HP OpenView Operations for UNIX White Paper

Deploying OVO HTTPS Agents Using Radia

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Abstract

This white paper explains how to use Radia to install an OVO HTTPS agent for Windows. The first part of this white paper describes how to install the OVO HTTPS agent software for Windows. The second part explains how to deploy OVO HTTPS policies and instrumentation files to the managed nodes. The third part suggests how to maintain OVO managed nodes with OVO agent patches. And the fourth part reveals how you can use advanced scripting in threshold monitor policies to parameterize the threshold values.

In environments with both OVO and Radia installed, it can be advantageous to use Radia to install the OVO HTTPS agent on managed devices. Using Radia's distribution mechanisms is faster, less labor-intensive, and more reliable than OVO's agent installation methods when thousands of managed nodes must be updated.

To deploy an OVO HTTPS agent, you must first create clone images of the OVO agent software, and the policy and instrumentation files. To make a clone image as generic as possible, you can parameterize node-specific information, for example in the agent profile file and also in the policy files. In parameterized files, certain information is stored in variables for which you specify values before deployment. Radia replaces the variables with the specified values during deployment.

When the clone images are complete, you upload them into Radia, create Radia applications and services for the OVO packages and files, and provide helper classes which are needed to resolve the variables in the parameterized files during deployment. You then use Radia Management Portal to specify values for the variables and to deploy the packages. To complete the deployment, you activate the managed nodes in OVO so that they start sending messages.

About Radia and OVO

Radia

Radia, HP OpenView's Configuration Management solution, automates the management of software such as operating systems, applications, patches, content, and configuration settings to ensure that each computing device is maintained in the right configuration.

OVO

HP OpenView Operations for UNIX (OVO) monitors, controls, and reports on the availability and performance of your heterogeneous, large-scale IT environment. It consolidates information for all IT components that support your business: network, systems, storage, databases, and applications.

OVO HTTPS agent

The OVO agent software is the part of OVO that is installed on managed nodes to gather information, process this information, and generate appropriate responses. The OVO HTTPS agent is new with OVO for UNIX 8. It uses the HTTPS communication protocol and complements the already well-established OVO DCE agent.

Before you start

This white paper describes advanced techniques that require a thorough understanding of both OVO and Radia. In addition, you must be familiar with the *Installing OVO Agents Using Clone Images* white paper and the OVO HTTPS Agents Concepts and Configuration Guide.

Note

This white paper describes only a small installation scenario with one Windows managed node. The intention is to provide you with an informational framework for deploying OVO HTTPS agents with Radia. Users with advanced knowledge of Radia will be able to refine and expand the techniques described in this document, for example to deploy the OVO HTTPS agent software for other operating systems and platforms.

Compatibility

This white paper is based on the following versions of OVO for UNIX and Radia:

Product	Version
HP OpenView Operations Management Server on HP-UX	8.23 and higher
HP OpenView Operations HTTPS Agent for Windows	8.16 and higher
Radia for Windows	4.0 and higher

Deploying OVO HTTPS agent software using Radia

To deploy OVO HTTPS agents using Radia, you must complete the following high-level steps. Each step is described in detail in the following sections of this white paper:

- 1. Creating a clone image (page 5)
- 2. Uploading the OVO agent software clone image into Radia Packager (page 6)
- 3. Creating an application, service, and helper class in Radia System Explorer (page 10)
- 4. Deploying the OVO agent software clone image using Radia Management Portal (page 19)

Creating a clone image of the OVO HTTPS agent software

Creating a clone image of an OVO HTTPS agent is described in detail in the white paper *Installing* OVO Agents Using Clone Images, which is available from the HP OpenView Product Manuals web site at <u>http://ovweb.external.hp.com/lpe/doc_serv/</u>. (Select **Operations for UNIX** version **8.x**. Then select the clone image white paper in the list of manuals and click **Open** or **Download**.)

When you create a clone image for deployment with Radia, add an agent profile file that has been created using the following instructions:

1. Use a text editor to create a text file named OVO_agt_profile.txt.

Note that the file name is not important but it may be useful if the name reflects the contents of the file. The .txt suffix lets you easily view the file on Windows systems.

2. Add the following lines to the file:

```
set sec.core.auth:MANAGER_ID=&(APPINFO.OVOM_ID)
set sec.core.auth:MANAGER=&(APPINFO.OVOMGR)
set sec.cm.client:CERTIFICATE SERVER=&(APPINFO.OVOM CER)
```

The variables (starting with the ampersand (&)) will be replaced by Radia during deployment.

3. Add the agent profile file to the clone image.

Note

The instructions in the remainder of this document assume that the OVO agent software clone image will be installed using the automatic certificate installation method, which is the default installation method.

Uploading the OVO agent software clone image into Radia Packager

To upload the OVO agent software clone image into Radia Packager:

- Make the OVO agent software clone image available on the system where Radia Administrator Workstation is installed, for example using FTP. For easier maintenance, create a clone directory like C:\ovo_https_agt_win.
- 2. Create two helper files that will allow Radia to call the OVO agent installation and de-installation scripts on the client computers:
- Installation helper file:
 - a. Use a text editor to create ovo_agt_install.bat.
 - b. Add the following lines: cd <clone_image_directory_on_client_computer> %SystemRoot%\system32\cscript.exe opc_inst.vbs -non_int -configure <OVO_agent_profile>
 c. Add the helper file to the clone image.
- De-installation helper file:
 - a. Use a text editor to create ovo_agt_remove.bat.
 - b. Add the following lines: cd <clone_image_directory_on_client_computer> %SystemRoot%\system32\cscript.exe opc_inst.vbs -non_int -remove
 - c. Add the helper file to the clone image.
- 3. Start Radia Packager:

Click **Start > All Programs > Radia Administrator Workstation > Radia Packager**. The Open Publishing Session window displays.

- 4. In the Open Publishing Session window, do the following:
 - a. Click Component Selection Mode.
 - b. Click New Session.

- c. Type a session ID and description into the corresponding fields.
- d. Click **Next**.

Radia Packager File Edit View Tools Help	
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Radia® Packager	Session Type C Installation Monitor Mode © Component Selection Mode
Market	What to Open New Session Session ID: DVOWAG Description: OVOHTTPSWINAGT
	Cancel
Open publishing session	

5. In the Package Properties window, specify the package name, domain, description, and release, then click **Next**.

Radia Packager File Edit View Tools Help		
T = = = ∞ ↔ ₩		
Package Properties		
Enter the name of the package to create, and an	y additional pack	age information
Radia® Packager	Package Name: Domain:	OVOHTTPSWINAGT
	Description:	HP OpenView Operations for UNIX HTT
	Release:	8.16
ر بریک		
	<- Prev	Next -> Cancel

6. In the System Configuration window, select the target operating systems, then click **Next**.

🗑 Radia Packager	×
File <u>E</u> dit <u>V</u> iew <u>T</u> ools <u>H</u>	elp
7 🖻 🖻 🖳	55 🏆 🐨
System Configuration —	
Selected options will limit specified requirements	the distribution of this package to desktops that meet the
	Operating System
✓ Target Operating System:	Win2K3 (Windows Server 2003) WinXP (Windows XP) Win200 (Windows 2000) Win95 (Windows 98) Win95 (Windows 95)
Minimum Megabytes of Memory Required	MegaBytes MB
Minimum Processor Speed Required:	Processor Speed(MHz)
	Ker Prev Next -> Cancel

7. In the Availability window, click **Next**. (Do not specify anything in this window.)

🐼 Radia Packager	
File Edit Yiew Tools Help	
マ 🚘 🖳 🖧 🏆 🕸	
Availability	
Indicate the date and/or time that this package will be available for deployment. ("If no availability is specified, the package will be available immediately.)	
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8. Select the files to be published, then click **Next**.

