



Network Services Tasks

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Add Account

Summary Description Inputs

Input	Description	Mappable To Type	Mandatory
Account Name	Enter the name of the bare metal agent account	gen_text_input	Y
Description	Enter the description of the bare metal agent account		
Bare Metal Agent uses different interfaces for management and PXE traffic	Check if the bare metal agent uses different network interfaces for management and PXE traffic		
Management Address	Enter the management network IP address for the bare metal agent	gen_text_input	Y
PXE Interface Address	Enter the PXE network IP address for the bare metal agent		Y
Login ID	Enter the user name for the bare metal agent	gen_text_input	Y
Password	Enter the password for the bare metal agent	password	Y
Enable Samba service for Windows PXE	Samba service is used for Windows PXE boot. Check if you want to use bare metal agent for Windows installation.		
Samba Password	Enter the password for the Samba service	password	
Confirm Samba Password	Confirm the password for the Samba service	password	
Location	Enter the location of the bare metal agent, such as a physical location		
Set As Default Bare Metal Agent	Check if the bare metal agent needs to be set as the default BMA		
Start Bare Metal Agent services after adding Account	Check if you want to start bare metal agent services after adding the account		
Database Address	Choose the IP address of the inventory database node if you are configuring the bare metal agent for the Cisco UCS Director multi-node deployment	UCSDIPAddress List	Y

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent

BMA OS Image Provision

Summary

Provision OS image item in BMA.

Description

This task allows you to provision the OS image item in Bare Metal Agent. The OS image available in the OS image repository of the selected Bare Metal Agent can be provisioned. Upon successful image provisioning, the image template files, such as the PXE configuration and kick start files, are available in the Bare Metal Agent. The provisioned image, configuration files can be used to PXE boot the bare metal.

Inputs

Input	Description	Mappable To Type	Mandatory
Select BMA Account	Choose the bare metal agent account to provision the OS image	bare_metal_agent	Y
OS Image Name	Choose the OS image from the uploaded OS images list. OS image is used to provision the catalog.	gen_text_input	Y
OS Type	Choose the OS type of the image selected	bmaProvisionOsTypeList Provider	Y
Catalog Name	Enter the catalog name to be used for the current provisioned image	gen_text_input	Y

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent
OUTPUT_OS_IMAGE_PATH	OS Image Path in BMA's OS image repository	bare_metal_agent
OUTPUT_OS_CATALOG_NAME	Catalog name as provision in BMA.	gen_text_input

BMA OS Image Upload

Summary

Upload OS image to BMA.

Description

This task allows you to upload the OS image to Bare Metal Agent. OS image can be uploaded to the Bare Metal Agent from a local file or from a webserver location. Upon successful image upload, the image is available for provisioning. If the image file with the same image name and OS type already exists or if the connection to web server is not accessible, the image upload fails.

Inputs

Input	Description	Mappable To Type	Mandatory
Select BMA Account	Choose the bare metal agent account	bare_metal_agent	Y
OS Image Label	Enter the name of the OS image	gen_text_input	Y
OS Type	Choose the OS type of the image	bmaOsTypeList Provider	Y
OS Image Upload Type	Choose the type of upload from the options. For example: DESKTOP FILE / WEB SERVER PATH. Use the desktop file option to upload the file from the local disk. Use the webserver path option to specify the web server path where the ISO images are stored.	gen_text_input	
HTTP/HTTP(s) URL	Enter the HTTP or HTTPS URL of the OS image if the upload type is WEB SERVER PATH. For example: http://centos.mirror.net.in/centos/7/isos/x86_64/CentOS-7-xyz.iso.	gen_text_input	
Local File Location	Local file Location of the OS Image	gen_text_input	
Checksum(MD5)	Checksum of the file to be checked. MD5 checksum.	gen_text_input	

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent
OUTPUT_OS_IMAGE_PATH	OS Image Path in BMA's OS image repository	bare_metal_agent

Configure DHCP

Summary
Description
Inputs

Input	Description	Mappable To Type	Mandatory
Select BMA Account	Choose the bare metal agent to the configure DHCP service	bare_metal_agent	Y
DHCP Subnet	Enter the DHCP subnet in IPv4 address format to configure the DHCP. For example: 192.168.1.0		Y
DHCP Netmask	Enter the DHCP net mask. For example: 255.255.255.0		Y
DHCP Start IP	Enter the DHCP start IP address range in IPv4 address format. For example: 192.168.1.2		Y
DHCP End IP	Enter the DHCP end IP address range in IPv4 address format. For example: 192.168.1.252		Y
Router IP Address	Enter the router IP address in IPv4 address format. For example: 192.168.1.1		

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent

Configure Interface

Summary

Description

Inputs

Input	Description	Mappable To Type	Mandatory
Select Bare Metal Agent Account	Choose the bare metal agent account to configure the network interface	bare_metal_agent	Y
Interface Name	Enter the network interface name		Y
IP Address	Enter the network interface IP address in IPv4 address format		Y
Subnet Mask	Enter the network interface subnet mask		Y

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent

DNS name to IP Resolver

Summary

Resolve a DNS name to an IP Address.

