

VMware Smart Assurance Version 9.6.0.3 Cumulative Patch Readme

VMware Smart Assurance 9.6.0



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Revision history

This section presents the revision history of this document.

Revision history

| Revision | Release Date | Description |
|----------|--------------|---|
| 01 | January 2019 | Release of EMC Smarts Version 9.6.0 Patch 1 Readme. |
| 02 | May 2019 | Release of VMware Smart Assurance Version 9.6.0 Patch 2 Readme. |
| 03 | Aug 2019 | Release of VMware Smart Assurance Version 9.6.0 Patch 3 Readme. |

Scope

This section presents the product scope for this patch release.

Products released in this patch

| Patch Release | Release date | Product (s) released in this patch |
|--|--------------|------------------------------------|
| VMware Smart Assurance Version 9.6.0 Patch 3 | Aug 2019 | IP. |

Patch description

A patch provides one or more fixes to an Smarts product. A patch can only be applied to the specific major or minor release and Service Pack of the particular product for which it is intended; this is called the product's baseline.

Note All Smarts 9.6.0.x products will not be released for every patch release. A patch may apply only to a subset of products, for example, the next patch release may be only for SAM and IP. Also, if the latest patch version for all products is 1 and Patch 2 is only for SAM and IP, the next patch number irrespective of which product is released will be Patch 3. In addition, Network Configuration Manager (NCM) is also part of Smarts 9.6 release and impacts the patch numbering for the release. Details for this product are kept in a separate Patch Readme.

This chapter includes the following topics:

- [Installation directory](#)
- [Installation overview](#)
- [JRE requirement for Installation software](#)
- [Install a new patch over an older patch](#)
- [Upgrade after applying a patch](#)
- [Patch installation files](#)

Installation directory

In this document, the term BASEDIR represents the location where Smarts software is installed.

For UNIX, the default location is: /opt/InCharge/<productsuite>.

For Windows, the default location is: C:\InCharge\<productsuite>.

The <productsuite> represents the Smarts product suite to which the product belongs.

Optionally, you can specify the root of BASEDIR to be something other than /opt/InCharge (on UNIX) or C:\InCharge (on Windows), but you cannot change the name of the <productsuite> that is part of the BASEDIR.

The *System Administration Guide* provides additional information about the directory structure of Smarts software.

Installation overview

A patch installs files to the BASEDIR/smarts/local directory of the product. The Installation software performs the following actions:

Backs up all files that are being replaced or merged.

Merges changes from your current, user-modifiable configuration files into the new versions of the files from the patch.

Displays a list of files that were merged and files that could not be merged due to conflicts.

Displays the location of a log file that lists the results of merging the files.

Leaves user-modifiable files that are not updated by the patch untouched.

Note If the original product was installed on one computer and then was copied to another computer, the patch cannot be applied to the copied installation. You must apply the patch to the computer with the original installation, and then the results can be copied to another computer.

JRE requirement for Installation software

If the patch Installation software cannot find the correct version of the JRE, it displays the message: "A suitable JVM could not be found."

If this occurs, use the `is:javahome` option to specify the absolute path of the JRE installed with the Smarts software on one line. For example:

```
./setup-IP-linux-9_6_0_3-20190809-64BIT.bin -is:javahome BASEDIR/IP/_jvm
```

Or, if software is being installed in Wizard mode and an error message is thrown saying "Cannot find a compatible JVM. Select the java.exe file of the JVM from the <BASEDIR>/_jvm/bin directory".

Note The term BASEDIR represents the location where Smarts software is installed; for example, `C:/InCharge/<productsuite>`.

Install a new patch over an older patch

Patches are cumulative; each successive patch includes all of the fixes from any previous patches. As a result, a newer patch can be installed on top of an older patch. The patch number, which increments itself for each successive patch, indicates the version. A patch with higher version number can be installed over a patch with a lower version number.

The Installation software checks the version of the installed product and the version to be installed at the beginning of its process. It will not allow an older version to be installed on top of a newer version.

Upgrade after applying a patch

During an upgrade, the Installation software automatically uninstalls any applied patches. Patch files, which are installed to BASEDIR/smarts/local, are removed if the files are not modified by the user. The files that are modified are not removed and are copied to <BASEDIR>/smarts/.local.bkp.<patch version> directory for manual reconciliation.

Note <patch version> is the complete version number for the patch, for example, 9.6.0.3

Patch installation files

Install the patch on each host where the Smarts product is running. Choose the appropriate Installation software based on the operating system of the host.

IP:

setup-IP-linux-9_6_0_3-20190807-64BIT.bin

setup-IP-win-9_6_0_3-20190809-64BIT.exe

Enhancements and changes

This chapter includes the following topics:

- [General enhancements and changes](#)
- [Enhancements and changes in IP](#)
- [Enhancements and changes in SAM](#)
- [Enhancements and changes in VoIP](#)
- [Enhancements and changes in MPLS](#)
- [Enhancements and changes in NPM](#)
- [Enhancements and changes in ESM](#)
- [Enhancements and changes in OTM](#)
- [New configuration flags](#)

General enhancements and changes

Enhancements and changes in IP

Enhancements and changes in SAM

This patch release does not contain any enhancement and changes.

Enhancements and changes in VoIP

This patch release does not contain any enhancement and changes.

Enhancements and changes in MPLS

This patch release does not contain any enhancement and changes.

Enhancements and changes in NPM

This patch release does not contain any enhancement and changes.

Enhancements and changes in ESM

This patch release does not contain any enhancement and changes.

Enhancements and changes in OTM

This patch release does not contain any enhancement and changes.

New configuration flags

This chapters helps you to configure new flags.

Configuration Flags in IP Certification

- **EnableMXVirtualRouterDiscovery:** This flag must be enabled for Juniper MX480 virtual router discovery.

```
# EnableMXVirtualRouterDiscovery (Enables or disables the discovery of Juniper MX Series Virtual
Router):
#
#           A value of TRUE enables the discovery of Juniper MX Series Virtual Router.
#           A value of FALSE disables the discovery of Juniper MX Series Virtual Router.
#
# Default Value = FALSE
EnableMXVirtualRouterDiscovery FALSE
```

- **MXLogicalCommunityOnly:** This flag must be enabled for virtual router community string.

```
# MXLogicalCommunityOnly – Add Sys0ID to allow selective logical router default community string
format without main router community string.
# Example: if logical/default@XXXXX ( Here XXXXX is main router community string ) is actual
string for logical router, then we need to configure only logical string format like logical/
default
MXLogicalCommunityOnly.1.3.6.1.4.1.2636.1.1.1.2.25 logical/default
```

Known problems and limitations

This chapter includes the following topics:

- [General Known problems and limitations](#)
- [Known problems and limitations in IP](#)
- [Known problems and limitations in SAM](#)
- **[Known problems and limitations in VoIP](#)**
- [Known problems and limitations in MPLS](#)
- [Known problems and limitations in NPM](#)
- [Known problems and limitations in ESM](#)
- [Known problems and limitations in OTM](#)

General Known problems and limitations

Known problems and limitations in IP

This patch release does not include any known issues.