Radia Packager File Edit View Tools Help					- 0 2
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Filter in offect: None					
Eren Drives Detected	Name	Size	Tune	Modified	
	HPOvBbc.msi	1817600	Windows Installer Pack	20060301	OE
	HPOvBbc.xml	1035	XML Document	20060301	06
	HPOvConf.msi	1441280	Windows Installer Pack	20060301	OE
	HP0vConf.xml	1006	XML Document	20060301	06
	HPOvCtrl.msi	1263104	Windows Installer Pack	20060301	06
⊞□ 🗀 Inetpub	HP0vCtrl.xml	1029	XML Document	20060301	06
	HPOvDepl.msi	1363968	Windows Installer Pack	20060301	06
🖃 🛄 MSOCache	HPOvDepl.xml	1030	XML Document	20060301	0E
⊞□ 🛄 Novadigm	HPOvEaAgt.msi	4776448	Windows Installer Pack	20060301	06
	HPOvE aAgt.xml	1083	XML Document	20060301	06
HPOvBbc.msi	HPOvPacc.msi	1055232	Windows Installer Pack	20060301	06
HPOvBbc.xml	HPOvPacc.xml	1033	XML Document	20060301	06
HPOvConf.msi	HPOvPC0.msi	1160192	Windows Installer Pack	20060301	0E
HPOvConf.xml	HPOvPC0.xml	1054	XML Document	20060301	0E
HPOvCtrl.msi	HPOvPerlA.msi	3381760	Windows Installer Pack	20060301	0E
HPOvCtrl.xml	HPUvPerIA.xml	1035	XML Document	20060301	
HPOvDepl.msi ✓	HPUVSecUU.msi	1290752	Windows Installer Pack	20060301	UE ♥
	<- Pr	ev	Next ->	Cano	el
Select files to be published	Items !	Selected: 3	28 20776 k	Selected	

9. Verify that all required files are selected, then click **Next**.

🐼 Radia Packager			_ D ×
File Edit View Tools Help			
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Files Desktop Regi	stry		
Filter in effect: None			
	Name	Data	
	Instance	C006167BA040_853989C2	
	Туре	File Folder	
	File Name	ovowin_agent	
	Domain	SOFTWARE	
HPOvBbc.xml	Class	FILE	
HPOvConf.msi	Venty	Default	
HPOvConf.xml	Priority Man Jakaw (Optional	Ontinual	
HPOvCtrl.msi 🧮	Mandatory/Optional	Specified	
HPOvCtrl.xml	Compression	Deflate	
HPOvDepl.msi	Dataless Promote	No	
HPOvDepl.xml	Encapsulation	No	
	Encryption	No	
	Init Method		
	Install Method		
	De-install Method		
HPUVPacc.xml	Instance Update Method		
	<- Prev	Next -> C	ancel
Set properties and locations	Items Selected:	28 20776 K Select	ed

10.Click **Promote** to add the files to the Radia Database.

🚱 Radia Packager	
rile Eait Yew Loois Help	
Filter in effect: None	
	Data
	Cancel
Promote files	

11.Radia displays a message to inform you that the files were promoted to the database successfully. Click **Finish** to complete the session and close Radia Packager.

Creating an application, service, and helper class in Radia System Explorer

Use Radia System Explorer to create an application package and a service for the agent software package. To resolve the variables of the OVO agent profile file, create a helper class and instance, and link the helper instance to the service.

The following list gives an overview of the high-level steps that must be completed. See the following sections for detailed information about each step:

- 1. Create an application for the OVO agent software clone image in Radia System Explorer (page 10)
- 2. Create a service for the OVO agent software clone image in Radia System Explorer (page 13)
- 3. Create a helper class for variable replacement during deployment (page 16)
- 4. Link the helper instance to the service for the OVO agent software clone image (page 18)

Create an application for the OVO agent software clone image in Radia System Explorer

To create an application in Radia System Explorer:

1. Start Radia System Explorer:

Click Start > All Programs > Radia Administrator Workstation > Radia System Explorer. Radia System Explorer opens.

Radia System Explorer - [6:RCS - 1]			
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2 × 6 C × 6 II = 45 E m 🔏			
Database Tree View:	Application Packages (PACKAGE) Class Instances:		
😴 Database 🔄	Name	Instance Name	Type
- P LICENSE	BASE_INSTANCE_	_BASE_INSTANCE_	SOFTWARE.PACKAGE
- PRIMARY	A CLASS BEHAVIORS FILE	CLASS BEHAVIORS FILE	SOFTWARE.PACKAGE
B-CJ ADMIN	SI_CLASS_BEHAVIORS_REGISTRY_	CLASS_BEHAVIORS_REGISTRY_	SOFTWARE PACKAGE
🗈 🤮 AUDIT	CLIENT_BEHAVIORS_	_CUENT_BEHAVIORS_	SOFTWARE PACKAG
B-B CLIENT	Acrobal Reader 4 HPUX	READER4 HP	SOFTWARE PACKAG
B MACHINE	Acrobat Reader_4 Solaris	READER4_SOL	SOFTWARE.PACKAG
R M NOVADIGM	Acrobat Reader 4.05 Win	READER405_WIN	SOFTWARE.PACKAG
	Amortize Windows 95/38	AMORTIZE2_W95	SOFTWARE PACKAG
B- B PAICH	Amortize Windows NT/2000/MP	AMORTIZE2_NT	SOFTWARE PACKAG
B B PATCHMOR	Apache Web Server 1.3.26 for Solaris	SOL_APACHE_1_3_26	SOFTWARE.PACKAG
	Apache Web Server for Windows	APACHE_HTTP_SRV	SOFTWARE.PACKAG
S SOFTWARE	Prag & View Windows 95/38	DRAGVIEW2_W95	SOFTWARE.PACKAG
CI Alert / Defer (ALERIDEE)	Drag & View Windows NT/2000/5/P	DRAGVIEW2_NT	SOFTWARE.PACKAG
Application (ZSERVICE)	A ExcelXP	EXCEL_XP	SOFTWARE PACKAG
- Application Packages (PACKAGE)	GS-Calc Windows 95/98	GSCALC2_W95	SOFTWARE PACKAG
BASE_INSTANCE_	GS-Calc Windows NT/2000/XP	GSCALC2_NT	SOFTWARE PACKAG
CLASS_BEHAVIORS_FILE_	HP OpenView Operations for UNIX HTTPS agent softwar.	OVOHTTPSWINAGT	SOFTWARE.PACKAG
CLASS_BEHAVIORS_REGISTRY_	A Netscape	NETSCAPE	SOFTWARE.PACKAG
- A _CLIENT_BEHAVIORS_	Diffice XP Pro	OFFICE_XP_PR0	SOFTWARE PACKAG
- Acrobat Reader_4 HPUX	DFRICE_XP_PR0_ACP	OFFICE_XP_PRO_ACP	SOFTWARE PACKAG
- Acrobat Reader_4 Solaris	PowerPoint XP	POWERPOINT_XP	SOFTWARE PACKAG
- Acrobat Reader_4.05 Win	A Radia Behaviors 5/18/99	ADAPT	SOFTWARE PACKAG
- Amortize Windows 95/98	An Radia Behaviors Panels	RADIA_BEHAVIORS_PANELS	SOFTWARE PACKAG
- Amortize Windows NT/2000/vP	Badia Client Behaviors	CUENT_BEHAVIORS_237	SOFTWARE PACKAG
Apache Web Server 1.3.26 for Solaris	Redbox Organizer Windows 95/98	RED80x2_W95	SOFTWARE PACKAG
Apache Web Server for Windows	Redbox Organizer Windows NT/2000/XP	REDBOK2_NT	SOFTWARE.PACKAG
Drag & View Windows 35/35	Sales Demo Windows 95/98	SALES2_W95	SOFTWARE.PACKAG
E E LINE CONTRACTOR CONTRACTOR	Sales Demo Windows NT/2000/7/P	SALES2_NT	SOFTWARE.PACKAG
An GS. Cale Workson 95/98	Sales Update - Microsoft	SALES_MS	SOFTWARE.PACKAG
- At GS-Calc Windows NT/2000/XP	SOLARIS_PATCH_113575	SOLARIS_PATCH_113575	SOFTWARE PACKAG
At HP Oper/view Operations for UNIX HTTPS age	SOLARIS_PATCH_115869	SOLARIS_PATCH_115869	SOFTWARE.PACKAG
	1		

- In the Database Tree View, click PRIMARY > SOFTWARE > Application Packages (PACKAGE), then
 right-click your OVO HTTPS agent package, and click New Application Wizard... in the shortcut
 menu. The New Application wizard opens and displays the Service Name and Operating System
 window.
- 3. Type the name of OVO HTTPS agent package into the **Service Name (32)** field. Then select the operating systems of the target devices and click **Next**.

ervice mame (32):	JUVUHTTPSWINAGT		
	(Unique Radia application instanc	e name)	
Target Operating System	Operating Systems Win2K3 (Windows Server 2003) WinXP (Windows XP) Win2000 (Windows 2000) WinNT (Windows NT)		
	Win98 (Windows 98) Win95 (Windows 95)		-
te: If Target Operatin Populate Windows I Verify Options © Default	Win38 (Windows 38) Win35 (Windows 35) g System is not selected, the service nstaller Methods	e will be available fo	r all platforms

4. Select Application Manager as application target type and click Next.

🔽 App	lication Manac	er
	Just-In-Time:	Transparent real time automated management.
F.	wed Scheduling	Routine, reliable, scheduled update delivery.
Mar	datory Services:	Automatic application installation.
Ca	ntral Notification:	Immediate delivery of application updates.
	Versiming	Rollback/forward of new versions.
C Soft	ware Manager	
	User Catalog:	User application management control.
	Adaptability:	Automatically adapt to situational specific conditions.
	Personalization:	Establish and change application preferences.
	Updates:	User controls when updates are applied.
Note:	lf an app the appli	lication's features require products not licensed on the target machine, eithe cation may not be installed or may be installed with limited settings.

