Installation and Configuration

Sun Ray Connector for VMware View Manager 1.1

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Contents

Preface

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

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. SRVC is intended to be used as part of a virtualization solution with VMware ESX server software, VMware vCenter, VMware View Manager software, and Sun Ray Software. For further information on these products, see the Related Documentation.

This document describes the installation of SRVC, and the configuration of SRVC interfacing software. 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

- Sun Ray Software 4

  See http://docs.sun.com/app/docs/prod/sunray.sw4?l=en[amp]a=view.
- Solaris Operating System (x86 or SPARC)

  See http://docs.sun.com/app/docs/prod/solaris.10?l=en[amp]a=view.
- VMware ESX Server Software

  See http://www.vmware.com/support/pubs/vi_pages/vi_pubs_35.html.
- VMware vCenter Software

  See http://www.vmware.com/support/pubs/vi_pages/vi_pubs_35.html.
- VMware View Manager Components

  See http://www.vmware.com/pdf/viewmanager3_admin_guide.pdf.

Related Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (`http://www.sun.com/documentation/`)
- Support (`http://www.sun.com/support/`)
- Training (`http://www.sun.com/training/`)

Sun Welcomes Your Comments

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Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P–1 Typographic Conventions

Typeface	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories, and onscreen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% you have mail.`
`AaBbCc123`	What you type, contrasted with onscreen computer output	`machine_name%` **`su`** `Password:`

TABLE P–1 Typographic Conventions *(Continued)*

Typeface	Meaning	Example
aabbcc123	Placeholder: replace with a real name or value	The command to remove a file is `rm` *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the *User's Guide*. A *cache* is a copy that is stored locally. Do *not* save the file. **Note:** Some emphasized items appear bold online.

Shell Prompts in Command Examples

The following table shows the default UNIX® system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

TABLE P–2 Shell Prompts

Shell	Prompt
C shell	`machine_name%`
C shell for superuser	`machine_name#`
Bourne shell and Korn shell	`$`
Bourne shell and Korn shell for superuser	`#`

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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

A VMware virtualization environment:

- VMware ESX Server
- VMware vCenter Server
- VMware View Connection Server
- VMware View Agent

  (Installed on virtual machines accessed via SRVC)

A Sun Ray environment:

- Sun Ray Software 4 (09/07) or above
- Solaris Operating System (x86 or SPARC)

  (Version is dependent on the system requirements of SRS)

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 SRVC software to the Sun Ray server. The software can be found at `http://www.sun.com/software/sunray/get_addons.jsp`.
2. Unzip the bits:

   ```
   $ unzip srvc_1.1.zip
   ```

3. Become superuser:

   ```
   $ su
   Password:
   ```

4. Remove any previous installation of the software:

   ```
   # pkgrm SUNWkio-vdm
   ```

5. Move to the srvc_1.1 folder, that was extracted from the zip file.
6. 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 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:

   `-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: `$ man -M 'pkginfo -r SUNWuttsc'/SUNWuttsc/man uttsc`

4. Instruct the server when to use Kiosk Mode for card and non-card users. Click on the System Policy sub-tab on the Advanced menu. In the dialog box, check the Enabled box for Kiosk Mode for both card and non-card users.
5. Click Save when done.
6. Restart the 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. On the Configuration tab in the VMware View Connection Server web administration, select the server, and click Edit.

2. Click on Direct Connection to Desktop in the pop-up screen.

Secure Sockets Layer (SSL)

If 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. Configure VMware View Manager to accept non-SSL connections.
   a. Log into your VMware View Connection Server web administration, and click the Configurations tab.
   b. Edit the global settings to set Require SSL to Off.
   c. Deselect Require SSL on 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.

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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 file `/var/dt/Xerrors`.

General Troubleshooting

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 uttsc 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 1.1.

Solution: Disable connection tunneling.

- For VDM 2/2.1, open the VMware View Connection Server web administration, go to Configuration, and enable Direct Connection to Desktop.
- For VMware View Manager 3, open the VMware View Connection Server web administration, go to Configuration, then VDM Servers, then Edit, and enable Direct Connection to Desktop. See Configuring VMware View Connection Server.

`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.