabling Syslog with TCP Primary Server

#### Request

```

<configConfMo cookie='75060986c1/754a14c8-0b92-4d24-b139-e2905a965c10' inHierarchical='false'

dn='sys/svc-ext/syslog/client-primary'> <inConfig>
<commSyslogClient name='primary' adminState='enabled'

```

```
hostname='10.10.10.10' port='6514' proto='tcp'
dn='sys/svc-ext/syslog/client-primary'/> </inConfig> </configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/syslog/client-primary"
cookie="75060986c1/754a14c8-0b92-4d24-b139-e2905a965c10" response="yes">
<outConfig>
<commSyslogClient adminState="enabled" hostname="10.10.10.10"
name="primary" port="6514" proto="tcp" secureEnabled="disabled"
certificatePresence="no" sslHandshakeStatus="NA" adminAction="no-op"
dn="sys/svc-ext/syslog/client-primary" status="modified" >
</commSyslogClient></outConfig>
</configConfMo>
```

## Enabling Secure Syslog Primary Server

### Request

```
<configConfMo cookie='ed4af4ede4/00ee6783-cf29-e2e0-c071-63e0dd7fcb41'
dn='sys/svc-ext/syslog/secure-rsyslog' inHierarchical='false'> <inConfig>
<enableSecuredRsyslog adminState='enabled' selectServer='1'
dn='sys/svc-ext/syslog/secure-rsyslog'>
</enableSecuredRsyslog></inConfig></configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/syslog/secure-rsyslog"
cookie="ed4af4ede4/00ee6783-cf29-e2e0-c071-63e0dd7fcb41" response="yes">
<outConfig>
<enableSecuredRsyslog dn="sys/svc-ext/syslog/secure-rsyslog"
adminState="enabled" selectServer="" status="modified" >
</enableSecuredRsyslog></outConfig>
</configConfMo>
```

## Setting Secure Remotesyslog Secondary Server




---

**Note** TCP protocol must be set to enable Secure syslog.

---

## Enable Syslog with TCP Secondary Server

### Request

```
<configConfMo cookie='ed4af4ede4/00ee6783-cf29-e2e0-c071-63e0dd7fcb41'
inHierarchical='false' dn='sys/svc-ext/syslog/client-secondary'> <inConfig>
<commSyslogClient name='secondary' adminState='enabled' hostname='10.10.10.11'
port='6514' proto='tcp' dn='sys/svc-ext/syslog/client-secondary'/> </inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/syslog/client-secondary"
cookie="ed4af4ede4/00ee6783-cf29-e2e0-c071-63e0dd7fcb41" response="yes">
<outConfig>
<commSyslogClient adminState="enabled" hostname="10.10.10.11"
```

```
name="secondary" port="6514" proto="tcp" secureEnabled="disabled"
certificatePresence="no" sslHandshakeStatus="NA" adminAction="no-op"
  dn="sys/svc-ext/syslog/client-secondary" status="modified" >
</commSyslogClient></outConfig>
</configConfMo>
```

## Enabling Secure Syslog Secondary Server

### Request

```
<configConfMo cookie='5116687ea4/19c46c01-58bb-5290-ffd2-db5b37cc7a27'
dn='sys/svc-ext/syslog/secure-rsyslog' inHierarchical='false'> <inConfig>
<enableSecuredRsyslog adminState='enabled'
selectServer='2' dn='sys/svc-ext/syslog/secure-rsyslog'>
</enableSecuredRsyslog></inConfig></configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/syslog/secure-rsyslog"
cookie="5116687ea4/19c46c01-58bb-5290-ffd2-db5b37cc7a27" response="yes">
<outConfig>
<enableSecuredRsyslog dn="sys/svc-ext/syslog/secure-rsyslog"
adminState="enabled" selectServer="" status="modified" >
</enableSecuredRsyslog></outConfig>
</configConfMo>
```

## Uploading Remote Syslog Certificate

### Request

```
'<configConfMo
cookie="36f8c563a3/c179b9fb-2364-5356-43cd-0d2349b88d86"
dn="sys/svc-ext/syslog/upload-rsyslog-ca-cert" inHierarchical="false">
<inConfig> <uploadRsyslogCACertificate adminAction="remote-cert-upload"
protocol="scp" remoteServer="10.10.10.10"
remoteFile="/home/xyz/test-cert.pem" user="abc" pwd="password"
selectServer="0" dn="sys/svc-ext/syslog/upload-rsyslog-ca-cert">
</uploadRsyslogCACertificate>
</inConfig> </configConfMo>'
```



**Note** You can use the following values for the parameter `selectServer` parameter:

- 0: Indicates primary and secondary server.
- 1: Indicates primary server.
- 2: Indicates secondary server.

### Response

```
<configConfMo dn="sys/svc-ext/syslog/upload-rsyslog-ca-cert"
cookie="819016008e/afc70624-ae64-a6ad-a988-8baf2936661a" response="yes">
<outConfig>
<uploadRsyslogCACertificate dn="sys/svc-ext/syslog/upload-rsyslog-ca-cert"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
```

```

user="" pwd="" selectServer="" certificateContent="Certificate Content"
uploadStatus="COMPLETED" uploadProgress="100%" status="modified" >
</uploadRsyslogCACertificate></outConfig>
</configConfMo>

```

## Deleting Remote Syslog Certificate

### Request

```

'<configConfMo
cookie="a9c67589b4/963bf304-119d-1ed0-933e-0ac907164491"
inHierarchical="false" dn="sys/svc-ext/syslog/delete-rsyslog-ca-cert">
<inConfig> <deleteRsyslogCACertificate
dn="sys/svc-ext/syslog/delete-rsyslog-ca-cert"
adminState="triggered" selectServer="0" >
</deleteRsyslogCACertificate></inConfig> </configConfMo>'

```



**Note** You can use the following values for the parameter `selectServer`:

- 0: Indicates primary and secondary server.
- 1: Indicates primary server.
- 2: Indicates secondary server.

### Response

```

<configConfMo dn="sys/svc-ext/syslog/delete-rsyslog-ca-cert"
cookie="a9c67589b4/963bf304-119d-1ed0-933e-0ac907164491" response="yes">
<outConfig>
<deleteRsyslogCACertificate dn="sys/svc-ext/syslog/delete-rsyslog-ca-cert"
adminState="triggered" selectServer=""
status="modified" ></deleteRsyslogCACertificate></outConfig>
</configConfMo>

```

## Configuring Network Adapter Properties - Admin Link Training

### Enabling Admin Link Training on External Ethernet Interfaces

#### Request

```

<configConfMo cookie='f9c011cea1/9f019147-a2a6-b2c5-4291-461eb96da395' inHierarchical='false'
dn='sys/rack-unit-1/adaptor-MLOM/ext-eth-2/link-training'><inConfig><adaptorLinkTraining
adminLinkTraining='on'
dn='sys/rack-unit-1/adaptor-MLOM/ext-eth-2/link-training'></adaptorLinkTraining></inConfig>
</configConfMo>

```



**Response**

```
<configConfMo dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-2/link-training"
cookie="f9c011cea1/9f019147-a2a6-b2c5-4291-461eb96da395" response="yes">
<outConfig>
<adaptorLinkTraining dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-2/link-training"
adminLinkTraining="On" operLinkTraining="Off" status="modified"
></adaptorLinkTraining></outConfig>
</configConfMo>
```

## Setting Admin FEC Mode on External Ethernet Interfaces

ConfigResolve parent

**Request**

```
<configResolveParent cookie='df2665019b/db4e749c-cd7e-4510-f9ea-08b5925cb823'
dn='sys/rack-unit-1/adaptor-MLOM/ext-eth-3/link-training'
inHierarchical='true'></configResolveParent>
```

**Response**

```
<configResolveParent cookie="df2665019b/db4e749c-cd7e-4510-f9ea-08b5925cb823" response="yes"
dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-3/link-training">
<outConfig>
<adaptorExtEthIf portId="3" ifType="physical" linkState="up"
mac="68:87:C6:BB:32:2F" transport="CE" adminSpeed="Auto" operSpeed="10Gbps"
adminFecMode="cl91" operFecMode="Off"
dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-3"><adaptorConnectorInfo
rn="connector-info" present="YES" supported="YES" type="SFP-H10GB-CU3M
vendor="CISCO-TYCO
" partNumber="1-2053783-2" partRevision="V"/><adaptorLinkTraining rn="link-training"
adminLinkTraining="Auto" operLinkTraining="Off"/></adaptorExtEthIf></outConfig>
</configResolveParent>
```

ConfigResolve children

**Request**

```
<configResolveChildren cookie='df2665019b/db4e749c-cd7e-4510-f9ea-08b5925cb823'
dn='sys/rack-unit-1/adaptor-MLOM/ext-eth-1' inHierarchical='false'>
</configResolveChildren>
```

**Response**

```
<configResolveChildren cookie="df2665019b/db4e749c-cd7e-4510-f9ea-08b5925cb823"
response="yes">
<outConfigs>
<adaptorConnectorInfo dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-1/connector-info"
present="YES" supported="YES" type="SFP-H10GB-CU3M
" vendor="CISCO-TYCO" partNumber="1-2053783-2
" partRevision="T"/><adaptorLinkTraining
dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-1/link-training"
adminLinkTraining="Auto" operLinkTraining="Off"/><adaptorPortProfiles
dn="sys/rack-unit-1/adaptor-MLOM/ext-eth-1/port-profiles"
portProfilesCount="0" portProfilesName=""></outConfigs>
</configResolveChildren>
```

# Configuring TLS v1.2 and v1.3

## Enabling TLS v1.2

Beginning with release 4.2(2a), Cisco IMC supports enabling or disabling TLS v1.2 and customize the cipher values.

### Request

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="3b09d91cd1/3857fc26-68c5-2cab-412e-1d5f30844ad6"
inHierarchical="false">
<inConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="enabled"></commTlsConfig>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="3b09d91cd1/3857fc26-68c5-2cab-412e-1d5f30844ad6"
response="yes">
<outConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="enabled" tlsConfigSupported="TLSv1.2,
TLSv1.3" status="modified"/></outConfig>
</configConfMo>
- validates
```

## Disabling TLS v1.2

### Request

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="3cdb71b895/01efdfe4-f375-f886-915c-7fe41fae00e1"
inHierarchical="false">
<inConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="disabled"></commTlsConfig>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="3cdb71b895/01efdfe4-f375-f886-915c-7fe41fae00e1"
response="yes">
<outConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="disabled" tlsConfigSupported=" TLSv1.3"
status="modified"/></outConfig>
</configConfMo>
- validates
```

## Disabling TLS v1.2 When Common Criteria (CC) is Enabled

### Request

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="016e17cca5/a349db48-8189-4638-f7d0-d656117f7fbb"
  inHierarchical="false">
<inConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="disabled"></commTlsConfig>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="3b09d91cd1/3857fc26-68c5-2cab-412e-1d5f30844ad6"
response="yes">
<outConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="disabled" tlsConfigSupported="TLSv1.3"

status="modified"/></outConfig>
</configConfMo>
- validates
```

## Setting TLS v1.2: Cipher Mode

### Request

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="eb14e0ab27/ecbbcfef-d3cf-d714-b2f1-da43214dbe49"
inHierarchical="false">
<inConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2CipherMode="Medium"></commTlsConfig>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="eb14e0ab27/ecbbcfef-d3cf-d714-b2f1-da43214dbe49" response="yes">
<outConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="enabled" tlsConfigSupported="TLSv1.2,
TLSv1.3" tlsv2CipherMode="Medium" tlsv2CipherList="ALL:!DH:!EDH:!ADH:!EXPORT40:!EXPORT56:!LOW:
!RC4:AES128-SHA:AES128:+HIGH:+MEDIUM:+EXP:+eNULL"
tlsv3CipherSuite="TLS_AES_256_GCM_SHA384:TLS_
AES_128_GCM_SHA256:TLS_AES_128_CCM_SHA256:TLS_AES_128_CCM_8_SHA256"
status="modified"/></outConfig>
</configConfMo>
- validates
```

## Setting TLS v1.3 Cipher Suite

### Request

```
<configConfMo dn="sys/svc-ext/tls-svc"
cookie="273947dce0/d8adb688-6fe7-c8e1-3e11-511f4f99a298"
```

```

    inHierarchical="false">
<inConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc"
tlsv3CipherSuite="TLS_AES_128_CCM_8_SHA256"></commTlsConfig>
</inConfig>
</configConfMo>

```

**Response**

```

<configConfMo dn="sys/svc-ext/tls-svc"
cookie="273947dce0/d8adb688-6fe7-c8e1-3e11-511f4f99a298" response="yes">
<outConfig>
<commTlsConfig dn="sys/svc-ext/tls-svc" tlsv2Enabled="enabled" tlsConfigSupported="TLSv1.2,
TLSv1.3" tlsv2CipherMode="Medium" tlsv2CipherList="ALL:!DH:!EDH:!ADH:!EXPORT40:!EXPORT56:!LOW:
!RC4:AES128-SHA:AES128:+HIGH:+MEDIUM:+EXP:+eNULL" tlsv3CipherSuite="TLS_AES_128_CCM_8_SHA256"

status="modified"/></outConfig>
</configConfMo>
- validates

```

## Configuring Physical NIC Mode

### Enabling Physical NIC Mode Setting

**Request**

```

"<configConfMo cookie='f893ac28b8/f015e479-9500-f701-fc37-e6cf0d8f2b0a'
dn='sys/rack-unit-1/adaptor-2/general' inHierarchical='true'>
<inConfig> <adaptorGenProfile dn='sys/rack-unit-1/adaptor-2/general'
fipMode='Disabled' vntagMode='Disabled' lldp='Disabled'
portChannelEnable='Disabled' physicalNicMode='enabled'/>
</inConfig> </configConfMo>" https://10.10.10.10/nuova -schema
/home/user/xyz/PNMRACK-OUT.xsd-

```

### Viewing Physical NIC Mode Setting

**Request**

```

"<configResolveClass cookie='498cff7c25/a96e84c3-26a2-156c-deaa-39568e365a64'
inHierarchical='true' classId='adaptorGenProfile'/>"
https://10.10.10.10/nuova -schema /home/user/xyz/PNMRACK-OUT.xsd -

```

## Uploading and Mapping New Image File for FlexMMC

**Getting the Authentication Cookie**

```

curl -k -X POST -d '<aaaLogin inName="admin" inPassword="password"/>'
https://10.10.10.10/nuova

```

### Uploading the File in to IMC Partition

Use the cookie to upload the file to IMC partition.

```
curl -k -d '<configConfMo cookie="d6de151e01/fce94609-b178-67ec-779e-c41c566f8e51"
dn="sys/rack-unit-1/board/storage-flexmmc/download-file">
<inConfig><storageFlexMMCDownloadFile
  adminAction="download-file" dn="sys/rack-unit-1/board/storage-flexmmc/download-file"
  map="nfs" remoteShare="10.10.10.10:/nfsshare" remoteFile="server-CMC.1.1.0.0.iso"
  mountOptions="noauto" location="IMC Images"/> </inConfig> </configConfMo>'
https://10.10.10.10/nuova | xmllint -schema RACK-OUT.xsd -
```

### Reviewing the File Upload Status

```
curl -k -d '<configResolveClass cookie="d6de151e01/fce94609-b178-67ec-779e-c41c566f8e51"
inHierarchical="false" classId="storageFlexMMCDownloadFile"/>' https://10.10.10.10/nuova
|
xmllint -schema RACK-OUT.xsd -
```

### Mapping the File

```
curl -k -d '<configConfMo cookie="d6de151e01/fce94609-b178-67ec-779e-c41c566f8e51"
dn="sys/rack-unit-1/board/storage-flexmmc/file-3"> <inConfig> <storageFlexMMCFile
adminAction="
map-file" dn="sys/rack-unit-1/board/storage-flexmmc/file-3" fileId="3"/> </inConfig>
</configConfMo>' https://10.10.10.10/nuova | xmllint -schema RACK-OUT.xsd -
```

Reboot the server and verify the mapped device is present in **F6**.

## Setting Physical Drive Status Auto Config Mode

Beginning with release 4.2(1a), Cisco IMC supports Physical Drive Status Auto Config Mode.



**Note** This mode is available only on some servers.

The examples in this section show how to use the Cisco IMC XML API to set Physical Drive Status Auto Config Mode. Each example shows the XML API request followed by the response from Cisco IMC.

To enable the Physical Drive Status Auto Config Mode, two new attributes are added under storageController Managed Object:

- `physicalDriveStatusAutoConfigCapable` - To display the capability
- `physicalDriveStatusAutoConfigMode` - To display the configured auto configuration mode

### Viewing the details of the auto config capability and mode of the controller

#### Request

```
curl -k -d '<configResolveClass cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
inHierarchical="false" classId="storageController"/>' https://10.10.10.10/nuova
|xmllint -schema conf/platform/m6_platform/RACK-OUT.xsd -
% Total      % Received % Xferd Average Speed   Time    Time     Time Current
                               Dload  Upload   Total   Spent    Left  Speed
100 1251      0 1122 100    129    1120    128  0:00:01  0:00:01  --:--:--  1122
```

#### Response

```

<?xml version="1.0"?>
<configResolveClass cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
response="yes" classId="storageController">
<outConfigs>
<storageController id="MRAID2" typePlusSlotId="SAS-MRAID2" pid="UCSC-RAID-M6T"
model="Cisco M6 12G SAS RAID Controller with 4GB FBWC (16 Drives)"
productPID="UCSC-RAID-M6T" pciSlot="MRAID2" presence="equipped" raidSupport="yes"
serial="SK94876114" type="SAS" controllerType="RAID" vendor="LSI Logic"
selfEncryptEnabled="no" physicalDriveStatusAutoConfigCapable="yes"
physicalDriveStatusAutoConfigMode="jbod" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-MRAID2"/>
<storageController id="MSTOR-RAID" typePlusSlotId="SATA-MSTOR-RAID"
pid="UCS-M2-HWRAID" model="Cisco Boot optimized M.2 Raid controller"
productPID="UCS-M2-HWRAID" pciSlot="MSTOR-RAID" presence="equipped"
raidSupport="yes" serial="FCH23257H5Q" type="SATA" controllerType="M2HWRAID"
vendor="Marvell" selfEncryptEnabled="no" physicalDriveStatusAutoConfigCapable="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SATA-MSTOR-RAID"/></outConfigs>
</configResolveClass>
- validates

```

## Configuring auto configuration mode as unconfigured-good

### Request

```

<configConfMo cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-MRAID2">
  <inConfig>
    <storageController dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
adminAction="set-physical-drive-status-auto-config-mode"
physicalDriveStatusAutoConfigMode="unconfigured-good"/>
  </inConfig>
</configConfMo>

```

### Response

```

<?xml version="1.0"?>
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070" response="yes">
<outConfig>
<storageController id="MRAID2" typePlusSlotId="SAS-MRAID2"
pid="UCSC-RAID-M6T" model="Cisco M6 12G SAS RAID Controller with 4GB FBWC
(16 Drives)" productPID="UCSC-RAID-M6T" pciSlot="MRAID2" presence="equipped"
raidSupport="yes" serial="SK94876114" type="SAS" controllerType="RAID"
vendor="LSI Logic" selfEncryptEnabled="no"
physicalDriveStatusAutoConfigCapable="yes"
physicalDriveStatusAutoConfigMode="unconfigured-good"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
status="modified"/></outConfig>
</configConfMo>
- validates

```

## Configuring auto configuration mode as JBOD

### Request

```

<configConfMo cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-MRAID2">
  <inConfig>
    <storageController dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
adminAction="set-physical-drive-status-auto-config-mode"
physicalDriveStatusAutoConfigMode="jbod"/>
  </inConfig>
</configConfMo>

```

**Response**

```
<?xml version="1.0"?>
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070" response="yes">
<outConfig>
<storageController id="MRAID2" typePlusSlotId="SAS-MRAID2"
pid="UCSC-RAID-M6T" model="Cisco M6 12G SAS RAID Controller with 4GB FBWC (16 Drives)"
productPID="UCSC-RAID-M6T" pciSlot="MRAID2" presence="equipped"
raidSupport="yes" serial="SK94876114" type="SAS" controllerType="RAID"
vendor="LSI Logic" selfEncryptEnabled="no" physicalDriveStatusAutoConfigCapable="yes"
physicalDriveStatusAutoConfigMode="jbod" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-MRAID2" status="modified"/></outConfig>
</configConfMo>
- validates
```

**Configuring auto configuration mode as raid0-writeback****Request**

```
<configConfMo cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-MRAID2">
<inConfig>
<storageController dn="sys/rack-unit-1/board/storage-SAS-MRAID2"
adminAction="set-physical-drive-status-auto-config-mode"
physicalDriveStatusAutoConfigMode="raid0-writeback"/>
</inConfig>
</configConfMo>
```

**Response****Auto configuration on unsupported controller****Request**

```
<configConfMo cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SATA-MSTOR-RAID">
<inConfig>
<storageController dn="sys/rack-unit-1/board/storage-SATA-MSTOR-RAID"
adminAction="set-physical-drive-status-auto-config-mode"
physicalDriveStatusAutoConfigMode="raid0-writeback"/>
</inConfig>
</configConfMo>
```

**Response**

```
<?xml version="1.0"?>
<configConfMo dn="sys/rack-unit-1/board/storage-SATA-MSTOR-RAID"
cookie="c37dd69229/a4ac0b23-62e3-0939-0b82-89adc050f070" response="yes"
errorCode="2999" invocationResult="unidentified-fail"
errorDescr="Invalid request: This storage controller does NOT support
set-physical-drive-status-auto-config-mode operation "/>
- validates
```

# MCTP SPDM Certificate Management

Beginning with release 4.2(1a), Cisco IMC supports MCTP SPDM Certificate Management.

The example in this section show how to use the Cisco IMC XML API to add MCTP SPDM certificates. The example shows the XML API request followed by the response from Cisco IMC.

To enable MCTP SPDM Certificate Management, four new managed objects are added:

- mctpCertificateManagement
- uploadEndPointRootCACertificate
- endPointRootCACertificate
- endPointRootCACertificateInfo
- endpoint
- endPointCertificateChain

### Viewing the details of the certificate chain for the endpoint with slot id as MRAID

#### Request

```
<configResolveClass cookie="1d487631d0/ec28cbcd-91c1-289f-dbla-ee1dce0c23fc"
inHierarchical="false" classId="endPointCertificateChain"/>
```

#### Response

```
<configResolveClass cookie="1d487631d0/ec28cbcd-91c1-289f-dbla-ee1dce0c23fc"
response="yes" classId="endPointCertificateChain">
  <outConfigs>
    <endPointCertificateChain depth="0" serialNumber="10:03"
countryCode="US" state="Colorado" locality="Colorado Springs"
organization="Broadcom Inc." organizationalUnit="NA" commonName="Aero Device"
issuerCountryCode="US" issuerState="Colorado" issuerLocality="NA"
issuerOrganization="Broadcom Inc." issuerOrganizationalUnit="DCSG"
issuerCommonName="Aero Model" validFrom="Oct 23 01:01:28 2019 GMT"
validTo="Mar 10 01:01:28 2047 GMT" dn="sys/mctp-cert-mgmt/ep-MRAID/cert-chain-0"/>
    <endPointCertificateChain depth="1" serialNumber="10:04"
countryCode="US" state="Colorado" locality="NA" organization="Broadcom Inc."
organizationalUnit="NA" commonName="Aero Model" issuerCountryCode="US"
issuerState="Colorado" issuerLocality="Colorado Springs"
issuerOrganization="Broadcom Inc." issuerOrganizationalUnit="NA"
issuerCommonName="NA" validFrom="Oct 23 00:36:24 2019 GMT"
validTo="Aug 3 00:36:24 2126 GMT" dn="sys/mctp-cert-mgmt/ep-MRAID/cert-chain-1"/>
    <endPointCertificateChain depth="2"
serialNumber="7C:34:E9:BF:E7:44:CF:F3:17:17:6B:BA:80:AA:23:03:CF:8C:96:F3"
countryCode="US" state="Colorado" locality="Colorado Springs"
organization="Broadcom Inc." organizationalUnit="NA" commonName="NA"
issuerCountryCode="US" issuerState="Colorado" issuerLocality="Colorado Springs"
issuerOrganization="Broadcom Inc." issuerOrganizationalUnit="NA"
issuerCommonName="NA" validFrom="Oct 23 00:25:13 2019 GMT"
validTo="Apr 29 00:25:13 2129 GMT" dn="sys/mctp-cert-mgmt/ep-MRAID/cert-chain-2"/>
  </outConfigs>
</configResolveClass>
```

## Configuring TACACS+ Authentication

Beginning with release 4.1(3a), Cisco IMC supports Terminal Access Controller Access-Control System Plus (TACACS+) Authentication. The examples in this section show how to use the Cisco IMC XML API to configure TACACS+ authentication. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Get aaaTacacsPlus, on page 17](#)



- [Get aaaTacacsPlusServer Details, on page 17](#)
- [Set aaaTacacsPlus, on page 18](#)
- [Configure aaaTacacsPlusServer, on page 20](#)
- [Delete a Server, on page 20](#)
- [Get aaaUserAuthPrecedence Details, on page 20](#)
- [Configure authPrece, on page 21](#)

## Get aaaTacacsPlus

### Request

```
<configResolveClass cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"
inHierarchical="false" classId="aaaTacacsPlus"/>
```

### Response

```
<configResolveClass cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"
response="yes" classId="aaaTacacsPlus">
<outConfigs>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication="disabled"
timeout="5"/>
</outConfigs>
</configResolveClass>
```

## Get aaaTacacsPlusServer Details

### Request

```
<configResolveClass cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"
inHierarchical="false" classId="aaaTacacsPlusServer"/>
```

### Response

```
<configResolveClass cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"
response="yes" classId="aaaTacacsPlusServer">
<outConfigs>
<aaaTacacsPlusServer id="1" ipAddress="" port="" key="" adminAction="no-op"
dn="sys/tacacs-ext/server-1"/><aaaTacacsPlusServer id="2" ipAddress="xx.xx.xx.xx"
port="49" key="*****" adminAction="no-op" dn="sys/tacacs-ext/server-2"/>
<aaaTacacsPlusServer id="3" ipAddress="" port="" key="" adminAction="no-op"
dn="sys/tacacs-ext/server-3"/><aaaTacacsPlusServer id="4" ipAddress="" port="" key=""
adminAction="no-op" dn="sys/tacacs-ext/server-4"/><aaaTacacsPlusServer id="5" ipAddress=""
port="" key="" adminAction="no-op" dn="sys/tacacs-ext/server-5"/><aaaTacacsPlusServer id="6"
ipAddress="10.10.10.10" port="49" key="*****"
adminAction="no-op" dn="sys/tacacs-ext/server-6"/>
</outConfigs>
</configResolveClass>
```

## Set aaaTacacsPlus

### Configure aaaTacacsPlus

#### Request

```
<configConfMo cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"
inHierarchical="false" dn="sys/tacacs-ext">
<inConfig>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="disabled" fallbackAuthentication="enabled"
timeout="180"></aaaTacacsPlus>
</inConfig>
</configConfMo>
```

#### Response

```
<configConfMo dn="sys/tacacs-ext" cookie="12584ca24b/c72b7605-3c37-3217-dc04-5b9bca663446"

response="yes">
<outConfig>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="disabled" fallbackAuthentication="enabled"
timeout="180" status="modified"/>
</outConfig>
</configConfMo>
```

### Configure Both aaaTacacsPlus and aaaTacacsPlusServer

#### Request

```
<configConfMo cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
inHierarchical="true" dn="sys/tacacs-ext">
<inConfig>
  <aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication=
"disabled" timeout="50">
    <aaaTacacsPlusServer dn="sys/tacacs-ext/server-1" ipAddress="xx.xx.xx.xx"
port="25" key="server-1"/>
    <aaaTacacsPlusServer dn="sys/tacacs-ext/server-2" ipAddress="xx.xx.xx.xx"
port="30" key="server-2"/>
    <aaaTacacsPlusServer dn="sys/tacacs-ext/server-3" ipAddress="xx.xx.xx.xx"
port="40" key="server-3"/>
  </aaaTacacsPlus>
</inConfig>
</configConfMo>
```

#### Response

```
<configConfMo dn="sys/tacacs-ext" cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
  response="yes">
<outConfig>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication="disabled"
timeout="50" status="modified"><aaaTacacsPlusServer id="1" ipAddress="xx.xx.xx.xx" port="25"

key="*****" adminAction="no-op" rn="server-1" status="modified"/><aaaTacacsPlusServer
id="2"
ipAddress="10.10.1.20" port="30" key="*****" adminAction="no-op" rn="server-2"
status="modified"/><aaaTacacsPlusServer id="3" ipAddress="xx.xx.xx.xx" port="40"
key="*****" adminAction="no-op" rn="server-3" status="modified"/><aaaTacacsPlusServer
id="4" ipAddress="" port="" key="" adminAction="no-op" rn="server-4" status="modified"/>
<aaaTacacsPlusServer id="5" ipAddress="" port="" key="" adminAction="no-op" rn="server-5"
status="modified"/><aaaTacacsPlusServer id="6" ipAddress="xx.xx.xx.xx" port="49" key="*****"

adminAction="no-op" rn="server-6" status="modified"/>
</aaaTacacsPlus>
```

```
</outConfig>
</configConfMo>
```

## Add/Modify/Delete in a Single Request

### Request

```
<configConfMo cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
inHierarchical="true" dn="sys/tacacs-ext">
<inConfig>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication="disabled"
timeout="50">
  <aaaTacacsPlusServer dn="sys/tacacs-ext/server-1" ipAddress="xx.xx.xx.xx" port="25"
key="server-1"/>
  <aaaTacacsPlusServer dn="sys/tacacs-ext/server-2" ipAddress="xx.xx.xx.xx" port="30"
key="server-2"/>
  <aaaTacacsPlusServer dn="sys/tacacs-ext/server-3" adminAction="clear"/>
  <aaaTacacsPlusServer dn="sys/tacacs-ext/server-4" ipAddress="xx.xx.xx.xx" port="40"
key="server-3"/>
</aaaTacacsPlus>
</inConfig>
</configConfMo>
```

### Response

```
Response:
<configConfMo dn="sys/tacacs-ext" cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
response="yes">
<outConfig>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication="disabled"
timeout="50" status="modified"><aaaTacacsPlusServer id="1" ipAddress="xx.xx.xx.xx" port="25"
key="*****" adminAction="no-op" rn="server-1" status="modified"/><aaaTacacsPlusServer
id="2"
ipAddress="xx.xx.xx.xx" port="30" key="*****" adminAction="no-op" rn="server-2"
status="modified"/><aaaTacacsPlusServer id="3" ipAddress="" port="" key=""
adminAction="no-op" rn="server-3" status="modified"/><aaaTacacsPlusServer id="4"
ipAddress="xx.xx.xx.xx" port="40" key="*****" adminAction="no-op" rn="server-4"
status="modified"/><aaaTacacsPlusServer id="5" ipAddress="" port="" key=""
adminAction="no-op" rn="server-5" status="modified"/><aaaTacacsPlusServer id="6"
ipAddress="xx.xx.xx.xx" port="49" key="*****" adminAction="no-op" rn="server-6"
status="modified"/></aaaTacacsPlus>
</outConfig>
</configConfMo>
```

## Configure Using configConfMos

### Request

```
<configConfMos cookie='966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340'
inHierarchical="true" >
<inConfigs>
<pair key='sys/tacacs-ext'>
<aaaTacacsPlus dn="sys/tacacs-ext" adminState="enabled" fallbackAuthentication="disabled"
timeout="50">
<aaaTacacsPlusServer dn="sys/tacacs-ext/server-1" ipAddress="xx.xx.xx.xx" port="25"
key="server-1"/>
<aaaTacacsPlusServer dn="sys/tacacs-ext/server-2" adminAction="clear"/>
</aaaTacacsPlus>
</pair>
</inConfigs>
</configConfMos>
```

**Response**

```
<configConfMos cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
response="yes"><outConfigs><pair key="sys/tacacs-ext"><aaaTacacsPlus dn="sys/tacacs-ext"
adminState="enabled" fallbackAuthentication="disabled" timeout="50" status="modified">
<aaaTacacsPlusServer id="1" ipAddress="xx.xx.xx.xx" port="25" key="*****"
adminAction="no-op" rn="server-1" status="modified"/><aaaTacacsPlusServer id="2"
ipAddress="" port="" key="" adminAction="no-op" rn="server-2" status="modified"/>
<aaaTacacsPlusServer id="3" ipAddress="" port="" key="" adminAction="no-op" rn="server-3"
status="modified"/><aaaTacacsPlusServer id="4" ipAddress="xx.xx.xx.xx" port="40"
key="*****" adminAction="no-op" rn="server-4" status="modified"/><aaaTacacsPlusServer
id="5" ipAddress="" port="" key="" adminAction="no-op" rn="server-5" status="modified"/>
<aaaTacacsPlusServer id="6" ipAddress="xx.xx.xx.xx" port="49" key="*****"
adminAction="no-op" rn="server-6" status="modified"/></aaaTacacsPlus></pair>
<operationStatus>success</operationStatus></outConfigs></configConfMos>
```

## Configure aaaTacacsPlusServer

**Request**

```
<configConfMo cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
inHierarchical="true" dn="sys/tacacs-ext/server-5">
<inConfig>
<aaaTacacsPlusServer dn="sys/tacacs-ext/server-5" ipAddress="xx.xx.xx.xx" port="50"
key="server-5"/>
</inConfig>
</configConfMo>
```

**Response**

```
<configConfMo dn="sys/tacacs-ext/server-5" cookie="966f8cfa3b/ad44b60e-9779-c0c8-
f6f0-f8827da7e340" response="yes">
<outConfig>
<aaaTacacsPlusServer id="5" ipAddress="xx.xx.xx.xx" port="50" key="*****"
adminAction="no-op" dn="sys/tacacs-ext/server-5" status="modified"/></outConfig>
</configConfMo>
```

## Delete a Server

**Request**

```
<configConfMo cookie="966f8cfa3b/ad44b60e-9779-c0c8-f6f0-f8827da7e340"
inHierarchical="true" dn="sys/tacacs-ext/server-x">
<inConfig>
<aaaTacacsPlusServer dn="sys/tacacs-ext/server-x" adminAction="clear"/>
</inConfig>
</configConfMo>
```

**Response**

```
<configConfMo dn="sys/tacacs-ext/server-5" cookie="966f8cfa3b/ad44b60e-9779-c0c8-
f6f0-f8827da7e340" response="yes">
<outConfig>
<aaaTacacsPlusServer id="x" ipAddress="" port="" key="" adminAction="no-op"
dn="sys/tacacs-ext/server-x" status="modified"/></outConfig>
</configConfMo>
```

## Get aaaUserAuthPrecedence Details

**Request**

```
<configResolveClass cookie="ea375e792a/efa7af1b-ae9-73c0-d19f-5c26635007f3"
inHierarchical="false" classId="aaaUserAuthPrecedence"/>
```

### Response

```
<configResolveClass cookie="ea375e792a/efa7af1b-ae9-73c0-d19f-5c26635007f3"
response="yes" classId="aaaUserAuthPrecedence">
<outConfigs>
<aaaUserAuthPrecedence dn="sys/user-ext/auth-precedence" authPrecedence1="tacacs-user-db"
authPrecedence2="local-user-db" authPrecedence3="ldap-user-db"/>
</outConfigs>
</configResolveClass>
```

## Configure authPrece

### Configure authPrece

#### Request

```
<configConfMo cookie="c6a92c0169/c0bc57b5-4a92-47f5-9117-00411dc166e8"
inHierarchical="false" dn="sys/user-ext/auth-precedence">
<inConfig>
<aaaUserAuthPrecedence dn="sys/user-ext/auth-precedence" authPrecedence1="tacacs-user-db"
authPrecedence3="ldap-user-db"></aaaUserAuthPrecedence>
</inConfig>
</configConfMo>
```

#### Response

```
<configConfMo dn="sys/user-ext/auth-precedence" cookie="c6a92c0169/c0bc57b5-4a92-
47f5-9117-00411dc166e8" response="yes">
<outConfig>
<aaaUserAuthPrecedence dn="sys/user-ext/auth-precedence" authPrecedence1="tacacs-user-db"
authPrecedence2="local-user-db" authPrecedence3="ldap-user-db" status="modified"/>
</outConfig>
</configConfMo>
```

## Configuring HTTP and HTTPS Services

Beginning with release 4.1(3a), Cisco IMC supports HTTP services for communication. The examples in this section show how to use the Cisco IMC XML API to configure HTTP services. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Retrieving HTTP and HTTPS Details, on page 21](#)
- [Enabling HTTP, on page 22](#)

## Retrieving HTTP and HTTPS Details

### Get HTTP details

```
<configResolveClass cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
inHierarchical="false" classId="commHttp"/>
```

### Response

```
<configResolveClass cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
response="yes" classId="commHttp"> <outConfigs> <commHttp dn="sys/svc-ext/http-svc"
adminState="disabled" descr="HTTP Service" name="http" port="80" redirectState="enabled"
sessionTimeout="1800" maximumSessions="4" activeSessions="0" proto="tcp" ></commHttp><
/outConfigs> </configResolveClass>
```

### Get HTTPS Detail

```
<configResolveClass cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
inHierarchical="false" classId="commHttps"/>
```

### Response

```
<configResolveClass cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
response="yes" classId="commHttps"> <outConfigs> <commHttps dn="sys/svc-ext/https-svc"
adminState="enabled" descr="Secure HTTP Service" name="https" port="443"
sessionTimeout="1800" maximumSessions="4" activeSessions="1" proto="tcp" >
</commHttps></outConfigs> </configResolveClass>
```

## Enabling HTTP

### Enabling HTTP when HTTPS is Enabled

```
<configConfMo cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
inHierarchical="false" dn="sys/svc-ext/http-svc">
<inConfig>
<commHttp dn="sys/svc-ext/http-svc" adminState="enabled" ></commHttp>
</inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/svc-ext/http-svc"
cookie="ed70e99f8c/ad1478bf-2f69-94e3-853a-bae5f226ce1f"
response="yes">
<outConfig>
<commHttp dn="sys/svc-ext/http-svc" adminState="enabled" descr="HTTP Service"
name="http" port="80" redirectState="enabled" sessionTimeout="1800" maximumSessions="4"
activeSessions="1" proto="tcp" status="modified" ></commHttp></outConfig>
</configConfMo>
```

## Configuring HTTP Boot Device

Beginning with release 4.1(3b), Cisco IMC supports HTTP Boot Capability. HTTP Boot is supported in UEFI Boot Mode only.

The examples in this section show how to use the Cisco IMC XML API to configure HTTP boot device. Each example shows the XML API request followed by the response from Cisco IMC.

### Configuring HTTP Boot device without any specific parameters

#### Request

```
<configConfMo cookie="6b3d5c4773/1652fca0-2e3e-a98b-0a4a-2e2c359e6f1b" inHierarchical="false"
dn="sys/rack-unit-1/boot-precision/http-http_test">
<inConfig>
<lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" />
</inConfig>
</configConfMo>
```

**Response**

```
<configConfMo dn="sys/rack-unit-1/boot-precision/http-http_test"
cookie="6b3d5c4773/1652fca0-2e3e-a98b-0a4a-2e2c359e6f1b" response="yes">
<outConfig>
<lsbootHttp name="http_test" type="HTTP" order="1" state="Enabled"
dn="sys/rack-unit-1/boot-precision/http-http_test" status="modified"/></outConfig>
</configConfMo>
- validates
```

**Configuring HTTP Boot device with required parameters for DHCP****Request**

```
<configConfMo cookie="6b3d5c4773/1652fca0-2e3e-a98b-0a4a-2e2c359e6f1b" inHierarchical="false"
dn="sys/rack-unit-1/boot-precision/http-http_test">
<inConfig>
<lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" slot="10"
port="10" macAddress="ab:cd:ef:ac:df:ad" ipConfigType="DHCP"/>
</inConfig>
</configConfMo>
```

**Response**

```
<configConfMo dn="sys/rack-unit-1/boot-precision/http-http_test"
cookie="6b3d5c4773/1652fca0-2e3e-a98b-0a4a-2e2c359e6f1b" response="yes">
<outConfig>
<lsbootHttp name="http_test" type="HTTP" macAddress="ab:cd:ef:ac:df:ad" slot="10"
port="10" order="1" state="Enabled" ipConfigType="DHCP"
dn="sys/rack-unit-1/boot-precision/http-http_test" status="modified"/>
</outConfig>
</configConfMo>
- validates
```

**Viewing the HTTP Boot Device Details****Request**

```
curl -k -d '<configResolveClass cookie="11470293a5/d2941a5c-b0a1-2f77-c102-a823394633f7"
inHierarchical="false" classId="lsbootHttp"/>' https://10.10.10.10/nuova | xmllint -schema
conf/common/RACK-OUT.xsd -
% Total % Received % Xferd Average Speed Time Time Time Current
Dload Upload Total Spent Left Speed
100 663 0 541 100 122 142 32 0:00:03 0:00:03 --:--:-- 142
```

**Response**

```
<?xml version="1.0"?>
<configResolveClass cookie="11470293a5/d2941a5c-b0a1-2f77-c102-a823394633f7" response="yes"
classId="lsbootHttp">
<outConfigs>
<lsbootHttp name="http_test" type="HTTP" macAddress="aa:aa:aa:aa:aa:aa" iptype="IPv6"
slot="10" port="10" order="1" state="Enabled" ipConfigType="Static" uri="http://cisco.com"
ipaddress="2001:420:5446:2014::330:12" netmaskOrIPv6Prefix="64"
gateway="2001:420:5446:2014::330:1" dnsserver="2001:420:c0e0:1008::118"
dn="sys/rack-unit-1/boot-precision/http-http_test"/></outConfigs>
</configResolveClass>
- validates
```

**Modifying the HTTP Boot Device****Request**

```
<configConfMo cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" inHierarchical="false"
dn="sys/rack-unit-1/boot-precision">
  <inConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" rebootOnUpdate="no">
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" slot="L"
port="20" macAddress="ab:cd:ca:ac:df:ad" ipConfigType="DHCP" />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
purpose="operational" rebootOnUpdate="no" reapply="no" configuredBootMode="Uefi"
lastConfiguredBootOrderSource="BIOS" status="modified"/>
  </outConfig>
</configConfMo>
- validates
```

## Configuring HTTP Boot Devices of IP type IPv4 and IPv6 with Required Parameters for Static

### Request

```
<configConfMo cookie="c95a430d80/8cac361a-46de-1814-17b5-840d22b24b46" inHierarchical="true"
dn="sys/rack-unit-1/boot-precision">
  <inConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" rebootOnUpdate="no">
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" slot="L"
port="20" macAddress="ab:cd:ca:ac:df:ad" ipConfigType="Static"
ipaddress="2001:420:5446:2014::330:12" netmaskOrIPv6Prefix="128"
gateway="2001:420:5446:2014::330:1" dnsserver="2001:420:c0e0:1008::118" iptype="IPv6"
uri="http://cisco.com/a.iso"/>
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_MLOM" state="enabled"
slot="MLOM" port="10" macAddress="aa:aa:aa:aa:aa:aa" ipConfigType="Static"
uri="http://cisco.com/b.iso" iptype="IPv4" ipaddress="10.1.1.10"
netmaskOrIPv6Prefix="255.255.255.0" gateway="10.1.1.1" dnsserver="10.20.20.1"/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

### Response

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="c95a430d80/8cac361a-46de-1814-17b5-840d22b24b46" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
purpose="operational" rebootOnUpdate="no" reapply="no" configuredBootMode="Legacy"
lastConfiguredBootOrderSource="CIMC" status="modified"><lsbootHttp name="http_test"
type="HTTP" macAddress="ab:cd:ca:ac:df:ad" iptype="IPv6" slot="L" port="20" order="1"
state="Enabled" ipConfigType="Static" uri="http://cisco.com/a.iso"
ipaddress="2001:420:5446:2014::330:12" netmaskOrIPv6Prefix="128"
gateway="2001:420:5446:2014::330:1" dnsserver="2001:420:c0e0:1008::118" rn="http-http_test"
status="modified"/><lsbootHttp name="http_MLOM" type="HTTP" macAddress="aa:aa:aa:aa:aa:aa"
iptype="IPv4" slot="MLOM" port="10" order="2" state="Enabled" ipConfigType="Static"
uri="http://cisco.com/b.iso" ipaddress="10.1.1.10" netmaskOrIPv6Prefix="255.255.255.0"
gateway="10.1.1.1" dnsserver="10.20.20.1" rn="http-http_MLOM"
status="modified"/></lsbootDevPrecision></outConfig>
</configConfMo>
- validates
```



## Configure with Parent and child hierarchy

### Request

```
<configConfMo cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" inHierarchical="false"
dn="sys/rack-unit-1/boot-precision">
  <inConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" rebootOnUpdate="no">
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" slot="10"
port="10" macAddress="ab:cd:ef:ac:df:ad" ipConfigType="DHCP" />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
purpose="operational" rebootOnUpdate="no" reapply="no" configuredBootMode="Uefi"
lastConfiguredBootOrderSource="BIOS" status="modified"/>
  </outConfig>
</configConfMo>
- validates
```

## Modifying HTTP Boot Devices of IP type IPv4 and IPv6 with Required Parameters for Static

### Request

```
<configConfMo cookie="c95a430d80/8cac361a-46de-1814-17b5-840d22b24b46" inHierarchical="true"
dn="sys/rack-unit-1/boot-precision">
  <inConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" rebootOnUpdate="no">
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" state="enabled" slot="L"
port="20" macAddress="ab:cd:ca:ac:df:ad" ipConfigType="Static"
ipaddress="2001:420:5446:2014::330:13" netmaskOrIPv6Prefix="64"
gateway="2001:420:5446:2014::330:2" dnsserver="2001:420:c0e0:1008::120" iptype="IPv6"
uri="http://cisco.com/c.iso"/>
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_MLOM" state="enabled"
slot="MLOM" port="10" macAddress="aa:aa:aa:aa:aa:aa" ipConfigType="Static"
uri="http://cisco.com/b.iso" iptype="IPv4" ipaddress="10.1.1.20"
netmaskOrIPv6Prefix="255.255.255.0" gateway="10.1.1.2" dnsserver="10.20.20.2"/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

### Response

```
<?xml version="1.0"?>
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="c95a430d80/8cac361a-46de-1814-17b5-840d22b24b46" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
purpose="operational" rebootOnUpdate="no" reapply="no" configuredBootMode="Legacy"
lastConfiguredBootOrderSource="CIMC" status="modified"><lsbootHttp name="http_test"
type="HTTP" macAddress="ab:cd:ca:ac:df:ad" iptype="IPv6" slot="L" port="20" order="1"
state="Enabled" ipConfigType="Static" uri="http://cisco.com/c.iso"
ipaddress="2001:420:5446:2014::330:13" netmaskOrIPv6Prefix="64"
gateway="2001:420:5446:2014::330:2" dnsserver="2001:420:c0e0:1008::120" rn="http-http_test"
status="modified"/><lsbootHttp name="http_MLOM" type="HTTP" macAddress="aa:aa:aa:aa:aa:aa"
iptype="IPv4" slot="MLOM" port="10" order="2" state="Enabled" ipConfigType="Static"
uri="http://cisco.com/b.iso" ipaddress="10.1.1.20" netmaskOrIPv6Prefix="255.255.255.0"
gateway="10.1.1.2" dnsserver="10.20.20.2" rn="http-http_MLOM"
status="modified"/></lsbootDevPrecision></outConfig>
```

```
</configConfMo>
- validates
```

## Deleting a Boot Device

### Request

```
<configConfMo cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" inHierarchical="false"
dn="sys/rack-unit-1/boot-precision">
  <inConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" rebootOnUpdate="no">
      <lsbootHttp dn="sys/rack-unit-1/boot-precision/http-http_test" status="deleted"/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

### Response

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="54127d7d5d/84476585-7e70-2981-7e66-82b487981198" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
purpose="operational" rebootOnUpdate="no" reapply="no" configuredBootMode="Uefi"
lastConfiguredBootOrderSource="BIOS" status="modified"/></outConfig>
</configConfMo>
- validates
```

# Configuring SSH Keys

To support configuring of SSH keys for a user, Cisco IMC 4.1.2 XML API provides a new managed object, **aaaUserSSHKey**. This new managed object is available with the DN - **sys/user-ext/user-1/ssh-key-1**.

The examples in this section show how to use the Cisco IMC XML API to configure SSH keys. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Configuring SSH Key index 1 using content-key-upload for User 1, on page 26](#)
- [Deleting the SSH key index 1 for User 1, on page 27](#)
- [Configuring SSH Key 2 for User 1 from Remote Location, on page 27](#)
- [Configuring SSH Key 2 using configConfMos with content-key-upload, on page 28](#)
- [Deleting SSH Key 2 for User 1 using configConfMos, on page 28](#)
- [Configure SSH Key 2 using configConfMos for User 1 from Remote Location, on page 29](#)

## Configuring SSH Key index 1 using content-key-upload for User 1

### Request:

```
<configConfMo cookie="55a599cb83/75867bc0-8528-e91e-da88-8ec6a98b9f1f"
inHierarchical="false" dn="sys/user-ext/user-1/ssh-key-1">
<inConfig>
<aaaUserSSHKey dn="sys/user-ext/user-1/ssh-key-1"
adminAction="content-key-upload"
sshKey="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQD8byYqBdno8+Zo0dH3/
4PiyvXWBVEkOG2VvHcM294rQIjU16wjc/Kpcxy/
```

```

citl4N86+rVSIk+C2ud001Ixzlbr8EFpeRJ5Q645c2qbiLS0yLcTT6deLWL28SPcGZ9RlHsit6+xGPuhcIEq79Wf1/
ciYcGRbdX5CyDcH7qFYivc6F+WrsfzDFJa0F/
SicoLUaJBf2OLVgQV1aV8gJwTj88xCWmZ9GofuLIVvwF9c+TqGPxeYwf+Nzt7eQy5j+pHrx/
VKG509hz+qjC966BzKXq25BifwmS1ZoDY49p9DkpOB/Qrr+Com/
HpHez6oozAJizXva6lP7+/1m7WkbUJyxR jdakua@IPv6Setup"></aaaUserSSHKey>
</inConfig>
</configConfMo>

```

**Response:**

```

<?xml version="1.0"?>
<configConfMo dn="sys/user-ext/user-1/ssh-key-1"
cookie="55a599cb83/75867bc0-8528-e91e-da88-8ec6a98b9f1f" response="yes">
<outConfig>
<aaaUserSSHKey id="1"
sshKey="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQD8byYqBdnio8+Zo0dH3/
4PiyvXWBVEkOG2VvHcM294rQIjU16wjc/Kpcxy/
citl4N86+rVSIk+C2ud001Ixzlbr8EFpeRJ5Q645c2qbiLS0yLcTT6deLWL28SPcGZ9RlHsit6+xGPuhcIEq79Wf1/
ciYcGRbdX5CyDcH7qFYivc6F+WrsfzDFJa0F/
SicoLUaJBf2OLVgQV1aV8gJwTj88xCWmZ9GofuLIVvwF9c+TqGPxeYwf+Nzt7eQy5j+pHrx/
VKG509hz+qjC966BzKXq25BifwmS1ZoDY49p9DkpOB/Qrr+Com/
HpHez6oozAJizXva6lP7+/1m7WkbUJyxR jdakua@IPv6Setup "
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" dn="sys/user-ext/user-1/ssh-key-1" status="modified"/>
</outConfig>
</configConfMo>
- validates

```

**Deleting the SSH key index 1 for User 1****Request:**

```

<configConfMo
cookie="14d926a2fd/d58efaf0-0379-22b3-a46a-d707e11a2193"
inHierarchical="false" dn="sys/user-ext/user-1/ssh-key-1">
<inConfig>
<aaaUserSSHKey dn="sys/user-ext/user-1/ssh-key-1"
adminAction="clear" ></aaaUserSSHKey>
</inConfig>
</configConfMo>

```

**Response:**

```

<?xml version="1.0"?>
<configConfMo dn="sys/user-ext/user-1/ssh-key-1"
cookie="14d926a2fd/d58efaf0-0379-22b3-a46a-d707e11a2193" response="yes">
<outConfig>
<aaaUserSSHKey id="1" sshKey="" adminAction="no-op"
protocol="none" remoteServer="" remoteFile="" user="" pwd=""
dn="sys/user-ext/user-1/ssh-key-1" status="modified"/></outConfig>
</configConfMo>
- validates

```

**Configuring SSH Key 2 for User 1 from Remote Location****Request:**

```

<configConfMo
cookie="604e5e6b96/ae7ead8c-5694-e797-6b34-9046b12810da"
inHierarchical="false" dn="sys/user-ext/user-1/ssh-key-2">
<inConfig>
<aaaUserSSHKey dn="sys/user-ext/user-1/ssh-key-2"
adminAction="remote-key-upload" protocol="scp"
remoteServer="10.197.125.105" remoteFile="/home/srvatss/publickey.pem"
user="srivatss" pwd="password"></aaaUserSSHKey>

```

```
</inConfig>
</configConfMo>
```

**Response:**

```
<?xml version="1.0"?>
<configConfMo dn="sys/user-ext/user-1/ssh-key-2"
  cookie="604e5e6b96/ae7ead8c-5694-e797-6b34-9046b12810da" response="yes">
<outConfig>
<aaaUserSSHKey id="2"
sshKey="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDFOK17ZYbMMfGcxGrfxlupMqFy11ZN
IjohPxASTu41OkItF9VrrhrfF1ZKOpogJinx3s0OcPfgLMSWEQkUq1zG1L8rAESZbi6z36WGFz9
3amJ3nfxDU7JWD9KHMInixpX5XbbZeKQJvfSTptanmkjTQ8sq2iSMK0HL+G35i8BXmwIBLuEM+SWI
EYjLaDAZ6aLKPxxddTrFxWTP9QpzJafQG1XXZSYauYb6OMNUxjgqFtB2XCiROZTzcj4n1XQRbzU+
56HvHmowcOPh081Btbun+xvksTeXbV3e9DVymjQK1qD2yY5h/EJdC0+9wGPYVmat2baOu4HbTsz8
u4HFkTf jdakua@IPv6Setup "
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" dn="sys/user-ext/user-1/ssh-key-2" status="modified"/>
</outConfig>
</configConfMo>
- validates
```

**Configuring SSH Key 2 using configConfMos with content-key-upload****Request:**

```
<configConfMos
cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
inHierarchical="false">
<inConfigs>
  <pair key="sys/user-ext/user-1/ssh-key-2">
    <aaaUserSSHKey id="2" rn="ssh-key-2" adminAction="content-key-upload"
sshKey="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQAC/
wh89lwly7q5yMWUQbcZYJiEUOWnjuJlrHmdtn2F1ZyFRdIfEd/
flgpLST88pK4DAX6eI5fY7/E2HhtTOYoRDVwanvwCy6jx8yYzDoDqioI+S7RBz20urI800
wp4ofEshAnxJVOqxjGsddk8X8xraCQKEoOpgY8NY4YotEcwm41/
82cXj65sCiW818Q172oIsDLySeHalYR6TkBcyEwvnJ1PPqpZnbtki6sWHTvdWcne4g5VGoM0C+0sE/
YmTElQ7XMidlM2eXadW01OayfXZaqWjn4sxCp4IkBg+Un2ip6kZ65yjQe3Kmez4Lxvvpn3+rFRB/
GYxFBEN9OQ4cuz duprasad@cisco.com"></aaaUserSSHKey>
  </pair>
</inConfigs>
</configConfMos>
```

**Response:**

```
<?xml version="1.0"?>
<configConfMos cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
response="yes"><outConfigs><pair key="sys/user-ext/user-1/ssh-key-2">
<aaaUserSSHKey id="2" sshKey="ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQAC/
wh89lwly7q5yMWUQbcZYJiEUOWnjuJlrHmdtn2F1ZyFRdIfEd/flgpLST88pK4DAX6eI5fY7/
E2HhtTOYoRDVwanvwCy6jx8yYzDoDqioI+S7RBz20urI800wp4ofEshAnxJVOqxjGsddk8X8xraCQK
EoOpgY8NY4YotEcwm41/82cXj65sCiW818Q172oIsDLySeHalYR6TkBcyEwvnJ1PPqpZnbtki6sWHTv
dWcne4g5VGoM0C+0sE/YmTElQ7XMidlM2eXadW01OayfXZaqWjn4sxCp4IkBg+Un2ip6kZ65yjQe3Km
ez4Lxvvpn3+rFRB/GYxFBEN9OQ4cuz duprasad@cisco.com "
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" dn="sys/user-ext/user-1/ssh-key-2" status="modified"/>
</pair><operationStatus>success</operationStatus></outConfigs>
</configConfMos>
- validates
```

**Deleting SSH Key 2 for User 1 using configConfMos****Request:**

```

<configConfMos
cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
inHierarchical="false">
<inConfigs>
  <pair key="sys/user-ext/user-1/ssh-key-2">
    <aaaUserSSHKey id="2" rn="ssh-key-2"
    adminAction="clear" ></aaaUserSSHKey>
  </pair>
</inConfigs>
</configConfMos>

```

**Response:**

```

<?xml version="1.0"?>
<configConfMos cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
response="yes"><outConfigs><pair key="sys/user-ext/user-1/ssh-key-2">
<aaaUserSSHKey id="2" sshKey="" adminAction="no-op" protocol="none"
  remoteServer="" remoteFile="" user="" pwd=""
dn="sys/user-ext/user-1/ssh-key-2" status="modified"/></pair>
<operationStatus>success</operationStatus></outConfigs></configConfMos>
- validates

```

**Configure SSH Key 2 using configConfMos for User 1 from Remote Location****Request:**

```

<configConfMos
cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
inHierarchical="false">
<inConfigs>
  <pair key="sys/user-ext/user-1/ssh-key-2">
    <aaaUserSSHKey dn="sys/user-ext/user-1/ssh-key-2"
adminAction="remote-key-upload" protocol="scp" remoteServer="10.197.125.105"
remoteFile="/home/srivatss/publickey1.pem" user="srivatss" pwd="password">
</aaaUserSSHKey>
  </pair>
</inConfigs>

```

**Response:**

```

<configConfMos
cookie="2f96decb91/c7120c07-b4bb-35e7-c33d-a03dee411971"
inHierarchical="false">
<inConfigs>
  <pair key="sys/user-ext/user-1/ssh-key-2">
    <aaaUserSSHKey dn="sys/user-ext/user-1/ssh-key-2"
adminAction="remote-key-upload" protocol="scp" remoteServer="10.197.125.105"
  remoteFile="/home/srivatss/publickey1.pem" user="srivatss" pwd="password">
</aaaUserSSHKey>
  </pair>
</inConfigs>
</configConfMos>

```

## Managing the External Certificate

To support upload of the external certificate and private key, Cisco IMC 4.1.2 XML API provides two new managed objects, **uploadExternalCertificate** and **uploadExternalPrivateKey**. These new managed objects are available under **certificateManagement** with the DN - **sys/cert-mgmt/external-cert-upload** and **sys/cert-mgmt/external-pvt-key-upload** respectively.

In addition to the new managed objects, Cisco IMC XML API provides an additional attribute - **adminAction** - **activate-external-cert** to activate the external certificate. The **adminAction** is a part of certificateManagement MO.

### Details of the Managed Objects

For **uploadExternalCertificate**:

**Table 1: uploadExternalCertificate**

Attributes	Description
<b>adminAction</b>	Specify any one of the following: <ul style="list-style-type: none"> <li>• <b>remote-cert-upload</b> - Upload certificate by copy-pasting the text.</li> <li>• <b>content-cert-upload</b> - Upload certificate from a remote share location.</li> </ul>
<b>protocol</b>	Specify the protocol ( <b>tftp</b> , <b>scp</b> , <b>sftp</b> , <b>ftp</b> and <b>http</b> ) to upload the certificate from remote location.
<b>remoteShare</b>	Specify the remote share.
<b>remoteFile</b>	Specify the remote file which contains the external certificate.
<b>user</b>	Specify the user name (if the chosen protocol is <b>scp/sftp</b> )
<b>pwd</b>	Specify the password (if the chosen protocol is <b>scp/sftp</b> )

For **uploadExternalPrivateKey**:

**Table 2: uploadExternalPrivateKey**

Attributes	Description
<b>adminAction</b>	Specify any one of the following: <ul style="list-style-type: none"> <li>• <b>remote-cert-upload</b> - Upload private key by copy-pasting the text.</li> <li>• <b>content-cert-upload</b> - Upload private key from a remote share location.</li> </ul>
<b>protocol</b>	Specify the protocol ( <b>scp</b> and <b>sftp</b> ) to upload the private key from remote location.
<b>remoteShare</b>	Specify the remote share.
<b>remoteFile</b>	Specify the remote file which contains the private key.

Attributes	Description
<b>user</b>	Specify the user name.
<b>pwd</b>	Specify the password.

The examples in this section show how to use the Cisco IMC XML API to configure the external certificate and private key. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Sample uploadExternalCertificate.xml File used for Uploading External Certificate by Pasting, on page 31](#)
- [Uploading External Certificate by Pasting, on page 32](#)
- [Sample uploadExternalCertificate.xml File used for Uploading External Certificate from Remote Server, on page 32](#)
- [Uploading External Certificate from Remote Server, on page 32](#)
- [Sample uploadExternalPrivateKey.xml File used for Uploading External Private Key by Pasting, on page 33](#)
- [Uploading Private Key by Pasting, on page 33](#)
- [Sample uploadExternalPrivateKey.xml File used for Uploading External Private Key from Remote Server, on page 34](#)
- [Uploading Private Key from Remote Server, on page 34](#)
- [Sample activateExternalCert.xml File, on page 34](#)
- [Uploading External Certificate using configConfMosusing remote-cert-upload, on page 35](#)
- [Uploading Private Key Using configConfMos using remote-cert-upload, on page 35](#)
- [Activating External Certificate using configConfMos, on page 36](#)

### Sample uploadExternalCertificate.xml File used for Uploading External Certificate by Pasting

```
<configConfMo cookie="0154b835ee/21becfc5-f7de-e50d-3d8f-a8368bf4817c"
dn="sys/cert-mgmt/external-cert-upload" inHierarchical="false">
  <inConfig>
    <uploadExternalCertificate adminAction="content-cert-upload"
certificateContent="
-----BEGIN CERTIFICATE-----
MIID8zCCAtugAwIBAgIBBDANBgkqhkiG9w0BAQwFADCBsDELMAkGA1UEBhMCSU4x
EjAQBGNVBAGMCUthcm5hdGFrYTESMBAkGA1UEBwwJQmFuZ2Fsb3JlMSQwIgyDVQOK
DBtDaXNjbyBTeXN0ZW1zIEluZGlhIFB2dCBMdGQxGDAwBgNVBAsMD1VDUy1SYWNr
LVNlcnZlcjEwMBQGA1UEAwwNQ21zY28gU31zdGVtczEhMB8GCSqGSIb3DQEJARYS
c3JpdmF0c3NAZ21zY28uY29tY28gU31zdGVtczEhMB8GCSqGSIb3DQEJARYS
NVowgbExCzAUBGNVBAYTAk1OMRIwEAYDVQQIEw1LYXJuYXRha2ExEjAQBGNVBACt
CUJlbmdhbHVydTEkMCIGA1UEChMhQ21zY28gU31zdGVtcyBjbmRpbSBQdnQgTHRk
MRgwFgyDVQOLEw9VQ1MtUmFjay1TZXJ2ZXIxFjAUBGNVBAMTDUNpc2NvIFN5YXRl
bXMxIjAgBgkqhkiG9w0BCQEWEM3NyaXZhdHNzQGNC2NvLmNvbW0wgGEiMA0GCSqG
SIb3DQEBAQUAA4IBDwAwggEKAoIBAQC6fcG9QISg6t1fi6U3+czmek2LvfhAxSgd
r2g7uMssgdTrBh59TEgZ15aza15zWazm/li069D6/iabyoli8+MiQAtANnKxqWM3
StEih+3U2jOf39l1lZrAmpd4Ag/OtK50cUtwUHM52ixm/uu61geVPZ5mJpKzq3T
JNcv6TR90K8v0nEILm1lgoA96y64I9YN3ufSE4gm9VOS/sFughmAYErsvgvoJpn
```

