



Release Notes for Cisco Services Ready Engine Virtualization 1.1

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Introduction

Cisco Services Ready Engine Virtualization (Cisco SRE-V) is a branch-office infrastructure platform that combines computing, networking, storage access, virtualization, and unified management into a cohesive system. It enables the VMware vSphere Hypervisor™ to be provisioned on a Cisco Services Ready Engine (SRE) Service Module and to host one or multiple virtual machines running the Microsoft Windows Server operating system. The entire system is integrated with the Generation 2 of the Cisco Integrated Services Router (ISR G2).



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System Requirements

This section describes the hardware and software requirements. It contains the following:

- [Hardware Requirements, page 2](#)
- [Software Requirements, page 3](#)

Hardware Requirements

The Cisco SRE-V software runs on the Cisco SRE Service Module, which is the hardware component of Cisco SRE-V. The Cisco SRE Service Module can reside either in the Cisco 2900 series or 3900 series ISR G2.

The Cisco SRE-V software is supported on the following service modules:

- Cisco SRE 700 Service Module
- Cisco SRE 900 Service Module

[Table 1](#) provides the hardware information for each of the supported modules.

Table 1 Cisco SRE Service Module Hardware at a Glance

Feature	Cisco SRE 700 Service Module	Cisco SRE 900 Service Module
Form Factor	SM	SM
CPU	Intel Core 2 Duo (one core active), 1.86 GHz	Intel Core 2 Duo (two cores active), two 1.86 GHz
DRAM	4 GB	4 GB or 8 GB
eUSB Flash Memory	2-GB internal USB flash-memory module	2-GB internal USB flash-memory module
Hard Disk	1 x 500 GB	2 x 500 GB (1 TB)
Internal Network Interfaces	1 Layer 2 Gigabit Ethernet interface 1 Layer 3 Gigabit Ethernet interface	1 Layer 2 Gigabit Ethernet interface 1 Layer 3 Gigabit Ethernet interface
External Network Interfaces	1 USB connector 1 RJ-45 Gigabit Ethernet connector	1 USB connector 1 RJ-45 Gigabit Ethernet connector
Router Platforms	2911, 2921, 2951, 3925, 3925e, 3945, 3945e	2911, 2921, 2951, 3925, 3925e, 3945, 3945e

[Table 2](#) shows the Cisco EtherSwitch Enhanced High-Speed WAN Interface Cards (EHWICs) and Cisco EtherSwitch service modules that are supported on the Cisco ISR G2.

Table 2 Supported Cisco EtherSwitch EHWIC and Cisco EtherSwitch Service Modules

Cisco EtherSwitch EHWIC	Cisco EtherSwitch Service Module
EHWIC-D-8ESG-P=, EHWIC-D-8ESG-P, EHWIC-D-8ESG=, EHWIC-D-8ESG, EHWIC-4ESG-P=, EHWIC-4ESG-P, EHWIC-4ESG=, and EHWIC-4ESG	SM-D-ES3G-48-P, SM-D-ES3-48-P, SM-D-ES2-48, SM-ES3G-24-P, SM-ES3-24-P, SM-ES2-24-P, SM-ES2-24, and SM-ES3G-16-P

Software Requirements

This section provides information about third-party software, software options, and feature licenses.

Third-Party Software

Cisco SRE-V uses the following third-party software:

- VMware vSphere Hypervisor™—For virtualization.
- Microsoft Windows Server—For the operating system.

The following Microsoft Windows Servers are certified:

- Windows Server 2003 SP2 Standard 32-bit and 64-bit
- Windows Server 2003 SP2 Enterprise 32-bit and 64-bit
- Windows Server 2008 R2 Standard 64-bit
- Windows Server 2008 R2 Enterprise 64-bit

Cisco SRE-V Software Options

Cisco SRE-V is available in the following three options:

- Hardware only (SM-SRE-700-K9 or SM-SRE-900-K9)—Cisco SRE Service Module without any software installed on it.

