



Release Notes for Cisco Services Ready Engine Virtualization 1.5

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This document provides system requirements, information about open source software, new and changed information, and open and resolved caveats for Cisco Services Ready Engine Virtualization 1.5.



Note

We sometimes update the documentation after original publication. Therefore, review the documentation on Cisco.com for any updates.

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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 or Linux operating systems. The entire system is integrated with the Generation 2 of the Cisco Integrated Services Router (ISR G2).

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.

- 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 Solo (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, Cisco SRE-V 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 guest operating system in virtual machines.

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
- Linux—For the guest operating system in virtual machines.

For a list of supported Linux distributions, see *VMware Compatibility Guide* at:

<http://www.vmware.com/resources/compatibility/search.php?deviceCategory=software>

Cisco SRE-V Options

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

- Hardware only (Cisco SRE 700 or 900 Service Module)—Cisco SRE Service Module without any software installed on it.
- Hardware plus Virtualization software (Cisco SRE 700 or 900 Service Module + Cisco SRE-V)—Cisco SRE Service Module with Cisco SRE-V software preinstalled.
- Hardware, plus Virtualization software, plus Microsoft Windows software (Cisco SRE 700 or 900 Service Module + Cisco SRE-V + Microsoft Windows Server 2008 R2)—Cisco SRE Service Module with both Cisco SRE-V and Microsoft Windows Server 2008 R2 Standard Edition 64-bit virtual machine preinstalled.

Feature Licenses

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

Table 3 Feature License SKUs

License SKUs	Description
Licenses Without vCenter Support	
FL-SRE-V-HOST	VMware vSphere Hypervisor Host 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).
Licenses With vCenter Support	
FL-SRE-V-HOSTVC	Feature license for the VMware vSphere Hypervisor software on the Cisco SRE Service Module, which includes vCenter management support. This license can be purchased with the software.
FL-SRE-V-HOSTVC=	Feature license for the VMware vSphere Hypervisor software on the Cisco SRE Service Module, which includes vCenter management support (spare).
L-FL-SRE-V-HOSTVC=	E-delivery feature license for the VMware vSphere Hypervisor software on the Cisco SRE Service Module, which includes vCenter management support (spare).
Upgrade Licenses to Add vCenter Support	
FL-SRE-V-VC-UPG=	Feature license to upgrade the VMware vSphere Hypervisor software on the Cisco SRE Service Module to enable vCenter management support (spare).
L-FL-SRE-V-VC-UPG=	E-delivery feature license to upgrade the VMware vSphere Hypervisor software on the Cisco SRE Service Module to enable vCenter management support (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/1.5/open_source/licenses/sre_v_1_5_open_source.pdf

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

Table 4 shows 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 1.5 supports the following new features:

- Linux operating system
- vCenter Server access

Since Cisco SRE-V 1.1, the following information has changed in Cisco SRE-V 1.5:

- Configuration of the Cisco SRE Service Module interfaces is simplified.
- Configuration of the user management tasks is done using the vSphere Client GUI instead of the Cisco SRE-V CLI.
- Cisco SRE-V license management is done using the VMware Management tools instead of the Cisco Software Licensing (CSL) tool.
- Management of virtual machines is done using the vSphere Client GUI instead of the Cisco SRE-V CLI.
- The process to enter the RAID management command environment has changed.

Open Caveats

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

Table 5 Open Caveats in Cisco SRE-V 1.5

Bug ID	Summary	Additional Information
CSCctq93133	RBCP does not work when lockdown mode is enabled and when restarting the system.	<p>Symptom: When VMware ESXi lockdown mode is enabled, UCS-E module gets reloaded. Also under this condition “service-module ip” IOS CLI commands configured under interface sm slot/port does not take effect.</p> <p>Condition: This problem happens only when VMware ESXi's Lockdown mode is enabled.</p> <p>Workaround: A workaround for this problem is to disable heartbeat-reset under IOS configuration CLI interface sm slot/port and to use VMware Console interface (DCUI) to manage Hypervisor IP address.</p>
CSCctq33026	Garbled characters when exiting from the DCUI screen.	<p>Symptom: When suspended from UCS-E module console session with ctrl-shift-6 x, the IOS router prompt sometimes becomes garbled.</p> <p>Condition: This problem occurs occasionally only with a few terminal client programs. It tends to happen only when the ctrl-shift-6 x keystore is entered while the module's console screen is refreshing.</p> <p>Workaround: To work around the program, suspend or disconnect the console session when the display page is static.</p>
CSCctq70314	Cannot delete or create datastore via ESXi suggested methods or vSphere.	<p>Symptom: Cannot delete the datastore via the vSphere client.</p> <p>Condition: Attempting to delete and then create a datastore as suggested by the VMware knowledge base article: http://kb.vmware.com/selfservice/microsites/search.do?language=en_US&cmd=displayKC&externalId=1017104</p> <p>Workaround: This problem usually happens to the default datastore1 after a fresh install. To resolve this problem for this case do the following:</p> <ol style="list-style-type: none"> 1. fdisk /vmfs/devices/disks/eui.<id> 2. Delete just partition. 3. This action will get rid of the datastore. <ol style="list-style-type: none"> a. Command (m for help): d b. Partition number (1-4): 3 c. Command (m for help): w <ol style="list-style-type: none"> i. The partition table has been altered! 3. Add a new partition 3. <ol style="list-style-type: none"> a. fdisk /vmfs/devices/disks/eui.<id> b. Command (m for help): n