5. Type the properties of the application into the Application Properties window and click **Next**.

e for Windo		
e for Wind		
Hewlett-Packard		

6. Select the events that the Radia configuration client will report and click **Next**.

☑	Application Installation	C Success	C Failure	 Both
₽	Application Deinstallation	C Success	C Failure	• Both
	Application Update	C Success	Failure	C Both
	Application Repair	C Success	Failure	C Both
	Application Verify	C Success	Failure	C Both
	Version Activation	C Success	Failure	C Both
	Version Deactivation	C Success	Failure	C Both
	Use Base Save as D	efault		

7. Review the application summary and click **Finish**.

Service Name:	HTTPSWINAGT
Target OS(es):	Win2K3 (Windows Server 2003),WinXP (Windows XP),Win2000 (Windows 2000),WinNT (Windows NT)
Target Type(s):	Application Manager
Long Description:	HP OpenView Operations for UNIX HTTPS Agent Software for Windows
Short Description:	OVOHTTPSWINAGT
Vendor:	Hewlett-Packard
Version:	8.16
Author:	Hewlett-Packard
Web URL:	http://www.hp.com/go/managementsoftware
Event Reporting:	AI=B,AD=B,AU=N,AR=N,AV=N,VA=N,VD=N

Radia System Explorer confirms the fact that your application has been successfully added.

Create a service for the OVO agent software clone image in Radia System Explorer

To create a service in Radia System Explorer:

1. In the Database Tree View, click **PRIMARY > SOFTWARE > Application (ZSERVICE)**, then doubleclick your OVO HTTPS agent software package to expand it.

Eile Edit View Window Help			_
XBRX BII - SHEFF 🛛			
tabase Tree View:	Application class OVO	HTTPS'WINAGT Instance Attributes:	
Database	Name	Attribute Description	Value
P LICENSE	20 ZSTOP000	Expression Besolution Method	WOBDPOS(EDMGETV(ZMASTEB ZOS) WI
PRIMARY	20 ZSTOP001	Expression Resolution Method - 001	
由 C ADMIN	20 ZSTOP002	Expression Resolution Method - 002	LIPPEB(EDMGETV/ZMASTEB ZDOMNAME))
🕀 🔜 AUDIT	20 ZSTOP999	Stop Linless Badia Connect	
E St CLIENT	ZSVCNAME	Service Name/Description	OVOHTTPSWINAGT
🐵 🐮 MACHINE	ZSVCTTYP	Application Target Type (A/S)	Δ
E SA NOVADIGM	ZSVCMO	Mandatory or Optional [M/D/MD/DM]	м
⊕ Bros	ZSVCCSTA	Service Status on Client (999)	999
PATCH	ZSVCPBI	Service Create Ordering (01-99)	
E B PATCHMGR	it always	Contains	
	I always	Contains	
	I always	Contains	
	I ALWAYS	Contains	
		Contains	SOFTWARE PACKAGE OVOHITTPSWINAGT
		Contains	
		Contains	
	ST ALWAYS	Utility Besolution Method	
Apache Web Server 1.3.26 for Solaris	SCREATE	Service Pre-Installation Method	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Apache Web Server 2.0 for Windows		Service Installation Method	
Drag & View		Service Initialization Method	
Excel XP		Service Pre-Delete Method	
🚰 GS-CALC		Service Delete Method	
🎬 HPUX_Netscape Communicator	BUPDATE	Service Pre-I Indate Method	
Office XP Pro		Service I Indate Method	
	TZVEBIEY	Service Verifu Method	
(J) ovo	REFPAIR	Service Pre-Benair Method	
HP OpenView Operations for UNIX HTTPS		Service Repair Method	
	ZAVIS	Available Verified Installed Sunc F	YYNY
Redbox Organizer		Published Date of Service	
Remote Control	VEBDATE	Verfied Date of Service	
Sales Information		When Application was Upgraded on De	
SUL WMP		mas opgraded of De	

2. Double-click the **ZCREATE** attribute and type the name and path of your OVO agent installation helper file into the **Service Installation Method** field:

&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.exe /c <OVO_install_helper_file>

This is the ovo_agt_install.bat file you created before uploading the clone image into Radia Packager (see page 6).

🖉 Editing OVOHTTP	SWINAGT Instance - Last Update	e: - 10/20/06 04:35:07
Service Installation 1	Method /SDRV)&(ZMASTER.ZWSYSDIR)cmd	.exe /c C:\ovowin_agent\OVO_agt_install.bat
Name	Attribute Description	Value
C_ALWAYS_	Contains	
C_ALWAYS_	Contains	
TALWAYS_	Contains	SOFTWARE.PACKAGE.OVOHTTPSWINAGT
I _ALWAYS_	Contains	
DI_ALWAYS_	Contains	
LALWAYS_	Utility Resolution Method	
SCREATE	Service Pre-Installation Method	
ZCREATE	Service Installation Method	&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.ex
•		
		Cancel Restore

3. Double-click the **BDELETE** attribute and type the name and path of your OVO agent de-installation helper file into the **Service Pre-Delete Method** field:

&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.exe /c <OVO_remove_helper_file>

This is the ovo_agt_remove.bat file you created before uploading the clone image into Radia Packager (see page 6).

Editing OVOHTTP	SWINAGT Instance - Last Update Method	2: - 12/06/06 09:39:39 ? ×
&ZMASTER.ZWSY	/SDRV)&(ZMASTER.ZWSYSDIR)cmd	.exe /c C:\ovowin_agent\OVO_agt_remove.bat
Name	Attribute Description	Value
IT_ALWAYS_	Contains	SOFTWARE.PACKAGE.OVOHTTPSWINAGT
I _ALWAYS_	Contains	
DI_ALWAYS_	Contains	
LALWAYS_	Utility Resolution Method	
SCREATE	Service Pre-Installation Method	
ZCREATE	Service Installation Method	&[ZMASTER.ZWSYSDRV]&[ZMASTER.ZWSYSDIR]cmd.ex
ZINIT	Service Initialization Method	
BDELETE	Service Pre-Delete Method	&[ZMASTER.ZWSYSDRV]&[ZMASTER.ZWSYSDIR]cmd.ex
•		
		OK Cancel Restore

4. In the Database Tree View, double-click your OVO HTTPS agent package to display a list of all files that are included in the package. Then double-click the line containing the OVO_agt_profile.txt file to display a list of its instance attributes.

