



Release Notes for Cisco Application eXtension Platform (AXP) 1.0.6

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Cisco AXP 1.0.6
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These release notes support Cisco Application eXtension Platform 1.0.6 based on the Cisco Application eXtension (AXP) Platform Cisco version 1.0.1. For a list of the software caveats that apply, see the “Caveats” section on page 6.

We recommend that you view the field notices for this release to see if your software or hardware platforms are affected. If you have an account on Cisco.com, you can find field notices at http://www.cisco.com/warp/customer/tech_tips/index/cfn.html.

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System Requirements

This section describes the system requirements for Cisco Application Platform eXtension Version 1.0.6 and includes the following sections:

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Hardware Supported

Table 1 lists the hardware platforms and the modules required to support the Cisco AXP version 1.0.6.

Table 1 *Hardware Supported for the Cisco AXP 1.0.6*

Cisco Platforms	Cisco AXP Service Module SKU	Processor/Memory
Cisco 1841	AIM-APPRE-102-K9	300MHz/256 MB
Cisco 2801		
Cisco 2811	NME-APPRE-302-K9	1.0 GHz/512 MB
Cisco 2821		
Cisco 2851		
Cisco 3825		
Cisco 3845		
Cisco 3825	NME-APPRE-522-K9	1.4 GHz/2.0 GB
Cisco 3845		

Files in Cisco AXP 1.0.6

Table 2 lists the files available in the Cisco AXP 1.0.6 AIM Software.

Table 3 list the files available in Cisco AXP 1.0.6 AIM Full Distribution

Table 4 list the files available in Cisco AXP 1.0.6 AIM Add-On Packages

Table 5 lists the files available in Cisco AXP 1.0.6 NME Software

Table 6 lists the files available in Cisco AXP 1.0.6 NME Add-On Packages

Table 7 lists the files available in Cisco AXP 1.0.6 Software Development Kit

Table 2 *Files in Cisco AXP 1.0.6 AIM Software*

Filename	Purpose
axp-helper-k9.aim.1.0.6	Cisco Application eXtension Platform Rescue Helper image. Aids application installation on AIM service modules when necessary.
axp-k9-aim.1.0.6.pkg	Main package for installing the Cisco Application eXtension Platform on AIM service modules.
axp-k9-aim.1.0.6.prt1	Package payload containing all data and executable files for the installer subsystem associated with the Cisco Application eXtension Platform on AIM service modules.
axp-installer-k9.aim.1.0.6.prt1	Package payload containing all data and executable files for the installer subsystem associated with the Cisco Application eXtension Platform on AIM service modules.

Table 3 *Files included in Cisco AXP 1.0.6 AIM Full Distribution*

Filename	Purpose
axp-k9.aim.1.0.6.tar.gz	Compressed archive of all package files associated with the Cisco Application eXtension Platform on AIM service modules.

Table 4 *Files included in Cisco AXP 1.0.6 AIM Add-On Packages*

Filename	Purpose
axp-app-dev.aim.1.0.6.pkg	Package for installing the Application Development Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-app-dev.aim.1.0.6.prt1	Package payload containing all data and executable files for the Application Development Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-cli-plugin.aim.1.0.6.pkg	Package for installing the Command Language Interpreter Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-cli-plugin.aim.1.0.6.prt1	Package payload containing all data and executable files for the Command Language Interpreter Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-eemapi.aim.1.0.6.pkg	Package for installing Cisco IOS Event Notification Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-eemapi.aim.1.0.6.prt1	Package payload containing all data and executable files for Cisco IOS Event Notification Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-iosapi.aim.1.0.6.pkg	Package for installing Cisco IOS Configuration Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-iosapi.aim.1.0.6.prt1	Package payload containing all data and executable files for Cisco IOS Configuration Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-vserial.aim.1.0.6.pkg	Package for installing the IOS Serial Device Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-vserial.aim.1.0.6.prt1	Package payload containing all data and executable files for the IOS Serial Device Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-perl-5.8.8.aim.1.0.6.pkg	Package for installing a Perl Language Interpreter Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-perl-5.8.8.aim.1.0.6.prt1	Package payload containing all data and executable files for a Perl Language Interpreter Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-prosyst-mbs6.aim.1.0.6.pkg	Package for installing a Prosyst eMbedded System Add-On associated with the Cisco Application eXtension Platform on AIM service modules.