Known problems and limitations in SAM

This patch release does not include any known issues.

Known problems and limitations in VoIP

This patch release does not include any known issues.

Known problems and limitations in MPLS

This patch release does not include any known issues.

Known problems and limitations in NPM

This patch release does not include any known issues.

Known problems and limitations in ESM

This patch release does not include any known issues.

Known problems and limitations in OTM

This patch release does not include any known issues.

Number of fixed defects and certified devices

5

This section lists the number of defects fixed and devices certified (new and updated) for this patch.

Number of fixed defects and certified devices

| Product | Number of fixed defects | Number of new certifications | Number of updated certifications | Patch release |
|---------|-------------------------|------------------------------|----------------------------------|---------------|
| DMT | 0 | 0 | 0 | NA |
| IP | 0 | 44 | 6 | 9.6.0.3 |
| SAM | 0 | 0 | 0 | NA |
| NPM | 0 | 0 | 0 | NA |
| ESM | 0 | 0 | 0 | NA |
| MPLS | 0 | 0 | 0 | NA |
| VoIP | 0 | 0 | 0 | NA |
| OTM | 0 | 0 | 0 | NA |

Fixed Defects

This chapter includes the following topics:

- [Fixed Foundation defects](#)
- [Fixed IP specific defects](#)
- [Fixed SAM specific defects](#)
- [Fixed VoIP specific defects](#)
- [Fixed MPLS specific defects](#)
- [Fixed NPM specific defects](#)
- [Fixed ESM specific defects](#)
- [Fixed OTM specific defects](#)

Fixed Foundation defects

Fixed Foundation defects applicable for all products:

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|--------------------|---|---------------|
| NA | NA | NA | NA | NA |

Fixed IP specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |
| IS-12882/ SR 12751025 | Invalid alerts about Temperature Out of Range occur in Cisco devices. | The UseMIBThreshold = false scenario has been updated to populate the correct values as per Polling and Threshold settings. | Cisco_Environment.mdl | 9.6.0.1 |

Fixed SAM specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |
| NA | NA | NA | NA | NA |

Fixed VoIP specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |

Fixed MPLS specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |

Fixed NPM specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |
| NA | NA | NA | NA | NA |

Fixed ESM specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |
| NA | NA | NA | NA | NA |

Fixed OTM specific defects

| CQ/JIRA or SR Ticket Number | Symptom | Description of Fix | Modified Files (all files in BASEDIR/smarts/local/) | Patch Release |
|-----------------------------|---------|---|---|---------------|
| | | The Fixed Foundation defects table lists issues fixed in the patch. | | |
| NA | NA | NA | NA | NA |

Certified devices

This section describes the devices certified and the certification impact in this patch.

This chapter includes the following topics:

- [Simple certifications](#)
- [Complex certifications](#)
- [Certification impact](#)

Simple certifications

Simple certification involves only in configure file changes and the qualification of new OID in the currently existing driver. This section describes the devices certified in this patch.

Table 7-1. Simple devices certified in the IP patch

| SR /TASC Number | Vendor Name | Description | Patch Release |
|---------------------|-------------|---|---------------|
| SASS-13516 / 304922 | Arista | Certified the following components for the DCS-7280QR-C36-M Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7280.3101.2878.36.972): Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13503 / 304910 | Cisco | Certified the following components for the ciscoC1111X8P Router (System OID : .1.3.6.1.4.1.9.1.2668): Card, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13548 / 304908 | Symmetricom | Certified the following components for the SyncServer S600 Host (System OID : .1.3.6.1.4.1.9070.1.2.5.7.4): Host. | 9.6.0.3 |
| SASS-13433 / 304905 | Juniper | Certified the following components for the QFX1000260C Switch (System OID : .1.3.6.1.4.1.2636.1.1.1.4.82.19): Card, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13432 / 304904 | Juniper | Certified the following components for the EX9253 Switch (System OID : .1.3.6.1.4.1.2636.1.1.1.2.156): Card,CardRedundancyGroup, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13429 / 304903 | Juniper | Certified the following components for the EX9251 Switch (System OID : .1.3.6.1.4.1.2636.1.1.1.2.151): Card, Fan, Interface, Port, VLAN, Memory, Processor, PowerSupply, and Temperature Sensor. | 9.6.0.3 |
| SASS-13554 / 304902 | Juniper | Certified the following components for the EX4650 Switch (System OID : .1.3.6.1.4.1.2636.1.1.1.4.508.1): Card, Fan, Interface, Memory, Processor, Port, PowerSupply, Temperature Sensor, VLAN, and Virtual Chassis. | 9.6.0.3 |

| | | | |
|---------------------|-------------|--|---------|
| SASS-13495 / 304900 | Pan | Certified the following components for the PanM-200 Firewall (System OID : .1.3.6.1.4.1.25461.2.3.40): Interface, Memory, and Processor. | 9.6.0.3 |
| SASS-13493 / 304899 | Cisco | Certified the following components for the ciscoC11114P Router (System OID : .1.3.6.1.4.1.9.1.2505): Card, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor and VLAN. | 9.6.0.3 |
| SASS-13468 / 304896 | F5 Networks | Certified the following components for the BIG-IP i11800 LoadBalancer (System OID : .1.3.6.1.4.1.3375.2.1.3.4.122): AggregatePort, Disk, Fan, FileSystem, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13465 / 304895 | Cisco | Certified the following components for the ciscoCatWSC2960L8TSLL Switch (System OID : .1.3.6.1.4.1.9.1.2360): Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13463 / 304893 | Cisco | Certified the following components for the ciscoC11174P Router (System OID : .1.3.6.1.4.1.9.1.2520): Card, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13447 / 304889 | Aruba | Certified the following components for the Aruba JL261A 2930F-24G-PoE +-4SFP Switch (System OID : .1.3.6.1.4.1.11.2.3.7.11.181.24): Fan, Interface, Memory, Port, PowerSupply, Processor, and VLAN. | 9.6.0.3 |
| SASS-13452 / 304888 | Aruba | Certified the following components for the Aruba JL076A 3810M-40G-8SR-PoE +-1-slot Switch (System OID : .1.3.6.1.4.1.11.2.3.7.11.174.6): AggregatePort, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13518 / 304886 | Arista | Certified the following components for the DCS-7050SX3-48YC8 Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7050.3741.3.48.1654.8): Interface, Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13520 / 304881 | Arista | Certified the following components for the DCS-7050SX2-72Q Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7050.3741.2.72.2512): Interface, Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13524 / 304880 | Arista | Certified the following components for the DCS-7280CR2A-60 Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7280.2727.2.3648.60): Interface, Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13530 / 304876 | Arista | Certified the following components for the DCS-7060CX2-32S Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7060.2733.2.32.3282): Interface, Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13445 / 304875 | F5 Networks | Certified the following components for the BIG-IP-I7800D LoadBalancer (System OID : .1.3.6.1.4.1.3375.2.1.3.4.130): Disk, Fan, Filesystem, Interface, Memory, Port, Power supply, Processor, and Temperature Sensor. | 9.6.0.3 |
| SASS-13533 / 304874 | Arista | Certified the following components for the DCS-7050CX3-32S Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7050.2733.3.32.3282): Interface, Memory, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13566 / 304872 | Opengear | Certified the following components for the ogACM70045 TerminalServer (System OID : .1.3.6.1.4.1.25049.1.91): Interface and Memory. | 9.6.0.3 |
| SASS-13552 / 304866 | HP | Certified the following components for the HP-ProCurve-J9310A Switch (System OID : .1.3.6.1.4.1.11.2.3.7.11.114): Fan, Interface, Memory, Processor, Port, PowerSupply, Temperature Sensor, and VLAN. | 9.6.0.3 |

