

HP OpenView Service Desk

OpenView Operations Integration Administrator's Guide

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For the Windows and UNIX Operating Systems



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1 Introduction to this Manual

This guide explains the integration between Service Desk and OpenView Operations for Windows® and UNIX®. With the information in this guide you can install, configure and perform the various tasks available with this integration.

This guide is intended for IT administrators who will install and configure the integration, and for users who will perform the integration tasks.

To install and configure the integration you must have knowledge of both the OpenView Operations application and Service Desk.

This guide is organized as follows:

- Chapter 2, “Integration Overview,” on page 13 describes the architecture of the OpenView Operations Integration and gives a brief explanation of the integration possibilities.
- Chapter 3, “OVO for Windows Integration Installation,” on page 21 describes the installation steps that need to be performed on Service Desk and on your OVO for Windows server.
- Chapter 4, “OVO for Windows Integration Configuration,” on page 27 explains how to configure the integration if you are using OVO for Windows.
- Chapter 5, “OVO for UNIX Integration Installation,” on page 43 explains how to install the integration if you are using OVO for UNIX with Service Desk.
- Chapter 6, “OVO for UNIX Integration Configuration,” on page 47 explains how to configure the integration if you are using OVO for UNIX with Service Desk.
- Chapter 7, “User Tasks,” on page 55 provides examples on how to use the different features supplied with this integration.
- Chapter A, “Troubleshooting,” contains information on the default locations of installed files and other information that may be helpful in solving problems with the integration.

Related Publications

This section helps you find information that is related to the information in this guide. It gives an overview of the documentation and lists other publications you may need to refer to when using this guide.

Other Related Publications

In addition to the documentation mentioned above, you may want to refer to the following publications when using this guide:

- *HP OpenView Operations for UNIX: Concepts Guide*
- *HP OpenView Operations: Concepts Guide*
- *HP OpenView Operations: Installation and Administrative Task Guide*
- *HP OpenView Operations for UNIX Developer's Toolkit: Application Integration Guide*

2 **Integration Overview**

This chapter provides an explanation of the key features and processes in the OpenView Operations Integration.

Feature Overview

The HP OpenView Operations integration brings together the functionality of HP OpenView Service Desk (hereafter known as Service Desk) and HP OpenView Operation (hereafter known as OVO) and allows the transfer of information between both. OVO monitors and adjusts your IT environment, while Service Desk manages the processes within this same IT environment. Some of the key features in this integration are described in the following sections.

Bidirectional Event Integration

The OVO Integration provides not only the capability to forward messages to Service Desk but also the ability to acknowledge these messages when the corresponding incident in Service Desk is closed. For example, when an OVO agent registers a problem with a node and a message is created in the OVO Management Server, the integration will automatically create an incident in Service Desk. This incident is then handled in accordance with your company ITIL processes. When the incident is closed, the corresponding Message in OVO is also closed. Based on the policy/template definitions in OVO, you are able to define the type of messages for each infrastructure element that needs to be forwarded to Service Desk. The flow of information is bidirectional; when the incident is created in Service Desk, an incident ID is passed back to OVO.

Status Update (OVO for Windows)