Filename	Purpose
axp-prosyst-mbs6.aim.1.0.6.prt1	Package payload containing all data and executable files for a Prosyst eMbedded System Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-ssh-4.6p1-k9.aim.1.0.6.pkg	Package for installing a Secure Shell Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-ssh-4.6p1-k9.aim.1.0.6.prt1	Package payload containing all data and executable files for a Secure Shell Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-tomcat5.aim.1.0.6.pkg	Package for installing a Tomcat Java-based Web Server Add-On associated with the Cisco Application eXtension Platform on AIM service modules.
axp-tomcat5.aim.1.0.6.prt1	Package payload containing all data and executable files for a Tomcat Java-based Web Server Add-On associated with the Cisco Application eXtension Platform on AIM service modules.

Table 5 Files included in Cisco AXP 1.0.6 Cisco NME Software

Filename	Purpose
axp-helper-k9.nme.1.0.6	Cisco Application eXtension Platform Rescue Helper image. Aids application installation on Cisco NME service modules when necessary.
axp-k9.nme.1.0.6.tar.gz	Compressed archive of all package files associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-k9.nme.1.0.6.pkg	Main package for installing the Cisco Application eXtension Platform on Cisco NME service modules.
axp-k9.nme.1.0.6.prt1	Package payload containing all data and executable files for a full installation of the Cisco Application eXtension Platform on Cisco NME service modules.
axp-installer-k9.nme.1.0.6.prt1	Package payload containing all data and executable files for the installer subsystem associated with the Cisco Application eXtension Platform on Cisco NME service modules.

Table 6 Files included in Cisco AXP 1.0.6 Cisco NME Add-On Packages

Filename	Purpose
axp-app-dev.nme.1.0.6.pkg	Package for installing the Application Development Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-app-dev.nme.1.0.6.prt1	Package payload containing all data and executable files for the Application Development Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-cli-plugin.nme.1.0.6.pkg	Package for installing the Command Language Interpreter Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.

Filename	Purpose
axp-cli-plugin.nme.1.0.6.prt1	Package payload containing all data and executable files for the Command Language Interpreter Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-eemapi.nme.1.0.6.pkg	Package for installing Cisco IOS Event Notification Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-eemapi.nme.1.0.6.prt1	Package payload containing all data and executable files for the IOS Event Notification Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-iosapi.nme.1.0.6.pkg	Package for installing Cisco IOS Configuration Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-iosapi.nme.1.0.6.prt1	Package payload containing all data and executable files for the IOS Configuration Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-vserial.nme.1.0.6.pkg	Package for installing Cisco IOS Serial Device Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-vserial.nme.1.0.6.prt1	Package payload containing all data and executable files for Cisco IOS Serial Device Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-perl-5.8.8.nme.1.0.6.pkg	Package for installing a Perl Language Interpreter Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-perl-5.8.8.nme.1.0.6.prt1	Package payload containing all data and executable files for a Perl Language Interpreter Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-prosyst-mbs6.nme.1.0.6.pkg	Package for installing a Prosyst eMbedded System Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-prosyst-mbs6.nme.1.0.6.prt1	Package payload containing all data and executable files for a Prosyst eMbedded System Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-ssh-4.6p1-k9.nme.1.0.6.pkg	Package for installing a Secure Shell Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-ssh-4.6p1-k9.nme.1.0.6.prt1	Package payload containing all data and executable files for a Secure Shell Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-tomcat5.nme.1.0.6.pkg	Package for installing a Tomcat Java-based Web Server Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.
axp-tomcat5.nme.1.0.6.prt1	Package payload containing all data and executable files for a Tomcat Java-based Web Server Add-On associated with the Cisco Application eXtension Platform on Cisco NME service modules.

Table 7 Files included in Cisco AXP Version 1.0.6 Software Development Kit

Filename	Purpose
axp-sdk.1.0.6.tar.gz	Cisco Application eXtension Platform Software Development Kit for all service modules.