If you purchase this option, you must download and install Cisco SRE-V software as well as your own version of the Microsoft Windows Server 2003 or Microsoft Windows Server 2008 software.

- Hardware plus Virtualization software (SM-SRE-700-K9 or SM-SRE-900-K9 + SW-SM-SRE-V-1.0-K9)—Cisco SRE Service Module with Cisco SRE-V software preinstalled. At the time of purchase, you can choose the RAID option that you want enabled on the Cisco SRE-V software.

Purchase this option if you have your own version of Microsoft Windows Server 2003 or Microsoft Windows Server 2008 software that you want to use. If you purchase this option, the Cisco SRE-V license is preactivated.



Note RAID is supported on the Cisco SRE 900 Service Module only.

- Hardware, plus Virtualization software, plus Microsoft Windows software (SM-SRE-700-K9 or SM-SRE-900-K9 + SW-SM-SRE-V-1.0-K9 + MSWS-08R2ST-X86-K9)—Cisco SRE Service Module with both Cisco SRE-V and Microsoft Windows Server 2008 R2 Standard Edition 64-bit virtual machine preinstalled. At the time of purchase, you can choose the RAID option that you want enabled on the Cisco SRE-V software.

If you purchase this option, both the Microsoft Windows Server 2008 R2 license and the Cisco SRE-V license are preactivated.



Note RAID is supported on the Cisco SRE 900 Service Module only.

Feature Licenses

Table 3 provides the feature licenses available for Cisco SRE-V.

Table 3 License SKUs

License SKUs	Description
FL-SRE-V-HOST	VMware vSphere Hypervisor Host pre-activated paper license purchased with the software.
FL-SRE-V-HOST=	VMware vSphere Hypervisor Host paper license purchased without the software (spare).
L-FL-SRE-V-HOST=	VMware vSphere Hypervisor Host electronic license purchased without the software (spare).

Open Source Software Information

Some components of the software created for Cisco Services Ready Virtualization are provided through open source or commercial licensing. For more information about these components and associated copyright statements, see:

http://www.cisco.com/en/US/docs/interfaces_modules/services_modules/sre_v/1.1/open_source/licenses/sre_v_1_1_open_source.pdf

Router, Cisco SRE Service Module, and Cisco IOS Software Version Compatibility

Table 4 provides the compatibility between the routers, Cisco SRE Service Modules, and Cisco IOS software version that must be installed in the router to use Cisco SRE-V.

Table 4 Cisco Routers, Cisco SRE Service Module, and Cisco IOS Version Compatibility

Router	Cisco IOS Software Version for Cisco SRE 700 Service Module	Cisco IOS Software Version for Cisco SRE 900 Service Module
2911	15.1(4)M and later versions	15.1(4)M and later versions
2921	15.1(4)M and later versions	15.1(4)M and later versions
2951	15.1(4)M and later versions	15.1(4)M and later versions
3925	15.1(4)M and later versions	15.1(4)M and later versions
3925e	15.1(4)M and later versions	15.1(4)M and later versions
3945	15.1(4)M and later versions	15.1(4)M and later versions
3945e	15.1(4)M and later versions	15.1(4)M and later versions

New and Changed Information

Cisco SRE-V 1.1 supports the following new feature:

- RAID—You can choose to store the Cisco SRE 900 Service Module data files on local Redundant Array of Inexpensive Disks (RAID). The available RAID options are: RAID 1, RAID 0, and non-RAID.

RAID is *not supported* on the Cisco SRE 700 Service Module. It is supported on the Cisco SRE 900 Service Module only.

Open Caveats

Table 5 lists the caveats that are open in Cisco SRE-V1.1.