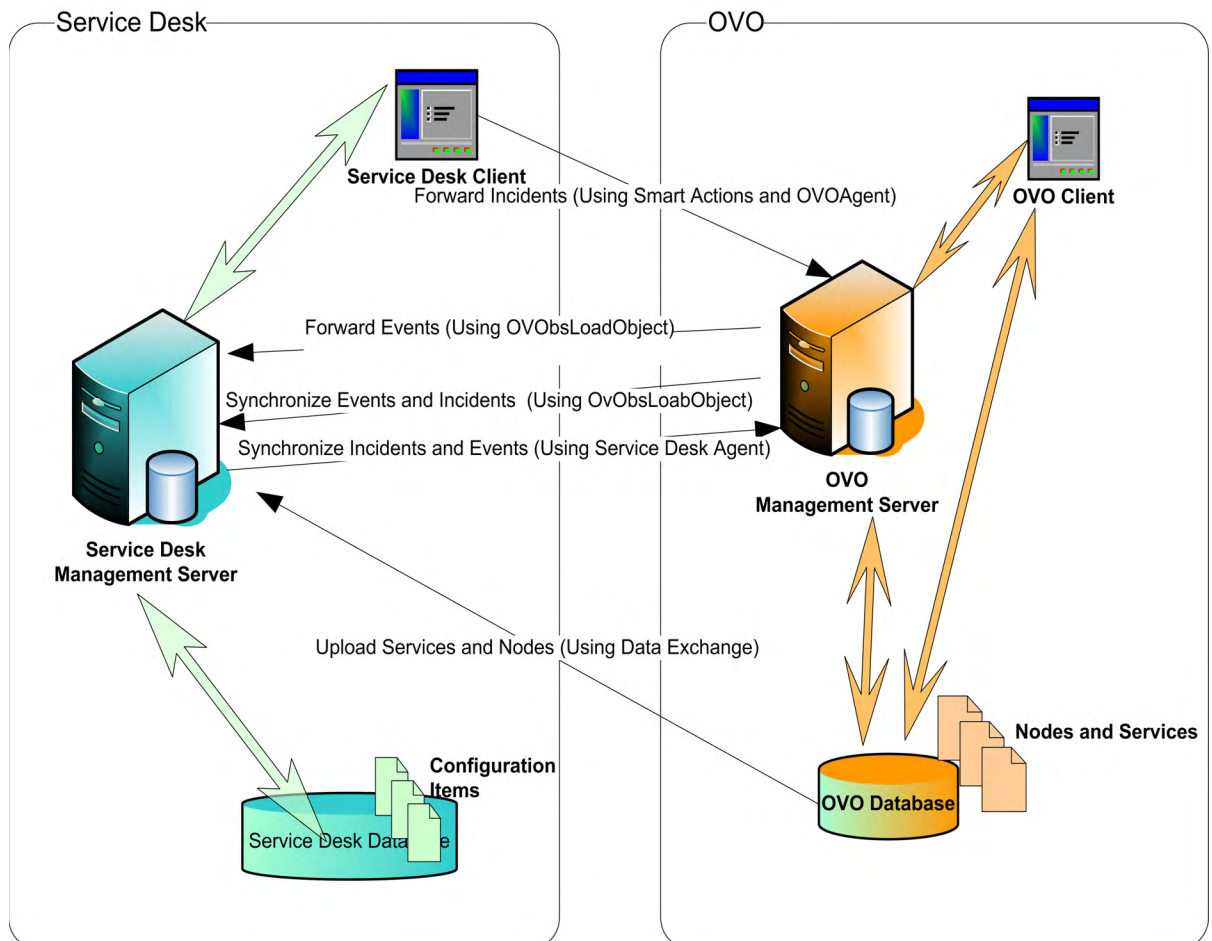
The OVO Integration is designed to forward status updates to an incident in Service Desk when the priority of the message in OVO has changed. This change is automatically reflected in the corresponding Service Desk incident. Similarly, if you add or modify an annotation in OVO for Windows, this information is automatically transferred to Service Desk and the corresponding Service Desk incident is updated. Also, when closing an incident in Service Desk, it is automatically reflected in OVO, providing up-to-date status information for the operators and improving the communication between help desk operators and infrastructure management operators.

Node and Services Upload

Accurate configuration items are fundamental to Service Desk accurately responding to faults in your system. This Integration allows you to upload node and service information from OVO into Service Desk as configuration items. The OVO Integration uses the Service Desk Data Exchange functionality to upload the node information into Service Desk. Services are only uploaded from OVO for Windows.

Integration Architecture and Processes

The OVO Integration comprises of several processes that allow communication of data between Service Desk and OVO. The following diagram shows the process-architecture of the OVO Integration:



Forward Events from OVO to Service Desk

This Integration automatically forwards OVO events from your OVO environment to Service Desk. See “Configuring Your Environment” on page 49. However, you can also manually forward events from OVO to Service Desk if, for example, you have not configured your environment to forward a particular type of event. See “Manually Forwarding Messages from OVO to Service Desk (OVO for UNIX)” on page 61

You can configure OVO to send all events or specific events to Service Desk. The event information is mapped to a Service Desk incident. The first time an event is sent, an incident is created in Service Desk; Service Desk is then the owner of that event. The import mapping in Service Desk defines which event attributes will be imported into the incident fields.