Upgrading to Cisco AXP 1.0.6

To upgrade to Cisco Application eXtension Platform 1.0.6:

- a. Copy the installer payload file (**axp-installer.k9.<nme/aim.1.0.6>.prt1**) to the same FTP directory as the Cisco Application eXtension Platform package. The FTP directory contains a package file such as **axp-k9.nme.1.0.6.pkg** and a corresponding payload file **axp-k9.nme.1.0.6.prt1** with other add-on packages.
- b. Install the Cisco AXP package using the software install upgrade command at following link: http://www.cisco.com/en/US/docs/interfaces_modules/services_modules/ax/1.0/command/reference/axpcr.html



Note

If you are upgrading from Cisco AXP 1.0.1 to Cisco AXP 1.0.6, use the Cisco AXP 1.0.1 Software Development Authorization Certificate to package/bundle your application. After upgrading to Cisco AXP 1.0.6, verify the system is running fine on Cisco AXP 1.0.6. Once the system has upgraded to 1.0.6, you can use the Cisco AXP 1.0.6 Software Development Authorization Certificate to package/bundle your application for your next install.

To downgrade to an earlier version of Cisco Application eXtension Platform:

- If you need to downgrade to a previous version of Cisco AXP, use the “software install upgrade” command from the following link: http://www.cisco.com/en/US/docs/interfaces_modules/services_modules/ax/1.0/command/reference/axpcr.html. The “software install downgrade” command is not currently supported. For more information on this command, see the [Cisco Application eXtension Platform User Guide](#) and the [Cisco Application eXtension Platform 1.0 Command Reference](#).

Determining the Software Version

To determine which version of the Cisco AXP software is currently running on your Cisco ISR router, log in to the router, and enter the **show version EXEC** command. The following sample output from the **show version** command indicates the version number on the second output line.

```
Application eXtension Platform (AXP) version (1.0.6)
Technical Support: http://www.cisco.com/techsupport/ Copyright (c) 1986-2008 by Cisco
Systems, Inc.
```

Caveats

Caveats describe unexpected behavior or defects in Cisco software releases. Severity 1 caveats are the most serious caveats, severity 2 caveats are less serious, and severity 3 caveats are the least serious of these three severity levels.

**Note**

To reach the Bug Toolkit, **log in** to [Cisco.com](https://www.cisco.com) and go to: http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl. (If the defect that you have requested cannot be displayed, this may be due to one or more of the following reasons: the defect number does not exist, the defect does not have a customer-visible description yet, or the defect has been marked Cisco Confidential.)

- [Caveats for Cisco AXP, page 7](#)

Caveats for Cisco AXP

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- [Resolved Caveats- Cisco AXP Version 1.0.6, page 7](#)
- [Open Caveats- Cisco AXP Version 1.0.5, page 12](#)
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- [Open Caveats- Cisco AXP Version 1.0.4, page 13](#)
- [Resolved Caveats- Cisco AXP Version 1.0.4, page 14](#)
- [Open Caveats - Cisco AXP Version 1.0.3, page 17](#)
- [Resolved Caveats - Cisco AXP Version 1.0.3, page 17](#)

Open Caveats- Cisco AXP Version 1.0.6

There are no open caveats for this version.

Resolved Caveats- Cisco AXP Version 1.0.6

CSCso45164 `/dev/rtc` device disappears in vserver after addition of second vserver

Symptom The `/dev/rtc` device disappears from the guest environment

Conditions Problem was seen happening after a second application was installed on the system. The `/dev/rtc` device of the first application disappeared and the second application can see its `/dev/rtc` device.

Workaround None.

Further Problem Description:

Installing more applications may cause previously installed application's `/dev/rtc` device to disappear.

CSCso48376 Removal of **ios_config** event has no effect if username is not configured.

Symptom Remove, change, or add an **ios_config** type event from CLI has no effect.

Workaround Configure username/password with proper privilege(15) and configure the name and password in Service module as well.

CSCso56053 Incorrect error message when trying to install an add-on using upgrade C

Symptom When the user tries to install an add-on package on the system using “software install upgrade” instead of the correct CLI “software install add”, the system prints an incorrect error message instead of a more meaningful message indicating that this action is not permitted. Following is the error message that the user will see:

TypeError: raise: arg 3 must be a traceback or None

Conditions This happens only when the user tries to install an application using a wrong CLI.