Description

This task queries the DNS server for the IP address of a given domain name. The task caches the resolved IP. By default, to protect against DNS spoofing attacks, the cache never refreshes. If the IP address is changed on the DNS server, the task provides the old (now incorrect) IP. The task can be forced to refresh the cache by configuring the cache time. The cache time is configured by setting a property in the Java security properties file. Warning: Changing Java security properties has serious security implications. Do not change this property unless you are sure that your network is safe from DNS spoofing attacks. To change the property:

1. In the `/opt/bin/jre/lib/security/java.security` file, find the property `networkaddress.cache.ttl`.
2. Uncomment the line that sets the `networkaddress.cache.ttl` property.
3. Set `networkaddress.cache.ttl` to the number of seconds to cache an address for. A value of 60 to 600 or higher is recommended.
4. Restart UCSB services.

Inputs

Input	Description	Mappable To Type	Mandatory
DNS Name	Enter the DNS name	gen_text_input	Y

Outputs

Output	Description	Type
OUTPUT_HOST_DNS_NAME	Host DNS Name	gen_text_input
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input

IP Address to DNS name Resolver

Summary

Resolve an IP Address to a DNS name.

Description

This task queries the DNS server for the domain name of a specified IP address.

Inputs

Input	Description	Mappable To Type	Mandatory
IP Address	Enter the IP address in IPv4 address format	gen_text_input	Y

Outputs

Output	Description	Type
OUTPUT_HOST_DNS_NAME	Host DNS Name	gen_text_input
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input

Monitor PXE Boot

Summary

Description

Inputs

Input	Description	Mappable To Type	Mandatory
PXE Request ID	Enter the PXE request ID to be monitored for completion	gen_text_input	Y
Max Wait time (Hours)	Choose the maximum wait time in hours		Y

Outputs

No Outputs

Remove PXE Boot Setup

Summary

Remove a PXE boot setup.

Description

This task releases the setup used for PXE Boot for a selected PXE boot ID.

Inputs

Input	Description	Mappable To Type	Mandatory
PXE Boot Id	Enter the PXE Boot ID	gen_text_input	Y
Clean this IP Address in All other PXE Requests	Check this option to clean up the IP Address used in this PXE request from all other PXE requests	Boolean	

Outputs

No Outputs

Service Status

Summary
Description
Inputs

Input	Description	Mappable To Type	Mandatory
Select Bare Metal Agent Account	Choose the bare metal agent account	bare_metal_agent	Y

Outputs

Output	Description	Type
OUTPUT_BMA_ID	BMA ID that was created while adding BMA Account	bare_metal_agent

Setup PXE Boot

Summary

Set up PXE boot request parameters.

Description

This task specifies PXE boot request parameters such as OS Type, Host Name, Server IP Address Range, MAC Address, NetMask, Gateway, Name Server, Password, and Time Zone. Output of this task is the PXE Request ID.

Inputs

Input	Description	Mappable To Type	Mandatory
Network Boot Manager	Choose the network boot manager	NetworkBootManagerList	
OS Type	Choose the OS to be installed	gen_text_input	Y
Server MAC Address	Enter the MAC addresses of the server as a comma-separated list of MAC addresses	gen_text_input	Y
IP configuration type	Choose the type of IP configuration. For example: Static or DHCP.	IPConfigType	
Server Address	Enter the IP address range of the server. For example: 192.168.0.1-192.168.0.255,192.168.1.20	gen_text_input	Y
Server Net Mask	Enter the server net mask	gen_text_input	Y
Server Host Name	Enter the server hostname	gen_text_input	Y
Server Gateway	Enter the server gateway	gen_text_input	Y
Server Name Server	Enter the name server	gen_text_input	
Management VLAN	Enter the management VLAN	gen_text_input	
Root Password	Enter the root password	password	Y
Timezone	Choose the time zone	gen_text_input	Y
Additional Parameters	Enter additional parameters to customize the answer files. The Additional Parameters table takes the key-value pair of each additional parameter.		