```
SQZUYxwdueBm4XV48QY7Mc7neUVYCNo7TcfBX7DC/N0BHv3h1KhGCCQ+5if63uOh
ja8ahdBoIPJqI0h70a92yBK5lv4dxSHexccw2D40kar4CzfvSqx9AgMBAAGjFTAT
MBEGCWCWSAGG+EIBAQQEAWIGQDANBgkqhkiG9w0BAQwFAAOCAQEAXdVTJevqNyI9
DEVibfjGXiKnJ2gEuYr8MdhPDeff/WrsLk7lxhOomVrDZ3iyCX99tNoCIvtOMgNs
jOu90EjNtBulOlgwdQ9ugwp/JToohbD+2JHRK/MgrFpZmewH1oKKDNpOdayR6u9m
SNfvMNBgvxg+cMcbkif0pJU3XHlniPF6UVgj/LJdyBSGrULpnyDwToq2UEF6g9Dc
6gOgRGYNHn7MRzigPJtyjbJsbxgPQ9C46I3Me9N2sJNaLSVQhOxW7KonPI6USRs
e2iEAYaaCvThGE4HTwOMF9dJ24inU+SKTci1AFq2+V4I3P9v+aH5aolH9T/p/AUP
ho6MuZ+wWg==
-----END CERTIFICATE----- "
dn="sys/cert-mgmt/external-cert-upload"/>
</inConfig>
</configConfMo>
```

## Uploading External Certificate by Pasting

### Request:

```
curl -k -H "Content-Type: multipart/form-data; " --data-binary @uploadExternalCertificate.xml
https://10.10.10.10/nuova | xmllint --schema ../conf/common/RACK-OUT.xsd -
```

### Response:

```
% Total      % Received % Xferd Average Speed   Time
Time Current Dload Upload Total Spent Left Speed
100 2462 0 451 100 2011 216 965 0:00:02 0:00:02 --:--:-- 965
<?xml version="1.0"?>
<configConfMo dn="sys/cert-mgmt/external-cert-upload"
cookie="86f83c3d04/37903252-df40-8f3c-ea28-038cb3764e8f" response="yes">
<outConfig>
<uploadExternalCertificate dn="sys/cert-mgmt/external-cert-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" uploadStatus="COMPLETED" uploadProgress="100%"
certificateContent="Certificate Content" status="modified"/></outConfig>
</configConfMo>
- validates
```

## Sample uploadExternalCertificate.xml File used for Uploading External Certificate from Remote Server

```
<configConfMo cookie="0154b835ee/21becfc5-f7de-e50d-3d8f-a8368bf4817c"
dn="sys/cert-mgmt/external-cert-upload" inHierarchical="false">
<inConfig>
<uploadExternalCertificate adminAction="remote-cert-upload" protocol="scp"
user="srivatss" remoteServer="10.10.10.10"
remoteFile="/home/srivatss/server.cert" pwd="password"
dn="sys/cert-mgmt/external-cert-upload"/>
</inConfig>
</configConfMo>
```

## Uploading External Certificate from Remote Server

### Request:

```
curl -k -d@uploadExternalCertificate.xml https://10.10.10.10/nuova | xmllint --schema
../conf/common/RACK-OUT.xsd -
```

### Response:

```
% Total      % Received % Xferd Average Speed   Time   Time
Time Current Dload Upload Total Spent Left Speed
100 2381 0 451 100 1930 80 344 0:00:05 0:00:05 --:--:-- 0
<?xml version="1.0"?>
<configConfMo dn="sys/cert-mgmt/external-cert-upload"
```



```

cookie="86f83c3d04/37903252-df40-8f3c-ea28-038cb3764e8f" response="yes">
<outConfig>
<uploadExternalCertificate dn="sys/cert-mgmt/external-cert-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" uploadStatus="COMPLETED" uploadProgress="100%"
certificateContent="Certificate Content" status="modified"/></outConfig>
</configConfMo>
- validates

```

### Sample uploadExternalPrivateKey.xml File used for Uploading External Private Key by Pasting

```

<configConfMo
cookie="0154b835ee/21becfc5-f7de-e50d-3d8f-a8368bf4817c"
dn="sys/cert-mgmt/external-pvt-key-upload" inHierarchical="false">
  <inConfig>
    <uploadExternalPrivateKey adminAction="content-cert-upload"
certificateContent="
-----BEGIN RSA PRIVATE KEY-----
MIIEOQIBAAKCAQEAAun3BvUCEoOrdX4ulN/nM5npNi734QMUhna9o07jLLIHU6wYe
fUxIGZews2pec1mmZv9YjuvQ+v4mm8qJYvPjIkALQDZysaljN0k3oofTlNozn9/Z
SJWawDKXeAIPzrSuTnFLcFBzOdosZv1FOtYHlT2eZiaT5M6t0yTXL+k0fdCvL9Jx
CC5tZYKAPesuuCPWdd7n0hOIJvVtkv7BboIZgMmBK7IL4KCaZ0kGVGMchbngZuFl
ePEG0zHO53lFWAjaO03HwV+wwwzdAR794ZSoRggkPuYn+t7joY2vGoXQaCDyaiNI
e9GvdsgSuZb+HcUh3sXHMNg+NJGq+As31UqsqfQIDAQABAoH/MSv3aW8ZiVRkCk1H
wvqajCqzR6VPT8SqMgknpem+pVBDrcOUvtKB3Vwxt3FCaUZuw6YyxZig8t/YpSE
pRkPUN6SGNxCYZXIE0u635/3lafy9LSRFhJcO1EbnwjsIhSB4Sz+Nx7/QsHD82PU
XS8R0MfufAcv/iSAsKuGEZvru0BWexDlycojGTDRhGqWZGzsN6ncsbhQ0kItC0Pv
Ycx+9NeKfGwO+P9NwyWwaKW9M4nOyx3/MviMx9QRbnjgxjrdTj+A0aBUEzgdZOf
WCJ/LlSbHmJ46HYZOILL4KDBbow/c7a1c2JcFwn01m33qNCRWdkb5H+1UZA+el7g
XnxDAoGBALzBdW26GGIZjj42Ayr9PAXFsO8n0MonqVHRlRTvxeuLovHYdD9HzgkH
CFXA0IGmNk/lRuwEARx6U6ezSP6z7za9B63MskE7t3Vs28/OJg14KptRftGKUIbZ
NRfl03J7VUf9mYk9u3pc/PJ8oVweFoml/SwRTDvZyUn5WRLq7zJ3AoGBAPztx24M
qj0Gcbqa7U5pUM+9bD9eGPxrGranFlDp79eobG+9kva286clp0Yr5XrNsQpx42Q6
RjLBVEwrb03D7X9UIOaAgyiaDbDMbIeAcRqOC9qpLDUxrpMvrdvhtcPrK8VAp4
h0le6zYKMSHMXDExhH3EHaQ7aVOQRpt5GoGrAoGBAKBX1ue3TK9I9kRyrY4/QFXG
8d62++4+ct9GILZ+uKq2w4PeVCHNZYDVsIboHDeGcmzJ901WutxRLe8vppb4L6VY
PsWtNV+k0tu1daS5gim/ArKeMBTgYjerHCcWS5pcmr1k+KBVCIWRqG504L3X8V1M
3BwrNY9CGnP0LW401K1RAoGASikuIIZ2JA6Pqjdi/WrD1yWjZ7Efgm01IYk8cd0m
BgXMRbdAMDbUm13f/iNA1hEZqAZctjaFhKhLH0o+if641GzGeM+VpYIGIaDO8awn
fbHIqASSgb6/4UCqCZtCPizKYkMWITvVPNgN/2BdqYM6RPPJ9tBaIJ2K9IWIJLm0D
6KECgYB9rmj/8YW7Rz1Isfg7JhK32p7LC+5xSSbpxQc8s/3PftZ5uQnsXXh0zJ0H
cfA4mbj4nttyFwX+kuUpQdG/ZhoJ/SDqE5lvzVM4stMRKFEJq8ksld+KGGzLFEkj
OotvpQor5dHHU46Iiu9tv5ctrJImMjSM7wro26kW2EB3UZZYw==
-----END RSA PRIVATE KEY----- "
dn="sys/cert-mgmt/external-pvt-key-upload"/>
  </inConfig>
</configConfMo>

```

### Uploading Private Key by Pasting

#### Request:

```

curl -k -H "Content-Type: multipart/form-data;
" --data-binary @uploadExternalPrivateKey.xml
https://10.10.10.10/nuova | xmllint --schema ../conf/common/RACK-OUT.xsd -

```

#### Response:

```

% Total    % Received % Xferd  Average Speed   Time    Time
Time      Current Dload  Upload    Total   Spent    Left   Speed
100 2715    0 455 100 2260    109   542   0:00:04  0:00:04  ---:---:--  542
<?xml version="1.0"?>
<configConfMo dn="sys/cert-mgmt/external-pvt-key-upload"
cookie="86f83c3d04/37903252-df40-8f3c-ea28-038cb3764e8f" response="yes">

```

```

<outConfig>
<uploadExternalPrivateKey dn="sys/cert-mgmt/external-pvt-key-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" uploadStatus="COMPLETED" uploadProgress="100%"
certificateContent="Certificate Content" status="modified"/></outConfig>
</configConfMo>
- validates

```

### Sample uploadExternalPrivateKey.xml File used for Uploading External Private Key from Remote Server

```

<configConfMo
cookie="0154b835ee/21becfc5-f7de-e50d-3d8f-a8368bf4817c"
dn="sys/cert-mgmt/external-pvt-key-upload" inHierarchical="false">
  <inConfig>
<uploadExternalPrivateKey adminAction="remote-cert-upload"
protocol="scp" user="srivatss" remoteServer="10.10.10.10"
remoteFile="/home/srivatss/wildcard.pem" pwd="password"
dn="sys/cert-mgmt/external-pvt-key-upload"/>
  </inConfig>
</configConfMo>

```

### Uploading Private Key from Remote Server

Request:

```

curl -k -d@uploadExternalPrivateKey.xml https://10.10.10.10/nuova | xmllint --schema
../conf/common/RACK-OUT.xsd -

```

Response:

```

% Total    % Received % Xferd  Average Speed   Time    Time
Time Current Dload Upload  Total   Spent    Left  Speed
100 2621    0 455 100 2166    63   302  0:00:07  0:00:07 --:--:--    0
<?xml version="1.0"?>
<configConfMo dn="sys/cert-mgmt/external-pvt-key-upload"
cookie="86f83c3d04/37903252-df40-8f3c-ea28-038cb3764e8f" response="yes">
<outConfig>
<uploadExternalPrivateKey dn="sys/cert-mgmt/external-pvt-key-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" uploadStatus="COMPLETED" uploadProgress="100%"
certificateContent="Certificate Content" status="modified"/></outConfig>
</configConfMo>
- validates

```

### Sample activateExternalCert.xml File

```

<configConfMo
cookie="0154b835ee/21becfc5-f7de-e50d-3d8f-a8368bf4817c"
inHierarchical="false">
  <inConfig>
    <certificateManagement adminAction="activate-external-cert"
dn="sys/cert-mgmt"/>
  </inConfig>
</configConfMo>

```

### Activating the External Certificate

Request:

```

curl -k -d@activateExternalCert.xml https://10.10.10.10/nuova |
xmllint --schema ../conf/common/RACK-OUT.xsd -

```

Response:

```

% Total      % Received % Xferd  Average Speed   Time    Time
Time Current Dload Upload   Total   Spent    Left  Speed
100 580    0  347  100   233     85    57  0:00:04  0:00:04  --:--:--   85
<?xml version="1.0"?>
<configConfMo dn="" cookie="86f83c3d04/37903252-df40-8f3c-ea28-038cb3764e8f"
  response="yes">
<outConfig>
<certificateManagement dn="sys/cert-mgmt" description="Certificate Management"
externalCertificate="Not Available" externalPrivateKey="Not Available"
adminAction="no-op" status="modified"/></outConfig>
</configConfMo>
- validates

```

### Uploading External Certificate using configConfMos using remote-cert-upload

#### Request:

```

<configConfMos
  cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259"
  inHierarchical="false">
  <inConfigs>
    <pair key="sys/cert-mgmt/external-cert-upload">
      <uploadExternalCertificate adminAction="remote-cert-upload"
protocol="scp" user="amkalyan" remoteServer="10.10.10.10"
remoteFile="/home/amkalyan/Cert_Mgmt/wildcard.crt" pwd="password"
dn="sys/cert-mgmt/external-cert-upload"/>
    </pair>
  </inConfigs>
</configConfMos>

```

#### Response:

```

<configConfMos
  cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259" response="yes">
  <outConfigs>
    <pair key="sys/cert-mgmt/external-cert-upload">
      <uploadExternalCertificate dn="sys/cert-mgmt/external-cert-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile="" user=""
pwd="" uploadStatus="UPLOADING" uploadProgress="25%"
certificateContent="Certificate Content" status="modified"/>
    </pair>
    <operationStatus>success</operationStatus>
  </outConfigs>
</configConfMos>

```

### Uploading Private Key Using configConfMos using remote-cert-upload

#### Request:

```

<configConfMos cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259"
  inHierarchical="false">
  <inConfigs>
    <pair key="sys/cert-mgmt/external-pvt-key-upload">
      <uploadExternalPrivateKey adminAction="remote-cert-upload" protocol="scp"
user="amkalyan" remoteServer="10.225.121.139"
remoteFile="/home/amkalyan/Cert_Mgmt/wildcard.pem" pwd="password"
dn="sys/cert-mgmt/external-pvt-key-upload"/>
    </pair>
  </inConfigs>
</configConfMos>

```

#### Response:

```

<configConfMos
  cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259"

```

```

response="yes">
  <outConfigs>
    <pair key="sys/cert-mgmt/external-pvt-key-upload">
      <uploadExternalPrivateKey dn="sys/cert-mgmt/external-pvt-key-upload"
adminAction="no-op" protocol="none" remoteServer="" remoteFile=""
user="" pwd="" uploadStatus="UPLOADING" uploadProgress="25%"
certificateContent="Certificate Content" status="modified"/>
    </pair>
    <operationStatus>success</operationStatus>
  </outConfigs>
</configConfMos>

```

### Activating External Certificate using configConfMos

Request:

```

<configConfMos
cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259"
inHierarchical="false">
  <inConfigs>
    <pair key="sys/cert-mgmt">
      <certificateManagement adminAction="activate-external-cert"
dn="sys/cert-mgmt"/>
    </pair>
  </inConfigs>
</configConfMos>

```

Response:

```

<configConfMos
cookie="d6cfaced6/9fe756e9-50c5-c0c4-b29a-130160933259"
response="yes">
  <outConfigs>
    <pair key="sys/cert-mgmt">
      <certificateManagement dn="sys/cert-mgmt"
description="Certificate Management"
externalCertificate="Not Available" externalPrivateKey="Not Available"
adminAction="no-op" status="modified"/>
    </pair>
    <operationStatus>success</operationStatus>
  </outConfigs>
</configConfMos>

```

## Configuring Non-IPMI User Mode and Virtual Media XML API Examples

The examples in this section show how to use the Cisco IMC 4.1 XML API to perform Non-IPMI User Mode tasks. The examples also show how to configure and view virtual media (vMedia). Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Adding a New User, on page 37](#)
- [Setting User Mode as IPMI, on page 37](#)
- [Setting User Mode as Non-IPMI, on page 37](#)
- [Creating a Share With Read Write Permission Through CIFS Protocol, on page 37](#)

- [Viewing the vMedia Mapping in the Server, on page 38](#)

### Adding a New User

Request:

```
<configResolveClass cookie="300e98a8dd/cfd410f3-1ba2-8e0a-0a11-fc4e8180369b"
inHierarchical="false" classId="aaaUserPolicy"/>
```

Response:

```
<configResolveClass cookie="300e98a8dd/cfd410f3-1ba2-8e0a-0a11-fc4e8180369b" response="yes"
classId="aaaUserPolicy"> <outConfigs> <aaaUserPolicy dn="sys/user-ext/policy"
userPasswordPolicy="enabled" passwordPolicyRules="Rules to set the password when
userPasswordPolicy is enabled. 1) The password must have a minimum of 8 and a maximum of
20 characters for for IPMI user mode and 127 characters for Non-IPMI user mode. 2) The
password must not contain the User's Name. 3) The password must contain characters from
three of the following four categories. a) English uppercase characters (A through Z). b)
English lowercase characters (a through z). c) Base 10 digits (0 through 9). d) Non-alphabetic
characters (!, @, #, $, %, ^, ampersand, *, -, _, +, =)." allowedAttempts="0"
lockoutPeriod="0" userDisableOnLockout="disabled" userMode="non-ipmi"
"></aaaUserPolicy></outConfigs> </configResolveClass>
```

### Setting User Mode as IPMI

Request:

```
<configConfMo cookie="05c78ba1d9/42fdaf5d-43c7-8227-f561-82f4bb76abc2" inHierarchical="false"
dn="sys/user-ext/policy">
<inConfig>
<aaaUserPolicy userMode="ipmi" dn="sys/user-ext/policy"/>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="e6628585b7/39e83851-4e81-2997-0b8c-dd15e1586e6f" inHierarchical="false"
dn="sys/user-ext/policy"> <inConfig> <aaaUserPolicy userMode="ipmi"/> </inConfig>
</configConfMo>
```

### Setting User Mode as Non-IPMI

Request:

```
<configConfMo cookie="584855d11e/7falca2b-d2bb-073b-d2d0-eab99e70a5ed" inHierarchical="false"
dn="sys/user-ext/policy">
<inConfig>
<aaaUserPolicy userMode="non-ipmi" dn="sys/user-ext/policy"/>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="e6628585b7/39e83851-4e81-2997-0b8c-dd15e1586e6f" inHierarchical="false"
dn="sys/user-ext/policy"> <inConfig> <aaaUserPolicy userMode="non-ipmi"/> </inConfig>
</configConfMo>
```

### Creating a Share With Read Write Permission Through CIFS Protocol

Request:

```
configConfMos cookie="4ce36e964d/cal1f9583-9c80-ab81-80c9-2697698614af"
inHierarchical="false"><inConfigs><pair key="sys/svc-ext/vmedia-svc/volume_name
"><commVMediaMap dn="sys/svc-ext/vmedia-svc/volume_name " map="cifs"
```

```
mountOptions="sec=ntlm,vers=3.0,rw" password="*****" remoteFile="test.img"
remoteShare="//{Share_IP_Address}/Folder" username="user" volumeName="volume_name"
/></pair></inConfigs></configConfMos>' https://{CIMC_IP_Address}/nuova
```

Response:

```
<configConfMos cookie="4ce36e964d/cal1f9583-9c80-ab81-80c9-2697698614af"
response="yes"><outConfigs><pair key="sys/svc-ext/vmedia-svc/volume_name"><commVMediaMap
volumeName="volume_name" map="cifs" remoteShare="//{Share_IP_Address}/Folder"
remoteFile="test.img"
mountOptions="username=user,password=*****,sec=ntlm,vers=3.0,rw,soft,nounix,noserverino,rsize=3072,wsiz=3072"
mappingStatus="In Progress" password="" adminAction="no-op"
dn="sys/svc-ext/vmedia-svc/volume_name" status="created"
></commVMediaMap></pair><operationStatus>success</operationStatus></outConfigs></configConfMos>
```

### Viewing the vMedia Mapping in the Server

Request:

```
<configResolveClass cookie="4ce36e964d/cal1f9583-9c80-ab81-80c9-2697698614af"
inHierarchical="true" classId="commVMedia"/>' https://{CIMC_IP_Address}/nuova
```

Response:

```
<configResolveClass cookie="4ce36e964d/cal1f9583-9c80-ab81-80c9-2697698614af" response="yes"
classId="commVMedia">
<outConfigs>
<commVMedia dn="sys/svc-ext/vmedia-svc" adminState="enabled" activeSessions="0"
encryptionState="disabled" lowPowerUsbState="enabled" adminAction="no-op" ><commVMediaMap
volumeName="volume_name" map="cifs" remoteShare="//{Share_IP_Address}/Folder"
remoteFile="test.img"
mountOptions="username=Sai,password=*****,sec=ntlm,vers=3.0,rw,soft,nounix,noserverino,rsize=3072,wsiz=3072"
mappingStatus="OK" password="" adminAction="no-op" rn="volume_name"
></commVMediaMap></commVMedia></outConfigs>
</configResolveClass>
```

## Examples of Common Server Management Tasks

The examples in this chapter show how to use the Cisco IMC XML API to perform common server management tasks. Each example shows the XML API request followed by the response from Cisco IMC.

This chapter includes the following examples:

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- [Retrieving Cisco IMC User Sessions, on page 42](#)
- [Retrieving Server Summary Information and Host Power State, on page 43](#)
- [Retrieving Current Running Firmware Versions of Server Components, on page 43](#)
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### Using Cisco IMC LDAP User Credentials to Establish XML API Session Cookie

Request:

```
<aaaLogin inName='admin' inPassword='cisco@123'/>
```

Response:

```
<aaaLogin cookie="" response="yes" outCookie="1461753405/e60c76e8-3175-1175-8002-4cc92474a254"
  outRefreshPeriod="600" outPriv="admin"
  outSessionId="17" outVersion="3.0(0.149)">
</aaaLogin>
```

### Retrieving Cisco IMC User Sessions

Request:

```
<configResolveClass cookie='1385080136/1a887a90-ebb9-1bb9-8007-130bcc74a254'
  classId='aaaSession' inHierarchical='true'>
</configResolveClass>
```

Response:

```
<configResolveClass cookie="1385080136/1a887a90-ebb9-1bb9-8007-130bcc74a254"
  response="yes" classId="aaaSession">
<outConfigs>
  <aaaSession host="10.10.10.10" id="18" ui="shell" user="admin"
  dn="sys/user-ext/term-18" ></aaaSession>
  <aaaSession host="10.10.10.10" id="17" ui="web" user="admin"
  dn="sys/user-ext/term-17" ></aaaSession>
  <aaaSession host="N/A" id="15" ui="serial" user="admin"
  dn="sys/user-ext/term-15" ></aaaSession>
  <aaaSession host="10.10.10.10" id="9" ui="web" user="admin"
  dn="sys/user-ext/term-9" >
```

```

    </aaaSession>
  </outConfigs>
</configResolveClass>

```



**Note** UI type indicates **serial** when you connect directly to the server through the serial port using either a KVM dongle (DB9), or the serial port (RJ-45) at the rear of the chassis.

### Retrieving Server Summary Information and Host Power State

Request:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" classId="computeRackUnit"/>

```

Response:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388" response="yes"
classId="computeRackUnit"/>
<outConfig>
  <computeRackUnit dn="sys/rack-unit-1" adminPower="policy" availableMemory="49152"
model="R250-2480805W" memorySpeed="1067" name="UCS C250 M2" numofAdaptors="1"
numOfCores="8" numofCoresEnabled="8" numofCpus="2" numofEthHostIfs="8"
numofFcHostIfs="2" numofThreads="16" operPower="on"
originalUuid="100DC440-0EBC-11DF-3B97-8843E1C2615E" presence="equipped" serverId="1"
serial="PGS140601CS" totalMemory="49152" usrLbl="Cisco C250 Server"
uuid="100DC440-0EBC-11DF-3B97-8843E1C2615E" vendor="Cisco Systems Inc"
cimcResetReason="graceful-reboot />
  </outConfig>
</configResolveClass>

```

### Retrieving Current Running Firmware Versions of Server Components

Request:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" classId="firmwareRunning"/>

```

Response:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388" response="yes"
classId="firmwareRunning">
  <outConfigs>
    <firmwareRunning dn="sys/rack-unit-1/bios/fw-boot-loader" deployment="boot-loader"
type="blade-bios" version="CxxMx.1.5.1c.0 (Build Date: 01/31/2013)" >
    <firmwareRunning dn="sys/rack-unit-1/mgmt/fw-boot-loader" deployment="boot-loader"
type="blade-controller" version="1.5(0.59).24"
    <firmwareRunning dn="sys/rack-unit-1/mgmt/fw-system"
deployment="system" type="blade-controller" version="1.5(1b)" >
    <firmwareRunning dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/fw-boot-loader"
deployment="boot-loader" type="storage-controller"
version="4.31.00_4.12.05.00_0x05180000" >
    <firmwareRunning dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/fw-system"
deployment="system" type="storage-controller" version="2.130.364-2185" >
  </firmwareRunning>

```

```
</outConfigs>
</configResolveClass>
```

### Retrieving Backup Firmware Version Installed on Cisco IMC

Request:

```
<configResolveDn cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" dn="sys/rack-unit-1/mgmt/fw-updatable"/>
```

Response:

```
<configResolveDn cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388" response="yes"
dn="sys/rack-unit-1/mgmt/fw-updatable">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable" adminState="triggered"
deployment="backup" operState="ready" version="1.5(0.73)" protocol="none"
remoteServer="" remotePath="" user="" pwd="" progress="Success"
type="blade-controller">
  </outConfig>
</configResolveDn>
```

### Activating Firmware Backup Image on Cisco IMC

Request:

```
<configConfMo cookie='1369391866/63bd7c70-dd74-1d74-8002-233362a70344'
dn='sys/rack-unit-1/mgmt/fw-boot-def/bootunit-combined'>
<inConfig>
  <firmwareBootUnit dn='sys/rack-unit-1/mgmt/fw-boot-def/bootunit-combined'
adminState='trigger' image='backup' resetOnActivate='yes' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMocookie="1369391866/63bd7c70-dd74-1d74-8002-233362a70344" response="yes"
dn="sys/rack-unit-1/mgmt/fw-boot-def/bootunit-combined">
<outConfig>
  <firmwareBootUnit dn="sys/rack-unit-1/mgmt/fw-boot-def/bootunit-combined"
adminState="triggered"
image="running" resetOnActivate="no" type="combined" version="1.5(1f)"
status="modified">
  </firmwareBootUnit>
</outConfig>
</configConfMo>
```

### Using the inHierarchical Option to Retrieve Configured Boot Order Table

Request:

```
<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="true" classId="lsbootDef">
```

Response:

```
<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
response="yes"
classId="lsbootDef">
  <outConfig>
```

```

<lsbootDef dn="sys/rack-unit-1/boot-policy" name="boot-policy"
  purpose="operational" rebootOnUpdate="no" >
  <lsbootVirtualMedia access="read-only" order="3"
    type="virtual-media" rn="vm-read-only" />
  <lsbootVirtualMedia access="read-write" order="5"
    type="virtual-media" rn="vm-read-write"/>
  <lsbootLan rn="lan-read-only" access="read-only" order="2"
    prot="pxe" type="lan" />
  <lsbootStorage rn="storage-read-write" access="read-write" order="1"
    type="storage" >
    <lsbootLocalStorage rn="local-storage" />
  </lsbootStorage>
  <lsbootEfi rn="efi-read-only" access="read-only" order="4"
    type="efi" />
</lsbootDef>
</outConfig>
</configResolveClass>

```

### Retrieving Power Supply Unit Details on Server

Request:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" classId="equipmentPsu">

```

Response:

```

<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
response="yes"
  classId="equipmentPsu">
  <outConfig>
    <equipmentPsu id="1" model="UCSC-PSU-450W" operability="operable" power="on"
      presence="equipped" serial="DCB1621010X" thermal="ok"
      vendor="Cisco Systems Inc" voltage="unknown" dn="sys/rack-unit-1/psu-1" >
    <equipmentPsu id="2" model="" operability="unknown" power="off"
      presence="missing" serial="" thermal="unknown" vendor=""
      voltage="unknown" dn="sys/rack-unit-1/psu-2" >
  </outConfig>
</configResolveClass>

```

### Retrieving Details of Fan Object Identified by DN

Request:

```

<configResolveDn cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" dn="sys/rack-unit-1/fan-module-1-2/fan-2"/>

```

Response:

```

<configResolveDn cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
response="yes"
dn="sys/rack-unit-1/fan-module-1-2/fan-2"/>
  <outConfig>
    <equipmentFan id="2" model="" module="2" operability="operable" power="on"
      presence="equipped" serial="" thermal="not-supported" tray="1" vendor=""
      voltage="not-supported" dn="sys/rack-unit-1/fan-module-1-2/fan-2"/>
  </outConfig>
</configResolveDn>

```

## Retrieving SNMP Configuration Details

Request:

```
<configResolveClass cookie="1313086522/c7c08988-aa3e-1a3e-8005-5e61c2e14388"
inHierarchical="false" classId="commSnmplib"/>
```

Response:

```
<configResolveClass cookie="1362107065/43d02d50-d6d4-16d4-8009-c979e5e53d50"
response="yes"
classId="commSnmplib">
  <outConfigs>
    <commSnmplib dn="sys/svc-ext/snmp-svc" descr="SNMP Service" name="snmp" adminState="enabled"

      port="161" proto="udp" community="" trapCommunity="public" com2Sec="disabled"
      sysContact="who@where" sysLocation="unknown"/>
  </outConfigs>
</configResolveClass>
```

## Retrieving Status of Local Hard Disk on Server

Request:

```
<configResolveDn cookie="1313146313/b38e04a0-aa4c-1a4c-8008-cdac38e14388"
inHierarchical="false" dn="sys/rack-unit-1/board/disk-4"/>
```

Response:

```
<configResolveDn cookie="1313146313/b38e04a0-aa4c-1a4c-8008-cdac38e14388"
response="yes"
dn="sys/rack-unit-1/board/disk-4">
  <outConfig>
    <storageLocalDiskSlotEp id="4" operability="operable" presence="equipped"
      dn="sys/rack-unit-1/board/disk-4"/>
  </outConfig>
</configResolveDn>
```

## Power Cycling the Server

Request:

```
<configConfMo cookie="1313084260/40ea8058-aa3e-1a3e-8004-5e61c2e14388"
inHierarchical="false" dn="sys/rack-unit-1" >
  <inConfig>
    <computeRackUnit adminPower="cycle-immediate" dn="sys/rack-unit-1">
      </computeRackUnit>
    </inConfig>
  </configConfMo>
```

Response:

```
<configConfMo cookie="1313084260/40ea8058-aa3e-1a3e-8004-5e61c2e14388"
response="yes" dn="sys/rack-unit-1" >
  <outConfig>
    <computeRackUnit dn="sys/rack-unit-1" adminPower="policy" availableMemory="49152"
      model="R250-2480805W" memorySpeed="1067" name="UCS C250 M2" numofAdaptors="1"
      numofCores="8" numofCoresEnabled="8" numofCpus="2" numofEthHostIfs="0"
      numofFcHostIfs="0" numofThreads="16" operPower="off"
      originalUuid="100DC440-0EBC-11DF-3B97-8843E1C2615E" presence="equipped" serverId="1">
  </outConfig>
</configConfMo>
```

```

        serial="PGS140601CS" totalMemory="49152" usrLbl="Cisco C210 Server"
        uuid="100DC440-0EBC-11DF-3B97-8843E1C2615E" vendor="Cisco Systems Inc"
        status="modified"/>
    </outConfig>
</configConfMo>

```

### Configuring EFI as the Second Boot Device in Boot Order Table

Request:

```

<configConfMo cookie="1313090863/ca79ef88-aa3f-1a3f-8006-5e61c2e14388"
inHierarchical="false" dn="sys/rack-unit-1/boot-policy/efi-read-only">
  <inConfig>
    <lsbootEfi order="2" status="modified"
      dn="sys/rack-unit-1/boot-policy/efi-read-only"
    </inConfig>
  </configConfMo>

```

Response:

```

<configConfMo cookie="1313090863/ca79ef88-aa3f-1a3f-8006-5e61c2e14388"
response="yes" dn="sys/rack-unit-1/boot-policy/efi-read-only" >
  <outConfig>
    <lsbootEfi dn="sys/rack-unit-1/boot-policy/efi-read-only" access="read-only"
      order="2" type="efi" status="modified"/>
  </outConfig>
</configConfMo>

```

### Removing Floppy Disk Drive as a Boot Device From the Boot Order List

Request:

```

<configConfMo cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388"
inHierarchical="true" dn="sys/rack-unit-1/boot-policy/vm-read-write" >
  <inConfig>
    <lsbootVirtualMedia order="5" access="read-write" status="deleted"
      dn="sys/rack-unit-1/boot-policy/vm-read-write"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388" response="yes"
dn="sys/rack-unit-1/boot-policy/vm-read-write" >
  <outConfig>
  </outConfig>
</configConfMo>

```

### Configuring Boot Order to HDD, CDROM, FDD, PXE, and EFI Without Rebooting the Host

Request:

```

<configConfMo cookie="1360205300/79c672f0-d519-1519-8004-30339ee53d50"
inHierarchical="true" dn="sys/rack-unit-1/boot-policy">
  <inConfig>
    <lsbootDef dn="sys/rack-unit-1/boot-policy" rebootOnUpdate="no">
    <lsbootVirtualMedia access="read-only" order="2" type="virtual-media"
      rn="vm-read-only"/>
  </inConfig>

```

```

<lsbootVirtualMedia access="read-write" order="3" type="virtual-media"
  rn="vm-read-write"/>
<lsbootLan rn="lan-read-only" access="read-only" order="4" prot="pxe" type="lan"/>
<lsbootStorage rn="storage-read-write" access="read-write" order="1" type="storage">
<lsbootLocalStorage rn="local-storage"/> </lsbootStorage>
<lsbootEfi rn="efi-read-only" access="read-only" order="5" type="efi"/>
</lsbootDef>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1360205300/79c672f0-d519-1519-8004-30339ee53d50" response="yes"
dn="sys/rack-unit-1/boot-policy">
  <outConfig>
    <lsbootDef dn="sys/rack-unit-1/boot-policy" name="boot-policy" purpose="operational"
      rebootOnUpdate="no" status="modified">
      <lsbootVirtualMedia access="read-only" order="2" type="virtual-media" rn="vm-read-only"
        status="modified"/>
      <lsbootVirtualMedia access="read-write" order="3" type="virtual-media"
rn="vm-read-write"
        status="modified"/>
      <lsbootLan rn="lan-read-only" access="read-only" order="4" prot="pxe" type="lan"
        status="modified"/>
      <lsbootStorage rn="storage-read-write" access="read-write" order="1" type="storage"
        status="modified">
      <lsbootLocalStorage rn="local-storage" status="modified"/>
      </lsbootStorage>
      <lsbootEfi rn="efi-read-only" access="read-only" order="5" type="efi"
        status="modified"/>
    </lsbootDef>
  </outConfig>
</configConfMo>

```

### Using inHierarchical Option to Change and Retrieve SNMP Configuration of Trap Receivers

Request:

```

<configConfMo cookie="1362115258/2c1b1380-d6d6-16d6-800b-c979e5e53d50"
inHierarchical="true" dn="sys/svc-ext/snmp-svc">
<inConfig>
  <commSnmp dn="sys/svc-ext/snmp-svc" adminState="enabled" community="Top$ecret"
    trapCommunity="Dar$Good" com2Sec="full" sysContact="snmpadmin@cisco"
    port='600' sysLocation="San Jose"/>
</inConfig>

```

Response:

```

<configConfMo cookie="1398652603/2f9bf4c8-f811-1811-8005-79bdaa4c93a4" response="yes"
dn="sys/svc-ext/snmp-svc">
<outConfig>
  <commSnmp dn="sys/svc-ext/snmp-svc" descr="SNMP Service" name="snmp"
    adminState="enabled" port="600" proto="udp" community="public"
    trapCommunity="public" com2Sec="full" sysContact="testContact"
    sysLocation="testLocation" status="modified" >
  <commSnmpTrap id="1" adminState="disabled" version="v3"
    notificationType="traps" port="162" hostname="0.0.0.0" user="unknown"
    rn="snmp-trap-1" status="modified">
  </commSnmpTrap>
  <commSnmpTrap id="2" adminState="disabled" version="v3">
    notificationType="traps" port="162" hostname="0.0.0.0" user="unknown">

```



```

rn="snmp-trap-2" status="modified">
</commSnmpTrap>
.
.
.
<commSnmpUser id="15" name=""
securityLevel="" auth="" authPwd="" privacy="" privacyPwd=""
rn="snmpv3-user-15" status="modified"
</commSnmpUser>
</commSnmp>
</outConfig>

```

### Retrieving Select Memory RAS BIOS Token

Request:

```

<configResolveClass cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388"
inHierarchical="false" classId="biosVfSelectMemoryRASConfiguration"/>

```

Response:

```

<configResolveClass cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388" response="yes"
classId="biosVfSelectMemoryRASConfiguration">
<outConfig>
<biosVfSelectMemoryRASConfiguration
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration"
vpSelectMemoryRASConfiguration="maximum-performance" >
</biosVfSelectMemoryRASConfiguration>
</outConfig>
</configResolveClass>

```

### Configuring Select Memory RAS BIOS Token for Mirroring Mode

Request:

```

<configConfMo cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388"
inHierarchical="false"
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration">
<inConfig>
<biosVfSelectMemoryRASConfiguration
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration"
vpSelectMemoryRASConfiguration="mirroring">
</biosVfSelectMemoryRASConfiguration>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1313092854/412183f8-aa40-1a40-8007-5e61c2e14388" response="yes"
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration">
<outConfig>
<biosVfSelectMemoryRASConfiguration
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration"
vpSelectMemoryRASConfiguration="mirroring" status="modified"/>
</outConfig>
</configConfMo>

```



**Note** After configuring the BIOS tokens, reboot the host for the configured tokens to reflect on the host side.

### Retrieving C240 Server BIOS Token Values

Request:

```
<configResolveClass cookie="1360207841/1133b530-d51a-151a-8005-30339ee53d50"
inHierarchical="true" classId="biosSettings"/>
```

Response:

```
<configResolveClass cookie="1362115258/2c1b1380-d6d6-16d6-800b-c979e5e53d50" response="yes"
classId="biosSettings">
  <outConfigs>
    <biosSettings dn="sys/rack-unit-1/bios/bios-settings">
      <biosVfIntelVTForDirectedIO rn="Intel-VT-for-directed-IO"
        vpIntelVTDATSSupport="enabled" vpIntelVTDCoherencySupport="disabled"
        vpIntelVTForDirectedIO="enabled"/>
      <biosVfSelectMemoryRASConfiguration rn="SelectMemory-RAS-configuration"
        vpSelectMemoryRASConfiguration="maximum-performance"/>
      <biosVfProcessorC6Report rn="Processor-C6-Report" vpProcessorC6Report="enabled"/>
      <biosVfIntelHyperThreadingTech rn="Intel-HyperThreading-Tech"
        vpIntelHyperThreadingTech="enabled"/>
      <biosVfEnhancedIntelSpeedStepTech rn="Enhanced-Intel-SpeedStep-Tech"
        vpEnhancedIntelSpeedStepTech="enabled"/>
      <biosVfIntelVirtualizationTechnolog rn="Intel-Virtualization-Technology"
        vpIntelVirtualizationTechnology="enabled"/>
      <biosVfMemoryMappedIOAbove4GB rn="Memory-mapped-IO-above-4GB"
        vpMemoryMappedIOAbove4GB="disabled"/>
      <biosVfCPUPerformance rn="CPU-Performance" vpCPUPerformance="enterprise"/>
      <biosVfLvDIMMSupport rn="LvDIMM-Support" vpLvDDRMode="performance-mode"/>
      <biosVfNUMAOptimized rn="NUMA-optimized" vpNUMAOptimized="enabled"/>
      <biosVfConsoleRedirection rn="Console-redirection" vpBaudRate="115200"
        vpConsoleRedirection="disabled" vpFlowControl="none" vpTerminalType="vt100"
        vpPuttyKeyPad="ESCN" vpRedirectionAfterPOST="Always Enable"/>
      <biosVfCoreMultiProcessing rn="Core-MultiProcessing" vpCoreMultiProcessing="all"/>
      <biosVfIntelTurboBoostTech rn="Intel-Turbo-Boost-Tech"
        vpIntelTurboBoostTech="enabled"/>
      <biosVfDirectCacheAccess rn="Direct-Cache-Access" vpDirectCacheAccess="enabled"/>
      <biosVfExecuteDisableBit rn="Execute-Disable-Bit" vpExecuteDisableBit="enabled"/>
      <biosVfOSBootWatchdogTimer rn="OS-Boot-Watchdog-Timer-Param"
        vpOSBootWatchdogTimer="disabled"/>
      <biosVfOSBootWatchdogTimerPolicy rn="OS-Boot-Watchdog-Timer-Policy"
        vpOSBootWatchdogTimerPolicy="power-off"/>
      <biosVfOSBootWatchdogTimerTimeOut rn="OS-Boot-Watchdog-Timer-Time-Out"
        vpOSBootWatchdogTimerPolicy="10-minutes"/>
      <biosVfHardwarePrefetch rn="Hardware-Prefetch" vpHardwarePrefetch="enabled"/>
      <biosVfAdjacentCacheLinePrefetch rn="Adjacent-Cache-Line-Prefetch"
        vpAdjacentCacheLinePrefetch="enabled"/>
      <biosVfFRB2Enable rn="FRB2-Enable" vpFRB2Enable="enabled"/>
      <biosVfProcessorC1E rn="Processor-C1E" vpProcessorC1E="enabled"/>
      <biosVfPatrolScrub rn="Patrol-Scrub-Param" vpPatrolScrub="enabled"/>
      <biosVfTPMSupport rn="TPM-Support" vpTPMSupport="disabled"/>
      <biosVfDCUPrefetch rn="DCU-Prefetch" vpStreamerPrefetch="enabled"
        vpIPPrefetch="enabled"/>
      <biosVfCPUPowerManagement rn="CPU-PowerManagement"
        vpCPUPowerManagement="energy-efficient"/>
```

```

<biosVfCPUFrequencyFloor rn="CPU-FreqFloor" vpCPUFrequencyFloor="disabled"/>
<biosVfCPUEnergyPerformance rn="CPU-EngPerfBias"
  vpCPUEnergyPerformance="balanced-performance"/>
<biosVfMemoryInterleave rn="Memory-Interleave" vpChannelInterLeave="auto"
  vpRankInterLeave="auto"/>
<biosVfDemandScrub rn="Demand-Scrub-Param" vpDemandScrub="enabled"/>
<biosVfAltitude rn="Altitude-Param" vpAltitude="300-m"/>
<biosVfDRAMClockThrottling rn="DRAM-Clock-Throttling"
  vpDRAMClockThrottling="Balanced"/>
<biosVfASPMsupport rn="ASPM-Support" vpASPMsupport="Disabled"/>
<biosVfVgaPriority rn="VgaPriority" vpVgaPriority="Onboard"/>
<biosVfUSBPortsConfig rn="USB-Ports-Config" vpAllUsbDevices="enabled"
  vpUsbPortRear="enabled" vpUsbPortFront="enabled" vpUsbPortInternal="enabled"
  vpUsbPortKVM="enabled" vpUsbPortVMedia="enabled" vpUsbPortSDCard="enabled"/>
<biosVfQPIConfig rn="QPI-Config" vpQPILinkFrequency="auto"/>
<biosVfLegacyUSBsupport rn="LegacyUSB-Support" vpLegacyUSBsupport="enabled"/>
<biosVfUCSMBootOrderRuleControl rn="Boot-Order-Rules"
  vpUCSMBootOrderRule="Loose"/>
<biosVfPCIOptionROMs rn="PCI-OptionROMs" vpPCIOptionROMs="Enabled"/>
<biosVfLOMPortOptionROM rn="LOMPort-OptionROM" vpLOMPortsAllState="Enabled"
  vpLOMPort0State="Enabled" vpLOMPort1State="Enabled" vpLOMPort2State="Enabled"
  vpLOMPort3State="Enabled"/>
<biosVfPCISlotOptionROMEnable rn="PCI-Slot-OptionROM-Enable"
  vpSlot1State="Enabled" vpSlot2State="Enabled" vpSlot3State="Enabled"
  vpSlot4State="Enabled" vpSlot5State="Enabled" vpSlot6State="Enabled"
  vpSlot7State="Enabled" vpSlot1LinkSpeed="GEN3" vpSlot2LinkSpeed="GEN3"
  vpSlot3LinkSpeed="GEN3" vpSlot4LinkSpeed="GEN3" vpSlot5LinkSpeed="GEN3"
  vpSlot6LinkSpeed="GEN3" vpSlot7LinkSpeed="GEN3"/>
<biosVfPStateCoordType rn="p-state-coord" vpPStateCoordType="HW ALL"/>
<biosVfDramRefreshRate rn="dram-refresh-rate" vpDramRefreshRate="2x"/>
<biosVfOutOfBandMgmtPort rn="OoB-MgmtPort"
  vpOutOfBandMgmtPort="Disabled" >
</biosVfOutOfBandMgmtPort>
</biosSettings>
</outConfigs>

```

## Retrieving Default Values of BIOS Tokens

Request:

```

<configResolveClass cookie='1307953743/b63ff130-a593-1593-8004-2e4ac2e14388'
  classId='biosPlatformDefaults' inHierarchical='true'>

```

Response:

```

<configResolveClass cookie="1370842491/23c0a810-dec6-1ec6-8002-1ec9e1a85750"
  response="yes" classId="biosPlatformDefaults">
  <outConfigs>
    <biosPlatformDefaults dn="sys/rack-unit-1/bios/bios-defaults" >
      <biosVfIntelVTForDirectedIO rn="Intel-VT-for-directed-IO"
        vpIntelVTDATSSupport="enabled"
        vpIntelVTDCoherencySupport="disabled"
        vpIntelVTForDirectedIO="enabled" >
      </biosVfIntelVTForDirectedIO>
      <biosVfSelectMemoryRASConfiguration rn="SelectMemory-RAS-configuration"
        vpSelectMemoryRASConfiguration="maximum-performance" >
      </biosVfSelectMemoryRASConfiguration>
      <biosVfProcessorC6Report rn="Processor-C6-Report"
        vpProcessorC6Report="enabled" >
      </biosVfProcessorC6Report><biosVfIntelHyperThreadingTech rn="Intel-HyperThreading-Tech"
        vpIntelHyperThreadingTech="enabled" >
      </biosVfIntelHyperThreadingTech>
      <biosVfEnhancedIntelSpeedStepTech rn="Enhanced-Intel-SpeedStep-Tech"

```

```

    vpEnhancedIntelSpeedStepTech="enabled" >
  </biosVfEnhancedIntelSpeedStepTech>
  <biosVfIntelVirtualizationTechnology rn="Intel-Virtualization-Technology"
    vpIntelVirtualizationTechnology="enabled" >
  </biosVfIntelVirtualizationTechnology>
  .
  .
  .
  </biosVfLOMPortOptionROM><biosVfPCISlotOptionROMEnable rn="PCI-Slot-OptionROM-Enable"
    vpSlot1State="Enabled"
    vpSlot2State="Enabled"
    vpSlotMezzState="Enabled"
    vpSlot2LinkSpeed="GEN3" >
  </biosVfPCISlotOptionROMEnable><biosVfPStateCoordType rn="p-state-coord"
    vpPStateCoordType="HW ALL" >
  </biosVfPStateCoordType>
  <biosVfDramRefreshRate rn="dram-refresh-rate"
    vpDramRefreshRate="2x" >
  </biosVfDramRefreshRate>
</biosPlatformDefaults>
</outConfigs>
</configResolveClass>

```

## Using Platform-Default to Configure BIOS Parameters to Default Values

Request:

```

<configConfMo cookie="0000020175/b2909140-0004-1004-8002-cdac38e14388"
inHierarchical="true" dn="sys/rack-unit-1/bios/bios-settings">
  <inConfig>
    <biosSettings>
      <biosVfIntelVTForDirectedIO
dn="sys/rack-unit-1/bios/bios-settings/Intel-VT-for-directed-IO"
        vpIntelVTDATSSupport="platform-default" vpIntelVTDCoherencySupport="platform-default"

        vpIntelVTForDirectedIO="platform-default"/>
      <biosVfSelectMemoryRASConfiguration
dn="sys/rack-unit-1/bios/bios-settings/SelectMemory-RAS-configuration"
        vpSelectMemoryRASConfiguration="platform-default"/>
      ....
      ....
      ....
      <biosVfProcessorC6Report dn="sys/rack-unit-1/bios/bios-settings/Processor-C6-Report"

        vpSlot2State="platform-default" vpSlotMezzState="platform-default"
vpSlot1LinkSpeed="platform-default"
        vpSlot2LinkSpeed="platform-default"/>
      <biosVfPStateCoordType dn="sys/rack-unit-1/bios/bios-settings/p-state-coord"
        vpPStateCoordType="platform-default"/>
    </biosSettings>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1347919470/f5335af8-c9ec-19ec-8007-1ec9e1a85750" response="yes"
dn="sys/rack-unit-1/mgmt/fw-updatable" >
  <outConfig>
    <biosSettings dn="sys/rack-unit-1/bios/bios-settings" status="modified" >
      <biosVfIntelVTForDirectedIO rn="Intel-VT-for-directed-IO"
        vpIntelVTDATSSupport="enabled" vpIntelVTDCoherencySupport="disabled"
        vpIntelVTForDirectedIO="enabled" status="modified" >
      </biosVfIntelVTForDirectedIO>

```

```

<biosVfSelectMemoryRASConfiguration rn="SelectMemory-RAS-configuration"
  vpSelectMemoryRASConfiguration="maximum-performance" status="modified" >
  .
  .
  .
  vpSlot1State="enabled" vpSlot2State="enabled" vpSlotMezzState="enabled"
  vpSlot1LinkSpeed="GEN3" vpSlot2LinkSpeed="GEN3" status="modified"
</biosVfPCISlotOptionROMEnable>
<biosVfPStateCoordType rn="p-state-coord" vpPStateCoordType="HW_ALL"
  status="modified" >
</biosVfPStateCoordType>
</biosSettings>
</outConfig>
</configConfMo>

```



**Note** The request and response in the preceding example is not the complete output, only a part of it has been included.

This will set the BIOS parameters such as the Processor, Memory, QPI, PCI, Serial, LOM and PCIe slots configuration settings to platform-default values. Similarly, you can configure the BIOS parameters by changing the **platform-default** input parameter in the example to what you want to configure.

### Setting the Out-Of-Band-Mgmt-Port BIOS Token Value

Request:

```

<configConfMo cookie="1462352296/f3b4e630-3200-1200-8002-f0fa5ff6083c"
inHierarchical="false" dn="sys/rack-unit-1/bios/bios-settings/OoB-MgmtPort">
  <inConfig>
    <biosVfOutOfBandMgmtPort dn="sys/rack-unit-1/bios/bios-settings/OoB-MgmtPort"
vpOutOfBandMgmtPort="Disabled">
      </biosVfOutOfBandMgmtPort>
    </inConfig>
  </configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/bios/bios-settings/OoB-MgmtPort"
cookie="1462352296/f3b4e630-3200-1200-8002-f0fa5ff6083c" response="yes">
  <outConfig>
    <biosVfOutOfBandMgmtPort dn="sys/rack-unit-1/bios/bios-settings/OoB-MgmtPort"
vpOutOfBandMgmtPort="Disabled" status="modified"/>
  </outConfig>
</configConfMo>

```

### Using TFTP to Export Cisco IMC Configuration Data

Request:

```

<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false"> dn="sys/export-config"
  <inConfig>
    <mgmtBackup dn="sys/export-config" adminState="enabled" hostname="198.xx.210.xx"
      remoteFile="/tftpserver/c250_config_export.cfg"/>
      user='<username>' pwd='<password>' passphrase='<passphrase>'
    </mgmtBackup>
  </inConfig>
</configConfMo>

```

```

</inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
response="yes" dn="sys/export-config">
  <outConfig>
    <mgmtBackup dn="sys/export-config" adminState="disabled" fsmStageDescr="Completed
successfully"
    fsmRmtInvErrCode="" fsmRmtInvErrDescr="NONE" fsmDescr="export-config" proto="tftp"
hostname=""
    remoteFile="" user="" pwd="" passphrase="" status="modified"/>
  </outConfig>
</configConfMo>

```

The preceding request launches the export operation, which executes as a background task.

The exported configuration file resembles the following example:

```

[root]# cat /tftpserver/c250_config_export.cfg
<root><CIMC>
<version>1.4 (0.22) </version>
<network>
<hostname>ucs-c250-M2</hostname>
<mode>dedicated</mode>
<redundancy>active-standby</redundancy>
<dns-use-dhcp>no</dns-use-dhcp>
<preferred-dns-server>0.0.0.0</preferred-dns-server>
<alternate-dns-server>0.0.0.0</alternate-dns-server>
<vlan-enabled>no</vlan-enabled>
.
.
.

```

TFTP used in the preceding example is the default protocol. You can also export the Cisco IMC configuration using the other available protocols such as the ftp, sftp, scp and http. Exporting using the ftp, sftp and scp requires user credentials, as shown in the following example:

Request:

```

configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" dn="sys/export-config"
<inConfig>
  <mgmtBackup dn="sys/export-config" adminState="enabled"
hostname="bxxxxa-xxx-fileserver.cisco.com" proto="ftp"
  user="username" pwd="password" passphrase='passphrase'
  remoteFile="/home/xxxxx/ppapi.xml">
</inConfig>

```

Response:

```

<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes">
  dn="sys/export-config"
  <outConfig>
    <mgmtBackup dn="sys/export-config" adminState="disabled"
      fsmStageDescr="Completed successfully" fsmRmtInvErrCode=""
      fsmRmtInvErrDescr="NONE"
      fsmDescr="export-config" proto="ftp" hostname="" remoteFile=""
      User="" pwd="" passphrase="" status="modified"/>
  </outConfig>
</configConfMo>

```

```
</outConfig>
</configConfMo>
```

## Using TFTP to Import Cisco IMC Configuration Data

Request:

```
<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" dn="sys/import-config">
  <inConfig>
    <mgmtImporter dn="sys/import-config" adminState="enabled" hostname="10.10.10.10"
remoteFile="/tftpserver/c250_config_export.cfg" user="user" pwd="password"
passphrase="passphrase"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
response="yes" dn="sys/import-config">
  <outConfig>
    <mgmtImporter dn="sys/import-config" adminState="disabled" fsmStageDescr="Error"
fsmRmtInvErrCode="" fsmRmtInvErrDescr="NONE" fsmDescr="import-config" proto="tftp" hostname=""
remoteFile="" user="" pwd="" passphrase="" status="modified"/>
  </outConfig>
</configConfMo>
```

The preceding request launches the import operation, which executes as a background task. You can periodically query for the completion status by sending the following requests:

Status request:

```
<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" classId="mgmtImporter"/>
```

Status response before completion:

```
<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes"
  classId="mgmtImporter">
  <outConfig>
    <mgmtImporter dn="sys/import-config" adminState="enabled"
      fsmStageDescr="Applying configuration" fsmRmtInvErrCode=""
      fsmRmtInvErrDescr="NONE" fsmDescr="import-config" proto="none" hostname=""
      remoteFile="" user="" pwd=""/>
  </outConfig>
</configResolveClass>
```

Repeated status request:

```
<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" classId="mgmtImporter"/>
```

Status response after completion:

```
<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes"
  classId="mgmtImporter">
  <outConfig>
```

```

    <mgmtImporter dn="sys/import-config" adminState="disabled"
      fsmStageDescr="Completed successfully" fsmRmtInvErrCode=""
      fsmRmtInvErrDescr="NONE" fsmDescr="import-config" proto="none" hostname=""
      remoteFile="" user="" pwd=""/>
  </outConfig>
</configResolveClass>

```

## Using TFTP to Export Cisco IMC Technical Support Data

Request:

```

<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" dn="sys/rack-unit-1/tech-support">
  <inConfig>
    <sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support" adminState="enabled"
      remoteFile="/tftpserver/c250_techsupport_archive.tgz" proto="tftp"
      hostname="198.xx.xxx.14"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes"
  dn="sys/rack-unit-1/tech-support" >
  <outConfig>
    <sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support" adminState="disabled"
      hostname="198.xx.xxx.14" proto="tftp"
      remoteFile="/tftpserver/c250_techsupport_archive.tgz" fsmStageDescr="none"
      fsmProgr="0" fsmStatus="nop" status="modified"/>
  </outConfig>
</configConfMo>

```

The preceding request launches the technical support generation, after technical support data is generated, it is uploaded to the remote location. You can periodically query for the completion status by sending the following requests:

Status request:

```

<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" classId="sysdebugTechSupportExport"/>

```

Status response before completion:

```

<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes"
  classId="sysdebugTechSupportExport">
  <outConfig>
    <sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support" adminState="enabled"
      hostname="10.10.10.10" proto="tftp"
      remoteFile="/tftpserver/c250_techsupport_archive.tgz"
      fsmStageDescr="collecting" fsmProgr="0" fsmStatus="exporting"/>
  </outConfig>
</configResolveClass>

```

Repeated status request:

```

<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388"
inHierarchical="false" classId="sysdebugTechSupportExport"/>

```



Status response after completion:

```
<configResolveClass cookie="1313118253/2b07f100-aa46-1a46-8008-5e61c2e14388" response="yes"
  classId="sysdebugTechSupportExport">
  <outConfig>
    <sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support" adminState="disabled"
      hostname="10.10.10.10" proto="tftp"
      remoteFile="/tftpserver/c250_techsupport_archive.tgz"
      fsmStageDescr="completed" fsmProgr="100" fsmStatus="success"/>
  </outConfig>
</configResolveClass>
```

The exported technical support file resembles the following example:

```
[root]# tar tvfz /tftpserver/c250_techsupport_archive.tgz | more
drwxr-xr-x root/root          0 2011-08-11 13:01:10 obfl/
-rw-r--r-- root/root       76910 2011-08-11 13:00:56 obfl/obfl-log.1
-rw-r--r-- root/root       76835 1970-01-01 09:38:26 obfl/obfl-log.2
-rw-r--r-- root/root       76881 2011-08-08 21:20:55 obfl/obfl-log.3
-rw-r--r-- root/root       76916 1969-12-31 16:07:28 obfl/obfl-log.4
-rw-r--r-- root/root       76846 2011-08-03 21:38:49 obfl/obfl-log.5
-rw-r--r-- root/root       14598 2011-08-11 20:49:57 obfl/obfl-log
.
.
.
```

## Retrieving CPU Product ID Details

Request:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
  inHierarchical="false" classId="pidCatalogCpu"/>
```

Response:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
  response="yes" classId="pidCatalogCpu"> <outConfigs> <pidCatalogCpu id="1"
  socketdesignation="CPU1"
  description="Intel(R) Xeon(R) E5-2650 2.00GHz 8-core 95W 20MB Cache DDR3 1600MHz"
  pid="UCS-CPU-E5-2650"
  model="Intel(R) Xeon(R) CPU E5-2650 0 @ 2.00GHz" signature="Type 0, Family 6, Model 45,
  Stepping 7" currentspeed="2000"
  operState="Enabled" dn="sys/rack-unit-1/board/pid/pid-cpu-1" ></pidCatalogCpu><pidCatalogCpu
  id="2" socketdesignation="CPU2"
  description="Intel(R) Xeon(R) E5-2650 2.00GHz 8-core 95W 20MB Cache DDR3 1600MHz"
  pid="UCS-CPU-E5-2650" model="Intel(R) Xeon(R)
  CPU E5-2650 0 @ 2.00GHz" signature="Type 0, Family 6, Model 45, Stepping 7"
  currentspeed="2000" operState="Enabled"
  dn="sys/rack-unit-1/board/pid/pid-cpu-2" ></pidCatalogCpu></outConfigs> </configResolveClass>
```

## Retrieving IMM/ Memory Unit Product ID Details

Request:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
  inHierarchical="false" classId="pidCatalogDimm"
```

Response:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
response="yes" classId="pidCatalogDimm"> <outConfigs> <pidCatalogDimm name="DIMM_A1"
description="8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v" pid="UCS-MR-1X082RY-A"
mfgid="0xCE00"
manufacturer="Samsung Electronics, Inc." serialnumber="14765DC9 " model="Mx93B1K70DH0-YK0"
capacity="8192 MB"
speed="1600" datawidth="64 bits" operability="Operable"
dn="sys/rack-unit-1/board/pid/pid-dimm-DIMM_A1" >
</pidCatalogDimm><pidCatalogDimm name="DIMM_B1" description="8GB DDR3-1600-MHz
RDIMM/PC3-12800/dual rank/1.35v"
pid="UCS-MR-1X082RY-A" mfgid="0xCE00" manufacturer="Samsung Electronics, Inc."
serialnumber="1494DE1A "
model="Mx93B1K70DH0-YK0" capacity="8192 MB" speed="1600" datawidth="64 bits"
operability="Operable"
dn="sys/rack-unit-1/board/pid/pid-dimm-DIMM_B1" ></pidCatalogDimm><pidCatalogDimm
name="DIMM_E1"
description="8GB DDR3-1600-MHz RDIMM/PC3-12800/dual rank/1.35v" pid="UCS-MR-1X082RY-A"
mfgid="0xCE00"
manufacturer="Samsung Electronics, Inc." serialnumber="1474F06F " model="Mx93B1K70DH0-YK0"
capacity="8192 MB"
speed="1600" datawidth="64 bits" operability="Operable"
dn="sys/rack-unit-1/board/pid/pid-dimm-DIMM_E1" >
</pidCatalogDimm><pidCatalogDimm name="DIMM_F1" description="8GB DDR3-1600-MHz
RDIMM/PC3-12800/dual rank/1.35v"
pid="UCS-MR-1X082RY-A" mfgid="0xCE00" manufacturer="Samsung Electronics, Inc."
serialnumber="1494D625 "
model="Mx93B1K70DH0-YK0" capacity="8192 MB" speed="1600" datawidth="64 bits"
operability="Operable"
dn="sys/rack-unit-1/board/pid/pid-dimm-DIMM_F1" ></pidCatalogDimm></outConfigs>
</configResolveClass>
```

### Retrieving HDD Product ID Details

Request:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
inHierarchical="false" classId="pidCatalogHdd"/>
```

Response:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
response="yes" classId="pidCatalogHdd">
<outConfigs>
<pidCatalogHdd disk="1" controller="SLOT-4" description="300GB 6Gb SAS 10K RPM 2.5"
pid="A03-D300GA2" vendor="SEAGATE" model="ST300MM0006" serialnumber="Z0K01B3K0000C4171HJU"

dn="sys/rack-unit-1/board/pid/pid-hdd-1" >
</pidCatalogHdd>
<pidCatalogHdd disk="2" controller="SLOT-4" description="300GB 6Gb SAS 10K RPM 2.5"
pid="A03-D300GA2" vendor="SEAGATE" model="ST300MM0006" serialnumber="Z0K01GP10000C419ARHL"

dn="sys/rack-unit-1/board/pid/pid-hdd-2" >
</pidCatalogHdd>
</outConfigs>
</configResolveClass>
```

### Retrieving PCI Adapter Product ID Details

Request:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
inHierarchical="false" classId="pidCatalogPCIAdapter"/>
```

Response:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c" response="yes"
classId="pidCatalogPCIAdapter"> <outConfigs> <pidCatalogPCIAdapter slot="L"
description="Onboard LOM" pid="N/A" vendor="0x8086" device="0x1521" subvendor="0x1137"
subdevice="0x008b" dn="sys/rack-unit-1/board/pid/pid-pciadapter-L" ></pidCatalogPCIAdapter>
<pidCatalogPCIAdapter slot="2" description="Cisco UCS Dual Port 10Gb Ethernet and 4G Fibre
Channel CNA SFP+"
pid="UCSC-PCIE-CSC-02" vendor="0x1137" device="0x0042" subvendor="0x1137" subdevice="0x0085"
dn="sys/rack-unit-1/board/pid/pid-pciadapter-2" ></pidCatalogPCIAdapter><pidCatalogPCIAdapter
slot="4"
description="LSI 6G MegaRAID SAS 9271-8i card with Supercap (RAID 0,1,5,6; RAID spans
10,50,60) - External mini-SAS connectors"
pid="UCS-RAID9271-8i" vendor="0x1000" device="0x005b" subvendor="0x1000" subdevice="0x9271"
dn="sys/rack-unit-1/board/pid/pid-pciadapter-4" ></pidCatalogPCIAdapter></outConfigs>
</configResolveClass>
```

## Retrieving Firmware Update Details

Request:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
inHierarchical="false" classId="firmwareUpdatable"/>
```

Response:

```
<configResolveClass cookie="1462354358/4b33a4f4-3201-1201-8004-f0fa5ff6083c"
response="yes" classId="firmwareUpdatable">
<outConfigs>
<firmwareUpdatable dn="sys/rack-unit-1/bios/fw-updatable" description="BIOS firmware
version"
adminState="triggered" deployment="primary" operState="ready" version="CxxxMx.3.0.0.3
(Build Date: 03/23/2016)" protocol="none" remoteServer="" remotePath="" user=""
pwd="" progress="None, OK" type="blade-bios" >
</firmwareUpdatable>
<firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable"
description="Cisco IMC backup firmware version"
adminState="triggered" deployment="backup" operState="ready"
version="66.77(67.1462359966)" protocol="none"
remoteServer="" remotePath="" user="" pwd="" progress="Success"
type="blade-controller" secureBoot="enabled" >
</firmwareUpdatable>
<firmwareUpdatable dn="sys/rack-unit-1/adaptor-2/mgmt/fw-updatable"
description="Cisco VIC adapter backup firmware version" adminState="triggered"
deployment="backup"
version="2.1(3a)" protocol="none" remoteServer="" remotePath="" user="" pwd=""
progress="Stage: No operation (0%), Status: Idle, Error: No error" type="adaptor" >
</firmwareUpdatable>
</outConfigs>
</configResolveClass>
```

## Updating Cisco IMC Firmware

Request:

```
<configConfMo cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/mgmt/fw-updatable">
  <inConfig>
    <firmwareUpdatable adminState="trigger" dn="sys/rack-unit-1/mgmt/fw-updatable"
      protocol="tftp" remoteServer="10.10.10.10" remotePath="update_pkg-rack-colusa1.bin"
      type="blade-controller"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/mgmt/fw-updatable"
cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c" response="yes">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable"
      description="Cisco IMC backup firmware version" adminState="triggered"
      deployment="backup" operState="updating" version="3.0(0.167)" protocol="none"
      remoteServer="" remotePath="" user="" pwd="" progress="5" type="blade-controller"
      secureBoot="enabled" status="modified"/>
  </outConfig>
</configConfMo>
```

## Updating BIOS Firmware

Request:

```
<configConfMo cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/bios/fw-updatable">
  <inConfig>
    <firmwareUpdatable adminState="trigger" dn="sys/rack-unit-1/bios/fw-updatable"
      protocol="tftp" remoteServer="10.10.10.10" remotePath="BIOS-2-0-12-9.cap"
      type="blade-bios"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/bios/fw-updatable"
cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c" response="yes">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/bios/fw-updatable"
      description="BIOS firmware version" adminState="triggered" deployment="primary"
      operState="updating" version="server-name.2.0.12.3.031720160046" protocol="none"
      remoteServer="" remotePath="" user="" pwd="" progress="Image Download (5 %), OK"
      type="blade-bios" status="modified"/>
  </outConfig>
</configConfMo>
```

The preceding Cisco IMC and BIOS firmware upgrade examples use tftp as the protocol, similarly you can use other available protocols, such as ftp, sftp, scp and http. When you use the sftp, ftp or scp protocol while updating, username and password has to be specified in the input parameters.

## Using Non-Interactive HUU to Update Firmware on all C-Series Server Components

Request:

```
<configConfMo cookie="0000020175/b2909140-0004-1004-8002-cdac38e14388"
inHierarchical="true" dn='sys/huu/firmwareUpdater'>
  <inConfig>
    <huuFirmwareUpdater dn='sys/huu/firmwareUpdater' adminState='trigger'
      remoteIp='10.xxx.xxx.99' remoteShare='/home/xxxxxx/ucs-Cxxx-huu-1.5.0.67.iso'
      mapType='cifs' username='user' password='pwd' stopOnError='yes'
      timeOut='25' verifyUpdate='yes' updateComponent='all' />
    </inConfig>
  </configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/bios/fw-updatable"
cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c" response="yes">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/bios/fw-updatable" description="BIOS firmware
version"
      adminState="triggered" deployment="primary" operState="updating"
      version="server-name.2.0.12.3.031720160046 " protocol="none" remoteServer=""
remotePath=""
      user="" pwd="" progress="Image Download (5 %), OK" type="blade-bios" status="modified"/>
    </outConfig>
  </configConfMo>
```

The preceding example initiates and updates the firmware on all components of the server, you can periodically run the following request to check the status of the update:

Status request:

```
<configResolveClass cookie="1360030993/e4404760-d4f0-14f0-8004-1ec9e1a85750"
inHierarchical="true" classId="huuFirmwareUpdater">
```

Response:

```
<configResolveClass cookie="1360030993/e4404760-d4f0-14f0-8004-1ec9e1a85750" response="yes"
classId="huuFirmwareUpdater">
  <outConfigs>
    <huuFirmwareUpdater dn="sys/huu/firmwareUpdater" adminState="triggered"
      remoteIp="http://10.xxx.xxx.99" remoteSharePath="/home/xxxx/ucs-Cxxx-huu-1.5.0.67.iso"
      remoteShareFile="ucs-Cxxx-huu-1.5.0.67.iso" mapType="cifs"username="user"
      password="pwd" stopOnError="yes" timeOut="25" verifyUpdate="no" updateComponent="all"
    >
    <huuFirmwareUpdateStatus rn="updateStatus"
      overallStatus="CIMC,LOM,PCI,STORAGE update successful. BIOS update in progress."
      currentTime="Tue Feb 5 02:48:42 2013" updateStartTime="Tue Feb 5 02:28:06 2013"
      updateEndTime="NA" >
    <huuUpdateComponentStatus component="CIMC" description="CIMC" slot="NA"
      runningVersion="1.5(0.69)" newVersion="1.5(0.67)" macAddr="NA"
      vendorId="NA" deviceId="NA" subVendorId="NA" subDeviceId="NA" cntrlId="0"
      updateStatus="Completed" errorDescription="NA" verifyStatus="NA"
      rn="component-CIMC" >
    <huuUpdateComponentStatus component="LOM" description="I350" slot="NA"
      runningVersion="1.61-02.12-2.7.111-1.3.98-5.1.01-2.7.111"
      newVersion="1.61-02.12-2.7.111-1.3.98-5.1.01-2.7.111" macAddr="5057A8E1C922"
      vendorId="8086" deviceId="1521" subVendorId="1137" subDeviceId="008A"
      cntrlId="0" updateStatus="Completed" errorDescription="NA"
      verifyStatus="NA" rn="component-LOM" >
    <huuUpdateComponentStatus component="STORAGE" description="2008M-8i" slot="M"
```

```

        runningVersion="2.130.364-2185" newVersion="2.130.364-2185" macAddr="NA"
        vendorId="NA" deviceId="NA" subVendorId="NA" subDeviceId="NA" cntrlId="0"
        updateStatus="Completed" errorDescription="NA" verifyStatus="NA"
        rn="component-STORAGE" >
<hhuUpdateComponentStatus component="PCI" description="UCS VIC 1225" slot="1"
    runningVersion="2.1(1.110)-uboot-2.1(1.110)" newVersion="2.1(1.108)-uboot-2.1(1.108)"

    macAddr="0200544D474D" vendorId="1137" deviceId="0042" subVendorId="1137"
    subDeviceId="0085" cntrlId="0" updateStatus="Completed" errorDescription="NA"
    verifyStatus="NA" rn="component-PCI" >
<hhuUpdateComponentStatus component="BIOS" description="BIOS" slot="NA"
    runningVersion="CxxxMx.1.5.1c.0.013120130456"
    newVersion="CxxxMx.1.5.1b.0.012720130527" macAddr="NA" vendorId="NA" deviceId="NA"
    subVendorId="NA" subDeviceId="NA" cntrlId="0" updateStatus="InProgress"
    errorDescription="NA" verifyStatus="NA" rn="component-BIOS" >
</hhuFirmwareUpdateStatus>
</hhuFirmwareUpdater>
</outConfigs>
</configResolveClass>

```




---

**Note** You can choose a specific components in the updateComponent ' ' parameter to update the firmware only for that component.

---

### Using TFTP to Import VIC Adapter Configuration Data

Request:

```

<configConfMo cookie="cookiecutter" inHierarchical="true"
dn="sys/rack-unit-1/adaptor-MLOM/import-config">
  <inConfig>
    <adaptorCfgImporter dn="sys/rack-unit-1/adaptor-MLOM/import-config"
      adminState="trigger" proto="tftp" hostname="10.10.10.10" remoteFile="tftppapi.xml"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/adaptor-MLOM/import-config"
cookie="0000008008/5c0d9f7e-0002-1002-8003-ac7c7d74a254" response="yes">
  <outConfig>
    <adaptorCfgImporter dn="sys/rack-unit-1/adaptor-MLOM/import-config"
      adminState="triggered" descr="import-config" proto="none" hostname="" remoteFile=""
      user="" pwd="" progress="Done" status="modified"/>
  </outConfig>
</configConfMo>

```

### Using TFTP to Update VIC Firmware

Request:

```

<configConfMo cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable">
  <inConfig>
    <firmwareUpdatable adminState="trigger" dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable"

      protocol="tftp" remoteServer="10.10.10.10" remotePath="cruzfw1.bin" type="adaptor"/>
  </inConfig>
</configConfMo>

```

```
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable"
cookie="0000286104/a1778199-0042-1042-8003-7e573e8f835c" response="yes">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable"
description="Cisco VIC adapter backup firmware version" adminState="triggered"
deployment="backup" operState="Idle" version="4.1(1d)" protocol="none" remoteServer=""

remotePath="" user="" pwd="" progress="Stage: No operation (0%), Status: Idle, Error:
No error"
type="adaptor" status="modified"/>
  </outConfig>
</configConfMo>
```

The preceding example initiates and updates the firmware on VIC, you can periodically run the following request to check the status of the update:

Status request:

```
<configResolveDn cookie="1350860496/b80c15e8-cc99-1c99-8011-1fc9e1a85750"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable"/>
```

Status response after completion:

```
<configResolveDn cookie="1350860496/b80c15e8-cc99-1c99-8011-1fc9e1a85750" response="yes"
dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable">
  <outConfig>
    <firmwareUpdatable dn="sys/rack-unit-1/adaptor-1/mgmt/fw-updatable" adminState="triggered"

deployment="backup" version="2.x(0.xxx)" protocol="tftp" remoteServer="" remotePath=""

user="" pwd="" progress="Successful" type="adaptor" >
  </firmwareUpdatable>
  </outConfig>
</configResolveDn>
```

## Configuring VIC Adapter Parameters

Request:

```
<configConfMo cookie="0000356151/3380bf82-0053-1053-8004-7e573e8f835c" inHierarchical="true"
dn="sys/rack-unit-1/adaptor-1">
  <inConfig>
    <adaptorUnit id="1" description="SL1-PP-System" adminState="adaptor-reset-default"
dn="sys/rack-unit-1/adaptor-1">
      <adaptorGenProfile dn="sys/rack-unit-1/adaptor-1/general" fipMode="enabled"
vntagMode="enabled" numOfVMFexIifs="10"/>
    </adaptorUnit>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1"
cookie="0000356151/3380bf82-0053-1053-8004-7e573e8f835c"
response="yes">
  <outConfig>
```

```

    <adaptorUnit id="1" model="UCSC-MLOM-C10T-02" pciAddr="1" pciSlot="1" presence="equipped"
serial="FCH19267ENR" description="SL1-PP-System" adminState="policy"
cimcManagementEnabled="no"
vendor="Cisco Systems Inc" dn="sys/rack-unit-1/adaptor-1" status="modified">
    <adaptorGenProfile rn="general" pciSlot="1" productName="UCS VIC 1227T"
model="UCSC-MLOM-C10T-02"
serial="FCH19267ENR" revision="2" fipMode="Enabled" vntagMode="Enabled" lldp="Enabled"
iscsiBootSupported="True" usnicSupported="True" configurationPending="yes" numOfVMFexIifs="10"

vendorId="V01" vendor="Cisco Systems Inc" status="modified"/>
    <mgmtController rn="mgmt" model="UCSC-MLOM-C10T-02" serial="FCH19267ENR"
subject="adaptor"
vendor="Cisco Systems Inc" status="modified">
    <firmwareRunning rn="fw-boot-loader" description="Cisco VIC adapter currently running
boot loader firmware version"
deployment="boot-loader" type="adaptor" version="4.0(5b)" status="modified"/>
    <firmwareRunning rn="fw-system" description="Cisco VIC adapter currently running
firmware version"
deployment="system" type="adaptor" version="4.1(1.47)" status="modified"/>
    <firmwareUpdatable rn="fw-updatable" description="Cisco VIC adapter backup firmware
version"
adminState="triggered" deployment="backup" operState="Idle" version="4.1(1d)" protocol="none"

remoteServer="" remotePath="" user="" pwd="" progress="Stage: No operation (0%), Status:
Idle,
Error: No error" type="adaptor" status="modified"/>
    <firmwareBootDefinition rn="fw-boot-def" type="adaptor" status="modified">
    <firmwareBootUnit rn="bootunit-combined" description="Cisco VIC adapter startup
firmware version"
adminState="triggered" image="running" resetOnActivate="no" type="combined"
version="4.1(1.47)" status="modified"/>
    </firmwareBootDefinition>
    </mgmtController>
    <adaptorExtEthIf portId="0" ifType="physical" linkState="down" mac="18:8B:9D:72:93:46"

transport="CE" adminSpeed="10Gbps" operSpeed="-" rn="ext-eth-0" status="modified">
    <adaptorConnectorInfo rn="connector-info" present="N/A" supported="N/A" type="N/A"

vendor="N/A" partNumber="N/A" partRevision="N/A" status="modified"/>
    <adaptorLinkTraining rn="link-training" linkTraining="n/a" status="modified"/>
    <adaptorPortProfiles rn="port-profiles" portProfilesCount="0" portProfilesName=""
status="modified"/>
    </adaptorExtEthIf>
    <adaptorExtEthIf portId="1" ifType="physical" linkState="down" mac="18:8B:9D:72:93:47"

transport="CE" adminSpeed="10Gbps" operSpeed="-" rn="ext-eth-1" status="modified">
    <adaptorConnectorInfo rn="connector-info" present="N/A" supported="N/A" type="N/A"

vendor="N/A" partNumber="N/A" partRevision="N/A" status="modified"/>
    <adaptorLinkTraining rn="link-training" linkTraining="n/a" status="modified"/>
    <adaptorPortProfiles rn="port-profiles" portProfilesCount="0" portProfilesName=""
status="modified"/>
    </adaptorExtEthIf>
    <adaptorHostEthIf name="eth0" cdn="VIC-1-eth0" ifType="virtual" mac="18:8B:9D:72:93:52"
mtu="1500"
pxeBoot="disabled" iscsiBoot="disabled" usnicCount="0" uplinkPort="0" classOfService="N/A"

channelNumber="1" portProfile="" rn="host-eth-eth0" status="modified">
    <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled"
uplinkFailover="Disabled"
uplinkFailbackTimeout="5" order="ANY" trustedClassOfService="disabled" rateLimit="N/A"
vlan="N/A"
vlanMode="N/A" status="modified"/>

```



```

        <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1" status="modified"/>

        <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
tcpRxChecksum="enabled"
tcpSegment="enabled" tcpTxChecksum="enabled" status="modified"/>
        <adaptorEthRcvQueueProfile rn="eth-rcv-q" count="4" ringSize="512"
status="modified"/>
        <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"
status="modified"/>
        <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
tcpHash="disabled" status="modified"/>
        <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"
status="modified"/>
        <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"
status="modified"/>
        <adaptorRssProfile rn="rss" receiveSideScaling="enabled" status="modified"/>
        <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"

count="8" mode="MSIx" status="modified"/>
    </adaptorHostEthIf>
    <adaptorHostEthIf name="eth1" cdn="VIC-1-eth1" ifType="virtual" mac="18:8B:9D:72:93:53"

mtu="1500" pxeBoot="disabled" iscsiBoot="disabled" usnicCount="0" uplinkPort="1"
classOfService="N/A"
channelNumber="2" portProfile="" rn="host-eth-eth1" status="modified">
        <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled"
uplinkFailover="Disabled"
uplinkFailbackTimeout="5" order="ANY" trustedClassOfService="disabled" rateLimit="N/A"
vlan="N/A"
vlanMode="N/A" status="modified"/>
        <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1" status="modified"/>

        <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
tcpRxChecksum="enabled"
tcpSegment="enabled" tcpTxChecksum="enabled" status="modified"/>
        <adaptorEthRcvQueueProfile rn="eth-rcv-q" count="4" ringSize="512"
status="modified"/>
        <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"
status="modified"/>
        <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
tcpHash="disabled" status="modified"/>
        <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"
status="modified"/>
        <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"
status="modified"/>
        <adaptorRssProfile rn="rss" receiveSideScaling="enabled" status="modified"/>
        <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"

count="8" mode="MSIx" status="modified"/>
    </adaptorHostEthIf>
    <adaptorHostFcIf name="fc0" ifType="virtual" wwnn="10:00:18:8B:9D:72:93:54"
wwpn="20:00:18:8B:9D:72:93:54" uplinkPort="0" sanBoot="disabled" channelNumber="3"
portProfile=""
adminPersistentBindings="policy" rn="host-fc-fc0" status="modified">
        <adaptorFcGenProfile rn="general" mac="18:8B:9D:72:93:54" order="ANY"
classOfService="N/A"
rateLimit="N/A" vlan="NONE" persistentLunBind="disabled" maxDataFieldSize="2112"
status="modified"/>
        <adaptorFcErrorRecoveryProfile rn="fc-err-rec" errorDetectTimeout="2000"
fcpErrorRecovery="disabled"
linkDownTimeout="30000" portDownIoRetryCount="8" portDownTimeout="10000"
resourceAllocationTimeout="10000"
ioTimeoutRetry="5" status="modified"/>
        <adaptorFcInterruptProfile rn="fc-int" mode="MSIx" status="modified"/>

```

```

        <adaptorFcPortFLogiProfile rn="fc-port-flogi" retries="INFINITE" timeout="2000"
status="modified"/>
        <adaptorFcPortPLogiProfile rn="fc-port-plogi" retries="8" timeout="2000"
status="modified"/>
        <adaptorFcPortProfile rn="fc-port" ioThrottleCount="512" lunsPerTarget="256"
lunQueueDepth="20" status="modified"/>
        <adaptorFcRecvQueueProfile rn="fc-rcv-q" ringSize="64" status="modified"/>
        <adaptorFcWorkQueueProfile rn="fc-work-q" ringSize="64" status="modified"/>
        <adaptorFcCdbWorkQueueProfile rn="fc-cdb-work-q" count="1" ringSize="512"
status="modified"/>
    </adaptorHostFcIf>
    <adaptorHostFcIf name="fc1" ifType="virtual" wwnn="10:00:18:8B:9D:72:93:55"
wwpn="20:00:18:8B:9D:72:93:55"
uplinkPort="1" sanBoot="disabled" channelNumber="4" portProfile=""
adminPersistentBindings="policy"
rn="host-fc-fc1" status="modified">
        <adaptorFcGenProfile rn="general" mac="18:8B:9D:72:93:55" order="ANY"
classOfService="N/A"
rateLimit="N/A" vlan="NONE" persistentLunBind="disabled" maxDataFieldSize="2112"
status="modified"/>
        <adaptorFcErrorRecoveryProfile rn="fc-err-rec" errorDetectTimeout="2000"
fcpErrorRecovery="disabled"
linkDownTimeout="30000" portDownTimeout="10000"
resourceAllocationTimeout="10000"
ioTimeoutRetry="5" status="modified"/>
        <adaptorFcInterruptProfile rn="fc-int" mode="MSIX" status="modified"/>
        <adaptorFcPortFLogiProfile rn="fc-port-flogi" retries="INFINITE" timeout="2000"
status="modified"/>
        <adaptorFcPortPLogiProfile rn="fc-port-plogi" retries="8" timeout="2000"
status="modified"/>
        <adaptorFcPortProfile rn="fc-port" ioThrottleCount="512" lunsPerTarget="256"
lunQueueDepth="20" status="modified"/>
        <adaptorFcRecvQueueProfile rn="fc-rcv-q" ringSize="64" status="modified"/>
        <adaptorFcWorkQueueProfile rn="fc-work-q" ringSize="64" status="modified"/>
        <adaptorFcCdbWorkQueueProfile rn="fc-cdb-work-q" count="1" ringSize="512"
status="modified"/>
    </adaptorHostFcIf>
    <adaptorVMFexEthIf name="pts0" ifType="virtual" mtu="1500" uplinkPort="0"
classOfService="N/A"
pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5"
rn="vmfex-eth-pts0" status="modified">
        <adaptorVMFexEthProfile rn="vmfexprofile" name="pts0" trustedClassOfService="disabled"
pciOrder="19"
completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN" coalescingTime="125"

interruptCount="6" interruptMode="MSI" largeReceive="enabled" tcpRxChecksum="enabled"
tcpSegment="enabled"
tcpTxChecksum="enabled" receiveQueueCount="4" receiveQueueRingSize="512"
receiveSideScaling="enabled"
receiveSideScalingIPv4Hash="enabled" receiveSideScalingTCPIpV4Hash="enabled"
receiveSideScalingIPv6Hash="enabled" receiveSideScalingTCPIpV6Hash="enabled"
receiveSideScalingExtIpV6Hash="disabled" receiveSideScalingExtTCPIpV6Hash="disabled"
transmitQueueCount="1"
transmitQueueRingSize="256" status="modified"/>
    </adaptorVMFexEthIf>
    <adaptorVMFexEthIf name="pts1" ifType="virtual" mtu="1500" uplinkPort="1"
classOfService="N/A"
pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5"
rn="vmfex-eth-pts1" status="modified">
        <adaptorVMFexEthProfile rn="vmfexprofile" name="pts1" trustedClassOfService="disabled"

pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"

```

```

coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"

receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"

receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
  </adaptorVMFexEthIf>
  <adaptorVMFexEthIf name="pts2" ifType="virtual" mtu="1500" uplinkPort="0"
classOfService="N/A"
pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5"
rn="vmfex-eth-pts2" status="modified">
  <adaptorVMFexEthProfile rn="vmfexprofile" name="pts2" trustedClassOfService="disabled"

pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled"
tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4" receiveQueueRingSize="512"

receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"
receiveSideScalingTCPIpV4Hash="enabled"
receiveSideScalingIpV6Hash="enabled" receiveSideScalingTCPIpV6Hash="enabled"
receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
  </adaptorVMFexEthIf>
  <adaptorVMFexEthIf name="pts3" ifType="virtual" mtu="1500" uplinkPort="1"
classOfService="N/A"
pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5"
rn="vmfex-eth-pts3" status="modified">
  <adaptorVMFexEthProfile rn="vmfexprofile" name="pts3" trustedClassOfService="disabled"

pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"

receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"

receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
  </adaptorVMFexEthIf>
  <adaptorVMFexEthIf name="pts4" ifType="virtual" mtu="1500" uplinkPort="0"
classOfService="N/A" pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5" rn="vmfex-eth-pts4" status="modified">
  <adaptorVMFexEthProfile rn="vmfexprofile" name="pts4" trustedClassOfService="disabled"

pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled"
tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4" receiveQueueRingSize="512"

receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"
receiveSideScalingTCPIpV4Hash="enabled"
receiveSideScalingIpV6Hash="enabled" receiveSideScalingTCPIpV6Hash="enabled"
receiveSideScalingExtIpV6Hash="disabled" receiveSideScalingExtTCPIpV6Hash="disabled"
transmitQueueCount="1" transmitQueueRingSize="256" status="modified"/>
  </adaptorVMFexEthIf>

```

```

    <adaptorVMFexEthIf name="pts5" ifType="virtual" mtu="1500" uplinkPort="1"
classOfService="N/A" pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5" rn="vmfex-eth-pts5" status="modified">
    <adaptorVMFexEthProfile rn="vmfexprofile" name="pts5" trustedClassOfService="disabled"
pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"
receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"
receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
    </adaptorVMFexEthIf>
    <adaptorVMFexEthIf name="pts6" ifType="virtual" mtu="1500" uplinkPort="0"
classOfService="N/A" pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5" rn="vmfex-eth-pts6" status="modified">
    <adaptorVMFexEthProfile rn="vmfexprofile" name="pts6" trustedClassOfService="disabled"
pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"
receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"
receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
    </adaptorVMFexEthIf>
    <adaptorVMFexEthIf name="pts7" ifType="virtual" mtu="1500" uplinkPort="1"
classOfService="N/A"
pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5"
rn="vmfex-eth-pts7" status="modified">
    <adaptorVMFexEthProfile rn="vmfexprofile" name="pts7" trustedClassOfService="disabled"
pciOrder="19" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"
receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"
receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
status="modified"/>
    </adaptorVMFexEthIf>
    <adaptorVMFexEthIf name="pts8" ifType="virtual" mtu="1500" uplinkPort="0"
classOfService="N/A" pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5" rn="vmfex-eth-pts8" status="modified">
    <adaptorVMFexEthProfile rn="vmfexprofile" name="pts8" trustedClassOfService="disabled"
pciOrder="20" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"
receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"

```

```

receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
  status="modified"/>
  </adaptorVMFexEthIf>
  <adaptorVMFexEthIf name="pts9" ifType="virtual" mtu="1500" uplinkPort="1"
classOfService="N/A" pxeBoot="disabled" vlan="N/A" vlanMode="N/A" uplinkFailover="Enabled"
uplinkFailbackTimeout="5" rn="vmfex-eth-pts9" status="modified">
  <adaptorVMFexEthProfile rn="vmfexprofile" name="pts9" trustedClassOfService="disabled"

pciOrder="20" completionQueueCount="5" completionQueueRingSize="1" coalescingType="MIN"
coalescingTime="125" interruptCount="6" interruptMode="MSI" largeReceive="enabled"
tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled" receiveQueueCount="4"

receiveQueueRingSize="512" receiveSideScaling="enabled" receiveSideScalingIpV4Hash="enabled"

receiveSideScalingTCPIpV4Hash="enabled" receiveSideScalingIpV6Hash="enabled"
receiveSideScalingTCPIpV6Hash="enabled" receiveSideScalingExtIpV6Hash="disabled"
receiveSideScalingExtTCPIpV6Hash="disabled" transmitQueueCount="1" transmitQueueRingSize="256"
  status="modified"/>
  </adaptorVMFexEthIf>
  <adaptorCfgImporter rn="import-config" adminState="triggered" descr="import-config"
proto="none" hostname="" remoteFile="" user="" pwd="" progress="Done" status="modified"/>
  <adaptorCfgBackup rn="export-config" adminState="triggered" descr="export-config"
proto="none" hostname="" remoteFile="" user="" pwd="" progress="Done" status="modified"/>
  </adaptorUnit>
</outConfig>
</configConfMo>

```

### Retrieving VIC Adapter General Profile Details

Request:

```

<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
inHierarchical="true" classId="adaptorGenProfile"/>

```

Response:

```

<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
response="yes" classId="adaptorGenProfile">
  <outConfigs>
    <adaptorGenProfile dn="sys/rack-unit-1/adaptor-1/general" pciSlot="1"
      productName="UCS VIC 1227T" model="UCSC-MLOM-C10T-02" serial="FCH19267ENR"
      revision="2" fipMode="Enabled" vntagMode="Enabled" lldp="Enabled"
      iscsiBootSupported="True" usnicSupported="True" configurationPending="yes"
      numOfVMFexIfs="10" vendorId="V01" vendor="Cisco Systems Inc"/>
  </outConfigs>
</configResolveClass>

```

### Retrieving VIC Adapter Uplink Port Details

Request:

```

<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
inHierarchical="true" classId="adaptorExtEthIf"/>

```

Response:

```

<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"

```

```

response="yes" classId="adaptorExtEthIf">
  <outConfigs>
    <adaptorExtEthIf portId="0" ifType="physical" linkState="down"
      mac="18:8B:9D:72:93:46" transport="CE" adminSpeed="10Gbps"
      operSpeed="-" dn="sys/rack-unit-1/adaptor-1/ext-eth-0">
      <adaptorConnectorInfo rn="connector-info" present="N/A" supported="N/A" type="N/A"
        vendor="N/A" partNumber="N/A" partRevision="N/A"/>
      <adaptorLinkTraining rn="link-training" linkTraining="n/a"/>
      <adaptorPortProfiles rn="port-profiles" portProfilesCount="0" portProfilesName=""/>
    </adaptorExtEthIf>
    <adaptorExtEthIf portId="1" ifType="physical" linkState="down" mac="18:8B:9D:72:93:47"
      transport="CE" adminSpeed="10Gbps" operSpeed="-" dn="sys/rack-unit-1/adaptor-1/ext-eth-1">

      <adaptorConnectorInfo rn="connector-info" present="N/A" supported="N/A" type="N/A"
        vendor="N/A" partNumber="N/A" partRevision="N/A"/>
      <adaptorLinkTraining rn="link-training" linkTraining="n/a"/>
      <adaptorPortProfiles rn="port-profiles" portProfilesCount="0" portProfilesName=""/>
    </adaptorExtEthIf>
  </outConfigs>
</configResolveClass>

```

## Setting Uplink Port Speed of a VIC Adapter

Request:

```

<configConfMo cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/ext-eth-0">
  <inConfig>
    <adaptorExtEthIf portId="0" adminSpeed="10Gbps" dn="sys/rack-unit-1/adaptor-1/ext-eth-0"/>

  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/adaptor-1/ext-eth-0"
cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c" response="yes">
  <outConfig>
    <adaptorExtEthIf portId="0" ifType="physical" linkState="down" mac="18:8B:9D:72:93:46"

      transport="CE" adminSpeed="10Gbps" operSpeed="-"
      dn="sys/rack-unit-1/adaptor-1/ext-eth-0" status="modified">
      <adaptorConnectorInfo rn="connector-info" present="N/A" supported="N/A" type="N/A"
        vendor="N/A" partNumber="N/A" partRevision="N/A" status="modified"/>
      <adaptorLinkTraining rn="link-training" linkTraining="n/a" status="modified"/>
      <adaptorPortProfiles rn="port-profiles" portProfilesCount="0" portProfilesName=""
status="modified"/>
    </adaptorExtEthIf>
  </outConfig>
</configConfMo>

```




---

**Note** Configuring the speed of an uplink port is supported only for the Cisco UCS VIC1225T Virtual Interface Cards.

---

## Retrieving Adapter Ethernet Interface Details

Request:

```
<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
inHierarchical="true" classId="adaptorHostEthIf"/>
```

Response:

```
<configResolveClass cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
response="yes" classId="adaptorHostEthIf">
  <outConfigs>
    <adaptorHostEthIf name="eth0" cdn="VIC-1-eth0" ifType="virtual"
      mac="18:8B:9D:72:93:52" mtu="1500" pxeBoot="disabled" iscsiBoot="disabled"
      usnicCount="0" uplinkPort="0" classOfService="N/A" channelNumber="1" portProfile=""
      dn="sys/rack-unit-1/adaptor-1/host-eth-eth0">
      <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled"
        uplinkFailover="Disabled" uplinkFailbackTimeout="5" order="ANY"
      trustedClassOfService="disabled"
        rateLimit="N/A" vlan="N/A" vlanMode="N/A"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1"/>
      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
      tcpRxChecksum="enabled"
        tcpSegment="enabled" tcpTxChecksum="enabled"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="512"/>
      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
      tcpHash="disabled"/>
      <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"/>
      <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorRssProfile rn="rss" receiveSideScaling="enabled"/>
      <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
      count="8" mode="MSIx"/>
    </adaptorHostEthIf>
    <adaptorHostEthIf name="eth1" cdn="VIC-1-eth1" ifType="virtual" mac="18:8B:9D:72:93:53"
      mtu="1500"
      pxeBoot="disabled" iscsiBoot="disabled" usnicCount="0" uplinkPort="1"
      classOfService="N/A" channelNumber="2"
      portProfile="" dn="sys/rack-unit-1/adaptor-1/host-eth-eth1">
      <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled"
      uplinkFailover="Disabled"
        uplinkFailbackTimeout="5" order="ANY" trustedClassOfService="disabled" rateLimit="N/A"
        vlan="N/A" vlanMode="N/A"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1"/>
      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
      tcpRxChecksum="enabled"
        tcpSegment="enabled" tcpTxChecksum="enabled"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="512"/>
      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
      tcpHash="disabled"/>
      <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"/>
      <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorRssProfile rn="rss" receiveSideScaling="enabled"/>
      <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
      count="8" mode="MSIx"/>
    </adaptorHostEthIf>
  </outConfigs>
</configResolveClass>
```

## Creating Adapter Ethernet Interface

Request:

```
<configConfMo cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2">
  <inConfig>
    <adaptorHostEthIf name="eth2" mac="AUTO" mtu="1500" pxeBoot="disabled" uplinkPort="0"
      classOfService="0" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2" status="created">
      <adaptorEthGenProfile rn="general" order="ANY" trustedClassOfService="disabled"
        rateLimit="OFF" vlan="NONE" vlanMode="TRUNK"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5"/>
      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
        tcpRxChecksum="enabled" tcpSegment="enabled" tcpTxChecksum="enabled"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="512"/>
      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
        tcpHash="disabled"/>
      <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"/>
      <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorRssProfile rn="rss" receiveSideScaling="enabled"/>
      <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
        count="8" mode="MSIX"/>
    </adaptorHostEthIf>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1/host-eth-eth2"
cookie="0000357041/1800a4e5-0054-1054-8005-7e573e8f835c" response="yes">
  <outConfig>
    <adaptorHostEthIf name="eth2" cdn="VIC-1-eth2" ifType="virtual"
      mac="18:8B:9D:72:93:56" mtu="1500" pxeBoot="disabled" iscsiBoot="disabled"
      usnicCount="0" uplinkPort="0" classOfService="0" channelNumber="N/A" portProfile="N/A"

      dn="sys/rack-unit-1/adaptor-1/host-eth-eth2" status="created">
      <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled" uplinkFailover="N/A"

      uplinkFailbackTimeout="N/A" order="ANY" trustedClassOfService="disabled" rateLimit="OFF"

      vlan="NONE" vlanMode="TRUNK" status="created"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1" status="created"/>

      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="enabled"
        tcpRxChecksum="enabled"
        tcpSegment="enabled" tcpTxChecksum="enabled" status="created"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="512" status="created"/>

      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"
        status="created"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
        tcpHash="disabled" status="created"/>
      <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256" status="created"/>

      <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="enabled"
        status="created"/>
      <adaptorRssProfile rn="rss" receiveSideScaling="enabled" status="created"/>
      <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
        count="8" mode="MSIX" status="created"/>
    </adaptorHostEthIf>
  </out Config>
```



```
</configConfMo>
```

## Modifying Properties of Ethernet Interface

Request:

```
<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2">
  <inConfig>
    <adaptorHostEthIf name="eth2" mac="AUTO" mtu="2222" pxeBoot="enabled"
      uplinkPort="0" classOfService="2" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2">
      <adaptorEthGenProfile rn="general" order="ANY" trustedClassOfService="disabled"
        rateLimit="OFF" vlan="NONE" vlanMode="TRUNK"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5"/>
      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="disabled"
tcpRxChecksum="enabled"
      tcpSegment="enabled" tcpTxChecksum="enabled"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="256"/>
      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled"
tcpHash="disabled"/>
      <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256"/>
      <adaptorIpV6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="disabled"/>
      <adaptorRssProfile rn="rss" receiveSideScaling="enabled"/>
      <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
count="8" mode="MSIx"/>
    </adaptorHostEthIf>
  </inConfig>
</configConfMo>
```

Response: The highlighted changes should be done, verify the changes in the Cisco IMC or Web user interface.

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1/host-eth-eth2"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <adaptorHostEthIf name="eth2" cdn="VIC-1-eth2" ifType="virtual" mac="18:8B:9D:72:93:56"
      mtu="2222" pxeBoot="enabled" iscsiBoot="disabled" usnicCount="0" uplinkPort="0"
      classOfService="2" channelNumber="N/A" portProfile="N/A"
dn="sys/rack-unit-1/adaptor-1/host-eth-eth2"
      status="modified">
      <adaptorEthGenProfile rn="general" vmq="disabled" arfs="disabled" uplinkFailover="N/A"
uplinkFailbackTimeout="N/A" order="ANY" trustedClassOfService="disabled" rateLimit="OFF"
      vlan="NONE" vlanMode="TRUNK" status="modified"/>
      <adaptorEthCompQueueProfile rn="eth-comp-q" count="5" ringSize="1" status="modified"/>
      <adaptorEthOffloadProfile rn="eth-offload" largeReceive="disabled"
tcpRxChecksum="enabled"
      tcpSegment="enabled" tcpTxChecksum="enabled" status="modified"/>
      <adaptorEthRecvQueueProfile rn="eth-rcv-q" count="4" ringSize="256" status="modified"/>
      <adaptorIpV4RssHashProfile rn="ipv4-rss-hash" ipHash="enabled" tcpHash="enabled"
status="modified"/>
      <adaptorExtIpV6RssHashProfile rn="ext-ipv6-rss-hash" ipHash="disabled" tcpHash="disabled"
status="modified"/>
    </adaptorHostEthIf>
  </outConfig>
</configConfMo>
```

```

    <adaptorEthWorkQueueProfile rn="eth-work-q" count="1" ringSize="256" status="modified"/>
    <adaptorIPv6RssHashProfile rn="ipv6-rss-hash" ipHash="enabled" tcpHash="disabled"
status="modified"/>
    <adaptorRssProfile rn="rss" receiveSideScaling="enabled" status="modified"/>
    <adaptorEthInterruptProfile rn="eth-int" coalescingType="MIN" coalescingTime="125"
count="8"
    mode="MSIX" status="modified"/>
  </adaptorHostEthIf>
</outConfig>
</configConfMo>

```

## Deleting Ethernet Interface

Request:

```

<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2">
  <inConfig>
    <adaptorHostEthIf name="eth2" mac="AUTO" mtu="2222" pxeBoot="enabled"
uplinkPort="0" classOfService="2" dn="sys/rack-unit-1/adaptor-1/host-eth-eth2"
status="deleted"/>
  </inConfig>
</configConfMo>

```

This deletes the chosen ethernet interface.

Response:

```

<configConfMo dn="sys/rack-unit-1/adaptor-1/host-eth-eth2"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
  </outConfig>
</configConfMo>

```

## Retrieving Adapter Fibre Channel Interface Details

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="adaptorHostFcIf"/>

```

Response:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="adaptorHostFcIf">
  <outConfigs>
    <adaptorHostFcIf name="fc0" ifType="virtual" wwnn="10:00:18:8B:9D:72:93:54"
wwpn="20:00:18:8B:9D:72:93:54" uplinkPort="0" sanBoot="disabled" channelNumber="N/A"

    portProfile="N/A" adminPersistentBindings="policy"
dn="sys/rack-unit-1/adaptor-1/host-fc-fc0">
    <adaptorFcGenProfile rn="general" mac="18:8B:9D:72:93:54" order="ANY" classOfService="3"

    rateLimit="OFF" vlan="NONE" persistentLunBind="disabled" maxDataFieldSize="2112"/>
    <adaptorFcErrorRecoveryProfile rn="fc-err-rec" errorDetectTimeout="2000"
fcpErrorRecovery="disabled" linkDownTimeout="30000" portDownIoRetryCount="8"
portDownTimeout="10000" resourceAllocationTimeout="10000" ioTimeoutRetry="5"/>
    <adaptorFcInterruptProfile rn="fc-int" mode="MSIX"/>
    <adaptorFcPortFLogiProfile rn="fc-port-flogi" retries="INFINITE" timeout="2000"/>
    <adaptorFcPortPLogiProfile rn="fc-port-plogi" retries="8" timeout="2000"/>

```

```

    <adaptorFcPortProfile rn="fc-port" ioThrottleCount="512" lunsPerTarget="256"
lunQueueDepth="20"/>
    <adaptorFcRecvQueueProfile rn="fc-rcv-q" ringSize="64"/>
    <adaptorFcWorkQueueProfile rn="fc-work-q" ringSize="64"/>
    <adaptorFcCdbWorkQueueProfile rn="fc-cdb-work-q" count="1" ringSize="512"/>
  </adaptorHostFcIf>
  <adaptorHostFcIf name="fc1" ifType="virtual" wwnn="10:00:18:8B:9D:72:93:55"
  wwpn="20:00:18:8B:9D:72:93:55" uplinkPort="1" sanBoot="disabled" channelNumber="N/A"
  portProfile="N/A" adminPersistentBindings="policy"
  dn="sys/rack-unit-1/adaptor-1/host-fc-fc1">
    <adaptorFcGenProfile rn="general" mac="18:8B:9D:72:93:55" order="ANY" classOfService="3"
  rateLimit="OFF"
  vlan="NONE" persistentLunBind="disabled" maxDataFieldSize="2112"/>
    <adaptorFcErrorRecoveryProfile rn="fc-err-rec" errorDetectTimeout="2000"
fcpErrorRecovery="disabled"
  linkDownTimeout="30000" portDownIoRetryCount="8" portDownTimeout="10000"
resourceAllocationTimeout="10000" ioTimeoutRetry="5"/>
    <adaptorFcInterruptProfile rn="fc-int" mode="MSIX"/>
    <adaptorFcPortFLogiProfile rn="fc-port-flogi" retries="INFINITE" timeout="2000"/>
    <adaptorFcPortPLogiProfile rn="fc-port-plogi" retries="8" timeout="2000"/>
    <adaptorFcPortProfile rn="fc-port" ioThrottleCount="512" lunsPerTarget="256"
lunQueueDepth="20"/>
    <adaptorFcRecvQueueProfile rn="fc-rcv-q" ringSize="64"/>
    <adaptorFcWorkQueueProfile rn="fc-work-q" ringSize="64"/>
    <adaptorFcCdbWorkQueueProfile rn="fc-cdb-work-q" count="1" ringSize="512"/>
  </adaptorHostFcIf>
</outConfigs>
</configResolveClass>

```

## Creating Boot Entry for a Fibre Channel Interface

Request:

```

<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/adaptor-1/host-fc-fc0/fcboot-0">
  <inConfig>
    <adaptorFcBootTestTable dn="sys/rack-unit-1/adaptor-1/host-fc-fc0/fcboot-0"
targetWwpn="20:11:22:33:44:55:66:78" bootLun="1" status="created"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/adaptor-1/host-fc-fc0/fcboot-0"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <adaptorFcBootTestTable index="0" targetWwpn="20:11:22:33:44:55:66:78" bootLun="1"
dn="sys/rack-unit-1/adaptor-1/host-fc-fc0/fcboot-0" status="created"/>
  </outConfig>
</configConfMo>

```

## Configuring HUU for One-Time Boot

Request:

```

<configConfMo cookie='1342064443/ba6bccf0-c499-1499-8002-134c9ee53d50'
inHierarchical='false' dn='sys/rack-unit-1/boot-one-time' >
  <inConfig>
    <oneTimeBootDevice device='huu' dn='sys/rack-unit-1/boot-one-time'>

```

```

    </oneTimeBootDevice>
  </inConfig>
</configConfMo>

```

You can verify this in the user interface. Similar to this example, you can also set SCU and HV as one-time boot devices.

### Mounting Share to the VMedia with Username

Request:

```

<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" dn="sys/svc-ext/vmedia-svc/vmmap-WIN7">
  <inConfig>
    <commVMediaMap map="nfs" dn="sys/svc-ext/vmedia-svc/vmmap-WIN7"
      volumeName="WIN7" remoteShare="10.10.10.10:/nfs" remoteFile="sllhuu.iso"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/svc-ext/vmedia-svc/vmmap-WIN7"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <commVMediaMap volumeName="WIN7" map="nfs" remoteShare="10.10.10.10:/nfs"
      remoteFile="sllhuu.iso"
      mountOptions="nolock,noexec,soft,timeo=100,retry=2,rsiz=3072,wsiz=3072"
      mappingStatus="ERROR: mounting 10.10.10.10:/nfs failed: Permission denied " password=""
      dn="sys/svc-ext/vmedia-svc/vmmap-WIN7" status="created"/>
  </outConfig>
</configConfMo>

```

### Mounting Share to the VMedia Without the Username

Request:

```

<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
dn="sys/svc-ext/vmedia-svc/vmmap-Win12" inHierarchical="false">
  <inConfig>
    <commVMediaMap dn="sys/svc-ext/vmedia-svc/vmmap-Win12" map="www"
      mountOptions="username=,password=" remoteFile="en_windows_server_2012_x64_dvd_915478.iso"
      remoteShare="http://10.10.10.10/" status="created" volumeName="Win12"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/svc-ext/vmedia-svc/vmmap-Win12"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <commVMediaMap volumeName="Win12" map="www" remoteShare="http://10.10.10.10/"
      remoteFile="en_windows_server_2012_x64_dvd_915478.iso" mountOptions="noauto,
      username=,password=" mappingStatus="ERROR: mount.httpfs2: HEAD: reply didn't contain
      Content-Length! "
      password="" dn="sys/svc-ext/vmedia-svc/vmmap-Win12" status="created"/>
  </outConfig>
</configConfMo>

```

## Setting Remotesyslog Primary Server

Request:

```
<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" dn="sys/svc-ext/syslog/client-primary">
  <inConfig>
    <commSyslogClient name="primary" adminState="enabled"
      hostname="10.xxx.196.xxx" port="900" dn="sys/svc-ext/syslog/client-primary"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/svc-ext/syslog/client-primary"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <commSyslogClient adminState="enabled" hostname="10.xxx.196.xxx"
      name="primary" port="900" adminAction="no-op"
      dn="sys/svc-ext/syslog/client-primary" status="modified"/>
  </outConfig>
</configConfMo>
```

## Setting Remotesyslog Secondary Server

Request:

```
<configConfMo cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" dn="sys/svc-ext/syslog/client-secondary">
  <inConfig>
    <commSyslogClient name="secondary" adminState="enabled"
      hostname="10.xxx.195.xxx"
      port="900" dn="sys/svc-ext/syslog/client-secondary"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/svc-ext/syslog/client-secondary"
cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c" response="yes">
  <outConfig>
    <commSyslogClient adminState="enabled" hostname="10.xxx.195.xxx"
      name="secondary" port="900" adminAction="no-op"
      dn="sys/svc-ext/syslog/client-secondary" status="modified"/>
  </outConfig>
</configConfMo>
```

## Retrieving Syslog Client-Server Details

Request:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" classId="commSyslogClient"/>
```

Response:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="commSyslogClient">
  <outConfigs>
```

```

    <commSyslogClient adminState="enabled" hostname="10.xxx.196.xxx" name="primary"
    port="900" adminAction="no-op" dn="sys/svc-ext/syslog/client-primary"/>
    <commSyslogClient adminState="enabled" hostname="10.xxx.195.xxx" name="secondary"
    port="900" adminAction="no-op" dn="sys/svc-ext/syslog/client-secondary"/>
  </outConfigs>
</configResolveClass>

```

### Retrieving LOM MAC Address Support Details

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
classId="networkAdaptorUnit" inHierarchical="false"/>

```

Response:

```

<configResolveClass cookie="1270945253/00566da0-83eb-13eb-8002-98219ee53d50" response="yes"
classId="networkAdaptorUnit">
  <outConfigs>
    <networkAdaptorUnit slot="1" model="Broadcom 57712-S" numIntf="2"
    dn="sys/rack-unit-1/network-adaptor-1" > </networkAdaptorUnit>
    <networkAdaptorUnit slot="2" model="Broadcom 57711 1" numIntf="2"
    dn="sys/rack-unit-1/network-adaptor-2" > </networkAdaptorUnit>
    <networkAdaptorUnit slot="L" model="Intel Onboard 1Gbps Ethernet Adapter" numIntf="2"
    dn="sys/rack-unit-1/network-adaptor-L" >
    </networkAdaptorUnit>
  </outConfigs></configResolveClass>

```

### Retrieving MAC Address of Individual Ports of Network Controllers

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="networkAdapterEthIf"/>

```

Response:

```

<configResolveClass cookie='1347541314/e95cea30-c994-1994-80ac-0877e1a85750' response="yes"
dn="sys/rack-unit-1/network-adaptor-1">
  <outConfigs>
    <networkAdaptorEthIf id="1" mac="00:10:18:bf:62:0c" linkStateAtPOST="Down"
    dn="sys/rack-unit-1/network-adaptor-1/eth-1" > </networkAdaptorEthIf>
    <networkAdaptorEthIf id="2" mac="00:10:18:bf:62:0e" linkStateAtPOST="Down"
    dn="sys/rack-unit-1/network-adaptor-1/eth-2" >
    </networkAdaptorEthIf>
  </outConfigs></configResolveClass>

```

### Retrieving LOM MAC Address of Individual Ports

Request:

```

<configResolveDn cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" dn="sys/rack-unit-1/network-adaptor-L"/>

```

Response:

```

<configResolveDn cookie="1270945253/00566da0-83eb-13eb-8002-98219ee53d50" response="yes"
dn="sys/rack-unit-1/network-adaptor-L/eth-1">

```

```

<outConfig>
  <networkAdaptorEthIf id="1" mac="50:3D:E5:9E:21:9C" linkStateAtPOST="Up"
    dn="sys/rack-unit-1/network-adaptor-L/eth-1" >
  </networkAdaptorEthIf>
</outConfig>
</configResolveDn>

```

## Retrieving LSI Storage Adapter Summary Properties Installed on C-Series Server

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="storageController"/>

```

Response:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageController">
  <outConfigs>
    <storageController id="SLOT-MEZZ" pciSlot="SLOT-MEZZ"
      presence="equipped" raidSupport="yes" serial="FCH1901JBUX" type="SAS"
      vendor="LSI Logic" selfEncryptEnabled="yes" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ">
      <storageControllerProps rn="controller-props" pciSlot="SLOT-MEZZ" health="Good"
        controllerStatus="Optimal" batteryStatus="Optimal" bbuPresent="true"
raidChipTempCentigrade="49"
        backendPortCount="8" memorySize="1024 MB" cacheMemorySize="820 MB" virtualDriveCount="1"

        degradedVirtualDriveCount="0" offlineVirtualDriveCount="0" physicalDriveCount="15"
criticalPhysicalDriveCount="0" failedPhysicalDriveCount="0" memoryCorrectableErrors="0"

        memoryUncorrectableErrors="0" bootDrive="none" bootDriveIsPhysicalDrive="false"
supportsRaid0="true"
        supportsRaid1="true" supportsRaid5="true" supportsRaid6="true" supportsRaid00="true"
supportsRaid10="true" supportsRaid50="true" supportsRaid60="true" supportsRaidle="false"

        supportsRaidlerlq0="true" supportsRaidle0rlq0="true" supportsRaidsrl03="true"
dateOfManufacture="2015-01-26" revision="03" prebootCliVersion="01.07-05:##0000"
webBiosVersion="N/A"
        nvdataVersion="3.1511.00-0011" bootBlockVersion="3.07.00.00-0003" bootVersion="N/A"
nvramPresent="true"
        serialDebuggerPresent="true" flashPresent="true" sasAddress0="5188b9d724504b7f"
sasAddress1="5188b9d724503a7f"
        sasAddress2="0000000000000000" sasAddress3="0000000000000000"
sasAddress4="0000000000000000"
        sasAddress5="0000000000000000" sasAddress6="0000000000000000"
sasAddress7="0000000000000000"
        serial="FCH1901JBUX" firmwarePackageBuild="24.12.1-0018" ttyLogStatus="Complete
(total size 426675 bytes)"/>
      <storageControllerHealth rn="controller-health" id="SLOT-MEZZ" health="Good"/>
      <generatedStorageControllerKeyId rn="gen-key-id"
generatedKeyId="UCSC-RAID_FCH1901JBUX_c7984572"/>
      <suggestedStorageControllerSecurityKey rn="suggested-sec-key"
suggestedSecurityKey="itXTMdShfbG6nyXddEoWZjMGd4BV2Ruh"/>
      <selfEncryptStorageController rn="ctr-self-encrypt" keyId="test1234"
securityKey="Security key"
existingSecurityKey="Existing security key" adminAction="no-op"/>
      <storageRaidBattery rn="raid-battery" batteryType="TMM-C SuperCap" health="Good"
batteryStatus="Optimal"
batteryPresent="true" chargingState="N/A" temperature="30 degrees C" temperatureHigh="false"
designVoltage="9.500 V"
voltage="9.547 V" current="0.000 A" learnMode="Auto" learnCycleStatus="Successful"

```

```

learnCycleRequested="false"
nextLearnCycle="1970-01-28 22:50" designCapacity="288 Joules" manufacturer="LSI"
dateOfManufacture="2014-09-28"
serialNumber="14609" firmwareVersion="6536-03A" adminAction="no-op"/>
  <storageVirtualDriveCreatorUsingUnusedPhysicalDrive rn="virtual-drive-create"
description="Create a new virtual drive from unused physical drive(s) available in the rack
server.
Children objects of this object, lists all currently available unused physical drives."
minRequiredPhysicalDrives="RAID 0 at least 1 physical drive, RAID 1 at least 2 physical
drives,
RAID 5 at least 3 physical drives, RAID 6 at least 3 physical drives, RAID 10 at least 4
physical drives,
RAID 50 or RAID 60 at least 6 physical drives" virtualDriveName="" raidLevel="" size=""
driveGroup="[span1_pd_id1,span1_pd_id2,span1_pd_id3...,span1_pd_idN]
[span2_pd_id1,span2_pd_id2,span2_pd_id3...,span2_pd_idN]..." writePolicy="" stripSize=""
readPolicy="" cachePolicy="" accessPolicy="" diskCachePolicy="" createdVirtualDriveDn=""
operStatus="" adminAction="no-op" adminState="triggered">
  <storageUnusedLocalDisk id="3" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-3"/>
  <storageUnusedLocalDisk id="4" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-4"/>
  <storageUnusedLocalDisk id="5" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-5"/>
  <storageUnusedLocalDisk id="6" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-6"/>
  <storageUnusedLocalDisk id="8" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-8"/>
  <storageUnusedLocalDisk id="9" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-9"/>
  <storageUnusedLocalDisk id="10" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-10"/>
  <storageUnusedLocalDisk id="11" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-11"/>
  <storageUnusedLocalDisk id="12" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-12"/>
  <storageUnusedLocalDisk id="13" pdStatus="Unconfigured Good" coercedSize="3814697
MB"
health="Good" mediaType="HDD" vendor="SEAGATE" rn="pd-13"/>
  </storageVirtualDriveCreatorUsingUnusedPhysicalDrive>
  <storageVirtualDriveCreatorUsingVirtualDriveGroup rn="virtual-drive-carve"
description="Create a new virtual drive from an existing virtual drive, with available
physical drive group space.
Children objects of this object, lists all virtual drives with available drive group space."
sharedVirtualDriveId="" virtualDriveName="" size="" writePolicy="" stripSize="" readPolicy=""
cachePolicy="" accessPolicy="" diskCachePolicy="" createdVirtualDriveDn="" operStatus=""
adminState="triggered"/>
  <storageLocalDisk id="1" pdStatus="Online" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1C0VNV0000K5486L16"
driveState="Online"
online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000"

```



```

enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-1">
  <storageLocalDiskProps rn="general-props" physicalDrive="1" pdStatus="Online"
health="Good"
enclosureDeviceId="24" deviceId="15" sequenceNumber="2" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"

coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089b407b5"
sasAddress1="5000c50089b407b6"
physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" dropInProgress="false" currentDrop="No
operation in progress"
progressPercent="0" elapsedSeconds="0"/>
  </storageLocalDisk>
  <storageLocalDisk id="2" pdStatus="Online" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023"
driveFirmware="0004" driveSerialNumber="S1Z1C0Y9000K5486G13" driveState="Online"
online="true"
dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaeee0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-2">
  <storageLocalDiskProps rn="general-props" physicalDrive="2" pdStatus="Online"
health="Good"
enclosureDeviceId="24" deviceId="16" sequenceNumber="2" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
  coercedSize="3814697 MB"
powerState="active" sasAddress0="5000c50089b4002d" sasAddress1="5000c50089b4002e"
physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" dropInProgress="false" currentDrop="No
operation in progress"
progressPercent="0" elapsedSeconds="0"/>
  </storageLocalDisk>
  <storageLocalDisk id="3" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1C0ST000K5486KJF"
driveState="Unconfigured Good"
online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaeee0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-3">
  <storageLocalDiskProps rn="general-props" physicalDrive="3" pdStatus="Unconfigured
Good"
health="Good" enclosureDeviceId="24" deviceId="17" sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
MB"
nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
sasAddress0="5000c50089b40c5d"
sasAddress1="5000c50089b40c5e" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" dropInProgress="false" currentDrop="No

```

```

operation in progress"
progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="4" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1C0XW0000K5486FYZ"
driveState="Unconfigured Good" online="true" dedicatedHotSpareForVdId=""
enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000" enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no" adminAction="no-op" rn="pd-4">
  <storageLocalDiskProps rn="general-props" physicalDrive="4" pdStatus="Unconfigured
  Good" health="Good"
enclosureDeviceId="24" deviceId="10" sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"

coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089b4015d"
sasAddress1="5000c50089b4015e" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="5" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
coercedSize="3814697 MB" vendor="SEAGATE" productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1C0LG0000K5486KZG" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVdId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-5">
  <storageLocalDiskProps rn="general-props" physicalDrive="5" pdStatus="Unconfigured
  Good"
health="Good" enclosureDeviceId="24" deviceId="13" sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"

coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089b42465"
sasAddress1="5000c50089b42466" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="6" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
coercedSize="3814697 MB"
vendor="SEAGATE" productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1C0RB0000K5486KXG"
driveState="Unconfigured Good" online="true" dedicatedHotSpareForVdId=""
enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000" enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no" adminAction="no-op" rn="pd-6">
  <storageLocalDiskProps rn="general-props" physicalDrive="6" pdStatus="Unconfigured
  Good"
health="Good" enclosureDeviceId="24" deviceId="20" sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"

```

```

mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
sasAddress0="5000c50089b41215"
sasAddress1="5000c50089b41216" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false" currentLrop="No
operation in progress"
progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="7" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0063"
driveFirmware="0004" driveSerialNumber="Z1Z8MRC70000R540WM1C" driveState="JBOD" online="true"

dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="yes"
fdeEnabled="yes" secured="yes" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-7">

  <storageLocalDiskProps rn="general-props" physicalDrive="7" pdStatus="JBOD"
health="Good"
enclosureDeviceId="24" deviceId="26" sequenceNumber="4" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"

coercedSize="3814697 MB" powerState="active" sasAddress0="5000c5008390f455"
sasAddress1="5000c5008390f456" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false" currentLrop="No
operation in progress"
progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="8" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z19MEK0000K5474R7B"
driveState="Unconfigured Good"
online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000" enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no"
adminAction="no-op" rn="pd-8">
  <storageLocalDiskProps rn="general-props" physicalDrive="8" pdStatus="Unconfigured
  Good"
health="Good" enclosureDeviceId="24" deviceId="18" sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
sasAddress0="5000c50089a49f75"
sasAddress1="5000c50089a49f76" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="9" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1AXG20000K5486GFD"

```

```

driveState="Unconfigured Good" online="true" dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaae0000" enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no" adminAction="no-op" rn="pd-9">
  <storageLocalDiskProps rn="general-props" physicalDrive="9" pdStatus="Unconfigured
  Good"
  health="Good" enclosureDeviceId="24" deviceId="19" sequenceNumber="1" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
  mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
  nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
  sasAddress0="5000c50089a54ed5"
  sasAddress1="5000c50089a54ed6" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
  currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="10" pdStatus="Unconfigured Good" health="Good"
  predictiveFailureCount="0"
  linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
  vendor="SEAGATE"
  productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1AE7C0000K5488N1T"
  driveState="Unconfigured Good" online="true" dedicatedHotSpareForVDId=""
  enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaae0000"
  enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
  fdeCapable="no" fdeEnabled="no" secured="no" locked="no" foreignLocked="no"
  adminAction="no-op" rn="pd-10">
  <storageLocalDiskProps rn="general-props" physicalDrive="10" pdStatus="Unconfigured
  Good"
  health="Good" enclosureDeviceId="24" deviceId="23" sequenceNumber="1" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
  mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
  nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
  sasAddress0="5000c5008996c641"
  sasAddress1="5000c5008996c642" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
  currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="11" pdStatus="Unconfigured Good" health="Good"
  predictiveFailureCount="0"
  linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
  vendor="SEAGATE"
  productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z19LR20000K5474R6W"
  driveState="Unconfigured Good" online="true" dedicatedHotSpareForVDId=""
  enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaae0000"
  enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
  fdeCapable="no" fdeEnabled="no" secured="no" locked="no" foreignLocked="no"
  adminAction="no-op" rn="pd-11">
  <storageLocalDiskProps rn="general-props" physicalDrive="11" pdStatus="Unconfigured
  Good"
  health="Good" enclosureDeviceId="24" deviceId="22" sequenceNumber="1" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
  mediaType="HDD"
  blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447 MB"
  nonCoercedSize="3814935 MB"
  coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089a4f409"
  sasAddress1="5000c50089a4f40a" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false" currentLrop="No
  operation in progress"
  progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="12" pdStatus="Unconfigured Good" health="Good"

```

```

predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z192230000K5486HLT"
driveState="Unconfigured Good" online="true" dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no" fdeEnabled="no" secured="no" locked="no" foreignLocked="no"
adminAction="no-op" rn="pd-12">
  <storageLocalDiskProps rn="general-props" physicalDrive="12" pdStatus="Unconfigured
  Good"
  health="Good" enclosureDeviceId="24" deviceId="21" sequenceNumber="1" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
  mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
  nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
  sasAddress0="5000c5008996eb51"
  sasAddress1="5000c5008996eb52" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
  currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="13" pdStatus="Unconfigured Good" health="Good"
  predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
  coercedSize="3814697 MB" vendor="SEAGATE" productId="ST4000NM0023" driveFirmware="0004"
  driveSerialNumber="S1Z1B0ME0000K548AJYA" driveState="Unconfigured Good" online="true"
  dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
  enclosureLogicalId="500e004aaae0000"
  enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
  fdeCapable="no"
  fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-13">
  <storageLocalDiskProps rn="general-props" physicalDrive="13" pdStatus="Unconfigured
  Good"
  health="Good" enclosureDeviceId="24" deviceId="12" sequenceNumber="1" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
  mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
  MB"
  nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
  sasAddress0="5000c500899670a1"
  sasAddress1="5000c500899670a2" physicalBlockSize="512"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
  currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
</storageLocalDisk>
  <storageLocalDisk id="14" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
  linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
  vendor="SEAGATE" productId="ST4000NM0023" driveFirmware="0004"
  driveSerialNumber="S1Z19MLC0000K5473FAP"
  driveState="JBOD" online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander
  Attached"
  enclosureLogicalId="500e004aaae0000" enclosureSASAddress0="5188b9d724504b7e"
  enclosureSASAddress1="0x0"
  locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
  foreignLocked="no"
  adminAction="no-op" rn="pd-14">
  <storageLocalDiskProps rn="general-props" physicalDrive="14" pdStatus="JBOD"
  health="Good"
  enclosureDeviceId="24" deviceId="14" sequenceNumber="2" mediaErrorCount="0"
  otherErrorCount="0"
  predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
  blockSize="512"
  blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
  coercedSize="3814697 MB"
  powerState="active" sasAddress0="5000c50089a4916d" sasAddress1="5000c50089a4916e"
  physicalBlockSize="512"/>

```

```

        <storageOperation rn="storage-operation" lropInProgress="false" currentLrop="No
operation in progress"
progressPercent="0" elapsedSeconds="0"/>
    </storageLocalDisk>
    <storageLocalDisk id="21" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023"
driveFirmware="0004" driveSerialNumber="S1Z19LY80000K5487ZHM" driveState="JBOD" online="true"

dedicatedHotSpareForVdId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op" rn="pd-21">

    <storageLocalDiskProps rn="general-props" physicalDrive="21" pdStatus="JBOD"
health="Good"
enclosureDeviceId="24" deviceId="11" sequenceNumber="2" mediaErrorCount="0"
otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD"
blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"

coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089a4d9c9"
sasAddress1="5000c50089a4d9ca" physicalBlockSize="512"/>
    <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
    </storageLocalDisk>
    <storageVirtualDrive id="0" name="RAID1_12" raidLevel="RAID 1" size="3814697 MB"
vdStatus="Optimal" health="Good" bootDrive="false" stripSize="256k" drivesPerSpan="2"
spanDepth="1" accessPolicy="read-write" cachePolicy="direct-io" readPolicy="no-read-ahead"

requestedWriteCachePolicy="write-through" currentWriteCachePolicy="write-through"
diskCachePolicy="unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true" driveState="Optimal"

fdeCapable="no" fdeEnabled="no" adminAction="no-op" hotspareAction="no-op" targetId="0"
physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
pd_id1,pd_id2,...pd_idN" rn="vd-0">
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="7812499456" virtualDrive="0"

physicalDrive="1" state="online" span="0" rn="pd-1"/>
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="7812499456" virtualDrive="0"

physicalDrive="2" state="online" span="0" rn="pd-2"/>
    <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"/>
    </storageVirtualDrive>
    <firmwareRunning rn="fw-boot-loader" description="LSI Storage controller currently
running boot
loader firmware version" deployment="boot-loader" type="storage-controller"
version="6.30.03.0_4.17.08.00_0xC6130201"/>
    <firmwareRunning rn="fw-system" description="LSI Storage controller currently running
firmware version"
deployment="system" type="storage-controller" version="4.620.00-6084"/>
    <firmwareBootDefinition rn="fw-boot-def" type="storage-controller">
    <firmwareBootUnit rn="bootunit-combined" description="LSI Storage controller startup
BIOS firmware version"
adminState="triggered" image="running" resetOnActivate="no" type="combined"
version="6.30.03.0_4.17.08.00_0xC6130201"/>
    </firmwareBootDefinition>
    <storageControllerSettings rn="controller-settings" pciSlot="SLOT-MEZZ"
predictiveFailPollInterval="300 sec"