Workaround Use the correct CLI, “software install add”.

CSCso59201 Resource manager cannot handle corrupt filenames.

Symptom When the packaged application contains files with corrupted filenames, the resource manager fails to install any new addons or upgrades.

Conditions This happens when the package contains files with corrupted filenames, such as filenames containing escape characters, white spaces, or control characters.

Workaround Remove all white spaces, escape characters, or control character from the filenames.

CSCso74355 Log level errors CLI do not work.

Symptom When user configures the application log level to be “error”, logging fails.

Conditions The user makes the configuration by using the following command (with an “s” in the word error):

```
>configure terminalconf>app-service <app>
```

```
conf-app>log level errors
```

Workaround The user should use the following command without an “s” in the word “error”:

```
conf-app>log level errors
```

CSCso15624 CLI plugin activation causes user to be kicked out to the router prompt.

Symptom When user issues a plug-in CLI command, the CLI console is being kicked out to the router prompt.

Conditions This issue is caused when the plug-in CLI is activated in either one of the following two possible error conditions:

1. The CLI action shared library loading problem.
2. The CLI action has seg fault.

These conditions should be checked and verified by the plug-in CLI developers.

Workaround Check the CLI action to ensure the two conditions above are causing the problem and fix them.

CSCso36155 Upgrade does not work for manifest only changes.

Symptom Customer changes the resource limits of an application but does not change any content, re-packages the application with different version number and upgrades the application using “software install upgrade”. After reboot “show resource limits” still shows old resource values.

Workaround Touch a dummy file and then repackage the application with new resource limits. If at least one file is different from the old version, upgrade will update the manifest file and after reboot “show resource limits” will have correct values for the application.

CSCso43978 'no shutdown' on vserver not working

Symptom A given vserver for an installed application will not start if this vserver is “down”. Typically, the vserver will not start after the system reboots after the installation. The following message can be seen in messages.log:

```
<14>Feb 29 15:37:50 localhost [App1]: invalid parameters: 'space_used' is larger than 'space_total'
```

Conditions The developer specified a value for the --disk-limit parameter at the time of application packaging which is syntactically correct but specifies a limit that is actually less than the amount of data to be packaged.

When this occurs with an SDK that does not have a fix for this problem, the following errors take place:

1. The packaging tool accepts the erroneous value for --disk-limit and creates the package.
2. The developer installs the package on the blade and the installer goes through.
3. After the installation, the vserver attempts to start and the vserver logic prevents the vserver from starting due to the configured limit (--disk-limit) being exceeded by the size of the data present in the vserver.

Workaround To prevent the erroneous behavior, the developer must provide a disk-limit greater than the data to be packaged. Use the linux “du” command to figure out how much space is required.

CSCsl01618 Always clear 'vserver run' file if 'vserver start' returns error.

Symptom If application startup fails, the log message may still show application started success. The CLI may report that the application is online when it is really not.

Conditions Application startup fails due to bad startup script or system error.

Workaround No work around for the incorrect log message. If CLI is displaying the application as online when it is not, one can try connect console to the application. This will update the state shown on the CLI.

CSCso91674 Syslog and timer events fail. EEM Errors in /var/log/messages.log

Symptom EEM events are not registered properly sometimes. EEM events are not received after reload and an additional reset is required.

Conditions Application names contain "_" (underscore) character.

Workaround Repackage applications using names that do not contain "_" (underscore) character. Additional reset is needed to restart the EEM event delivery service.

CSCsq37639 Connect console fails when link using absolute path.

Symptom Command connect console fails though proper link to files were created in post install script.

Conditions Absolute links to files created in the post-install.sh file fail. For example: `'ln -s /bin/login.sh /bin/console'`

Workaround Create relative links to the files. Use the following link:

`'ln -s login.sh /bin/console'`

CSCsq52222 java.lang.InterruptedException on show tech-support with Ctrl+C

Symptom When 'show tech-support' CLI is used with Ctrl+C keys, the CLI output throws java.lang.InterruptedException.

