

# **Sun Ray Connector for VMware View Manager 1.2 Installation and Configuration Guide**

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## Preface

Sun Ray Connector for VMware View Manager (SRVC) is a software product that connects users of Sun Ray clients to Windows virtual machines via the VMware View Manager. This document describes the installation of SRVC and the configuration of the SRVC interfacing software.

Sun Ray is a certified VMware View and VMware Virtual Desktop Manager (VDM) client solution. It is listed in VMware's Hardware Compatibility Guide at <http://www.vmware.com/resources/compatibility>.

For an overview of the complete virtualization solution, refer to the [Sun Blueprint, Virtualizing Desktops with Sun Ray Software and VMware View Manager](#).

## Related Documentation

Product	Documentation
Sun Ray Software	<a href="http://wikis.sun.com/display/SRS/Home">http://wikis.sun.com/display/SRS/Home</a>
Solaris Operating System (x86 or SPARC)	<a href="http://docs.sun.com/app/docs/prod/solaris.10?l=en&amp;a=view">http://docs.sun.com/app/docs/prod/solaris.10?l=en&amp;a=view</a>
VMware View	<a href="http://www.vmware.com/support/pubs/view_pubs.html">http://www.vmware.com/support/pubs/view_pubs.html</a>
Sun Blueprint, Virtualizing Desktops with Sun Ray Software and VMware View Manager	<a href="https://www.sun.com/offers/thankyou/thankyou.xml?id=820-7120.pdf">https://www.sun.com/offers/thankyou/thankyou.xml?id=820-7120.pdf</a>

## Chapter 1: Setting up SRVC

Sun Ray Connector for VMware View Manager (SRVC) connects users of Sun Ray clients to Windows virtual machines via the VMware View Manager. It provides a Sun Ray kiosk session that allows users to connect to their virtual machines with their Active Directory user name and password. The user does not have to reenter their password at the Windows login screen.

## System Requirements

The following VMware environments are supported by the indicated Sun Ray Software releases on the Solaris operating system (x86 or SPARC):

VMware View Version	Sun Ray Software Version
VMware View 4.5	Sun Ray Software 5.1 or later
VMware View 4.0 (certified)	Sun Ray Software 5, patch-03 rev, or later
VMware View 3.1 (certified)	Sun Ray Software 5, patch-03 rev, or later

See the Related Documentation for more information.

## Installing SRVC

Install the Sun Ray Connector for VMware View Manager software on the Sun Ray server using the procedure below.

1. Download the [Sun Ray Software 5.1 Media Pack](#) and make it accessible to the Sun Ray server.
2. Become superuser on the Sun Ray server.

To avoid installation script errors that may occur if user environment settings are carried forward, use the following command:

```
% su - root
```

3. Remove any previous installation of the software:

```
# pkgrm SUNWkio-vdm
```

4. Change directory to the `srvc_1.2` folder, which was extracted from the zip file.
5. Install the package for your architecture:

- x86:

```
# pkgadd -d Packages/Solaris_10+/i386/
```

- Sparc:

```
# pkgadd -d Packages/Solaris_10+/sparc/
```

## Configuring the Sun Ray Server for SRVC

The following steps use the Sun Ray Software web administration (SRS Admin GUI) to configure the Sun Ray server to present Windows desktops.

1. Log into the SRS Admin GUI at `http://<sun ray server>:1660` using the administrator user name and the password assigned during server setup.
2. Click on the Advanced tab, and Kiosk Mode sub-tab. Then click Edit.
3. Modify the session parameters. In the Sessions pull-down, select VMware View Manager Session.

The arguments accepted are:

Argument	Description
-s <server>	VMware View Connection Server hostname
-https	Use SSL connection to VMware View Connection Server (default)

-http	Do not use SSL connection to VMware View Connection Server
-p <port number>	VMware View Connection Server port number
-t <seconds>	The length of inactivity before the user is automatically logged out of the desktop selection dialog if no smart card is used. Default value is 3 minutes.
-no-auto-login	Users are automatically forwarded to their desktop if there is only one desktop. This flag disables this behavior.
-d <domain>	This domain name will be preselected in the login screen, if available.
- <uttsc arguments>	Options to be passed to the Sun Ray Connector for Windows OS. For detailed information on these options refer to the uttsc man page: <code>\$ man -M `pkginfo -r SUNWuttsc`/SUNWuttsc/man uttsc</code>



#### Note

SRWC 2.3 is capable of supporting Windows Network Level Authentication (NLA), but VMware View 4.5 does not support NLA on non-Windows based View clients. You must use the standard RDP authentication with VMware View 4.5. To configure RDP authentication, enable RDP authentication on the guest OS and add the `-N off` option to the `uttsc` arguments field in the Kiosk Mode tab within the SRS Admin GUI.

4. Configure the server to use Kiosk Mode for card and non-card users.
  - a. Click the System Policy sub-tab on the Advanced menu.
  - b. Enable Kiosk Mode for both card and non-card users.
5. Click Save when done.
6. Restart the Sun Ray server:
  - a. Click on the link in the message dialog to switch to the Servers tab.
  - b. Select the server and click Cold Restart.

## Configuring VMware View Connection Server

Some additional configuration of the VMware View Connection server may be required in order for SRVC to serve users their desktops.

