HP OpenView Server Management Using Radia

for the Windows operating system

Software Version: 4.1

Windows Terminal Server and Citrix Support

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1 Introduction

About this Guide

Who this Guide is for

This book is for Radia systems administrators who want to use Radia to deploy applications to Windows Terminal Servers.

To use this feature, you must own a Server LTU for Application Manager using Radia.

What this Guide is about

This guide describes:

- New classes in the Radia Database for using the Server Management Suite.
- Installation of files needed to run the Terminal Server component of Server Management.
- Publishing details for Terminal Server Applications.
- Deployment procedures

Windows Terminal Services is a thin-client server available on Windows 2003 Server, Windows 2000 Server, and Windows NT 4.0 Terminal Server Edition. With Terminal Services, the processing of one or more applications is moved completely off of a user's desktop and onto a centralized server. Only screen, mouse, and keyboard information is passed between the client and the server.

The Server Management Suite provides the ability to install and manage applications in a Windows Terminal Server environment for applications to be run by Windows Terminal Server clients, and for applications to be run locally on the Windows Terminal server.

As part of the application deployment process, the Server Management Suite automatically manages the Install and Execute modes in which a Windows Terminal Server can install and maintain applications. Before installing or

updating an application, the Server Management Suite will query the Windows Terminal Server for active sessions, prompt users to logoff, and, if needed, disconnect user sessions. Upon completion of the installation, the Windows Terminal Server is brought back online to accept incoming user sessions.

Summary of Features

- **Support for Windows Terminal Server and Citrix**
  Use Radia to manage Windows Terminal Server and Citrix applications.

2 Support for Windows Terminal Server and Citrix

Database Additions

Two new classes have been added to the Radia Database to use the Server Management Suite. The two new classes are:

- **WTS App Comp Scripts (WTSACS)**
  Use an instance in this class to configure application compatibility scripts. For more information on this class, see Table 1 on page 16.
- **WTS Control (WTSCTRL)**
  Use instances in this class to describe some behaviors you may need for the application. For more information on this class, see Table 2 on page 18.

If you are using the Radia Database version 3.2 or higher, the Server Applications classes should already be present. Use the System Explorer of the HP OpenView Administrator Workstation Using Radia (System Explorer) to check for the existence of these classes in the SOFTWARE domain.

If your Radia Database does not include these two classes, you will need to complete the following steps before using the Server Management Suite for the first time. HP provides import decks for the new classes.

1 From the files supplied to you, copy `WTSACS.XPC` and `WTSCTRL.XPC` to the `\bin` directory of your HP OpenView Configuration Server Using Radia (Configuration Server).

We recommend that you back up your Radia Database before making changes to its structure.

2 Stop the Configuration Server, and then copy the import decks into the `\bin` directory on your Configuration Server. From a command prompt, run the following commands from the `\bin` directory on your Configuration Server.