Table 5 Open Caveats in Cisco SRE-V 1.1

Bug ID	Summary	Additional Information
CSCto77490	The RAID command, rb -a restart , does not work.	<p>Symptom: An error occurs when you execute the rb -a restart command.</p> <p>Condition: After the rebuild process initiates, you use the rb -a pause command to pause a rebuild, and then you use the rb -a restart command to continue with the rebuild and an error occurs. The error occurs because you used the rb -a restart command instead of the rb -a resume command.</p> <p>Workaround: To resolve this problem, after you use the rb -a pause command, use the rb -a resume command to continue with the rebuild. The rebuild process continues from where it left off when the pause command was executed.</p>
CSCto45749	Datastore is missing after RAID migration.	<p>Symptom: Datastore is missing after RAID migration.</p> <p>Condition: After RAID migration, for example, from non-RAID to RAID 0, or from non-RAID to RAID 1, the local datastore disappears after reboot. This problem occurs because RAID migration changes the disk volume signature, including the capacity and serial number, which triggers the datastore revalidation in VMware vSphere Hypervisor™.</p> <p>Workaround: To resolve this problem, do one of the following:</p> <ul style="list-style-type: none"> • Rescan the system a couple of times. From the vSphere Client GUI, choose Inventory > Configuration > Storage > Rescan All... <p>If rescanning the system does not resolve the problem, choose Inventory > Configuration > Storage > Add Storage... > Assign a New Signature > Free Space.</p> <p>For detail procedure, see the “Cannot View Datastores” section in Installation and Configuration Guide for Cisco Services Ready Engine Virtualization.</p> <ul style="list-style-type: none"> • From the Console Manager interface, use the hypervisor set disk revalidation command: <pre>SRE-Module# hypervisor set disk revalidation</pre>

Table 5 Open Caveats in Cisco SRE-V 1.1 (continued)

Bug ID	Summary	Additional Information
CSCto59640	Cannot upgrade Cisco SRE-V in disk maintenance mode.	<p>Symptom: When the system is in disk maintenance mode, the Console Manager interface commands, such as the software install package command and the show tech-support hypervisor command fail to execute. Also, the Export System Logs feature in the vSphere Client GUI does not work.</p> <p>Conditions: This problem occurs in the following three conditions:</p> <ul style="list-style-type: none"> • If the system is in disk maintenance mode. • When the scratch storage is not located in any of the local datastores or if the datastore does not have sufficient free space. <p>Workaround: To resolve this problem, do the following, as appropriate:</p> <ul style="list-style-type: none"> • If the system is in disk maintenance mode, use the hypervisor unset disk maintenance command to move the system out of the disk maintenance mode. • If the scratch storage is not located in any of the local datastores or the datastore does not have sufficient free space, use the hypervisor set scratch datastore command to move the scratch storage to a local datastore that has at least 2 GB of free disk space.
CSCto59738	The RAID management CLI hangs after executing the hypervisor unset disk maintenance command.	<p>Symptom: Occasionally, after executing the hypervisor unset disk maintenance command, the RAID management CLI hangs.</p> <p>Condition: After you deleted and recreated logical drives, you executed the hypervisor unset disk maintenance command.</p> <p>Workaround: To resolve this problem, do the following: After you execute the hypervisor unset disk maintenance command, we recommend that you wait for approximately 10 minutes, the Cisco SRE Service Module automatically reloads, and the problem is resolved.</p>
CSCto69457	Inaccurate disk information after removing and reinserting a drive on a migrated RAID1 array.	<p>Symptom: Inaccurate disk information is displayed when the disk in a RAID 1 array, which was migrated from a RAID 0 array, is removed and then reinserted.</p> <p>Condition: After migrating from RAID 0 to RAID 1, you removed and reinserted one of the disk drives, and then you notice that the previous RAID 0 disk information still appears for that drive.</p> <p>Workaround: To resolve this problem, after you reinsert the disk, reload the Cisco SRE Service Module.</p>
CSCtj39408	Several Microsoft Windows virtual machines are still present after uninstallation.	<p>Problem: Uninstallation of Cisco SRE-V software does not remove all of the Microsoft Windows virtual machines.</p> <p>Symptom: A number of Microsoft Windows virtual machines are still present after uninstallation. To view all the remaining virtual machines after uninstallation, use the show virtual-machine command from the Console Manager interface.</p> <p>Workaround: To resolve this problem, perform a helper install of the Cisco SRE-V software. This will remove all of the remaining virtual machines.</p>