Uploading Nodes and Services from OVO into Service Desk

This integration allows you to upload services and nodes from your OVO environment to Service Desk. The upload process should be performed on a regular basis so that the CMDB in Service Desk contains the nodes and services that you are managing. See “Exporting and Importing Service and Nodes From OVO into Service Desk” on page 56

Forward an Incident from Service Desk to OVO

This process allows you to forward an incident to OVO as an event (also known as a message), if there is not already a corresponding event in OVO for that incident.

Send Message Annotations from Service Desk to OVO

A message is sent to OVO stating that the event forwarded to Service Desk has been registered as an incident (with the corresponding incident number).

Annotating a message in OVO is similar to adding a note of explanation to a business contract. The annotation is a short summation of the important points and can be used as a reference the next time you receive the same message. Message annotations are normally used to provide information on:

- action performed to resolve the problem;
- name of the user who started the action;
- status information for the action performed;
- start and finish time of the action;
- any pre- or post action information which is relevant.

Database rules are available with this integration for sending an annotation to OVO whenever an incident is created as a result of an event being sent from OVO to Service Desk. The database rule can also be configured to send an annotation to the OVO application whenever the status of that incident changes. Database rules can be turned on/off and modified from the Service Desk. Service Desk agents on the OVO servers are sent commands, generated from a database rule in Service Desk.

Once the integration is installed and configured, an annotation is sent whenever Service Desk receives an incident from OVO. Optionally, whenever a Service Desk user updates the incident's information, an annotation is also sent to OVO.

Send Acknowledgment Messages from Service Desk to OVO

Messages are to sent to OVO when an incident is closed in Service Desk (referred to as acknowledging an event in OVO).

Database rules are available with this integration for acknowledging messages/events from OVO whenever an incident that was created as a result of an OVO event is closed in Service Desk. Agents on the OVO server are sent commands, generated by a database rule in Service Desk.

Once the integration is installed and configured, whenever an incident from OVO is closed in Service Desk, an acknowledgement is sent automatically.

Monitor Service Desk Processes and Error Log Files in OVO for Windows

You can instruct OVO for Windows to monitor Service Desk log files.

OVO policies can be used to monitor the log files for the Service Desk agent and the Service Desk management server. This provides you with a means for monitoring the integration continuously. The policies can be used to match specific log file lines and assign variables out of the intercepted lines to use for pattern matching.

Once the policies are deployed, detected errors are sent to the message browser automatically. Instructional text is provided with the error messages to help solve detected problems. Use the policy monitor `OvSd_Monitor_sd_load_logfile` to monitor the OVO management server. Use the policy `OvSd_Monitor_Service_Desk_logfile` for monitoring the Service Desk application server.

Suppress Node-down Messages in OVO for UNIX

When Service Desk schedules an outage (for example, a node is shutdown for a particular time interval), OVO automatically suppresses messages related to that node.

You can prevent Service Desk from receiving OVO for UNIX messages by letting OVO suppress the messages when an outage is planned. This is done by using `mkoutage` to retrieve data from Service Desk and pass this information to OVO. Two types of outages are recognized: periodic (or recurring outages), and occasional (or incidental outages). See “Modify Database Rules Related to the Outage Functionality” on page 50.

Reflect OVO for Windows updates in Service Desk

If an incident is created in Service Desk based on a message on OVO and the message is updated in OVO (new annotation is sent from OVO to Service Desk or severity changes are sent from OVO to Service Desk), then the changes are reflected in Service Desk.

3

OVO for Windows Integration Installation

This chapter describes how to install the OVO Integration software, and provides guidelines on the correct order of installation of other necessary

software components.

About the OVO Integration (Windows) Installation

The OVO Integration installs the software and the utilities that are needed to ceaselessly perform the integration: OvObsLoadObject and Data Exchange. The installation process is not fully automated; certain software components must be installed manually.

Install OVO Integration on the OVO Management Server

Installation Prerequisites

- Windows installed with the latest patches and running
- OVO for Windows installed and running
- Service Desk Management Server installed and running
- HTTP protocol enabled on the Service Desk Management Server. To enable the HTTP protocol:
 1. Log on to the system on which the Service Desk Management Server is installed.
 2. Depending on the operating system, run one of the following commands to launch the Server Configuration program:
 - UNIX: `/opt/OV/bin/OvObsServerSettingsEditor`.
 - Windows: Start>Programs>HP OpenView>Server Settings.
 3. Navigate to the Protocols tab.
 4. Select HTTP from the **Protocol** drop-down list.
 5. Select the **Enable this protocol** check box.
 6. From a command prompt, use the `ovc` command to restart the `ovobs` process:

```
ovc -restart ovobs
```
- Service Desk Client installed and running on the OVO Management Server

Before you Start the Install Procedure

- Read the contents of Chapter 2 “Preparing to Install HP OpenView Service Desk 5.0” of the HP OpenView Service Desk Installation Guide, including the section “HP OpenView Installer – Overview” – this contains a description of the HP OpenView Installer and associated screens.