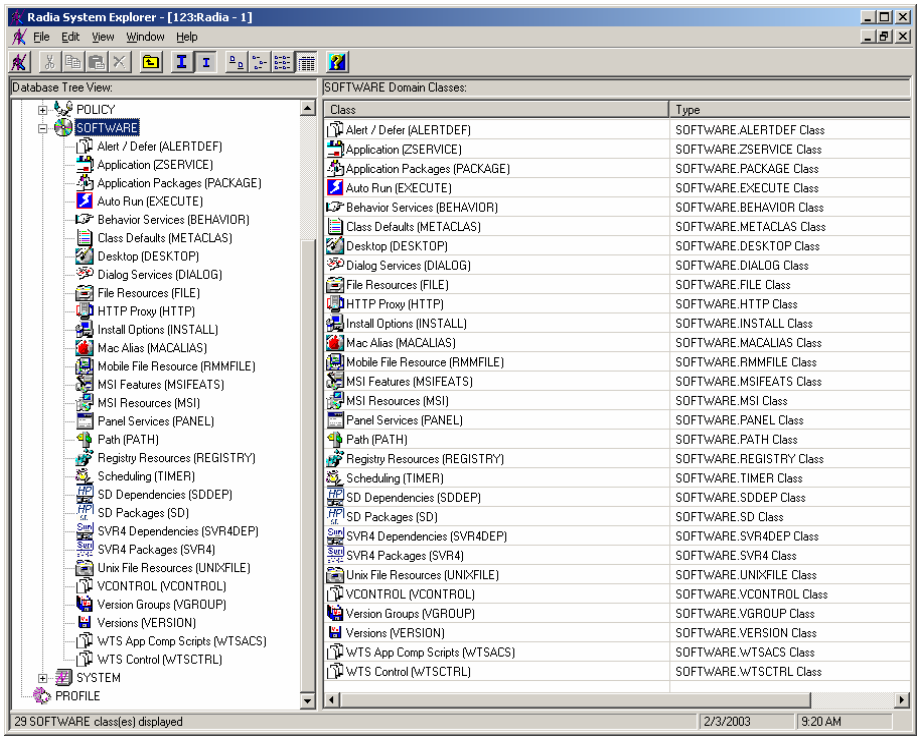
```
ZEDMAMS VERB=IMPORT_CLASS,FILE=WTSACS.XPC,PREVIEW=NO

ZEDMAMS VERB=IMPORT_CLASS,FILE=WTSCTRL.XPC,PREVIEW=NO
```

A return code of 0 indicates that there were no errors reported during the import, and the updates were applied to the database.

3 Restart the Configuration Server.

4 Use the System Explorer to view the new classes and sample instances. The figure below shows the completely expanded SOFTWARE domain.



Installing the Server Management Client

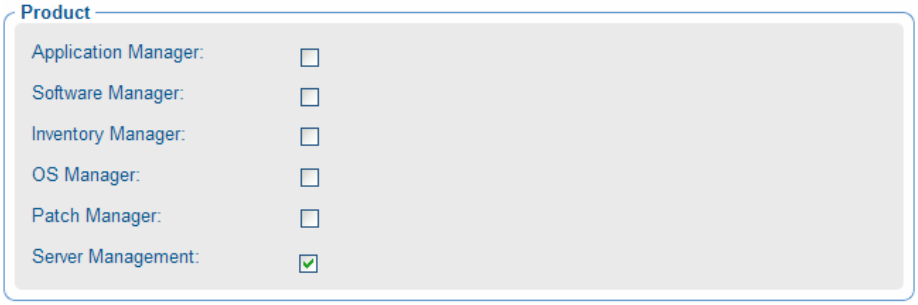
In addition to the two new classes in the Radia Database, you must install the Radia Server Management feature of the HP OpenView Application Manager Using Radia (Application Manager).

The directions shown below are for installation through the Radia Management Portal version 2.0. These screens and instructions may change in future versions. See the Radia Management Portal Guide for additional information.

To use this feature, you must own a Server LTU for Application Manager using Radia.

To install the Server Management Client from the Management Portal

1. Select the option to install the "Remotely Installable Client Modules" when you install the Management Portal. You must use the client install 4.0.1 or above CD-ROM. If not, you will need to copy the files to the appropriate operating system directory.
2. Use the Radia Management Portal's Install Client task to begin the installation process.
3. In the Product section of the Radia Management Portal's Client-opts screen, select Server Management.