Table 5 Open Caveats in Cisco SRE-V 1.1 (continued)

Bug ID	Summary	Additional Information
CSCtj34317	Error occurs with the show hypervisor ip command after a reset from IOS.	<p>Symptom: An error occurs after executing the show hypervisor ip command.</p> <p>Condition: The following error message is displayed when the show hypervisor ip command is used after a reset from IOS:</p> <pre>Hypervisor information cannot be displayed. Error: Host system not found.</pre> <p>Workaround: To resolve this problem, after the Cisco SRE-V comes back online, use the hypervisor set password seed password_seed command from the Console Manager interface.</p>
CSCti97289	After power cycle of the router with HWIC-9-ESW, the sm slot/1 interface does not come up.	<p>Symptom: Because the sm slot/1 interface does not come up after a power cycle of the router, the connectivity to the VMware vSphere Hypervisor™ is not present.</p> <p>Condition: This problem occurs occasionally when an HWIC-9-ESW is present in the ISR G2 and a power cycle of the router is performed.</p> <p>Workaround: To resolve this problem, do the following: From the router, enter the shutdown command followed by the no shutdown command for the interface sm slot/1.</p> <p>Example:</p> <pre>Router# configure terminal Enter configuration commands, one per line. End with CNTL/Z Router(config)# interface sm 1/1 Router(config-if)# shutdown Router(config-if)# no shutdown Router(config-if)# end Router# write</pre>
CSCti99366	IP address change of SM interface should not require a reload.	<p>Symptom: After changing the IP address of the VMware vSphere Hypervisor™, the change is not reflected on the service-module side.</p> <p>Condition: This problem occurs if you change the IP address of the VMware vSphere Hypervisor™ (service-module mgf ip address hypervisor-ip-address subnet-mask), and do not do a reload.</p> <p>Workaround: To resolve this problem, use the reload command from the Console Manager interface.</p> <p>Example:</p> <pre>Router# service-module SM 1/0 session Trying x.x.x.x, 2258 ... Open SRE-Module# reload</pre>
CSCtj75962	After manual configuration, the Cisco SRE Service Module does not synchronize with the NTP server.	<p>Symptom: If the VMware vSphere Hypervisor™ clock is manually set using the vSphere Client GUI, and then an NTP server is added to the clock settings, the Cisco SRE Service Module fails to synchronize with the NTP server.</p> <p>Condition: This problem can occur if the clock is manually set using the vSphere Client GUI, and at a later date, an NTP server is added to the time configuration using the vSphere Client GUI.</p> <p>Workaround: To resolve this problem, reload the Cisco SRE Service Module.</p>

Resolved Caveats

Table 6 lists the caveats that are resolved in Cisco SRE-V 1.1.

Table 6 *Resolved Caveats in Cisco SRE-V 1.1*

Bug ID	Summary
CSCtj36619	Module fails to reload after executing the reload command from the Management virtual machine.
CSCtj84901	Router reloads when both PVDM and Cisco SRE Service Module are installed in the router.

Related Documentation

The following related documentation for Cisco SRE-V1.1 is available on Cisco.com:

- [Release Notes for Cisco Services Ready Engine Virtualization 1.1](#) (this document)
- [Installation and Configuration Guide for Cisco Services Ready Engine Virtualization 1.1](#)
- [FAQs and Troubleshooting Guide for Cisco Services Ready Engine Virtualization](#)
- [Open Source Used In Cisco Services Ready Engine Virtualization Release: 1.1](#)

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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