- Ensure that you have the appropriate permissions required to install the software. You need Administrator privileges to install this software.

Install Procedure

1. Log on to the host system on which the OVO for Windows management server is installed.
2. Locate the execution file:

```
<UnpackDir>\Installer\ovowintegration\setup.exe
```

3. Run `setup.exe` to start the installation. The Introduction window of OpenView Installer displays.
4. The installation now follows the standard OpenView Installer process as described in Chapter 2 of the HP OpenView Service Desk Installation Guide.
5. Log in to the OVO console and deploy the OVO agent on the Service Desk client machine; see the OVO user documentation for installation instructions. This step only needs to be performed for Service Desk clients that need to send events to OVO. The OVO agent is required by the OVO integration to generate an OVO message from Service Desk.
6. The OVO for Windows integration, uses WBEM ODBC source driver, therefore WMI version 1085 core components are required. These components are available for Windows 2000 on the Windows 2000 installation CD in the folder `\Valueadd\Msft\Mgmt\Wbemodbc`.
7. For Win2003, execute the following file:

```
<install_dir>\Program files\HP  
OpenView\lbin\sd\ovow\OvSdSync.exe
```

to create tables in the SQL Server database. These tables contain records for each node and service in OVO.

NOTE

You must run `OvSdSync.exe` everytime you add new nodes and services to your OVO environment. If you want to import nodes and services again (for example, because new nodes and services were added to the OVO Management server), you must run `OvSdSync.exe` again before the import.

8. To install OvObsAgent, execute the following file:

<UnpackDir>\Installer\agent\setup.exe

See Chapter 8 of the installation guide for further instructions.

9. Deploy opcmmsg (from the OVO console):

- a. In the OVO management console, open **Policies grouped by type**.
- b. Open the **Open Message Interface** policy group.
- c. Select the **opcmmsg** policy, right-click and then select **All Tasks**, then **Deploy on**.
- d. Select all of the Service Desk client nodes that you want to be able to manually create OVO messages from and click **OK**.

Opcmmsg is used to create OVO messages from Service Desk. You need to deploy this policy to all Service Desk clients that you want to be able to perform this function from.

For additional information refer to the Online Help in your *OpenView Operations for Windows* application.

10. See Chapter 4, “OVO for Windows Integration Configuration,” on page 27 for further instructions on how to complete the setup of this integration.

WARNING

To support multiple OVO Management Servers you need to install the OVO Integration on each server.

NOTE

Once the installation steps are completed, check if the Service Desk agent is running (using the command `ovc -status`); `ovobsag` should be listed as a running service. If the service is not running, type the following command: `ovc -start ovobsag`.

4

OVO for Windows Integration Configuration

This chapter provides information on the integration programs that allow communication between Service Desk and OVO, and how to

configure both systems to achieve bidirectional transfer and viewing of information.

Overview

This section explains the configuration steps that must be done in Service Desk. The tasks are listed below:

The following will be created automatically (after uploading the Configuration Exchange file):

- OVO Integration account
- Database rules
- OVO Integration Role
- Import Mappings
- Templates
- Smart Action

The configuration tasks are:

- Modify the `OvObsLoadObject.conf` file.
- Upload the Configuration Exchange file. On Windows 2003 you must also upload the Windows 2003 Configuration Exchange file.
- Configure the Integration Account.
- Deploy the forwarding policy and change event policy.
- Edit logfile monitoring policies.
- Configuring the `OvServiceExport` tool for viewing OVO services in a browser.