Conditions Hit Ctrl+C keys after entering the CLI 'show tech-support' on app-services. Software: Application eXtension Platform (AXP) version (1.0.4).

Workaround None.

CSCsq56199 Copy log CLI fails to throw error.

Symptom The copy log CLI does not provide a failure message when the user attempts to copy a log file that does not exist.

Conditions This defect affects AXP version 1.0.4 and earlier versions. The defect occurs when the user specifies a log file that does not exist on the copy log CLI.

Workaround None.

CSCsq88119 Installing a second wildcard application makes the first application lose its configured value.

Symptom CLI configs for other applications disappear when installing or uninstalling third party applications.

Conditions After a new application is installed, previously configured CLI changes for other applications are lost. This behavior is also observed when an application is uninstalled. The old configs can be located in startup-config, but they are missing from the running-config.

None.

CSCso35807 Service using domain socket must validate socket path size.

Symptom Application with the application name containing 20 to 32 characters will not have working CLI plug-in capability

Conditions CLI plug-in fails, if an application name contains 20 to 32 characters.

Workaround Change the application name with a new name containing less than or equal to 19 characters.

CSCsq39715 **app-service exec** and config missing command when two add-on packages have same name.

Conditions This happens when two add-on packages have the same name and the names are in upper case for one package and lower case for the other, for example: APP2 and App2. As a result of same package names:

- show runn fails with no output.
- config under app-server fails to prompt with default configuration commands (for example, bind, hostname, ip limit)

Workaround Do not package same name add-on package.

Open Caveats- Cisco AXP Version 1.0.5

CSCso91674 Syslog and timer events fail. EEM errors in /var/log/messages.log

Symptom EEM events are not registered properly sometimes. EEM events are not received after reload and an additional reset is required.

Conditions This happens if the application names contain “_” (underscore) character.

Workaround Repackage applications using names that do not contain “_” (underscore) character. Additional reset is needed to restart the EEM event delivery service.

Resolved Caveats- Cisco AXP Version 1.0.5

CSCsq49465 - ntp sync takes 20 minutes on router/service module full power down/up

Symptom If the router and service module are physically powered down, and left to sit over a period of hours, the ntp sync time between the router and the service module can take up to 20 minutes or longer on powering back the router and service module.

Conditions The service module has the ISR as its ntp master, and the ISR syncs to an external ntp master. This happens when both the ISR and service module are physically powered down and then powered up.

Workaround None.

CSCsq49482 iosapi daemon crashes and fails to restart

Conditions This happens when application that depends upon axp-iosapi add-on package, has a name containing more than 15 characters. As a result, the memory storage holding the application name does not have enough memory space allocated. Hence, data corruption occurs.

Workaround Use shorter application name with less than 15 characters when building the application package that depends upon axp-iosapi add-on package.

CSCsq25612 Unable to display run config after installing an add-on package with long name

Symptom Running configuration is not displayed when installing add-on package with application name containing 32 characters.

Conditions This happens when using the software install add command to install a package with a long application name containing more than 15 characters. As a result, the “show run” command does not display the running configuration.

Workaround Use shorter application name with less than 15 characters when building the add on package.

CSCso43087 **ip_forward** turned off by default

Symptom IP packet forwarded to the blade can be routed back to the router.

Conditions When using packet replication technologies from IOS, NAM or RITE packet, the IP address of these packets are not the same as the blade's IP address. Application/driver does not read the packet and IP routing sends the packet back to the IOS router. This should not affect operation just consuming CPU processing and bandwidth of the interface between Cisco IOS and blade.

Workaround None.

Open Caveats- Cisco AXP Version 1.0.4

CSCso45164 The “/dev/rtc” device disappears in vserver after addition of second vserver.

Symptom The /dev/rtc device disappears from the guest environment.

Conditions This problem happens after the installation of a second application on the system. The /dev/rtc device of the first application disappeared, but the second application can see its /dev/rtc device.

Workaround There is no known workaround for this issue.

Further Problem Description: Installing more applications may cause previously installed application's /dev/rtc device to disappear.

CSCso36155 Upgrade does not work for manifest ONLY changes.

Symptom Customer changes the resource limits of an application but does not change any content, re-packages the application with different version number and upgrades the application using “software install upgrade”. After reboot “show resource limits” still shows old resource values.

