

Tutorial #5 - Working with Remote Configurations

1 Overview

Symlabs Virtual Directory Server provides the option of working directly with remote configurations within a GUI environment on a local system. This facility is made available through the Remote Administration Server, a separate daemon or service that runs on the host system and is capable of interacting directly with configuration files on the server, as well as being able to initiate or stop a VDS instance. With some basic setup steps, it is possible for an administrator to work directly on a VDS host remotely, without requiring direct access to the host system. This provides a number of benefits to any enterprise environment. Firstly, it provides an additional layer of security in that administrators responsible for the maintenance of the VDS instance, do not need to be provisioned with any other form of access to the host system. Secondly, it massively eases configuration and maintenance tasks in environments where there are multiple VDS instances running, as the administrator only needs to open the GUI on his or her local system and connect to the VDS host that needs to be configured. Finally, and perhaps most importantly, systems running RAS do not need to have a graphical display available in order to configure and manage them. For Unix environments in particular, production servers rarely have an X server or windows environment installed. This helps to improve security and reduce unnecessary load on a production system. Using the RAS allows administrators to configure and manage VDS instances with the convenience of a GUI without requiring a windows environment to be loaded on the VDS host.

This tutorial will set out to explain how to configure the Remote Administration Server (RAS) on a host, how to start it, and how to connect to it using a locally installed graphical user interface. Once the host is accessible via RAS, an administrator should be able to configure the VDS instance on the remote host as if it were a local configuration. At this point, any of the other tutorials (or customized configurations) can be followed with the only variation being that the configuration will be created or edited remotely.

2 Assumptions

1. VDS is installed and configured properly; VDS is currently running.
2. The Administrator following this tutorial has access to the system that will run the VDS instance (from now on, referred to as the Remote VDS Host).
3. The Administrator has installed the VDS GUI on a separate system that has network access to the Remote VDS Host. This system will be referred to from now on as the Local VDS Controller.
4. Port 9443 is available on the Remote VDS Host.
5. The Local VDS Controller is able to communicate with the Remote VDS Host on port 9443 (i.e. there are no firewall restrictions for this port).

3 Connect to the Remote VDS Host and Configure RAS

Depending on the Operating System that the Remote VDS Host is using, you will need to determine how best to access the Remote VDS Host. For Microsoft Windows environments, this might be done using Terminal Services. Unix and Linux environments can be accessed using SSH. Alternatively, you may find it easier to work directly on the Remote VDS Host locally, to perform the initial RAS configuration. In this section, we will assume that regardless of the Operating System, you are able to access the system and perform the tasks required.

1. The RAS configuration parameters are stored in an LDIF file within the *admrem* folder or subdirectory within the root folder for the VDS installation. On Windows, this is likely to be in the path C:\Program Files\Symlabs\DE\R4.0.0. While on Unix and Linux platforms, this is likely to be in the path, /opt/ds/std/.

1. Using your preferred editor, open the file named *admconf.ldif* in the *admrem* directory.

2. Within this file, regardless of the Operating System, are the following lines:

```
dn: cn=administrator,o=dsproxyremote
user: demanager
passwd: admin123
```

3. The user and passwd lines specify the credentials that are used to access the RAS instance. In production environments, we highly recommend that you change the user and password credentials for the RAS service, as this facility allows full control of any VDS instance running on the Remote VDS Host. In our example tutorial we will only change the passwd value, and we will set it to 'symlabs123'.

4. Save the edited *admconf.ldif* file, and close it.

4 Start the RAS service on the Remote VDS Host

The RAS service will essentially run as its own unique VDS instance and will intercept requests from the Local VDS Controller that are directed to port 9443, and will act on them as required. Incidentally, it is possible to run the RAS service on a different port, by editing the *admRemServer.ldif* configuration file (also within the *admrem* folder in the root of your installation). However, we do not recommend that you edit this file unless absolutely necessary.