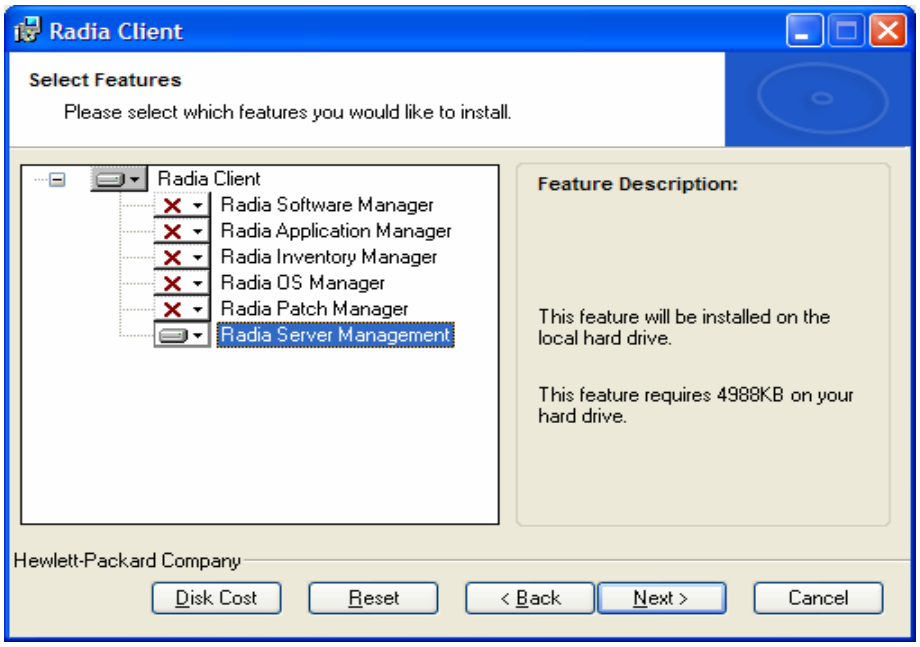


4. Complete the remaining information in the Client-Opts screen.
5. Schedule the installation and submit the job.

If the Radia Management Agent is not already installed on the client computer, the Agent will be installed as part of the Server Management Client installation.

To install from the CD-ROM for Windows Clients

Navigate to the appropriate subdirectory for you operating system on the Radia v41 applications CD-ROM. Double-click setup.exe. When prompted, select the **Radia Server Management** feature.



To use the install.ini file for Windows Clients

In the [PROPERTIES} section of the install.ini file, add the following line: ADDLOCAL=NVDINSTALLSVR

After installing the client, you will need to assign the appropriate services to the client computers.

Use standard Application Manager and Software Manager Deployment methods for your server applications.

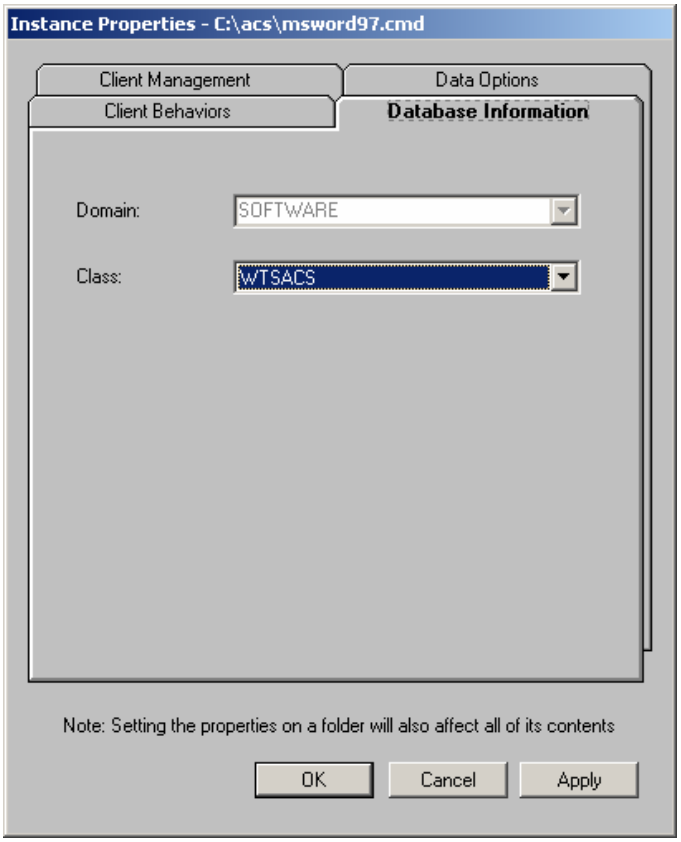
Publishing the Applications and Scripts

Windows Terminal Server and Citrix applications are usually composed of two elements: the application and the application compatibility scripts. To