Workaround The workaround is for the customer to touch a dummy file and then repackage the application with the new resource limits. If at least one file is different from the old version upgrade will update the manifest file and so after reboot “show resource limits” will have correct values for the application.

Resolved Caveats- Cisco AXP Version1.0.4

CSCsm67655 EEM Apps takes a long time to come online.

Symptom There is a sequential delay if **eemapi** add-on package is installed. When the installation of an application depends on Cisco axp-eemapi add-on package, that application takes about 10 to 11 minutes to come online. Installing a second application takes about 20 plus minutes to come online.

Conditions This happens when a Cisco IOS router prompts confirmation “erase flash: [confirm]” when “erase flash:” CLI command is issued. The 1.0.3 eemapi add-on package during startup, it does not expect the confirmation prompt, hence, it times out after 10 minutes.

Workaround **axp-eemapi..1.0.3** add-on package will not be released for version 1.0.3. User should use version 1.0.1.

CSCsl02585 Bundle script throw errors and exits when there is no disk space

Symptom The bundle package is packed and signed correctly but the installation will fail because the disk space on the development environment is full.

Conditions This happens when disk space is out and the payload is missing in the bundled package. This error shows up, If during packaging of one of the many add-on packages, the packaging fails to copy due to full disk space on the development environment.

Workaround Make sure there is at least twice the total disk space needed by all add-on packages before running packaging tool.

CSCsm47140 Javalin: CLI: ip ssh server does not bring it up to RUNNING state

Symptom The config CLI “ip ssh server” under an application’s app-service mode, does not take effect in random times. That results in the application SSH server not starting, even though the config CLI is registered and seen in “show running-config”. This case arises when the application container is running into high CPU usage.

Conditions To turn on the application SSH server, in the CLI console:

```
CLI>config terminal
CLI(config)>app-service myapp
CLI(config-myapp)>ip ssh server
```

Normally, users should see that the application is running by doing:

```
CLI>app-service myapp
CLI(exec-myapp)>show ssh-server
Application SSH Server
```

```
Status:                RUNNING
```

But in some cases when the application is in high CPU usage, it might report that the application SSH server is “NOT RUNNING”

Workaround Since this is a random failure, users can issue the same config CLI again until the SSH server reports “RUNNING”.

CSCsm71620 Validation Failed: Development authorization not found

Symptom Installation failure with the following error:

Validation Failed: Development authorization not found

Conditions When dev authorization file is not named as “dev_authorization.sig”.

Workaround Rename dev authorization file to “dev_authorization.sig”.

CSCsm85157 Vserver should only have the CLIs that are applicable to it

Symptom When customer installs application that depends upon Cisco add-on package. The CLIs associated with that add-on, if any, should only be displayed in that Vserver Instance. However, if customer install another applications that depends on another Cisco add-on which has its own CLIs, those CLIs also shows on the other application which does not depend on it.

Conditions When multiple Cisco add-on packages are installed and each one has its own set of CLIs, the CLIs are displayed to all the Vserver Instances regardless whether the application has dependency on them or not.

Workaround Customer needs to ignore the CLIs under app-service that is not applicable to their applications.

CSCsm97701 AXP Service API Hangs when ntp server is set

Symptom Service API hangs, no returns from the call.

Conditions This happens when issuing ntp server x.x.x.x prefer CLI through Service API.

Workaround Implement a timeout that exits the call after a period of waiting. The actual CLI config is already processed and executed on the Blade and it is only the Service API call that fails to return.

CSCsm92964 Session to blade hangs by using CLI

Symptom When install **eemapi** application or vserial application, after boot up and console become ready the CLI console freeze

Conditions This is problem affects all the versions.

Workaround There is no workaround.

CSCso08068 CLI commands on service module not working properly

Symptom Slow response of show run, show resource limit and “[no] limit disk utilization” commands

Conditions This happens when an Virtual Instance is populated with a application image.

Workaround This is a performance issue that does not have other side effect. Currently there is no work around.

CSCso34815 CLI console hangs upon reboot

Symptom The CLI console hangs at 3% at the progress bar, upon reboot of a fresh install application.