```

```

rebuildRate="30 %" patrolReadRate="30 %" consistencyCheckRate="30 %" reconstructionRate="30
%"
cacheFlushInterval="4 sec" spinupDriveCount="4" spinupDelay="6 sec" physDriveCoercionMode="1
GB" clusterEnable="false"
batteryWarning="true" eccBucketLeakRate="1440 min" exposeEnclosureDevices="true"
maintainPdFailHistory="false"
enableCopybackOnSmart="true" enableCopybackToSsdOnSmartError="true" ncqStatus="enabled"
enableJbod="true"
spinDownUnconfigured="true" enableSsdPatrolRead="false" autoEnhancedImport="true"/>
</storageController>
</outConfigs>
</configResolveClass>

```

## Retrieving LSI Storage Adapter Detailed Properties Installed on C-Series Server

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="storageControllerProps"/>

```

Response:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageControllerProps">
<outConfigs>
<storageControllerProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/controller-props"

pciSlot="SLOT-MEZZ" health="Good" controllerStatus="Optimal" batteryStatus="Optimal"
bbuPresent="true" raidChipTempCentigrade="49" backendPortCount="8"
memorySize="1024 MB" cacheMemorySize="820 MB" virtualDriveCount="1"
degradedVirtualDriveCount="0" offlineVirtualDriveCount="0" physicalDriveCount="15"
criticalPhysicalDriveCount="0" failedPhysicalDriveCount="0" memoryCorrectableErrors="0"

memoryUncorrectableErrors="0" bootDrive="none" bootDriveIsPhysicalDrive="false"
supportsRaid0="true" supportsRaid1="true" supportsRaid5="true" supportsRaid6="true"
supportsRaid00="true" supportsRaid10="true" supportsRaid50="true" supportsRaid60="true"

supportsRaidle="false" supportsRaidler1q0="true" supportsRaidle0rlq0="true"
supportsRaidsr103="true" dateOfManufacture="2015-01-26" revision="03"
prebootCliVersion="01.07-05:##0000"
webBiosVersion="N/A" nvdataVersion="3.1511.00-0011" bootBlockVersion="3.07.00.00-0003"
bootVersion="N/A"
nvramPresent="true" serialDebuggerPresent="true" flashPresent="true"
sasAddress0="5188b9d724504b7f"
sasAddress1="5188b9d724503a7f" sasAddress2="0000000000000000"
sasAddress3="0000000000000000"
sasAddress4="0000000000000000" sasAddress5="0000000000000000"
sasAddress6="0000000000000000"
sasAddress7="0000000000000000" serial="FCH1901JBUX" firmwarePackageBuild="24.12.1-0018"

ttyLogStatus="Complete (total size 426675 bytes)"/>
</outConfigs>
</configResolveClass>

```

## Retrieving LSI Storage Adapter Details of RAID Battery

Request:

```

<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="storageRaidBattery"/>

```

Response:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageRaidBattery">
  <outConfigs>
    <storageRaidBattery dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/raid-battery"
      batteryType="TMM-C SuperCap" health="Good" batteryStatus="Optimal"
      batteryPresent="true" chargingState="N/A" temperature="30 degrees C"
      temperatureHigh="false"
      designVoltage="9.500 V" voltage="9.547 V" current="0.000 A" learnMode="Auto"
      learnCycleStatus="Successful" learnCycleRequested="false" nextLearnCycle="1970-01-28
      22:50"
      designCapacity="288 Joules" manufacturer="LSI" dateOfManufacture="2014-09-28"
      serialNumber="14609" firmwareVersion="6536-03A" adminAction="no-op"/>
  </outConfigs>
</configResolveClass>
```

### Retrieving Summary Information of Local Disks (HDD)

Request:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" classId="storageLocalDisk"/>
```

Response:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageLocalDisk">
  <outConfigs>
    <storageLocalDisk id="1" pdStatus="Online" health="Good" predictiveFailureCount="0"
      linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
      vendor="SEAGATE"
      productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z1C0VN0000K5486L16"
      driveState="Online"
      online="true" dedicatedHotSpareForVdId="" enclosureAssociation="Expander Attached"
      enclosureLogicalId="500e004aaaae0000"
      enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
      fdeCapable="no"
      fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-1"/>
    <storageLocalDisk id="2" pdStatus="Online" health="Good" predictiveFailureCount="0"
      linkSpeed="12.0 Gb/s"
      interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
      productId="ST4000NM0023"
      driveFirmware="0004" driveSerialNumber="S1Z1C0Y90000K5486G13" driveState="Online"
      online="true" dedicatedHotSpareForVdId=""
      enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
      enclosureSASAddress0="5188b9d724504b7e"
      enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
      locked="no"
      foreignLocked="no" adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-2"/>
    <storageLocalDisk id="3" pdStatus="Unconfigured Good" health="Good"
      predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
      interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
      productId="ST4000NM0023" driveFirmware="0004"
      driveSerialNumber="S1Z1C0ST0000K5486KJF" driveState="Unconfigured Good" online="true"
      dedicatedHotSpareForVdId=""
      enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
      enclosureSASAddress0="5188b9d724504b7e"
      enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
```



```

locked="no"
foreignLocked="no" adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-3"/>

  <storageLocalDisk id="4" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1C0XW0000K5486FYZ" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
  locked="no"
foreignLocked="no" adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-4"/>

  <storageLocalDisk id="5" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1C0LG0000K5486KZG" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
  locked="no"
foreignLocked="no" adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-5"/>

  <storageLocalDisk id="6" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1C0RB0000K5486KXG" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
  locked="no" foreignLocked="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-6"/>
  <storageLocalDisk id="7" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE" productId="ST4000NM0063"
driveFirmware="0004"
driveSerialNumber="Z1Z8MRC70000R540WM1C" driveState="JBOD" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="yes" fdeEnabled="yes"
secured="yes" locked="no"
foreignLocked="no" adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-7"/>

  <storageLocalDisk id="8" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z19MEK0000K5474R7B" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
  locked="no" foreignLocked="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-8"/>
  <storageLocalDisk id="9" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"

```

```

productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1AXG20000K5486GFD" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
locked="no" foreignLocked="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-9"/>
  <storageLocalDisk id="10" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1AE7C0000K5488N1T" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
locked="no" foreignLocked="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-10"/>
  <storageLocalDisk id="11" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z19LR20000K5474R6W" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
locked="no"
foreignLocked="no" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-11"/>
  <storageLocalDisk id="12" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004" driveSerialNumber="S1Z192230000K5486HLT"
driveState="Unconfigured Good"
online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no" fdeEnabled="no"
secured="no" locked="no" foreignLocked="no" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-12"/>
  <storageLocalDisk id="13" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z1B0ME0000K548AJYA" driveState="Unconfigured Good" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
locked="no" foreignLocked="no"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-13"/>
  <storageLocalDisk id="14" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023" driveFirmware="0004"
driveSerialNumber="S1Z19MLC0000K5473FAP" driveState="JBOD" online="true"
dedicatedHotSpareForVDId=""
enclosureAssociation="Expander Attached" enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e"
enclosureSASAddress1="0x0" locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no"
locked="no"

```

```
foreignLocked="no" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-14"/>
  <storageLocalDisk id="21" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB" vendor="SEAGATE"
productId="ST4000NM0023"
driveFirmware="0004" driveSerialNumber="S1Z19LY8000K5487ZHM" driveState="JBOD" online="true"

dedicatedHotSpareForVdId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="500e004aaaae0000"
enclosureSASAddress0="5188b9d724504b7e" enclosureSASAddress1="0x0" locatorLEDStatus="off"
fdeCapable="no"
fdeEnabled="no" secured="no" locked="no" foreignLocked="no" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-21"/>
  </outConfigs>
</configResolveClass>
```

## Retrieving Detailed Information of Local Disks (HDD)

Request:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="false" classId="storageLocalDiskProps"/>
```

Response:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageLocalDiskProps">
  <outConfigs>
    <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-1/general-props"

physicalDrive="1" pdStatus="Online" health="Good" enclosureDeviceId="24" deviceId="15"
sequenceNumber="2"
mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
MB"
nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
sasAddress0="5000c50089b407b5"
sasAddress1="5000c50089b407b6" physicalBlockSize="512"/>
    <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-2/general-props"

physicalDrive="2" pdStatus="Online" health="Good" enclosureDeviceId="24" deviceId="16"
sequenceNumber="2"
mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
MB"
nonCoercedSize="3814935 MB"
coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089b4002d"
sasAddress1="5000c50089b4002e"
physicalBlockSize="512"/>
    <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-3/general-props"
  physicalDrive="3"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="17"
sequenceNumber="1"
mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
MB"
nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
sasAddress0="5000c50089b40c5d"
```

```

sasAddress1="5000c50089b40c5e" physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-4/general-props"
    physicalDrive="4"
    pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="10"
    sequenceNumber="1" mediaErrorCount="0"
    otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
    mediaType="HDD" blockSize="512"
    blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
    coercedSize="3814697 MB"
    powerState="active" sasAddress0="5000c50089b4015d" sasAddress1="5000c50089b4015e"
    physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-5/general-props"
    physicalDrive="5"
    pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="13"
    sequenceNumber="1" mediaErrorCount="0"
    otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
    mediaType="HDD" blockSize="512"
    blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
    coercedSize="3814697 MB"
    powerState="active" sasAddress0="5000c50089b42465" sasAddress1="5000c50089b42466"
    physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-6/general-props"
    physicalDrive="6"
    pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="20"
    sequenceNumber="1" mediaErrorCount="0"
    otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
    mediaType="HDD" blockSize="512"
    blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
    coercedSize="3814697 MB"
    powerState="active" sasAddress0="5000c50089b41215" sasAddress1="5000c50089b41216"
    physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-7/general-props"
    physicalDrive="7"
    pdStatus="JBOD" health="Good" enclosureDeviceId="24" deviceId="26" sequenceNumber="4"
    mediaErrorCount="0"
    otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
    mediaType="HDD"
    blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447 MB"
    nonCoercedSize="3814935 MB"
    coercedSize="3814697 MB" powerState="active" sasAddress0="5000c5008390f455"
    sasAddress1="5000c5008390f456"
    physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-8/general-props"
    physicalDrive="8"
    pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="18"
    sequenceNumber="1"
    mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s"
    interfaceType="SAS"
    mediaType="HDD" blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447
    MB"
    nonCoercedSize="3814935 MB" coercedSize="3814697 MB" powerState="active"
    sasAddress0="5000c50089a49f75"
    sasAddress1="5000c50089a49f76" physicalBlockSize="512"/>
  <storageLocalDiskProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-9/general-props"
    physicalDrive="9"
    pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="19"
    sequenceNumber="1" mediaErrorCount="0"
    otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
    mediaType="HDD" blockSize="512"
    blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
    coercedSize="3814697 MB"
    powerState="active" sasAddress0="5000c50089a54ed5" sasAddress1="5000c50089a54ed6"
    physicalBlockSize="512"/>
  </storageLocalDiskProps

```

```

dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-10/general-props" physicalDrive="10"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="23"
sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
coercedSize="3814697 MB"
powerState="active" sasAddress0="5000c5008996c641" sasAddress1="5000c5008996c642"
physicalBlockSize="512"/>
  <storageLocalDiskProps
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-11/general-props" physicalDrive="11"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="22"
sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
coercedSize="3814697 MB"
powerState="active" sasAddress0="5000c50089a4f409" sasAddress1="5000c50089a4f40a"
physicalBlockSize="512"/>
  <storageLocalDiskProps
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-12/general-props" physicalDrive="12"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="21"
sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
coercedSize="3814697 MB"
powerState="active" sasAddress0="5000c5008996eb51" sasAddress1="5000c5008996eb52"
physicalBlockSize="512"/>
  <storageLocalDiskProps
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-13/general-props" physicalDrive="13"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="24" deviceId="12"
sequenceNumber="1" mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512"
blockCount="7814037168" bootDrive="false" rawSize="3815447 MB" nonCoercedSize="3814935 MB"
coercedSize="3814697 MB"
powerState="active" sasAddress0="5000c500899670a1" sasAddress1="5000c500899670a2"
physicalBlockSize="512"/>
  <storageLocalDiskProps
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-14/general-props" physicalDrive="14"
pdStatus="JBOD" health="Good" enclosureDeviceId="24" deviceId="14" sequenceNumber="2"
mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD"
blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447 MB"
nonCoercedSize="3814935 MB"
coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089a4916d"
sasAddress1="5000c50089a4916e"
physicalBlockSize="512"/>
  <storageLocalDiskProps
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/pd-21/general-props" physicalDrive="21"
pdStatus="JBOD" health="Good" enclosureDeviceId="24" deviceId="11" sequenceNumber="2"
mediaErrorCount="0"
otherErrorCount="0" predictiveFailureCount="0" linkSpeed="12.0 Gb/s" interfaceType="SAS"
mediaType="HDD"
blockSize="512" blockCount="7814037168" bootDrive="false" rawSize="3815447 MB"
nonCoercedSize="3814935 MB"
coercedSize="3814697 MB" powerState="active" sasAddress0="5000c50089a4d9c9"
sasAddress1="5000c50089a4d9ca"
physicalBlockSize="512"/>
  </outConfigs>
</configResolveClass>

```

## Retrieving Details of All Virtual Drives Configured in LSI Adapters

Request:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
inHierarchical="true" classId="storageVirtualDrive"/>
```

Response:

```
<configResolveClass cookie="0000360672/c2450e1c-0054-1054-8006-7e573e8f835c"
response="yes" classId="storageVirtualDrive">
  <outConfigs>
    <storageVirtualDrive id="0" name="RAID1_12" raidLevel="RAID 1" size="3814697 MB"
vdStatus="Optimal" health="Good" bootDrive="false" stripSize="256k"
drivesPerSpan="2" spanDepth="1" accessPolicy="read-write" cachePolicy="direct-io"
readPolicy="no-read-ahead" requestedWriteCachePolicy="write-through"
currentWriteCachePolicy="write-through" diskCachePolicy="unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" fdeCapable="no" fdeEnabled="no" adminAction="no-op"
hotspareAction="no-op" targetId="0" physicalDrivesList="Physical drives to be
used for virtual drive reconstruction. pd_id1,pd_id2,...pd_idN"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-MEZZ/vd-0">
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="7812499456" virtualDrive="0"
physicalDrive="1" state="online" span="0" rn="pd-1"/>
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="7812499456" virtualDrive="0"
physicalDrive="2" state="online" span="0" rn="pd-2"/>
  <storageOperation rn="storage-operation" lropInProgress="false" currentLrop="No operation
in progress" progressPercent="0" elapsedSeconds="0"/>
  </storageVirtualDrive>
  </outConfigs>
</configResolveClass>
```

## Retrieving Details of Physical Disks Usage by Virtual Drives

Request:

```
<configResolveClass cookie="1362107110/46742048-d6d4-16d4-8006-4a45b42d542c"
inHierarchical="false" classId="storageLocalDiskUsage"/>
```

Response:

```
<configResolveClass cookie="1362107110/46742048-d6d4-16d4-8006-4a45b42d542c" response="yes"
classId="storageLocalDiskUsage">
  <outConfigs>
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="209715200"
virtualDrive="10" physicalDrive="5" state="online" span="0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-10/pd-5"/>
    <storageLocalDiskUsage startingBlock="209715200" numberOfBlocks="25165824"
virtualDrive="11" physicalDrive="5" state="online" span="0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-11/pd-5"/>
    <storageLocalDiskUsage startingBlock="234881024" numberOfBlocks="25165824"
virtualDrive="12" physicalDrive="5" state="online" span="0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-12/pd-5"/>
    <storageLocalDiskUsage startingBlock="260046848" numberOfBlocks="25625088"
virtualDrive="13" physicalDrive="5" state="online" span="0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-13/pd-5"/>
    <storageLocalDiskUsage startingBlock="285671936" numberOfBlocks="25165824"
virtualDrive="14" physicalDrive="5" state="online" span="0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-14/pd-5"/>
```

```

<storageLocalDiskUsage startingBlock="310837760" numberOfBlocks="25165824"
  virtualDrive="15" physicalDrive="5" state="online" span="0"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-15/pd-5"/>
<storageLocalDiskUsage startingBlock="336003584" numberOfBlocks="25165824"
  virtualDrive="16" physicalDrive="5" state="online" span="0"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-16/pd-5"/>
<storageLocalDiskUsage startingBlock="361169408" numberOfBlocks="614530560"
  virtualDrive="17" physicalDrive="5" state="online" span="0"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-3/vd-17/pd-5"/>
</outConfigs>

```

### Retrieving Storage Controller Security Key

Request:

```

<configResolveClass cookie="1440536380/580cdbeb-1e29-1e29-8002-1ca31e1b0ff4"
inHierarchical="false" classId="generatedStorageControllerKeyId"/>

```

Response:

```

<configResolveClass cookie="1440536380/580cdbeb-1e29-1e29-8002-1ca31e1b0ff4"
  response="yes" classId="generatedStorageControllerKeyId">
  <outConfigs>
    <generatedStorageControllerKeyId
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/gen-key-id"
      generatedKeyId="UCSC-MRAID12G_SV44108637_1d6f954e"/>
    </outConfigs>
  </configResolveClass>

```

### Retrieving Suggested Storage Controller Security Key

Request:

```

<configResolveClass cookie="1440536380/580cdbeb-1e29-1e29-8002-1ca31e1b0ff4"
inHierarchical="false" classId="suggestedStorageControllerSecurityKey"/>

```

Response:

```

<configResolveClass cookie="1440536380/580cdbeb-1e29-1e29-8002-1ca31e1b0ff4" response="yes"
  classId="suggestedStorageControllerSecurityKey">
  <outConfigs>
    <suggestedStorageControllerSecurityKey
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/suggested-sec-key"
      suggestedSecurityKey="UPMMOqnwhlGfN@gC6Cs5HqXLUPMMOqnw"/>
    </outConfigs>
  </configResolveClass>

```

### Retrieving Self-encrypted Storage Controller Details

Request:

```

<configResolveClass cookie="1440546768/5d6cc751-1e2c-1e2c-8002-a4f07b6138b8"
inHierarchical="false" classId="selfEncryptStorageController"/>

```

Response:

```

<configResolveClass cookie="1440546768/5d6cc751-1e2c-1e2c-8002-a4f07b6138b8"

```

```

response="yes" classId="selfEncryptStorageController">
<outConfigs>
  <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="UCSC-MRAID12G_FHH18250010_1cad8d50" securityKey="Security key"
  existingSecurityKey="Existing security key" adminAction="no-op" adminSubAction="no-op"/>

  </outConfigs>
</configResolveClass>

```

## Enabling Self-encryption on Controllers

Request:

```

<configConfMo cookie="1443656333/506a0432-2100-1100-8004-6ca2cdf9eca0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt" inHierarchical="false">
<inConfig>
  <selfEncryptStorageController adminAction="enable-self-encrypt" keyId="TestKeyId"
  securityKey="TestSecurityKey"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt">
  </selfEncryptStorageController>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1444870328/8c41b3e1-221a-121a-811c-deabcdf9eca0" response="yes"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA">
<outConfigs>
  <storageController id="SLOT-HBA" model="Cisco 12G SAS Modular Raid Controller"
  pciSlot="SLOT-HBA" presence="equipped" raidSupport="yes" serial="SV44104119"
  type="SAS" vendor="LSI Logic" selfEncryptEnabled="yes"
  adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA"/>
</outConfigs>
</configConfMo>

```

## Disabling Self-encryption on Controllers

Request:

```

<configConfMo cookie="1444871687/cc606a82-221a-121a-811f-deabcdf9eca0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt" inHierarchical="false">
<inConfig>
  <selfEncryptStorageController adminAction="disable-self-encrypt"
  existingSecurityKey="TestSecurityKey"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt">
  </selfEncryptStorageController>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1444870328/8c41b3e1-221a-121a-811c-deabcdf9eca0"
response="yes" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA">
<outConfigs>
  <storageController id="SLOT-HBA" model="Cisco 12G SAS Modular Raid Controller"
  pciSlot="SLOT-HBA" presence="equipped" raidSupport="yes" serial="SV44104119"
  type="SAS" vendor="LSI Logic" selfEncryptEnabled="No" adminAction="no-op"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA"/>

```



```
</outConfigs>
</configConfMo>
```

## Enabling Self-encryption on Physical Drives

Request:

```
<configConfMo cookie="1444963230/52790541-2230-1230-8195-deabcdf9eca0"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3" inHierarchical="false">
<inConfig>
  <storageLocalDisk adminAction="enable-self-encrypt"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3">
  </storageLocalDisk>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="1444963230/52790541-2230-1230-8195-deabcdf9eca0"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3" inHierarchical="false">
<outConfigs>
  <storageLocalDisk id="3" pdStatus="JBOD" health="Good" predictiveFailureCount="0"
    linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
    vendor="SEAGATE" productId="ST4000NM0063" driveFirmware="0004"
    driveSerialNumber="Z1Z8MRC70000R540WM1C" driveState="JBOD" online="true"
    dedicatedHotSpareForVDId="" locatorLEDStatus="off" fdeCapable="yes" fdeEnabled="yes"
    secured="yes" locked="no" foreignLocked="no" adminAction="no-op"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3"/>
</outConfigs>
</configConfMo>
```

## Creating Secured Virtual Drive Group

Request:

```
<configConfMo cookie="1443751990/88100a71-2116-1116-8060-deabcdf9eca0"
  inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/virtual-drive-create">
  <inConfig>
    <storageVirtualDriveCreatorUsingUnusedPhysicalDrive adminAction="enable-self-encrypt"
      virtualDriveName="1" raidLevel="1" size="600MB" driveGroup="[4,3]"
      writePolicy="write-through"
      adminState="trigger"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="1443751990/88100a71-2116-1116-8060-deabcdf9eca0" inHierarchical="false"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/virtual-drive-create">
<outConfigs>
  <storageVirtualDrive id="0" name="1" raidLevel="RAID 1" size="600 MB" vdStatus="Optimal"
    health="Good" bootDrive="false" stripSize="64k" drivesPerSpan="2" spanDepth="1"
    accessPolicy="read-write" cachePolicy="direct-io" readPolicy="no-read-ahead"
    requestedWriteCachePolicy="write-through" currentWriteCachePolicy="write-through"
    diskCachePolicy="unchanged" allowBackgroundInit="true" autoSnapshot="false"
    autoDeleteOldest="true" driveState="Optimal" fdeCapable="yes" fdeEnabled="yes"
    adminAction="no-op" targetId="0"
    physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
    pd_id1,pd_id2,...pd_idN" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"/>
```

```
</outConfigs>
</configConfMo>
```

### Unlocking Secure Drives on Controllers

If you want to import secure drives to a controller from other controllers, you must first unlock these secure drive that you want import. The following XML API request helps you to unlock drives:

Request:

```
<configConfMo cookie="1445440951/5715265f-229f-129f-8004-c6efa42fa074"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt" >
<inConfig>
  <selfEncryptStorageController
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
    securityKey="t" adminAction="unlock-secured-drives"/>
  </inConfig>
</configConfMo>
```

Response:

Run a `configResolveClass` with class ID `storageLocalDisk` and verify that **Locked** is set to **no** and **fdeCapable**, **fdeEnabled**, **Secured** and **ForeignLocked** are **yes**.

### Erasing Data on Secure Unconfigured Good Drives

Request:

```
<configConfMo cookie="1440644344/0ffb96f5-1e43-1e43-8002-a4f07b6138b8"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-4">
<inConfig>
  <storageLocalDisk adminAction="disable-self-encrypt"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-4">
  </storageLocalDisk>
</inConfig>
</configConfMo>
```

Response:

```
<outConfig>
  <storageLocalDisk id="3" pdStatus="Unconfigured Good" health="Good"
    predictiveFailureCount="0"
    linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="3814697 MB"
    vendor="SEAGATE" productId="ST4000NM0063" driveFirmware="0004"
    driveSerialNumber="Z1Z8MRC70000R540WM1C" driveState="Unconfigured Good"
    online="true" dedicatedHotSpareForVDId="" locatorLEDStatus="off"
    fdeCapable="yes" fdeEnabled="yes"secured="yes" locked="no" foreignLocked="no"
    adminAction="no-op" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3"
    status="modified" >
  </storageLocalDisk>
</outConfig>
```

### Erasing Data on Secure Foreign Drives

Request:

```
<configConfMo cookie="1440644344/0ffb96f5-1e43-1e43-8002-a4f07b6138b8"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-4">
<inConfig>
```

```

<storageLocalDisk adminAction="disable-sed-foreign-drives"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-4">
</storageLocalDisk>
</inConfig>
</configConfMo>

```

Response:

```

<outConfig>
<storageLocalDisk id="3" pdStatus="Foreign Configuration" health="Moderate Fault"
  predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD"
  coercedSize="3814697 MB" vendor="SEAGATE" productId="ST4000NM0063" driveFirmware="0004"
  driveSerialNumber="Z1Z8MRC70000R540WM1C" driveState="Foreign Configuration" online="true"

  dedicatedHotSpareForVDId="" locatorLEDStatus="off" fdeCapable="yes" fdeEnabled="yes"
  secured="yes" locked="yes" foreignLocked="yes" adminAction="no-op"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-3" status="modified" >
</storageLocalDisk>
</outConfig>

```

## Modifying the Controller Key ID

Request:

```

<configConfMo cookie ='1450387768/f9532d76-271e-171e-8002-deabcdf9eca0'
inHierarchical='false'
  dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt'>
  <inConfig>
    <selfEncryptStorageController adminAction='modify-self-encrypt' keyId='TestKeyChange'
      dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1450387768/f9532d76-271e-171e-8002-deabcdf9eca0" response="yes"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
      keyId="TestKeyChange" securityKey="Security key" existingSecurityKey="Existing security
      key"
      adminAction="no-op" status="modified" >
    </selfEncryptStorageController>
  </outConfig>
</configConfMo>

```

## Modifying the Controller Security Key

Request:

```

<configConfMo cookie ='1450387768/f9532d76-271e-171e-8002-deabcdf9eca0' inHierarchical='false'
dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt'>
  <inConfig>
    <selfEncryptStorageController adminAction='modify-self-encrypt'
      securityKey='TestSecurityChange' existingSecurityKey='TestSecurity'
      dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt' />
  </inConfig>
</configConfMo>

```

```

    </inConfig>
  </configConfMo>

```

Response:

```

<configConfMo cookie="1450387768/f9532d76-271e-171e-8002-deabcdf9eca0" response="yes"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="TestKeyChange" securityKey="Security key" existingSecurityKey="Existing security
  key"
  adminAction="no-op" status="modified" >
    </selfEncryptStorageController>
  </outConfig>
</configConfMo>

```

### Modifying Controller Security Key and the Key ID

Request:

```

<configConfMo cookie='1450387768/f9532d76-271e-171e-8002-deabcdf9eca0' inHierarchical='false'
dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt'>
  <inConfig>
    <selfEncryptStorageController adminAction='modify-self-encrypt' keyId='TestKeyChange'
      securityKey='TestSecurityChange' existingSecurityKey='TestSecurity'
      dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1450387768/f9532d76-271e-171e-8002-deabcdf9eca0" response="yes"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="TestKeyChange" securityKey="Security key" existingSecurityKey="Existing security
  key"
  adminAction="no-op" status="modified" >
    </selfEncryptStorageController>
  </outConfig>
</configConfMo>

```

### Retrieving Network Time Protocol (NTP) Properties

Request:

```

<configResolveClass cookie='1357785728/200df7e0-d2e6-12e6-8004-3e02e2a85750'
classId='commNtpProvider' inHierarchical='false'>

```

Response:

```

<configResolveClass cookie="1357785728/200df7e0-d2e6-12e6-8004-3e02e2a85750"
response="yes" classId="commNtpProvider">
  <outConfigs>
    <commNtpProvider dn="sys/svc-ext/ntp-svc" description="Network Time Protocol"
      ntpEnable="no" ntpServer1="0. pool.ntp.org" ntpServer2="1.pool.ntp.org"

```

```

    ntpServer3="2.pool.ntp.org" ntpServer4="3.pool.ntp.org" >
  </commNtpProvider>
</outConfigs>

```

## Configuring Network Time Protocol (NTP) Properties

Request:

```

<configConfMo cookie="1360482215/f33512f0-d559-1559-8007-30339ee53d50"
dn="sys/svc-ext/ntp-svc">
  <inConfig>
    <commNtpProvider dn="sys/svc-ext/ntp-svc" ntpEnable="yes" ntpServer1="172.29.xxx.187"
      ntpServer2="ntpserver.cisco.com" ntpServer3="ntp.globalcomp.net"
      ntpServer4="170.xx.198.25"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1360482215/f33512f0-d559-1559-8007-30339ee53d50"
response="yes" dn="sys/svc-ext/ntp-svc" >
  <outConfig>
    <commNtpProvider dn="sys/svc-ext/ntp-svc" description="Network Time Protocol"
      ntpEnable="yes" ntpServer1="172.xx.xxx.187" ntpServer2="ntpserver.cisco.com"
      ntpServer3="ntp.globalcomp.net" ntpServer4="170.xx.198.25"
      status="modified"/>
  </outConfig>
</configConfMo>

```

## Retrieving all Cisco IMC Users

Request:

```

<configResolveClass cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50"
inHierarchical="false" classId="aaaUser"/>

```

Response:

```

<configResolveClass cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50"
response="yes" classId="aaaUser">
  <outConfigs>
    <aaaUser id="1" accountStatus="active" name="admin" priv="admin" pwd=""
dn="sys/user-ext/user-1"/>
    <aaaUser id="2" accountStatus="inactive" name="" priv="" pwd="" dn="sys/user-ext/user-2"/>

    <aaaUser id="3" accountStatus="active" name="server.monitor" priv="read-only" pwd=""
      dn="sys/user-ext/user-3"/>
    <aaaUser id="4" accountStatus="active" name="acme" priv="user" pwd=""
dn="sys/user-ext/user-4"/>
    <aaaUser id="5" accountStatus="inactive" name="" priv="" pwd="" dn="sys/user-ext/user-5"/>

    <aaaUser id="6" accountStatus="active" name="msgDept" priv="admin" pwd=""
      dn="sys/user-ext/user-6"/>
    <aaaUser id="7" accountStatus="inactive" name="" priv="" pwd="" dn="sys/user-ext/user-7"/>

    <aaaUser id="8" accountStatus="inactive" name="john_srvadmin" priv="admin" pwd=""
      dn="sys/user-ext/user-8"/>
    <aaaUser id="9" accountStatus="inactive" name="" priv="" pwd="" dn="sys/user-ext/user-9"/>

    <aaaUser id="10" accountStatus="inactive" name="qa.manager-dept" priv="read-only" pwd=""

```

```

    dn="sys/user-ext/user-10"/>
    <aaaUser id="11" accountStatus="inactive" name="" priv="" pwd=""
    dn="sys/user-ext/user-11"/>
    <aaaUser id="12" accountStatus="inactive" name="" priv="" pwd=""
dn="sys/user-ext/user-12"/>
    <aaaUser id="13" accountStatus="inactive" name="" priv="" pwd=""
dn="sys/user-ext/user-13"/>
    <aaaUser id="14" accountStatus="inactive" name="" priv="" pwd=""
dn="sys/user-ext/user-14"/>
    <aaaUser id="15" accountStatus="inactive" name="" priv="" pwd=""
dn="sys/user-ext/user-15"/>
  </outConfigs>

```

## Setting up ID 11 Cisco IMC User With Username and Password and Enabling Login Access to this User

Request:

```

<configConfMo cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50"
inHierarchical="false" dn="sys/user-ext/user-11">
  <inConfig>
    <aaaUser id="11" accountStatus="active" name="master.work" priv="admin"
      pwd="password" dn="sys/user-ext/user-11"/>
  </inConfig>

```

Response:

```

<configConfMo cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50" response="yes"
dn="sys/user-ext/user-11">
  <outConfig>
    <aaaUser id="11" accountStatus="active" name="master.work"
      priv="admin" pwd="" dn="sys/user-ext/user-11" status="modified"/>
  </outConfig>
</configConfMo>

```

## Configuring User ID 3, Deactivating this User and Changing the Password

Request:

```

<configConfMo cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50"
inHierarchical="false" dn="sys/user-ext/user-3">
  <inConfig>
    <aaaUser id="3" accountStatus="inactive" name="server.monitor" priv="user"
      pwd="Game(hang#" dn="sys/user-ext/user-3"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1360213362/5a499e50-d51b-151b-8008-30339ee53d50" response="yes"
dn="sys/user-ext/user-3" >
  <outConfig>
    <aaaUser id="3" accountStatus="inactive" name="server.monitor" priv="user"
      pwd="" dn="sys/user-ext/user-3" status="modified"/>
  </outConfig>

```

## Disabling or Enabling Strong Password

### Enabling Strong Password

Request:

```
<configConfMo cookie="1438173516/dd4b406b-1c03-1c03-8002-a3209f054ef4"
dn="sys/user-ext/policy" inHierarchical="false">
  <inConfig>
    <aaaUserPolicy userPasswordPolicy="enabled" dn="sys/user-ext/policy"/>
  </inConfig>
</configConfMo>
```

### Disabling Strong Password

Request:

```
<configConfMo cookie="1438173516/dd4b406b-1c03-1c03-8002-a3209f054ef4"
dn="sys/user-ext/policy" inHierarchical="false">
  <inConfig>
    <aaaUserPolicy userPasswordPolicy="disabled" dn="sys/user-ext/policy"/>
  </inConfig>
</configConfMo>
```

### Retrieving Memory Unit Statistics

Request:

```
<configResolveClass cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' classId='memoryUnitEnvStats'>
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="memoryUnitEnvStats">
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58"
response="yes" classId="memoryUnitEnvStats">
  <outConfigs>
    <memoryUnitEnvStats dn="sys/rack-unit-1/board/memarray-1/mem-9/dimm-env-stats"
      id="9" description="CPU1_B0_DIMM_1" temperature="16.0"
timeCollected="2013-2-5T19:33:41">
    </memoryUnitEnvStats>
    <memoryUnitEnvStats dn="sys/rack-unit-1/board/memarray-1/mem-13/dimm-env-stats"
      id="13" description="CPU1_B1_DIMM_1" temperature="18.0"
timeCollected="2013-2-5T19:33:42">
    </memoryUnitEnvStats>
  </outConfigs>
</configResolveClass>
```

### Retrieving Specific DIMM Memory Unit Statistics

Request:

```
<configResolveDn cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/board/memarray-1/mem-45/dimm-env-stats' >
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="memoryUnitEnvStats">
<outConfigs>
  <memoryUnitEnvStats dn="sys/rack-unit-1/board/memarray-1/mem-9/dimm-env-stats"
    id="9" description="CPU1_B0_DIMM_1" temperature="16.0" timeCollected="2013-2-5T19:33:41"
  </memoryUnitEnvStats>
```

```
</outConfigs>
</configResolveClass>
```

### Retrieving Processor Environment Statistics

Request:

```
<configResolveClass cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' classId='processorEnvStats'>
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="processorEnvStats">
<outConfigs>
<processorEnvStats dn="sys/rack-unit-1/board/cpu-1/env-stats"
id="1" description="P1_TEMP_SENS" temperature="36.0" timeCollected="2013-2-9T19:40:37">
</processorEnvStats>
<processorEnvStats dn="sys/rack-unit-1/board/cpu-2/env-stats"
id="2" description="P2_TEMP_SENS" temperature="35.0" timeCollected="2013-2-9T19:40:37">
</processorEnvStats>
</outConfigs>
</configResolveClass>
```

### Retrieving Specific DIMM Processor Environment Statistics

Request:

```
<configResolveDn cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/board/cpu-2/env-stats' >
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="processorEnvStats">
<outConfigs>
<processorEnvStats dn="sys/rack-unit-1/board/cpu-1/env-stats"
id="1" description="P1_TEMP_SENS" temperature="36.0" timeCollected="2012-11-29T19:40:37">
</processorEnvStats>
<processorEnvStats dn="sys/rack-unit-1/board/cpu-2/env-stats"
id="2" description="P2_TEMP_SENS" temperature="35.0" timeCollected="2012-11-29T19:40:37">
</processorEnvStats>
</outConfigs>
</configResolveClass>
```

### Retrieving Motherboard Temperature Statistics

Request:

```
<configResolveClass cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
classId='computeRackUnitMbTempStats' inHierarchical='false'>
```

Response:



```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="computeRackUnitMbTempStats">
  <outConfigs>
    <computeRackUnitMbTempStats dn="sys/rack-unit-1/board/temp-stats" ambientTemp="18.0"
      frontTemp="18.0" ioh1Temp="46.0" ioh2Temp="53.0"
      rearTemp="32.0" timeCollected="2013-2-9T19:41:29" >
    </computeRackUnitMbTempStats>
  </outConfigs>
</configResolveClass>
```

### Retrieving Specific DIMM Motherboard Temperature Statistics

Request:

```
<configResolveDn cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/board/temp-stats' >
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="computeRackUnitMbTempStats">
  <outConfigs>
    <computeRackUnitMbTempStats dn="sys/rack-unit-1/board/temp-stats"
      ambientTemp="18.0" frontTemp="18.0" ioh1Temp="46.0" ioh2Temp="53.0" rearTemp="32.0"
      timeCollected="2013-2-9T19:41:29" >
    </computeRackUnitMbTempStats>
  </outConfigs>
</configResolveClass>
```

### Retrieving Motherboard Power Statistics

Request:

```
<configResolveClass cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
classId='computeMbPowerStats' inHierarchical='false'>
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="computeMbPowerStats">
  <outConfigs>
    <computeMbPowerStats dn="sys/rack-unit-1/board/power-stats"
      consumedPower="280" inputCurrent="" inputVoltage="" timeCollected="2012-11-29T19:49:49"
    >
    </computeMbPowerStats>
  </outConfigs>
</configResolveClass>
```

### Retrieving Specific DIMM Motherboard Power Statistics

Request:

```
<configResolveDn cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/board/power-stats'>
```

Response:

```
<configResolveClass cookie="1354217286/484b4498-cfa7-1fa7-8002-aab825098d58" response="yes"
classId="computeMbPowerStats">
  <outConfigs>
    <computeMbPowerStats dn="sys/rack-unit-1/board/power-stats"
      consumedPower="280" inputCurrent="" inputVoltage="" timeCollected="2013-2-9T19:49:49">

    </computeMbPowerStats>
  </outConfigs>
</configResolveClass>
```

## Retrieving iSCSI Parameters

Request:

```
<configResolveDn cookie='1350453563/f8f69e20-cc3a-1c3a-8003-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/adaptor-1/host-eth-adad/ethiscsi'>
```

Response:

```
<configResolveClass cookie="1350515994/821ald18-cc49-1c49-8007-6cdd29114ca4" response="yes"
classId="adaptorEthISCSIProfile">
  <outConfigs>
    <adaptorEthISCSIProfile dn="sys/rack-unit-1/adaptor-2/host-eth-eth0/ethiscsi"
      linkupTimeout="15" linkBusyRetryCount="15" ipVer="IPv4" dhcpId="" dhcpTimeout="60"
      dhcpNetworkSettings="enabled" dhcpISCSI="enabled" initiatorName="test"
      initiatorTCPTimeout="15"
      primaryTargetName="test.com" primaryTargetIPAddress="192.xxx.1.1" primaryTargetPort="3260"

      primaryTargetBootLun="0">
    </adaptorEthISCSIProfile>
  </outConfigs>
</configResolveClass>
```

## Removing iSCSI Boot

Request:

```
<configConfMo cookie='1350517826/ef4dd140-cc49-1c49-8008-6cdd29114ca4'
inHierarchical='false' dn='sys/rack-unit-1/adaptor-2/host-eth-eth1/ethiscsi' >
  <inConfig>
    <adaptorEthISCSIProfile linkupTimeout='85' linkBusyRetryCount='135' dhcpId='vendrocisco'

    dhcpTimeout='88' dhcpNetworkSettings='enabled' dhcpISCSI='enabled' status='removed'
    dn='sys/rack-unit-1/adaptor-2/host-eth-eth1/ethiscsi'>
    </adaptorEthISCSIProfile>
  </inConfig>
</configConfMo>
```

Response: Verify that the iSCSI boot is disabled in the web user interface or CLI.

```
<configConfMo cookie="1350517826/ef4dd140-cc49-1c49-8008-6cdd29114ca4" "response="yes"
dn="sys/rack-unit-1/adaptor-2/host-eth-eth1/ethiscsi">
  <outConfig>
</outConfig>
</configConfMo>
```

## Retrieving Fault Objects Identified by Cisco IMC

Request:

```
<configResolveClass cookie="1360461607/26daf980-d555-1555-8004-0834b6fdd0d0"
inHierarchical="false" classId="faultInst">
```

Response:

```
<configResolveClass cookie="1360461607/26daf980-d555-1555-8004-0834b6fdd0d0" response="yes"
classId="faultInst">
<outConfigs>
<faultInst ack="yes" cause="powerproblem" code="F0883"
created="Sat Feb 9 00:30:40 2013"
descr="Power supply 4 is in a degraded state, or has bad input voltage"
affectedDN="sys/rack-unit-1/psu-4" highestSeverity="critical" id="167773192"
lastTransition="Sat Feb 9 00:24:08 2013" lc="flapping" occur="16" origSeverity="cleared"

prevSeverity="cleared" rule="fltEquipmentPsuInputError" severity="critical"
tags="server" type="server" dn="sys/rack-unit-1/fault-F0883"/>
<faultInst ack="yes" cause="psuRedundancyFail" code="F0743"
created="Sat Feb 9 00:30:40 2013"
descr="Power Supply redundancy is lost : Reseat or replace Power Supply "
affectedDN="sys/rack-unit-1/psu" highestSeverity="critical" id="352321544"
lastTransition="Sat Feb 9 00:24:08 2013" lc="flapping" occur="16" origSeverity="cleared"

prevSeverity="cleared" rule="fltPowerChassisMemberChassisPsuRedundanceFailure"
severity="major" tags="server" type="server" dn="sys/rack-unit-1/fault-F0743"/>
<faultInst ack="yes" cause="equipmentDegraded" code="F0969"
created="Fri Feb 8 23:57:44 2013" descr="Storage Raid Battery 11 Degraded:
please check the battery or the storage controller"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-SAS/raid-battery-11"
highestSeverity="critical" id="3539995392" lastTransition="Fri Feb 8 23:11:08 2013"
lc="flapping" occur="2" origSeverity="cleared" prevSeverity="cleared"
rule="fltStorageRaidBatteryDegraded" severity="major" tags="storage" type="server"
dn="sys/rack-unit-1/fault-F0969"/>
<faultInst ack="yes" cause="equipmentInoperable" code="F0531"
created="Fri Feb 8 23:57:44 2013"
descr="Storage Raid Battery 11 is inoperable: Check Controller battery"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-SAS/raid-battery-11"
highestSeverity="critical" id="3539995392" lastTransition="Fri Feb 8 23:11:08 2013"
lc="flapping" occur="2" origSeverity="cleared" prevSeverity="cleared"
rule="fltStorageRaidBatteryInoperable" severity="major" tags="storage"
type="server" dn="sys/rack-unit-1/fault-F0531"/>
</outConfigs>
</configResolveClass>
```

## Generating Temporary Authentication Tokens and Launching the KVM

Launching the KVM console using the XML APIs include the following:

- Retrieving a session cookie.
- Generating temporary authentication tokens.
- Accessing the URL to download the JNLP file using the tokens.
- Launching the KVM.

Request for obtaining authentication tokens:

```
<aaaGetComputeAuthTokens cookie="1363034734/412ce290-d7ac-17ac-8006-c979e5e53d50" />
```

Response for obtaining authentication tokens:

```
<aaaGetComputeAuthTokens cookie="1363034734/412ce290-d7ac-17ac-8006-c979e5e53d50"
  outTokens="1957747793,424238335" response="yes">
</aaaGetComputeAuthTokens>
```

To access the URL, use the tokens in the `tkn1` and `tkn2` parts of the following URL within 60 seconds of generation:

```
javaws http://<Cisco IMC IP address>/kvm.jnlp?cimcAddr=<Cisco IMC IP
address>&tkn1=1957747793&tkn2=424238335
```

Download the JNLP file from the URL and launch it to start a KVM session.

### Retrieving usNIC Device Parameters

Request:

```
<configResolveClass cookie='1301262014/6a0d66ca-3b1a-49e1-b5d4-334749717158'
  classId='adaptorEthUSNICProfile' inHierarchical='true'>
```

Response:

```
<configResolveClass cookie="1369708188/0a09aa88-ddbe-1dbe-8003-1fc9e1a85750"
  response="yes" classId="adaptorEthUSNICProfile">
<outConfigs>
  <adaptorEthUSNICProfile dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
    usnicCount="1" transmitQueueCount="2" transmitQueueRingSize="256"
    receiveQueueCount="2" receiveQueueRingSize="512"
    completionQueueCount="4" interruptCount="4" coalescingType="MIN"
    coalescingTime="125" classOfService="0" tcpSegment="disabled"
    largeReceive="disabled" tcpTxChecksum="disabled"
    tcpRxChecksum="disabled" >
  </adaptorEthUSNICProfile>
</outConfigs>
</configResolveClass>
```

### Creating Ethernet Interface usNIC Profiles

Request:

```
<configConfMo cookie="1364563172/1f244b38-d910-1910-8002-02249ee53d50"
  dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic">
  <inConfig>
    <adaptorEthUSNICProfile dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
      usnicCount="3"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
  cookie="1364563172/1f244b38-d910-1910-8002-02249ee53d50" response="yes">
  <outConfig>
    <adaptorEthUSNICProfile dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
      usnicCount="3" transmitQueueCount="2" transmitQueueRingSize="256"
      receiveQueueCount="2" receiveQueueRingSize="512" completionQueueCount="4"
      interruptCount="4" coalescingType="MIN" coalescingTime="125"
      classOfService="0" tcpSegment="disabled" largeReceive="disabled"
      tcpTxChecksum="disabled" tcpRxChecksum="disabled" status="modified">
    </adaptorEthUSNICProfile>
  </outConfig>
</configConfMo>
```

## Modifying Ethernet Interface usNIC Profiles

Request:

```
<configConfMo cookie="1364563172/1f244b38-d910-1910-8002-02249ee53d50"
dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic">
  <inConfig>
    <adaptorEthUSNICProfile dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
transmitQueueCount="9"
transmitQueueRingSize="3024" receiveQueueCount="11" receiveQueueRingSize="4024"
completionQueueCount="12"
interruptCount="13" coalescingType="IDLE" coalescingTime="1400" classOfService="5"
tcpSegment="enabled"
largeReceive="enabled" tcpTxChecksum="enabled" tcpRxChecksum="enabled"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
cookie="1364563172/1f244b38-d910-1910-8002-02249ee53d50" response="yes">
  <outConfig>
    <adaptorEthUSNICProfile dn="sys/rack-unit-1/adaptor-1/host-eth-eth0/ethusnic"
usnicCount="3" transmitQueueCount="9" transmitQueueRingSize="3024"
receiveQueueCount="11" receiveQueueRingSize="4024"
completionQueueCount="12" interruptCount="13" coalescingType="IDLE"
coalescingTime="1400" classOfService="5"
tcpSegment="enabled" largeReceive="enabled" tcpTxChecksum="enabled"
tcpRxChecksum="enabled" status="modified"/>
  </outConfig>
</configConfMo>
```

## Retrieving LDAP Server Details

Request:

```
<configResolveClass cookie="1370404868/3f5f79b8-de60-1e60-8002-1ec9e1a85750"
response="yes" classId="aaaLdap">
```

Response:

```
<outConfigs>
  <aaaLdap dn="sys/ldap-ext" adminState="enabled" basedn="1.2.3.4"
domain="tfb.com" filter="sAMAccountName" attribute="CiscoAvPair"
timeout="1800" encryption="disabled" locateDirectoryUsingDNS="yes"
dnsDomainSource="extracted-domain" dnsSearchDomain="" dnsSearchForest=""
ldapServer1="172.26.53.36" ldapServerPort1="636"
ldapServer2="0.0.0.0" ldapServerPort2="636"
ldapServer3="ServThree.com" ldapServerPort3="9636"
ldapServer4="myfinance.com" ldapServerPort4="3269"
ldapServer5="199.22.44.253" ldapServerPort5="9269"
ldapServer6="" ldapServerPort6="3269"
bindMethod="login-credentials" bindDn="someDn" password=""
groupAuth="enabled" groupAttribute="memberOf">
  <aaaLdapRoleGroup id="1" name="" domain="" role="admin" rn="rolegroup-1" >
  </aaaLdapRoleGroup>
  <aaaLdapRoleGroup id="2" name="" domain="" role="user" rn="rolegroup-2" >
  </aaaLdapRoleGroup>
  <aaaLdapRoleGroup id="3" name="" domain="" role="read-only" rn="rolegroup-3">
  </aaaLdapRoleGroup>
  <aaaLdapRoleGroup id="4" name="" domain="" role="" rn="rolegroup-4" >
  </aaaLdapRoleGroup>
  <aaaLdapRoleGroup id="5" name="" domain="" role="" rn="rolegroup-5" >
  </aaaLdapRoleGroup>
```

```

<aaaLdapRoleGroup id="6" name="" domain="" role="" rn="rolegroup-6" >
</aaaLdapRoleGroup>
<aaaLdapRoleGroup id="7" name="" domain="" role="" rn="rolegroup-7" >
</aaaLdapRoleGroup>
<aaaLdapRoleGroup id="8" name="" domain="" role="" rn="rolegroup-8" >
</aaaLdapRoleGroup>
</aaaLdap>
</outConfigs>

```

## Configuring LDAP Server IP Address and Port Numbers

Request:

```

<configConfMo cookie="1351062607/c6c74fd8-ccc8-1cc8-8005-1ec9e1a85750"
inHierarchical=true" dn="sys/ldap-ext">
<inConfig>
<aaaLdap dn="sys/ldap-ext" adminState="disabled" basedn="" domain="tfb.com"
filter="sAMAccountName" attribute="CiscoAvPair" timeout="60"
encryption="disabled" locateDirectoryUsingDNS="yes"
dnsDomainSource="extracted-domain"
ldapServer1="172.26.53.36" ldapServerPort1="636"
ldapServer2="0.0.0.0" ldapServerPort2="636"
ldapServer3="ServThree.com" ldapServerPort3="9636"
ldapServer4="myfinance.com" ldapServerPort4="3269"
ldapServer5="199.22.44.253" ldapServerPort5="9269"
ldapServer6="" ldapServerPort6="3269"
bindMethod="login-credentials" bindDn="" password=""
groupAuth=disabled" groupAttribute="memberOf">
</inConfig>

```

Response:

```

<outConfigs>
<aaaLdap dn="sys/ldap-ext" adminState="disabled" basedn="" domain="tfb.com"
filter="sAMAccountName" attribute="CiscoAvPair" timeout="60"
encryption="disabled" locateDirectoryUsingDNS="yes"
dnsDomainSource="extracted-domain"
ldapServer1="172.26.53.36" ldapServerPort1="636"
ldapServer2="0.0.0.0" ldapServerPort2="636"
ldapServer3="ServThree.com" ldapServerPort3="9636"
ldapServer4="myfinance.com" ldapServerPort4="3269"
ldapServer5="199.22.44.253" ldapServerPort5="9269"
ldapServer6="" ldapServerPort6="3269"
bindMethod="login-credentials" bindDn="someDn" password=""
groupAuth="disabled" groupAttribute="memberOf" status="modified">
<aaaLdapRoleGroup id="1" name="" domain="" role="admin" rn="rolegroup-1" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="2" name="" domain="" role="user" rn="rolegroup-2" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="3" name="" domain="" role="read-only" rn="rolegroup-3">
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="4" name="" domain="" role="" rn="rolegroup-4" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="5" name="" domain="" role="" rn="rolegroup-5" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="6" name="" domain="" role="" rn="rolegroup-6" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="7" name="" domain="" role="" rn="rolegroup-7" >
status="modified" </aaaLdapRoleGroup>
<aaaLdapRoleGroup id="8" name="" domain="" role="" rn="rolegroup-8" >
status="modified" </aaaLdapRoleGroup>
</aaaLdap>
</outConfigs>

```

## Configuring LDAP Parameters

You can configure LDAP parameters such as, LDAP status, encryption, timeout, domain, base Dn, binding parameters, DNS parameters, group authorization parameters, LDAP role groups and so on. The following example shows configuring LDAP parameters:

Request:

```
<configConfMo cookie="1351062607/c6c74fd8-ccc8-1cc8-8005-1ec9e1a85750"
inHierarchical="true" dn="sys/ldap-ext">
<inConfig>
  <aaaLdap dn="sys/ldap-ext" adminState="enabled" basedn="ExampleDn"
    domain="Example.com" filter="MysAMAccountNameYes" attribute="CiscoAviator"
    timeout="160" encryption="enabled" locateDirectoryUsingDNS="no"
    dnsDomainSource="extracted-domain" dnsSearchDomain="child.cp.com"
    dnsSearchForest="cp.com"
    ldapServer1="172.26.53.36" ldapServerPort1="636"
    ldapServer2="0.0.0.0" ldapServerPort2="636"
    ldapServer3="ServThree.com" ldapServerPort3="9636"
    ldapServer4="myfinance.com" ldapServerPort4="3269"
    ldapServer5="199.22.44.253" ldapServerPort5="9269"
    ldapServer6="" ldapServerPort6="3269"
    bindMethod="anonymous" bindDn="myexampleDn"
    password="magic@#%!(#&$" groupAuth="enabled"
    groupAttribute="memberOfExample">
  <aaaLdapRoleGroup id="1" name="name1"
    domain="name1.cisco.com" role="user" rn="rolegroup-1"/>
  <aaaLdapRoleGroup id="2" name="" domain="" role="read-only"
    rn="rolegroup-2"/>
  <aaaLdapRoleGroup id="3" name="" domain="" role="admin"
    rn="rolegroup-3"/>
  <aaaLdapRoleGroup id="4" name="name2"
    domain="sjssjsj.djddjd.cook.com" role="user" rn="rolegroup-4"/>
  <aaaLdapRoleGroup id="5" name="" domain="" role="" rn="rolegroup-5"/>
  <aaaLdapRoleGroup id="6" name="" domain="" role="" rn="rolegroup-6"/>
  <aaaLdapRoleGroup id="7" name="" domain="domainname.com"
    role="admin" rn="rolegroup-7"/>
  <aaaLdapRoleGroup id="8" name="" domain="" role="" rn="rolegroup-8"/>
  <aaaLdapRoleGroup id="9" name="" domain="" role="" rn="rolegroup-9"/>
  <aaaLdapRoleGroup id="10" name="name3"
    domain="dorm.ucs.com" role="read-only" rn="rolegroup-10"/>
</aaaLdap>
</inConfig>
</configMo>
```

Response:

```
<configConfMo cookie="1370760204/fb173e00-deb2-1eb2-8002-1ec9e1a85750"
response="yes" dn="sys/ldap-ext" >
<outConfig>
  <aaaLdap dn="sys/ldap-ext" adminState="enabled" basedn="ExampleDn"
    domain="Example.com" filter="MysAMAccountNameYes" attribute="CiscoAviator"
    timeout="160" encryption="enabled" locateDirectoryUsingDNS="yes"
    dnsDomainSource="configured-domain" dnsSearchDomain="child.cp.com"
    dnsSearchForest="cp.com"
    ldapServer1="172.26.53.36" ldapServerPort1="636"
    ldapServer2="0.0.0.0" ldapServerPort2="636"
    ldapServer3="ServThree.com" ldapServerPort3="9636"
    ldapServer4="myfinance.com" ldapServerPort4="3269"
    ldapServer5="199.22.44.253" ldapServerPort5="9269"
    ldapServer6="" ldapServerPort6="3269"
    bindMethod="anonymous" bindDn="myexampleDn" password=""
    groupAuth="enabled" groupAttribute="memberOfExample"
    status="modified">
```

```

<aaaLdapRoleGroup id="1" name="name1"
  domain="name1.cisco.com" role="user" rn="rolegroup-1"
  status="modified" />
<aaaLdapRoleGroup id="2" name="" domain="" role="read-only"
  rn="rolegroup-2" anonymous status="modified"/>
<aaaLdapRoleGroup id="3" name="" domain="" role="admin"
  rn="rolegroup-3" status="modified"/>
<aaaLdapRoleGroup id="4" name="name2"
  domain="sjsssjsj.djdjddj.cook.com" role="user"
  rn="rolegroup-4" status="modified"/>
<aaaLdapRoleGroup id="5" name="" domain="" role="" rn="rolegroup-5"
  status="modified"/>
<aaaLdapRoleGroup id="6" name="" domain="" role="" rn="rolegroup-6"
  status="modified"/>
<aaaLdapRoleGroup id="7" name="" domain="domainname.com"
  role="admin" rn="rolegroup-7" status="modified"/>
<aaaLdapRoleGroup id="8" name="" domain="" role="" rn="rolegroup-8"
  status="modified"/>
<aaaLdapRoleGroup id="9" name="" domain="" role="" rn="rolegroup-9"
  status="modified"/>
<aaaLdapRoleGroup id="10" name="name3"
  domain="dorm.ucs.com" role="read-only"
  rn="rolegroup-10" status="modified"/>
</aaaLdap>
</inConfig>
</configMo>

```

### Querying to Check Cisco IMC for NI-IOD Support

#### Request

```

<configResolveClass cookie="1375699222/ef7afa00-e330-1330-8004-22bcaa4c93a4"
inHierarchical="false" classId="iodController"/>

```

#### Response

```

<configResolveClass cookie="1375699222/ef7afa00-e330-1330-8004-22bcaa4c93a4"
response="yes" classId="iodController">
  <outConfigs>
    <iodController dn="sys/iod"
      description="Non-Interactive Offline Diagnostics (IOD)"/>
  </outConfigs>
</configResolveClass>

```

### Triggering Snapshot based on Parameters Provided with Request

#### Request

```

<configConfMo cookie="1375699222/ef7afa00-e330-1330-8004-22bcaa4c93a4"
inHierarchical="true" dn="sys/iod/snapshotStart">
<inConfig>
  <iodSnapshotStart dn="sys/iod/snapshotStart"
    adminState="trigger" isoShareIp="10.10.10.10"
    isoShare="/home/sriparim/xfer/ucs-cxx-scu-3.1.2.iso"
    isoShareType="nfs" username="none" password="none" timeOut="30"
    remoteShareIp="10.10.10.10" remoteSharePath="/home/sriparim/xfer"
    remoteShareFile="" remoteShareType="scp" remoteShareUsername="root"
    remoteSharePassword="topspin123" />
  </inConfig>
</configConfMo>

```

#### Response



```
<configConfMo cookie="1375699222/ef7afa00-e330-1330-8004-22bcaa4c93a4"
dn="sys/iod/snapshotStart">
  <outConfig>
    <iodSnapshotStart dn="sys/iod/snapshotStart" adminState="triggered"
      isoShareIp="10.10.10.10" isoSharePath="/home/sriparim/xfer"
      isoShareFile="ucs-cxx-scu-3.1.2.iso" isoShareType="nfs"
      username="none" password="" remoteShareIp="10.10.10.10"
      remoteSharePath="/home/sriparim/xfer" remoteShareFile=""
      remoteShareType="scp" remoteShareUsername="root" remoteSharePassword=""
      timeOut="30" status="modified" />
  </outConfig>
</configConfMo>
```

## Querying Status of Current or Previous Snapshot Operation

### Request

```
<configResolveClass inHierarchical="false"
cookie="1375695710/1e1ff5c8-e330-1330-8002-22bcaa4c93a4"
classId="iodSnapshotStatus"/>
```

### Response: Host Booting

```
<configResolveClass cookie="1375695710/1e1ff5c8-e330-1330-
8002-22bcaa4c93a4" response="yes" classId="iodSnapshotStatus">
  <outConfigs>
    <iodSnapshotStatus dn="sys/iod/snapshotStatus" currentStatus=
      "SCU (NI-IOD) booting in progress" currentTime="Mon Aug 5 09:46:00 2013 "
      startTime="Mon Aug 5 09:46:00 2013 " runningTime="NA"
      snapshotReport="yes" remoteShareIp="NA"
      remoteSharePath="NA" remoteShareFile="NA" />
  </outConfigs>
</configResolveClass>
```

### Response: IOD Tests in Progress

```
<configResolveClass cookie="1375699222/ef7afa00-e330
-1330-8004-22bcaa4c93a4" response="yes" classId="iodSnapshotStatus">
  <outConfigs>
    <iodSnapshotStatus dn="sys/iod/snapshotStatus"
      currentStatus="SCU Non-interactive IOD tests is in progress"
      currentTime="Mon Aug 5 10:48:54 2013
      "startTime="Mon Aug 5 10:40:29 2013" runningTime="
      0 Hours 8 Minutes 49 Seconds" snapshotReport="yes" remoteShareIp="NA"
      remoteSharePath="NA" remoteShareFile="NA" />
  </outConfigs>
</configResolveClass>
```

### Response: IOD Tests Completed

```
<configResolveClass cookie="1375699222/ef7afa00-e330-1330
-8004-22bcaa4c93a4" response="yes" classId="iodSnapshotStatus">
  <outConfigs>
    <iodSnapshotStatus dn="sys/iod/snapshotStatus" currentStatus="
      Snapshot completed on this CIMC" currentTime="Mon Aug 5 11:11:24 2013"
      startTime="Mon Aug 5 10:40:29 2013 " runningTime="
      0 Hours 31 Minutes 0 Seconds" snapshotReport="yes"
      remoteShareIp="10.10.10.10" remoteSharePath="/home/sriparim/xfer"
      remoteShareFile="" />
  </outConfigs>
</configResolveClass>
```

### Response: No Session in Progress

```
<configResolveClass cookie="1375710321/850e6910-e333-1333
-8006-22bcaa4c93a4" response="yes" classId="iodSnapshotStatus">
<outConfigs>
<iodSnapshotStatus dn="sys/iod/snapshotStatus"
  currentTime="NI-IOD session not found" currentTime="Sat Jan 3 00:26:05 1970"
  startTime="NA" runningTime="NA" snapshotReport="no" remoteShareIp="NA"
  remoteSharePath="NA" remoteShareFile="NA" />
</outConfigs>
</configResolveClass>
```

## Retrieving the Existing Fault Events on a Server

Request:

```
<configResolveClass cookie='1307953743/b63ff130-a593-1593-8004-2e4ac2e14388'
classId='faultInst' inHierarchical='true'>
```

Response:

```
<configResolveClass cookie="1373297279/b08308c8-e101-1101
-8007-5afca0114ca4" response="yes" classId="faultInst">
<outConfigs>
<faultInst ack="yes" cause="equipmentDegraded" code="F1008"
  created="Sun Jun 30 18:51:36 2013" descr="Storage Virtual Drive 0
  Degraded: please check the storage controller, or reseal the storage drive"
  affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-0"
  highestSeverity="critical" id="3523280896" lastTransition="" lc="flapping"
  occur="1" origSeverity="cleared" prevSeverity="cleared"
  rule="fltStorageVirtualDriveDegraded" severity="warning" tags="storage"
  type="server" dn="sys/rack-unit-1/fault-F1008" >
</faultInst>
</outConfigs>
</configResolveClass>
```

## Retrieving Object and Fault Details of an affectedDn

This retrieves the details of the object and the associated faults.