🛛 File Edit View Window Help				_
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atabase Tree View:	File Resources class HP OpenView Operations for UNIX HTTPS agent software for Windows:\OVO_agt_profile.txt Instance Attributed agent and the software for Windows:\OVO_agt_profile.txt Instance Attributed agent			
NX HTTPS agent software for Windows: <all></all>	Name	Attribute Description	Value	
IX HTTPS agent software for Windows: <all></all>	V ZRSCNAME	Resource Name	&ZRSCCFIL	
or UNIX HTTPS agent software for Windows:\	V ZRSCCFIL	Resource File Name	\0V0_agt_profile.txt	
r UNIX HTTPS agent software for Windows:\HPOvBbc.msi	V ZRSCMO	Mandatory/Optional on Client [M/O]	0	
or UNIX HTTPS agent software for Windows:\HPOvBbc.xml	ZRSCVRFY	Verify Resource File on Connect	Y	
r UNIX HTTPS agent software for Windows:\HPOvConf.msi	ZRSCCONF	Confirm File Download [Y/N]	Y	
r UNIX HTTPS agent software for Windows:\HPOvConf.xml	ZESCEASH	DOS File Attribute (B/A/S/H)	A	
r UNIX HTTPS agent software for Windows:\HPOvCtrl.msi	ZRSCSTYP	Server File Type (BINARY/TEXT)	BINARY	
r UNIX HTTPS agent software for Windows:\HPOvCtrl.xml		PDS Member Name		
r UNIX HTTPS agent software for Windows:\HPOvDepl.msi	ZBSCDATE	Besource Date Stamp - From Promote	20061018	
or UNIX HTTPS agent software for Windows:\HPOvDepl.xml		Besource Time Stamp - From Promote	04:30:43	
or UNIX HTTPS agent software for Windows:\HPOvEaAgt.msi		Besource Size - From Promote	0000000150	
r UNIX HTTPS agent software for Windows:\HPUvEaAgt.xml		Besource Version - From Promote	0000000100	
r UNIX HTTPS agent software for Windows:\HPUvPacc.msi		Client File Status	999	
INVESTIGATION OF A CONTRACT OF A		Besource Checkpoint	333	
r UNIX HTTPS agent software for Windows:\HPUvPLU.msi		Possureo CPC		
INVESTIGATION CONTRACT IN THE INPORTATION OF THE INFORTATION OF		Dested N/All	N	
or UNIX HTTPS agent software for Windows (HPUVPenA.ms)		Deside (17N)	N	-
or UNIX HTTPS agent software for Windows:\HPUvPeriA.xml		Persistent Ubject Name	0000000150	
INVESTIGATION AND A CONTRACT OF A CONTRACT O		Lompressed File Size	0000000152	
or UNIX HTTPS agent software for Windows (HPUVSecLL.xm)		Compression Key	_UNDEF_	-
or UNIX HTTPS agent software for Windows (HPUVSecLo.ms)	ZRSCSVRB	Version Skip Rebuild Flag [Y/N]		
or UNIX HTTPS agent software for Windows (HPUVSecLo.xm)	ZRSCPRI	Create Sequence Priority	50	
or UNIX HTTPS agent software for Windows (HPUVXpLms)	ZRSCPADM	Admin ID		
INIX HTTPS agent software for Windows APPUVADLIM	ZRSCSRC	Resource Source, i.e. Publisher		
INIX HTTPS agent software for Windows (opc_inst.vos	ZINIT	Resource Initialization Method		
or UNIX HTTPS agent software for Vindows: \UVU-Urent.xml	ZCREATE	Method to Install Resource	RADSETB	
VIDING HITFS agent software for Vindows: (UVU-client.xml.en	ZDELETE	Method to De-install Resource	RADREMF	
UNIX HTTPS agent software for Unidework(0)/0_agt_instalL0at If	ZREPAIR	Client Instance Repair Method		
INIX HTTPS agent software for Windows: (0V0_agt_profile.txt	ZUPDATE	Client Instance Update Method		
r on shirt in the agent solowale for windows, to vo_agi_femove.bat	ZFILEUPD	Client File Update/Add Method		
e	ZOPENERR	Client Method on File Open Error	RADLKM	
-	C_ALWAYS_	Connect To		
	C ALWAYS	Connect To		

5. Double-click the **ZCREATE** attribute and type RADSETB into the **Method to Install Resource** field. This ensures that Radia will be able to replace the variables in the OVO_agt_profile.txt file during deployment. Click **OK**.

🤵 Editing \0¥0_agt	_profile.txt Instance - Last Upda	ite: - 10/18/06 0	5:43:12	?	×
Method to Install Res	source				
RADSETB					
Name	Attribute Description	Value			
ZCMPSIZE	Compressed File Size	0000000152			
V ZCMPKEY	Compression Key	_UNDEF_			
V ZRSCSVRB	Version Skip Rebuild Flag [Y/N]				1
V ZRSCPRI	Create Sequence Priority	50		-	4
V ZRSCPADM	Admin ID				
V ZRSCSRC	Resource Source, i.e. Publisher				
ZINIT	Resource Initialization Method				
ZCREATE	Method to Install Resource	RADSETB		-	-
•					
			OK	Cancel Restore	

Create a helper class for variable replacement during deployment

To create a helper class for variable replacement:

- 1. In the Database Tree View, click **PRIMARY > POLICY**. Then right-click **POLICY** and click **New Class** in the shortcut menu. The Create Class window opens.
- 2. Type a name for your new policy class and click OK.

reate Class			
Creating a nev	v POLICY class name	±:	
OVOVARS			
		0.1.1	

- 3. An editor for the new class opens. Specify the following information in this editor:
 - a. Select <none> as class type.
 - b. Add the variables listed in the OVO_agt_profile.txt file as attributes to the class:

Name	Length	Description
OVOM_ID	44	MANAGER_ID
OVOMGR	44	MANAGER
OVOM_CER	44	CERTIFICATE_SERVER

- c. For each variable, select **Resolve** in the manager properties section of the window
- d. Click **OK** to save your class and close the window.
- e. When prompted, confirm that you want to save your class.

Lass Information	Persistent 🗖	Automatic Sequencing 50 🕂 Priorit	ty Type
ttribute Information	44 Description:	MANAGER	
Name Len Description		Type	
V OVOM_CER 44 CERTIFICAT V OVOM_ID 44 MANAGER_	e_server D	Properties Client Global Default Substitute Protect Absolute Execute Resolve Counter	Manager Global Default V Substitute Protect Absolute Execute V Resolve Counter
Insert Before Add After	Delete	Client Defaults	Manager Defaults

Double-click your new class in the Database Tree View to expand it. Then right-click
 BASE_INSTANCE and click Edit Instance... in the shortcut menu. An editor for this instance opens.

5. Specify a value for each attribute of the base instance, then click **OK**:

Name	Attribute Description	Value
OVOM_ID	MANAGER_ID	&(POLICY.OVOM_ID)
OVOMGR	MANAGER	&(POLICY.OVOMGR)
OVOM_CER	CERTIFICATE_SERVER	&(POLICY.OVOM_CER)

Editing _BASE_IN	ISTANCE_Instance - Last Upda	ote: - 10/18/06 09:35:47	<u>? ×</u>
MANAGER	3)		
Name	Attribute Description	Value	
V OVOMGR	MANAGER	&(POLICY.OVOMGR)	
V OVOM_CER V OVOM_ID	CERTIFICATE_SERVER MANAGER_ID	&(POLICY.OVOM_CER) &(POLICY.OVOM_ID)	
•		OK Car	ncel Restore

- 6. Right-click your class and click **New Instance** in the shortcut menu. The Create Instance window opens.
- 7. Type a name for your new helper instance and click **OK**.



Link the helper instance to the service for the OVO agent software clone image

To link the helper instance to the service:

- 1. In the Database Tree View, click **PRIMARY > SOFTWARE > Application Packages (ZSERVICE)**, then double-click your OVO HTTPS agent package to expand it.
- 2. Double-click the attribute **_ALWAYS_** and type POLICY.<*class_name*>.<*instance_name*> into the **Contains** field, then click **OK**.

🕺 Editing O¥OHTTP:	5WINAGT Instance - Last Update:	- 10/18/06 07:52:10
- Contains		
POLICY.OVOVARS.	0V0	
	[1
Name	Attribute Description	Value
30 ZSTOP999	Stop Unless Radia Connect	
V ZSVCNAME	Service Name/Description	OVOHTTPSWINAGT
V ZSVCTTYP	Application Target Type [A/S]	A
V ZSVCMO	Mandatory or Optional [M/O/M	м
V ZSVCCSTA	Service Status on Client (999)	999
V ZSVCPRI	Service Create Ordering [01-99]	
C_ALWAYS_	Contains	POLICY.OVOVARS.OVO
C_ALWAYS_	Contains	
•		•

Deploying the OVO agent software clone image using Radia Management Portal

This procedure assumes that the target devices have already been set up in Radia and have the Radia Client installed. To deploy the OVO HTTPS agent to a target device, perform the following high-level steps. Each step is described in more detail in the following sections:

- 1. Modify the OVO HTTPS agent policy (page 19)
- 2. Notify the target device (page 23)
- 3. Verify the OVO HTTPS agent installation on the target device (page 25)
- 4. Activate the target device as managed node in OVO (page 25)

Modify the OVO HTTPS agent policy in Radia

To modify the OVO HTTPS agent policy:

- 1. In a Web browser, start Radia Management Portal at http://localhost:3466.
- 2. Navigate to the target device on which you want to install the OVO HTTPS agent application package, the click **Modify Policies**.
- 3. Navigate to the software policies and select the OVO HTTPS agent policy. Then click 😳 (Add).