use Radia to manage Windows Terminal Server and Citrix applications, you must publish both elements. First, use the Publisher of the HP OpenView Administrator Workstation (Publisher) to publish the application as you would any other application. Refer to the *Installation and Configuration Guide for the HP OpenView Application Manager Using Radia (Application Manager Guide)* for more information on publishing applications. Then, follow the procedure below to publish and prepare the application compatibility scripts. Publish each script separately.

To publish application compatibility scripts

1. Use Component Selection Mode in the Publisher to publish the application compatibility scripts (ACS) into the WTSACS class. To do this, when you reach the **Files** tab, expand to the location of the ACS file. Right-click on the ACS file and select **Properties**.
2. Click the **Database Information** tab.
3. From the **Class** drop-down list, select **WTSACS**.



4 Finish the publishing session, and exit Radia Publisher.

5 Complete the procedure for each ACS. An instance will be created in the WTSACS class. After the instance has been created, use the System Explorer to configure its attributes as shown in the next section

Preparing the Service

After you have published the application and its scripts, you must now prepare the service for deployment. During this process, you will need to create a Service Group to deploy the Server Application. See the instructions in the *System Explorer Guide for the HP OpenView Administrator Workstation Using Radia (System Explorer Guide)* in the section *Radia Service Groups* before beginning this procedure. To completely prepare the service, you will need to:

- ❑ Configure the WTS App Comp Scripts (WTSACS) instance.
- ❑ Configure the WTS Control (WTSCTRL) instance.
- ❑ Create a Service.
- ❑ Assign the Service.

Task 1 Configuring the WTSACS Instance

Edit instances in the WTSACS class to specify the type of application compatibility script.

To configure the WTSACS instance

1. Use the System Explorer to navigate to the WTSACS instance you want to configure.
2. Right-click the instance and select **Edit Instance**.
3. Use Table 1 on page 16 to set the attributes for the application compatibility script. Keep in mind the following:
   - For an ACS Install script, set the TYPE to I, and ZCREATE to &(WTSACS.LOCATION)&(WTSACS.ZRSCCFIL).
   - For an ACS Uninstall script, set the TYPE to U, and BDELETE to &(WTSACS.LOCATION)&(WTSACS.ZRSCCFIL)..
   - For an ACS Logon script, set the TYPE to L.
4. Click **OK** to accept the new values.
5. Click **Yes** to confirm the changes.

Table 1: Attributes of the WTSACS Class

Attribute	Description
ZRSCNAME	Resource Name Default: &ZRSCCFIL
ZRSCCFIL	Resource File Name
ZRSCVRFY	Verify Resource File on Connect Default: Y
ZRSCRASH	DOS File Attribute [R/A/S/H]
ZRSCSTYP	Server File Type [BINARY/TEXT] Default: BINARY
TYPE	Install, Logon, Uninstall [`I/L/U`] • Set to `I` for Install script. • Set to `L` for a logon script. • Set to `U` for an Uninstall Script.
ZRSCDATE	Resource Date Stamp – from Promote
ZRSCTIME	Resource Time Stamp – from Promote
ZRSCSIZE	Resource Size – from Promote
ZCMPSIZE	Compressed File Size
ZRSCCSTA	Client File Status Default: 999
ZRSCPRI	Create Sequence Priority Default: 50
ZCREATE	Method to Install Resource Set this attribute for the Install ACS to &ZRSCCFIL so this script is run at service installation.
ZDELETE	Method to De-Install Resource Set this to the method to run when the resource is deleted. Default: RADREMF
BDELETE	Method Before Delete Set this attribute for the Uninstall ACS to &ZRSCCFIL so this script is run at service removal.