Request:

```
<configResolveDn cookie="1374520602/84383130-e21e-121e-8003-5afca0114ca4"
  response="yes" dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-16">
```

Response:

```
<outConfig>
<storageLocalDisk id="16" pdStatus="Rebuilding" health="Moderate Fault"
  predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SATA"
  mediaType="HDD" coercedSize="476416 MB" vendor="ATA" productId="ST9500620NS"
  driveFirmware="CC02" driveSerialNumber="9XF14F21" driveState="rebuild"
  online="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-16" >
<storageLocalDiskProps rn="general-props" physicalDrive="16"
  enclosureDeviceId="8" deviceId="12" sequenceNumber="4" mediaErrorCount="0"
  otherErrorCount="0" predictiveFailureCount="0" linkSpeed="6.0 Gb/s"
  interfaceType="SATA" mediaType="HDD" blockSize="512" blockCount="976773168"
  rawSize="476940 MB" nonCoercedSize="476428 MB" coercedSize="476416 MB"
  powerState="active" sasAddress0="a44c11a0fc5a009f" sasAddress1="0x0" >
</storageLocalDiskProps>
<faultInst ack="yes" cause="equipment-inoperable" code="F0181"
  created="Mon Jul 22 18:48:14 2013" descr="Storage Local disk 16 is inoperable:
  reseal or replace the storage drive 16"
  affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-16"
  highestSeverity="critical" id="3506704384" lastTransition=""
  lc="flapping" occur="1" origSeverity="0" prevSeverity="0"
```

```

    rule="fltStorageLocalDiskInoperable" severity="3" tags="2" type="server"
    rn="fault-F0181" >
  </faultInst>
</storageLocalDisk>
</outConfig>
</configResolveDn>

```

### Retrieving Fault Details of a Fault Dn

Request:

```

<configResolveDn cookie="1374520602/84383130-e21e-121e-8003-5afca0114ca4"
dn="sys/rack-unit-1/fan-module-1-1/fan-1/fault-F0395">

```

Response:

```

<configResolveDn cookie="1388395900/1c7baee0-eebd-1ebd-808c-1fc9e1a85750"
response="yes" dn="sys/rack-unit-1/fan-module-1-1/fan-1/fault-F0395">
<outConfig>
  <faultInst ack="yes" cause="performance-problem" code="F0395"
created="Mon Dec 30 09:35:19 2013" descr="FAN1_TACH1:
  Fan speed for fan-1 is lower non critical:Check the air intake to the server"
affectedDN="sys/rack-unit-1/fan-module-1-1/fan-1"
highestSeverity="critical" id="486539524" lastTransition="" lc="flapping"
occur="1" origSeverity="cleared" prevSeverity="cleared"
rule="fltEquipmentFanPerfThresholdNonCritical" severity="minor"
tags="server" type="server"
dn="sys/rack-unit-1/fan-module-1-1/fan-1/fault-F0395" >
  </faultInst>
</outConfig>
</configResolveDn>

```

### Configuring BIOS Parameters Across Various Platforms Using a Master XML Request

Using the XML API interface, you can use the master BIOS parameters configuration XML request to configure BIOS parameters across different C-series servers. The BIOS parameters in this master XML request that are not supported on a specific platform are ignored. The supported parameters are configured as specified in the XML request.

Request:

```

<configConfMo dn="sys/rack-unit-1/bios/bios-settings"
inHierarchical="true" cookie="1379605932/898925a0-e6be-16be-922b-5bfca0114ca4">
<inConfig>
  <biosSettings>
    <biosVfAdjacentCacheLinePrefetch dn="sys/rack-unit-1
/bios/bios-settings/ Adjacent-Cache-Line-Prefetch"
vpAdjacentCacheLinePrefetch="enabled"/>
    <biosVfAltitude dn="sys/rack-unit-1/bios/bios-settings
/Altitude-Param" vpAltitude="900-m"/>
    <biosVfASPMsSupport dn="sys/rack-unit-1/bios/bios-settings
/ASPM-Support" vpASPMsSupport="Disabled"/>
    <biosVfAssertNMIONPERR dn="sys/rack-unit-1/bios/bios-settings
/Assert-NMI-on-PERR" vpAssertNMIONPERR="enabled"/>
    <biosVfAssertNMIONSERR dn="sys/rack-unit-1/bios/bios-settings
/Assert-NMI-on-SERR" vpAssertNMIONSERR="enabled"/>
    <biosVfBootOptionRetry dn="sys/rack-unit-1/bios/bios-settings
/Boot-option-retry" vpBootOptionRetry="disabled"/>
    <biosVfCkeLowPolicy dn="sys/rack-unit-1/bios/bios-settings
/Cke-Low-Policy" vpCkeLowPolicy="auto"/>
    <biosVfConsoleRedirection dn="sys/rack-unit-1/bios/bios-settings
/Console-redirection" vpLegacyOSRedirection="disabled"
vpRedirectionAfterPOST="Always Enable" vpPuttyKeyPad="ESCN"

```

```

vpTerminalType="vt100-plus" vpFlowControl="none"
vpConsoleRedirection="enabled" vpBaudRate="115200"/>
<biosVfCoreMultiProcessing dn="sys/rack-unit-1/bios/bios-settings
/Core-MultiProcessing" vpCoreMultiProcessing="all"/>
<biosVfCPUEnergyPerformance dn="sys/rack-unit-1/bios/bios-settings
/CPU-EngPerfBias"vpCPUEnergyPerformance="balanced-performance"/>
<biosVfCPUFrequencyFloor dn="sys/rack-unit-1/bios/bios-settings
/CPU-FreqFloor" vpCPUFrequencyFloor="disabled"/>
<biosVfCPUPerformance dn="sys/rack-unit-1/bios/bios-settings
/CPU-Performance" vpCPUPerformance="enterprise"/>
<biosVfCPUPowerManagement dn="sys/rack-unit-1/bios/bios-settings
/CPU-PowerManagement" vpCPUPowerManagement="energy-efficient"/>
<biosVfDCUPrefetch dn="sys/rack-unit-1/bios/bios-settings
/DCU-Prefetch" vpIPPrefetch="enabled"
vpStreamerPrefetch="enabled"/>
<biosVfDemandScrub dn="sys/rack-unit-1/bios/bios-settings
/Demand-Scrub-Param"
vpDemandScrub="enabled"/>
<biosVfDirectCacheAccess dn="sys/rack-unit-1/bios/bios-settings
/Direct-Cache-Access" vpDirectCacheAccess="enabled"/>
<biosVfDRAMClockThrottling dn="sys/rack-unit-1/bios/bios-settings
/DRAM-Clock-Throttling" vpDRAMClockThrottling="Balanced"/>
<biosVfDramRefreshRate dn="sys/rack-unit-1/bios/bios-settings
/dram-refresh-rate" vpDramRefreshRate="Auto"/>
<biosVfEnhancedIntelSpeedStepTech dn="sys/rack-unit-1/bios
/bios-settings/Enhanced-Intel-SpeedStep-Tech"
vpEnhancedIntelSpeedStepTech="enabled"/>
<biosVfExecuteDisableBit dn="sys/rack-unit-1/bios/bios-settings
/Execute-Disable-Bit" vpExecuteDisableBit="enabled"/>
<biosVfFRB2Enable dn="sys/rack-unit-1/bios/bios-settings
/FRB2-Enable" vpFRB2Enable="enabled"/>
<biosVfHardwarePrefetch dn="sys/rack-unit-1/bios/bios-settings
/Hardware-Prefetch" vpHardwarePrefetch="enabled"/>
<biosVfIntelHyperThreadingTech dn="sys/rack-unit-1/bios
/bios-settings/Intel-HyperThreading-Tech"
vpIntelHyperThreadingTech="enabled"/>
<biosVfIntelTurboBoostTech dn="sys/rack-unit-1/bios/bios-settings
/Intel-Turbo-Boost-Tech" vpIntelTurboBoostTech="enabled"/>
<biosVfIntelVirtualizationTechnology dn="sys/rack-unit-1
/bios/bios-settings/Intel-Virtualization-Technology"
vpIntelVirtualizationTechnology="enabled"/>
<biosVfIntelVTForDirectedIO dn="sys/rack-unit-1/bios/bios-settings
/Intel-VT-for-directed-IO" vpIntelVTForDirectedIO="enabled"
vpIntelVTDPassThroughDMASupport="enabled"
vpIntelVTInterruptRemapping="enabled"
vpIntelVTDCoherencySupport="disabled"
vpIntelVTDATSSupport="enabled"/>
<biosVfIOHResource dn="sys/rack-unit-1/bios/bios-settings
/ioh-resource" vpIOHResource="IOH0 40k IOH1 24k"/>
<biosVfLegacyUSBSupport dn="sys/rack-unit-1/bios
/bios-settings /LegacyUSB-Support" vpLegacyUSBSupport="enabled"/>
<biosVfLOMPortOptionROM dn="sys/rack-unit-1/bios/bios-settings
/LOMPort-OptionROM" vpLOMPort3State="Enabled"
vpLOMPort2State="Enabled" vpLOMPort1State="Enabled"
vpLOMPort0State="Enabled" vpLOMPortsAllState="Enabled"/>
<biosVfLvDIMMSupport dn="sys/rack-unit-1/bios/bios-settings
/LvDIMM-Support" vpLvDDRMode="power-saving-mode"/>
<biosVfMemoryInterleave dn="sys/rack-unit-1/bios/bios-settings
/Memory-Interleave" vpRankInterLeave="auto"
vpChannelInterLeave="auto"/>
<biosVfMemoryMappedIOAbove4GB dn="sys/rack-unit-1/bios/bios-settings/
Memory-mapped-IO-above-4GB" vpMemoryMappedIOAbove4GB="enabled"/>
<biosVfMirroringMode dn="sys/rack-unit-1/bios/bios-settings
/Mirroring-Mode" vpMirroringMode="intra-socket"/>

```

```

<biosVfNUMAOptimized dn="sys/rack-unit-1/bios/bios-settings
 /NUMA-optimized" vpNUMAOptimized="enabled"/>
<biosVfOnboardNIC dn="sys/rack-unit-1/bios/
 bios-settings/Onboard-NIC" vpOnboard10GbitLOM="enabled"
 vpOnboardGbitLOM="enabled"/>
<biosVfOnboardStorage dn="sys/rack-unit-1/bios/bios-settings
 /Onboard-Storage" vpOnboardSCUStorageSupport="disabled"/>
<biosVfOnboardStorageSWStack dn="sys/rack-unit-1/bios
 /bios-settings/ Onboard-SCU-Storage-SWStack"
 vpOnboardSCUStorageSWStack="LSI SW RAID"/>
<biosVfOSBootWatchdogTimer dn="sys/rack-unit-1/bios/bios-settings/
 OS-Boot-Watchdog-Timer-Param" vpOSBootWatchdogTimer="disabled"/>
<biosVfOSBootWatchdogTimerPolicy dn="sys/rack-unit-1/bios
 bios-settings/ OS-Boot-Watchdog-Timer-Policy"
 vpOSBootWatchdogTimerPolicy="power-off"/>
<biosVfOSBootWatchdogTimerTimeout dn="sys/rack-unit-1/bios
 /bios-settings/ OS-Boot-Watchdog-Timer-Time-Out"
 vpOSBootWatchdogTimerTimeout="10-minutes"/>
<biosVfOutOfBandMgmtPort dn="sys/rack-unit-1/bios/bios-settings
 /OoB-MgmtPort" vpOutOfBandMgmtPort="Enabled"/>
<biosVfPackageCStateLimit dn="sys/rack-unit-1/bios/bios-settings/
 Package-CState-Limit" vpPackageCStateLimit="c3-state"/>
<biosVfPatrolScrub dn="sys/rack-unit-1/bios/bios-settings
 /Patrol-Scrub-Param" vpPatrolScrub="enabled"/>
<biosVfPatrolScrubDuration dn="sys/rack-unit-1/bios/bios-settings/
 Patrol-Scrub-Duration" vpPatrolScrubDuration="8"/>
<biosVfPCIOptionROMs dn="sys/rack-unit-1/bios/bios-settings
 /PCI-OptionROMs" vpPCIOptionROMs="Legacy Only"/>
<biosVfPCISlotOptionROMEnable dn="sys/rack-unit-1/bios/bios-settings
 /PCI-Slot-OptionROM-Enable" vpSlotMezzState="Enabled"
 vpSlot7LinkSpeed="GEN3" vpSlot6LinkSpeed="GEN2"
 vpSlot5LinkSpeed="GEN2" vpSlot4LinkSpeed="GEN2"
 vpSlot3LinkSpeed="GEN2" vpSlot2LinkSpeed="GEN2"
 vpSlot1LinkSpeed="GEN2" vpSlot10State="Enabled"
 vpSlot9State="Enabled" vpSlot8State="Enabled"
 vpSlot7State="Enabled" vpSlot6State="Enabled"
 vpSlot5State="Enabled" vpSlot4State="Enabled"
 vpSlot3State="Enabled" vpSlot2State="Enabled"
 vpSlot1State="Enabled"/>
<biosVfPOSTErrorPause dn="sys/rack-unit-1/bios/bios-settings
 /POST-error-pause" vpPOSTErrorPause="disabled"/>
<biosVfProcessorC1E dn="sys/rack-unit-1/bios/bios-settings
 /Processor-C1E" vpProcessorC1E="enabled"/>
<biosVfProcessorC3Report dn="sys/rack-unit-1/bios
 /bios-settings/Processor-C3-Report" vpProcessorC3Report="enabled"/>
<biosVfProcessorC6Report dn="sys/rack-unit-1/bios/bios-settings
 /Processor-C6-Report" vpProcessorC6Report="enabled"/>
<biosVfProcessorCState dn="sys/rack-unit-1/bios/bios-settings
 /Processor-C-State" vpProcessorCState="enabled"/>
<biosVfPStateCoordType dn="sys/rack-unit-1/bios
 /bios-settings/p-state-coord" vpPStateCoordType="HW ALL"/>
<biosVfQPICfg dn="sys/rack-unit-1/bios/bios-settings
 /QPI-Config" vpQPILinkFrequency="auto"/>
<biosVfSelectMemoryRASConfiguration dn="sys/rack-unit-1/bios
 /bios-settings/SelectMemory-RAS-configuration"
 vpSelectMemoryRASConfiguration="sparing"/>
<!-- port A supported in Alpine and SM -->
<biosVfSerialPortAEnable dn="sys/rack-unit-1/bios/bios-settings
 /Serial-port-A-enable" vpSerialPortAEnable="enabled"/>
<biosVfSparingMode dn="sys/rack-unit-1/bios/bios-settings
 /Sparing-Mode" vpSparingMode="rank-sparing"/>
<biosVfSrIov dn="sys/rack-unit-1/bios/bios-settings/sr-iov"
 vpSrIov="disabled"/>
<biosVfTPMSupport dn="sys/rack-unit-1/bios/bios-settings

```

```

    /TPM-Support" vpTPMSupport="disabled"/>
<biosVfUCSMBootOrderRuleControl dn="sys/rack-unit-1/bios
/bios-settings/Boot-Order-Rules" vpUCSMBootOrderRule="Loose"/>
<biosVfUSBBootConfig dn="sys/rack-unit-1/bios/bios-settings
/USB-Boot-Config" vpMakeDeviceNonBootable="disabled"/>
<biosVfUSBEmulation dn="sys/rack-unit-1/bios/bios-settings
/USBEmulation-Support" vpUSBEmul6064="enabled"/>
<biosVfUSBPortsConfig dn="sys/rack-unit-1/bios/bios-settings
/USB-Ports-Config" vpUsbPortSDCard="enabled"
vpUsbPortVMedia="enabled" vpUsbPortKVM="enabled"
vpUsbPortInternal="enabled" vpUsbPortFront="enabled"
vpUsbPortRear="enabled" vpAllUsbDevices="enabled"/>
<biosVfVgaPriority dn="sys/rack-unit-1/bios/bios-settings
/VgaPriority" vpVgaPriority="Onboard"/>
</biosSettings>
</inConfig>
</configConfMo>

```

### Response:

```

<configConfMo dn="sys/rack-unit-1/bios/bios-settings"
cookie="1379605932/898925a0-e6be-16be-922b-5bfca0114ca4" response="yes">
<outConfig>
<biosSettings dn="sys/rack-unit-1/bios/bios-settings" status="modified" >
<biosVfIntelVTForDirectedIO rn="Intel-VT-for-directed-IO"
vpIntelVTDATSSupport="enabled" vpIntelVTDCoherencySupport="disabled"
vpIntelVTForDirectedIO="enabled" status="modified" >
</biosVfIntelVTForDirectedIO><biosVfSelectMemoryRASConfiguration
rn="SelectMemory-RAS-configuration" vpSelectMemoryRASConfiguration=
"maximum-performance" status="modified" >
</biosVfSelectMemoryRASConfiguration>
<biosVfProcessorC6Report rn="Processor-C6-Report"
vpProcessorC6Report="enabled" status="modified" >
</biosVfProcessorC6Report>
<biosVfIntelHyperThreadingTec rn="Intel-HyperThreading-Tech"
vpIntelHyperThreadingTech="enabled" status="modified" >
</biosVfIntelHyperThreadingTech>
<biosVfEnhancedIntelSpeedStepTech rn="Enhanced-Intel-SpeedStep-Tech"
vpEnhancedIntelSpeedStepTech="enabled" status="modified" >
</biosVfEnhancedIntelSpeedStepTech>
<biosVfIntelVirtualizationTechnology rn="Intel-Virtualization-Technology"
vpIntelVirtualizationTechnology="enabled" status="modified" >
</biosVfIntelVirtualizationTechnology>
<biosVfMemoryMappedIOAbove4GB rn="Memory-mapped-IO-above-4GB"
vpMemoryMappedIOAbove4GB="enabled" status="modified" >
</biosVfMemoryMappedIOAbove4GB>
<biosVfCPUPerformance rn="CPU-Performance" vpCPUPerformance="enterprise"
status="modified" ></biosVfCPUPerformance>
<biosVfLvDIMMSupport rn="LvDIMM-Support" vpLvDDRMode="power-saving-mode"
status="modified" >
.
.
.
<biosVfUSBPortsConfig rn="USB-Ports-Config" vpAllUsbDevices="enabled"
vpUsbPortRear="enabled" vpUsbPortFront="enabled"
vpUsbPortInternal="enabled" vpUsbPortKVM="enabled"
vpUsbPortVMedia="enabled" status="modified" >
</biosVfUSBPortsConfig>
<biosVfQPIConfig rn="QPI-Config" vpQPILinkFrequency="auto"
status="modified" > </biosVfQPIConfig>
<biosVfOnboardStorage rn="Onboard-Storage" vpOnboardSCUStorageSupport="disabled"
status="modified" ></biosVfOnboardStorage>
<biosVfLegacyUSBSupport rn="LegacyUSB-Support" vpLegacyUSBSupport="enabled"
status="modified" ></biosVfLegacyUSBSupport>
<biosVfUSBEmulation rn="USBEmulation-Support" vpUSBEmul6064="enabled"

```

```

    status="modified" ></biosVfUSBEmulation>
<biosVfUCSMBootOrderRuleControl rn="Boot-Order-Rules" vpUCSMBootOrderRule="Loose"
status="modified" > </biosVfUCSMBootOrderRuleControl>
<biosVfPCIOptionROMs rn="PCI-OptionROMs" vpPCIOptionROMs="Legacy Only"
status="modified" ></biosVfPCIOptionROMs>
<biosVfLOMPortOptionROM rn="LOMPort-OptionROM" vpLOMPortsAllState="Enabled"
vpLOMPort0State="Enabled" vpLOMPort1State="Enabled" status="modified" >
</biosVfLOMPortOptionROM>
<biosVfPCISlotOptionROMEnable rn="PCI-Slot-OptionROM-Enable"
vpSlot1State="Enabled" vpSlot2State="Enabled" vpSlot3State="Enabled"
vpSlot4State="Enabled" vpSlot5State="Enabled" vpSlot1LinkSpeed="GEN2"
vpSlot2LinkSpeed="GEN2" vpSlot3LinkSpeed="GEN2" vpSlot4LinkSpeed="GEN2"
vpSlot5LinkSpeed="GEN2" status="modified" >
</biosVfPCISlotOptionROMEnable><biosVfPStateCoordType
rn="p-state-coord" vpPStateCoordType="HW ALL" status="modified" >
</biosVfPStateCoordType><biosVfDramRefreshRate rn="dram-refresh-rate"
vpDramRefreshRate="Auto" status="modified" >
</biosVfDramRefreshRate>
<biosVfOutOfBandMgmtPort rn="OoB-MgmtPort" vpOutOfBandMgmtPort="Enabled"
status="modified" >
</biosVfOutOfBandMgmtPort>
</biosSettings>
</outConfig>
</configConfMo>

```

## Retrieving TPM Information

Request:

```

<configResolveClass cookie='1382189754/215a42c8-e918-1918-8003-dafea0114ca4'
classId='equipmentTpm' inHierarchical='true'> </configResolveClass>"

```

Response:

```

<configResolveClass cookie="1383875054/8504b1f8-eea0-1aa0-8005-140197ebfab0"
response="yes" classId="equipmentTpm">
<outConfigs>
  <equipmentTpm dn="sys/rack-unit-1/board/tpm" presence="equipped"
enabledStatus="enabled" activeStatus="activated" ownership="unowned"
tpmRevision="1" model="UCSX-TPM1-001" vendor="Cisco Systems Inc"
serial="FCH1526749E" version="A" >
  </equipmentTpm>
</outConfigs>
</configResolveClass>

```

## Retrieving PCI Slot Information

Request:

```

<configResolveClass cookie='1307953743/b63ff130-a593-1593-8004-2e4ac2e14388'
classId='pciEquipSlot' inHierarchical='true'>
</configResolveClass>"

```

Response:

```

<configResolveClass cookie="0987076388/a17ea2c8-81bd-11bd-8003-4c40daf6083c" response="yes"
classId="pciEquipSlot">
<outConfigs>
  <pciEquipSlot controllerReported="L" hostReported="NOTINCP-0" id="L"
macLeft="NOTINCP-00:00:00:00:00:00" macRight="NOTINCP-00:00:00:00:00:00"
model="Intel(R) I350 1 Gbps Network Controller" serial="NOTINCP-"
smbiosId="L" vendor="0x8086" version="0x8000B16-1.997.9"

```

```

dn="sys/rack-unit-1/equipped-slot-L">
</pciEquipSlot>
<pciEquipSlot controllerReported="HBA"
hostReported="NOTINCP-0" id="HBA" macLeft="NOTINCP-00:00:00:00:00:00"
macRight="NOTINCP-00:00:00:00:00:00" model="Cisco 12G SAS Modular Raid
Controller" serial="NOTINCP-" smbiosId="HBA" vendor="0x1000" version="N/A"
dn="sys/rack-unit-1/equipped-slot-HBA">
</pciEquipSlot>
</outConfigs>
</configResolveClass>

```

## Retrieving DIMM Blacklisting Status

Request:

```

<configResolveClass
cookie="0987076388/a17ea2c8-81bd-11bd-8003-4c40daf6083c"
inHierarchical="false" classId="equipmentIndicatorLed"/>

```

Response:

```

<configResolveClass
cookie="0987076388/a17ea2c8-81bd-11bd-8003-4c40daf6083c" response="yes"
classId="equipmentIndicatorLed">
<outConfigs>
  <equipmentIndicatorLed color="green" id="1" name="LED_PSU_STATUS"
operState="on" dn="sys/rack-unit-1/indicator-led-1">
</equipmentIndicatorLed><equipmentIndicatorLed color="green" id="2"
name="LED_TEMP_STATUS" operState="on" dn="sys/rack-unit-1/indicator-led-2">
</equipmentIndicatorLed><equipmentIndicatorLed color="green" id="3"
name="LED_FAN_STATUS" operState="on" dn="sys/rack-unit-1/indicator-led-3">
</equipmentIndicatorLed><equipmentIndicatorLed color="green" id="4"
name="LED_HLTH_STATUS" operState="on" dn="sys/rack-unit-1/indicator-led-4">
</equipmentIndicatorLed><equipmentIndicatorLed color="blue" id="5"
name="FP_ID_LED" operState="off" dn="sys/rack-unit-1/indicator-led-5">
</equipmentIndicatorLed><equipmentIndicatorLed color="green" id="0"
name="OVERALL_DIMM_STATUS" operState="on"
dn="sys/rack-unit-1/indicator-led-0">
</equipmentIndicatorLed>
</outConfigs>
</configResolveClass>

```

## Retrieving Network Settings

Request:

```

<configResolveClass cookie="1428279919/7887a3d3-1303-1303-8002-4a791e1b0ff4"
inHierarchical="false" classId="mgmtIf"/>

```

Response:

```

<configResolveClass cookie="1428279919/7887a3d3-1303-1303-8002-4a791e1b0ff4"
response="yes" classId="mgmtIf">
<outConfigs>
<mgmtIf dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface Network Settings"
id="1"
extEnabled="yes" extIp="10.10.10.10" extMask="255.255.255.0" extGw="10.10.10.10"
ifType="physical" mac="F4:0F:1B:1E:79:4A" hostname="Unknown" dhcpEnable="no"
dnsUsingDhcp="no" ddnsEnable="yes" ddnsDomain="" dnsPreferred="72.163.128.140"
dnsAlternate="171.70.168.183" nicMode="dedicated" vicSlot="flex-lom" nicRedundancy="none"

vlanEnable="no" vlanId="1" vlanPriority="0" portProfile="" v6extEnabled="no"
v6extIp="::" v6extGw="::" v6prefix="64" v6linkLocal="::" v6SlaacIp="::"
v6dhcpEnable="no" v6dnsUsingDhcp="no" v6dnsPreferred="::"

```



```

v6dnsAlternate="::" subject="blade" autoNeg="disabled" adminNetSpeed="100Mbps"
adminDuplex="full" operNetSpeed="100Mbps" operDuplex="full"/>
</outConfigs>
</configResolveClass>

```

## Enabling Auto-Negotiation

Request:

```

<configConfMo cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4" inHierarchical="false">
  <inConfig>
    <mgmtIf dn="sys/rack-unit-1/mgmt/if-1" nicMode="dedicated" autoNeg="enabled"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="" cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4"
response="yes">
  <outConfig>
    <mgmtIf
      dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface Network Settings"
      id="1" extEnabled="yes" extIp="10.10.10.10" extMask="255.255.255.0"
      extGw="10.10.10.10" ifType="physical" mac="F4:4E:05:9F:20:A2" hostname="Cxxx-FCH1841V1AZ"

      dhcpEnable="no" dnsUsingDhcp="no" ddnsEnable="yes" ddnsDomain="" dnsPreferred="0.0.0.0"

      dnsAlternate="0.0.0.0" nicMode="dedicated" vicSlot="flex-lom" nicRedundancy="none"
      vlanEnable="no" vlanId="1" vlanPriority="0" portProfile="" v6extEnabled="no"
      v6extIp="::" v6extGw="::" v6prefix="64" v6linkLocal="::" v6SlaacIp="::"
      v6dhcpEnable="no" v6dnsUsingDhcp="no" v6dnsPreferred="::" v6dnsAlternate="::"
      subject="blade" autoNeg="enabled" adminNetSpeed="auto" adminDuplex="auto"
      operNetSpeed="1Gbps" operDuplex="full" status="modified"/>
    </outConfig>
  </configConfMo>

```

## Disabling Auto-Negotiation

Request:

```

<configConfMo cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4" inHierarchical="false">
  <inConfig>
    <mgmtIf dn="sys/rack-unit-1/mgmt/if-1" nicMode="dedicated" autoNeg="disabled"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="" cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4"
response="yes">
  <outConfig>
    <mgmtIf
      dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface Network Settings"
      id="1" extEnabled="yes" extIp="10.10.10.10" extMask="255.255.255.0"
      extGw="10.10.10.10" ifType="physical" mac="F4:4E:05:9F:20:A2" hostname="Cxxx-FCH1841V1AZ"

      dhcpEnable="no" dnsUsingDhcp="no" ddnsEnable="yes" ddnsDomain="" dnsPreferred="0.0.0.0"

      dnsAlternate="0.0.0.0" nicMode="dedicated" vicSlot="flex-lom" nicRedundancy="none"
      vlanEnable="no" vlanId="1" vlanPriority="0" portProfile="" v6extEnabled="no"
      v6extIp="::" v6extGw="::" v6prefix="64" v6linkLocal="::" v6SlaacIp="::"
      v6dhcpEnable="no" v6dnsUsingDhcp="no" v6dnsPreferred="::" v6dnsAlternate="::"

```

```

    subject="blade" autoNeg="disabled"    adminNetSpeed="100Mbps"
    adminDuplex="full" operNetSpeed="100Mbps" operDuplex="full"
    status="modified"/>
</outConfig>
</configConfMo>

```

### Configuring Network Port Speed and Duplex With Auto-negotiation in Disabled State

Request:

```

<configConfMo cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4"
inHierarchical="false">
  <inConfig>
    <mgmtIf dn="sys/rack-unit-1/mgmt/if-1" nicMode="dedicated" autoNeg="disabled"
      adminNetSpeed="10Mbps" adminDuplex="half"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="" cookie="1439377526/06f404d9-1d1c-1d1c-8002-a2209f054ef4"
response="yes">
  <outConfig>
    <mgmtIf
      dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface Network Settings"
      id="1" extEnabled="yes" extIp="10.10.10.10" extMask="255.255.255.0"
      extGw="10.10.10.10" ifType="physical" mac="F4:4E:05:9F:20:A2" hostname="Cxxx-FCH1841V1AZ"

      dhcpEnable="no" dnsUsingDhcp="no" ddnsEnable="yes" ddnsDomain="" dnsPreferred="0.0.0.0"

      dnsAlternate="0.0.0.0" nicMode="dedicated" vicSlot="flex-lom" nicRedundancy="none"
      vlanEnable="no" vlanId="1" vlanPriority="0" portProfile="" v6extEnabled="no" v6extIp="::"

      v6extGw="::" v6prefix="64" v6linkLocal="::" v6SlaacIp="::" v6dhcpEnable="no"
      v6dnsUsingDhcp="no" v6dnsPreferred="::" v6dnsAlternate="::" subject="blade"
      autoNeg="enabled" adminNetSpeed="10Mbps" adminDuplex="half"
      operNetSpeed="10Mbps" operDuplex="half" status="modified"/>
  </outConfig>
</configConfMo>

```

### Configuring Network Settings to Enable DDNS

Request:

```

<configConfMo cookie='0987076803/ba395308-81bd-11bd-8004-4c40daf6083c'
dn='sys/rack-unit-1/mgmt/if-1'>
  <inConfig>
    <mgmtIf dn='sys/rack-unit-1/mgmt/if-1' ddnsDomain='www.cisco.com' />
  </inConfig>
</configConfMo>

```

Response:

This enables the DDNS.

```

<configConfMo dn="sys/rack-unit-1/mgmt/if-1"
cookie="1398652603/2f9bf4c8-f811-1811-8005-79bdaa4c93a4" response="yes">
  <outConfig>
    <mgmtIf dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface
      Network Settings" id="1" extEnabled="yes" extIp="10.10.10.10"
      extMask="255.255.255.128" extGw="10.10.10.10" ifType="physical"
      mac="A4:93:4C:AA:BD:79" hostname="ucs-Cxxx-mx" dhcpEnable="no"
      dnsUsingDhcp="no" ddnsEnable="no" ddnsDomain="www.cisco.com"
      dnsPreferred="0.0.0.0" dnsAlternate="0.0.0.0" nicMode="shared_lom"

```

```

        nicRedundancy="active-active" vlanEnable="no" vlanId="1" vlanPriority="0"
        portProfile="test" v6extEnabled="no" v6extIp="::"
        v6extGw="::v6prefix="64" v6linkLocal="::" v6dhcpEnable="no"
        v6dnsUsingDhcp="no" v6dnsPreferred="::" v6dnsAlternate="::"
        subject="blade" status="modified">
    </mgmtIf>
</outConfig>
</configConfMo>

```

## Creating PXE Boot Device

Request:

```

<configConfMo cookie='1390349461/f5c79390-f083-1083-8005-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootPxe name='pxe_slot1_port1' slot='1' port='1'
      state='Enabled' dn='sys/rack-unit-1/boot-precision/pxe-pxe_slot1_port1'
      rn='pxe-pxe_slot1_port1'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390349461/f5c79390-f083-1083-8005-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
      purpose="operational" rebootOnUpdate="no" bootMode="Legacy" status="modified" >
    <lsbootVMedia name="kvm-fdd" type="VMEDIA" subtype="kvm-mapped-dvd" access=
      "read-only-local" order="1" state="Enabled" rn="vm-kvm-fdd"
      status="modified" >
    </lsbootVMedia>
    <lsbootPxe name="pxe" type="PXE" slot='1' port='1' order="2" state="Enabled"
      rn="pxe-pxe" status="modified" >
    </lsbootPxe>
    </lsbootDevPrecision>
  </outConfig>
</configConfMo>

```

## Deleting PXE Boot Device

Request:

```

<configConfMo cookie='1390433433/82e32da8-f097-1097-8005-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootPxe name='PXE9' slot='9' port='' order='3' state='Enabled'
      status='deleted' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390433433/82e32da8-f097-1097-8005-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"

```

```

purpose="operational" rebootOnUpdate="no" bootMode="Legacy" reapply="no"
status="modified" >
<lsbootPxe name="PXE1" type="PXE" slot="9" order="2" state="Enabled" rn="pxe-PXE1"
status="modified">
  <lsbootVMedia name="kvm-fdd" type="VMEDIA" subtype="kvm-mapped-dvd" access=
"read-only-local"
  order="1" state="Enabled" rn="vm-kvm-fdd" status="modified">
</lsbootPxe>
</lsbootDevPrecision>
</outConfig>
</configConfMo>

```

## Modifying PXE Boot Device

Request:

```

<configConfMo cookie='1390882671/1b905748-f100-1100-8006-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
  <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
status='modified'>
  <lsbootPxe name='pxe_slot1_port1' slot='2' port='1'
state='Enabled' dn='sys/rack-unit-1/boot-precision/pxe-pxe_slot1_port1'
order='1'
rn='pxe-pxe_slot1_port1' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390882671/1b905748-f100-1100-8006-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" reapply="no" status="modified" >
  <lsbootVMedia name="kvm-fdd" type="VMEDIA" subtype="kvm-mapped-dvd"
access="read-only-local" order="1" state="Enabled" rn="vm-kvm-fdd"
status="modified" >
</lsbootVMedia>
  <lsbootPxe name="pxe_slot1_port1" type="PXE" slot="1"
port="1" order="1" state="Enabled" rn="pxe-pxe_slot1_port1"
status="modified">
</lsbootPxe>
</lsbootDevPrecision>
</outConfig>
</configConfMo>

```

## Creating iSCSI Boot Device

Request:

```

<configConfMo cookie='1390443548/ddc28938-f099-1099-8007-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
  <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
status='modified'>
  <lsbootIscsi name='myISCSIfist-device' slot='1' port='1'
order='4' state='Enabled'
dn='sys/rack-unit-1/boot-precision/iscsi-myISCSIfist-device'
rn='iscsi-myISCSIfist-device' />
</lsbootDevPrecision>

```

```
</inConfig>
</configConfMo>
```

#### Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390443548/ddc28938-f099-1099-8007-93536d0df730" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" status="modified" >
<lsbootPxe name="PXE5" type="PXE" slot="9" order="1" state="Disabled"
rn="pxe-PXE5" status="modified" >
</lsbootPxe>
<lsbootPxe name="PXE1" type="PXE" slot="9" order="2" state="Enabled"
rn="pxe-PXE1" status="modified" >
</lsbootPxe>
<lsbootIscsi name="Iscsi" type="ISCSI" order="3" state="Disabled"
rn="iscsi-Iscsi" status="modified" >
</lsbootIscsi>
<lsbootIscsi name="myISCSIfist-device" type="ISCSI" slot="1"
port="1" order="4" state="Enabled" rn="iscsi-myISCSIfist-device"
status="modified" >
</lsbootIscsi>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

### Deleting ISCSI Boot Device

#### Request:

```
<configConfMo cookie='1390451709/c43d08b0-f09b-109b-800a-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
<lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
status='modified'>
<lsbootIscsi name='iscsi105' slot='3' port='6' order='1'
state='Enabled' status='removed' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>
```

#### Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390451709/c43d08b0-f09b-109b-800a-93536d0df730" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" status="modified" >
<lsbootIscsi name="iscsi105" type="ISCSI" slot="3" port="6" order="1"
state="Enabled" rn="iscsi-iscsi105" status="modified">
</lsbootIscsi>
<lsbootIscsi name="iscsi101" type="ISCSI" slot="3"
port="6" order="2" state="Enabled" rn="iscsi-iscsi101"
status="modified">
</lsbootIscsi>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Modifying iSCSI Boot Device

Request:

```
<configConfMo cookie='1390451709/c43d08b0-f09b-109b-800a-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
      <lsbootIscsi name='iscsi109' slot='100' port='100' order='1'
        state='Disabled'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390451709/c43d08b0-f09b-109b-800a-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
    name="boot-precision" purpose="operational" rebootOnUpdate="no"
    bootMode="Legacy" status="modified" >
  <lsbootIscsi name="iscsi106" type="ISCSI" slot="3" port="6" order="1"
    state="Enabled" rn="iscsi-iscsi106" status="modified">
  </lsbootIscsi>
  <lsbootIscsi name="iscsi105" type="ISCSI" slot="3" port="6" order="2"
    state="Enabled" rn="iscsi-iscsi105" status="modified" >
  </lsbootIscsi>
  <lsbootIscsi name="iscsi109" type="ISCSI" slot="1" port="9" order="3"
    state="Disabled" rn="iscsi-iscsi109" status="modified">
  </lsbootIscsi>
  <lsbootIscsi name="iscsi101" type="ISCSI" slot="3" port="6" order="4"
    state="Enabled" rn="iscsi-iscsi101" status="modified">
  </lsbootIscsi>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Creating SAN Boot Device

Request:

```
<configConfMo cookie='1390514059/489111c0-f0aa-10aa-800b-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootSan name='mysanboot3' slot='100' lun='100'
      order='1' state='Enabled' dn='sys/rack-unit-1/boot-precision/san-
      rn='san-mysanboot3'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390514059/489111c0-f0aa-10aa-800b-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
    name="boot-precision" purpose="operational" rebootOnUpdate="no"
    bootMode="Legacy" status="modified" >
  <lsbootSan name="mysanboot3" type="SAN" slot="100"
    lun="100" order="1" state="Enabled" rn="san-mysanboot3">
  </lsbootSan>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

```

    status="modified">
  </lsbootSan>
  <lsbootSan name="mysanboot" type="SAN" order="2" state="Disabled"
    rn="san-mysanboot" status="modified">
  </lsbootSan>
</lsbootDevPrecision>
</outConfig>
</configConfMo>

```

## Deleting SAN Boot Device

Request:

```

<configConfMo cookie='1390535353/3dc6e2b0-f0af-10af-8002-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
      <lsbootSan name='san16' slot='1' lun='9'
        order='1' state='Enabled' status='removed' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390535353/3dc6e2b0-f0af-10af-8002-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified" >
    <lsbootPxe name="pxe" type="PXE" slot="1" port="1" order="4"
      state="Enabled" rn="pxe-pxe" status="modified">
    </lsbootPxe>
    <lsbootHdd name="myhdd" type="LOCALHDD" slot="1" lun="3" order="5"
      state="Enabled" rn="hdd-myhdd" status="modified">
    </lsbootHdd>
    <lsbootSan name="san16" type="SAN" slot="1" lun="9" order="1"
      state="Enabled" rn="san-san16" status="modified">
    </lsbootSan>
    <lsbootSan name="san10" type="SAN" slot="1" lun="9" order="2"
      state="Disabled" rn="san-san10" status="modified">
    </lsbootSan>
    <lsbootSan name="san9" type="SAN" slot="1" lun="9" order="3"
      state="Enabled" rn="san-san9" status="modified">
    </lsbootSan>
  </lsbootDevPrecision>
</outConfig>
</configConfMo>

```

## Modifying SAN Boot Device

Request:

```

<configConfMo cookie='1390535353/3dc6e2b0-f0af-10af-8002-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootSan name='san9' slot='99' lun='99' order='1'
      state='Disabled' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

```
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390535353/3dc6e2b0-f0af-10af-8002-93536d0df730" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" status="modified" >
<lsbootSan name="san9" type="SAN" slot="1" lun="9"
order="1" state="Enabled" rn="san-san9" status="modified" >
</lsbootSan>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Examples of Common Server Management Tasks Contd.

The examples in this section show how to use the Cisco IMC XML API to perform common server management tasks. Each example shows the XML API request followed by the response from Cisco IMC.

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- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_0497197F0CA04FA482E785F44E68D115](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_0B3125377489486487725980CE9E03B8](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_FBCA6AC69598485CA3AE9E0F43DF7DBF](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_B597F852458A47EAA60A5D34B22246F6](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_FC553C162FC74568B6B440436CD56CF8](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_6FD56FD8A76241EAB993083E97459577](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_237D7582B7574F488C5E160E783B0202](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_FDD51439CA194F95B587861CEEB066A8](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_CFEBB4B1F1BF46F596F172390F15BD39](#)
- [#unique\\_96 unique\\_96\\_Connect\\_42\\_section\\_C1FBE15776394D768C13778D3F6315EA](#)

- #unique\_96 unique\_96\_Connect\_42\_section\_3FF34DA528EF48ED98457B80B7B627B0
- #unique\_96 unique\_96\_Connect\_42\_section\_7F946E9D10BA4796966903077E5609F9
- #unique\_96 unique\_96\_Connect\_42\_section\_327E76DADF0F47278B223EDB4AD1CC52
- #unique\_96 unique\_96\_Connect\_42\_section\_3B20522E4B624727929B58643F585226
- #unique\_96 unique\_96\_Connect\_42\_section\_8FC766ACDAAE4E5681D6DDCABA58586D
- #unique\_96 unique\_96\_Connect\_42\_section\_64170A06BAC74DE2A27AAD4B391197AA
- #unique\_96 unique\_96\_Connect\_42\_section\_38DF4DD852D94AA3ACF079383B71E914
- #unique\_96 unique\_96\_Connect\_42\_section\_C9293E15A35C4CBFABCC5A1374F62A83
- #unique\_96 unique\_96\_Connect\_42\_section\_F268CB8A73164A90B1412501478FE384
- #unique\_96 unique\_96\_Connect\_42\_section\_24A0B4D76AA649CB80096263179E0F0B
- #unique\_96 unique\_96\_Connect\_42\_section\_409FA893A184454E9AE2FBFF46089C05
- #unique\_96 unique\_96\_Connect\_42\_section\_1AE96F42BAF8462A8EBB9EBA18A276FC
- #unique\_96 unique\_96\_Connect\_42\_section\_3752C79473934D0E9915C9B2C044AAF0
- #unique\_96 unique\_96\_Connect\_42\_section\_0CB48E28A9D54B68ADC9FD7B65CF93B3
- #unique\_96 unique\_96\_Connect\_42\_section\_C978A89F0C594C949842EA61B1A84EA0
- #unique\_96 unique\_96\_Connect\_42\_section\_E58CEA7F08DF4FB080F7CAFB406A89F1

### Creating LOCALHDD Boot Device

Request:

```
<configConfMo cookie='1390538599/ff40b380-f0af-10af-8003-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision'
      rebootOnUpdate='no' status='modified'>
      <lsbootHdd name='MySecondLocalHDD' slot='99' lun='99' order='1'
        state='Enabled'
        dn='sys/rack-unit-1/boot-precision/hdd-MySecondLocalHDD' rn='hdd-MySecondLocalHDD' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390538599/ff40b380-f0af-10af-8003-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified" >
    <lsbootHdd name="MySecondLocalHDD" type="LOCALHDD" slot="99"
      lun="99" order="1" state="Disabled" rn="hdd-MySecondLocalHDD"
      status="modified" >
    </lsbootHdd>
    <lsbootHdd name="myhdd" type="LOCALHDD" order="2" state="Disabled"
      rn="hdd-myhdd" status="modified" >
    </lsbootHdd>
```

```

    </lsbootDevPrecision>
  </outConfig>
</configConfMo>

```

### Deleting LOCALHDD Boot Device

Request:

```

<configConfMo cookie='1390544308/538d3b88-f0b1-10b1-8005-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
      <lsbootHdd name='HDD8' order='1' state='Enabled' status='removed' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390544308/538d3b88-f0b1-10b1-8005-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified" >
    <lsbootHdd name="HDD8" type="LOCALHDD" order="1" state="Enabled"
      rn="hdd-HDD8" status="modified" >
    </lsbootHdd><lsbootHdd name="HDD8" type="LOCALHDD" order="2"
      state="Enabled" rn="hdd-HDD6" status="modified" >
    </lsbootHdd>
  </lsbootDevPrecision>
</outConfig>
</configConfMo>

```

### Modifying LOCALHDD Boot Device

Request:

```

<configConfMo cookie='1390544308/538d3b88-f0b1-10b1-8005-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
      <lsbootHdd name='HDD7' order='1' state='Enabled' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390544308/538d3b88-f0b1-10b1-8005-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified" >
    <lsbootHdd name="HDD6" type="LOCALHDD" order="1" state="Enabled"
      rn="hdd-HDD6" status="modified" >
    </lsbootHdd>
    <lsbootHdd name="HDD7" type="LOCALHDD" slot="1" lun="99"
      order="2" state="Disabled" rn="hdd-HDD7" status="modified" >
    </lsbootHdd>
  </lsbootDevPrecision>

```

```
</outConfig>
</configConfMo>
```

## Creating SDCARD Boot Device

Request:

```
<configConfMo cookie='1390548710/59ead228-f0b2-10b2-8008-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
<lsbootDevPrecision dn='sys/rack-unit-1/boot-precision'
rebootOnUpdate='no' status='modified'>
<lsbootSd name='sdcard2' order='1' state='Enabled'
dn='sys/rack-unit-1/boot-precision/sd-sdcard2' rn='sd-sdcard2' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390548710/59ead228-f0b2-10b2-8008-93536d0df730" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" status="modified">
<lsbootSd name="sdcard2" type="SDCARD" order="1"
state="Enabled" rn="sd-sdcard1" status="modified" >
</lsbootSd>
<lsbootSd name="mySd" type="SDCARD" order="1" state="Enabled"
rn="sd-mySd" status="modified" >
</lsbootSd>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Deleting SDCARD Boot Device

Request:

```
<configConfMo cookie='1390606215/bd813540-f0bf-10bf-800c-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
<lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
status='modified'>
<lsbootSd name='sdcard5' order='2' state='Enabled' status='deleted' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390606215/bd813540-f0bf-10bf-800c-93536d0df730" response="yes">
<outConfig>
<lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
bootMode="Legacy" status="modified" >
<lsbootSd name="sdcard" type="SDCARD" order="1" state="Disabled"
rn="sd-sdcard" status="modified" >
</lsbootSd>
<lsbootSd name="sdcard5" type="SDCARD" order="2" state="Enabled"
rn="sd-sdcard5" status="modified" >
</lsbootSd>
```

```

    </lsbootDevPrecision>
  </outConfig>

```

## Modifying SDCARD Boot Device

Request:

```

<configConfMo cookie='1390606215/bd813540-f0bf-10bf-800c-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootSd name='sdcard6' order='1' state='Enabled' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390606215/bd813540-f0bf-10bf-800c-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
      purpose="operational" rebootOnUpdate="no" bootMode="Legacy" status="modified" >
    <lsbootSd name="sdcard6" type="SDCARD" order="1"
      state="Disabled" rn="sd-sdcard" status="modified" >
    </lsbootSd>
    <lsbootSd name="sdcard6" type="SDCARD" order="2"
      state="Enabled" rn="sd-sdcard6" status="modified" >
    </lsbootSd>
    <lsbootSd name="sdcard6" type="SDCARD" order="3"
      state="Enabled" rn="sd-sdcard5" status="modified" >
    </lsbootSd>
  </lsbootDevPrecision>
</outConfig>
</configConfMo>

```

## Creating USB Boot Device

Request:

```

<configConfMo cookie='1390608715/5288c220-f0c0-10c0-800d-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootUsb name='firstusb' order='1' state='Enabled'
      subtype='usb-cd' dn='sys/rack-unit-1/boot-precision/usb-firstusb'
      rn='usb firstusb' />
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390608715/5288c220-f0c0-10c0-800d-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
      purpose="operational" rebootOnUpdate="no" bootMode="Legacy" status="modified" >
    <lsbootUsb name="firstusb" type="USB" subtype="usb-hdd" order="1"
      state="Enabled" rn="usb-firstusb" status="modified" >
    </lsbootUsb>
  </lsbootDevPrecision>

```

```
</outConfig>
</configConfMo>
```

## Deleting USB Boot Device

Request:

```
<configConfMo cookie='1390610306/b1565da8-f0c0-10c0-800e-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
  <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision'
    rebootOnUpdate='no' status='modified'>
  <lsbootUsb name='usb-hdd' order='1' state='Enabled'
    subtype='usb-hdd' status='removed' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390610306/b1565da8-f0c0-10c0-800e-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
    purpose="operational" rebootOnUpdate="no" bootMode="Legacy"
    status="modified" >
  <lsbootUsb name="usb-hdd" type="USB" subtype="usb-hdd" order="1"
    state="Enabled" rn="usb-usb-hdd" status="modified">
</lsbootUsb>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Modifying USB Boot Device

Request:

```
<configConfMo cookie='1390793785/698fd000-f0eb-10eb-8010-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
  <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
    status='modified'>
  <lsbootUsb name='usb-usb1' order='2' state='Enabled' subtype='usb-hdd' />
</lsbootDevPrecision>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390793785/698fd000-f0eb-10eb-8010-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
    name="boot-precision" purpose="operational" rebootOnUpdate="no"
    bootMode="Legacy" status="modified" >
  <lsbootUsb name="usb-usb1" type="USB" subtype="usb-hdd" order="1"
    state="Disabled" rn="usb-usb-usb1" status="modified" >
</lsbootUsb>
  <lsbootUsb name="usb-hdd1" type="USB" subtype="usb-hdd" order="2"
    state="Enabled" rn="usb-usb-hdd1" status="modified" >
</lsbootUsb>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

## Creating VMEDIA Boot Device

Request:

```
<configConfMo cookie='1390798614/8965d518-f0ec-10ec-8013-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootVMedia name='CIMC-DVD2' order='1' state='Enabled'
      access='read-only-remote' subtype='cimc-mapped-dvd'
      dn='sys/rack-unit-1/boot-precision/vm-CIMC-DVD2' rn='vm-CIMC-DVD2'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390798614/8965d518-f0ec-10ec-8013-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified">
    <lsbootVMedia name="CIMC-DVD2" type="VMEDIA" subtype="cimc-mapped-dvd"
      access="read-only-remote" order="1" state="Enabled"
      rn="vm-CIMC-DVD1" status="modified">
    </lsbootVMedia>
    </lsbootDevPrecision>
  </outConfig>
</configConfMo>
```

## Deleting VMEDIA Boot Device

Request:

```
<configConfMo cookie='1390860610/f89cf200-f0fa-10fa-801a-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision'
      rebootOnUpdate='no' status='modified'>
    <lsbootVMedia name='CIMC-DVD-a-s-d' order='1' state='Enabled'
      access='read-only-local' status='removed'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390860610/f89cf200-f0fa-10fa-801a-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision" name="boot-precision"
      purpose="operational" rebootOnUpdate="no" bootMode="Legacy" status="modified">
    <lsbootVMedia name="CIMC-DVD-a-s-d" type="VMEDIA"
      subtype="kvm-mapped-dvd" access="read-only-local"
      order="1" state="Enabled" rn="vm-CIMC-DVD-a-s-d" status="modified">
    </lsbootVMedia>
    </lsbootDevPrecision>
  </outConfig>
</configConfMo>
```

## Modifying vMEDIA Boot Device

Request:

```
<configConfMo cookie='1390860610/f89cf200-f0fa-10fa-801a-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
  <inConfig>
    <lsbootDevPrecision dn='sys/rack-unit-1/boot-precision' rebootOnUpdate='no'
      status='modified'>
    <lsbootVMedia name='CIMC-DVD-a-s-d' order='1' state='Disabled'
      access='read-only-local'/>
    </lsbootDevPrecision>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390860610/f89cf200-f0fa-10fa-801a-93536d0df730" response="yes">
  <outConfig>
    <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
      name="boot-precision" purpose="operational" rebootOnUpdate="no"
      bootMode="Legacy" status="modified">
    <lsbootVMedia name="CIMC-DVD-a-s-d" type="VMEDIA"
      subtype="kvm-mapped-dvd" access="read-only-local" order="1"
      state="Enabled" rn="vm-CIMC-DVD-a-s-d" status="modified">
    </lsbootVMedia>
    </lsbootDevPrecision>
  </outConfig>
</configConfMo>
```

## Retrieving PCI Inventory Details

Request:

```
<configResolveClass cookie='1307953743/b63ff130-a593-1593-8004-2e4ac2e14388'
classId='pciEquipSlot' inHierarchical='true'>
```

Response:

```
<configResolveClass cookie="0000058570/a30d32b0-000d-100d-8003-83a538e14388"
response="yes" classId="pciEquipSlot">
  <outConfigs>
    <pciEquipSlot controllerReported="1" hostReported="0" id="1"
      macLeft="CP_REL-00:00:00:00:00:00" macRight="CP_REL-00:00:00:00:00:00"
      model="UCS VIC P81E 10 Gbps 2 port CNA" revision="0" serial="CP_REL-"
      smbiosId="1" vendor="0x1137" dn="sys/rack-unit-1/equipped-slot-1">
    </pciEquipSlot>
    <pciEquipSlot controllerReported="5" hostReported="0" id="5"
      macLeft="CP_REL-00:00:00:00:00:00" macRight="CP_REL-00:00:00:00:00:00"
      model="Qlogic QLE2462 4 Gbps 2 port FC HBA" revision="0"
      serial="CP_REL-" smbiosId="5" vendor="0x1077"
      dn="sys/rack-unit-1/equipped-slot-5">
    </pciEquipSlot>
  </outConfigs>
</configResolveClass>
```

## Enabling Cisco IMC Secure Boot

Request:

```
<configConfMo dn='sys/rack-unit-1/mgmt/fw-updatable'
cookie='1382421711/231014e0-e94e-194e-8002-9e56e1a85750' inHierarchical='true'>
  <inConfig>
    <firmwareUpdatable adminState='trigger' dn='sys/rack-unit-1/mgmt/fw-updatable'
```



```

    protocol='tftp' remoteServer='10.10.10.10' remotePath='SL2EP29.bin'
    type='blade-controller' secureBoot=enable/'>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/mgmt/fw-updatable"
cookie="1382421711/231014e0-e94e-194e-8002-9e56e1a85750" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable" adminState="triggered"
deployment="backup" operState="updating" version="66.77(67.1380790153)"
protocol="none" remoteServer="" remotePath="" user="" pwd="" progress="0"
type="blade-controller" secureBoot=enabled status="modified">
</firmwareUpdatable>
</outConfig>
</configConfMo>

```

### Disabling Cisco IMC Secure Boot

Request:

```

<configConfMo cookie='1382421711/231014e0-e94e-194e-8002-9e56e1a85750'
dn='sys/rack-unit-1/mgmt/fw-updatable' inHierarchical='true'>
<inConfig>
  <firmwareUpdatable adminState='trigger' dn='sys/rack-unit-1/mgmt/fw-updatable'
protocol='tftp' remoteServer='10.10.10.10' remotePath='SL2EP29.bin'
type='blade-controller' secureBoot=disable/'>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/mgmt/fw-updatable"
cookie="1382421711/231014e0-e94e-194e-8002-9e56e1a85750" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable"
adminState="triggered" deployment="backup" operState="updating"
version="66.77(67.1380790153)" protocol="none" remoteServer=""
remotePath="" user="" pwd="" progress="0" type="blade-controller"
secureBoot=disabled status="modified">
</firmwareUpdatable>
</outConfig>
</configConfMo>

```

### Retrieving Windows Secure Boot Details

Request:

```

<configResolveClass classId='lsbootBootSecurity'
cookie='1383937224/feaf3d08-eaae-1aae-800a-dafea0114ca4' inHierarchical='true'>
</configResolveClass>

```

Response:

```

<configResolveClass response="yes" classId="lsbootBootSecurity"
cookie="1383937224/feaf3d08-eaae-1aae-800a-dafea0114ca4">
<outConfigs>
  <lsbootBootSecurity dn="sys/rack-unit-1/boot-policy/boot-security"
secureBoot="disabled">
</lsbootBootSecurity>
</outConfigs>
</configResolveClass>

```

## Enabling Windows Secure Boot

Request:

```
<configConfMo cookie='1383937224/feaf3d08-eaae-1aae-800a-dafea0114ca4'
inHierarchical='true'>
  <inConfig>
    <lsbootBootSecurity dn='sys/rack-unit-1/boot-policy/boot-security'
      secureBoot='enable'>
    </lsbootBootSecurity>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="" cookie="1383832397/9675eb78-ea96-1a96-8002-dafea0114ca4"
response="yes">
  <outConfig>
    <lsbootBootSecurity dn="sys/rack-unit-1/boot-policy/boot-security"
      secureBoot="enabled" status="modified">
    </lsbootBootSecurity>
  </outConfig>
</configConfMo>
```

## Disabling Windows Secure Boot

Request:

```
<configConfMo cookie='1383937224/feaf3d08-eaae-1aae-800a-dafea0114ca4'
inHierarchical='true'>
  <inConfig>
    <lsbootBootSecurity dn='sys/rack-unit-1/boot-policy/boot-security'
      secureBoot='disable'>
    </lsbootBootSecurity>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="" cookie="1383832397/9675eb78-ea96-1a96-8002-dafea0114ca4"
response="yes">
  <outConfig>
    <lsbootBootSecurity dn="sys/rack-unit-1/boot-policy/boot-security"
      secureBoot="disable" status="modified">
    </lsbootBootSecurity>
  </outConfig>
</configConfMo>
```

## Configuring IPV6 Properties

Request:

```
<configConfMo cookie="1383832397/9675eb78-ea96-1a96-8002-dafea0114ca4"
dn='sys/rack-unit-1/mgmt/if-1' inHierarchical='false'>
  <inConfig>
    <mgmtIf v6extEnabled='yes' v6dhcpEnable='no'
      v6extIp='2010:201::97' v6prefix='64' v6extGw='2010:201::1'
      v6dnsPreferred='2010:201::199' dn='sys/rack-unit-1/mgmt/if-1'>
    </mgmtIf>
  </inConfig>
</configConfMo>
```

Response:

## Creating Virtual Drives

Request:

```
<configConfMo cookie='1392018227/7ffe1220-f208-1208-8005-93536d0df730'
inHierarchical='false' dn='sys/rack-unit-1/board/storage-SAS-SLOT-5/virtual-drive-create'>

<inConfig>
  <storageVirtualDriveCreatorUsingUnusedPhysicalDrive
    dn='sys/rack-unit-1/board/storage-SAS-SLOT-5/virtual-drive-create'
    virtualDriveName='test3' raidLevel='1' size='2000 MB' driveGroup='[8,9]'
    writePolicy='Write Through' adminState='trigger'/>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-5/virtual-drive-create"
cookie="1392018227/7ffe1220-f208-1208-8005-93536d0df730" response="yes">
  <outConfig>
    <storageVirtualDriveCreatorUsingUnusedPhysicalDrive
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-5/virtual-drive-create"
      description="Create a new virtual drive from unused physical drive(s)
available in the rack server. Children objects of this object, lists all currently
available unused physical drives." minRequiredPhysicalDrives="RAID 0 at least 1
physical drive, RAID 1 at least 2 physical drives, RAID 5 at least 3 physical drives,
RAID 6 at least 3 physical drives, RAID 10 at least 4 physical drives, RAID 50 or RAID
60 at least 6 physical drives" virtualDriveName="test3" raidLevel="1" size="2000 MB"
driveGroup="[8.9]" writePolicy="Write Through"
operStatus="The requested virtual drive creation is under way.
Query the storageVirtualDrive class to retrieve details of the
newly created virtual drive." adminState="triggered"
status="modified"/>
    </outConfig>
  </configConfMo>
```

## Initiating Virtual Drive

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
  <inConfig>
    <storageVirtualDrive dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2' id='2'
adminAction='start-full-initialization'/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2"
cookie="1392899555/b33b2bf0-f2d5-12d5-8003-0977e1a85750" response="yes">
  <outConfig>
    <storageVirtualDrive id="2" name="testshared" raidLevel="RAID 1"
size="2000 MB" vdStatus="Cache Degraded" health="Moderate Fault"
bootDrive="false" stripSize="64 KB" drivesPerSpan="2" spanDepth="1"
accessPolicy="Read-Write" cachePolicy="Direct"
readAheadPolicy="Adaptive" requestedWriteCachePolicy="Write
Back Good BBU" currentWriteCachePolicy="Write Through"
diskCachePolicy="Unchanged" allowBackgroundInit="true"
autoSnapshot="false" autoDeleteOldest="true" driveState="Optimal"
adminAction="no-op" targetId="2"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2" status="modified">
```

```

<storageLocalDiskUsage startingBlock="2048000" numberOfBlocks="4096000"
virtualDrive="2" physicalDrive="4" state="online" span="0"
rn="pd-4" status="modified"/>
<storageLocalDiskUsage startingBlock="2048000" numberOfBlocks="4096000"
virtualDrive="2" physicalDrive="5" state="online" span="0" rn="pd-5"
status="modified"/>
<storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"
status="modified"/>
<faultInst ack="yes" cause="equipment-degraded" code="F1008"
created="Thu Feb 20 12:34:48 2014" descr="Storage Virtual Drive 2 Degraded:
please check the storage controller, or reseal the storage drive"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2"
highestSeverity="critical" id="3523281408" lastTransition="" lc="flapping"
occur="1" origSeverity="cleared" prevSeverity="cleared"
rule="fltStorageVirtualDriveDegraded" severity="warning"
tags="storage" type="server" rn="fault-F1008" status="modified"/>
</storageVirtualDrive>
</outConfig>
</configConfMo>

```

### Setting Virtual Drive as Boot Drive

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
<inConfig>
<storageVirtualDrive dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2' id='2'
adminAction='set-boot-drive' />
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-1"
cookie='"1392922328/0098c088-f2db-12db-8004-0977e1a85750" response="yes">
<outConfig>
<storageVirtualDrive id="1" name="test4" raidLevel="RAID 1" size="1000 MB"
vdStatus="Cache Degraded" health="Moderate Fault" bootDrive="true" stripSize="64 KB"
drivesPerSpan="2" spanDepth="1" accessPolicy="Read-Write" cachePolicy="Direct"
readAheadPolicy="Adaptive" requestedWriteCachePolicy="Write Back Good BBU"
currentWriteCachePolicy="Write Through" diskCachePolicy="Unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" adminAction="no-op" targetId="1"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-1" status="modified">
<storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000"
virtualDrive="1" physicalDrive="4" state="online" span="0" rn="pd-4"
status="modified"/>
<storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000" virtualDrive="1"
physicalDrive="5" state="online" span="0" rn="pd-5" status="modified"/>
<storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"
status="modified"/>
<faultInst ack="yes" cause="equipment-degraded" code="F1008"
created="Thu Feb 20 12:02:19 2014" descr="Storage Virtual Drive 1 Degraded:
please check the storage controller, or reseal the storage drive"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-1"
highestSeverity="critical" id="3523281152" lastTransition="Thu
Feb 20 11:59:32 2014" lc="flapping" occur="3" origSeverity="cleared"
prevSeverity="cleared" rule="fltStorageVirtualDriveDegraded" severity="warning"
tags="storage" type="server" rn="fault-F1008" status="modified"/>
</storageVirtualDrive>

```

```
</outConfig>
</configConfMo>
```

## Changing Virtual Drive Write Cache

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
<inConfig>
  <storageVirtualDrive dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
    id='2' requestedWriteCachePolicy='Write Through' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-1"
cookie="1392923392/40026120-f2db-12db-8005-0977e1a85750" response="yes">
<outConfig>
  <storageVirtualDrive id="1" name="test4" raidLevel="RAID 1" size="1000 MB"
    vdStatus="Optimal" health="Good" bootDrive="true" stripSize="64 KB" drivesPerSpan="2"
    spanDepth="1" accessPolicy="Read-Write" cachePolicy="Direct" readAheadPolicy="Adaptive"

    requestedWriteCachePolicy="Write Through" currentWriteCachePolicy="Write Through"
    diskCachePolicy="Unchanged" allowBackgroundInit="true" autoSnapshot="false"
    autoDeleteOldest="true" driveState="Optimal" adminAction="no-op" targetId="1"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-1" status="modified">
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000" virtualDrive="1"
      physicalDrive="4" state="online" span="0" rn="pd-4" status="modified"/>
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000" virtualDrive="1"
      physicalDrive="5" state="online" span="0" rn="pd-5" status="modified"/>
    <storageOperation rn="storage-operation" lropInProgress="false"
      currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"
      status="modified"/>
  </storageVirtualDrive>
</outConfig>
</configConfMo>
```