| | | | |
|------------------------|-------------|--|---------|
| SASS-13550 / 304864 | HP | Certified the following components for the HP-ProCurve-J9311A Switch (System OID : .1.3.6.1.4.1.11.2.3.7.11.115): Fan, Interface, Memory, Processor, Port, PowerSupply, Temperature Sensor, and VLAN. | 9.6.0.3 |
| SASS-13459 / 304863 | Datadomain | Certified the following components for the emcDD690 Host (System OID : .1.3.6.1.4.1.19746.3.1.0): FileSystem, Interface, Memory, MemoryGroup, Processor, and ProcessorGroup. | 9.6.0.3 |
| SASS-13375 / 304848 | Cisco | Certified the following components for the ciscoC385012XS Switch (System OID : .1.3.6.1.4.1.9.1.2162): Fan, Interface, Memory, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13378 / 304847 | Cisco | Certified the following components for the catwsC3560CX8ptS Switch (System OID : .1.3.6.1.4.1.9.1.2130): Card, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13527 / 304834 | Cisco | Certified the following components for the SG300-28 Switch (System OID : .1.3.6.1.4.1.9.6.1.83.28.1): Interface, Port, Processor, and VLAN. | 9.6.0.3 |
| SASS-13558 / 304830 | Apcon | Certified the following components for the ACI-4040 Switch (System OID : .1.3.6.1.4.1.10830.3.2): Interfaces, Memory, Processor, and FileSystem. | 9.6.0.3 |
| SASS-13427 / 304828 | Juniper | Certified the following components for the EX3400-48P Switch (System OID : .1.3.6.1.4.1.2636.1.1.1.4.131.4): Card, Card Redundancy Group, VCCRE Card Redundancy Group, Fan, Interface, Port, VLAN, Memory, Processor, PowerSupply, and Temperature Sensor. | 9.6.0.3 |
| SASS-13401 / 304823 | Checkpoint | Certified the following components for the CheckPoint5400 Firewall (System OID : .1.3.6.1.4.1.2620.1.6.123.1.67): Fan, FileSystem, Interface, Memory, Processor, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13395 / 304822 | Pulsesecure | Certified the following components for the ivePSA7000f Firewall (System OID : .1.3.6.1.4.1.12532.256.4.1): Disk, Interface, Memory, and Processor. | 9.6.0.3 |
| SASS-13542 / 304817 | Cisco | Certified the following components for the Cisco VCS Host (System OID : .1.3.6.1.4.1.5596.130.6.4.1): FileSystem, Interface, Memory, MemoryGroup, Port, Processor, ProcessorGroup, and TemperatureSensor. | 9.6.0.3 |
| SASS-13478 / 304784 | Arista | Certified the following components for the DCS-7280CR2K-30-F Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7280.2727.2.202.30): Interface, Port, Memory, Processor, and VLAN. | 9.6.0.3 |
| SASS-13497 / 304781 | Cisco | Certified the following components for the ciscoUCSC460M4Rackserver Host (System OID : .1.3.6.1.4.1.9.1.1817): Card, Disk, Fan, Interface, Memory, MemoryGroup, PowerSupply, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13536 / 304780 | Cisco | Certified the following components for the ciscoUcsC260 Host (System OID : .1.3.6.1.4.1.9.1.1516): Card, Disk, Fan, Interface, Memory, MemoryGroup, PowerSupply, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13539 / 304778 | Dell | Certified the following components for the PowerEdge R330 Host (System OID : .1.3.6.1.4.1.21343.3.2.24): Fan, Interface, Memory, MemoryGroup, Processor, ProcessorGroup, FileSystem, PowerSupply, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13392 / 304769 | Cisco | Certified the following components for the cevChassisN77c7702 Switch (System OID : .1.3.6.1.4.1.9.12.3.1.3.1648): Card, Fan, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |

| | | | |
|------------------------|------------|---|---------|
| SASS-13435 / 304833 | Draytek | Certified the following components for the Vigor 2860 Router (System OID :.1.3.6.1.4.1.7367): Interface. | 9.6.0.3 |
| SASS-13437 / 304878 | Audiocodes | Certified the following components for the MEDIANT800C Mediagateway(System OID :.1.3.6.1.4.1.5003.8.1.1.72): Card, Interface, Memory, and Processor | 9.6.0.3 |

Complex certifications

Complex certifications involve recertification, new device certifications, and involve new driver creations or multiple file changes. This section describes the devices certified in this patch.