Attribute	Description
NAME	Friendly name of the instance
LOCATION	Location of the application compatibility script Default: &(ZMASTER.ZLIBDRV)&(ZMASTER.ZLIBDIR)
ZSTOP000	Stop Expression Default: /(EDMGETV(ZCONFIG,WTSSRVR)='Y') Note: The export deck may have this configured incorrectly with a period in place of the comma. Check to be sure it is shown as above.

Task 2 Configuring the WTSCTRL Instance

Use instances in the WTSCTRL class to specify if you require logoffs for application events, the type of install, and timeout settings if needed

To configure the WTSCTRL instance

1. Use the System Explorer to navigate to the WTSCTRL class in the SOFTWARE domain.
2. Right-click **WTSCTRL** and select **New Instance**.
3. Type in a display name and an instance name.
4. Click **OK**.
5. Right-click the new instance and select **Edit Instance**.
6. Using Table 2 on page 18, to set logoff behaviors and timeouts.
7. Click **OK** to accept the new values.
8. Click **Yes** to confirm the changes.

Table 2: Attributes of the WTSCTRL Class

Attribute	Description
WTSTYPE	Install/Execute Mode [I/E] • Set to `E` to install files natively on the Windows Terminal Server such as applications that an administrator may use specifically on the server. • Set to I for an application that will be used by the Windows Terminal Server's clients. Default: E
LI	Logoff for Install [Y/N] Specify `Y` to logoff for application installation. Default: N
LU	Logoff for Update [Y/N] Specify `Y` to logoff for application update. Default: Y
LR	Logoff for Repair [Y/N] Specify `Y` to logoff for application repair. Default: Y
LD	Logoff for Delete [Y/N] Specify `Y` to logoff for application removal. Default: Y
TO	Disconnect Time Out (minutes) Specify in minutes now long the Windows Terminal Server should wait before disconnecting any users from the server. A warning message will appear on the Windows Terminal Server showing how long before the logoff will occur. Default: 15
RW	Rewarn of Logoff at (minutes) Specify when you want a second warning to appear that the Server will be logged off. Default: 2
NAME	Friendly Name

Attribute	Description
WTSOPTNS	WTS Logoff Settings. Do not modify. Composite concatenated logoff field to flow down to the client. Default: LI=&(LI),LU=&(LU),LR=&(LR),LD=&(LD), TO=&(TO),RW=&(RW)

After publishing the script and defining any special behaviors, you are ready to create the service.