Now that the RAS service has been configured, you will need to start it on the Remote VDS Host.

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Start the RAS service.

In Windows environments you can now start the RAS service by running the RAS Monitor will be listed in the Start menu (under Symlabs > DE > VDS > R4.5.0). When the RAS Monitor is started for the first time, the RAS Service will be registered as a regular Windows Service with the name "Symlabs DE VDS RAS" and can be controlled either using the RAS Monitor applet, or by using the Windows Services environment. Right clicking on the RAS Monitor applet will present you with a menu that will allow you to control the RAS service.

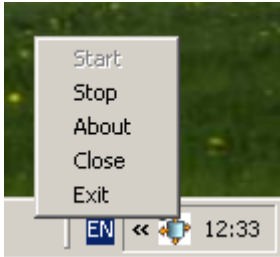


Fig-1: The Windows RAS Monitor.

The Windows RAS Monitor directly interacts with a batch script that is responsible for controlling how the RAS system functions. You can alternately start the RAS service by opening a command prompt. Changing to the root directory of your VDS installation (usually, C:\Program Files\Symlabs\VDS\R4.5.0) and typing:

```
init-admrem.bat start
```

For Unix or Linux systems, you can start the RAS service by opening a shell and changing to the root directory of your VDS installation (usually, \opt\ds\std) and typing:

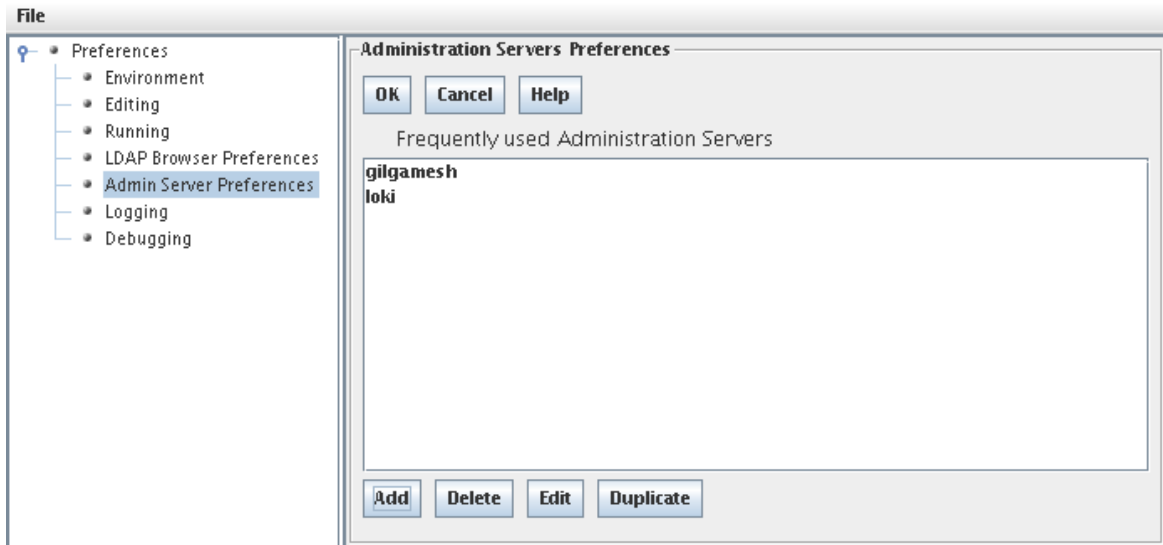
```
./init-admrem start
```

The Remote VDS Host should now be running the RAS service and should be accessible remotely.

5 Configure the Local VDS Controller

Now open the DSGUI application on your Local VDS Controller system. We will configure the GUI to be able to connect to our RAS instance, so that it can be controlled using the local system across the network.

1. Click on File in the File menu at the top of the GUI, and select Preferences from the dropdown menu.
2. In the Preferences dialog, select the Administration Server Preferences option from the navigation panel on the left.