4. Click 🗉 (Edit Attributes) to the left of the **Attributes** field to open the Attribute Editor.



5. In the **Attributes** field, type the variables as name-value pairs, separated by spaces:

Name		= Value
OVOM_ID	=	OvCoreld of the primary OVO management server
OVOMGR	=	Long hostname of the primary OVO management server
OVOM_CER	=	Long hostname of the system where the certificate authority is located

For example: OVOM_ID=4c529b90-0d22-7514-0d1b-cb5d7ea3ed60 OVOMGR=moehre.deu.hp.com OVOM_CER=moehre.deu.hp.com

Then click 😳 (Add) to add the attributes to the policy.

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 Install Management Agent Install Proxy Server Install RMP 	Attribute Editor		
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😼 Notify			
Policy 🛞	<u> 8</u> ×.		
Modify Policies	Add Att		
🔷 Modify Targets	Commit Reset Can	201	
🐕 Resolve Policy			
Policy (Advanced) 📀			
O Modify Defaults			
Modify Dependencies			
🔷 Modify Flags			-
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6. Click **Commit** to store the attribute values in the database.

The properties of the target device are displayed. Verify that the correct attributes and values are associated with the policy for the OVO HTTPS agent package.

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Policy 🔅	5	
Modify Policies		
O Modify Targets		
🐕 Resolve Policy		
Policy (Advanced) 🛛 🙁	Σ	
Modify Defaults		_
Modify Dependencies		
O Modify Flags		
E Done		😼 Local intranet

Notify the target device

To notify the target device:

- 1. Click **Notify** to notify the target device that the OVO HTTPS agent package is ready for deployment.
- 2. Select Software Connect as notify type and type the user name and password to be used for logging into the target device. Then click **Next**.

🚰 Zone: Demo Zone/demo computers/desktops/de	emoclt02- Notify - Microsoft Internet Explorer	. <u> ×</u>
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ka Install Client	Notify Information	ר
ka Install Management Agent	Command radskman dname=SOFTWARE	
Install Proxy Server	Port Number 3465	
Install RMP	User administrator	
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Notiny	1 item selected	
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Policy (Advanced)	ř	
Modify Defaults		-
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3. Do not modify the schedule information. Click **Next**.

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Group of Tasks		Job Name:		
Operations	*	Description:		
🥷 Install Client		Description.	Software Connect	
🍕 Install Management Agent		Priority:	Normal 💌	
 Install Proxy Server Install RMP 		Time Window —		
Anage Computer		Run:	Once	
Notify		Starting on:	Oct - 19 - 2006 - at 09 -	00 -
Policy	*	Duration:		
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Resolve Policy				Next Back Cancel
Policy (Advanced)	۲			
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Modify Denendencies				
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4. Review the summary of the notify task, then click **Submit** to start deploying the OVO HTTPS agent package.

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Operations	۲			
🍕 Install Client		Selected Options		
🍕 Install Management Agent		Display Name :	Software Connect	
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🍕 Install RMP		Port Number :	3466	
今 Manage Computer		User :	administrator	he l
🝓 Notify		Sahadulas Information		
Policy		Stading Oni	10/10/2005 00:00:00	
Modify Policies		Duration:	0	
Modify Targets		Periodic Interval	0	
Resolve Policy		Priority:	0	
Policy (Advanced)		Туре:	none	
A Modify Defaults		Job Name:		
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Modify Elans			Submit Back	Cancel
Done			🚺 🚺 tocali	intranet .

Radia starts the deployment process and will keep you informed about the progress and results.

Verify the OVO HTTPS agent installation on the target device

To verify the OVO HTTPS agent installation:

- 5. Verify that the variables now have the correct values in the deployed agent profile file: change to the clone directory and view the agent profile file in a text editor.
- 6. Verify that the certificate server has been set correctly, type: ovconfget sec.cm.client The output should be similar to the following: CERTIFICATE_SERVER=moehre.deu.hp.com

Activate the target device as managed node in OVO

To activate the target device as managed node in OVO:

See the *Installing OVO Agents Using Clone Images* white paper for more information about activating the managed nodes on the management server. The activation process involves the following high-level steps:

- 1. Add the target devices as managed nodes to the node bank.
- 2. Add the managed nodes to the required node groups.
- 3. Grant the certificate requests of the managed nodes.
- 4. Mark the managed node as installed in the OVO database.
- 5. Start heartbeat monitoring on the managed nodes.

Deploying OVO HTTPS policies and instrumentation using Radia

To deploy policies and instrumentation for OVO HTTPS agents using Radia, you must complete the following high-level steps. Each step is described in more detail in the following sections:

- 1. Creating a clone image of OVO HTTPS policies and instrumentation (page 26)
- 2. Uploading OVO HTTPS policies and instrumentation (page 27)
- 3. Creating an application and a service (page 28)
- 4. Deploying the OVO HTTPS policies and instrumentation files (page 30)

Creating a clone image of OVO HTTPS policies and instrumentation files

Downloading policies and instrumentation files is described in detail in the white paper *Installing* OVO Agents Using Clone Images. Use the command-line tools <code>opctmpldwn</code> and <code>opcinstrumdwn</code> to download the required configuration for the managed node for which you created the agent software clone image. It is recommended that you create a separate clone image for the downloaded policies and instrumentation files for easier maintenance in Radia.

The downloaded policies are signed with the certificate of the OVO management server that is responsible for the managed node, and can therefore only be installed on managed nodes that have the same management server. However, if multiple OVO management servers share the same certificate server, you can install the policies on all managed nodes that report to these servers.

Uploading OVO HTTPS policies and instrumentation files

Uploading OVO HTTPS policies and instrumentation files into Radia Packager is similar to uploading the OVO HTTPS agent software clone image. Instead of creating agent software installation and deinstallation helper files, you must create helper files for policies and instrumentation files.

1. Make the policies and instrumentation files available on the system where Radia Administrator Workstation is installed, for example using FTP. For easier maintenance, create a clone directory with the following structure:

```
C:\ovo_https_policies_instr_win\<policies>
C:\ovo_https_policies_instr_win\instrumentation\<instrumentation>
```

- 2. Create two helper files that will allow Radia to install and de-install the policies and instrumentation files on the client computers:
- Installation helper file:
 - a. Use a text editor to create ovo_pol_install.bat. Add the following lines: rem install instrumentation copy c:\ovo_https_policies_instr_win\instrumentation "C:\Program Files\HP OpenView\data\bin\instrumentation" rem install policies ovpolicy -install -dir C:\ovo_https_policies_instr_win -add-category My_OVO_RADIA_group
 - b. Add the helper file to the clone image directory.
- De-installation helper file:
 - a. Use a text editor to create ovo_pol_remove.bat.
 - b. Add the following lines: rem remove policy ovpolicy -remove -category My_OVO_RADIA_group
 Do not add any commands to remove the instrumentation files from the managed nodes because the files may be shared with other HP OpenView applications. The OVO agent software de-installation automatically removes all instrumentation files.
 c. Add the helper file to the clone image.
- 3. Use Radia Packager to upload the policy and instrumentation clone image into Radia. If you need assistance with this task, see Uploading the OVO agent software clone image into Radia Packager on page 6 for a similar task.

Creating an application and a service in Radia

Use Radia System Explorer to create an application package and a service for the policy and instrumentation package.

The following list gives an overview of the high-level steps that must be completed. See the following sections for detailed information about each step:

- 1. Create an application for the OVO policy and instrumentation clone image (page 28)
- 2. Create a service for the OVO policy and instrumentation clone image (page 28)

Create an application for the OVO policy and instrumentation clone image

Create an application for the OVO policy and instrumentation clone image in Radia System Explorer. If you need assistance with this task, see Create an application for the OVO agent software clone image in Radia System Explorer on page 11 for more information.

Create a service for the OVO policy and instrumentation clone image

To create a service in Radia System Explorer:

1. Start Radia System Explorer:

Click Start > All Programs > Radia Administrator Workstation > Radia System Explorer. Radia System Explorer opens

 In the Database Tree View, click PRIMARY > SOFTWARE > Application (ZSERVICE), then doubleclick your OVO HTTPS policy and instrumentation package to expand it.