Uploading Configuration Data into Service Desk

The OVO Integration installs configuration files that contain the configuration data needed by the integration. The configuration exchange file contains the following data:

- Integration Account
- Integration Role
- Database Rules
- Import Mappings
- Object templates
- Smart action

To upload this configuration data into Service Desk:

- On the OpenView Console, select Configuration Exchange from the File menu, and then select Import. The Configuration Exchange Import Wizard displays. Follow the onscreen instructions and import the following file:

```
<install_dir>\Program Files\HP  
OpenView\Data\Datafiles\data_exchange\xml\OvSdOvowConfig  
.xml.
```

See “Importing Configuration Settings” in the OpenView online help.

- If you installed the OVO Integration on a Windows 2003 server, you need to import additional configuration data in to Service Desk. On the OpenView Console, select Configuration Exchange from the File menu, and then select Import. The Configuration Exchange Import Wizard displays. Follow the onscreen instructions and import the following file:

```
<install_dir>\Program Files\HP  
OpenView\Data\Datafiles\data_exchange\xml\OvSdOvowConfig  
2003.xml.
```

Modify Account Information in Service Desk

The integration account information in Service Desk (imported as part of the configuration exchange import) needs to be modified.

1. Log on to the Openview Console.
2. The hostname must be modified to reference the OVO Management Server. Select the Users and Security workspace from the OV Configuration workspace group. Select Access>Accounts>OVO for Windows. In the OVO for Windows - Account dialog on the General tab, change **Host** to the hostname of the OVO Management Server. On the Role tab, select the Integration account role.

If you have multiple OVO Management Servers, create an integration account for each additional OVO Management Server.

For single and multiple OVO Management Server environments, it is good practice to name each account OVOW_<OVO_server_name>, where <OVO_server_name> is the OVO Management Server name. Each account name should start with OVOW.

3. Change the integration account password - This is an optional setting, but for security reasons it is advised to change the OVO for Windows account password in Service Desk. Please refer to the online help (Password Settings) for information on how to change your default passwords. The default password is Password4OpenV!ew.

Modifying Configuration Files on the OVO Management Server

In order to insert information into Service Desk from OVO (event forwarding), you need to modify the `OvObsLoadObject.conf` configuration file. This file was installed during the OVO for Windows integration installation (see “Install OVO Integration on the OVO Management Server” on page 24)

To modify this file:

1. Open `<install_dir>\Program Files\HP OpenView\Data\conf\obs\loadobject\OvObsLoadObject.conf` in a text editor.
2. In the `ACCOUNT=myusername/mypassword` entry, replace `mypassword` with the previously defined integration account username and password. The account name must start with `OVOW` because Service Desk database rules contain conditions that are dependent on this naming convention.
3. Replace `SERVER=localhost` with the hostname of the Service Desk Management Server.
4. In the `MAPPING=mymapping` entry, replace `mymapping` with `ovowindows`.

Modify and Deploy Policies on OVO Windows Managed Nodes

There are policies provided by this integration that allow you to monitor Service Desk log files. These are:

- `OvSd_Monitor_sd_load_logfile.policy`

This policy allows you to monitor Service Desk log files for java exceptions and warnings from Agent Manager.

Once uploaded to OVO for Windows, this policy is visible as `Monitor sd_load_logfile`.

- `OvSd_Monitor_Service_Desk_logfile.policy`

Once uploaded to OVO for Windows, this policy is visible as `Monitor Service_Desk_logfile`.

The Logfile Monitoring policies must be edited through the OVO for Windows console in the Service Desk Policy Group, in order to have the policies monitor Service Desk log files (<install_dir>\Program Files\HP OpenView\Data\Log).

You need to deploy the forwarding policies on the OVO for Windows management server. You may also need to modify the conditions of the forwarding policies to avoid forwarding all events regardless of the circumstances. Refer to the OVO for Windows documentation for instructions on how to deploy and filter policies in an OVO for Windows environment.

Viewing OVO Services in a HTML Browser

To view OVO for Windows services in a browser you need to export the data from the OVO database using the OvServiceExport tool. This tool exports the data from the OVO for Windows database in either HTML or XML format for viewing in a browser.

OvServiceExport Tool

OvServiceExport is a command line tool that enables you to export information about an OVO for Windows service.