- 2.
- Fig-1: Select the Admin Server Preferences option

3. Click on the Add button at the bottom of the screen. In the dialog that pops up, you will need to enter the details for the Remote VDS Host. In the Name field, enter a short name that will be used to reference the remote host (in our

example, we have simply called the instance RemoteHost). In the Hostname field, you can enter a hostname that is resolvable by DNS, or simply enter the IP address of the Remote VDS Host. Finally, in the password fields, enter the password that we defined in the RAS configuration file. In this case, we changed it to 'symlabs123'.

The screenshot shows a configuration dialog box with the following fields and values:

Name	RemoteHost
Hostname	192.168.0.200
Port	9443
Service path	main
User	demanager
Pass word	*****
repeat	*****

Buttons: Test, OK, Cancel, Help

3.
Fig-2: Define the parameters required to connect to the Remote VDS Host

4. Click the Test button to ensure that you are able to connect to the RAS service. A dialog should pop up to tell you if the connection was successful.
5. Click the OK button.
6. In the Preferences screen, click the OK button at the top of the screen, and then in the File menu at the top of the screen select the option to Save your preferences.
7. Close the Preferences screen.

6 Connect to the Remote VDS Host and Create a New Configuration

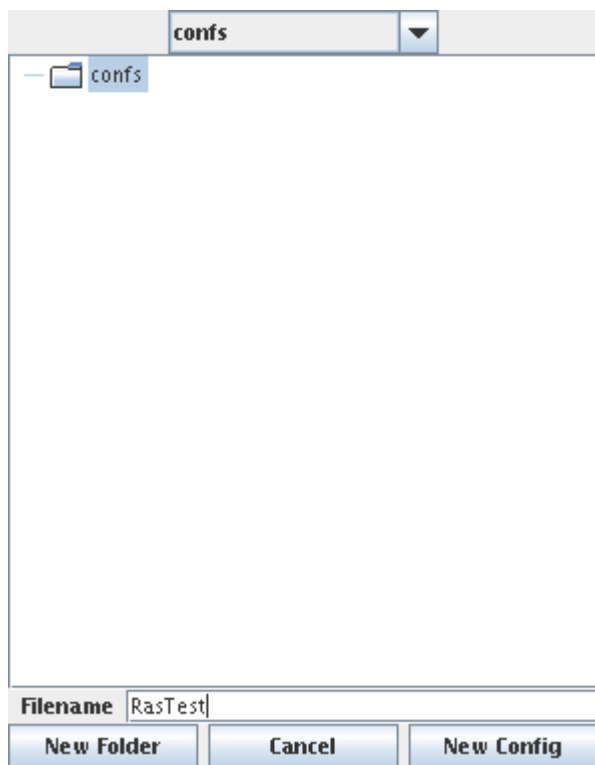
You will now be able to connect to the Remote VDS Host that you have defined in your preferences, and create a new configuration.

1. Click on the File button on the menu bar, and select New->New Remote Config. A dialog will pop-up allowing you to select the Remote VDS Host that you have specified in your Preferences. Click OK.

The screenshot shows a dialog box with the title "Select the server to create the configuration in". It contains a dropdown menu with "RemoteHost" selected and two buttons: "OK" and "Cancel".

1.
Fig-3: Select the VDS Host that you wish to connect to.

2. Provide a filename for your configuration. In our example, we have assigned the name RasTest. Click the New Config button.



2.

Fig-4: Create a new remote config.

The configuration will be saved by default in the *confs* folder in the root of the installation of the VDS software on the Remote VDS Host.

You will now be able to work with this configuration as if you were interacting with a local configuration. Changes will be saved on the Remote VDS Host. Any attempt to start or stop the configuration, will execute the appropriate action on the Remote VDS Host. Logging to STDOUT performed by the configuration will be returned via RAS to the Local VDS Controller to be displayed in the GUI logging window.

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