👷 Radia System Explorer - [6:RC5 - 1]				
N V BAR V AN THE			ł	-1812
Database Tree View:	Application class OVO	HTTPSWINPOLINST Instance Attributes:		
	Name	Attribute Description	Value	
Alert / Defer (ALERTDEF)	30 ZSTOP000	Expression Besolution Method	WOBDPOSIEDMGETVIZMASTEB ZOSI WI	
E Application (ZSERVICE)	20 ZSTOP001	Expression Resolution Method - 001	honor colebrater (Enhoren (200), mill	
- 🖆 OVOHTTPSWINPOLINST	39 ZSTOP002	Expression Besolution Method - 002	LIPPEB(EDMGETV(ZMASTEB/ZDOMNAME))	
HP OpenView Operations for UNIX HTTPS	39 ZSTOP999	Stop Inless Badia Connect		
🖃 🏰 Application Packages (PACKAGE)		Service Name/Description		
BASE_INSTANCE_	ZSVCITYP	Application Target Type (A/S)	Δ	
	ZSVCMO	Mandatory or Optional [M/0/M0/0M]	M	
	ZSVCCSTA	Service Status on Client (999)	999	
	ZSVCPBI	Service Create Ordering [01-99]		
Acrobat Reader_4 HPUX	I AI WAYS	Contains		
Acrobat Reader_4 Solaris	I ALWAYS	Contains		
Acrobat Header_4.05 Win	I ALWAYS	Contains		
Amortize Windows 95/98	IC ALWAYS	Contains		
Amortize Windows N 1/2000/XP		Contains	SOFTWARE PACKAGE OVOHITESWINPOL	
Apache Web Server 1.3.26 for Solaris	ALWAYS	Contains	SST THATE, HORAE, STOTT TO WIT DE	
Drag & View Windows 95/99		Contains		
Drag & View Windows NT /2000 A/P	ST ALWAYS	Utility Besolution Method		
	POPEATE	Service Pre-Installation Method		
- A GS-Calc Windows 95/98		Service Installation Method		
GS-Calc Windows NT/2000/XP		Service Initialization Method		
HP OpenView Operations for UNIX HTTPS age		Service Pre Delete Method		
- The OpenView Operations for UNIX HTTPS police		Service Fieldete Method		
HP OpenView Operations for UNIX HTTPS		Service Delete Method		
HP OpenView Operations for UNIX HT		Service Fle-opuate Method		
HP OpenView Operations for UNIX HTTPS		Service Opdate Method		
		Service Verity Method		
		Service Pre-Repair Method		
🏂 OFFICE_XP_PRO_ACP		Service Repair Method	(KAR)	
🐴 PowerPoint XP		Available, verified, installed, 5ync F	TANA	
	PUBDATE	Published Date of Service		
	VERUATE	verned Date of Service		
Radia Client Behaviors		when Application was Upgraded on De		
	UPDUATE	Upgrade Date (Programmatic)		

3. Double-click the **ZCREATE** attribute and type the name and path of your OVO policy installation helper file into the **Service Installation Method** field:

&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.exe /c <OVO_install_helper_file>

This is the ovo_pol_install.bat file you created before uploading the clone image into Radia Packager (see page 27).

🛛 Editing O¥OHTTP	SWINPOLINST Instance - Last Up	date: - 11/24/06 09:15:29	? ×
Service Installation N	Method /SDRV)&(ZMASTER.ZWSYSDIR)cmd	.exe /c C:\ovo_https_policies_instr_win\ovo_pol_install.bat	
Name	Attribute Description	Value	
C_ALWAYS_	Contains		
C_ALWAYS_	Contains		
T_ALWAYS_	Contains	SOFTWARE.PACKAGE.OVOHTTPSWINPOLINST	
I _ALWAYS_	Contains		
DI_ALWAYS_	Contains		
Z_ALWAYS_	Utility Resolution Method		
SCREATE	Service Pre-Installation Method		
ZCREATE	Service Installation Method	&[ZMASTER.ZWSYSDRV]&[ZMASTER.ZWSYSDIR]cmd	.ex 🕶
•			•
		OK Cancel Res	store

4. Double-click the **BDELETE** attribute and type the name and path of your OVO policy de-installation helper file into the **Service Pre-Delete Method** field:

```
&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.exe /c
<OVO_remove_helper_file>
```

This is the ovo_pol_remove.bat file you created before uploading the clone image into Radia Packager (see page 27).

Editing OVOHTTP	SWINPOLINST Instance - Last Up Method	odate: - 12/06/06 09:45:20	<u>?×</u>
Name		Value	
1 ALWAYS	Contains	SOFTWARE PACKAGE OVOHTTPSWINPOLINST	
ÎT ALWAYS	Contains		
NT ALWAYS	Contains		
ALWAYS_	Utility Resolution Method		
BCREATE	Service Pre-Installation Method		
ZCREATE	Service Installation Method	& (ZMASTER.ZWSYSDRV) & (ZMASTER.ZWSYSDIR) cmd.	ex
✓ ZINIT	Service Initialization Method		
BDELETE	Service Pre-Delete Method	&(ZMASTER.ZWSYSDRV)&(ZMASTER.ZWSYSDIR)cmd.	ex 🕶 📔
•			•
		OK Cancel Res	tore

Deploying the OVO HTTPS policies and instrumentation files

Deploying the OVO HTTPS policies and instrumentation files is similar to deploying the OVO HTTPS agent software package which is described on page 19. Refer to this section if you need help with the following task:

- 1. Modify the Radia policy for the OVO HTTPS policy and instrumentation package.
- 2. Commit your changes to the Radia database.
- 3. Notify the target devices and deploy the package.

Deploying OVO agent patches

Deploying OVO agent patches to managed nodes is similar to deploying the initial agent software but requires fewer steps:

- 1. Install the OVO agent patches on the management server.
- 2. Update the clone image with the patched files.
- 3. Upload the updated clone image into Radia Packager.
- 4. Deploy the package.

Tip

Use Radia's versioning mechanisms to keep track of the version number of the OVO agent software.

Deploying parameterized threshold monitor policies

Thresholds in monitor policies may change frequently and may therefore need to be adjusted often or may vary for different managed nodes. This is why you may want to consider parameterizing threshold monitor policies, similar to how the agent profile file was parameterized in Uploading the OVO agent software clone image into Radia Packager on page 6. Before deployment, you can then specify the values you want to use within the policies for a particular group of managed nodes. Radia will replace the variables with the values you entered and update the specified managed nodes.

To parameterize a threshold monitor policy, familiarize yourself with the following sections:

- About parameterized threshold monitor policies (page 32)
- Parameterizing a threshold monitor policy (page 33)
- Configuring Radia to deploy parameterized threshold monitor policies (page 34)
- Example: parameterized threshold monitor policy (page 39

About parameterized threshold monitor policies

To parameterize a threshold monitor policy, you must embed a script into the policy, which converts the hard-coded threshold values into parameters and instructs the policy to obtain the values through an ovconfget eaagt call.

Embedded scripts are as such not yet supported with OVO for UNIX but you can download an advanced scripting monitor policy from an OVO for Windows management server, adapt it for use with OVO for UNIX, insert the Perl script that parameterizes the threshold monitor values, then upload the policy into Radia, and finally configure Radia to resolve the variables during deployment.

The following section explain how to parameterize a threshold monitor policy for OVO for UNIX.

Parameterizing a threshold monitor policy

To parameterize a threshold monitor policy:

- 1. Download an advanced scripting policy from an OVO for Windows management server:
 - a. Download the policy to a directory on the C Drive: ovpmutil CFG POL DNL c:\<dir> /p "\<adv_script_policy_path>"
 - b. Convert the downloaded structured storage file to an ASCII header and data file: ovpmutil PCV /x "C:\<dir>\<downloaded_adv_script_policy>"
- 2. Transfer the downloaded advanced scripting policy to the OVO for UNIX management server.
- 3. Update the policy header file:
 - a. Copy an existing policy header file from:
 - /var/opt/OV/datafiles/policies/monitor/<uuid>_header.xml
 - b. Generate a new unique ID for the policy header file name using the HP-UX commandline tool uuidgen. See the *uuidgen(1)* man page for more information.
 - c. Rename the copied policy header file with the generated UUID.
 - d. Copy the generated UUID into the policy header:

- e. Sign the policy header file:
 - opctmpldwn -sign <policy_header_file>
- 4. Embed the Perl script into the policy data file. See the Example: parameterized threshold monitor policy on page 39.
- 5. Test the installation of the policy on a managed node:
 - a. Deploy the policy: ovpolicy -install -dir <dir_with_adv_script_policy> \ -host <node>
 - b. Check that the policy was deployed successfully: ovpolicy -1 -level 4 -host <node>
- 6. Add the policy to a clone image.