## Configuring Physical Drive as Global Hot Spare

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
<inConfig>
  <storageLocalDisk dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
    id='8' adminAction='make-global-hot-spare' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8"
cookie="1397033553/38b812a0-f698-1698-8003-7f9eeabd2200" response="yes">
<outConfig>
  <storageLocalDisk id="8" pdStatus="Global Hot Spare" health="Good"
    predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD"
    coercedSize="139648 MB" vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
    driveSerialNumber="D310PBC01PSC" driveState="hot spare" online="false"
    dedicatedHotSpareForVDId="" adminAction="no-op"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8" status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="8"
    pdStatus="Global Hot Spare" health="Good" enclosureDeviceId="40" deviceId="44"
```

```

sequenceNumber="8" mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0"
linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" blockSize="512"
blockCount="287277984" bootDrive="false" rawSize="140272 MB" nonCoercedSize="139760
MB"
coercedSize="139648 MB" powerState="active" sasAddress0="500000e1191313e2"
sasAddress1="0x0" status="modified"/>
<storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
</outConfig>
</configConfMo>

```

## Configuring Physical Drive as Dedicated Hot Spare

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
<inConfig>
<storageLocalDisk dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
id='8' dedicatedHotSpareForVDId='1' adminAction='make-dedicated-hot-spare' />
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8"
cookie="1397033553/38b812a0-f698-1698-8003-7f9eeabd2200" response="yes">
<outConfig>
<storageLocalDisk id="8" pdStatus="Dedicated Hot Spare" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD"
coercedSize="139648 MB" vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PSC" driveState="hot spare" online="false"
dedicatedHotSpareForVDId="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8" status="modified">
<storageLocalDiskProps rn="general-props" physicalDrive="8"
pdStatus="Dedicated Hot Spare" health="Good" enclosureDeviceId="40"
deviceId="44" sequenceNumber="12" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e1191313e2" sasAddress1="0x0"
status="modified"/>
<storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
</outConfig>
</configConfMo>

```

## Configuring Physical Drive as Unconfigured Good from JBOD Mode

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
<inConfig>
<storageLocalDisk dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8' id='8'
adminAction='make-unconfigured-good' />
</inConfig>
</configConfMo>

```

## Locating LED for Physical Drives

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
inHierarchical='true' cookie='1397033553/38b812a0-f698-1698-80037f9eeabd2200'>
  <inConfig>
    <storageLocalDisk dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8' id='8'
      dedicatedHotSpareForVDId='1' adminAction='locator-led-on'/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8"
cookie="1392897951/53a283f0-f2d5-12d5-8002-0977e1a85750" response="yes">
  <outConfig>
    <storageLocalDisk id="8" pdStatus="Unconfigured Good" health="Good"
      predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD"
      coercedSize="139648 MB" vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
      driveSerialNumber="D310PBC01PSC" driveState="unconfigured good" online="true"
      dedicatedHotSpareForVDId="" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8" status="modified">
    <storageLocalDiskProps rn="general-props" physicalDrive="8"
      pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="40" deviceId="44"
      sequenceNumber="1" mediaErrorCount="0" otherErrorCount="0" predictiveFailureCount="0"
      linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" blockSize="512"
      blockCount="287277984" bootDrive="false" rawSize="140272 MB"
      nonCoercedSize="139760 MB" coercedSize="139648 MB" powerState="active"
      sasAddress0="500000e1191313e2" sasAddress1="0x0" status="modified"/>
    <storageOperation rn="storage-operation" lropInProgress="false"
      currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"
      status="modified"/>
  </storageLocalDisk>
</outConfig>
</configConfMo>
```

## Setting Physical Drive as Boot Drive

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8'
inHierarchical='true' cookie='1397033553/38b812a0-f698-169880037f9eeabd2200'>
  <inConfig>
    <storageLocalDisk dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-8' id='8'
      dedicatedHotSpareForVDId='1' adminAction='set-boot-drive'/>
  </inConfig>
</configConfMo>
```

## Importing Foreign Configuration on Supported Configuration for MegaRAID Storage

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
inHierarchical='true' cookie='1397214630/61b2d990-f6c2-16c2-80027f9eeabd2200'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
      adminAction='import-foreign-config'/>
  </inConfig>
</configConfMo>
```

## Clearing Foreign Configuration on Supported Configuration for MegaRAID Storage

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
inHierarchical='true' cookie='1397214630/61b2d990-f6c2-16c2-80027f9eeabd2200'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
      adminAction='clear-foreign-config'/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4"
cookie="1392979972/6c729268-f2e8-12e8-8006-0977e1a85750" response="yes">
<outConfig>
<storageController id="SLOT-4" model="LSI MegaRAID SAS 9266-8i"
  pciSlot="SLOT-4" presence="equipped" raidSupport="yes" serial="SV21400468"
  type="SAS" vendor="LSI Logic" adminAction="no-op"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-4" status="modified">
<storageControllerProps rn="controller-props" pciSlot="SLOT-4"
health="Moderate Fault" controllerStatus="Optimal" batteryStatus="no
battery" bbuPresent="false" raidChipTempCentigrade="51"
backendPortCount="8" memorySize="1024 MB" cacheMemorySize="873 MB"
virtualDriveCount="3" degradedVirtualDriveCount="0"
offlineVirtualDriveCount="0" physicalDriveCount="8"
criticalPhysicalDriveCount="0" failedPhysicalDriveCount="0"
memoryCorrectableErrors="0" memoryUncorrectableErrors="0" bootDrive="1"
bootDriveIsPhysicalDrive="false" supportsRaid0="true" supportsRaid1="true"
supportsRaid5="true" supportsRaid6="true" supportsRaid00="true"
supportsRaid10="true" supportsRaid50="true" supportsRaid60="true"
supportsRaidle="false" supportsRaidlerlq0="true"
supportsRaidle0rlq0="true" supportsRaidsrl03="true"
dateOfManufacture="2012-04-01" revision="03A"
prebootCliVersion="05.07-00:#00011" webBiosVersion="6.1-62-e_62-Rel"
nvdataVersion="2.1304.03-0124" bootBlockVersion="2.05.00.00-0010"
bootVersion="07.26.13.219" nvramPresent="true"
serialDebuggerPresent="true" flashPresent="true"
sasAddress0="5057a8e1770800bf" sasAddress1="0000000000000000"
sasAddress2="0000000000000000" sasAddress3="0000000000000000"
sasAddress4="0000000000000000" sasAddress5="0000000000000000"
sasAddress6="0000000000000000" sasAddress7="0000000000000000"
serial="SV21400468" firmwarePackageBuild="23.12.0-0021" ttyLogStatus="Not
Downloaded" status="modified"/>
<storageRaidBattery rn="raid-battery" batteryType="No Battery"
health="N/A" batteryStatus="BBU Not Present" batteryPresent="false"
chargingState="no battery" retentionTime="N/A hours" temperature="0
degrees C" temperatureHigh="false" designVoltage="0.000 V" voltage="0.000
V" current="0.000 A" learnMode="Auto" completedChargeCycles="0"
learnCycleStatus="Successful" learnCycleRequested="false"
nextLearnCycle="N/A" designCapacity="0 mAh" fullCapacity="Unknown"
remainingCapacity="Unknown" relativeStateOfCharge="Unknown"
absoluteStateOfCharge="Unknown" expectedMarginOfError="0 %"
manufacturer="" dateOfManufacture="0000-00-00" serialNumber="0"
firmwareVersion="" adminAction="no-op" status="modified"/>
<storageVirtualDriveCreatorUsingUnusedPhysicalDrive
rn="virtual-drive-create" description="Create a new virtual drive from
unused physical drive(s) available in the rack server. Children objects of
this object, lists all currently available unused physical drives."
minRequiredPhysicalDrives="RAID 0 at least 1 physical drive, RAID 1 at
least 2 physical drives, RAID 5 at least 3 physical drives, RAID 6 at
least 3 physical drives, RAID 10 at least 4 physical drives, RAID 50 or
RAID 60 at least 6 physical drives" virtualDriveName="" raidLevel=""
size="" driveGroup="[span1_pd_id1,span1_pd_id2,span1_pd_id3...,span1_pd_idN]
```



```

[span2_pd_id1,span2_pd_id2,span2_pd_id3...,span2_pd_idN]... writePolicy=""
createdVirtualDriveDn="" operStatus="" adminState="triggered"
status="modified">
<storageUnusedLocalDisk id="8" pdStatus="Unconfigured Good"
coercedSize="139648 MB" health="Good" mediaType="HDD" vendor="FUJITSU"
rn="pd-8" status="modified"/>
</storageVirtualDriveCreatorUsingUnusedPhysicalDrive>
  <storageVirtualDriveCreatorUsingVirtualDriveGroup
rn="virtual-drive-carve" description="Create a new virtual drive from an
existing virtual drive, with available physical drive group space.
Children objects of this object, lists all virtual drives with available
drive group space." sharedVirtualDriveId="" virtualDriveName="" size=""
writePolicy="" createdVirtualDriveDn="" operStatus=""
adminState="triggered" status="modified">
  <storageVirtualDriveWithDriveGroupSpace id="1" name="test4"
raidLevel="1" usedPhysicalDriveIds="4,5" maxAvailableSpace="136648 MB"
rn="vd-1" status="modified"/>
  <storageVirtualDriveWithDriveGroupSpace id="2" name="testshared"
raidLevel="1" usedPhysicalDriveIds="4,5" maxAvailableSpace="136648 MB"
rn="vd-2" status="modified"/>
</storageVirtualDriveCreatorUsingVirtualDriveGroup>
  <storageLocalDisk id="1" pdStatus="Online" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="139648 MB" vendor="FUJITSU"
productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PDS" driveState="online" online="true"
dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-1"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="1"
pdStatus="Online" health="Good" enclosureDeviceId="40" deviceId="36"
sequenceNumber="2" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e11912c4e2" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
  <storageLocalDisk id="2" pdStatus="Online" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="139648 MB" vendor="FUJITSU"
productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PNJ" driveState="online" online="true"
dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-2"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="2"
pdStatus="Online" health="Good" enclosureDeviceId="40" deviceId="37"
sequenceNumber="2" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e1191306e2" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
  <storageLocalDisk id="3" pdStatus="Dedicated Hot Spare"
health="Good" predictiveFailureCount="0" linkSpeed="6.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="139648 MB"
vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PL1" driveState="hot spare" online="false"

```

```

dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-3"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="3"
pdStatus="Dedicated Hot Spare" health="Good" enclosureDeviceId="40"
deviceId="38" sequenceNumber="2" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e11912f0a2" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
  <storageLocalDisk id="4" pdStatus="Online" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="139648 MB" vendor="FUJITSU"
productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PR4" driveState="online" online="true"
dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-4"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="4"
pdStatus="Online" health="Good" enclosureDeviceId="40" deviceId="39"
sequenceNumber="2" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e119130c02" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
  <storageLocalDisk id="5" pdStatus="Online" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="139648 MB" vendor="FUJITSU"
productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PPW" driveState="online" online="true"
dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-5"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="5"
pdStatus="Online" health="Good" enclosureDeviceId="40" deviceId="41"
sequenceNumber="2" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e119130af2" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
  <storageLocalDisk id="6" pdStatus="Foreign Configuration"
health="Good" predictiveFailureCount="0" linkSpeed="6.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="139648 MB"
vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01MLC" driveState="unconfigured good"
online="true" dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-6"
status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="6"
pdStatus="Foreign Configuration" health="Good" enclosureDeviceId="40"
deviceId="42" sequenceNumber="1" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"

```

```

rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e1191153a2" sasAddress1="0x0"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
    <faultInst ack="yes" cause="equipment-degraded" code="F0996"
created="Thu Feb 20 12:02:03 2014" descr="Storage Local disk 6 is
degraded: please check if rebuild or copyback of drive is required"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-6"
highestSeverity="critical" id="3506701824" lastTransition="Thu Feb 20
11:59:16 2014" lc="flapping" occur="3" origSeverity="cleared"
prevSeverity="cleared" rule="fltStorageLocalDiskDegraded"
severity="warning" tags="storage" type="server" rn="fault-F0996"
status="modified"/>
  </storageLocalDisk>
  <storageLocalDisk id="7" pdStatus="Foreign Configuration"
health="Good" predictiveFailureCount="0" linkSpeed="6.0 Gb/s"
interfaceType="SAS" mediaType="HDD" coercedSize="139648 MB"
vendor="FUJITSU" productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PMS" driveState="unconfigured good"
online="true" dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-7"
status="modified">
    <storageLocalDiskProps rn="general-props" physicalDrive="7"
pdStatus="Foreign Configuration" health="Good" enclosureDeviceId="40"
deviceId="43" sequenceNumber="1" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e1191302c2" sasAddress1="0x0"
status="modified"/>
    <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
      <faultInst ack="yes" cause="equipment-degraded" code="F0996"
created="Thu Feb 20 12:02:08 2014" descr="Storage Local disk 7 is
degraded: please check if rebuild or copyback of drive is required"
affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/pd-7"
highestSeverity="critical" id="3506702080" lastTransition="Thu Feb 20
11:59:21 2014" lc="flapping" occur="3" origSeverity="cleared"
prevSeverity="cleared" rule="fltStorageLocalDiskDegraded"
severity="warning" tags="storage" type="server" rn="fault-F0996"
status="modified"/>
    </storageLocalDisk>
    <storageLocalDisk id="8" pdStatus="Unconfigured Good" health="Good"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" coercedSize="139648 MB" vendor="FUJITSU"
productId="MBE2147RC" driveFirmware="5701"
driveSerialNumber="D310PBC01PSC" driveState="unconfigured good"
online="true" dedicatedHotSpareForVDId="" adminAction="no-op" rn="pd-8"
status="modified">
      <storageLocalDiskProps rn="general-props" physicalDrive="8"
pdStatus="Unconfigured Good" health="Good" enclosureDeviceId="40"
deviceId="44" sequenceNumber="1" mediaErrorCount="0" otherErrorCount="0"
predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS"
mediaType="HDD" blockSize="512" blockCount="287277984" bootDrive="false"
rawSize="140272 MB" nonCoercedSize="139760 MB" coercedSize="139648 MB"
powerState="active" sasAddress0="500000e1191313e2" sasAddress1="0x0"
status="modified"/>
      <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
    </storageLocalDisk>
    <storageVirtualDrive id="0" name="RAID1_12" raidLevel="RAID 1"

```

```

size="139648 MB" vdStatus="Cache Degraded" health="Moderate Fault"
bootDrive="false" stripSize="64 KB" drivesPerSpan="2" spanDepth="1"
accessPolicy="Read-Write" cachePolicy="Direct" readAheadPolicy="Adaptive"
requestedWriteCachePolicy="Write Back Good BBU"
currentWriteCachePolicy="Write Through" diskCachePolicy="Unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" adminAction="no-op" targetId="0" rn="vd-0"
status="modified">
  <storageLocalDiskUsage startingBlock="0"
numberOfBlocks="285999104" virtualDrive="0" physicalDrive="1"
state="online" span="0" rn="pd-1" status="modified"/>
  <storageLocalDiskUsage startingBlock="0"
numberOfBlocks="285999104" virtualDrive="0" physicalDrive="2"
state="online" span="0" rn="pd-2" status="modified"/>
  <storageLocalDiskUsage startingBlock="0"
numberOfBlocks="285999104" virtualDrive="0" physicalDrive="3" state="hot
spare" span="0" rn="pd-3" status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
  <faultInst ack="yes" cause="equipment-degraded" code="F1008"
created="Thu Feb 20 12:02:17 2014" descr="Storage Virtual Drive 0
Degraded: please check the storage controller, or reseal the storage
drive" affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-0"
highestSeverity="critical" id="3523280896" lastTransition="Thu Feb 20
11:59:30 2014" lc="flapping" occur="3" origSeverity="cleared"
prevSeverity="cleared" rule="fltStorageVirtualDriveDegraded"
severity="warning" tags="storage" type="server" rn="fault-F1008"
status="modified"/>
</storageVirtualDrive>
  <storageVirtualDrive id="1" name="test4" raidLevel="RAID 1"
size="1000 MB" vdStatus="Optimal" health="Good" bootDrive="true"
stripSize="64 KB" drivesPerSpan="2" spanDepth="1"
accessPolicy="Read-Write" cachePolicy="Direct" readAheadPolicy="Adaptive"
requestedWriteCachePolicy="Always Write Back"
currentWriteCachePolicy="Write Back" diskCachePolicy="Unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" adminAction="no-op" targetId="1" rn="vd-1"
status="modified">
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000"
virtualDrive="1" physicalDrive="4" state="online" span="0" rn="pd-4"
status="modified"/>
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="2048000"
virtualDrive="1" physicalDrive="5" state="online" span="0" rn="pd-5"
status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageVirtualDrive>
  <storageVirtualDrive id="2" name="testshared" raidLevel="RAID 1"
size="2000 MB" vdStatus="Cache Degraded" health="Moderate Fault"
bootDrive="false" stripSize="64 KB" drivesPerSpan="2" spanDepth="1"
accessPolicy="Read-Write" cachePolicy="Direct" readAheadPolicy="Adaptive"
requestedWriteCachePolicy="Write Back Good BBU"
currentWriteCachePolicy="Write Through" diskCachePolicy="Unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" adminAction="no-op" targetId="2" rn="vd-2"
status="modified">
  <storageLocalDiskUsage startingBlock="2048000"
numberOfBlocks="4096000" virtualDrive="2" physicalDrive="4" state="online"
span="0" rn="pd-4" status="modified"/>
  <storageLocalDiskUsage startingBlock="2048000"
numberOfBlocks="4096000" virtualDrive="2" physicalDrive="5" state="online"
span="0" rn="pd-5" status="modified"/>

```

```

    <storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
    <faultInst ack="yes" cause="equipment-degraded" code="F1008"
created="Thu Feb 20 12:34:48 2014" descr="Storage Virtual Drive 2
Degraded: please check the storage controller, or reseal the storage
drive" affectedDN="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2"
highestSeverity="critical" id="3523281408" lastTransition="" lc="flapping"
occur="1" origSeverity="cleared" prevSeverity="cleared"
rule="fltStorageVirtualDriveDegraded" severity="warning" tags="storage"
type="server" rn="fault-F1008" status="modified"/>
    </storageVirtualDrive>
    <firmwareRunning rn="fw-boot-loader" deployment="boot-loader"
type="storage-controller" version="5.42.00_4.14.05.00_0x05280000"
status="modified"/>
    <firmwareRunning rn="fw-system" deployment="system"
type="storage-controller" version="3.240.95-2788" status="modified"/>
    <firmwareBootDefinition rn="fw-boot-def" type="storage-controller"
status="modified">
    <firmwareBootUnit rn="bootunit-combined" adminState="triggered"
image="running" resetOnActivate="no" type="combined"
version="5.42.00_4.14.05.00_0x05280000" status="modified"/>
    </firmwareBootDefinition>
    <storageControllerSettings rn="controller-settings" pciSlot="SLOT-4"
predictiveFailPollInterval="300 sec" rebuildRate="30 %" patrolReadRate="30
%" consistencyCheckRate="30 %" reconstructionRate="30 %"
cacheFlushInterval="4 sec" spinupDriveCount="2" spinupDelay="12 sec"
physDriveCoercionMode="128 MB" clusterEnable="false" batteryWarning="true"
eccBucketLeakRate="1440 min" exposeEnclosureDevices="true"
maintainPdFailHistory="false" enableCopybackOnSmart="false"
enableCopybackToSsdOnSmartError="true" disableNcq="false"
enableJbod="false" spinDownUnconfigured="true" enableSsdPatrolRead="false"
autoEnhancedImport="true" status="modified"/>
    </storageController>
  </outConfig>
</configConfMo>

```

## Enabling JBOD Mode on Supported Controller for MegaRAID Storage

### Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
inHierarchical='true' cookie='1397214630/61b2d990-f6c2-16c2-8002-7f9eeabd2200'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
      adminAction='enable-jbod'/>
  </inConfig>
</configConfMo>

```

### Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-5"
cookie="1392988666/72ab0028-f2ea-12ea-8003-bb4ee9bd2200" response="yes">
  <outConfig>
    <storageController id="SLOT-5" model="MegaRAID 9240-8i (RAID
0,1,10,5)" pciSlot="SLOT-5" presence="equipped" raidSupport="yes"
serial="SP23807568" type="SAS" vendor="LSI Logic" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-5" status="modified">
    .
    .
    .
    .
  </storageControllerSettings rn="controller-settings" pciSlot="SLOT-5"

```

```

    predictiveFailPollInterval="300 sec" rebuildRate="30 %" patrolReadRate="30
    %" consistencyCheckRate="30 %" reconstructionRate="30 %"
    cacheFlushInterval="4 sec" spinupDriveCount="4" spinupDelay="2 sec"
    physDriveCoercionMode="128 MB" clusterEnable="false"
    batteryWarning="false" eccBucketLeakRate="1440 min"
    exposeEnclosureDevices="true" maintainPdFailHistory="false"
    enableCopybackOnSmart="false" enableCopybackToSsdOnSmartError="true"
    disableNcq="false" enableJbod="true" spinDownUnconfigured="true"
    enableSsdPatrolRead="false" autoEnhancedImport="true" status="modified"/>
  </storageController>
</outConfig>
</configConfMo>

```

## Clearing Boot Drive on Supported Configuration for MegaRAID Storage

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
inHierarchical='true' cookie='1397214630/61b2d990-f6c2-16c2-8002-7f9eeabd2200'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-4'
      adminAction='clear-boot-drive' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4"
cookie="1393009392/46069e38-f2ef-12ef-8008-0977e1a85750" response="yes">
  <outConfig>
    <storageController id="SLOT-4" model="LSI MegaRAID SAS 9266-8i"
      pciSlot="SLOT-4" presence="equipped" raidSupport="yes" serial="SV21400468"
      type="SAS" vendor="LSI Logic" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-4" status="modified">
    <storageControllerProps rn="controller-props" pciSlot="SLOT-4"
      health="Moderate Fault" controllerStatus="Optimal" batteryStatus="no
      battery" bbuPresent="false" raidChipTempCentigrade="52"
      backendPortCount="8" memorySize="1024 MB" cacheMemorySize="873 MB"
      virtualDriveCount="2" degradedVirtualDriveCount="0"
      offlineVirtualDriveCount="0" physicalDriveCount="8"
      criticalPhysicalDriveCount="0" failedPhysicalDriveCount="0"
      memoryCorrectableErrors="0" memoryUncorrectableErrors="0" bootDrive="none"
      bootDriveIsPhysicalDrive="false" supportsRaid0="true" supportsRaid1="true"
      supportsRaid5="true" supportsRaid6="true" supportsRaid00="true"
      supportsRaid10="true" supportsRaid50="true" supportsRaid60="true"
      supportsRaidle="false" supportsRaidlerlq0="true"
      supportsRaidle0rlq0="true" supportsRaidsrl03="true"
      dateOfManufacture="2012-04-01" revision="03A"
      .
      .
      .
      .
    </storageControllerSettings rn="controller-settings" pciSlot="SLOT-4"
      predictiveFailPollInterval="300 sec" rebuildRate="30 %" patrolReadRate="30
      %" consistencyCheckRate="30 %" reconstructionRate="30 %"
      cacheFlushInterval="4 sec" spinupDriveCount="2" spinupDelay="12 sec"
      physDriveCoercionMode="128 MB" clusterEnable="false" batteryWarning="true"
      eccBucketLeakRate="1440 min" exposeEnclosureDevices="true"
      maintainPdFailHistory="false" enableCopybackOnSmart="false"
      enableCopybackToSsdOnSmartError="true" disableNcq="false"
      enableJbod="false" spinDownUnconfigured="true" enableSsdPatrolRead="false"
      autoEnhancedImport="true" status="modified"/>
  </outConfig>
</configConfMo>

```

```

    </storageController>
  </outConfig>
</configConfMo>

```

### Enabling Auto Learn on Supported Configuration for RAID Battery

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-2/raid-battery'
inHierarchical='true' cookie='1392964576/d6be88d8-f2e4-12e4-8003-5e47f122c7e4'>
  <inConfig>
    <storageRaidBattery dn='sys/rack-unit-1/board/storage-SAS-SLOT-2/raid-battery'
      adminAction='enable-auto-learn' />
  </inConfig>
</configConfMo>

```

### Creating Virtual Drive by Using Existing Virtual Drive Group

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/virtual-drive-carve'
inHierarchical='false' cookie='1397214630/61b2d990-f6c2-16c2-80027f9eeabd2200'>
  <inConfig>
    <storageVirtualDriveCreatorUsingVirtualDriveGroup
      dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/virtual-drive-carve'
      status='modified' adminState='trigger' writePolicy='Write Through'
      sharedVirtualDriveId='2' size='200 MB' virtualDriveName='test1' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo
dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/virtual-drive-carve"
cookie="1397214630/61b2d990-f6c2-16c2-8002-7f9eeabd2200" response="yes">
  <outConfig>
    <storageVirtualDriveCreatorUsingVirtualDriveGroup
      dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/virtual-drive-carve"
      description="Create a new virtual drive from an existing virtual drive,
with available physical drive group space. Children objects of this
object, lists all virtual drives with available drive group space."
      sharedVirtualDriveId="2" virtualDriveName="test1" size="200 MB"
      writePolicy="Write Through"
      createdVirtualDriveDn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-3"
      operStatus="The requested virtual drive creation is under way. Query the
storageVirtualDrive class to retrieve details of the newly created virtual
drive." adminState="triggered" status="modified" />
  </outConfig>
</configConfMo>

```

### Retrieving Storage Virtual Drive Creator Details

Request:

```

<configResolveClass cookie='1397214630/61b2d990-f6c2-16c2-8002-7f9eeabd2200'
classId='storageVirtualDriveCreatorUsingVirtualDriveGroup' inHierarchical='true'>
</configResolveClass>

```

Response:

```

<configResolveClass
cookie="1397214630/61b2d990-f6c2-16c2-8002-7f9eeabd2200" response="yes"
classId="storageVirtualDriveCreatorUsingVirtualDriveGroup">
  <outConfigs>

```

```

<storageVirtualDriveCreatorUsingVirtualDriveGroup
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/virtual-drive-carve"
  description="Create a new virtual drive from an existing virtual drive,
  with available physical drive group space. Children objects of this
  object, lists all virtual drives with available drive group space."
  sharedVirtualDriveId="" virtualDriveName="" size="" writePolicy=""
  createdVirtualDriveDn="" operStatus="" adminState="triggered">
<storageVirtualDriveWithDriveGroupSpace id="2" name="RAID0_357"
  raidLevel="0" usedPhysicalDriveIds="3,5,7" maxAvailableSpace="417543 MB"
  rn="vd-2"/>
<storageVirtualDriveWithDriveGroupSpace id="3" name="test1" raidLevel="0"
  usedPhysicalDriveIds="3,5,7" maxAvailableSpace="417543 MB" rn="vd-3"/>
<storageVirtualDriveWithDriveGroupSpace id="4" name="" raidLevel="0"
  usedPhysicalDriveIds="3,5,7" maxAvailableSpace="417543 MB" rn="vd-4"/>
</storageVirtualDriveCreatorUsingVirtualDriveGroup>
</outConfigs>
</configResolveClass>

```

### Changing RAID Level by Adding Drives in Virtual Drive Reconstruction

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
inHierarchical='false' cookie='1394109081/5096bd00-f3ef-13ef-80020977e1a85750'>
<inConfig>
  <storageVirtualDrive dn='sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2'
  adminAction='reconstruct-virtual-drive' physicalDrivesList='3,4'
  raidLevel='1'/>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2"
cookie="1394402794/b33dfc40-f433-1433-8003-0977e1a85750" response="yes">
<outConfig>
  <storageVirtualDrive id="2" name="RAID0_6" raidLevel="RAID 0"
  size="500 MB" vdStatus="Cache Degraded" health="Moderate Fault"
  bootDrive="false" stripSize="64 KB" drivesPerSpan="1" spanDepth="1"
  accessPolicy="Read-Write" cachePolicy="Cached I/O" readAheadPolicy="None"
  requestedWriteCachePolicy="Write Back Good BBU"
  currentWriteCachePolicy="Write Through" diskCachePolicy="Unchanged"
  allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="false"
  driveState="Optimal" adminAction="no-op" targetId="2"
  physicalDrivesList="Physical drives to be used for virtual drive
  reconstruction. pd_id1,pd_id2,...pd_idN"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-4/vd-2" status="modified"/>
</outConfig>
</configConfMo>

```

### Configuring configureBootMode to Legacy/Uefi and reapply='yes/no' and rebootOnUpdate='yes/no'

Request:

```

<configConfMo cookie='1390349461/f5c79390-f083-1083-8005-93536d0df730'
dn='sys/rack-unit-1/boot-precision' inHierarchical='true'>
<inConfig>
<lsbootDevPrecision dn='sys/rack-unit-1/boot-precision'
rebootOnUpdate='no' configuredBootMode='Legacy' reapply='no'
status='modified'>
</lsbootDevPrecision>
</inConfig>
</configConfMo>

```



Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision"
cookie="1390349461/f5c79390-f083-1083-8005-93536d0df730" response="yes">
<outConfig>
  <lsbootDevPrecision dn="sys/rack-unit-1/boot-precision"
name="boot-precision" purpose="operational" rebootOnUpdate="no"
  <b>confoguredBootMode="Legacy" reapply="no" status="modified" </b>
  <lsbootVMedia name="kvm-fdd" type="VMEDIA" subtype="kvm-mapped-dvd"
access="read-only-local" order="1" state="Enabled" rn="vm-kvm-fdd"
status="modified" >
  </lsbootVMedia>
  <lsbootPxe name="pxe_slot1_port1" type="PXE" slot='2' port='1' order="1"
state="Enabled" rn="pxe-pxe_slot1_port1" status="modified" >
  </lsbootPxe>
</lsbootDevPrecision>
</outConfig>
</configConfMo>
```

### Configuring SNMP Properties for a Specific ID

Request:

```
<configConfMo cookie='1398652603/2f9bf4c8-f811-1811-8005-79bdaa4c93a4'
inHierarchical='true' dn='sys/svc-ext/snmp-svc/snmp-trap-2'>
<inConfig>
<b>commSnmpTrap id='2' adminState='enabled' port='900' version='v3'
notificationType='traps' hostname='10.10.10.10' user='test'</b>
</commSnmpTrap>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/svc-ext/snmp-svc/snmp-trap-2"
cookie="1398652603/2f9bf4c8-f811-1811-8005-79bdaa4c93a4" response="yes">
<outConfig>
<commSnmpTrap id="2" adminState="enabled" version="v3"
notificationType="traps" port="900" hostname="10.10.10.10" user="test"
dn="sys/svc-ext/snmp-svc/snmp-trap-2" status="modified">
</commSnmpTrap>
</outConfig>
</configConfMo>
```

### Retrieving Certificate Details

Request:

```
<configResolveClass cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88"
classId="currentCertificate" inHierarchical="false"></configResolveClass>
```

Response:

```
<configResolveClass cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88"
response="yes" classId="currentCertificate">
<outConfigs>
  <currentCertificate dn="sys/cert-mgmt/curr-cert" serialNumber="C764DC592E154539"
countryCode="US" state="California" locality="San Jose" organization="cisco"
organizationalUnit="cisco" commonName="cisco" issuerCountryCode="US"
issuerState="California" issuerLocality="San Jose" issuerOrganization="cisco"
issuerOrganizationalUnit="cisco" issuerCommonName="cisco"
validFrom="Nov 20 05:11:22 2015 GMT" validTo="Nov 17 05:11:22 2025 GMT"/>
```

```

    </outConfigs>
  </configResolveClass>

```

## Generating Certificate Signing Request

Request:

```

<configConfMo cookie='1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88'
dn="sys/cert-mgmt/gen-csr-req" inHierarchical="false">
  <inConfig>
    <generateCertificateSigningRequest commonName="cisco" organization="cisco"
      organizationalUnit="cisco" locality="San Jose" state="California" countryCode="United
States"
      protocol="ftp" remoteServer="10.10.10.10" user="user" pwd="cisco123"
      remoteFile="/tmp/host.csr" dn="sys/cert-mgmt/gen-csr-req"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configResolveClass cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88"
response="yes" classId="currentCertificate">
  <outConfigs>
    <currentCertificate dn="sys/cert-mgmt/curr-cert" serialNumber="C764DC592E154539"
      countryCode="US" state="California" locality="San Jose" organization="cisco"
      organizationalUnit="cisco" commonName="cisco" issuerCountryCode="US"
      issuerState="California" issuerLocality="San Jose" issuerOrganization="cisco"
      issuerOrganizationalUnit="cisco" issuerCommonName="cisco"
      validFrom="Nov 20 05:11:22 2015 GMT" validTo="Nov 17 05:11:22 2025 GMT"/>
  </outConfigs>
</configResolveClass>

```

## Retrieving the Status of a Certificate Signing Request

Request:

```

<configResolveClass cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88"
classId="generateCertificateSigningRequest" inHierarchical="false">
</configResolveClass>

```

Response:

```

<configResolveClass cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88"
response="yes" classId="generateCertificateSigningRequest">
  <outConfigs>
    <generateCertificateSigningRequest dn="sys/cert-mgmt/gen-csr-req"
      commonName="Common Name" organization="Organization" organizationalUnit="Organizational
Unit" locality="Locality" state="State" countryCode="Country Code" email="Email Address"

      selfSigned="no" protocol="none" remoteServer="" remoteFile="" user="" pwd=""
      csrStatus="Completed CSR"/>
  </outConfigs>
</configResolveClass>

```

## Generating Self-Signed Certificate

Request:

```
<configConfMo cookie='1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88'
dn="sys/cert-mgmt/gen-csr-req" inHierarchical="false">
  <inConfig>
    <generateCertificateSigningRequest commonName="cisco" organization="cisco"
      organizationalUnit="cisco" locality="Banglore" state="KARNATAKA"
      countryCode="India" dn="sys/cert-mgmt/gen-csr-req" selfSigned="yes"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="1448761796/eb8a8234-25a4-15a4-8002-9a6ae7925a88" response="yes"
dn="sys/cert-mgmt/gen-csr-req">
  <outConfig>
    <generateCertificateSigningRequest dn="sys/cert-mgmt/gen-csr-req" commonName="Common Name"
      organization="Organization" organizationalUnit="Organizational Unit" locality="Locality"
      state="State" countryCode="Country Code" email="Email Address" selfSigned="no"
      protocol="none" remoteServer="" remoteFile="" user="" pwd=""
      csrStatus="Completed CSR" status="modified"/>
  </outConfig>
</configConfMo>
```

## Uploading a Signed Certificate

Request:

```
<configConfMo cookie='1448762867/b32d6bdd-25a4-15a4-8002-9a6ae7925a88'
dn="sys/cert-mgmt/upload-cert" inHierarchical="false">
  <inConfig>
    <uploadCertificate adminAction="remote-cert-upload" protocol="sftp" user="user"
      remoteServer="10.10.10.10" remoteFile="/tmp/xmlTest.crt" pwd="cisco123"
      dn="sys/cert-mgmt/upload-cert"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/cert-mgmt/upload-cert"
cookie="1448762867/b32d6bdd-25a4-15a4-8002-9a6ae7925a88"
response="yes">
  <outConfig>
    <uploadCertificate dn="sys/cert-mgmt/upload-cert" adminAction="no-op" protocol="none"
      remoteServer="" remoteFile="" user="" pwd="" certificateContent="Certificate Content"
      status="modified"/>
  </outConfig>
</configConfMo>
```

## Enabling Security on Existing Virtual Drive Groups

Request:

```
<configConfMo cookie="1443751990/88100a71-2116-1116-8060-deabcdf9eca0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/virtual-drive-create"
inHierarchical="false">
  <inConfig>
    <storageVirtualDriveCreatorUsingUnusedPhysicalDrive
      adminAction="enable-self-encrypt" virtualDriveName="1" raidLevel="1" size="600MB">
```

```

    driveGroup="[4,3]" writePolicy="write-through" adminState="trigger"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1443751990/88100a71-2116-1116-8060-deabcdf9eca0"
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/virtual-drive-create"
inHierarchical="false">
  <outConfigs>
    <storageVirtualDrive id="0" name="1" raidLevel="RAID 1" size="600 MB"
vdStatus="Optimal" health="Good" bootDrive="false" stripSize="64k"
drivesPerSpan="2" spanDepth="1" accessPolicy="read-write" cachePolicy="direct-io"
readPolicy="no-read-ahead" requestedWriteCachePolicy="write-through"
currentWriteCachePolicy="write-through" diskCachePolicy="unchanged"
allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
driveState="Optimal" fdeCapable="yes" fdeEnabled="no" adminAction="no-op" targetId="0"
physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
pd_id1,pd_id2,...pd_idN" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"/>
  </outConfigs>
</configConfMo>

```

### Enabling Binding of an LDAP CA Certificate

Request:

```

<configConfMo cookie='1457742601/2dd5f334-2dcf-1dcf-8005-515545067ff0'
dn='sys/ldap-ext/ldap-ca-cert-mgmt'>
  <inConfig>
    <ldapCACertificateManagement dn='sys/ldap-ext/ldap-ca-cert-mgmt'
      bindingCertificate='enabled'/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
  <outConfig>
    <ldapCACertificateManagement dn="sys/ldap-ext/ldap-ca-cert-mgmt"
      description="LDAP CA Certificate Management"
      bindingCertificate="enabled" status="modified">
    </ldapCACertificateManagement>
  </outConfig>
</configConfMo>

```

### Disabling Binding of CA Certificate

Request:

```

<configConfMo cookie='1457742601/2dd5f334-2dcf-1dcf-8005-515545067ff0'
dn='sys/ldap-ext/ldap-ca-cert-mgmt'>
  <inConfig>
    <ldapCACertificateManagement
      dn='sys/ldap-ext/ldap-ca-cert-mgmt' bindingCertificate='disabled'/>
  </inConfig>
</configConfMo>

```

Response:

```
<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
<outConfig>
  <ldapCACertificateManagement dn="sys/ldap-ext/ldap-ca-cert-mgmt"
    description="LDAP CA Certificate Management"
    bindingCertificate="disabled" status="modified" >
  </ldapCACertificateManagement>
</outConfig>
</configConfMo>
```

### Downloading LDAP CA Certificate using TFTP Protocol

Request:

```
<configConfMo cookie='1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-download' inHierarchical='false'>
<inConfig>
  <downloadLdapCACertificate protocol='tftp'
    remoteServer='10.10.10.10' remoteFile='new_com_chain.cer'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-download' />
</inConfig>
</configConfMo>
```

TFTP used in the preceding example is the default protocol. You can also download the LDAP CA certificate using the other available protocols such as the FTP, SFTP, SCP and HTTP.

Response:

```
<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-download"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
<outConfig>
  <downloadLdapCACertificate dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-download"
    protocol="none" remoteServer="" remoteFile="" user="" pwd=""
downloadStatus="COMPLETED" downloadProgress="100%" status="modified" >
  </downloadLdapCACertificate>
</outConfig>
</configConfMo>
```

### Testing LDAP Binding

Request:

```
<configConfMo cookie='1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert' inHierarchical='false'>
<inConfig>
  <ldapCACertificate adminAction='test-ldap-binding' user='user' pwd='Test123'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
<outConfig>
  <ldapCACertificate dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert"
    adminAction="" user="" pwd="" status="modified" >
  </ldapCACertificate>
```

```
</outConfig>
</configConfMo>
```

## Exporting LDAP CA Certificate

Request:

```
<configConfMo cookie='1463635956/27a0d4af-332c-132c-8004-9206a0395bfc'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-export' inHierarchical='false'>
  <inConfig>
    <exportLdapCACertificate protocol='tftp' remoteServer='10.10.10.10'
      remoteFile='fasfsaf.csr'
      dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-export' />
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-export"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
  <outConfig>
    <exportLdapCACertificate dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert-export"
      protocol="none" remoteServer="" remoteFile="" user="" pwd=""
      exportStatus="COMPLETED" exportProgress="100%" status="modified" >
    </exportLdapCACertificate>
  </outConfig>
</configConfMo>
```

## Deleting LDAP CA Certificate

Request:

```
<configConfMo cookie='1457746251/9ec8b64d-2dd0-1dd0-8008-515545067ff0'
dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert' inHierarchical='false'>
  <inConfig>
    <ldapCACertificate adminAction='delete-ca-certificate'
      dn='sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert' />
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert"
cookie="1470032930/13a3ed5e-38fd-18fd-800f-ad7c7d74a254" response="yes">
  <outConfig>
    <ldapCACertificate dn="sys/ldap-ext/ldap-ca-cert-mgmt/ldap-ca-cert"
      adminAction="" user="" pwd="" status="modified" >
    </ldapCACertificate>
  </outConfig>
</configConfMo>
```

## Uploading PID Catalog

Request:

```
<configConfMo cookie="1469999952/1c3dc79a-38f5-18f5-8005-9206a0395bfc"
dn="sys/rack-unit-1/board/pid/upload-catalog" inHierarchical="false">
  <inConfig>
    <uploadPIDCatalog protocol="tftp"
```

```

    remoteServer="10.10.10.10" remoteFile="latestpid.tar.gz"
    dn="sys/rack-unit-1/board/pid/upload-catalog"/>
  </inConfig>
</configConfMo>'

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pid/upload-catalog"
cookie="1469999952/1c3dc79a-38f5-18f5-8005-9206a0395bfc" response="yes">
  <outConfig>
    <uploadPIDCatalog dn="sys/rack-unit-1/board/pid/upload-catalog" protocol="none"
      remoteServer="" remoteFile="" user="" pwd=""
      pidUploadStatus="Upload Successful" status="modified" >
    </uploadPIDCatalog>
  </outConfig>
</configConfMo>

```

### Activating PID Catalog

Request:

```

<configConfMo cookie="1470039855/432ebd0e-38ff-18ff-8004-d5362a2fa074"
dn="sys/rack-unit-1/board/pid/activate-catalog" inHierarchical="false">
  <inConfig>
    <activatePIDCatalog adminState="trigger"
      dn="sys/rack-unit-1/board/pid/activate-catalog"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pid/activate-catalog"
cookie="1470039855/432ebd0e-38ff-18ff-8004-d5362a2fa074" response="yes">
  <outConfig>
    <activatePIDCatalog dn="sys/rack-unit-1/board/pid/activate-catalog"
      adminState="triggered" pidActivationStatus="Activation Successful"
      status="modified" >
    </activatePIDCatalog>
  </outConfig>

```

### Showing PID Catalog

Request:

```

<configResolveClass cookie="1473213767/1591338e-3be2-1be2-8002-ac988322e470"
inHierarchical="false" classId="pidCatalog"/>

```

Response:

```

<configResolveClass cookie="1473213767/1591338e-3be2-1be2-8002-ac988322e470"
response="yes" classId="pidCatalog">
  <outConfigs>
    <pidCatalog dn="sys/rack-unit-1/board/pid" name="Cisco Product Identifiers (PID)"
      version=2.0(13a)09>
    </pidCatalog>
  </outConfigs>
</configResolveClass>

```

## Retrieving PID Catalog of CPUs

Request:

```
<configResolveClass cookie='1282522267/f91bd068-8e72-1e72-8002-7e573e8f835c'
inHierarchical='false' classId='pidCatalogCpu' />
```

Response:

```
<configResolveClass cookie="1470739643/d6acc6cc-a139-19a1-8002-5a45145daae4"
response="yes" classId="pidCatalogCpu">
<outConfigs>
<pidCatalogCpu id="1" socketdesignation="CPU1" description="Intel(R)
Xeon(R) CPU E5-2620 v4 @ 2.10GHz/85W 8C/20MB Cache/DDR4 2133MHz"
pid="UCS-CPU-E52620E" model="Intel(R) Xeon(R) CPU E5-2620 v4 @ 2.10GHz"
signature="Type 0, Family 6, Model 79, Stepping 1" currentspeed="2100"
operState="Enabled" dn="sys/chassis-1/server-1/board/pid/pid-cpu-1" >
</pidCatalogCpu>
<pidCatalogCpu id="2" socketdesignation="CPU2" description="Intel(R)
Xeon(R) CPU E5-2620 v4 @ 2.10GHz/85W 8C/20MB Cache/DDR4 2133MHz"
pid="UCS-CPU-E52620E" model="Intel(R) Xeon(R) CPU E5-2620 v4 @ 2.10GHz"
signature="Type 0, Family 6, Model 79, Stepping 1" currentspeed="2100"
operState="Enabled" dn="sys/chassis-1/server-1/board/pid/pid-cpu-2" >
</pidCatalogCpu>
<pidCatalogCpu id="1" socketdesignation="CPU1" description="Intel(R)
Xeon(R) CPU E5-2695 v4 @ 2.10GHz/120W 18C/45MB Cache/DDR4 2400MHz"
pid="UCS-CPU-E52695E" model="Intel(R) Xeon(R) CPU E5-2695 v4 @ 2.10GHz"
signature="Type 0, Family 6, Model 79, Stepping 1" currentspeed="2100"
operState="Enabled" dn="sys/chassis-1/server-2/board/pid/pid-cpu-1" >
</pidCatalogCpu>
<pidCatalogCpu id="2" socketdesignation="CPU2" description="Intel(R)
Xeon(R) CPU E5-2695 v4 @ 2.10GHz/120W 18C/45MB Cache/DDR4 2400MHz"
pid="UCS-CPU-E52695E" model="Intel(R) Xeon(R) CPU E5-2695 v4 @ 2.10GHz"
signature="Type 0, Family 6, Model 79, Stepping 1" currentspeed="2100"
operState="Enabled" dn="sys/chassis-1/server-2/board/pid/pid-cpu-2" >
</pidCatalogCpu>
</outConfigs>
</configResolveClass>
```

## Retrieving PID Catalog of DIMMs

Request:

```
<configResolveClass cookie='1282522267/f91bd068-8e72-1e72-8002-7e573e8f835c'
inHierarchical='false' classId='pidCatalogDimm' />
```

Response:

```
<configResolveClass cookie="1470739643/d6acc6cc-a139-19a1-8002-5a45145daae4"
response="yes" classId="pidCatalogDimm">
<outConfigs>
<pidCatalogDimm name="DIMM_G1"
description="32GB DDR4-2400-MHz RDIMM/PC4-19200/dual rank/x4/1.2v"
pid="UCS-MR-1X322RV-A" mfgid="0xCE00" manufacturer="Samsung"
serialnumber="02EB33FD"model="Mx93A4K40BB1-CRC"capacity="32768 MB"
speed="2400" datawidth="64 bits" operability="Operable"
dn="sys/chassis-1/server-2/board/pid/pid-dimm-DIMM_G1">
</pidCatalogDimm>
.
.
.
```



```

    <pidCatalogDimm name="DIMM_G2"
      description="32GB DDR4-2400-MHz RDIMM/PC4-19200/dual rank/x4/1.2v"
      pid="UCS-MR-1X322RV-A" mfgid="0xCE00" manufacturer="Samsung"
      serialnumber="02EB3481" model="Mx93A4K40BB1-CRC" capacity="32768 MB"
      speed="2400" datawidth="64 bits" operability="Operable"
    dn="sys/chassis-1/server-2/board/pid/pid-dimm-DIMM_G2">
  </pidCatalogDimm>
</outConfigs>
</configResolveClass>

```

## Retrieving PID Catalog of HDDs

Request:

```

<configResolveClass cookie='1282522267/f91bd068-8e72-1e72-8002-7e573e8f835c'
  inHierarchical='false' classId='pidCatalogHdd' />

```

Response:

```

<configResolveClass cookie="1470739643/d6acc6cc-a139-19a1-8002-5a45145daae4"
  response="yes" classId="pidCatalogHdd">
  <outConfigs>
    <pidCatalogHdd disk="8" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="WD" model="WD4001FYYG-01SL3"
      serialnumber="WMC1F1927555" dn="sys/chassis-1/server-1/board/pid/pid-hdd-8">
    </pidCatalogHdd>
    <pidCatalogHdd disk="9" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="WD" model="WD4001FYYG-01SL3"
      serialnumber="WMC1F1930050" dn="sys/chassis-1/server-1/board/pid/pid-hdd-9" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="6" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="WD" model="WD4001FYYG-01SL3"
      serialnumber="WMC1F1927672" dn="sys/chassis-1/server-2/board/pid/pid-hdd-6" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="7" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="WD" model="WD4001FYYG-01SL3" \
      serialnumber="WMC1F1928331" dn="sys/chassis-1/server-2/board/pid/pid-hdd-7" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="10" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="WD" model="WD4001FYYG-01SL3"
      serialnumber="WMC1F1928305" dn="sys/chassis-1/server-2/board/pid/pid-hdd-10" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="11" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="TOSHIBA" model="MG03SCA400"
      serialnumber="14P0A0E8FVU4" dn="sys/chassis-1/server-2/board/pid/pid-hdd-11" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="12" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="TOSHIBA" model="MG03SCA400"
      serialnumber="14P0A069FVU4" dn="sys/chassis-1/server-2/board/pid/pid-hdd-12" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="13" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="TOSHIBA" model="MG03SCA400"
      serialnumber="14P0A07BFVU4" dn="sys/chassis-1/server-2/board/pid/pid-hdd-13" >
    </pidCatalogHdd>
    <pidCatalogHdd disk="14" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="TOSHIBA" model="MG03SCA400"
      serialnumber="1400A06EFVU4" dn="sys/chassis-1/server-2/board/pid/pid-hdd-14">
    </pidCatalogHdd>
    <pidCatalogHdd disk="28" controller="SBMezz1" description="4TB 6Gb SAS 7.2K RPM 3.5"
      pid="UCSC-Cxxx-HD4TB" vendor="TOSHIBA" model="MG03SCA400"

```

```

    serialnumber="1400A08MFVU4" dn="sys/chassis-1/server-2/board/pid/pid-hdd-28" >
  </pidCatalogHdd>
</outConfigs>
</configResolveClass>

```

## Retrieving PID Catalog of PCI Adapters

Request:

```

<configResolveClass cookie='1282522267/f91bd068-8e72-1e72-8002-7e573e8f835c'
inHierarchical=false' classId='pidCatalogPCIAdapter'/>

```

Response:

```

<configResolveClass cookie="1470739643/d6acc6cc-a139-19a1-8002-5a45145daae4"
response="yes" classId="pidCatalogPCIAdapter">
  <outConfigs>
    <pidCatalogPCIAdapter slot="SBNVMe1"
      description="800GB 2.5in NVMe based PCIe SSD drive"
      pid="UCSC-Cxxx-NV8" vendor="0x1c58" device="0x0003"
      subvendor="0x1137" subdevice="0x019e"
      dn="sys/chassis-1/server-1/board/pid/pid-pciadapter-SBNVMe1" >
    </pidCatalogPCIAdapter>
    <pidCatalogPCIAdapter slot="SIOC1" description="Cisco UCS 40Gb Ethernet"
      pid="UCSC-Cxxx-SIOC" vendor="0x1137" device="0x0042"
      subvendor="0x1137" subdevice="0x0157"
      dn="sys/chassis-1/server-1/board/pid/pid-pciadapter-SIOC1" >
    </pidCatalogPCIAdapter>
    <pidCatalogPCIAdapter slot="SBMezz1"
      description="Cisco UCS C3000 RAID controller for Mx Server Blade with 4G RAID Cache"
      pid="UCS-Cxxx-MxRAID" vendor="0x1000" device="0x00ce"
      subvendor="0x1137" subdevice="0x0197"
      dn="sys/chassis-1/server-1/board/pid/pid-pciadapter-SBMezz1" >
    </pidCatalogPCIAdapter>
    <pidCatalogPCIAdapter slot="SBMezz1"
      description="Cisco UCS C3000 RAID controller for Mx Server Blade with 4G RAID Cache"
      pid="UCSC-Cxxx-MxRAID" vendor="0x1000"
      device="0x00ce" subvendor="0x1137" subdevice="0x0197"
      dn="sys/chassis-1/server-2/board/pid/pid-pciadapter-SBMezz1" >
    </pidCatalogPCIAdapter>
  </outConfigs>
</configResolveClass>

```

## Retrieving Platform Event Filters

Request:

```

<configResolveClass cookie='1393260215/ac3bb348-f329-1329-800a-0977e1a85750'
classId='platformEventFilters' inHierarchical='true'>
</configResolveClass>

```

Response:

```

<configResolveClass cookie="1400973402/97c009e9-fa2d-1a2d-8004-bcbec261b284"
response="yes"
classId="platformEventFilters">
  <outConfigs>
    <platformEventFilters id="1" event="Temperature Critical Assert Filter" action="none"
      dn="sys/rack-unit-1/event-management/pef-1"/>
    <platformEventFilters id="2" event="Voltage Critical Assert Filter" action="none"
      dn="sys/rack-unit-1/event-management/pef-2"/>
    <platformEventFilters id="3" event="Current Critical Assert Filter" action="none"

```

```

    dn="sys/rack-unit-1/event-management/pef-3"/>
<platformEventFilters id="4" event="Fan Critical Assert Filter" action="none"
  dn="sys/rack-unit-1/event-management/pef-4"/>
<platformEventFilters id="5" event="Processor Assert Filter" action="none"
  dn="sys/rack-unit-1/event-management/pef-5"/>
<platformEventFilters id="6" event="Power Supply Critical Assert Filter" action="none"

  dn="sys/rack-unit-1/event-management/pef-6"/>
<platformEventFilters id="7" event="Memory Critical Assert Filter" action="none"
  dn="sys/rack-unit-1/event-management/pef-7"/>
</outConfigs>
</configResolveClass>

```

## Enabling Platform Event Filters

Request:

```

<configConfMo dn='sys/rack-unit-1/event-management/pef-1 inHierarchical='false'
  cookie='1394402794/b33dfc40-f433-1433-8003-0977e1a85750'>
<inConfig>
  <eventManagement
    dn='sys/rack-unit-1/event-management/pef-1' adminState='enabled' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/event-management"
  cookie="1400975065/29082126-fa2e-1a2e-8005-bcbec261b284" response="yes">
  <outConfig>
    <eventManagement dn="sys/rack-unit-1/event-management" adminState="enabled"
      adminAction="no-op" status="modified"/>
  </outConfig>
</configConfMo>

```

## Disabling Platform Event Filters

Request:

```

<configConfMo dn='sys/rack-unit-1/event-management/pef-1
  inHierarchical='false'
  cookie='1394402794/b33dfc40-f433-1433-8003-0977e1a85750'>
<inConfig>
  <eventManagement dn='sys/rack-unit-1/event-management/pef-1'
    adminState='disabled' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/event-management"
  cookie="1400975065/29082126-fa2e-1a2e-8005-bcbec261b284" response="yes">
  <outConfig>
    <eventManagement dn="sys/rack-unit-1/event-management"
      adminState="disabled" adminAction="no-op" status="modified"/>
  </outConfig>
</configConfMo>

```

## Configuring Platform Event Filters and Enabling or Disabling Platform Event Filters

Request:

```
<configConfMo cookie="1453104667/05fda47a-2998-1998-8002-1a4c5a74a254"
dn="sys/rack-unit-1/event-management" inHierarchical="true">
  <inConfig>
    <eventManagement adminState="enabled" dn="sys/rack-unit-1/event-management">
      <platformEventFilters dn="sys/rack-unit-1/event-management/pef-1" rn="pef-1"
        id="1" action="none"/>
      <platformEventFilters dn="sys/rack-unit-1/event-management/pef-2" action="none"/>
      <platformEventFilters dn="sys/rack-unit-1/event-management/pef-7"
        rn="pef-7" action="reboot"/>
    </eventManagement>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/event-management"
cookie="1453108513/a2eb91d8-2998-1998-8003-1a4c5a74a254" response="yes">
  <outConfig>
    <eventManagement dn="sys/rack-unit-1/event-management" adminState="enabled"
      adminAction="no-op" status="modified">
      <platformEventFilters id="1" event="Temperature Critical Assert Filter"
        action="none" rn="pef-1" status="modified"/>
      <platformEventFilters id="2" event="Voltage Critical Assert Filter"
        action="none" rn="pef-2" status="modified"/>
      <platformEventFilters id="3" event="Current Critical Assert Filter"
        action="none" rn="pef-3" status="modified"/>
      <platformEventFilters id="4" event="Fan Critical Assert Filter" action="none"
        rn="pef-4" status="modified"/>
      <platformEventFilters id="5" event="Processor Assert Filter" action="none"
        rn="pef-5" status="modified"/>
      <platformEventFilters id="6" event="Power Supply Critical Assert Filter"
        action="none" rn="pef-6" status="modified"/>
      <platformEventFilters id="7" event="Memory Critical Assert Filter"
        action="reboot" rn="pef-7" status="modified"/>
    </eventManagement>
  </outConfig>
</configConfMo>
```

## Resetting Platform Event Filters

Request:

```
<configConfMo dn='sys/rack-unit-1/event-management/pef-1'
inHierarchical='false' cookie='1394402794/b33dfc40-f433-1433-8003-0977e1a85750'>
  <inConfig>
    <eventManagement adminAction="reset-event-filters"
      dn='sys/rack-unit-1/event-management/pef-1'/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/event-management"
cookie="1453108513/a2eb91d8-2998-1998-8003-1a4c5a74a254" response="yes">
  <outConfig>
    <eventManagement dn="sys/rack-unit-1/event-management" adminState="enabled"
      adminAction="no-op" status="modified">
      <platformEventFilters id="1" event="Temperature Critical Assert Filter"
```

```

        action="none" rn="pef-1" status="modified"/>
<platformEventFilters id="2" event="Voltage Critical Assert Filter"
  action="none" rn="pef-2" status="modified"/>
<platformEventFilters id="3" event="Current Critical Assert Filter"
  action="none" rn="pef-3" status="modified"/>
<platformEventFilters id="4" event="Fan Critical Assert Filter"
  action="none" rn="pef-4" status="modified"/>
<platformEventFilters id="5" event="Processor Assert Filter" action="none"
  rn="pef-5" status="modified"/>
<platformEventFilters id="6" event="Power Supply Critical Assert Filter"
  action="none" rn="pef-6" status="modified"/>
<platformEventFilters id="7" event="Memory Critical Assert Filter" action="none"
  rn="pef-7" status="modified"/>
  </eventManagement>
</outConfig>
</configConfMo>

```

## Updating SAS Expander Firmware

Request:

```

<configConfMo cookie='1461072403/492cc5da-30d7-10d7-8003-d4362a2fa074'
  dn='sys/sas-expander-1/mgmt/fw-updatable'>
<inConfig>
<firmwareUpdatable dn='sys/sas-expander-1/mgmt/fw-updatable' adminState='trigger'
  protocol='tftp' type='sas-expander' remoteServer='10.10.10.10'
  remotePath='sasexp.bin' />
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/sas-expander-1/mgmt/fw-updatable"
  cookie="1461072403/492cc5da-30d7-10d7-8003-d4362a2fa074" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/sas-expander-1/mgmt/fw-updatable"
    description="SAS Expander backup firmware version"
    adminState="triggered" deployment="backup" operState="DOWNLOADING" protocol="none"
    remoteServer="" remotePath="" user="" pwd="" progress="0" type="sas-expander"
    status="modified"/>
</outConfig>
</configConfMo>

```

## Activating SAS Expander Firmware

Request:

```

<configConfMo cookie='1430677438/2f89af96-3115-1531-8007-df8077e2cff4'
  dn='sys/sas-expander-1/mgmt/fw-boot-def/bootunit-combined'>
<inConfig>
  <firmwareBootUnit dn='sys/sas-expander-1/mgmt./fw-boot-def/bootunit-combined'
    adminState='trigger' image='backup' resetOnActivate='yes' />
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/sas-expander-1/mgmt/fw-boot-def/bootunit-combined"
  cookie="1281314857/87d987c9-8d59-1d59-8002-7e573e8f835c" response="yes">

```

```

<outConfig>
  <firmwareBootUnit dn="sys/sas-expander-1/mgmt/fw-boot-def/bootunit-combined"
    description="SAS Expander startup firmware version" adminState="triggered"
    image="running" resetOnActivate="yes" type="combined"
    version="0x0408013F" status="modified"/>
</outConfig>
</configConfMo>

```

## Retrieving SAS Expander Firmware Updatable

Request:

```

<configResolveDn cookie='1392179711/9352dc53-f22e-122e-8002-ad7c7d74a254'
dn='sys/sas-expander-1/mgmt/fw-updatable' inHierarchical='true'>
</configResolveDn>

```

Response:

```

<configResolveDn cookie="1392179711/9352dc53-f22e-122e-8002-ad7c7d74a254"
response="yes" dn="sys/sas-expander-1/mgmt/fw-updatable">
<outConfig>
  <firmwareUpdatable dn="sys/sas-expander-1/mgmt/fw-updatable"
    description="SAS Expander backup firmware version"
    adminState="triggered" deployment="backup" operState="UPDATE_FAILED"
    version="0xffffffff" protocol="none" remoteServer="" remotePath=""
    user="" pwd="" progress="0" type="sas-expander"/>
</outConfig>
</configResolveDn>

```

## Setting up a Virtual Drive as Transport Ready with Exclude-All Options

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0'
inHierarchical='true' cookie='1390285111/1af97ad2-f075-1075-8003-bcbec261b284'>
  <inConfig>
    <storageVirtualDrive
      dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0' id='0'
      adminAction='set-transport-ready' hotspareAction='exclude-all' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"
cookie="1390285111/1af97ad2-f075-1075-8003-bcbec261b284" response="yes">
<outConfig>
  <storageVirtualDrive id="0" name="RAID1_12" raidLevel="RAID 1"
    size="952720 MB" vdStatus="Optimal" health="Good" bootDrive="false"
    stripSize="64k"drivesPerSpan="2" spanDepth="1" accessPolicy="Transport Ready"
    cachePolicy="direct-io" readPolicy="no-read-ahead"
    requestedWriteCachePolicy="write-through" currentWriteCachePolicy="write-through"
    diskCachePolicy="unchanged" allowBackgroundInit="true" autoSnapshot="false"
    autoDeleteOlddest="true" driveState="Optimal" fdeCapable="no" fdeEnabled="no"
    adminAction="no-op" hotspareAction="no-op" targetId="0"
    physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
    pd_id1,pd_id2,...pd_idN" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"
    status="modified">
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="1951170560" virtualDrive="0"
    physicalDrive="1" state="online" span="0" rn="pd-1" status="modified"/>
  <storageLocalDiskUsage startingBlock="0" numberOfBlocks="1951170560" virtualDrive="0"

```

```

    physicalDrive="2" state="online" span="0" rn="pd-2" status="modified"/>
    <storageOperationVD rn="storage-operation" lropInProgress="false"
      currentLrop="No operation in progress" progressPercent="0"
      elapsedSeconds="0" status="modified"/>
  </storageVirtualDrive>
</outConfig>
</configConfMo>

```



**Note** You can also set a Virtual Drive as Transport Ready using the **include-all** and **include-dhsp hotspareAction** values.

### Clearing a Virtual Drive as Transport Ready

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0'
  inHierarchical='true' cookie='1390285111/1af97ad2-f075-1075-8003-bcbec261b284'>
  <inConfig>
    <storageVirtualDrive dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0' id='0'
      adminAction='clear-transport-ready' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"
  cookie="1390285111/1af97ad2-f075-1075-8003-bcbec261b284" response="yes">
  <outConfig>
    <storageVirtualDrive id="0" name="RAID1_12" raidLevel="RAID 1"
      size="952720 MB" vdStatus="Optimal" health="Good" bootDrive="false"
      stripSize="64k" drivesPerSpan="2" spanDepth="1" accessPolicy="read-write"
      cachePolicy="direct-io" readPolicy="no-read-ahead"
      requestedWriteCachePolicy="write-through" currentWriteCachePolicy="write-through"
      diskCachePolicy="unchanged" allowBackgroundInit="true" autoSnapshot="false"
      autoDeleteOldest="true" driveState="Optimal" fdeCapable="no" fdeEnabled="no"
      adminAction="no-op" hotspareAction="no-op" targetId="0"
      physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
      pd_id1,pd_id2,...pd_idN" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/vd-0"
      status="modified">
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="1951170560" virtualDrive="0"
      physicalDrive="1" state="online" span="0" rn="pd-1" status="modified"/>
    <storageLocalDiskUsage startingBlock="0" numberOfBlocks="1951170560" virtualDrive="0"
      physicalDrive="2" state="online" span="0" rn="pd-2" status="modified"/>
    <storageOperationVD rn="storage-operation" lropInProgress="false"
      currentLrop="No operation in progress" progressPercent="0" elapsedSeconds="0"
      status="modified"/>
  </storageVirtualDrive>
</outConfig>
</configConfMo>

```

### Setting Up an SNMP Engine ID

Request:

```

<configConfMo cookie="1468979398/1fd17a6c-3808-1808-8002-ac988322e470"
  inHierarchical="false" dn="sys/svc-ext/snmp-svc">