### Disabling Connection Tunneling

SRVC does not support tunneled connections to VMware provided virtual machines. To switch off connection tunneling:

1. Log into your VMware View Connection Server web administration.
2. Click the Configurations tab.
3. Select Servers->View Servers and click Edit.
4. Enable "Direct connection to desktop" in the pop-up screen.

### Configuring VMware View Manager to Accept Non-SSL Connections

If (Secure Sockets Layer) SSL is not required, the following steps describe how to configure VMware View Manager so that SRVC can connect to it without using SSL.

1. Log into your VMware View Connection Server web administration.
2. Click the Configurations tab.
3. Select Global Settings and click Edit.
4. Disable "Use SSL for client connections" in the pop-up screen.

### Enabling SSL

The default SSL certificate that results from the VMware View Manager installation must be replaced in order to enable SRVC to connect to the system. The following steps assume that you have generated and stored a new certificate on the VMware View Connection server. Refer to VMware View Manager documentation for more details.

1. Export the certificate from the keystore on the VMware View Connection server, using the command:

```
# keytool -export -keystore keys.p12 -storetype pkcs12 -file vmware.cer
```

2. Copy the vmware.cer file to the Sun Ray server.
3. Import the certificate into a keystore on your Sun Ray server:

```
# keytool -import -file vmware.cer -trustcacerts -v -keystore
/etc/opt/SUNWkio/sessions/vdm/keystore
```

4. Edit the kiosk script (/etc/opt/SUNWkio/sessions/vdm/vdm) and modify the line that begins with javaKeyStorePass= to include the password for the keystore.
5. Restart the Sun Ray server via the Admin GUI.



#### Note

The administrator may choose to import the certificate into the default keystore of the server's Java installation instead of following steps 3 and 4. If this is done, the kiosk script must be modified and all references to javaKeyStore and javaKeyStorePass should be removed.

## Chapter 2: Troubleshooting

In the event the software does not work as expected, look at the log messages located in the /var/opt/SUNWut/log/messages file. Error messages related to the SRVC begin with kiosk:vdm. There may also be useful information in the /var/dt/Xerrors file.

### Known Issues

---

Authentication fails on VDM login screen when launching Windows 7 using Network Level Authentication (NLA).

---

#### Cause:

SRWC 2.3 is capable of supporting Windows Network Level Authentication (NLA), but VMware View 4.5 does not support NLA on non-Windows based View clients. You must use the standard RDP authentication with VMware View 4.5.

#### Solution:

To configure RDP authentication, enable RDP authentication on the guest OS and add the `-N off` option to the `uttsc` arguments field in the Kiosk Mode tab within the SRS Admin GUI.

---

Character input is not working with international keyboards.

---

#### Cause:

There are problems when typing some characters into Java 5 dialogs on Sun Ray.

#### Solution:

Install Java 6 on the Sun Ray server and modify the kiosk script to use Java 6 to execute the SRVC GUI.

---

User not returned to SRVC login window, but instead loops at Windows login screen.

---

#### Cause:

The `vdm-client.jar`, after authenticating the user's credentials, starts the standard SRWC `uttsc` script. The `uttsc` script launches the `uttsc` binary in a loop which attempts to detect how and why the `uttsc` binary exited. If the `uttsc` binary exits with a 0 exit code, the `uttsc` script will attempt to restart it rather than exiting. This avoids unnecessary kiosk sessions teardowns/recreates. However, in the VDM case, this causes

an error since the password provided originally by VDM is good for one login only and the user's normal user name and password cannot be used.

Solution:

Remove the looping logic from the `uttscc` script and add it to the VDM script so that the `vdm-client.jar` is relaunched inside the existing Kiosk Session.

---

## Key Error Messages

---

### Error connecting to VDM

```
server: javax.net.ssl.SSLException: java.lang.RuntimeException: Unexpected
error: java.security.InvalidAlgorithmParameterException: the trustAnchors parameter must be
non-empty
```

---

Cause:

The SSL certificate is not set up correctly on the Sun Ray server.

Solution:

See Enabling SSL.

---

This desktop is currently not available. Please try connecting to this desktop again later, or contact your system administrator. The desktop sources for this desktop are not responding. Please try connecting to the desktop again later, or contact your system administrator.

---

Cause:

The desktop is not set up properly or is already in use. For example:

- Someone is logged into the machine (over remote desktop or via the console in VMware vCenter).
  - The machine is powering on/off, or suspending.
  - No free desktops exist for that user.
  - VMware View Agent is not installed on the desktop, or is not working correctly. Check that the desktop status is available in VMware View Connection Server.
  - Active Directory and/or DNS is not set up properly on the desktop.
  - There is a network communication problem between VMware View Connection Server and the desktop.
  - A Windows firewall is blocking connections to the desktop.
- 

Connection tunneling is required to connect to the desktop, but it is not supported by this client.

---

Cause:

Connection tunneling is not supported by SRVC 1.2.

Solution:

See the Disabling Connection Tunneling procedure above.

---

### Exception in thread "main" java.lang.NoClassDefFoundError

---

Cause:

An incorrect version of Java software is in use.

Solution:

Install Java version 1.5 or 1.6.

---

## Desktop tries to open, but immediately disconnects

---

Cause:

Diagnose the problem further.

Solution:

Try to connect to the desktop manually from the Sun Ray server using the `/opt/SUNWuttsc/bin/uttsc <desktop-IP>` command. A remote desktop connection to the virtual machine should open. If it fails, it can provide an error message with further information.