Description of complex devices certified in the patch

| SR /TASC Number | Vendor Name | Description | Patch Release |
|------------------------|-------------|--|---------------|
| SASS-13363 / 304851 | Cisco | Certified the following components for the catwsC2960CX8tcL Switch (System OID : .1.3.6.1.4.1.9.1.2137): Card, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13360 / 304850 | Brocade | Certified the following components for the DS-5300B FiberChannelSwitch (System OID : .1.3.6.1.4.1.1588.2.1.1.64): Card, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13357 / 304849 | Brocade | Certified the following components for the SilkwormSeries FiberChannelSwitch (System OID : .1.3.6.1.4.1.1588.2.1.1.1): Card, Fan, Port, PowerSupply , and TemperatureSensor. | 9.6.0.3 |
| SASS-13371 / 304854 | Cisco | Certified the following components for the ciscoWsC2960P48TcS Switch (System OID : .1.3.6.1.4.1.9.1.1756): Card, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, and VLAN. | 9.6.0.3 |
| SASS-13380 / 304846 | Cisco | Certified the following components for the ciscoAIRAP1702 Switch (System OID : .1.3.6.1.4.1.9.1.2129): Interface, Memory, Port, and Processor. | 9.6.0.3 |
| SASS-13386 / 304845 | Cisco | Certified the following components for the ciscoAIRAP2702 Switch (System OID : .1.3.6.1.4.1.9.1.1938): Interface, Memory, Port, and Processor. | 9.6.0.3 |
| SASS-13405 / 304826 | Cisco | Certified the following components for the Cisco9500FixedSwitchStack Switch (System OID : .1.3.6.1.4.1.9.1.2593): Card,CardRedundancyGroup, Fan, Interface, Memory, Port, PowerSupply, Processor, TemperatureSensor, VoltageSensor, and VLAN. | 9.6.0.3 |
| SASS-13570 / 304774 | Libert | Certified the following components for the liebertGlobalProducts Host (System OID : .1.3.6.1.4.1.476.1.42): Interface, TemperatureSensor, and VoltageSensor. | 9.6.0.3 |
| SASS-13565 / 304861 | Juniper | Certified the following components for the SRX550 Router (System OID : .1.3.6.1.4.1.2636.1.1.1.2.86): Card, Disk, Fan, Interface, Memory, Processor, Powersupply, and Temperaturesensor. | 9.6.0.3 |

| | | | |
|------------------------|---------|---|---------|
| SASS-13463 / 304890 | Arista | Certified the following components for the DCS-7150S-24 Switch (System OID : .1.3.6.1.4.1.30065.1.3011.7150.3282.24): Port, Interface, Memory, and Processor. | 9.6.0.3 |
| SASS-13658 / 304779 | Juniper | Certified the following components for the MX480 Router (System OID : .1.3.6.1.4.1.2636.1.1.1.2.25): Card, CardRedundancyGroup, Fan, Interface, Memory, Processor, Powersupply, Router, and Temperaturesensor. | 9.6.0.3 |

Certification impact

This section lists the impacted drivers and SysOIDs as a result of certification changes.

Certification impact

| SR/TASC Number | Impacted drivers | Impacted SysOIDs | Patch Release |
|-------------------|-------------------------------------|--|---------------|
| | HEALTH = Cisco-Router-CRS-EntSensor | .1.3.6.1.4.1.9.1.348 .1.3.6.1.4.1.9.1.925 .1.3.6.1.4.1.9.1.822 .1.3.6.1.4.1.9.1.1116 .1.3.6.1.4.1.9.1.610 .1.3.6.1.4.1.9.1.2068 .1.3.6.1.4.1.9.1.2093 .1.3.6.1.4.1.9.1.1861 .1.3.6.1.4.1.9.1.2157 .1.3.6.1.4.1.9.1.1935 .1.3.6.1.4.1.9.1.2101 .1.3.6.1.4.1.9.1.2143 .1.3.6.1.4.1.9.1.2155 .1.3.6.1.4.1.9.1.2102 .1.3.6.1.4.1.9.1.2593 .1.3.6.1.4.1.9.1.2520 .1.3.6.1.4.1.9.1.2505 .1.3.6.1.4.1.9.1.2668 | 9.6.0.3 |

| | | | |
|--------|-----------------------|--|---------|
| 304845 | HEALTH = Cisco-Router | .1.3.6.1.4.1.9.1.497 .1.3.6.1.4.1.9.1.1040 .1.3.6.1.4.1.9.1.847 .1.3.6.1.4.1.9.1.1745 .1.3.6.1.4.1.9.1.1747 .1.3.6.1.4.1.9.1.1824 .1.3.6.1.4.1.9.1.2382 .1.3.6.1.4.1.9.1.1770 .1.3.6.1.4.1.9.1.1875 .1.3.6.1.4.1.9.1.1828 .1.3.6.1.4.1.9.1.1420 .1.3.6.1.4.1.9.1.1856 .1.3.6.1.4.1.9.1.848 .1.3.6.1.4.1.9.1.2309 .1.3.6.1.4.1.9.1.1853 .1.3.6.1.4.1.9.1.842 .1.3.6.1.4.1.9.1.2050 .1.3.6.1.4.1.9.1.2060 .1.3.6.1.4.1.9.1.1857 .1.3.6.1.4.1.9.1.1767 .1.3.6.1.4.1.9.1.2494 .1.3.6.1.4.1.9.1.1882 .1.3.6.1.4.1.9.1.2059 .1.3.6.1.4.1.9.1.1557 .1.3.6.1.4.1.9.1.1938 .1.3.6.1.4.1.9.1.2129 | 9.6.0.3 |
|--------|-----------------------|--|---------|

| | | | |
|--------|--|--|---------|
| 304849 | HEALTH = Brocade-Switch Environment = BrocadeEnvMon:DeviceID | .1.3.6.1.4.1.1588.2.1.1.1 .1.3.6.1.4.1.1588.2.1.1.18 .1.3.6.1.4.1.1588.2.1.1.55 .1.3.6.1.4.1.1588.2.1.1.155 .1.3.6.1.4.1.1588.2.1.1.10 .1.3.6.1.4.1.1588.2.1.1.32 .1.3.6.1.4.1.1588.2.1.1.58 .1.3.6.1.4.1.1588.2.1.1.42 .1.3.6.1.4.1.1588.2.1.1.43 .1.3.6.1.4.1.1588.2.1.1.72 .1.3.6.1.4.1.1588.2.1.3 .1.3.6.1.4.1.1588.2.1.1.71 .1.3.6.1.4.1.1588.2.1.1.162 .1.3.6.1.4.1.1588.2.1.1.34 .1.3.6.1.4.1.1588.2.1.1.26 .1.3.6.1.4.1.1588.2.1.1.44 .1.3.6.1.4.1.1588.2.1.1.118 .1.3.6.1.4.1.1588.2.1.1.64 .1.3.6.1.4.1.1588.2.1.1.46 .1.3.6.1.4.1.1588.2.1.1.109 .1.3.6.1.4.1.1588.2.1.1.83 .1.3.6.1.4.1.1588.2.1.1.76 .1.3.6.1.4.1.1588.2.1.1.67 .1.3.6.1.4.1.1588.2.1.1.177 .1.3.6.1.4.1.1588.2.1.1.121 .1.3.6.1.4.1.1588.2.1.1.120 .1.3.6.1.4.1.1588.2.1.1.62 .1.3.6.1.4.1.1588.2.1.1.92 .1.3.6.1.4.1.1588.2.1.1.66 .1.3.6.1.4.1.1588.3.3.1.1001 .1.3.6.1.4.1.1588.3.3.1.1000 .1.3.6.1.4.1.1588.3.3.1.131 .1.3.6.1.4.1.1588.2.1.1.77 .1.3.6.1.4.1.1588.2.1.1.165 .1.3.6.1.4.1.1588.2.1.1.166 .1.3.6.1.4.1.1588.2.1.1.133 .1.3.6.1.4.1.1588.3.3.1.164 .1.3.6.1.4.1.1588.2.1.1.129 .1.3.6.1.4.1.1588.2.1.1.148 .1.3.6.1.4.1.1588.3.3.1.151 .1.3.6.1.4.1.1588.2.1.1.162 | 9.6.0.3 |
|--------|--|--|---------|