```

```

<inConfig>
  <commSnmP dn="sys/svc-ext/snmp-svc" adminState="enabled"
    engineIdKey="Test_Engine_Key">
  </commSnmP>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/svc-ext/snmp-svc"
  cookie="1468979398/1fd17a6c-3808-1808-8002-ac988322e470" response="yes">
  <outConfig>
    <commSnmP dn="sys/svc-ext/snmp-svc" descr="SNMP Service"
      name="snmp" adminState="enabled" port="161" proto="udp" community=""
      trapCommunity="" com2Sec="disabled" sysContact="who@where" sysLocation="unknown"
      engineId="" engineIdKey="Test_Engine_Key" status="modified" >
    </commSnmP>
  </outConfig>
</configConfMo>

```

### Retrieving the Configured SNMP Engine ID

Request:

```

<configResolveClass cookie="1468979398/1fd17a6c-3808-1808-8002-ac988322e470"
  inHierarchical="false" classId="commSnmP"/>

```

Response:

```

<configResolveClass cookie="1468979398/1fd17a6c-3808-1808-8002-ac988322e470"
  response="yes" classId="commSnmP">
  <outConfigs>
    <commSnmP dn="sys/svc-ext/snmp-svc" descr="SNMP Service"
      name="snmp" adminState="enabled" port="161" proto="udp" community=""
      trapCommunity="" com2Sec="disabled" sysContact="who@where" sysLocation="unknown"
      engineId="80 00 00 09 04 54 65 73 74 5F 45 6E 67 69 6E 65 5F 4B 65 79"
      engineIdKey="Test_Engine_Key">
    </commSnmP>
  </outConfigs>
</configResolveClass>

```

### Retrieving Storage Controller Properties

Request:

```

<configResolveClass cookie='1472027101/557ad6d6-3acd-1acd-8007-95542a2fa074'
  inHierarchical='false' classId='storageControllerProps'/>

```

Response:

```

<configResolveClass cookie="1472027101/557ad6d6-3acd-1acd-8007-95542a2fa074"
  response="yes" classId="storageControllerProps">
  <outConfigs>
    <storageControllerProps dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/controller-props"

      pciSlot="SLOT-HBA" health="Good" controllerStatus="Optimal"
      batteryStatus="BBU Not Supported" raidChipTempCentigrade="50"
      backendPortCount="2" physicalDriveCount="7" criticalPhysicalDriveCount="0"
      failedPhysicalDriveCount="0" memoryCorrectableErrors="0"
      memoryUncorrectableErrors="0" bootDrive="2" bootDriveIsPhysicalDrive="true"

```



```

flashPresent="true" sasAddress0="0000000000000001" sasAddress1="0000000000000001"
sasAddress2="" sasAddress3="" sasAddress4="" sasAddress5=""
sasAddress6="" sasAddress7="" serial="5142631FC3D" firmwarePackageBuild="1.58-0"
ttyLogStatus="Not Downloaded" >
</storageControllerProps>
</outConfigs>
</configResolveClass>

```

## Retrieving NVMe Storage Controller Details

Request:

```

<configResolveClass cookie='1472022403/94a78a4a-3acc-1acc-8003-95542a2fa074'
inHierarchical='true' classId='storageControllerNVMe' />

```

Response:

```

<configResolveClass cookie="1472022403/94a78a4a-3acc-1acc-8003-95542a2fa074"
response="yes" classId="storageControllerNVMe">
<outConfigs>
<storageControllerNVMe id="SLOT-5"
model="Cisco UCS (SN150) HHHL 3800 GB NVMe based PCIe SSD"
vendor="HGST" serial="STM0001A7BD9" health="Good" controllerStatus="Optimal"
controllerChipTempCelsius="39" driveLifeUsed="0" performanceLevel="100"
ledFaultStatus="Healthy" percentageTotalPowerOnHour="6"
dn="sys/rack-unit-1/board/storage-NVMe-SLOT-5">
<firmwareRunning rn="fw-boot-loader"
description="NVMe Storage controller currently running boot loader firmware version"
deployment="boot-loader" type="storage-controller-NVMe"
version="N/A" >
</firmwareRunning>
<firmwareRunning rn="fw-system"
description="NVMe Storage controller currently running firmware version"
deployment="system" type="storage-controller-NVMe"
version="KMCCP105">
</firmwareRunning>
</storageControllerNVMe>
<storageControllerNVMe
id="SLOT-4" model="Cisco UCS (P3700) HHHL 800 GB NVMe based PCIe SSD"
vendor="Intel"
serial="CVFT6024002U800CGN" health="Good" controllerStatus="Optimal"
controllerChipTempCelsius="24" driveLifeUsed="0" performanceLevel="100"
ledFaultStatus="Healthy" percentageTotalPowerOnHour="5"
dn="sys/rack-unit-1/board/storage-NVMe-SLOT-4" >
<firmwareRunning rn="fw-boot-loader"
description="NVMe Storage controller currently running boot loader firmware version"
deployment="boot-loader" type="storage-controller-NVMe"
version="N/A" >
</firmwareRunning>
<firmwareRunning
rn="fw-system"
description="NVMe Storage controller currently running firmware version"
deployment="system" type="storage-controller-NVMe"
version="8DV1CP01" >
</firmwareRunning>
</storageControllerNVMe>
<storageControllerNVMe
id="SLOT-2" model="Cisco UCS (P3700) HHHL 1600 GB NVMe based PCIe SSD"
vendor="Intel" serial="CVFT5433007S1P6DGN" health="Good"
controllerStatus="Optimal" controllerChipTempCelsius="27"
driveLifeUsed="0" performanceLevel="100"

```

```

    ledFaultStatus="Healthy" percentageTotalPowerOnHour="3"
    dn="sys/rack-unit-1/board/storage-NVMe-SLOT-2">
  <firmwareRunning
    rn="fw-boot-loader"
    description="NVMe Storage controller currently running boot loader firmware version"
    deployment="boot-loader" type="storage-controller-NVMe" version="N/A">
  </firmwareRunning>
  <firmwareRunning
    rn="fw-system"
    description="NVMe Storage controller currently running firmware version"
    deployment="system" type="storage-controller-NVMe" version="8DV1CP01">
  </firmwareRunning>
  </storageControllerNVMe>
</outConfigs>
</configResolveClass>

```

### Retrieving Firmware Version of a NVMe Controller

Request:

```

<configResolveDn cookie='1405200895/c56a2fcc-fe06-1e06-8062-f4f25b78ac58'
  inHierarchical='false' dn='sys/rack-unit-1/board/storage-NVMe-FrontPCIe1/fw-system'/>

```

Response:

```

<configResolveDn cookie="1405200895/c56a2fcc-fe06-1e06-8062-f4f25b78ac58"
  response="yes" dn="sys/rack-unit-1/board/storage-NVMe-FrontPCIe1/fw-system">
  <outConfig>
  <firmwareRunning dn="sys/rack-unit-1/board/storage-NVMe-FrontPCIe1/fw-system"
    description="NVMe Storage controller currently running firmware version"
    deployment="system" type="storage-controller-NVMe"
    version="KMCCP105">
  </firmwareRunning>
</outConfig>
</configResolveDn>

```

### Enabling Secure Adapter Firmware Update

Request:

```

<configConfMo inHierarchical="false" cookie="1472686105/f4cebeba-3b66-1b66-8003-fad0998bc800"
  dn="sys/rack-unit-1">
  <inConfig>
    <computeRackUnit adaptorSecureUpdate="enabled" dn="sys/rack-unit-1"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1" cookie="1472686105/f4cebeba-3b66-1b66-8003-fad0998bc800"
  response="yes">
  <outConfig>
  <computeRackUnit dn="sys/rack-unit-1" adminPower="policy" availableMemory="131072"
    model="UCSC-Cxxx-MxS" memorySpeed="1866" name="UCS Cxxx MxS" numofAdaptors="1"
    numofCores="16" numofCoresEnabled="16" numofCpus="2"
    numofEthHostIfs="2" numofFcHostIfs="2" numofThreads="32" operPower="on"
    originalUuid="E320FC46-31AC-4D93-BA64-C7FE5A139628" presence="equipped"

```

```

serverId="1" serial="FCH2005V1E4" totalMemory="131072" usrLbl=""
uuid="E320FC46-31AC-4D93-BA64-C7FE5A139628"
vendor="Cisco Systems Inc" cimcResetReason="graceful-reboot "
  adaptorSecureUpdate="Enabled" status="modified"/>
</outConfig>
</configConfMo>

```

### Viewing the Status of Enabling Secure Firmware Update for Adapters

Request:

```

<configResolveDn cookie="1472686105/f4cebeba-3b66-1b66-8003-fad0998bc800"
inHierarchical="false" dn="sys/rack-unit-1"/>

```

Response:

```

<configResolveDn cookie="1472686105/f4cebeba-3b66-1b66-8003-fad0998bc800"
response="yes" dn="sys/rack-unit-1">
  <computeRackUnit dn="sys/rack-unit-1" adminPower="policy" availableMemory="131072"
model="UCSC-Cxxx-MxS" memorySpeed="1866" name="UCS Cxxx MxS" numOfAdaptors="1"
numOfCores="16" numOfCoresEnabled="16" numOfCpus="2" numOfEthHostIfs="2"
numOfFcHostIfs="2" numOfThreads="32" operPower="on"
originalUuid="E320FC46-31AC-4D93-BA64-C7FE5A139628" presence="equipped"
serverId="1" serial="FCH2005V1E4" totalMemory="131072" usrLbl=""
uuid="E320FC46-31AC-4D93-BA64-C7FE5A139628" vendor="Cisco Systems Inc"
cimcResetReason="graceful-reboot " adaptorSecureUpdate="Enabled" />
</outConfig>
</configConfMo>

```

## Examples of Common Server Management Tasks Contd.

The examples in this section show how to use the Cisco IMC XML API to perform common server management tasks. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Configuring SMTP Server For Receiving Email Alerts, on page 172](#)
- [Resetting All Components to Factory Defaults, on page 173](#)
- [Resetting Storage, VIC, and BMC Components to Factory Defaults, on page 174](#)
- [Enabling or Disabling the 6G or 12G Mixed Mode Speed on SAS Expander, on page 174](#)
- [Clearing All Configurations of a Storage Controller, on page 175](#)
- [Resetting Storage Controller to Factory Defaults, on page 176](#)
- [Hiding a Storage Virtual Drive, on page 177](#)
- [Enabling or Disabling Secure Key Management, on page 178](#)
- [Configuring KMIP Server, on page 179](#)
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- [Unlocking Foreign Configuration on a Self Encrypted Drive, on page 185](#)
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- [Enabling Self Encrypted Drive with Key Management as Local and KMIP Disabled, on page 186](#)
- [Enabling Self Encrypted Drive with Key Management as Remote and KMIP Enabled, on page 187](#)
- [Switching Key Management From Local to Remote with Existing Security Key, on page 187](#)
- [Switching Key Management From Remote to Local with Key ID and Security Key, on page 188](#)
- [Disabling Security Enabled Drive when Key Management is Local, on page 188](#)

## Configuring SMTP Server For Receiving Email Alerts

### Get Request

```
<configResolveClass cookie="d55a90fac7/82dcfd65-f21e-7fd5-98b8-c31fdd7c988e"
inHierarchical="false" classId="mailRecipient"/>
```

### Response

```
<configResolveClass cookie="d55a90fac7/82dcfd65-f21e-7fd5-98b8-c31fdd7c988e"
response="yes" classId="mailRecipient">
  <outConfigs>
    <mailRecipient id="1" email="xxxxx@cisco.com" severity="minor" adminAction="no-op"
testMailStatus="na" dn="sys/svc-ext/mail-alert-svc/mail-recipient-1"/>
    <mailRecipient id="2" email="xxxxx@cisco.com" severity="major" adminAction="no-op"
testMailStatus="na" dn="sys/svc-ext/mail-alert-svc/mail-recipient-2"/>
    <mailRecipient id="3" email="test@cisco.com" severity="informational"
adminAction="no-op" testMailStatus="na" dn="sys/svc-ext/mail-alert-svc/mail-recipient-3"/>
    <mailRecipient id="4" email="user@cisco.com" severity="informational"
adminAction="no-op" testMailStatus="na" dn="sys/svc-ext/mail-alert-svc/mail-recipient-4"/>
  </outConfigs>
</configResolveClass>
```

## Set Request

### Configure SMTP Properties along with mail recipients

```
<configConfMo cookie="1531920597/067cf5f8-7147-1147-8003-1a4c5a74a254"
inHierarchical="false" dn="sys/svc-ext/mail-alert-svc">
  <inConfig>
    <commMailAlert dn="sys/svc-ext/mail-alert-svc" adminState="enabled"
ipAddress="1.1.1.1" port="25" fromAddress="abc@cisco.com" >
      <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-1"
email="test@cisco.com" severity="informational"/>
      <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-2"
email="user@cisco.com" severity="major"/>
    </commMailAlert>
  </inConfig>
</configConfMo>
```

### Request Configure SMTP Properties Along with Mail Recipients without Individual Severity

```
<configConfMo cookie="1531920597/067cf5f8-7147-1147-8003-1a4c5a74a254"
inHierarchical="false" dn="sys/svc-ext/mail-alert-svc">
  <inConfig>
    <commMailAlert dn="sys/svc-ext/mail-alert-svc" adminState="enabled"
ipAddress="1.1.1.1" port="25" fromAddress="abc@cisco.com" >
      <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-1"
email="test@cisco.com"/>
      <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-2"
email="user@cisco.com"/>
    </commMailAlert>
  </inConfig>
</configConfMo>
```

### Request Configure only Mail Recipient

```
<configConfMo cookie="1531920597/067cf5f8-7147-1147-8003-1a4c5a74a254"
inHierarchical="false" dn="sys/svc-ext/mail-alert-svc/mail-recipient-3">
  <inConfig>
    <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-3"
email="user@cisco.com" severity="major"/>
  </inConfig>
</configConfMo>
```

### Request Configure only Mail Recipient without Severity

```
<configConfMo cookie="1531920597/067cf5f8-7147-1147-8003-1a4c5a74a254"
inHierarchical="false" dn="sys/svc-ext/mail-alert-svc/mail-recipient-3">
  <inConfig>
    <mailRecipient dn="sys/svc-ext/mail-alert-svc/mail-recipient-3"
email="user@cisco.com"/>
  </inConfig>
</configConfMo>
```

## Resetting All Components to Factory Defaults

Request:

```
<configConfMo dn='sys/rack-unit-1'
cookie="1484920480/dd879b5e-8746-1687-8003-be18652a6ca4" inHierarchical="true">
  <inConfig>
    <computeRackUnit dn='sys/rack-unit-1' resetComponents='all'>
    </computeRackUnit>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn='sys/rack-unit-1'
cookie="1484920480/dd879b5e-8746-1687-8003-be18652a6ca4" response="yes">
  <outConfig>
    <computeRackUnit dn="sys/rack-unit-1" adminPower="policy"
availableMemory="40960" model="UCSC-Cxxx-MxS" memorySpeed="2133"
name="UCS Cxxx MxS" numofAdaptors="1" numofCores="14" numofCoresEnabled="14"
numofCpus="1" numofEthHostIfs="2" numofFcHostIfs="2" numofThreads="28"
operPower="on" originalUuid="414949AC-22D6-4D0D-B0C0-F7950E9217C1"
presence="equipped" serverId="1" serial="FCH1834V23X" totalMemory="40960"
usrLbl="" uuid="414949AC-22D6-4D0D-B0C0-F7950E9217C1" vendor="Cisco Systems Inc"
cimcResetReason="graceful-reboot " assetTag="Unknown" adaptorSecureUpdate="Enabled"
resetComponents="components" storageResetStatus="Completed" vicResetStatus="Completed"
bmcResetStatus="Completed" status="modified"/>
  </outConfig>
</configConfMo>
```

### Resetting Storage, VIC, and BMC Components to Factory Defaults

Request:

```
<configConfMo dn='sys/rack-unit-1'
cookie="1484920480/dd879b5e-8746-1687-8003-be18652a6ca4" inHierarchical="true">
  <inConfig>
    <computeRackUnit dn='sys/rack-unit-1' resetComponents='storage,vic,bmc'>
  </computeRackUnit>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn='sys/rack-unit-1'
cookie="1484920480/dd879b5e-8746-1687-8003-be18652a6ca4" response="yes">
  <outConfig>
    <computeRackUnit dn="sys/rack-unit-1" adminPower="policy"
availableMemory="40960" model="UCSC-Cxxx-MxS" memorySpeed="2133"
name="UCS Cxxx MxS" numofAdaptors="1" numofCores="14" numofCoresEnabled="14"
numofCpus="1" numofEthHostIfs="2" numofFcHostIfs="2" numofThreads="28"
operPower="on" originalUuid="414949AC-22D6-4D0D-B0C0-F7950E9217C1"
presence="equipped" serverId="1" serial="FCH1834V23X" totalMemory="40960"
usrLbl="" uuid="414949AC-22D6-4D0D-B0C0-F7950E9217C1" vendor="Cisco Systems Inc"
cimcResetReason="graceful-reboot " assetTag="Unknown" adaptorSecureUpdate="Enabled"
resetComponents="components" storageResetStatus="Completed" vicResetStatus="Completed"
bmcResetStatus="Completed" status="modified"/>
  </outConfig>
</configConfMo>
```

### Enabling or Disabling the 6G or 12G Mixed Mode Speed on SAS Expander

Request:

```
<configConfMo dn='sys/rack-unit-1/sas-expander-1'
cookie="1484806041/908bffd4-6c46-166c-807c-67f2642a6ca4" inHierarchical="false" >
  <inConfig>
    <storageSasExpander dn='sys/rack-unit-1/sas-expander-1' mixed6G12GDriveSupport='Enabled'/>
```

```
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn='sys/rack-unit-1/sas-expander-1'
cookie='1484806041/908bffd4-6c46-166c-807c-67f2642a6ca4' response="yes"
<outConfig>
  <storageSasExpander id="1" name="SASEXP1" currentFwVersion="04.08.01_B075"
sasAddress="N/A" description="Storage controller - SAS Expander"
  mixed6G12GDriveSupport="Pending" status="modified" >
  </storageSasExpander>
</outConfig>
</configConfMo>
```




---

**Note** To disable the 6G or 12G Mixed Mode Speed, use the "mixed6G12GDriveSupport=disabled" attribute in the command.

---

### Clearing All Configurations of a Storage Controller

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
cookie='1488466281/3ee53bc7-49c1-19c1-8004-505545067ff0' inHierarchical='true'>
<inConfig>
  <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
  adminAction='clear-all-config' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
cookie='1488466281/3ee53bc7-49c1-19c1-8004-505545067ff0' response="yes">
<outConfig>
  <storageController id="SLOT-HBA" model="Cisco 12G SAS Modular Raid Controller"
  ...
  adminAction="no-op"
  dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA" status="modified">
  <storageControllerProps rn="controller-props" pciSlot="SLOT-HBA" health="Good"
  ...
  serial="" firmwarePackageBuild="24.12.1-0107"
  ttyLogStatus="Not Downloaded" status="modified"/>
  <storageControllerHealth rn="controller-health" id="SLOT-HBA"
  health="Good" status="modified"/>
  <generatedStorageControllerKeyId rn="gen-key-id"
  generatedKeyId="UCSC-MRAID12G__204aeea1" status="modified"/>
  <suggestedStorageControllerSecurityKey rn="suggested-sec-key"
  suggestedSecurityKey="4m5szE8z6@ELQ3Jlb3UkxbPI4m5szE8z" status="modified"/>
  <selfEncryptStorageController rn="ctr-self-encrypt" keyId="x" securityKey="Security
key"
  existingSecurityKey="Existing security key"
  keyManagement="" adminAction="no-op" status="modified"/>
  <storageRaidBattery rn="raid-battery" batteryType="No Battery" health="N/A"
  batteryStatus="BBU Not Present" batteryPresent="false" adminAction="no-op"
```

```

status="modified"/>
  <storageVirtualDriveCreatorUsingUnusedPhysicalDrive rn="virtual-drive-create"
  ...
  createdVirtualDriveDn="" operStatus="" adminAction="no-op"
  adminState="triggered" status="modified">
  <storageUnusedLocalDisk id="1" pdStatus="Unconfigured Good" coercedSize="475883 MB"
  health="Good" mediaType="HDD" status="modified"/>
  <storageLocalDisk id="1" pdStatus="Unconfigured Good" health="Good"
  ...
  foreignLocked="no" adminAction="no-op" rn="pd-1" status="modified">
  <storageLocalDiskProps rn="general-props" physicalDrive="1" pdStatus="Unconfigured Good"
  ...
  timeOfLastRefresh="" status="modified"/>
  <storageOperation rn="storage-operation" lropInProgress="false"
  currentLrop="No operation in progress" progressPercent="0"
  elapsedSeconds="0" status="modified"/>
  </storageLocalDisk>
  <firmwareRunning rn="fw-boot-loader"
  description="LSI Storage controller currently running boot loader firmware version"
  ...
  status="modified"/>
  <firmwareRunning rn="fw-system"
  description="LSI Storage controller currently running firmware version"
  ...
  status="modified"/>
  <firmwareBootDefinition rn="fw-boot-def"
  type="storage-controller" status="modified">
  <firmwareBootUnit rn="bootunit-combined"
  description="LSI Storage controller startup BIOS firmware version"
  ...
  status="modified"/>
  </firmwareBootDefinition>
  <storageControllerSettings rn="controller-settings" pciSlot="SLOT-HBA"
  ...
  autoEnhancedImport="true" status="modified"/>
  </storageController>
</outConfig>
</configConfMo>

```

## Resetting Storage Controller to Factory Defaults

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
cookie='1488466281/3ee53bc7-49c1-19c1-8004-505545067ff0' inHierarchical='true'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
      adminAction='reset-default-config' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
cookie='1488466281/3ee53bc7-49c1-19c1-8004-505545067ff0' response="yes">
  <outConfig>
    <storageController id="SLOT-HBA" model="Cisco 12G SAS Modular Raid Controller"
      ...
      adminAction="no-op"

```



```

dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA" status="modified">
<storageControllerProps rn="controller-props" pciSlot="SLOT-HBA" health="Good"
...
serial="" firmwarePackageBuild="24.12.1-0107"
ttyLogStatus="Not Downloaded" status="modified"/>
<storageControllerHealth rn="controller-health" id="SLOT-HBA"
health="Good" status="modified"/>
<generatedStorageControllerKeyId rn="gen-key-id"
generatedKeyId="UCSC-MRAID12G__204aeeal" status="modified"/>
<suggestedStorageControllerSecurityKey rn="suggested-sec-key"
suggestedSecurityKey="4m5szE8z6@ELQ3Jlb3UkxbPI4m5szE8z" status="modified"/>
<selfEncryptStorageController rn="ctr-self-encrypt" keyId="x" securityKey="Security
key"
existingSecurityKey="Existing security key"
keyManagement="" adminAction="no-op" status="modified"/>
<storageRaidBattery rn="raid-battery" batteryType="No Battery" health="N/A"
batteryStatus="BBU Not Present" batteryPresent="false" adminAction="no-op"
status="modified"/>
<storageVirtualDriveCreatorUsingUnusedPhysicalDrive rn="virtual-drive-create"
...
createdVirtualDriveDn="" operStatus="" adminAction="no-op"
adminState="triggered" status="modified">
<storageUnusedLocalDisk id="1" pdStatus="Unconfigured Good" coercedSize="475883 MB"
health="Good" mediaType="HDD" status="modified"/>
<storageLocalDisk id="1" pdStatus="Unconfigured Good" health="Good"
...
foreignLocked="no" adminAction="no-op" rn="pd-1" status="modified">
<storageLocalDiskProps rn="general-props" physicalDrive="1" pdStatus="Unconfigured Good"
...
timeOfLastRefresh="" status="modified"/>
<storageOperation rn="storage-operation" lropInProgress="false"
currentLrop="No operation in progress" progressPercent="0"
elapsedSeconds="0" status="modified"/>
</storageLocalDisk>
<firmwareRunning rn="fw-boot-loader"
description="LSI Storage controller currently running boot loader firmware version"
...
status="modified"/>
<firmwareRunning rn="fw-system"
description="LSI Storage controller currently running firmware version"
...
status="modified"/>
<firmwareBootDefinition rn="fw-boot-def"
type="storage-controller" status="modified">
<firmwareBootUnit rn="bootunit-combined"
description="LSI Storage controller startup BIOS firmware version"
...
status="modified"/>
</firmwareBootDefinition>
<storageControllerSettings rn="controller-settings" pciSlot="SLOT-HBA"
...
autoEnhancedImport="true" status="modified"/>
</storageController>
</outConfig>
</configConfMo>

```

## Hiding a Storage Virtual Drive

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-2/vd-1"
cookie="1490290813/f5921ed8-4b69-1b69-8006-e5de29114ca4" inHierarchical='true'>
  <inConfig>
    <storageVirtualDrive dn="sys/rack-unit-1/board/storage-SAS-SLOT-2/vd-1"
      adminAction="hide-virtual-drive" />
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-2/vd-1"
cookie="1490290813/f5921ed8-4b69-1b69-8006-e5de29114ca4" response="yes">
  <outConfig>
    <storageVirtualDrive id="1" name="test1" raidLevel="RAID 0"
      size="285148 MB" vdStatus="Optimal" health="Good"
      bootDrive="false" stripSize="64k" drivesPerSpan="1"
      spanDepth="1" accessPolicy="hidden" cachePolicy="direct-io"
      readPolicy="no-read-ahead" requestedWriteCachePolicy="write-through"
      currentWriteCachePolicy="write-through" diskCachePolicy="unchanged"
      allowBackgroundInit="true" autoSnapshot="false" autoDeleteOldest="true"
      driveState="Optimal" fdeCapable="no" fdeEnabled="no" adminAction="no-op"
      hotspareAction="no-op" targetId="1"
      physicalDrivesList="Physical drives to be used for virtual drive reconstruction.
      pd_id1,pd_id2,...pd_idN" status="modified" >
    </storageVirtualDrive>
  </outConfig>
</configConfMo>
```




---

**Note** To unhide a storage virtual drive, use `adminAction="unhide-virtual-drive"` in the command.

---

### Enabling or Disabling Secure Key Management

Request:

```
<configConfMo dn="sys/kmip-mgmt"
cookie="1486744606/2436e891-3048-1830-8002-be18652a6ca4" inHierarchical="false" >
  <inConfig>
    <kmipManagement dn="sys/kmip-mgmt" secureKeyManagement="enabled">
  </kmipManagement>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt"
cookie="1486744606/2436e891-3048-1830-8002-be18652a6ca4" response="yes">
  <outConfig>
    <kmipManagement dn="sys/kmip-mgmt"
      description="Key Management Interoperability Protocol"
      secureKeyManagement="enabled" serverRootCACertificate="Available"
      clientCertificate="Available" clientPrivateKey="Available"
      adminAction="no-op" status="modified"/>
  </outConfig>
```

```
</configConfMo>
```



**Note** To disable Secure Key Management, use `secureKeyManagement="disabled"` in the command.

### Configuring KMIP Server

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <kmipServer dn="sys/kmip-mgmt/kmip-server"
      ipAddress="10.10.10.10" port="6000" timeout="25">
    </kmipServer>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" response="yes">
  <outConfig>
    <kmipServer id="1" ipAddress="10.10.10.10" port="6000" timeout="25"
      testConnectionStatus="Unavailable" adminAction="no-op"
      dn="sys/kmip-mgmt/kmip-server" status="modified"/>
  </outConfig>
</configConfMo>
```

### Deleting KMIP Server

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <kmipServer dn="sys/kmip-mgmt/kmip-server" adminAction="delete" >
    </kmipServer>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" response="yes">
  <outConfig>
    <kmipServer id="1" ipAddress="" port="5696" timeout="5"
      adminAction="no-op" dn="sys/kmip-mgmt/kmip-server" status="modified"/>
  </outConfig>
</configConfMo>
```

## Viewing Secure Key Management Settings

Request:

```
< <configResolveClass dn="sys/kmip-mgmt"
cookie="1478234140/28bb863a-4073-1073-8002-e8374190b1d8" inHierarchical="false"
classId="kmipManagement">
```

Response:

```
<configResolveClass dn="sys/kmip-mgmt/"
cookie="1478235085/94b63d5a-4072-1072-8002-e8374190b1d8" response="yes" >
<outConfig>
  <kmipManagement dn="sys/kmip-mgmt" description="Key Management Interoperability Protocol"

  secureKeyManagement="enabled" serverRootCACertificate="Available"
  clientCertificate="Not Available" clientPrivateKey="Available"
  adminAction="no-op"/>
</outConfig>
</configResolveClass>
```

## Downloading Root CA Certificate (tftp)

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-ca-cert-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" inHierarchical="false">
<inConfig>
  <downloadRootCACertificate dn="sys/kmip-mgmt/kmip-ca-cert-download"
  protocol="tftp" remoteServer="10.10.10.10"
  remoteFile="/home/ss/cert/RootCA.pem">
  </downloadRootCACertificate>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-ca-cert-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" response="yes">
<outConfig>
  <downloadRootCACertificate dn="sys/kmip-mgmt/kmip-ca-cert-download"
  protocol="none" remoteServer="" remoteFile="" user="" pwd=""
  downloadStatus="COMPLETED" downloadProgress="100%" status="modified"/>
</outConfig>
</configConfMo>
```

## Exporting Root CA Certificate (scp)

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-ca-cert-export"
cookie="1478189648/3db712b5-4068-1068-8004-e8374190b1d8" inHierarchical="false" >
<inConfig>
  <exportRootCACertificate dn="sys/kmip-mgmt/kmip-ca-cert-export"
  protocol="scp" remoteServer="10.10.10.10" user="jsmith" pwd="johnpwd1980"
```

```

        remoteFile="/home/jsmith/cert/RootCA.pem">
    </exportRootCACertificate>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/kmip-mgmt/kmip-ca-cert-export"
cookie="1478189648/3db712b5-4068-1068-8004-e8374190b1d8" response="yes">
  <outConfig>
    <exportRootCACertificate dn="sys/kmip-mgmt/kmip-ca-cert-export"
      protocol="none" remoteServer="" remoteFile="" user="" pwd=""
      exportStatus="COMPLETED" exportProgress="100%" status="modified"/>
  </outConfig>
</configConfMo>

```

### Deleting Root CA Certificate

Request:

```

<configConfMo dn="sys/kmip-mgmt"
cookie="1478237721/12423b5d-4073-1073-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <kmipManagement dn="sys/kmip-mgmt"
      adminAction="delete-root-ca-certificate" >
    </kmipManagement>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/kmip-mgmt"
cookie="1478237721/12423b5d-4073-1073-8002-e8374190b1d8" response="yes">
  <outConfig>
    <kmipManagement dn="sys/kmip-mgmt"
      description="Key Management Interoperability Protocol"
      secureKeyManagement="enabled" serverRootCACertificate="Not Available"
      clientCertificate="Not Available" clientPrivateKey="Not Available"
      adminAction="no-op" status="modified"/>
  </outConfig>
</configConfMo>

```

### Testing Connection with KMIP Server

Request:

```

<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <kmipServer dn="sys/kmip-mgmt/kmip-server" adminAction="test-connection" >
  </kmipServer>
  </inConfig>
</configConfMo>

```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-server"
cookie="1478249230/3d18c6f9-4076-1076-8002-e8374190b1d8" response="yes">
<outConfig>
  <kmipServer id="1" ipAddress="10.10.10.10" port="5696"
    timeout="5" adminAction="no-op" dn="sys/kmip-mgmt/kmip-server"
    status="modified"/>
</outConfig>
</configConfMo>
```

## Downloading a Client Private Key

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-private-key-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" inHierarchical="false">
<inConfig>
  <downloadClientPrivateKey dn="sys/kmip-mgmt/kmip-private-key-download"
    protocol="scp" remoteServer="10.10.10.10" user="jsmith" pwd="pwd1234"
    remoteFile="/home/ss/cert/client_private.pem">
  </downloadClientPrivateKey>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-private-key-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" response="yes">
<outConfig>
  <downloadClientPrivateKey dn="sys/kmip-mgmt/kmip-private-key-download"
    protocol="none" remoteServer="" remoteFile="" user="" pwd=""
    downloadStatus="COMPLETED" downloadProgress="100%" status="modified"/>
</outConfig>
</configConfMo>
```

## Exporting a Client Private Key

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-private-key-export"
cookie="1478247863/eb2fa9cd-4075-1075-8002-e8374190b1d8" inHierarchical="false" >
<inConfig>
  <exportClientPrivateKey dn="sys/kmip-mgmt/kmip-private-key-export"
    protocol="scp" remoteServer="10.10.10.10" user="jsmith" pwd="Johnpwd1982"
    remoteFile="/home/ss/cert/KMIP/Client-Pvt-Key.pem">
  </exportClientPrivateKey>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-private-key-export"
cookie="1478247863/eb2fa9cd-4075-1075-8002-e8374190b1d8" response="yes">
<outConfig>
  <exportClientPrivateKey dn="sys/kmip-mgmt/kmip-private-key-export"
    protocol="none" remoteServer="" remoteFile="" user="" pwd=""
  </exportClientPrivateKey>
</outConfig>
</configConfMo>
```

```

    exportStatus="COMPLETED" exportProgress="100%" status="modified"/>
  </outConfig>
</configConfMo>

```

### Deleting a Client Private Key

Request:

```

<configConfMo dn="sys/kmip-mgmt"
cookie="1478236687/46db1685-4073-1073-8003-e8374190b1d8" inHierarchical="false" >
  <inConfig>
    <kmipManagement dn="sys/kmip-mgmt" adminAction="delete-client-private-key" >
    </kmipManagement>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/kmip-mgmt"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" response="yes">
  <outConfig>
    <kmipManagement dn="sys/kmip-mgmt"
description="Key Management Interoperability Protocol"
secureKeyManagement="enabled" serverRootCACertificate="Not Available"
clientCertificate="Not Available" clientPrivateKey="Not Available"
adminAction="no-op" status="modified"/>
  </outConfig>
</configConfMo>

```

### Downloading a Client Certificate

Request:

```

<configConfMo dn="sys/kmip-mgmt/kmip-client-cert-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" inHierarchical="false" >
  <inConfig>
    <downloadClientCertificate dn="sys/kmip-mgmt/kmip-client-cert-download"
protocol="scp" remoteServer="10.10.10.10" user="jsmith" pwd="Johnpwd1982"
remoteFile="/home/ss/cert/Client_cert.pem">
    </downloadClientCertificate>
  </inConfig>
</configConfMo>

```

```

<configConfMo dn="sys/kmip-mgmt/kmip-client-cert-download"
cookie="1478184218/cf931a62-4066-1066-8003-e8374190b1d8" response="yes">
  <outConfig>
    <downloadClientCertificate dn="sys/kmip-mgmt/kmip-client-cert-download"
protocol="none" remoteServer="" remoteFile="" user="" pwd=""
downloadStatus="COMPLETED" downloadProgress="100%" status="modified"/>
  </outConfig>
</configConfMo>

```

### Exporting a Client Certificate

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-client-cert-export"
cookie="1478187971/13b8e805-4068-1068-8003-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <exportClientCertificate dn="sys//rack-unit-1/kmip-mgmt/kmip-client-cert-export"
      protocol="scp" remoteServer="10.10.10.10" user="jsmith" pwd="Johnpwd1982"
      remoteFile="/home/ss/cert/KMIP/ClientCert.pem">
    </exportClientCertificate>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-client-cert-export"
cookie="1478247863/eb2fa9cd-4075-1075-8002-e8374190b1d8" response="yes">
  <outConfig>
    <exportClientCertificate dn="sys/kmip-mgmt/kmip-client-cert-export"
      protocol="none" remoteServer="" remoteFile="" user="" pwd=""
      exportStatus="COMPLETED" exportProgress="100%" status="modified"/>
  </outConfig>
</configConfMo>
```

### Deleting a Client Certificate

Request:

```
<configConfMo dn="sys/kmip-mgmt"
cookie="1478237721/12423b5d-4073-1073-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <kmipManagement dn="sys/kmip-mgmt" adminAction="delete-client-certificate" >
  </kmipManagement>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt"
cookie="1478237721/12423b5d-4073-1073-8002-e8374190b1d8" response="yes">
  <outConfig>
    <kmipManagement dn="sys/kmip-mgmt" description="Key Management Interoperability Protocol"

      secureKeyManagement="enabled" serverRootCACertificate="Not Available"
      clientCertificate="Not Available" clientPrivateKey="Not Available" adminAction="no-op"
      status="modified"/>
  </outConfig>
</configConfMo>
```

### Deleting KMIP Server Login Details

Request:

```
<configConfMo dn="sys/kmip-mgmt/kmip-login"
cookie="1478254180/02b1c8b1-4077-1077-8003-e8374190b1d8" inHierarchical="false" >
  <inConfig>
    <kmipServerLogin dn="sys/kmip-mgmt/kmip-login" adminAction="clear">
  </kmipServerLogin>
```



```
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/kmip-mgmt/kmip-login"
cookie="1478254180/02b1c8b1-4077-1077-8003-e8374190b1d8" response="yes">
  <outConfig>
    <kmipServerLogin dn="sys/kmip-mgmt/kmip-login"
      <b>accountStatus="disabled" name="" pwd="" adminAction="no-op" status="modified" />
    </outConfig>
  </configConfMo>
```

### Unlocking Foreign Configuration on a Self Encrypted Drive

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt'
cookie='1480557066/0583da3f-4290-1290-8021-127a1e1b0ff4' inHierarchical='false'>
  <inConfig>
    <selfEncryptStorageController
dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt'
      <b>adminAction='unlock-secured-drives' />
    </inConfig>
  </configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1480557066/0583da3f-4290-1290-8021-127a1e1b0ff4" response="yes">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
      keyId="UCSC-MRAID12G_SV53647770_1fd23aac" securityKey="Security key"
      existingSecurityKey="Existing security key" keyManagement=""
      adminAction="no-op" <b>status="modified" >
    </selfEncryptStorageController>
  </outConfig>
</configConfMo>
```

### Importing Foreign Configuration to a Self Encrypted Drive

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
cookie='1480557066/0583da3f-4290-1290-8021-127a1e1b0ff4' inHierarchical='false'>
  <inConfig>
    <storageController dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
      <b>adminAction='import-foreign-config' />
    </inConfig>
  </configConfMo>
```

Response:

```
<configConfMo dn='sys/rack-unit-1/board/storage-SAS-SLOT-HBA'
```

```

cookie="1480557500/2d74a062-428f-128f-8022-127a1e1b0ff4" response="yes" >
<outConfig>
  <storageController id="SLOT-HBA" model="Cisco 12G SAS Modular Raid Controller"
    pciSlot="SLOT-HBA" presence="equipped" raidSupport="yes" serial="SV53647770"
    type="SAS" vendor="LSI Logic" selfEncryptEnabled="yes" adminAction="no-op"
    dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA" >
  </storageController>
</outConfig>
</configConfMo>

```

## Enabling Self Encrypted Drive with Key Management as Local and KMIP Disabled

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478342437/3c993fcb-408c-108c-8002-e8374190b1d8" inHierarchical="false" >
  <inConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="test123" securityKey="test123" adminAction="enable-self-encrypt"
keyManagement="local">
    </selfEncryptStorageController>
  </inConfig>
</configConfMo>

```

Response:

As the configuration takes time, you see an empty response.

```

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478342437/3c993fcb-408c-108c-8002-e8374190b1d8" response="yes">
  <outConfig>
  </outConfig>
</configConfMo>

```

After the configuration is completed, send the following request:

```

<configResolveClass
cookie="1490834627/de1ed316-4be8-1be8-92d4-20be7d8bf200" inHierarchical="false"
classId="selfEncryptStorageController"/>

```

You see the following response:

```

<configResolveClass
cookie="1490834627/de1ed316-4be8-1be8-92d4-20be7d8bf200" response="yes"
classId="selfEncryptStorageController">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="testkeyid" securityKey="Security key" existingSecurityKey="Existing security key"

  keyManagement="" adminAction="no-op" >
    </selfEncryptStorageController>
  </outConfig>
</configResolveClass>

```

## Enabling Self Encrypted Drive with Key Management as Remote and KMIP Enabled

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478340466/cde62027-408b-108b-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
      adminAction="enable-self-encrypt" keyManagement="remote">
    </selfEncryptStorageController>
  </inConfig>
</configConfMo>
```

Response:

As the configuration takes time, you see an empty response.

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478340466/cde62027-408b-108b-8002-e8374190b1d8" response="yes">
  <outConfig>
</outConfig>
</configConfMo>
```

After the configuration is completed, send the following request:

```
<configResolveClass
cookie="1490834627/deled316-4be8-1be8-92d4-20be7d8bf200" inHierarchical="false"
classId="selfEncryptStorageController"/>
```

You see the following response:

```
<configResolveClass
cookie="1490834627/deled316-4be8-1be8-92d4-20be7d8bf200" response="yes"
classId="selfEncryptStorageController">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
      keyId="testkeyid" securityKey="Security key" existingSecurityKey="Existing security key"

      keyManagement="" adminAction="no-op" >
    </selfEncryptStorageController>
  </outConfig>
</configResolveClass>
```

## Switching Key Management From Local to Remote with Existing Security Key

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478343933/7da81dea-408c-108c-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
      adminAction="switch-local-to-remote" keyManagement="remote"
      existingSecurityKey="test123">
    </selfEncryptStorageController>
```

```
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478343933/7da81dea-408c-108c-8002-e8374190b1d8" response="yes">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="UCSC-MRAID12G_SV52731947_1fb07b15" securityKey="Security key"
  existingSecurityKey="Existing security key" keyManagement=""
  adminAction="no-op" status="modified"/>
    </outConfig>
  </configConfMo>
```

### Switching Key Management From Remote to Local with Key ID and Security Key

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478343933/7da81dea-408c-108c-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  adminAction="switch-remote-to-local" keyManagement="local"
  keyId="test1234" securityKey="test1234">
    </selfEncryptStorageController>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478343933/7da81dea-408c-108c-8002-e8374190b1d8" response="yes">
  <outConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  keyId="test1234" securityKey="Security key" existingSecurityKey="Existing security key"
  keyManagement="" adminAction="no-op" status="modified"/>
    </outConfig>
  </configConfMo>
```

### Disabling Security Enabled Drive when Key Management is Local

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478342437/3c993fcb-408c-108c-8002-e8374190b1d8" inHierarchical="false">
  <inConfig>
    <selfEncryptStorageController
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
  adminAction="disable-self-encrypt" >
    </selfEncryptStorageController>
  </inConfig>
```

```
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/ctr-self-encrypt"
cookie="1478342437/3c993fcb-408c-108c-8002-e8374190bd8" response="yes">
  <outConfig>
  </outConfig>
</configConfMo>
```

## Examples of Common Server Management Tasks Contd.

The examples in this section show how to use the Cisco IMC XML API to perform common server management tasks. Each example shows the XML API request followed by the response from Cisco IMC.

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## Viewing FlexUtil Controller Properties

Request:

```
<configResolveClass cookie='1399460397/43d31630-f8cd-18cd-8003-1d35daf6083c'
classId='storageFlexUtilController' inHierarchical='true'>
</configResolveClass>
```

Response:

```
<configResolveClass cookie="1486763533/58d8efa6-4834-1834-8014-f445e2caa600"
response="yes" classId="storageFlexUtilController">
<outConfigs>
  <storageFlexUtilController id="Flexutil" productName="Cisco Flexutil"
  controllerName="SDHC" controllerStatus="OK" internalState="OK"
  physicalDriveCount="1" virtualDriveCount="5" adminAction="no-op"
  dn="sys/rack-unit-1/board/storage-flexutil-Flexutil" >
  <storageFlexUtilHealth rn="health" health="OK" >
  </storageFlexUtilHealth>
  <storageFlexUtilOperationalProfile rn="oper-profile"
  ioReadErrorThreshold="20" ioWriteErrorThreshold="0" >
  </storageFlexUtilOperationalProfile>
  <storageFlexUtilPhysicalDrive physicalDrive="microSD" controller="Flexutil"
  pdStatus="present" serialNumber="0x25472b6c" manufacturerId="3" oemId="SD"
  productName="SL64G" productRevision="8.0" manufacturerDate="9/2016"
  writeEnabled="false" blockSize="512 bytes" capacity="60906 MB" health="healthy"
  readErrorCount="0" readErrorThreshold="20" writeErrorCount="10"
  writeErrorThreshold="0" partitionCount="5"
  drivesEnabled="SCU Diagnostics HUU Drivers UserPartition" rn="card-microSD" >
  </storageFlexUtilPhysicalDrive>
  <storageFlexUtilVirtualDrive partitionId="1" partitionName="SCU"
  virtualDrive="Cisco Server Configuration Utility" driveScope="Non-RAID" size="1280 MB"
  driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
  operationInProgress="NA" lastOperationStatus="none" adminAction="no-op" rn="vd-SCU" >
  </storageFlexUtilVirtualDrive>
  <storageFlexUtilVirtualDrive partitionId="2" partitionName="Diagnostics"
  virtualDrive="UCS Rack Server Diagnostics" driveScope="Non-RAID" size="256 MB"
  driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
  operationInProgress="NA" lastOperationStatus="none" adminAction="no-op"
  rn="vd-Diagnostics" >
  </storageFlexUtilVirtualDrive>
  <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
  virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID" size="1536 MB"
  driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
  operationInProgress="NA" lastOperationStatus="none" adminAction="no-op" rn="vd-HUU" >
  </storageFlexUtilVirtualDrive>
  <storageFlexUtilVirtualDrive partitionId="4" partitionName="Drivers"
  virtualDrive="Cisco Drivers Update Utility" driveScope="Non-RAID" size="8192 MB"
  driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
  operationInProgress="NA" lastOperationStatus="none" adminAction="no-op" rn="vd-Drivers"
  >
  </storageFlexUtilVirtualDrive>
  <storageFlexUtilVirtualDrive partitionId="5" partitionName="UserPartition"
  virtualDrive="User Partition" driveScope="Non-RAID" size="41442 MB"
  driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
  operationInProgress="NA" lastOperationStatus="NA" adminAction="no-op" rn="vd-UserPartition"
  >
  </storageFlexUtilVirtualDrive>
  <storageFlexUtilVirtualDriveImageMap virtualDrive="SCU" map="None" remoteShare="None"
  remoteFile="None" mountOptions="None" username="" password="" adminAction="no-op"
  rn="vdrive-map-SCU" >
  </storageFlexUtilVirtualDriveImageMap>
```

```

    <storageFlexUtilVirtualDriveImageMap virtualDrive="Diagnostics" map="None"
remoteShare="None"
    remoteFile="None" mountOptions="None" username="" password="" adminAction="no-op"
    rn="vdrive-map-Diagnostics" >
</storageFlexUtilVirtualDriveImageMap>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="HUU" map="None" remoteShare="None"
remoteFile="None" mountOptions="None" username="" password="" adminAction="no-op"
    rn="vdrive-map-HUU" >
</storageFlexUtilVirtualDriveImageMap>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="Drivers" map="None" remoteShare="None"

remoteFile="None" mountOptions="None" username="" password="" adminAction="no-op"
    rn="vdrive-map-Drivers" >
</storageFlexUtilVirtualDriveImageMap>
</storageFlexUtilController>
</outConfigs>
</configResolveClass>

```

### Verifying the Health of the FlexUtil Controller

Request:

```

<configResolveClass cookie='1399460397/43d31630-f8cd-18cd-8003-1d35daf6083c'
classId='storageFlexUtilHealth' inHierarchical='false'>
</configResolveClass>

```

Response:

```

<configResolveClass cookie="1486765376/f44bcb73-4834-1834-8015-f445e2caa600"
response="yes" classId="storageFlexUtilHealth">
<outConfig>
  <storageFlexUtilHealth
    dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/health"
    health="OK" >
  </storageFlexUtilHealth>
</outConfig>
</configResolveClass>

```

### Resetting FlexUtil Card Configuration

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil'
cookie='1379037053/15abc180-e63a-163a-8002-7389daf6083c' inHierarchical='true'>
<inConfig>
  <storageFlexUtilController dn='sys/rack-unit-1/board/storage-flexutil-Flexutil'
    adminAction='reset-card-configuration'>
  </storageFlexUtilController>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil"
cookie="1490845829/45be7559-4beb-1beb-8002-1c57e2caa600" response="yes">
<outConfig>
  <storageFlexUtilController id="Flexutil" productName="Cisco Flexutil"
    controllerName="SDHC" controllerStatus="OK" internalState="Connected"

```



```

phyveCount="5" adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil"
  status="modified" >
</storageFlexUtilController>
</outConfig>
</configConfMo>

```

### Configuring FlexUtil Operational Profile Properties

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/oper-profile'
cookie='1486766368/919d65ee-4835-1835-8016-f445e2caa600' inHierarchical='true'>
  <inConfig>
    <storageFlexUtilOperationalProfile
      dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/oper-profile'
      ioReadErrorThreshold='50' ioWriteErrorThreshold='50' >
    </storageFlexUtilOperationalProfile>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/oper-profile"
cookie="1486766368/919d65ee-4835-1835-8016-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilOperationalProfile
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/oper-profile"
      ioReadErrorThreshold="50" ioWriteErrorThreshold="50" status="modified" >
    </storageFlexUtilOperationalProfile>
  </outConfig>
</configConfMo>

```

### Viewing FlexUtil Operational Profile Properties

Request:

```

<configResolveClass cookie='1399460397/43d31630-f8cd-18cd-8003-1d35daf6083c'
classId='storageFlexUtilOperationalProfile' inHierarchical='false'>
</configResolveClass>

```

Response:

```

<configResolveClass cookie="1486765376/f44bcb73-4834-1834-8015-f445e2caa600"
response="yes" classId="storageFlexUtilOperationalProfile">
  <outConfig>
    <storageFlexUtilOperationalProfile
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/oper-profile"
      ioReadErrorThreshold="20" ioWriteErrorThreshold="0" >
    </storageFlexUtilOperationalProfile>
  </outConfig>
</configResolveClass>

```

### Viewing FlexUtil Physical Drive Properties

Request:

```
<configResolveClass cookie='1399460397/43d31630-f8cd-18cd-8003-1d35daf6083c'
classId='storageFlexUtilPhysicalDrive' inHierarchical='false'>
</configResolveClass>
```

Response:

```
<configResolveClass cookie="1486765376/f44bcb73-4834-1834-8015-f445e2caa600"
response="yes" classId="storageFlexUtilPhysicalDrive">
<outConfig>
<storageFlexUtilPhysicalDrive physicalDrive="microSD" controller="Flexutil"
pdStatus="present" serialNumber="0x25472b6c" manufacturerId="3" oemId="SD"
productName="SL64G" productRevision="8.0" manufacturerDate="9/2016"
writeEnabled="false" blockSize="512 bytes" capacity="60906 MB"
health="healthy" readErrorCount="0" readErrorThreshold="20"
writeErrorCount="10" writeErrorThreshold="0" partitionCount="5"
drivesEnabled="SCU Diagnostics HUU Drivers UserPartition"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/card-microSD" >
</storageFlexUtilPhysicalDrive>
</outConfig>
</configResolveClass>
```

### Viewing FlexUtil Virtual Drive Properties

Request:

```
<configResolveClass cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600'
classId='storageFlexUtilVirtualDrive' inHierarchical='false'>
</configResolveClass>
```

Response:

```
<configResolveClass cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600"
response="yes" classId="storageFlexUtilVirtualDrive">
<outConfig>
<storageFlexUtilVirtualDrive partitionId="1" partitionName="SCU"
virtualDrive="Cisco Server Configuration Utility" driveScope="Non-RAID" size="1280 MB"
driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="none" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU" >
</storageFlexUtilVirtualDrive>
<storageFlexUtilVirtualDrive partitionId="2" partitionName="Diagnostics"
virtualDrive="UCS Rack Server Diagnostics" driveScope="Non-RAID"
size="256 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics"
>
</storageFlexUtilVirtualDrive>
<storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID" size="1536 MB"
driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="none" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU" >
</storageFlexUtilVirtualDrive>
<storageFlexUtilVirtualDrive partitionId="4" partitionName="Drivers"
virtualDrive="Cisco Drivers Update Utility" driveScope="Non-RAID" size="8192 MB"
driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="none" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers" >
```

```

</storageFlexUtilVirtualDrive>
<storageFlexUtilVirtualDrive partitionId="5" partitionName="UserPartition"
virtualDrive="User Partition" driveScope="Non-RAID" size="41442 MB"
driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="NA" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition" >
</storageFlexUtilVirtualDrive>
</outConfig>
</configResolveClass>

```

### Enabling SCU Partition on FlexUtil Card

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
<inConfig>
<storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU'

adminAction='enable-vd'>
</storageFlexUtilVirtualDrive>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
<outConfig>
<storageFlexUtilVirtualDrive partitionId="1" partitionName="SCU"
virtualDrive="Cisco Server Configuration Utility" driveScope="Non-RAID"
size="1280 MB" driveStatus="Healthy" hostAccessible="Connected"
driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU"
status="modified" >
</storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Enabling Diagnostics Partition on FlexUtil Card

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
<inConfig>
<storageFlexUtilVirtualDrive
dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics'
adminAction='enable-vd'>
</storageFlexUtilVirtualDrive>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
<outConfig>
<storageFlexUtilVirtualDrive partitionId="2" partitionName="Diagnostics"
virtualDrive="Diagnostics" driveScope="Non-RAID"

```

```

    size="256 MB" driveStatus="Healthy" hostAccessible="Connected"
    driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
    adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics"
    status="modified" >
  </storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Enabling HUU Partition on FlexUtil Card

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'

      adminAction='enable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
      virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID"
      size="1536 MB" driveStatus="Healthy" hostAccessible="Connected"
      driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
      status="modified" >
    </storageFlexUtilVirtualDrive>
  </outConfig>
</configConfMo>

```

### Enabling Drivers Partition on FlexUtil Card

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers'

      adminAction='enable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="4" partitionName="Drivers"
      virtualDrive="Drivers" driveScope="Non-RAID"
      size="8192 MB" driveStatus="Healthy" hostAccessible="Connected"
      driveType="Removable" operationInProgress="NA" lastOperationStatus="none"

```

```

adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers"
status="modified" >
</storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Enabling User Partition on FlexUtil Card

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
<inConfig>
<storageFlexUtilVirtualDrive
dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/UserPartition'
adminAction='enable-vd'>
</storageFlexUtilVirtualDrive>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
<outConfig>
<storageFlexUtilVirtualDrive partitionId="5" partitionName="UserPartition"
virtualDrive="User Partition" driveScope="Non-RAID"
size="41442 MB" driveStatus="Healthy" hostAccessible="Connected"
driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition"

status="modified" >
</storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Disabling FlexUtil SCU Partition on the Host

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
<inConfig>
<storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU'

adminAction='disable-vd'>
</storageFlexUtilVirtualDrive>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
<outConfig>
<storageFlexUtilVirtualDrive partitionId="1" partitionName="SCU"
virtualDrive="Cisco Server Configuration Utility" driveScope="Non-RAID"
size="1280 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-SCU"

```

```

status="modified" >
  </storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Disabling FlexUtil Diagnostics Partition on the Host

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive
dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics'
  adminAction='disable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="2" partitionName="Diagnostics"
virtualDrive="UCS Rack Server Diagnostics" driveScope="Non-RAID" size="256 MB"
driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Diagnostics"
status="modified" >
    </storageFlexUtilVirtualDrive>
  </outConfig>
</configConfMo>

```

### Disabling FlexUtil HUU Partition on the Host

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'

  adminAction='disable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID"
size="1536 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
status="modified" >
    </storageFlexUtilVirtualDrive>

```

```
</outConfig>
</configConfMo>
```

### Disabling FlexUtil Drivers Partition on the Host

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers'

      adminAction='disable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="4" partitionName="Drivers"
      virtualDrive="Cisco Drivers Update Utility" driveScope="Non-RAID" size="8192 MB"
      driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
      operationInProgress="NA" lastOperationStatus="none" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-Drivers" status="modified" >
    </storageFlexUtilVirtualDrive>
  </outConfig>
</configConfMo>
```

### Disabling FlexUtil User Partition on the Host

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive
      dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition'
      adminAction='disable-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="5" partitionName="UserPartition"
      virtualDrive="User Partition" driveScope="Non-RAID" size="41442 MB"
      driveStatus="Healthy" hostAccessible="Not-Connected" driveType="Removable"
      operationInProgress="NA" lastOperationStatus="NA" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-UserPartition" status="modified"
    >
```

```

    </storageFlexUtilVirtualDrive>
  </outConfig>
</configConfMo>

```

### Erasing FlexUtil HUU Partition on the Host

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'
cookie='1486774652/887cbaa6-4837-1837-8017-f445e2caa600' inHierarchical='false'>
  <inConfig>
    <storageFlexUtilVirtualDrive dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU'

      adminAction='erase-vd'>
    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configResolveDn dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="1486774652/887cbaa6-4837-1837-8017-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID"
size="1536 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
driveType="Removable" operationInProgress="Erasing" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU" >
    </storageFlexUtilVirtualDrive></outConfig>
  </configResolveDn>

```




---

**Note** The same erase operation can be done on the SCU, Diagnostics, User, and Drivers partitions as well.

---

### Mapping An NFS Share to a FlexUtil Partition

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU'
cookie='1486779436/44127f73-4838-1838-8019-f445e2caa600' inHierarchical='true'>
  <inConfig>
    <storageFlexUtilVirtualDriveImageMap
dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU'
map='nfs' remoteShare='10.10.10.1:/nfsshare' remoteFile='ucs-cxxxmx-huu-3.1.0.25.iso'
mountOptions='nolock' username='' password='' adminAction='map' />
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU"
cookie="1486779436/44127f73-4838-1838-8019-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="HUU" map="nfs"
remoteShare="10.10.10.1:/nfsshare" remoteFile="ucs-cxxxmx-huu-3.1.0.25.iso"

```



```

mountOptions="nolock,noexec,noac,soft,timeo=60,retry=2,rsize=3072,wsiz=3072"
username="" password="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU"
status="modified" >
</storageFlexUtilVirtualDriveImageMap>
</outConfig>
</configConfMo>

```

## Mapping A CIFS Share to a FlexUtil Partition

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU'
cookie='1486779436/44127f73-4838-1838-8019-f445e2caa600' inHierarchical='true'>
<inConfig>
<storageFlexUtilVirtualDriveImageMap
dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU'
map='cifs' remoteShare='10.10.10.1:/utility' remoteFile='ucs-cxxxxmx-huu-3.1.0.54.iso'
username='' password='' adminAction='map' />
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU"
cookie="1486779436/44127f73-4838-1838-8019-f445e2caa600" response="yes">
<outConfig>
<storageFlexUtilVirtualDriveImageMap virtualDrive="HUU" map="cifs"
remoteShare="//10.127.45.252/utility" remoteFile="ucs-cxxxxmx-huu-3.1.0.54.iso"
mountOptions="username=Administrator,
password*****,soft,nounix,noserverino,rsize=3072,wsiz=3072"
username="" password="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU" status="modified"/>
</outConfig>
</configConfMo>

```

## Viewing FlexUtil Virtual Drive Map After Mapping a Partition

Request:

```

<configResolveClass cookie='1379140830/3f492a88-e652-1652-8004-7389daf6083c'
classId='storageFlexUtilVirtualDriveImageMap' inHierarchical='false'>
</configResolveClass>

```

Response:

```

<configResolveClass cookie="1486779436/44127f73-4838-1838-8019-f445e2caa600"
response="yes" classId="storageFlexUtilVirtualDriveImageMap">
<outConfigs>
<storageFlexUtilVirtualDriveImageMap virtualDrive="SCU" map="None"
remoteShare="None" remoteFile="None" mountOptions="None" username=""
password="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-SCU" >
</storageFlexUtilVirtualDriveImageMap>
<storageFlexUtilVirtualDriveImageMap virtualDrive="Diagnostics" map="None"
remoteShare="None" remoteFile="None" mountOptions="None" username="" password=""
adminAction="no-op"

```

```

dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-Diagnostics" >
</storageFlexUtilVirtualDriveImageMap>
<storageFlexUtilVirtualDriveImageMap virtualDrive="HUU" map="nfs"
remoteShare="10.104.236.81\:/nfsshare" remoteFile="ucs-cxxxmx-huu-3.1.0.25.iso"
mountOptions="nolock,noexec,noac,soft,timeo=60,retry=2,rsize=3072,wsiz=3072"
username="" password="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU" >
</storageFlexUtilVirtualDriveImageMap>
<storageFlexUtilVirtualDriveImageMap virtualDrive="Drivers" map="None" remoteShare="None"

remoteFile="None" mountOptions="None" username="" password="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-Drivers" >
</storageFlexUtilVirtualDriveImageMap>
</outConfigs>
</configResolveClass>

```



**Note** In the above response, the HUU partition has been currently mapped.

### Updating the FlexUtil Virtual Drive Properties After Mapping An Image

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="0000096648/22434b82-0017-1017-8002-0247e2caa600" inHierarchical="false">
<inConfig>
  <storageFlexUtilVirtualDrive dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"

  adminAction="update-vd" >
</storageFlexUtilVirtualDrive>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="1486781086/a60be5c6-4838-1838-801a-f445e2caa600" response="yes">
<outConfig>
  <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID"
size="1536 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
driveType="Removable" operationInProgress="Updating" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU" >
</storageFlexUtilVirtualDrive>
</outConfig>
</configConfMo>

```

### Cancelling the Update Operation of a FlexUtil Virtual Drive

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="0000096648/22434b82-0017-1017-8002-0247e2caa600" inHierarchical="false">
<inConfig>
  <storageFlexUtilVirtualDrive dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"

  adminAction="cancel-update" >

```

```

    </storageFlexUtilVirtualDrive>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU"
cookie="1488698676/3405e6d4-49f7-19f7-8018-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDrive partitionId="3" partitionName="HUU"
      virtualDrive="Cisco Host Upgrade Utility" driveScope="Non-RAID"
      size="1536 MB" driveStatus="Healthy" hostAccessible="Not-Connected"
      driveType="Removable" operationInProgress="NA"
      lastOperationStatus="Update-Failed"
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vd-HUU" >
    </storageFlexUtilVirtualDrive>
  </outConfig>
</configConfMo>

```

### Unmapping a Share on a FlexUtil Partition

Request:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-SCU'
cookie='1486781086/a60be5c6-4838-1838-801a-f445e2caa600' inHierarchical='true'>
  <inConfig>
    <storageFlexUtilVirtualDriveImageMap
      dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-SCU'
      adminAction='unmap' />
    </inConfig>
  </configConfMo>

```

Response:

```

<configConfMo dn='sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-SCU'
cookie="1486781086/a60be5c6-4838-1838-801a-f445e2caa600" response="yes">
  <outConfig>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="SCU" map="None"
      remoteShare="None" remoteFile="None" mountOptions="None" username=""
      password="" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-SCU" >
    </storageFlexUtilVirtualDriveImageMap>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="Diagnostics"
      map="None" remoteShare="None" remoteFile="None" mountOptions="None"
      username="" password="" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-Diagnostics" >
    </storageFlexUtilVirtualDriveImageMap>
    <storageFlexUtilVirtualDriveImageMap virtualDrive="HUU" map="nfs"
      remoteShare="10.104.236.81\:/nfsshare" remoteFile="ucs-cxxxmx-huu-3.1.0.25.iso"
      mountOptions="&apos;nolock,noexec,noac,soft,timeo=60,retry=2,rsize=3072,wsiz=3072&apos;"
      username="" password=""
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-HUU"
    >
  </storageFlexUtilVirtualDriveImageMap>
  <storageFlexUtilVirtualDriveImageMap virtualDrive="Drivers" map="None"
      remoteShare="None" remoteFile="None" mountOptions="None" username="" password=""
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexutil-Flexutil/vdrive-map-Drivers"
  >
  </storageFlexUtilVirtualDriveImageMap>

```

```
</outConfig>
</configConfMo>
```

## Viewing the Properties of FlexFlash Controller

Request:

```
<configResolveClass cookie='1487358764/81211fa8-48bf-18bf-8009-8446e2caa600'
classId='storageFlexFlashController' inHierarchical='false'>
```

Response:

```
<configResolveClass cookie="1487358764/81211fa8-48bf-18bf-8009-8446e2caa600"
response="yes" classId="storageFlexFlashController">
<outConfig>
<storageFlexFlashController id="FlexFlash-0" productName="Cisco FlexFlash"
fwVersion="1.3.2 build 166" vendor="Cypress" controllerStatus="OK"
internalState="Connected" cardsManageable="Yes"e="" autoSync=""
cardSlot="" nonUtilPartitionName="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0" >
</storageFlexFlashController>
</outConfig>
</configResolveClass>
```