Configuring Radia to deploy parameterized threshold monitor policies

To configure Radia to be able to deploy parameterized threshold monitor policies, you must complete the following steps:

- 1. Edit the installation and de-installation helper files (page 34)
- 2. Update Radia with the parameterized policy (page 35)
- 3. Edit the helper class for variable replacement (page 36)
- 4. Link the helper instance to the service (page 37)

Edit the installation and de-installation helper files

Add the following information to the helper files created in Uploading OVO HTTPS policies and instrumentation files on page 27:

Installation helper file

```
rem set variable
ovconfchg -ns eaagt -set AD_READING_XPLCONF.CriticalThreshold
&(APPINFO.AD_CRIT)
ovconfchg -ns eaagt -set AD_READING_XPLCONF.MajorThreshold 80
ovconfchg -ns eaagt -set AD_READING_XPLCONF.WarningThreshold 70
rem install instrumentation
copy c:\ovo_https_policies_instr_win\instrumentation "C:\Program
Files\HP OpenView\data\bin\instrumentation"
rem install policy
ovpolicy -install -dir \ovo_https_policies_instr_win -add-category
My_OVO_RADIA_group
```

The variable & (APPINFO.AD_CRIT) will be replaced with a value you specify before deployment.

• De-installation helper file

```
rem remove policy
ovpolicy -remove -category My_OVO_RADIA_group
rem clean variables
ovconfchg -ns eaagt -clear AD_READING_XPLCONF.WarningThreshold
ovconfchg -ns eaagt -clear AD_READING_XPLCONF.MajorThreshold
ovconfchg -ns eaagt -clear AD_READING_XPLCONF.CriticalThreshold
```

Do not add any commands to remove the instrumentation files from the managed nodes because the files may be shared with other HP OpenView applications. The OVO agent software deinstallation automatically removes all instrumentation files.

Update Radia with the parameterized policy

- 1. Upload the clone image with the parameterized policy into Radia Packager, and create an application and service for it in Radia System Explorer as described in Deploying OVO HTTPS policies and instrumentation using Radia on page 26.
- 2. In Radia System Explorer, specify RADSETB for the ZCREATE attribute of the policy installation helper file.

In the Database Tree View, double-click your parameterized policy package to display a list of all files that are included in the package. Then double-click the line containing the policy installation helper file (ovo_pol_install.bat) to display a list of its instance attributes.

File Edit View Window Help				_
XBRX E II BRE 🖀 👔				
ibase Tree View:	File Resources class HP OpenView Operations for UNIX HTTPS policies and instrumentation for Windows a:\ovo_pol_install.bat Inst			
cies and instrumentation for Windows a:\instrumentation\osspi_pe 🔺	Name	Attribute Description	Value	
cies and instrumentation for Windows a:\instrumentation\osspi_pla	ZRSCNAME	Resource Name	&ZRSCCFIL	
cies and instrumentation for Windows a:\instrumentation\osspi_pla	ZRSCCFIL	Resource File Name	\ovo_pol_install.bat	
cies and instrumentation for Windows a:\instrumentation\osspi_pri	ZRSCMO	Mandatory/Optional on Client [M/O]	0	
cies and instrumentation for Windows a:\instrumentation\osspi_pro	ZRSCVRFY	Verify Resource File on Connect	Y	
cies and instrumentation for Windows a:\instrumentation\osspi_pro	ZRSCCONF	Confirm File Download [Y/N]	Y	
cies and instrumentation for Windows a:\instrumentation\osspi_pro	ZRSCRASH	DOS File Attribute [R/A/S/H]	A	
cies and instrumentation for Windows a:\instrumentation\osspi_pro	ZRSCSTYP	Server File Type [BINARY/TEXT]	BINARY	
cies and instrumentation for Windows a:\instrumentation\osspi_ps	ZRSCMMEM	PDS Member Name		
cies and instrumentation for Windows a:\instrumentation\osspi_pv	ZRSCDATE	Resource Date Stamp - From Promote	20061026	
cies and instrumentation for Windows a:\instrumentation\osspi_qu	ZRSCTIME	Resource Time Stamp - From Promote	09:38:54	
cies and instrumentation for Windows a:\instrumentation\osspi_rol	ZBSCSIZE	Besource Size - From Promote	000000342	
cies and instrumentation for Windows a:\instrumentation\osspi_sc	ZBSCVEBS	Besource Version - From Promote		
cies and instrumentation for Windows a \instrumentation\osspi_sh	ZBSCCSTA	Client File Status	999	
cies and instrumentation for windows a \instrumentation\osspi_sh		Besource Checkpoint		
cies and instrumentation for Windows at Instrumentation (osspi_sn	ZBSCCBC	Besource CBC		
cies and instrumentation for V indows a Vinstrumentation asoni ou	ZPSCPSTP	Restart [V /h]	N	
cies and instrumentation for Windows a Vinstrumentation/cospi_sw		Perintent Object Name	in the second se	
cies and instrumentation for Windows a unstrumentation osspi_tra		Compressed File Size	0000000252	
cies and instrumentation for Windows a wistrumentation osspi_ur		Compression Key	UNDEE	
cies and instrumentation for Windows a \instrumentation\ossoi ve		Venier Chie Debuild Flee MAN	_ONDEF_	
cies and instrumentation for Windows a \instrumentation\osspi_re		Custo Comunication Priority	50	
cies and instrumentation for Windows a \instrumentation\osspi_re		Lifeate Sequence Priority	50	
cies and instrumentation for Windows a:\instrumentation\osspi vg	ZRSCPADM	Admin IU Deserves Course is Debtelor		
cies and instrumentation for Windows a:\instrumentation\osspi vi.	ZHSUSHU	Resource Source, i.e. Publisher		
cies and instrumentation for Windows a:\instrumentation\osspi_xr		Resource Initialization Method		
cies and instrumentation for Windows a:\instrumentation\Osspi_Xr	ZUREATE	Method to Install Hesource		
cies and instrumentation for Windows a:\instrumentation\osspi_xte		Method to De-Install Hesource	HAUREME	
cies and instrumentation for Windows a:\instrumentation\ovcatget	ZHEPAIH	Lient Instance Hepair Method		
cies and instrumentation for Windows a:\instrumentation\ovcreate	ZUPDATE	Lilient Instance Update Method		
cies and instrumentation for Windows a:\instrumentation\SPI_Disc	ZFILEUPD	Ulient File Update/Add Method	· · · · · · · · · · · · · · · · · · ·	
cies and instrumentation for Windows a:\ovo_pol_install.bat	ZOPENERR	Client Method on File Open Error	RADLKM	
cies and instrumentation for Windows a:\ovo_pol_remove.bat 🛛 🗾	I VC_ALWAYS_	Connect To		

3. Double-click the **ZCREATE** attribute and type RADSETB into the **Method to Install Resource** field. This ensures that Radia will be able to replace the variable in the ovo_pol_install.bat file during deployment. Click **OK**.

Method to Install Re RADSETB	source			
Name	Attribute Description	Value		
V ZCMPSIZE	Compressed File Size	0000000263		
V ZCMPKEY	Compression Key	_UNDEF_		
V ZRSCSVRB	Version Skip Rebuild Flag (Y/N)			
V ZRSCPRI	Create Sequence Priority	50		
V ZRSCPADM	Admin ID			
V ZRSCSRC	Resource Source, i.e. Publisher			
	Resource Initialization Method			
ZCREATE	Method to Install Resource	RADSETB		-
•				
			OK Cance	el Restore

Edit the helper class for variable replacement

- In the Database Tree View, click **PRIMARY > POLICY**. Then right-click the policy you created for the OVO HTTPS agent software package in the section Edit the helper class for variable replacement on page 16. Click **Edit Class...** in the shortcut menu.
- 2. An editor for the class opens:
 - a. Add the variable AD_CRIT as follows:

Name	Length	Description
AD_CRIT	44	AD_READING_XPLCONF.CriticalThreshold

- b. Select **Resolve** in the manager properties section of the window
- c. Click **OK** to save your class and close the window.
- d. When prompted, confirm that you want to save your class.