| | | | |
|--------|---|--|---------|
| 304851 | HEALTH = Cisco-Stack | .1.3.6.1.4.1.9.1.1757 .1.3.6.1.4.1.9.1.1805 .1.3.6.1.4.1.9.1.1699 .1.3.6.1.4.1.9.1.1765 .1.3.6.1.4.1.9.1.2133 .1.3.6.1.4.1.9.1.1703 .1.3.6.1.4.1.9.1.2131 .1.3.6.1.4.1.9.1.2135 .1.3.6.1.4.1.9.1.1750 .1.3.6.1.4.1.9.1.1754 .1.3.6.1.4.1.9.1.1753 .1.3.6.1.4.1.9.1.2136 .1.3.6.1.4.1.9.1.2137 .1.3.6.1.4.1.9.1.2363 .1.3.6.1.4.1.9.1.2361 .1.3.6.1.4.1.9.1.2369 .1.3.6.1.4.1.9.1.2233 .1.3.6.1.4.1.9.1.2365 .1.3.6.1.4.1.9.1.1756 .1.3.6.1.4.1.9.1.2360 | 9.6.0.3 |
| 304774 | HEALTH = Liebert Environment = LiebertEnvMon:DeviceID | .1.3.6.1.4.1.476.1.42 | 9.6.0.3 |

| | | | |
|--------|----------------------|---|---------|
| 304890 | CONT = Arista-Switch | .1.3.6.1.4.1.30065.1.3011.7508 .1.3.6.1.4.1.30065.1.3011.7148.3741 .1.3.6.1.4.1.30065.1.3011.7124.3282 .1.3.6.1.4.1.30065.1.3011.7124.3741 .1.3.6.1.4.1.30065.1.3011.7504 .1.3.6.1.4.1.30065.1.3011.7050.3282.64 .1.3.6.1.4.1.30065.1.3011.7050.3282.52 .1.3.6.1.4.1.30065.1.3011.7050.427.64 .1.3.6.1.4.1.30065.1.3011.7150.3282.24 .1.3.6.1.4.1.30065.1.3011.7150.3282.64.2745 .1.3.6.1.4.1.30065.1.3011.7150.3282.52.2745 .1.3.6.1.4.1.30065.1.3011.7050.2512.16 .1.3.6.1.4.1.30065.1.3011.7010.427.48 .1.3.6.1.4.1.30065.1.3011.7280.3714.64 .1.3.6.1.4.1.30065.1.3011.7050.3741.128 .1.3.6.1.4.1.30065.1.3011.7250.3095.64 .1.3.6.1.4.1.30065.1.3011.7260.3095.64 .1.3.6.1.4.1.30065.1.3011.7048.427.3648 .1.3.6.1.4.1.30065.1.3011.7050.1958.64 .1.3.6.1.4.1.30065.1.3011.7050.3741.64 .1.3.6.1.4.1.30065.1.3011.7050.3095.32 .1.3.6.1.4.1.30065.1.3011.7280.3101.2878.36 .1.3.6.1.4.1.30065.1.3011.7150.3282.24.2745.761 .1.3.6.1.4.1.30065.1.3011.7280.3735.2.3648.48.1 654.6 .1.3.6.1.4.1.30065.1.3011.7504.1359 .1.3.6.1.4.1.30065.1.3011.7280.3735.48.2878.6 .1.3.6.1.4.1.30065.1.3011.7050.3741.72.2512 .1.3.6.1.4.1.30065.1.3011.7050.1958.72.2512 .1.3.6.1.4.1.30065.1.3011.7160.32.2726 .1.3.6.1.4.1.30065.1.3011.7124.3741.761 .1.3.6.1.4.1.30065.1.3011.7512.1359 .1.3.6.1.4.1.30065.1.3011.7280.312.48.2878.6 .1.3.6.1.4.1.30065.1.3011.7280.1347.48.2878.6 .1.3.6.1.4.1.30065.1.3011.7160.48.1981.6 .1.3.6.1.4.1.30065.1.3011.7160.48.1654.6 .1.3.6.1.4.1.30065.1.3011.7050.3095.32.3282 .1.3.6.1.4.1.30065.1.3011.7280.2655.2878.36.328 2.972 .1.3.6.1.4.1.30065.1.3011.7280.2727.48 .1.3.6.1.4.1.30065.1.3011.7280.3977.48.2878.6 .1.3.6.1.4.1.30065.1.3011.7050.3741.3.48.1654.1 2 .1.3.6.1.4.1.30065.1.3011.7516.1359 .1.3.6.1.4.1.30065.1.3011.7280.2727.2.202.30 .1.3.6.1.4.1.30065.1.3011.7280.3101.2878.36.972 .1.3.6.1.4.1.30065.1.3011.7050.3741.3.48.1654.8 | 9.6.0.3 |
|--------|----------------------|---|---------|

| | | | |
|--------|---------------------------|---|---------|
| | | .1.3.6.1.4.1.30065.1.3011.7050.3741.2.72.2512 | |
| | | .1.3.6.1.4.1.30065.1.3011.7280.2727.2.3648.60 | |
| | | .1.3.6.1.4.1.30065.1.3011.7060.2733.2.32.3282 | |
| | | .1.3.6.1.4.1.30065.1.3011.7050.2733.3.32.3282 | |
| 304861 | HOSTRESRCS = MIB2-Disk-FS | .1.3.6.1.4.1.9.1.652 | 9.6.0.3 |
| | | .1.3.6.1.4.1.2636.1.1.1.2.26 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.28 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.36 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.35 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.34 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.40 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.39 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.41 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.49 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.64 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.58 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.86 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.136 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.129 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.134 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.133 | |
| | | .1.3.6.1.4.1.2636.1.1.1.2.143 | |
| 304779 | VROUTER = MX-Series | .1.3.6.1.4.1.2636.1.1.1.2.25 | 9.6.0.3 |

Environment and system requirements



This section lists the supported operating systems and describes how to verify the version number.