## Resetting the FlexFlash Controller

Request:

```
<configConfMo dn='sys/rack-unit-1/board/storage-flexflash-FlexFlash-0'
cookie='1486398317/ddd019fb-47df-17df-8009-3a42e2caa600' inHierarchical='false' >
<inConfig>
<storageFlexFlashController dn='sys/rack-unit-1/board/storage-flexflash-FlexFlash-0'
adminAction='reset-flexflash-controller' />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0"
cookie="1486398317/ddd019fb-47df-17df-8009-3a42e2caa600" response="yes">
<outConfig>
<storageFlexFlashController id="FlexFlash-0" productName="Cisco FlexFlash"
fwVersion="1.3.2 build 165" vendor="Cypress" controllerStatus="OK"
internalState="Connected" cardsManageable="Yes" partitionName="" autoSync=""
cardSlot="" nonUtilPartitionName="" adminAction="no-op"
dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0"
status="modified" >
</storageFlexFlashController>
</outConfig>
</configConfMo>
```

## Configuring FlexFlash Card

Request:

```
<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0
cookie="1486399519/3d53f281-47e0-17e0-800a-3a42e2caa600" inHierarchical="false">
```

```

<inConfig>
  <storageFlexFlashController
    dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0"
    adminAction="configure-cards" cardSlot="slot-2"
    partitionName="HV-home" autoSync="yes">
  </storageFlexFlashController>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0"
cookie="1486399519/3d53f281-47e0-17e0-800a-3a42e2caa600" response="yes">
  <outConfig>
    <storageFlexFlashController id="FlexFlash-0" productName="Cisco FlexFlash"
      fwVersion="1.3.2 build 165" vendor="Cypress" controllerStatus="OK"
      internalState="Disconnected" cardsManageable="Yes" partitionName=""
      autoSync="" cardSlot="" nonUtilPartitionName="" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0" status="modified" >
    </storageFlexFlashController>
  </outConfig>
</configConfMo>

```

### Enabling Virtual Drive on FlexFlash Controller

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" inHierarchical="false">
  <inConfig>
    <storageFlexFlashVirtualDrive
      dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      adminAction="enable-vd"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" response="yes">
  <outConfig>
    <storageFlexFlashVirtualDrive virtualDrive="HV-sys"
      partitionId="1" driveScope="Raid" size="60901 MB"
      driveStatus="Healthy" hostAccessible="Connected"
      driveType="Removable" operationInProgress="NA"
      lastOperationStatus="none" adminAction="no-op"
      dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      status="modified" >
    </storageFlexFlashVirtualDrive>
  </outConfig>
</configConfMo>

```

### Disabling Virtual Drive on FlexFlash Controller

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" inHierarchical="false">
  <inConfig>

```

```

    <storageFlexFlashVirtualDrive dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      adminAction="disable-vd"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
  cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" response="yes">
  <outConfig>
    <storageFlexFlashVirtualDrive virtualDrive="HV-Velu" partitionId="1"
      driveScope="Raid" size="60901 MB" driveStatus="Healthy"
      hostAccessible="Not-Connected" driveType="Removable"
      operationInProgress="NA" lastOperationStatus="none"
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      status="modified" >
    </storageFlexFlashVirtualDrive>
  </outConfig>
</configConfMo>

```

### Erasing Virtual Drive on FlexFlash Controller

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
  cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" inHierarchical="false">
  <inConfig>
    <storageFlexFlashVirtualDrive dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      adminAction="erase-vd"/>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
  cookie="1486401111/94fb4c13-47e0-17e0-800b-3a42e2caa600" response="yes">
  <outConfig>
    <storageFlexFlashVirtualDrive virtualDrive="HV-Velu" partitionId="1"
      driveScope="Raid" size="60901 MB" driveStatus="Healthy" hostAccessible="Connected"
      driveType="Removable" operationInProgress="NA" lastOperationStatus="none"
      adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      status="modified" >
    </storageFlexFlashVirtualDrive>
  </outConfig>
</configConfMo>

```

### Syncing the Virtual Drive on FlexFlash Controller

Request:

```

<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
  cookie="1486402018/3a29d74d-47e0-17e0-800c-3a42e2caa600" inHierarchical="false">
  <inConfig>
    <storageFlexFlashVirtualDrive dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
      adminAction="sync-vd"/>
  </inConfig>

```

```
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
cookie="1486402018/3a29d74d-47e0-17e0-800c-3a42e2caa600" response="yes">
  <outConfig>
    <storageFlexFlashVirtualDrive virtualDrive="HV-sys" partitionId="1"
driveScope="Raid" size="60901 MB" driveStatus="Degraded"
hostAccessible="Not-Connected" driveType="Removable"
operationInProgress="NA" lastOperationStatus="none"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1"
status="modified" >
    </storageFlexFlashVirtualDrive>
  </outConfig>
</configConfMo>
```

### Viewing Operational Profile of a FlexFlash Card

Request:

```
<configResolveClass cookie='1487358764/81211fa8-48bf-18bf-8009-8446e2caa600'
classId='storageFlexFlashOperationalProfile' inHierarchical='false'>
</configResolveClass>
```

Response:

```
<configResolveClass cookie="1487358764/81211fa8-48bf-18bf-8009-8446e2caa600"
response="yes" classId="storageFlexFlashOperationalProfile">
  <outConfigs>
    <storageFlexFlashOperationalProfile
dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/oper-profile"
controller="FlexFlash-0" operatingMode="mirror"
rdErrCountSlot1Threshold="0" wrErrCshold="0"
rdErrCountSlot2Threshold="NA" wrErrCountSlot2Threshold="NA" adminAction="no-op" >
    </storageFlexFlashOperationalProfile>
  </outConfigs>
</configResolveClass>
```

### Viewing FlexFlash Physical Drive Information

Request:

```
<configResolveClass cookie='1487358764/81211fa8-48bf-18bf-8009-8446e2caa600'
classId='storageFlexFlashPhysicalDrive' inHierarchical='false'>
</configResolve>
```

Response:

```
<configResolveClass cookie="1487358764/81211fa8-48bf-18bf-8009-8446e2caa600"
response="yes" classId="storageFlexFlashPhysicalDrive">
  <outConfig>
    <storageFlexFlashPhysicalDrive physicalDrive="SLOT-1" physicalDriveId="1"
controller="FlexFlash-0" slotNumber="SLOT-1" cardMode="mirror-primary"
pdStatus="present" health="healthy" syncModedType="FX3S configured"
cardStatus="active" capacity="30436 MB" writeEnabled="true" readErrorCount="0"
```

```

readErrorThreshold="0" writeErrorCount="0" writeErrorThreshold="0"
productName="SE32G"ion="8.0" serialNumber="0x23f21a2d" manufacturerId="3"
oemId="SD" manufacturerDate="7/16" blockSize="512 bytes"
passwordProtected="false" partitionCount="1"
drivesEnabled="Hypervisor" signa22308534403e21a4b24085344"
dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/card-1" >
</storageFlexFlashPhysicalDrive>
<storageFlexFlashPhysicalDrive physicalDrive="SLOT-2"
physicalDriroller="FlexFlash-0" slotNumber="SLOT-2"
cardMode="mirror-secondary" pdStatus="present"
health="healthy" syncMode="manual" cardType="FX3S configured"
cardStatus="active" capacity="30436 MB"="true"
readErrorCount="0" readErrorThreshold="0" writeErrorCount="0"
writeErrorThreshold="0" productName="SE32G" productRevision="8.0"
serialNumber="0x244b1ae2" manufacturerId="3" oemId="SerDate="7/16"
blockSize="512 bytes" passwordProtected="false" partitionCount="1"
drivesEnabled="Hypervisor" signature="032dlaf22308534403e21a4b24085344"
dn="sys/rack-unit-1/board/storage-fllash-0/card-2" >
</storageFlexFlashPhysicalDrive>
</outConfig>
</configResolveClass>

```

### Viewing FlexFlash Virtual Drive Information

Request:

```

<configResolveClass cookie='1487358764/81211fa8-48bf-18bf-8009-8446e2caa600'
classId='storageFlexFlashVirtualDrive' inHierarchical='false'>
</configResolve>

```

Response:

```

<configResolveClass cookie="1487358764/81211fa8-48bf-18bf-8009-8446e2caa600"
response="yes" classId="storageFlexFlashVirtualDrive">
<outConfig>
<storageFlexFlashVirtualDrive virtualDrive="Hypervisor"
partitionId="1" driveScope="Raid" size="30432 MB"
driveStatus="Healthy" hostAccessible="Connected" driveType="Removable"
operationInPlastOperationStatus="Sync-Success"
adminAction="no-op" dn="sys/rack-unit-1/board/storage-flexflash-FlexFlash-0/vd-1" >
</storageFlexFlashVirtualDrive>
</outConfig>
</configResolveClass>

```

### Enabling Smart Access USB

Request:

```

<configConfMo dn="sys/rack-unit-1"
cookie="1497203212/4b22e03e-51b3-11b3-8003-8f244411332c" inHierarchical="false" >
<inConfig>
<computeRackUnit dn="sys/rack-unit-1" smartUsbAccess="Enabled"/>
</inConfig>
</configConfMo>

```

Response:



```
<configConfMo dn="sys/rack-unit-1"
cookie="1497203212/4b22e03e-51b3-11b3-8003-8f244411332c" response="yes">
<outConfig>
  <computeRackUnit dn="sys/rack-unit-1" adminPower="policy"
availableMemory="16384" model="UCSC-Cxxx-MXSN" memorySpeed="2666"
name="UCS Cxxx MXSN" numOfAdaptors="0" numOfCores="24" numOfCoresEnabled="24"
numOfCpus="2" numOfEthHostIfs="0" numOfFcHostIfs="0" numOfThreads="48"
operPower="on" originalUuid="6844CD29-C885-46F2-9D90-D57DD4DFAC93"
presence="equipped" serverId="1" serial="WZP211704KF" totalMemory="16384"
usrLbl="" uuid="6844CD29-C885-46F2-9D90-D57DD4DFAC93" vendor="Cisco Systems Inc"
cimcResetReason="graceful-reboot" assetTag="Unknown" adaptorSecureUpdate="Enabled"
resetComponents="components" storageResetStatus="NA" vicResetStatus="NA"
bmcResetStatus="NA" smartUsbAccess="enabled"
smartUsbStatus="MassStorageAttached" status="modified" >
  </computeRackUnit>
</outConfig>
</configConfMo>
```

### Disabling Smart USB Access

Request:

```
<configConfMo dn="sys/rack-unit-1"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
  <computeRackUnit dn="sys/rack-unit-1" smartUsbAccess="Disabled"/>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" response="yes">
<outConfig>
  <computeRackUnit dn="sys/rack-unit-1" adminPower="policy"
availableMemory="196608" model="UCSC-Cxxx-MXL" memorySpeed="2400"
name="UCS Cxxx MXL" numOfAdaptors="1" numOfCores="48" numOfCoresEnabled="48"
numOfCpus="2" numOfEthHostIfs="0" numOfFcHostIfs="0" numOfThreads="96"
operPower="off" originalUuid="00020003-0004-0005-0006-000700080009"
presence="equipped" serverId="1" serial="WZP20420GS7" totalMemory="196608"
usrLbl="" uuid="00020003-0004-0005-0006-000700080009"
vendor="Cisco Systems Inc" cimcResetReason="graceful-reboot"
assetTag="Unknown" adaptorSecureUpdate="Enabled"
smartUsbAccess="disabled" status="modified"/>
</outConfig>
</configConfMo>
```

### Updating the BMC Image through Front Panel USB Device

Request:

```
<configConfMo dn="sys/rack-unit-1/mgmt/fw-updatable"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable" adminState="trigger"
type="blade-controller" source="usb" usbPath="BMC-Image_copied_in_usb">
  </firmwareUpdatable>
</inConfig>
```

```
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/mgmt/fw-updatable"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/mgmt/fw-updatable"
description="Cisco IMC backup firmware version" adminState="triggered"
deployment="backup" operState="updating" version="3.1(0.36)" protocol="none"
remoteServer="" remotePath="" user="" pwd="" progress="5" type="blade-controller"
secureBoot="enabled" source="" usbPath="" status="modified" >
  </firmwareUpdatable>
</outConfig>
</configConfMo>
```

### Updating BIOS Firmware through Front Panel USB Device

Request:

```
<configConfMo dn="sys/rack-unit-1/bios/fw-updatable"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/bios/fw-updatable" adminState="trigger"
type="blade-bios" source="usb" usbPath="bios image copied in USB" >
  </firmwareUpdatable>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/bios/fw-updatable"
cookie="1486025180/103e9486-4789-1789-8002-5bf676c63d84" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/bios/fw-updatable"
description="BIOS firmware version" adminState="triggered"
deployment="backup" operState="ready" version="CxxxMX.3.1.0.137"
protocol="none" remoteServer="" remotePath="" user="" pwd=""
progress="None, OK" type="blade-bios" status="modified"/>
</outConfig>
</configConfMo>
```

### Updating VIC Firmware through Front Panel USB Device

Request:

```
<configConfMo dn="sys/rack+K8-unit-1/adaptor-MLOM/mgmt/fw-updatable"
cookie="1486039310/303698f7-478c-178c-8004-5bf676c63d84" inHierarchical="false">
<inConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/adaptor-MLOM/mgmt/fw-updatable"
adminState="trigger" type="adaptor" source="usb" usbPath="Cruz.bin">
  </firmwareUpdatable>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/adaptor-MLOM/mgmt/fw-updatable"
cookie="1486039310/303698f7-478c-178c-8004-5bf676c63d84" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/rack-unit-1/adaptor-MLOM/mgmt/fw-updatable"
description="Cisco VIC adapter backup firmware version" adminState="triggered"
deployment="backup" operState="Update in progress" protocol="none" remoteServer=""
remotePath="" user="" pwd="" progress="Stage: Writing (66%), Status: Update in progress,
Error: No error" type="adaptor" status="modified" >
  </firmwareUpdatable>
</outConfig>
</configConfMo>
```

### Importing Cisco IMC Configuration from Front Panel USB Device

Request:

```
<configConfMo dn="sys/import-config"
cookie="1486028800/059cd6b8-478a-178a-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
  <mgmtImporter adminState="enabled" source="usb" usbPath="export1.xml"
  passphrase="123456" />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/import-config"
cookie="1486028800/059cd6b8-478a-178a-8002-5bf676c63d84" response="yes">
<outConfig>
  <mgmtImporter dn="sys/import-config" adminState="enabled"
  fsmStageDescr="Applying configuration" fsmRmtInvErrCode=""
  fsmRmtInvErrDescr="NONE" fsmDescr="import-config" proto="none"
  hostname="" remoteFile="" user="" pwd="" passphrase="" source=""
  usbPath="" status="modified" >
  </mgmtImporter>
</outConfig>
</configConfMo>
```

### Exporting Cisco IMC Configuration to Front Panel USB Device

Request:

```
<configConfMo dn="sys/export-config"
cookie="1486029151/22271dbf-4789-1789-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
  <mgmtBackup adminState="enabled" source="usb" usbPath="newexport1.xml" passphrase="123456"
  />
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/export-config"
cookie="1486029151/22271dbf-4789-1789-8002-5bf676c63d84" response="yes">
<outConfig>
```

```

<mgmtBackup dn="sys/export-config" adminState="enabled"
fsmStageDescr="Collecting configuration data" fsmRmtInvErrCode=""
fsmRmtInvErrDescr="NONE" fsmDescr="export-config" proto="none"
hostname="" remoteFile="" user="" pwd="" passphrase="" source=""
usbPath="" status="modified" >
</mgmtBackup>
</outConfig>
</configConfMo>

```

## Exporting Technical Support File to Front Panel USB Device

Request:

```

<configConfMo dn="sys/rack-unit-1/tech-support"
cookie="1486029151/22271dbf-4789-1789-8002-5bf676c63d84" inHierarchical="false">
<inConfig>
<sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support"
adminState="enabled" source="usb" usbPath=" ts3.tgz">
</sysdebugTechSupportExport>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/tech-support"
cookie="1486031612/51ae3ae7-478a-178a-8003-5bf676c63d84" response="yes">
<outConfig>
<sysdebugTechSupportExport dn="sys/rack-unit-1/tech-support"
adminState="enabled" hostname="10.104.236.99" protocol="tftp"
remoteFile="tars.tar.gz" user="user" pwd="" fsmStageDescr="collecting"
fsmProgr="35" fsmStatus="35" source="" usbPath="" status="modified"/>
</outConfig>
</configConfMo>

```

## Power Cap Configuration

Request: [powerBudget]

```

<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
inHierarchical="false" classId="powerBudget"/>

```

Response: [powerBudget]

```

<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
response="yes" classId="powerBudget">
<outConfigs>
<powerBudget dn="sys/rack-unit-1/budget" adminState="disabled" minPower="270"
maxPower="653" effPower="390" minCpuPower="73" maxCpuPower="300" effCpuPower="199"
minMemoryPower="3" maxMemoryPower="9" powerCharStatus="Completed successfully"
adminAction="no-op" powCharEnable="enabled"/>
</outConfigs>
</configResolveClass>

```

Request: [powerMonitor]

```

<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
inHierarchical="false" classId="powerMonitor"/>

```

Response: [powerMonitor]

```
<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
response="yes" classId="powerMonitor">
  <outConfigs>
    <powerMonitor domain="Platform" current="307" minimum="207" maximum="689"
      average="307" dn="sys/rack-unit-1/pwrmonitor-Platform"/>
    <powerMonitor domain="CPU" current="131" minimum="68" maximum="341"
      average="132" dn="sys/rack-unit-1/pwrmonitor-CPU"/>
    <powerMonitor domain="Memory" current="3" minimum="2" maximum="9"
      average="3" dn="sys/rack-unit-1/pwrmonitor-Memory"/>
  </outConfigs>
</configResolveClass>
```

Request: [standardPowerProfile]

```
<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
inHierarchical="false" classId="standardPowerProfile"/>
```

Response: [standardPowerProfile]

```
<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
response="yes" classId="standardPowerProfile">
  <outConfigs>
    <standardPowerProfile dn="sys/rack-unit-1/budget/stdpwrprof" profileType="standard"
      profileEnabled="no" allowThrottle="no" powerLimit="" suspendPeriod="" corrAction="alert"

      corrTime="3" hardCap="no"/>
  </outConfigs>
</configResolveClass>
```

Request: [advancedPowerProfile]

```
<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
inHierarchical="false" classId="advancedPowerProfile"/>
```

Response: [advancedPowerProfile]

```
<configResolveClass cookie="1515446979/60734c33-624b-124b-8003-2e254411332c"
response="yes" classId="advancedPowerProfile">
  <outConfigs>
    <advancedPowerProfile dn="sys/rack-unit-1/budget/advpwrprof" profileType="advanced"
      profileEnabled="no" allowThrottle="no" powerLimit="" suspendPeriod="" corrAction="alert"

      corrTime="3" hardCap="no" cpuPowerLimit="" memoryPowerLimit="" platformThermal=""
      thermalPowLimit="" platSafeThrotLvl="" cpuSafeThrotLvl=""
      memSafeThrotLvl="" missRdgTimeout=""/>
  </outConfigs>
</configResolveClass>
```

## PSU Redundancy policy

Request:

```
<configResolveClass cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0"
inHierarchical="false" classId="psuRedundancyPolicy"/>
```

Response:

```
<configResolveClass cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0"
response="yes" classId="psuRedundancyPolicy">
  <outConfigs>
    <psuRedundancyPolicy dn=" sys/rack-unit-1/board/psu-redundancy-policy"
      redundancyPolicy="grid"/>
  </outConfigs>
</configResolveClass>
```

## Configure PSU Redundancy policy

### Request:

```
<configConfMo cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0"
  inHierarchical="false" dn="sys/rack-unit-1/board/psu-redundancy-policy">
  <inConfig>
    < psuRedundancyPolicy dn="sys/rack-unit-1/board/psu-redundancy-policy"
      redundancyPolicy ="n-plus-one"/>
    </inConfig>
  </configConfMo>
```

### Response:

```
<configConfMo dn="sys/rack-unit-1/board/psu-redundancy-policy"
  cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0" response="yes">
  <outConfig>
    <psuRedundancyPolicy dn="sys/rack-unit-1/board/psu-redundancy-policy"
      redundancyPolicy ="n-plus-one status="modified"/>
    </outConfig>
  </configConfMo>
```

## Subject Alternate Name in CSR Generation

### Request:

```
<configConfMo cookie="1507308878/b3e05524-5ae3-1ae3-8002-5d18cc74a254"
  dn="sys/cert-mgmt/gen-csr-req" inHierarchical="false">
<inConfig>
<generateCertificateSigningRequest commonName="cisco" organization="cisco"
organizationalUnit="cisco" locality="bangalore" state="karnataka" countryCode="India"
protocol="sftp" remoteServer="10.104.236.99" user="user" pwd="cisco123"
remoteFile="/tmp/krigovin.csr" subjectAltNameType2="IP"
subjectAltNameValue2="5.5.5.5" subjectAltNameType1="IP" subjectAltNameValue1="10.10.10.10"

subjectAltNameType4="DNS" subjectAltNameValue4="abcd-555" subjectAltNameType5="email"
subjectAltNameValue5="abc@def.com" dn="sys/cert-mgmt/gen-csr-req">
</generateCertificateSigningRequest></inConfig>
</configConfMo>
```

### Response:

```
<configConfMo dn="sys/cert-mgmt/gen-csr-req"
  cookie="1507308878/b3e05524-5ae3-1ae3-8002-5d18cc74a254" response="yes">
<outConfig>
<generateCertificateSigningRequest dn="sys/cert-mgmt/gen-csr-req"
commonName="Common Name" organization="Organization" organizationalUnit="Organizational
Unit"
locality="Locality" state="State" countryCode="Country Code" email="Email Address"
signatureAlgorithm="SHA Algorithm" selfSigned="no" protocol="none" remoteServer=""
remoteFile="" user="" pwd="" csrStatus="InProgress CSR" subjectAltNameType1=""
subjectAltNameValue1=""
subjectAltNameType2="" subjectAltNameValue2="" subjectAltNameType3="" subjectAltNameValue3=""

subjectAltNameType4="" subjectAltNameValue4="" subjectAltNameType5="" subjectAltNameValue5=""

subjectAltNameType6="" subjectAltNameValue6="" subjectAltNameType7="" subjectAltNameValue7=""

subjectAltNameType8="" subjectAltNameValue8="" subjectAltNameType9="" subjectAltNameValue9=""

subjectAltNameType10="" subjectAltNameValue10="" status="modified"/></outConfig>
</configConfMo>
-validates
```

## Copy back operations

### start-copyback

#### Request:

```
<configConfMo cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-17">
<inConfig>
<storageLocalDisk dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-17"
destinationPDIId="21" adminAction="start-copyback" ></storageLocalDisk>
</inConfig>
</configConfMo>

<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-17"
cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8" response="yes">
<outConfig>
<storageLocalDisk id="17" pdStatus="Online" health="Good" predictiveFailureCount="0"
linkSpeed="12.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="571250 MB"
vendor="SEAGATE" productId="ST600MP0025" driveFirmware="NF03"
driveSerialNumber="S7M0GGRX0000M6064XBN"
driveState="Online" online="true" dedicatedHotSpareForVDId="" enclosureAssociation="Expander
Attached"
enclosureLogicalId="bf8a7e1304198b5d" enclosureSASAddress0="5d8b1904137e81bd"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="yes" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no"
adminAction="no-op" destinationPDIId="" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-17"

status="modified"/></outConfig>
</configConfMo>
- validates
```

### pause-copyback

#### Request:

```
<configConfMo cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8"
inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21">
<inConfig>
<storageLocalDisk dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
adminAction="pause-copyback" >
</storageLocalDisk>
</inConfig>
</configConfMo>
```

#### Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8" response="yes">
<outConfig>
<storageLocalDisk id="21" pdStatus="Copyback" health="Moderate Fault"
predictiveFailureCount="0"
linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="571250 MB"
vendor="TOSHIBA"
productId="AL13SXB600N" driveFirmware="5701" driveSerialNumber="45J0A00ZFE7B"
driveState="Copyback"
online="false" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
enclosureLogicalId="bf8a7e1304198b5d" enclosureSASAddress0="5d8b1904137e81bd"
enclosureSASAddress1="0x0"
locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
foreignLocked="no"
adminAction="no-op" destinationPDIId="" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"

status="modified"/></outConfig>
```

```
</configConfMo>
- validates
```

resume-copyback:

Request:

```
<configConfMo cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8"
  inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21">
<inConfig>
<storageLocalDisk dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
adminAction="resume-copyback" ></storageLocalDisk>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8" response="yes">
<outConfig>
<storageLocalDisk id="21" pdStatus="Copyback" health="Moderate Fault"
  predictiveFailureCount="0" linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD"
  coercedSize="571250 MB" vendor="TOSHIBA" productId="AL13SXB600N" driveFirmware="5701"
  driveSerialNumber="45J0A00ZFE7B" driveState="Copyback" online="false"
  dedicatedHotSpareForVDId=""
  enclosureAssociation="Expander Attached" enclosureLogicalId="bf8a7e1304198b5d"
  enclosureSASAddress0="5d8b1904137e81bd" enclosureSASAddress1="0x0" locatorLEDStatus="off"
  fdeCapable="no" fdeEnabled="no" secured="no" locked="no" foreignLocked="no"
  adminAction="no-op"
  destinationPDIId="" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
  status="modified"/></outConfig>
</configConfMo>
- validates
```

abort-copyback:

Request:

```
<configConfMo cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8"
  inHierarchical="false" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21">
<inConfig>
<storageLocalDisk dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
adminAction="abort-copyback" >
</storageLocalDisk>
</inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
cookie="1509348375/38d6533f-5cbf-1cbf-8002-e8374190b1d8" response="yes">
<outConfig>
<storageLocalDisk id="21" pdStatus="Copyback" health="Moderate Fault"
  predictiveFailureCount="0"
  linkSpeed="6.0 Gb/s" interfaceType="SAS" mediaType="HDD" coercedSize="571250 MB"
  vendor="TOSHIBA"
  productId="AL13SXB600N" driveFirmware="5701" driveSerialNumber="45J0A00ZFE7B"
  driveState="Copyback"
  online="false" dedicatedHotSpareForVDId="" enclosureAssociation="Expander Attached"
  enclosureLogicalId="bf8a7e1304198b5d" enclosureSASAddress0="5d8b1904137e81bd"
  enclosureSASAddress1="0x0"
  locatorLEDStatus="off" fdeCapable="no" fdeEnabled="no" secured="no" locked="no"
  foreignLocked="no"
  adminAction="no-op" destinationPDIId="" dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/pd-21"
  status="modified"/></outConfig>
```



```
</configConfMo>
- validates
```

### Add PXE device with IP Type

Request:

```
<configConfMo cookie='1510210090/ac5f9d32-5d87-1d87-8002-a03eff993a00'
inHierarchical="false" dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe"> <inConfig><lsbootPxe

dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe" type="PXE" name="xmlpxe"
state="Enabled" iptype="IPv6" macAddress="FF:AF:FF:FF:FF:FF" ></lsbootPxe></inConfig>
</configConfMo>
<configConfMo dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe"
cookie="1510210090/ac5f9d32-5d87-1d87-8002-a03eff993a00" response="yes">
```

Response:

```
<outConfig>
<lsbootPxe name="xmlpxe" type="PXE" macAddress="FF:AF:FF:FF:FF:FF"
iptype="IPv6" order="5" state="Enabled" dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe"
status="modified"/>
</outConfig>
</configConfMo>
```

### Modify PXE device by removing IP Type

Request:

```
<configConfMo cookie='1510210090/ac5f9d32-5d87-1d87-8002-a03eff993a00'
inHierarchical="false" dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe"> <inConfig><lsbootPxe

dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe" type="PXE" name="xmlpxe"
state="Enabled" iptype="" macAddress="FF:AF:FF:FF:FF:FF" ></lsbootPxe></inConfig>
</configConfMo>
<configConfMo dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe"
cookie="1510210090/ac5f9d32-5d87-1d87-8002-a03eff993a00" response="yes">
```

Response:

```
<outConfig>
<lsbootPxe name="xmlpxe" type="PXE" macAddress="FF:AF:FF:FF:FF:FF" order="5"
state="Enabled" dn="sys/rack-unit-1/boot-precision/pxe-xmlpxe" status="modified"/>
</outConfig>
</configConfMo>
```

### Request to prevent DNS scavenging on CIMC

Request to get the configured value

```
<configResolveClass cookie="1505114193/6ff95a94-58e5-18e5-8002-0247e2caa600"
inHierarchical="false" classId="mgmtIf"/>
```

Response:

```
<configResolveClass cookie="1505114193/6ff95a94-58e5-18e5-8002-0247e2caa600" response="yes"
classId="mgmtIf">
<outConfigs>
<mgmtIf dn="sys/rack-unit-1/mgmt/if-1" description="Management Interface Network Settings"
id="1"
extEnabled="yes" extIp="10.197.125.55" extMask="255.255.255.0" extGw="10.197.125.1"
ifType="physical"
mac="00:A6:CA:E2:47:02" hostname="C240-WZP20390PH" dhcpEnable="no" dnsUsingDhcp="no"
```

```

ddnsEnable="yes"
  ddnsRefreshInterval="100" ddnsDomain="" dnsPreferred="171.70.168.183"
dnsAlternate="171.70.168.183"
  nicMode="dedicated" vicSlot="riser1" nicRedundancy="none" vlanEnable="no" vlanId="1"
vlanPriority="0"
  portProfile="" v6extEnabled="no" v6extIp="::" v6extGw="::" v6prefix="64" v6linkLocal="::"
v6SlaacIp="::"
  v6dhcpEnable="no" v6dnsUsingDhcp="no" v6dnsPreferred="::" v6dnsAlternate="::"
subject="blade"
  autoNeg="enabled" adminNetSpeed="auto" adminDuplex="auto" operNetSpeed="1Gbps"
operDuplex="full"/>
</outConfigs>
</configResolveClass>

```

### To get storage controller next patrol read schedule details

#### Request:

```

<configResolveClass cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0"
inHierarchical="false" classId="storageControllerNextPatrolReadSchedule"/>

```

#### Response:

```

<configResolveClass cookie="1465285074/cf5dd611-34ab-14ab-8002-4e0916608cc0" response="yes"
classId="storageControllerNextPatrolReadSchedule">
  <outConfigs>
    <storageControllerNextPatrolReadSchedule
dn="sys/rack-unit-1/board/storage-SAS-SLOT-HBA/patrol-read"
id="SLOT-HBA" prSstate="active" prScheduleMode="auto" nextExecTime="2017-11-16 08:15"
  execFrequency="30 days"
  />
  </outConfigs>
</configResolveClass>

```

### NVMe Controller using XML API

#### Request: configResolveClass of storageControllerNVMe

```

<configResolveClass cookie="1510299473/f465b8d4-5d9c-1d9c-8011-4be441f16b00"
inHierarchical="false" classId="storageControllerNVMe"/>

```

#### Response:

```

<configResolveClass cookie="1510299473/f465b8d4-5d9c-1d9c-8011-4be441f16b00" response="yes"
classId="storageControllerNVMe">
  <outConfigs>
    <storageControllerNVMe id="NVMe-direct-HHHL-drives" health="healthy" driveCount="9"
dn="sys/rack-unit-1/board/storage-NVMe-NVMe-direct-HHHL-drives"/>
    <storageControllerNVMe id="PCIe-Switch-1" health="healthy" driveCount="2"
vendorId="MICROSEM"
  productId="PFX 48XG3" componentId="8533" productRevision="RevB" p2pVendorId="f811"
  p2pDeviceId="efbe" runningFirmwareVersion="1.8.0.58-41a1"
pendingFirmwareVersion="1.8.0.58"
  temperature="45" switchStatus="Optimal" linkStatus="Optimal"
dn="sys/rack-unit-1/board/storage-NVMe-PCIe-Switch-1"/>
    <storageControllerNVMe id="PCIe-Switch-2" health="healthy" driveCount="8"
vendorId="MICROSEM"
  productId="PFX 48XG3" componentId="8533" productRevision="RevB" p2pVendorId="f811"
  p2pDeviceId="efbe"
  runningFirmwareVersion="1.8.0.58-41a1" pendingFirmwareVersion="1.8.0.58" temperature="61"
  switchStatus="Optimal" linkStatus="Optimal"
dn="sys/rack-unit-1/board/storage-NVMe-PCIe-Switch-2"/>

```

```

    <storageControllerNVMe id="PCIe-Switch-3" health="healthy" driveCount="8"
vendorId="MICROSEM"
    productId="PFX 48XG3" componentId="8533" productRevision="RevB" p2pVendorId="f811"
p2pDeviceId="efbe"
    runningFirmwareVersion="1.8.0.58-41a1" pendingFirmwareVersion="1.8.0.58" temperature="61"

    switchStatus="Optimal" linkStatus="Optimal"
dn="sys/rack-unit-1/board/storage-NVMe-PCIe-Switch-3"/>
    <storageControllerNVMe id="PCIe-Switch-Rear" health="healthy" driveCount="8"
vendorId="MICROSEM"
    productId="PFX 48XG3" componentId="8533" productRevision="RevB" p2pVendorId="f811"
p2pDeviceId="efbe"
    runningFirmwareVersion="1.8.0.58-42a1" pendingFirmwareVersion="1.8.0.58" temperature="47"

    switchStatus="Optimal" linkStatus="Optimal"
dn="sys/rack-unit-1/board/storage-NVMe-PCIe-Switch-Rear"/>
  </outConfigs>
</configResolveClass>

```

## Examples of Common Server Management Tasks Contd.

The examples in this section show how to use the Cisco IMC XML API to perform common server management tasks. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Configuring Fast Boot Tokens, on page 219](#)
- [Configuring MultiQueue on 14xx VIC Adapters, on page 220](#)
- [Configuring EFI Shell Options, on page 220](#)
- [Updating the Device Connector \(DC\), on page 221](#)
- [Configuring Single IP Properties and Starting Port, on page 223](#)

### Configuring Fast Boot Tokens

Request:

```

curl -k -N -d "<configConfMo cookie='1538744526/72a14829-777b-177b-8003-c8571c735d00'
inHierarchical='false' dn='sys/rack-unit-1/bios/bios-settings/Cisco-Opromlaunch-Optimize'>
<inConfig><biosVfCiscoOpromLaunchOptimization
dn='sys/rack-unit-1/bios/bios-settings/Cisco-Opromlaunch-Optimize'
vpCiscoOpromLaunchOptimization='enabled'/></inConfig></configConfMo>"
https://10.10.10.10/nuova | xmllint -schema RACK-OUT.xsd -

```

Response:

```

<configConfMo dn="sys/rack-unit-1/bios/bios-settings/Cisco-Opromlaunch-Optimize"
cookie="1538744526/72a14829-777b-177b-8003-c8571c735d00"
response="yes">
<outConfig>
<biosVfCiscoOpromLaunchOptimization
dn="sys/rack-unit-1/bios/bios-settings/Cisco-Opromlaunch-Optimize"
vpCiscoOpromLaunchOptimization="Enabled" status="modified"/></outConfig>
</configConfMo>

```

## Configuring MultiQueue on 14x VIC Adapters

### For S-series

Request:

```
curl -k -d "<configConfMo cookie='1538482028/a18ec421-3e77-173e-8003-6ca87fa59038'
dn='sys/chassis-1/server-1/adaptor-SIOC1/host-eth-eth1/general'>
<inConfig> <adaptorEthGenProfile
dn='sys/chassis-1/server-1/adaptor-SIOC1/host-eth-eth1/general'
vmq='enabled' multiQueue='enabled'> </adaptorEthGenProfile> </inConfig> </configConfMo>"
https://10.10.10.10/nuova
```

Response:

```
<configConfMo dn="sys/chassis-1/server-1/adaptor-SIOC1/host-eth-eth1/general"
cookie="1538482028/a18ec421-3e77-173e-8003-6ca87fa59038"
response="yes">
<outConfig>
<adaptorEthGenProfile dn="sys/chassis-1/server-1/adaptor-SIOC1/host-eth-eth1/general"
vmq="enabled" multiQueue="enabled" arfs="disabled" uplinkFailover="N/A"
uplinkFailbackTimeout="N/A"
order="1" trustedClassOfService="disabled" rateLimit="OFF" vlan="NONE" vlanMode="TRUNK"
pciLink="0" nvgre="disabled" vxlan="disabled"
status="modified" ></adaptorEthGenProfile></outConfig>
</configConfMo>
```

### For C-series

Request:

```
curl -k -d "<configConfMo cookie='1538547165/c90fced7-774d-174d-8002-ce1460e81a02'
dn='sys/rack-unit-1/adaptor-2/host-eth-eth1/general'> <inConfig> <adaptorEthGenProfile
dn='sys/rack-unit-1/adaptor-2/host-eth-eth1/general' vmq='enabled' multiQueue='enabled'>
</adaptorEthGenProfile>
</inConfig> </configConfMo>"
https://10.10.10.10/nuova | xmllint -schema RACK-OUT-janus.xsd -
```

Response:

```
<?xml version="1.0"?>
<configConfMo dn="sys/rack-unit-1/adaptor-2/host-eth-eth1/general"
cookie="1538547165/c90fced7-774d-174d-8002-ce1460e81a02" response="yes">
<outConfig>
<adaptorEthGenProfile dn="sys/rack-unit-1/adaptor-2/host-eth-eth1/general"
vmq="enabled" multiQueue="enabled" arfs="disabled" uplinkFailover="N/A"
uplinkFailbackTimeout="N/A"
order="1" trustedClassOfService="disabled" rateLimit="OFF" vlan="NONE" vlanMode="TRUNK"
pciLink="0" nvgre="disabled" vxlan="disabled"
status="modified"/></outConfig>
</configConfMo>
- validates
```

## Configuring EFI Shell Options

Request:

```
<configConfMo cookie='1535509137/a97fdef4-7489-1489-814d-e29a5b735d00'
inHierarchical='false' dn='sys/rack-unit-1/boot-precision/hdd-xmltest1'><inConfig><lsbootHdd
dn='sys/rack-unit-1/boot-precision/hdd-xmltest1' type='LOCALHDD' slot='RAID' name='xmltest1'
```

```
state='Enabled'
boot-loader-name='BOOTX64.EFI' boot-loader-path='\EFI\BOOT\'
boot-loader-descr='EFIBOOT'/></inConfig></configConfMo>"
https://10.10.10.10/nuova
```

Response:

```
<configConfMo dn="sys/rack-unit-1/boot-precision/hdd-xmltest1"
cookie="1535509137/a97fdef4-7489-1489-814d-e29a5b735d00"
response="yes"><outConfig><lsbootHdd name="xmltest1" type="LOCALHDD" slot="RAID"
order="1" state="Enabled" boot-loader-name="BOOTX64.EFI" boot-loader-path="\EFI\BOOT\'
boot-loader-descr="EFIBOOT"
dn="sys/rack-unit-1/boot-precision/hdd-xmltest1"
status="modified" ></lsbootHdd> </outConfig></configConfMo>
```

## Updating the Device Connector (DC)

### XML API query to update DC image

Request:

```
<configConfMo cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
dn="sys/device-connector/mgmt/fw-updatable">
  <inConfig>
    <firmwareUpdatable adminState="trigger"
dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable" protocol="scp"
remoteServer="10.10.10.10"
  remotePath="/tftpboot/ucsc-m5-cimc-cloud-connector-1.0.9-328.bin" user="" pwd=""
type="device-connector"/>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/device-connector/mgmt/fw-updatable"
cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
response="yes">
  <outConfig>
    <firmwareUpdatable dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"
description="Cisco Device Connector firmware"
  adminState="triggered" deployment="primary" operState="updating" version=""
protocol="none" remoteServer="" remotePath="" user=""
  pwd="" progress="5" type="device-connector" status="modified"/>
  </outConfig>
</configConfMo>
```

### Device Connector Upgrade

Request

```
curl -k -d "<configConfMo cookie='1542698731/9bbf476b-7b13-1b13-8003-a256cbf9ba78'
dn='sys/cloud-mgmt/device-connector/mgmt/fw-updatable'
inHierarchical='true'><inConfig><firmwareUpdatable adminState='trigger'
dn='sys/cloud-mgmt/device-connector/mgmt/fw-updatable' protocol='tftp'
remoteServer='10.10.10.10' remotePath='c240-m4-cimc.4.0.2S14-cloud-connector.bin'
user='' pwd='' type='device-connector' /> </inConfig></configConfMo>"
https://10.10.10.10/nuova
```

Response

```
<configConfMo dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"
```

```

cookie="1542698731/9bbf476b-7b13-1b13-8003-a256cbf9ba78" response="yes">
<outConfig>
<firmwareUpdatable dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable" description="Cisco
  Device Connector firmware"
adminState="triggered" deployment="primary" operState="updating" version="NA" protocol="none"

remoteServer="" remotePath="" user="" pwd="" progress="5" type="device-connector"
status="modified" ></firmwareUpdatable></outConfig>
</configConfMo>

```

## Device Connector Downgrade

### Request

```

curl -k -d "<configConfMo cookie='1542695757/1a8febb6-7b13-1b13-8004-9102c05a6970'
dn='sys/cloud-mgmt/device-connector/mgmt/fw-updatable'
inHierarchical='true'><inConfig><firmwareUpdatable adminState='trigger'
dn='sys/cloud-mgmt/device-connector/mgmt/fw-updatable' protocol='tftp'
remoteServer='10.10.10.10' remotePath='c240-m5-cimc.4.0.2S12-cloud-connector.bin'
user='' pwd='' type='device-connector' /> </inConfig></configConfMo>"
https://10.10.10.10/nuova

```

### Response

```

<configConfMo dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"
cookie="1542695757/1a8febb6-7b13-1b13-8004-9102c05a6970" response="yes">
<outConfig>
<firmwareUpdatable dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"
description="Cisco Device Connector firmware" adminState="triggered" deployment="primary"
operState="ready" version="NA" protocol="none" remoteServer="" remotePath="" user="" pwd=""

progress="Success" type="device-connector" status="modified" ></firmwareUpdatable></outConfig>
</configConfMo>

```

## Using tftp Protocol

This section provides XML API example for using tftp protocol. The same example is valid for scp, sftp, ftp, and http protocols.

### Request:

```

<configConfMo cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
dn="sys/device-connector/mgmt/fw-updatable">
  <inConfig>
    <firmwareUpdatable adminState="trigger"
dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable" protocol="tftp"
    remoteServer="10.10.10.10" remotePath="ucsc-m5-cimc-cloud-connector-1.0.9-321.bin"
type="device-connector"/>
  </inConfig>
</configConfMo>

```

### Response:

```

<configConfMo dn="sys/device-connector/mgmt/fw-updatable"
cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600" response="yes">
<outConfig>
  <firmwareUpdatable dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"
description="Cisco Device Connector firmware" adminState="triggered"
  deployment="primary" operState="updating" version="" protocol="none" remoteServer=""
remotePath="" user="" pwd="" progress="5"
  type="device-connector" status="modified"/>
</outConfig></configConfMo>

```

## Getting the Status of Update

Request:

```
<configResolveDn cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
inHierarchical="true" dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable"/>
```

Response:

```
<configResolveDn cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
response="yes" dn="sys/cloud-mgmt/device-connector/mgmt/fw-updatable">
  <outConfig>
    <firmwareUpdatable dn="sys/device-connector/mgmt/fw-updatable" description="Cisco Device
Connector firmware"
  adminState="triggered" deployment="primary" operState="ready" version="" protocol="none"
  remoteServer="" remotePath="" user=""
  pwd="" progress="Success" type="device-connector"/>
  </outConfig>
</configResolveDn>
```

## Getting the DC Version

Request:

```
<configResolveDn cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600"
inHierarchical="true" dn="sys/cloud-mgmt/device-connector/mgmt/fw-system"/>
```

Response:

```
<configResolveDn cookie="1536659363/827d72d2-7595-1595-8002-6253e2caa600" response="yes"
dn="sys/device-connector/mgmt/fw-system">
  <outConfig>
    <firmwareRunning dn="sys/cloud-mgmt/device-connector/mgmt/fw-system"
  description="Cisco Device Connector currently running firmware version"
  deployment="system"
  type="device-connector" version="1.0.9-321"/>
  </outConfig>
</configResolveDn>
```

## Configuring Single IP Properties and Starting Port

Request:

```
<configConfMo cookie="1531872275/fb411afd-3a71-113a-8002-3f9f77e2cff4" dn="sys/chassis-1/if-1"
inHierarchical="false">
  <inConfig>
    <mgmtIf dn="sys/chassis-1/if-1" singleIPEnable="yes" startingPort="10000" />
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/chassis-1/if-1" cookie="1531872275/fb411afd-3a71-113a-8002-3f9f77e2cff4"
response="yes">
  <outConfig>
<mgmtIf dn="sys/chassis-1/if-1" description="Virtual Management Interface Network Settings"
id="1" extEnabled="yes" extIp="10.10.10.10" v4IPAddrCmc1="" v4IPAddrCmc2="" v4IPAddrBmc1=""
v4IPAddrBmc2=""
extMask="255.255.255.0" extGw="10.10.10.10" ifType="virtual" mac="F4:CF:E2:77:9F:3F"
```

```
vHostname="colusa8-single-ip"
dhcpEnable="yes" dnsUsingDhcp="no" ddnsEnable="no" ddnsDomain="" ddnsRefreshInterval="0"
dnsPreferred="10.10.10.10"
dnsAlternate="10.10.10.10" nicMode="dedicated" vicSlot="1" nicRedundancy="none"
vlanEnable="no" vlanId="1"
vlanPriority="0" portProfile="" v6extEnabled="no" v6extIp="::" v6extGw="::" v6prefix="64"
v6linkLocal="::" v6SlaacIp="::" v6dhcpEnable="no" v6dnsUsingDhcp="no"
v6dnsPreferred="::" v6dnsAlternate="::" v6IPAddrCmc1="::" v6IPAddrCmc2="::" v6IPAddrBmc1="::"
v6IPAddrBmc2="::"
autoNeg="enabled" adminNetSpeed="auto" adminDuplex="auto" operNetSpeed="1Gbps"
operDuplex="full" subject="virtual"
singleIPEnable="yes" startingPort="10000" status="modified"/></outConfig>
</configConfMo>
```

## Persistent Memory Module XML API Examples

The examples in this section show how to use the Cisco IMC XML API to perform Persistent Memory Module tasks. Each example shows the XML API request followed by the response from Cisco IMC.

This section includes the following examples:

- [Viewing Persistent Memory Unit Inventory Details, on page 225](#)
- [Viewing Persistent Memory Configuration Details, on page 225](#)
- [Viewing Persistent Memory Region Details, on page 226](#)
- [Viewing Persistent Memory Namespace Details, on page 226](#)
- [Viewing Persistent Memory ConfigResult, on page 227](#)
- [Viewing Persistent Memory Namespace ConfigResult, on page 227](#)
- [Viewing Persistent Memory Logical Configuration, on page 227](#)
- [Viewing Persistent Memory Goal, on page 227](#)
- [Viewing Persistent Memory Logical Namespace, on page 228](#)
- [Configuring Persistent Memory Goal, on page 228](#)
- [Modifying Pending Goal, on page 228](#)
- [Deleting a Goal, on page 229](#)
- [Configuring a Namespace, on page 229](#)
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- [Configuring Enable Security, on page 231](#)
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- [Modifying Secure Passphrase, on page 232](#)
- [Unlocking DIMM\(s\), on page 233](#)



- [Configuring Secure Erase, on page 233](#)
- [Resetting Persistent Memory to Factory Default Settings, on page 234](#)
- [Exporting of Persistent Memory Configuration, on page 234](#)
- [Importing of Persistent Memory Configuration, on page 235](#)
- [Configuring Host Managed Mode, on page 235](#)
- [Configuring Cisco IMC Managed Mode, on page 236](#)

## Viewing Persistent Memory Unit Inventory Details

Request:

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryUnit"/>
```

Response:

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970" response="yes"
classId="memoryPersistentMemoryUnit">
  <outConfigs>
    <memoryPersistentMemoryUnit array="1" location="DIMM_A2" capacity="128704" clock="2666"
formFactor="DIMM"
id="2" model="8089A217470000C66 " operState="operable" operability="operable"
presence="equipped"
serial="00000C66" type="Logical non-volatile device" vendor="0x8900" visibility="yes"
width="64"
memoryTypeDetail="Synchronous Non-volatile " bankLocator="NODE 0 CHANNEL 0 DIMM 1"
socketId="1"
uid="8089-A2-1747-00000C66" totalCapacity="126" persistentMemoryCapacity="96"
memoryCapacity="29"
appDirectCapacity="96" reservedCapacity="0" firmwareVersion="1.0.0.4351" healthState="Healthy"

socketLocalDimmNumber="2" securityStatus=" Enabled, UnLocked, Frozen, Count not expired "
lastSecurityOperStatus="No Error" dn="sys/rack-unit-1/board/memarray-1/pmem-2"/>
    <memoryPersistentMemoryUnit array="1" location="DIMM_D2" capacity="128704" clock="2666"
formFactor="DIMM"
id="8" model="8089A217470000A63 " operState="operable" operability="operable"
presence="equipped"
serial="00000A63" type="Logical non-volatile device" vendor="0x8900" visibility="yes"
width="64"
memoryTypeDetail="Synchronous Non-volatile " bankLocator="NODE 0 CHANNEL 3 DIMM 1"
socketId="1"
uid="8089-A2-1747-00000A63" totalCapacity="126" persistentMemoryCapacity="96"
memoryCapacity="29" appDirectCapacity="96" reservedCapacity="0" firmwareVersion="1.0.0.4351"

healthState="Healthy" socketLocalDimmNumber="8"
securityStatus=" Enabled, UnLocked, Frozen, Count not expired " lastSecurityOperStatus="No
Error"
dn="sys/rack-unit-1/board/memarray-1/pmem-8"/>
  </outConfigs>
</configResolveClass>
```

## Viewing Persistent Memory Configuration Details

Request:

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryConfiguration"/>
```

**Response:**

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
response="yes" classId="memoryPersistentMemoryConfiguration">
  <outConfigs>
    <memoryPersistentMemoryConfiguration dn="sys/rack-unit-1/board/pmemory-config"
configState="Configured"
totalCapacity="503" persistentMemoryCapacity="384" memoryCapacity="116" reservedCapacity="0"
numOfRegions="4"
numOfDimms="4" securityState="Unlocked-Frozen"/>
  </outConfigs>
</configResolveClass>
```

**Viewing Persistent Memory Region Details****Request:**

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryRegion"/>
```

**Response:**

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970" response="yes"
classId="memoryPersistentMemoryRegion">
  <outConfigs>
    <memoryPersistentMemoryRegion id="1" socketLocalDimmNumber="2" socketId="1"
interleavedSetId="7c4bda90ad238a22"
persistentMemoryType="AppDirectNonInterleaved" healthState="Healthy" totalCapacity="96"
freeCapacity="86"
dimmlocatorIds="DIMM_A2" dn="sys/rack-unit-1/board/pmemory-config/region-1"/>
    <memoryPersistentMemoryRegion id="2" socketLocalDimmNumber="8" socketId="1"
interleavedSetId="5e37da90aa218a22" persistentMemoryType="AppDirectNonInterleaved"
healthState="Healthy"
totalCapacity="96" freeCapacity="96" dimmlocatorIds="DIMM_D2"
dn="sys/rack-unit-1/board/pmemory-config/region-2"/>
    <memoryPersistentMemoryRegion id="3" socketLocalDimmNumber="2" socketId="2"
interleavedSetId="8105da90941c8a22" persistentMemoryType="AppDirectNonInterleaved"
healthState="Healthy" totalCapacity="96" freeCapacity="96" dimmlocatorIds="DIMM_G2"
dn="sys/rack-unit-1/board/pmemory-config/region-3"/>
    <memoryPersistentMemoryRegion id="4" socketLocalDimmNumber="8"
socketId="2" interleavedSetId="d641da9036228a22"
persistentMemoryType="AppDirectNonInterleaved"
healthState="Healthy" totalCapacity="96" freeCapacity="96" dimmlocatorIds="DIMM_K2"
dn="sys/rack-unit-1/board/pmemory-config/region-4"/>
  </outConfigs>
</configResolveClass>
```

**Viewing Persistent Memory Namespace Details****Request:**

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryNamespace"/>
```

**Response:**

```
<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
response="yes" classId="memoryPersistentMemoryNamespace">
  <outConfigs>
    <memoryPersistentMemoryNamespace name="TEST-91" operMode="raw"
capacity="10" labelVersion="1.2" uuid="894806e0-ecab-468d-8da4-5f74e6d2a7cb"
healthState="Healthy"
dn="sys/rack-unit-1/board/pmemory-config/region-1/ns-894806e0-ecab-468d-8da4-5f74e6d2a7cb"/>
  </outConfigs>
</configResolveClass>
```

```

    </outConfigs>
  </configResolveClass>

```

### Viewing Persistent Memory ConfigResult

Request:

```

<configResolveClass cookie="1551864178/d8c72c79-8369-1369-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryConfigResult"/>

```

Response:

```

<configResolveClass cookie="1551864178/d8c72c79-8369-1369-8002-943e485a6970"
response="yes" classId="memoryPersistentMemoryConfigResult">
  <outConfigs>
    <memoryPersistentMemoryConfigResult dn="sys/rack-unit-1/board/pmemory-config/cfg-result"
configState="Configured" configResult="NotApplicable" configError="Success"/>
  </outConfigs>
</configResolveClass>

```

### Viewing Persistent Memory Namespace ConfigResult

Request:

```

<configResolveClass cookie="1551335940/65142995-82ef-12ef-8002-d8e6ed6a0f70"
inHierarchical="false" classId="memoryPersistentMemoryNamespaceConfigResult"/>

```

Response:

```

<configResolveClass cookie="1551335940/65142995-82ef-12ef-8002-d8e6ed6a0f70"
response="yes" classId="memoryPersistentMemoryNamespaceConfigResult">
  <outConfigs>
    <memoryPersistentMemoryNamespaceConfigResult name=" TEST-91" socketId="1"
socketLocalDimmNumber="4" configStatus="Success"
dn="sys/rack-unit-1/board/pmemory-config/cfg-result/nscr-NSS-1"/>
  </outConfigs>
</configResolveClass>

```

### Viewing Persistent Memory Logical Configuration

Request:

```

<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryLogicalConfiguration"/>

```

Response:

```

<configResolveClass cookie="1553603882/d1f622a3-84fe-14fe-8002-943e485a6970" response="yes"
classId="memoryPersistentMemoryLogicalConfiguration">
  <outConfigs>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"/>
  </outConfigs>
</configResolveClass>

```

### Viewing Persistent Memory Goal

Request:

```

<configResolveClass cookie="1551867321/750375cb-836a-136a-8002-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryGoal"/>

```

Response:

```
<configResolveClass cookie="1551867321/750375cb-836a-136a-8002-943e485a6970"
response="yes" classId="memoryPersistentMemoryGoal">
  <outConfigs>
    <memoryPersistentMemoryGoal socketId="ALL" memoryModePercentage="70"
persistentMemoryType="app-direct-non-interleaved"
dn="sys/rack-unit-1/board/pmemory-lconfig/goal-ALL"/>
  </outConfigs>
</configResolveClass>
```

### Viewing Persistent Memory Logical Namespace

Request:

```
<configResolveClass cookie="1553667047/a46f89ac-850d-150d-8004-943e485a6970"
inHierarchical="false" classId="memoryPersistentMemoryLogicalNamespace"/>
```

Response:

```
<configResolveClass cookie="1553667047/a46f89ac-850d-150d-8004-943e485a6970" response="yes"
classId="memoryPersistentMemoryLogicalNamespace">
  <outConfigs>
    <memoryPersistentMemoryLogicalNamespace socketId="1" socketLocalDimmNumber="2" name="ns2"
capacity="5"
mode="raw" dn="sys/rack-unit-1/board/pmemory-lconfig/lms-ns2"/>
    <memoryPersistentMemoryLogicalNamespace socketId="1" socketLocalDimmNumber="2" name="ns1"
capacity="5"
mode="raw" dn="sys/rack-unit-1/board/pmemory-lconfig/lms-ns1"/>
  </outConfigs>
</configResolveClass>
```

### Configuring Persistent Memory Goal

Request:

```
<configConfMo cookie="1553659537/970809a2-850b-150b-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="yes">
      <memoryPersistentMemoryGoal dn="sys/rack-unit-1/board/pmemory-lconfig/goal-ALL"
rn="goal-ALL" socketId="ALL" memoryModePercentage="50"
persistentMemoryType="app-direct"/>
    </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553659537/970809a2-850b-150b-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="no"
adminAction="no-op" mgmtMode="imc-managed" status="modified"/>
  </outConfig>
</configConfMo>
```

### Modifying Pending Goal

Request:

```
<configConfMo cookie="1553664656/92a5bb89-850d-150d-8003-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="yes" mgmtMode="imc-managed">
    <memoryPersistentMemoryGoal dn="sys/rack-unit-1/board/pmemory-lconfig/goal-ALL"
memoryModePercentage="70" persistentMemoryType="app-direct" status="modified"/>
  </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>
```

**Response:**

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

**Deleting a Goal****Request:**

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="yes">
    <memoryPersistentMemoryGoal dn="sys/rack-unit-1/board/pmemory-lconfig/goal-ALL"
socketId="ALL"
status="deleted"/>
  </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>
```

**Response:**

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

**Configuring a Namespace****Request:**

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="yes">
    <memoryPersistentMemoryLogicalNamespace
dn="sys/rack-unit-1/board/pmemory-lconfig/lms-ns1" rn="lms-ns1" name="ns1" socketId="1"
```

```

socketLocalDimmNumber="2" mode="raw" capacity="25"/>
  </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
      rebootOnUpdate="no" forceConfig="no"
      adminAction="no-op" mgmtMode="imc-managed" status="modified"/>
  </outConfig>
</configConfMo>

```

## Modifying Pending Namespace

Request:

```

<configConfMo cookie="1553664656/92a5bb89-850d-150d-8003-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="yes" mgmtMode="imc-managed">
    <memoryPersistentMemoryLogicalNamespace
dn="sys/rack-unit-1/board/pmemory-lconfig/lns-ns1" rn="lns-ns1"
socketId="1" socketLocalDimmNumber="2" mode="raw" capacity="5" status="modified"/>
  </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>

```

## Deleting a Namespace

Request:

```

<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="yes">
    <memoryPersistentMemoryLogicalNamespace name="ns1" status="deleted"/>
  </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>

```

```

    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>

```

## Configuring Goal and Namespace

Request:

```

<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="yes" mgmtMode="imc-managed">
  <memoryPersistentMemoryGoal dn="sys/rack-unit-1/board/pmemory-lconfig/goal-ALL"
memoryModePercentage="70"
persistentMemoryType="app-direct-non-interleaved"/>
    <memoryPersistentMemoryLogicalNamespace
dn="sys/rack-unit-1/board/pmemory-lconfig/lms-ns2" rn="lms-ns2"
socketId="1" socketLocalDimmNumber="2" mode="raw" capacity="5"/>
    <memoryPersistentMemoryLogicalNamespace
dn="sys/rack-unit-1/board/pmemory-lconfig/lms-ns1" rn="lms-ns1"
socketId="1" socketLocalDimmNumber="2" mode="raw" capacity="5"/>
    </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>

```

Response:

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>

```

## Configuring Enable Security

Request:

```

<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
adminAction="enable-security" forceConfig="yes" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" securePassphrase="password"/>
      </memoryPersistentMemorySecurity>
    </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>

```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

## Configuring Disable Security

### Request:

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

adminAction="disable-security" forceConfig="yes" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" deployedSecurePassphrase="password"/>
        </memoryPersistentMemorySecurity>
      </memoryPersistentMemoryLogicalConfiguration>
    </inConfig>
  </configConfMo>
```

### Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

## Modifying Secure Passphrase

### Request:

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" inHierarchical="false"
dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

adminAction="modify-passphrase" forceConfig="yes" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" securePassphrase="newpassword" deployedSecurePassphrase="password"/>
        </memoryPersistentMemorySecurity>
      </memoryPersistentMemoryLogicalConfiguration>
    </inConfig>
  </configConfMo>
```



Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

## Unlocking DIMM(s)

Request:

```
<configConfMo cookie="1553519711/f92b8b8f-84eb-14eb-8002-d8e6ed6a0f70"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

adminAction="unlock-dimms" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" deployedSecurePassphrase="password"/>
        </memoryPersistentMemorySecurity>
        <memoryPersistentMemoryDimms rn="pmemory-dimms-1" socketId="1"
socketLocalDimmNumbers="2"/>
      </memoryPersistentMemoryLogicalConfiguration>
    </inConfig>
  </configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>
```

## Configuring Secure Erase

Request:

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

adminAction="secure-erase" forceConfig="yes" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" deployedSecurePassphrase="password"/>
        </memoryPersistentMemorySecurity>
    </inConfig>
  </configConfMo>
```

```

        <memoryPersistentMemoryDimms rn="pmemory-dimms-1" socketId="1"
        socketLocalDimmNumbers="2"/>
    </memoryPersistentMemoryLogicalConfiguration>
</inConfig>
</configConfMo>

```

**Response:**

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>

```

**Resetting Persistent Memory to Factory Default Settings****Request:**

```

<configConfMo cookie="1553669878/b263ca00-850e-150e-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

adminAction="reset-factory-default" forceConfig="yes" rebootOnUpdate="yes">
      <memoryPersistentMemorySecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security"
rn="pmemory-security">
        <memoryPersistentMemoryLocalSecurity
dn="sys/rack-unit-1/board/pmemory-lconfig/pmemory-security/local"
rn="local" deployedSecurePassphrase="password"/>
      </memoryPersistentMemorySecurity>
    </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>

```

**Response:**

```

<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>
  </outConfig>
</configConfMo>

```

**Exporting of Persistent Memory Configuration****Request:**

```

<configConfMo cookie="1553668752/ca5726fe-850d-150d-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-config/export-config">
  <inConfig>
    <memoryPersistentMemoryBackup dn="sys/rack-unit-1/board/pmemory-config/export-config"
proto="sftp" hostname="10.10.10.10" remoteFile="FilePath" user="xxx"
pwd="password"> </memoryPersistentMemoryBackup>
  </inConfig>
</configConfMo>

```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-config/export-config"
cookie="1553668752/ca5726fe-850d-150d-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryBackup dn="sys/rack-unit-1/board/pmemory-config/export-config"
fsmDescr="export-config" proto="none" hostname="" remoteFile="" user="" pwd=""
fsmStatus="success"
status="modified"/>

```

## Importing of Persistent Memory Configuration

Request:

```
<configConfMo cookie="1553668752/ca5726fe-850d-150d-8002-943e485a6970"
dn="sys/rack-unit-1/board/pmemory-config/import-config">
  <inConfig>
    <memoryPersistentMemoryImporter dn="sys/rack-unit-1/board/pmemory-config/import-config"

rebootOnUpdate="no" proto="sftp" hostname="10.10.10.10" remoteFile="FilePath"
user="xxx" pwd="password"> </memoryPersistentMemoryImporter>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-config/import-config"
cookie="1553668752/ca5726fe-850d-150d-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryImporter dn="sys/rack-unit-1/board/pmemory-config/import-config"

fsmDescr="import-config" proto="none" hostname="" remoteFile="" user="" pwd=""
fsmStatus="success"
rebootOnUpdate="yes" status="modified"/>>
  </outConfig>
</configConfMo>
```

## Configuring Host Managed Mode

Request:

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

mgmtMode="host-managed" forceConfig="no" rebootOnUpdate="no"
  </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>
```

Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="host-managed"
status="modified"/>>
  </outConfig>
</configConfMo>
```

## Configuring Cisco IMC Managed Mode

### Request:

```
<configConfMo cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970"
inHierarchical="false" dn="sys/rack-unit-1/board/pmemory-lconfig">
  <inConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"
mgmtMode="imc-managed" forceConfig="no" rebootOnUpdate="no">
  </memoryPersistentMemoryLogicalConfiguration>
  </inConfig>
</configConfMo>
```

### Response:

```
<configConfMo dn="sys/rack-unit-1/board/pmemory-lconfig"
cookie="1553660570/86d0435c-850c-150c-8002-943e485a6970" response="yes">
  <outConfig>
    <memoryPersistentMemoryLogicalConfiguration dn="sys/rack-unit-1/board/pmemory-lconfig"

rebootOnUpdate="no" forceConfig="no" adminAction="no-op" mgmtMode="imc-managed"
status="modified"/>>
  </outConfig>
</configConfMo>
```