Outputs

Output	Description	Type
OUTPUT_PXE_BOOT_ID	PXE Boot ID that was created for setup pxe boot request	gen_text_input
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input

Setup PXE Boot With BMA Selection

Summary Description Inputs

Input	Description	Mappable To Type	Mandatory
Network Boot Manager	Choose the network boot manager	NetworkBootManagerList	
Target BMA	Choose the bare metal agent account	gen_text_input	
OS Type	Choose the OS to be installed	gen_text_input	Y
Server MAC Address	Enter the MAC addresses of the server as a comma-separated list of MAC address	gen_text_input	Y
IP configuration type	Choose the type of IP configuration. For example: Static or DHCP.	IPConfigType	
Server Address	Enter the IP address range of the server. For example: 192.168.0.1-192.168.0.255,192.168.1.20.	gen_text_input	Y
Server Net Mask	Enter the server net mask	gen_text_input	Y
Server Host Name	Enter the server hostname	gen_text_input	Y
Server Gateway	Enter the server gateway	gen_text_input	Y
Server Name Server	Enter the name server	gen_text_input	
Management VLAN	Enter the management VLAN	gen_text_input	
Root Password	Enter the root password	password	Y
Timezone	Choose the time zone	gen_text_input	Y
Additional Parameters	Enter additional parameters to customize the answer files. The Additional Parameters table takes the key-value pair of each additional parameter.		

Outputs

Output	Description	Type
OUTPUT_PXE_BOOT_ID	PXE Boot ID that was created for setup pxe boot request	gen_text_input
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input

Setup PXE Boot for Virtual SAN

Summary

Setup PXE Boot for Virtual SAN.

Description

This task allows you to Setup PXE Boot for Virtual SAN.

Inputs

Input	Description	Mappable To Type	Mandatory
Network Boot Manager	Choose the network boot manager	NetworkBootManagerList	
Target BMA	Choose the bare metal agent account	BMA	
OS Type	Choose the OS to be installed	OSType	Y
Server MAC Address	Enter the MAC addresses of the server as a comma separated list of MAC addresses	gen_text_input	Y
IP configuration type	Choose the type of IP configuration. For example: Static or DHCP.	IPConfigType	
Server Address	Enter the IP address range of the server. For example: 192.168.0.1-192.168.0.255,192.168.1.20.	gen_text_input	Y
Server Net Mask	Enter the server net mask	gen_text_input	Y
Server Host Name	Enter the server hostname	gen_text_input	Y
Server Gateway	Enter the server gateway	gen_text_input	Y
Server Name Server	Enter the name server	gen_text_input	
Management VLAN	Enter the management VLAN	gen_text_input	
Root Password	Enter the root password	password	Y
Timezone	Choose the time zone	Timezone	Y
Additional Parameters	Enter additional parameters to customize the answer files. The Additional Parameters table takes the key-value pair of each additional parameter.		
ESXi Boot Order	Choose the ESXi boot order	ESXiBootOrder	
Server Model	Enter the server model	gen_text_input	

Outputs

Output	Description	Type
OUTPUT_PXE_BOOT_ID	PXE Boot ID that was created for setup pxe boot request	gen_text_input

Output	Description	Type
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input

Setup Windows PXE Boot

Summary Description Inputs

Input	Description	Mappable To Type	Mandatory
Network Boot Manager	Choose the network boot manager	NetworkBootManager List	
Target BMA	Choose the bare metal agent account	gen_text_input	
OS Type	Choose the OS to be installed	gen_text_input	Y
Server MAC Address	Enter the MAC addresses of the server as a comma separated list of MAC addresses	gen_text_input	Y
OS Flavor Name	Enter the OS flavor name	gen_text_input	Y
Organization Name	Enter the organization name	gen_text_input	Y
Product Key	Choose the product key for Windows	baremetal_windows_ license_pool	Y
Host Name	Enter the server host name	gen_text_input	Y
Administrator Password	Enter the administrator password	gen_text_input	Y
Confirm Password	Enter the administrator password for confirmation	gen_text_input	Y
IP configuration type	Choose the type of IP configuration. For example: Static or DHCP.	IPConfigType	
Server Address	Enter the IP address range of the server. For example: 192.168.0.1-192.168.0.255,192.168.1.20.	gen_text_input	
Server Net Mask	Enter the server net mask	gen_text_input	
Server Gateway	Enter the server gateway	gen_text_input	
Server Name Server	Enter the name server	gen_text_input	
Timezone	Choose the time zone	gen_text_input	Y
Disk Partition Size (GB)	Enter the disk partition size in GB	gen_text_input	Y
Additional Parameters	Enter additional parameters to customize the answer files. The Additional Parameters table takes the key-value pair of each additional parameter.		

Outputs

Output	Description	Type
OUTPUT_PXE_BOOT_ID	PXE Boot ID that was created for setup pxe boot request	gen_text_input
OUTPUT_HOST_IP_ADDRESS	Host IP Address resolved by the Setup PXE task.	gen_text_input