This chapter includes the following topics:

- [Supported operating systems and version number details](#)

Supported operating systems and version number details

This sections expalains the supported operating systems and version number details.

| Product | Supported operating systems | Version number details |
|---------|--|---|
| IP | Red Hat Enterprise Linux 7.1, 7.2, and 7.3– 64 bit, CentOS 6.7, 6.8, and 6.9– 64 bit, CentOS 7.1, 7.2, and 7.3– 64 bit Microsoft Windows Server 2012 R2– 64 bit, Microsoft Windows Server 2016 VMware® ESX Version 5.x,6.x | From <BASEDIR>/smarts/bin/, type the following command: ./sm_server --version (Linux) The following output is displayed: sm_server: linux_rhAS50-x86-64/301032700 IP_NETWORK_SUITE: V9.6.0.3(179091), 07-Aug-2019 15:40:34 Copyright 2019, VMware Inc - Build 30 Foundation V9.6.0.1(174262), 18-Jan-2019 10:24:40 Copyright 2019, VMware Inc - Build 1 sm_server.exe --version (Windows) The following output is displayed: sm_server.exe: winnt-x86-64/206200 IP_NETWORK_SUITE: V9.6.0.3(179136), 09-Aug-2019 13:17:08 Copyright 2019, VMware Inc - Build 39 Foundation V9.6.0.1(174263), 18-Jan-2019 10:44:23 Copyright 2019, VMware Inc - Build 1 |

Installation

This chapter includes the following topics:

- [Apply patch using Wizard mode](#)
- [Apply patch using CLI mode](#)
- [Apply patch using Unattended \(Silent\) mode](#)

Apply patch using Wizard mode

Wizard mode provides a graphical interface to the patch Installation software.

Wizard mode requirements for UNIX systems

On UNIX systems, Wizard mode uses the X Window System to display the installation wizard. The host on which you install the Smarts software and the host where you log on must be configured to run the X Window System. Before starting the Installation software using the Wizard mode, verify that the X Window System is running.

Run Wizard mode

- 1 Run the appropriate setup command listed in below table. Replace “xx” with the relevant product name, for example, IP. For exact name, check the Patch Installation Files section.

Setup command syntax for Wizard mode

| Operating system | Wizard setup command syntax |
|------------------|---|
| Linux | ./setup-XX- linux-9_6_0_3-20190807-64BIT.bin Note: Where XX represents the product name. |
| Windows | setup-XX-win-9_6_0_3-20190809-64BIT.exe Note: Where XX represents the product name. |

The Installation Wizard dialog box appears and closes. The **Shutdown VMware Smart Assurance Programs** dialog box and the Welcome screen appear.

You may need to point the Patch installer to the java location. ([JRE requirement for Installation software](#)).

- 2 Click **Next** in the **Welcome** screen.

If you do not have administrative privileges, **Next** is disabled and a message appears. Exit and restart the installation with administrative privileges.

- 3 Read the license agreement, select **I accept the terms of the license agreement**, and click **Next**. If you do not accept the terms, you cannot complete the installation and must exit.

The Installation software detects all existing installations of the particular product and displays them in the upgrade screen.

- 4 Select the product to patch and click **Next**.

If there is only a single installation of the product, it is selected. The Installed VMware Smart Assurance services screen appears.

- 5 If the Installation software detects services running from the install area, a list of services that the Installation software has detected is displayed. Stop each running service by pressing any key. Then click **Next**.

The Installation software then checks for any changes made to user-modifiable files. This check is performed only on files that will be updated with new versions in the patch and the results are displayed in the **Merge Files** screen. If there are no changes to user-modifiable files, this screen is not displayed.

The Installation software will attempt to merge changes from the existing user-modifiable files into the new versions of the files that are in the patch. The **Merge Files** screen lists the files that were changed so that you are aware of the scope of the merge:

- a A red x-mark indicates that a file was modified after the previous patch was installed.
- b An orange exclamation point indicates that a file was modified before the previous patch was installed.

- 6 Choose whether to use merged files or the new files from the patch:

- a **Select Merge and use the files** to merge changes from existing versions of the user-modifiable files into the new versions from the patch. These merged files will be used when the products are restarted. Unchanged versions of the new patch files are also installed, but they are named with an extension that corresponds to the patch number. This prevents the files from being used when the products are restarted. The existing files are backed up into a directory that is named using the version number of the previous patch release that was installed (<BASEDIR>/smarts/.local.bkp.<previous_version_number>).
- b **Select Merge but do not use the files** to merge changes from existing versions of the user-modifiable files into the new versions from the patch. These merged files will be named with the extension .automerge and will not be used when the products are restarted. New, unmerged versions of the user-modifiable files from patch are also installed and are named so that they will be used by the products when they are restarted. The existing files are backed up into a directory that is named using the version number of the previous patch release that was installed (<BASEDIR>/smarts/.local.bkp.<previous_version_number>).

- 7 Click **Next**.

- 8 Verify the target installation directory and click **Next**.

The list of products to be installed will contain only the patch. At the bottom of this screen, the total amount of disk space required for the patch is provided so that you can verify that adequate disk space is available.

- 9 Upon completion, the **Installation Summary** displays informational messages including the confirmation of a successful installation and the location of the log file for the automatic reconciliation and file merge. The names of all merged files that contain conflicts are also displayed. Click **Finish** to exit the installation.
- 10 Reconcile the files with conflicts and review successfully merged files as described in [Chapter 11 Reconcile user-modifiable files](#).

Apply patch using CLI mode

CLI mode provides a text-based method for invoking the Installation software. This mode is intended for UNIX platforms with non-graphic (text-only) consoles. The CLI mode installation follows the same process as the wizard mode but displays text on the terminal screen and requires user responses on the keyboard.

Run CLI mode

- 1 Change directory to the directory where you typically store patches, for example, <BASEDIR> for your product suite.
- 2 Type the setup command listed in below table and then press Enter. Replace “xx” with the relevant product name, for example, IP. For exact name, check the *Patch Installation Files* section.

Setup command syntax for CLI mode

| Operating system | CLI setup command syntax | Wizard setup command syntax for the Console |
|------------------|---|---|
| Linux | <code>./setup-XX-linux-9_6_0_3-20190807.bin -console</code> | <code>./setup-IP-linux-9_6_0_3-20190807.bin -console</code> |
| Windows | <code>setup-XX-win-9_6_0_3-20190809-64BIT.exe -console</code> | <code>setup-IP-win-9_6_0_3-20190809.exe -console</code> |

A welcome message with information about the installation appears.

You may need to point the Patch installer to the java location. ([JRE requirement for Installation software](#)).

User selections and navigation in CLI mode

During the patch installation process, at the end of each screen of text, you are prompted with a set of options. For example:

```
Press 1 for Next, 2 for Previous, 3 to Cancel or 5 to Redisplay [1]
```

- Select a choice by typing its number and pressing **Enter**.
- Accept the default choice, indicated in brackets ([1] in the above example), by pressing **Enter**.

To navigate between the steps, type a number key as listed in below table and then press **Enter**.