Conditions This issue happens if the customer is creating their application package with an application name that is too long (for example, 29 characters).

Workaround Reduce the application name to a shorter name. Name of 19 characters has been tested and works.

Open Caveats - Cisco AXP Version 1.0.3

CSCsm67655 EEM Apps takes a long time to come online

Symptom When installing an application depends on Cisco axp-eemapi add-on package, that application takes about 10 to 11 minutes to come online. If installing 2nd applications, it takes about 20+ minutes to come online. There is a sequential delays if eemapi add-on package is installed.

This happens when a Cisco IOS router prompts confirmation “erase flash: [confirm]” when “erase flash:” CLI command is issued. The 1.0.3 eemapi add-on package during startup, it does not expect the confirmation prompt, hence, it times out after 10 min.

Workaround axp-eemapi.<aim/nme>.1.0.3 add-on package will not be released for version 1.0.3. Customer should stay with existing axp-eemapi.<aim/nme>.1.0.1 package for Cisco IOS Event Notification feature.

Resolved Caveats - Cisco AXP Version 1.0.3

CSCs175082 ICW Upgrade requires boothelper and configuration change

Symptom Customer who wishes to do a clean install to an AIM 1.0.1 image from older images may encounter kernel signature mismatch errors during the boot process.

Conditions Problem is seen with 1.0.1 image in AIM with primary bootloader configured as default bootloader. Images prior to 1.0.1 may also be affected.

Workaround The workaround is to change the bootloader configuration to use secondary bootloader.

Further Problem Description: The primary bootloader included in 1.0.1 image is defective and unusable.

CSCs105305 Packaging fails with a source directory name with space

Symptom When the directory name of the source value contains a space, the packaging fails.

Conditions Space in the name of the source directory.

Workaround Rename the directory without a space as a work around.

CSCs115789 Show history iosapi c can not do auto-complete.

Symptom No output for show history iosapi if the user uses the auto complete

Conditions This error occurs when trying to do a show command with partial names for parameters

For example: show history iosapi c instead of show history iosapi config

Workaround Use full names for parameters like config instead of c or con or conf. Further, after executing a show command with partial parameter, it could be successfully executed again by using the up arrow to get to the previous command to execute it again. The second time the auto-completion takes effect.

CSCs114407 Installing vserial ciscoadd-on causes 3rd party app installation to fail

Symptom Cannot install a package due to resource limitation errors.

Conditions When AXP VSerial Add-on package is installed and the following command has been executed: **show serial devices**

Workaround There is no workaround.

CSCs180156 Non CLI entries to /etc/passwd and /etc/group not persisted after reload

Symptom When customer has its own post-install.sh to add user and password or runtime add users as well. These new users are not persisted.

Conditions Since post-install.sh only execute once, there is no way for it to add user again

Workaround They can use post-install.sh to add user(s), but it needs to be saved in the /opt/cli_server/original_config/passwd. Here is an example of post-install.sh:

```
#!/bin/bash
ln -s /bin/bash /bin/console
useradd testuser1 -p $1$encryptedpasswd1

useradd testuser2 -p $1$encryptedpasswd2
user1=`cat /etc/passwd | grep testuser1`

user2=`cat /etc/passwd | grep testuser2`

/bin/unprotect_host /opt/cli_server/original_config/passwd
echo "$user1" >> /opt/cli_server/original_config/passwd

echo "$user2" >> /opt/cli_server/original_config/passwd
```

If they are performing **useradd** after vserver is up and running (i.e. go into Linux shell to do useradd or manually add entry in the /etc/passwd file). They need to first unprotect /opt/cli_server/original_config/passwd file first, then manually copy over the entries into that file. /bin/unprotect /opt/cli_server/original_config/passwd

vi /opt/cli_server/original_config/passwd (then copy entries in)

CSCsm09058 Manifest file becomes corrupt when application upgrade with different cert.