Table 5 *Open Caveats in Cisco SRE-V 1.5 (continued)*

Bug ID	Summary	Additional Information
CSCtq70314 (continued)		<p>c. Command action</p> <ul style="list-style-type: none"> i. e extended ii. p primary partition (1-4) iii. enter: p <p>d. Partition number (1-4): 3</p> <ul style="list-style-type: none"> i. First cylinder (537-60788, default 537): Using default value 537 ii. Last cylinder or +size or +sizeM or +sizeK (537-60788, default 60788): Using default value 60788 <p>e. Command (m for help): w</p> <ul style="list-style-type: none"> i. The partition table has been altered! <p>4. Set partition 3 type.</p> <ul style="list-style-type: none"> a. fdisk /vmfs/devices/disks/eui.<id> b. Command (m for help): t <ul style="list-style-type: none"> i. Partition number (1-4): 3 ii. Hex code (type L to list codes): fb iii. Changed system type of partition 3 to fb (VMFS) c. Command (m for help): w <ul style="list-style-type: none"> i. The partition table has been altered! <p>5. Create the new datastore on partition 3 with 8 MB block.</p> <ul style="list-style-type: none"> a. vmkfstools -C vmfs3 -b 8M -S "datastore1" /dev/disks/eui.<id>:3 <p>Checking if remote hosts are using this device as a valid file system. This may take a few seconds.</p> <p>Creating vmfs3 file system on "eui.<id>:3" with blockSize 8388608 and volume label "datastore1".</p> <p>Successfully created new volume: 4de697a4-cce8942a-b960-0023eba107fd.</p>

Table 5 Open Caveats in Cisco SRE-V 1.5 (continued)

Bug ID	Summary	Additional Information
CSCto45749	Datstore is missing after RAID migration.	<p>Symptom: Datstore 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 datstore disappears after reboot. This problem occurs because RAID migration changes the disk volume signature, including the capacity and serial number, which triggers the datstore revalidation in VMware vSphere Hypervisor™.</p> <p>Workaround: To resolve this problem, do the following:</p> <p style="padding-left: 20px;">Rescan the system a couple of times. From the vSphere Client GUI, choose Inventory > Configuration > Storage > Rescan All...</p> <p style="padding-left: 20px;">If rescanning the system does not resolve the problem, choose Inventory > Configuration > Storage > Add Storage... > Assign a New Signature > Free Space.</p> <p style="padding-left: 20px;">For detailed procedures, see the “Cannot View Datstores” section in <i>Installation and Configuration Guide for Cisco Services Ready Engine Virtualization</i>.</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>
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>
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 1.5.

Table 6 *Resolved Caveats in Cisco SRE-V 1.5*

Bug ID	Summary
CSCti99366	IP address change of SM interface should not require a reload.
CSCto77490	The RAID command, rb -a restart , does not work.
CSCto69457	Inaccurate disk information after removing and reinserting a drive on a migrated RAID1 array.

Related Documentation

The following related documentation for Cisco SRE-V1.5 is available on Cisco.com:

- [Release Notes for Cisco Services Ready Engine Virtualization 1.5](#) (this document)
- [Installation and Configuration Guide for Cisco Services Ready Engine Virtualization 1.5](#)
- [FAQs and Troubleshooting Guide for Cisco Services Ready Engine Virtualization 1.5](#)
- [Open Source Used In Cisco Services Ready Engine Virtualization Release: 1.5](#)

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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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