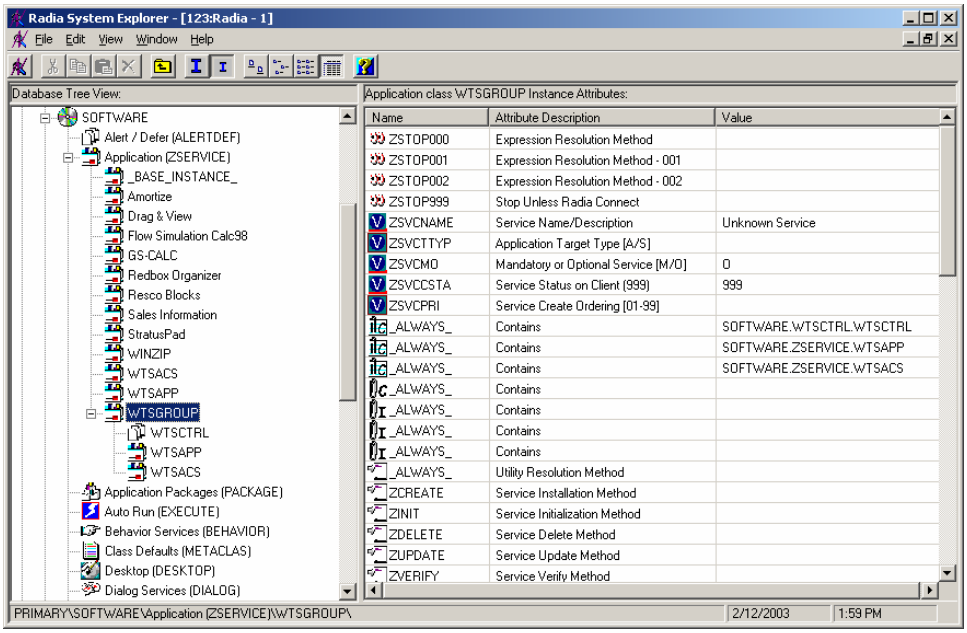
Task 3 Creating the Service

After configuring the WTSACS and WTSCTRL instances, you will need to create services for the WTSACS instance and the original application package. Then, the two services and the WTSCTRL instance will become part of a Radia Service Group.

To create a service for the Windows Terminal or Citrix Server

1. Create a Radia Service Group for the application. See *Radia Service Groups* in the *System Explorer Guide* for more information.
2. Set the ZSVCGRP attribute on the Radia Service Group to `D` for dependent. See the *System Explorer Guide* for information on adding this variable and using Service Groups.
3. Create Application (ZSERVICE) instances for the application and the WTSACS instance.
4. Connect the WTSCTRL instance and the services created in Step 3 of this procedure to the Service Group instance in the following order:
   - WTSCTRL instance
   - Main application Service
   - WTSACS Service

   In the example shown below, we created a Radia Service Group called WTSGROUP. Next, we connected the WTSCTRL instance, and the services for WTSAPP and WTSACS, in that order.



The services in a Service Group will install in “visual Order”. This means, from the top downward as connected to the Service Group. Services in a Service Group do not honor the settings in ZSVCPRI.

Task 4 Assigning the Service

To simplify entitlement of the Windows Terminal or Citrix Server applications, you may want to create a user specifically for the applications. Use the System Explorer to create a user with the same name as the Windows Terminal or Citrix Server.

To assign the service

1. Create a user in the USER class in the POLICY domain called WTSSERVER.
2. Connect the Server Application’s ZSERVICE instance to the WTSSERVER.

Deploying the Service

RADSVMAN.EXE is the client module responsible for Server Applications. RADSVMAN completes the following tasks:

1. Changes the Windows Terminal Server to Execute mode.
2. Downloads necessary data.
3. Installs sever applications. These applications have the WTSTYPE attribute of the WTSCTRL instance set to E.
4. Changes the Windows Terminal Server to Install mode.
5. Installs Client apps. These applications have the WTSTYPE attribute of the WTSCTRL instance set to I.
6. Switches back to Execute mode.

Run RADSVMAN through a Scheduling (TIMER) instance or from the command line on the Windows Terminal Server. In the example below, the applications are assigned to a user based on the computer name.

```
radsvman ip=<IP_ address>, uid=$MACHINE
```

RADSVMAN accepts the same parameters as RADSKMAN. For more information on RADSKMAN, see the *Application Manager Guide* and the HP Technical Support web site.

Running Exit Methods

You may need to run a method either before or after installing applications. Use SVRBEXIT (Before Exit Point method) to specify a method to run *before* installing applications, and use SVRAEXIT (After Exit Point method) to specify a method to run *after* installing applications. These attributes must be present in the RADSETUP client object to run. You can add them in any of the following ways:

- Add the variables before installation in the install.ini.
- Use the Client Explorer to manually add them to the RADSETUP object on the client computer.
- If you are using Client Operation Profiles, add SVRBEXIT and SVRAEXIT as variables to the CLIENT.SETTINGS class.

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