Symptom If an application is upgraded with new development authorization and certificate files the blade becomes unusable. After the upgrade if the user wants to use any of the “**software install**” commands the CLI fails with an error: Validation Failed: Signature validation failed for file /sw/installed/manifest/<manifest_name>.sig AesopError.AesopInstallerError: Manifest signature validation failed for <manifest_name>.sig

Conditions This problem happens only when the user changes the application's development authorization and certificate files and upgrades the application using “**software install upgrade**”. If the user uses “**software install add**” to install the application he will not have this issue. This problem affects 1.0.1 version only.

Workaround There is no workaround.

CSCsm11276 Router crashed during the IOS EEM configuration

Symptom Router reload when the NM blade boot up.

Conditions When install multiple eemapi applications on the blade, occasionally the router will reload itself.

Workaround Install only single eemapi application.

Further Problem Description: Multiple **eemapi** applications cause underlying **eem** startup code try to configure IOS concurrently. This may cause conflict and result in router reload.

CSCsh86692 Static route not in routing table after shut/no shut interface

Symptom conf t se-100-0-1-2(config)> ip route 4.0.0.0 255.255.255.0 200.0.0.1
se-100-0-1-2(config-interface)> shut se-100-0-1-2(config-interface)> no shut

After shut, and no shut, the ip routing table is disappeared for the entry of 4.0.0.0

Conditions This problem occurs in version 1.0.1 and can be reproduced.

Workaround There is no workaround.

CSCsi77373 Failed copy command does not give error message

Symptom When use CLI copy command, it does not print any error message and just return. This leave customer has no indication that the copy command failed.

Conditions When the copy command can not be executed successfully due to remote setup etc. but CLI leaves no indication to user that some error has occurs.

Workaround There is no workaround.

CSCsm18304 CLI allows default route to be removed

Symptom The Integrated-Service-Engine (ISE) default route setup on the router for the blade via the Cisco IOS command 'service-module ip default gateway' establishes the default route for the eth0 interface. The AXP CLI allows the user to remove this default route via 'no ip route 0.0.0.0 0.0.0.0 <gateway ip>', and then add their own default route. This allowance leads the user to believe the he can change the default route of the blade which is not possible. The removed route is restored when the blade is reloaded since the data is provided by the router.

Conditions When user do the AXP CLI: >config t >no ip route 0.0.0.0 0.0.0.0 <gateway ip> and then add their own default route. After reload, the original default route (configured in IOS) is restored back.

Workaround Do not delete default router in AXP. It should be changed in IOS side and reflect in the AXP side.

CSCsm01287 Cannot read upper case hostname using IOSAPI within show run incl

Symptom When user using JAVA API, that do filter spec with mixed lower and upper case value. The result are "no data found".

Conditions This only happen in Java API and only happens when the filter spec is included and the value has mixed cases.

Workaround Use include command not filter to specific value (which has mixed case)

CSCsm22156 Service APIs not working with Single install of OS,addon,and app

Symptom Particular CLIs do not show up after a clean installation. For example:

1. "ip ssh ..." CLIs for the app-dev and app-ssh packages
2. Plugin CLIs written by application developer

Conditions This problem arises if the application developer bundles the AXP OS package, add-on packages and their application in a single install bundle and install.

Workaround Application developers should first install the AXP OS package, then install the rest of the bundle (add-on and application).

Additional References

The following sections describe the documentation available for the Cisco Application eXtension Platform and Cisco ISR routers. Typically, these documents consist of hardware and software installation guides, Cisco IOS configuration and command references, system error messages, feature modules, and other documents for Cisco IOS Release.

Use these release notes with the documents listed in the following sections:

- [Related Documents, page 21](#)
- [Platform-Specific Documents, page 21](#)

Related Documents

The following documents are specific to Cisco Application eXtension Platform. They are located at <http://www.cisco.com/cgi-bin/tablebuild.pl/axp-101-docs> on [Cisco.com](#):

- [Cisco Application eXtension Platform User Guide](#)
- [Cisco Application eXtension Platform Developer Guide](#)
- [Cisco Application extension Platform Quick Start Guide](#)
- [Cisco Application eXtension Platform Command Reference](#)

Platform-Specific Documents

Hardware installation guides, configuration and command reference guides, and additional documents specific to the Cisco ISR routers are available at the following location:

http://www.cisco.com/en/US/products/ps5854/tsd_products_support_series_home.html

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