CLI mode navigation keys

| Key | Operation |
|-----|--|
| 1 | Next, continue to the next step |
| 2 | Previous, go back to the previous step |
| 3 | Cancel, terminates the install program |
| 5 | Redisplay, repeats the step |
| 0 | Accept the marked ([X]) menu choice |

Other screens have different choices. For example when the license agreement is displayed, the following prompt appears:

```
Press ENTER to read the text [Type q to quit]
```

Press **Enter** after reading each page. At the end of the license agreement, the installation process displays the first of several menus.

```
Please choose from the following options:
[ ] 1 - I accept the terms of the license agreement.
[X] 2 - I do not accept the terms of the license agreement.
To select an item enter its number, or 0 when you are finished: [0]
```

Each choice is numbered and has a pair of brackets. The default menu choice ('2' in this example) has an **X** in the brackets. Type the number of the desired selection and press **Enter**. In the case of the license agreement, you must accept the agreement by typing **1** and pressing **Enter**.

The screen is redisplayed with an **X** in the brackets next to the selected item. When you are satisfied with the indicated selection, type **0** (zero) and press **Enter**.

The rest of the installation follows the same steps as the Wizard Mode but uses the above method for selecting choices and navigating through the installation steps.

When the patch installation is complete, reconcile the configuration files as described in [Chapter 11 Reconcile user-modifiable files](#).

Apply patch using Unattended (Silent) mode

Unattended mode installs the patch without user input or a response file. When invoking the install program, specify the location of the product suite to be patched.

In order to invoke an unattended installation of the patch, type the appropriate setup command from Table *Setup command syntax for unattended mode* and then press **Enter**. Replace "xx" with the relevant product name, for example, IP. For exact name, check the [Patch installation files](#) section.

Setup command syntax for unattended mode

| Operating system | Unattended setup command syntax |
|------------------|---------------------------------|
|------------------|---------------------------------|

```
./setup-XX-linux-9_6_0_3-20190807-64BIT.bin -silent
```

| | |
|-------|---|
| Linux | -G replaceNewerResponse="Yes to All" -P rpProduct.installLocation=<BASEDIR> -W mergeSummaryPanel.choiceMergeResult={auto manual} Note: Where XX represents the product name. |
|-------|---|

< *BASEDIR* > is the location where the Smarts software is installed.

{auto|manual} specifies the merge operation. You must choose either:

- autowill merge existing versions of the user-modifiable files with new versions that are included in the patch. These merged files will be used when the products are restarted. This is equivalent to Select Merge and use the filesin Wizard mode.
- manual will install and use the new versions of the user-modifiable files included in the patch. Merged versions of the files will also be created and saved for review. This is equivalent to Select Merge but do not use the filesin Wizard mode.

When the patch installation is complete, reconcile the configuration files as described in [Chapter 11 Reconcile user-modifiable files](#).

You may need to point the Patch installer to the java location. See [JRE requirement for Installation software](#).

Log files

Patch report and log file locations, lists the files that the Installation software creates during the install process.

Table 10-1. Patch report and log file locations

| Name | Path | File Name |
|------------------|--|-----------------------------------|
| Install log | <BASEDIR>/smarts/setup/logs C:\tmp (if install fails) | Install.<patch version>.log |
| Merged files log | BASEDIR/smarts/setup/logs | install.merge.<patch version>.log |

Where <patch version> is the complete version number for the patch, for example, 9.6.0.3

Install log

The installer creates an Install log file listing all actions performed by the installation. You need not read this file unless you suspect an installation failure.

If the installation process fails, the log files are located in a temporary directory, for example /tmp or C:\temp. A non-zero status indicates a failure.

Merged files Log

This log lists the files in the BASEDIR/smarts/local directory structure that were merged. For each merged file, the log lists the location and name of the file. If any file cannot be merged due to conflicts, this is also noted. In addition, the log lists the name and location for unmerged versions of all user-modifiable files that are included in the patch.

Reconcile user-modifiable files

The Installation software is designed to preserve your changes to user-modifiable files when installing new versions of these files. The Installation software does this by analyzing the user modifiable-files to answer these questions:

- For each new user-modifiable file in a patch, has the current version of the file been changed?
- If the current version was changed, do the changes conflict with changes in the new version in the patch?

Existing changes to user-modifiable files are always automatically merged into new files, but you control whether or not the files are used by making one of these selections during installation:

- **Merge and use the files:** If there are no conflicts between the changes in the new file and the changes in the current version, the Installation software combines the changes in to merged version of the user-modifiable file. The merged version is named and placed in the location where the Manager can load and use it.

If there are conflicts between changes in the new file and the changes in the current version, then a conflict file (`.<filename>.<patch version>.conflict`) is created that clearly indicates the issues so that you can evaluate them. In addition, an unchanged version of the file from the patch is placed in the location where the Manager can load and use it. Resolve issues in conflict files section provides a procedure to resolve the conflicts.

- **Merge but do not use the files:** All the new user-modifiable files included in the patch are placed in the location where the Manager can load and use them. These files do not include any changes from your current files.

The Installation software does combine changes from the current files with the new files, but the changes are saved into merged versions that are named using an extension (`.automerger`) so that the Manager will not use the merged files. You can then review these automerger files and decide when to make merged changes operational. See Rename and use Automerger files for this procedure.

If there are conflicts between changes in the new file and the changes in the current file, then a conflict file is created that clearly indicates the issues so that you can evaluate them. See Resolve issues in conflict files for a procedure to resolve the conflicts and use the files.

The Installation software also creates a backup of all the versions of the user-modifiable files to ensure that you will not lose any configuration data. See *Backup versions of user-modifiable files* for a description of the backup files.

Note In UNIX, the conflict and automerger versions of the user-modifiable files are hidden files.

This chapter includes the following topics:

- [Backup versions of user-modifiable files](#)
- [Review the results of the reconciliation process](#)
- [Resolve issues in conflict files](#)
- [Rename and use Automerge files](#)

Backup versions of user-modifiable files

The Installation software always creates backup versions of user-modifiable files included in the patch and all current versions of the files. Below table lists the purpose and location of all user-modifiable files that the Installation software creates during the install process and their locations.

Purpose and location of backup files

| Purpose of back up file | Path (from BASEDIR/smarts) | Example (from BASEDIR/smarts) |
|--|---|--|
| Preserve settings of the new user-modifiable file in patch | <code>/local/<directory>/.<filename>.<patch version></code> | <code>/local/conf/.discovery.conf.9.6.0.3</code> |
| Preserve your changes in the current user-modifiable file, if a new version of the same file is in the patch | <code>/.local.bkp.<patch version>/<directory>/<filename></code> | <code>/.local.bkp.9.6.0.3/conf/discovery.conf</code> |

Where:

`<directory>` is the standard location for the file

`<filename>` is the standard name of the file

`<patch version>` is the complete version number for the patch, for example, 9.6.0.3

Review the results of the reconciliation process

The results of the reconciliation analysis performed during the installation and all actions taken are included in the merged files log located in `<BASEDIR>/smarts/setup/logs`. The name of the log file is

```
install.merge.<patch version>.log
```

Determine which files require action by reviewing the merged files log generated by the install process:

- 1 Using any editor, open and review the log:

```
BASEDIR/smarts/setup/log/Install.Merge.9.6.0.3.log.
```

- 2 Review the log:

- a Resolve conflicts in files manually. See *Resolve issues in conflict files*.
- b If you chose the Merge and do not use option during the installation, note the entries that indicate file merges without conflicts that resulted in automerge files. The automerge file can be reviewed and then manually renamed for use. See *Rename and use Automerge files*.