Class Information	S - Last Update: 10/27/06 04:38:41 C - C - C - C - C - C - C - C - C - C -	I I
Attribute Information	Length: 44 Description: AD_READING_XPLCONF.CriticalThreshol	
Name	Len Description	
V OVOMGR	44 MANAGER Variable	
V AD_CRIT	44 AD_READING_XPLCONF.CriticalThres	
V OVOM CER	44 CERTIFICATE SERVER	_
VOM_ID	44 MANAGER_ID	e
Insert <u>B</u> efore	Add After Delete Client Defaults Manager D	efaults
mber of Attributes:	4 Combined Length: 316 OK Cancel	Restore

- 3. Double-click your class in the Database Tree View to expand it. Then right-click **_BASE_INSTANCE** and click **Edit Instance...** in the shortcut menu. An editor for this instance opens.
- 4. Specify a value for the AD_CRIT attribute, then click **OK**:

Name AD_CRIT	Attribute Description AD_READING_XPLCONF.CriticalThreshold			Value &(POLICY.AD_CRIT)	
	Editing BASE_IN	STANCE_ Instance - Last Update: CONF.CriticalThreshol	- 10/27/06 04:44:56	<u>?</u> X	
	(POLICY.AD_CRIT		1		
	Name	Attribute Description	Value		
	V OVOMGR	MANAGER	&(POLICY.OVOMGR)		
	AD_CRIT	AD_READING_XPLCONF.Criti	&(POLICY.AD_CRIT)		
	✓ 0V0M_CER ✓ 0V0M_ID	CERTIFICATE_SERVER MANAGER_ID	&(POLICY.OVOM_CER) &(POLICY.OVOM_ID)		
	•		OK I	Cancel Restore	

Link the helper instance to the service

- In the Database Tree View, click PRIMARY > SOFTWARE > Application (ZSERVICE), then doubleclick the parameterized policy package to expand it.
- 2. Double-click the attribute **_ALWAYS_** and type POLICY.<*class_name*>.<*instance_name*> into the **Contains** field, then click **OK**.

POLICY.OVOVARS	0V0	
Name	Attribute Description	Value
😕 ZSTOP002	Expression Resolution Method	UPPER(EDMGETV(ZMASTER ZDOMNAME))<>'SOFTWARI
😕 ZSTOP999	Stop Unless Radia Connect	
ZSVCNAME	Service Name/Description	OVOHTTPSWINPOLINST
ZSVCTTYP	Application Target Type [A/S]	A
/ ZSVCMO	Mandatory or Optional [M/O/M	м
ZSVCCSTA	Service Status on Client (999)	999
ZSVCPRI	Service Create Ordering [01-99]	
C_ALWAYS_	Contains	POLICY.OVOVARS.OVO
C_ALWAYS_	Lontains	PULICY.UVUVAHS.UVU

Deploy the parameterized threshold monitor policy

Use Radia Management Portal to deploy the parameterized threshold monitor policy to the target devices. Deploying the parameterized policy is similar to deploying the OVO HTTPS policies and instrumentation files which is described on page 30.

Before committing your changes to the Radia database, specify a value for the AD_CRIT attribute, for example: AD_CRIT=86.



After the package has been deployed, verify that the threshold monitor values are set correctly on the managed node:

- 1. On the managed node, type ovpolicy -1 -level 4. This produces a list of all policies that are installed on the system.
- On the managed node, type ovconfget eaagt. This produces a list of all configuration variables that are set in the eaagt name space.
- 3. Send an opemon message to test the configured threshold and view the message in the OVO message browser.

Example: parameterized threshold monitor policy

The following code shows a parameterized threshold monitor policy. The embedded script is a Perl script, marked in blue color.

```
SYNTAX_VERSION 10
ADVMONITOR "AD_READING_XPLCONF"
        DESCRIPTION "<initial policy version>"
        SCRIPTTYPE "Perl"
        INSTANCEMODE ONCE
        MAXTHRESHOLD
        ICASE
        EXTERNAL "SRC"
          DESCRIPTION ""
        MSGCONDITIONS
                                                 Embedded
          DESCRIPTION "Critical message"
                                                 Perl script.
          CONDITION_ID "ealaff0b-dc59-498a_
                                                             b8"
          CONDITION
            THRESHOLD
                                                                   Parameters
              SCRIPT "#PARAMETERS START
                                                                   are read
#PARAMETER AD_READING_XPLCONF.CriticalThreshold INT DEFAULT 95
                                                                   from
NODEINFO
                                                                   ovconfget
my $CriticalThreshold;
$CriticalThreshold = $OVOSystem-
                                                                   eaaqt.
>ParameterGetNum(\"AD_READING_XPLCONF.CriticalThreshold \
                                                            .951
#PARAMETER AD READING XPLCONF.MajorThreshold INT DEFAULT 85 VALUE 85
NODEINFO
my $MajorThreshold;
$MajorThreshold = $OVOSystem-
>ParameterGetNum(\"AD_READING_XPLCONF.MajorThreshold\",85);
#PARAMETER AD_READING_XPLCONF.WarningThreshold INT DEFAULT 75 VALUE 75
NODEINFO
my $WarningThreshold;
$WarningThreshold = $OVOSystem-
>ParameterGetNum(\"AD_READING_XPLCONF.WarningThreshold\",75);
#PARAMETERS END
                                                                  Parameters are
$Session->Value('CriticalThreshold', $CriticalThreshold)
                                                                  exported to the
$Session->Value('MajorThreshold', $MajorThreshold);
                                                                  entire session so
$Session->Value('WarningThreshold', $WarningThreshold);
                                                                  that they are
                                                                  available to all
my $src;
                                                                  conditions.
$src = $Policy->Source(\"SRC\");
if ( $src->Value() > $CriticalThreshold )
{
  $Rule->Status(TRUE);
п
            SETSTART
              SEVERITY Critical
              TEXT "Threshold <$SESSION(CriticalThreshold)> reached:
<$MSG TEXT>"
```

```
DESCRIPTION "Major message"
          CONDITION_ID "20d227e0-38b6-423c-a491-ad61317a699d"
          CONDITION
            THRESHOLD
              SCRIPT "
my $src;
$src = $Policy->Source(\"SRC\");
if ( $src->Value() > $Session->Value('MajorThreshold') )
{
  $Rule->Status(TRUE);
}
п
            SETSTART
              SEVERITY Major
              TEXT "Threshold <$SESSION(MajorThreshold)> reached:
<$MSG_TEXT>"
          DESCRIPTION "Warning message"
          CONDITION_ID "4bcfafc7-c205-41f2-8dec-a9f3986c48be"
          CONDITION
            THRESHOLD
              SCRIPT "
my $src;
$src = $Policy->Source(\"SRC\");
if ( $src->Value() > $Session->Value('WarningThreshold') )
{
  $Rule->Status(TRUE);
}
п
     SETSTART
           SEVERITY Warning
           TEXT "Threshold <$SESSION(WarningThreshold)> reached:
<$MSG TEXT>"
```

Glossary

• Agent (OVO):

Program that receives requests from a manager program, and can gather information, perform processing, and generate responses.

• Class (Radia):

A logical partition in the Radia database that groups similar instances. It is the third level in the hierarchical structure of the database.

• Class instance (Radia):

A specific occurrence of a class. Each instance of a particular class inherits the attributes defined for that class.

• Client computer (Radia):

A computer that has the Radia client installed and where the OVO agent software will be installed. It may also be referred to as a target device.

• Clone directory (OVO):

Directory on the target device that contains the clone image.

• Clone image (OVO):

A set of files that represent an identical copy of the software and configuration of a typical OVO agent.

• Database (Radia):

An object-oriented database that stores all the information needed to manage assets on a device, including the software and/or data that Radia distributes, the policies determining which subscribers or users are entitled to which packages, and security and access rules for administrators. It has a hierarchical structure containing four levels: files, domains, classes, and instances.

• Managed node (OVO):

Computer system or intelligent device (for example, a network printer or router) monitored or controlled by OVO. The OVO agent collects, filters, and processes information from each node, and sends it to the management server.

• Management server (OVO):

Central computer system of the domain to which all managed nodes forward their OVO messages.

• Notify (Radia):

A message sent to the managed device that tells the device to start a client connect.

• Package (Radia):

(n) A unit of software or data that can be published to the Radia database.

(v) The process of grouping data into a unit that can be published to the Radia database.

• Policy (OVO):

A set of one or more specifications rules and other information that help automate network, system, service, and process management. Policies can be deployed to various targets (for example, managed systems, devices, network interfaces) providing consistent, automated administration across the network.

• Policy (Radia):

A designation of the services to which a subscriber, a client computer, or a managed device is entitled.

• Service (Radia):

A service organizes a group of related packages (applications), methods, or behaviors into manageable units.

• Target device (Radia):

A workstation or server on which you want to install, replace, or update software.

For more information

- HP OpenView Management Software http://www.hp.com/go/managementsoftware
- HP OpenView Product Manuals http://ovweb.external.hp.com/lpe/doc_serv/

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Call to action

To help us better understand and meet your needs for technical information about HP OpenView, submit a support case or enhancement request using HP Software Support Online at http://support.openview.hp.com/support.jsp.

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