Resolve issues in conflict files

If a conflict occurs, the Installation software creates conflict files that indicate which portions of the file are an issue.

Review the conflict files and resolve issues using the following procedure:

- 1 Open the user-modifiable file where the conflict occurs using `sm_edit`. Conflict files are named using the following convention:

```
.<filename>.<patch version>.conflict
```

For example, the conflict file for `discovery.conf` is named `.discovery.conf.9.6.0.3.conflict`. In UNIX, conflict files are hidden files.

- 2 Save the file using the same file name, but without the `.conflict` extension. This will overwrite the unmerged version of the file included with the patch. (Note that a backup version of the unmerged file is at `.<standard filename>.9.6.0.3`).
- 3 Review and resolve the conflict. The file shows each conflict with applicable sections from the various versions of the file: a section from the user-configurable file in the patch (`hotfix.txt`), another section from the base release (`original.txt`), and one from the modified version of the file (`local.txt`). The following is an example of a conflict:

```
<!-- ----- FROM hotfix.txt : ----- -->
# ServerName = "INCHARGE-<Product>"

<!-- -----FROM original.txt ----- -->
serverName = "INCHARGE-<Product>"

<!-- -----FROM local.txt ----- -->
serverName = "TESTINCHARGE-<Product>"

<!-- ----- END CONFLICT ----- -->
```

Delete the incorrect sections from the conflict and ensure that the correct section is uncommented.

- 4 Save and close the file.

Rename and use Automerge files

Automerge files are only created if you choose the **Merge but do not use the files** option during installation, and no conflicts had occurred during the merge process.

- 1 Open and review merged files using `sm_edit`. Merged files are named as `.<filename>.automerge`. For example, the merged version of `discovery.conf` will be named `.discovery.conf.automerge`. In UNIX, automerge files are hidden files.
- 2 If necessary, make changes in the file to reflect your desired configuration.

- 3 To use the automerge file, rename the file from `.<filename>.automerge` to `<filename>` and save the file. For example, change the name of the merged file from `.discovery.conf.automerge` to `discovery.conf` and save the file.
- 4 Save and close the file.

Note A backup version of the unmerged user-modifiable file from the patch is at `.<standard filename>.9.6.0.3`.

Uninstallation

Uninstalling a patch removes all previously applied patches and returns the Smarts software to the baseline product version.

Note Administrative privileges are required to uninstall a patch.

Note Use either the uninstaller program or, for Windows, **Add/Remove Programs** to uninstall a patch. Failure to use one of these methods can result in an unstable system and/or inconsistent product directories.

This chapter includes the following topics:

- [Before uninstallation](#)
- [Roll back to a previous patch](#)
- [Uninstall patch using the Control Panel \(Windows only\)](#)
- [Uninstall patch using the uninstaller program](#)
- [Uninstall steps](#)

Before uninstallation

You must complete the following task before uninstalling the patch:

Extracting JVM file

To uninstall the patch completely, you must extract the `_jvm.zip` (in Windows) and `_jvm.tar` (in Linux) files manually before uninstalling the patch.

Note If uninstaller does not find the `_jvm.zip/_jvm.tar` folder in any of the directories, then you may encounter errors in uninstallation. To avoid the errors, complete the following procedure.

To extract the `_jvm.tar` or `_jvm.zip`, perform these steps:

For Linux:

- 1 Navigate to the `/opt/InCharge/<Product>`.
- 2 Extract the `_jvm.tar` file, by invoking the following command:

```
sudo tar -xvf _jvm.tar
```

For Windows:

- 1 Navigate to the C:\InCharge*<Product>*.
- 2 Right-click on the _jvm.zip file, and then select Extract.

Roll back to a previous patch

If you want to revert to a previous patch, you must:

- Uninstall the currently installed patch to return to the baseline version.
- Reinstall the previous patch.

For example, to revert from Patch 20 to Patch 19, uninstall Patch 20, and then reinstall Patch 19.

Uninstall patch using the Control Panel (Windows only)

Note If you installed a patch to two different installations of the product on the same system, use the uninstaller program to remove the patch. Do not use the **Add/Remove Programs** because it does not support multiple instances of the same software.

Use the Windows **Control Panel** to uninstall a patch:

- 1 Click **Start > Settings > Control Panel**.
- 2 Open the list of programs.
 - a For Windows Server 2012, double-click Programs and Features.
- 3 From the programs window, select **<Product>**.
- 4 Click **Change/Remove**.

The uninstaller program proceeds as described in [Uninstall steps](#).

Uninstall patch using the uninstaller program

Use the uninstaller program to uninstall a patch:

Note Do not use the uninstaller program in the _uninst directory because it will remove the entire product.

- 1 Change the directory or use the file navigator to find the _rpuninst directory. For example:
 - a /opt/InCharge/<Product>/_rpuninst on UNIX systems
 - b C:\InCharge*<Product>*_rpuninst on Windows systems
- 2 Invoke the uninstaller program. For example:
 - a ./uninstaller.bin on UNIX systems

C:\uninstaller.exe on Windows

Note To run the uninstaller program in CLI mode, specify the console option after the uninstall command.

The uninstall proceeds as described in [Uninstall steps](#).

Uninstall steps

- 1 The Welcome screen appears. Click **Next**.

The patch to be uninstalled is displayed with its location.

- 2 Review the patch number and the directory path.

- 3 Click **Next** and the Uninstallation Progress screen appears. After you click **Next**, you cannot cancel the uninstallation process.

Upon completion, the Uninstallation Summary displays informational messages such as successful completions, error messages, and warnings.

- 4 Click **Next** and, if necessary, restart your system. Otherwise, click Finish to exit the uninstaller program.

The uninstaller program creates a log file with the naming convention Uninstall.RP.<maj>.<min>.<sp>.log.

<maj> is the major release version number.

<min> is the minor release version number.

<sp> is the service pack release number.

<patch> is the patch number.

The log file is located in the <BASEDIR>/smarts/setup/logs directory.

Troubleshooting and getting help

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VMware support, product, and licensing information can be obtained as follows.

Product information - For documentation, release notes, software updates, or for information about VMware Smart Assurance products, go to VMware Online Support at:

<https://support.vmware.com>