OvServiceExport.exe accepts the following optional parameters:

```
OvServiceExport.exe -server <server name> -service <service name> [-format XML -file <file name>] | [-format HTML -cgi <cgi root> -file <file name>]
```

Table 4-1 describes the parameters:

Table 4-1

OvServiceExport Command Line Parameters

Parameter	Description
-server	<server name> is the name of the OVO Management Server that holds the service information. Default value: name of the local machine
-service	<service name> is the name (not the caption) of the service of which you want to export information. Default value: "Root_Services"

Table 4-1 **OvServiceExport Command Line Parameters (Continued)**

Parameter	Description
-format	<p>Choose between XML and HTML:</p> <ul style="list-style-type: none">• XML <p>The information is generated in XML format. This XML stream contains service information about the service <service name>, all association information about its dependencies and components as well as service information for each of these dependencies and components. The XML stream follows the rules of service.dtd, the same DTD that OpenView Operations for Unix uses.</p> <ul style="list-style-type: none">• HTML <p>Use this option, for example, if you want to use OvServiceExport.exe together with CGI. The information is formatted in a special form of HTML. The HTML page includes information about the service <service name> as well as the information of its child and dependent services.</p> <p>Default value: XML</p>
-file	<p><file name> is the name of the output file. If no file name is specified, the information is written to standard output.</p> <p>Default value: none</p>
-cgi	<p>If you use OvServiceExport.exe together with CGI, <cgi root> specifies the directory where the executable is located on the web server.</p> <p>Default value: cgi-bin</p>
-refresh	<p><refresh time> is the time in seconds after which the HTML page on your browser is updated by a new CGI request. This option is only applicable if you use CGI.</p> <p>Default value: 60</p>

Generating XML Output

If you want to generate an XML stream displayed on standard output, run the following command:

```
OvServiceExport.exe -format xml
```

You can add other parameters (see Table 4-1 on page 34) from the omand line.

Another example:

```
OvServiceExport.exe -format xml -server VPWServer -service  
VP_SM:Server -file test.xml
```

This example generates a file called `test.xml` with the service information of the service `VP_SM:Server` from the management Server `VPWServer`.

Using OvServiceExport.exe with CGI

This section describes how to use `OvServiceExport.exe` with CGI.

Installing OvServiceExport on a Web Server

It is important that the `OvServiceExport.exe` runs under an account that has the rights to retrieve data from OVO for Windows, as explained below.

Apache Web Server If you use an Apache web server, you need to copy the `OvServiceExport.exe` file to a directory from where Apache is able to run CGI scripts. The Apache default directory is `cgi-bin`.

If you use a non-default directory, use the `-cgi <cgi root>` parameter of `OvServiceExport.exe` to specify it.

Normally, Apache runs the executable file under the system account, so you should not have any security issues.

The `htdocs` directory must contain an `OvServiceExport` directory. The `OvServiceExport` directory must contain the two images `VPW.gif` and `VPWSvcIco.gif`.

Microsoft Internet Information Services 6.0

1. Create folder `C:\Inetpub\cgi-bin` on the OVO management server.

2. Navigate to the <install_dir>\Program Files\HP
OpenView\misc\sd\ovow directory.
3. Extract the OvSdServiceExport.zip file to a directory of your
choice.
4. Copy the OvServiceExport.exe file to the C:\Inetpub\cgi-bin
directory.
5. Copy the OvServiceExport folder to C:\Inetpub\wwwroot. Verify
that this folder contains the VPWSvcIco.gif and VPW.gif files.
6. Open the IIS Manager (IISM).
7. In IISM under Web Sites->Default Web Site, create the cgi-bin
directory as an IIS virtual directory. Use cgi-bin as the alias and set
C:\Inetpub\cgi-bin as the path.
8. Right-click **OvServiceExport.exe** in IISM window and select
Properties.
9. Open the File Security tab and click **Edit** in the **Authentication and
access control** section. In the opened dialog, do the following:
 - Select the **Anonymous access** checkbox and click **Browse**
 - Specify a user account and password that has the rights to access
OVO Services. Typically that would be the
<DOMAIN>\HP-OVE-User account.
10. In the folder tree, right-click **cgi-bin** and select **Properties**. Select the
Virtual Directory tab and verify that **Execute permissions** is set to
Scripts and Executables. If not, manually select it. When prompted
to override inheritances, select all. Accept these settings and return
to the IISM console.
11. In the folder tree, right-click **Default Web Site** and select **Properties**.
Select the Home Directory tab and verify that **Execute permissions**
is set to **Scripts and Executables**. If not, manually select it. When
prompted to override inheritances, select all. Accept these settings
and return to the IISM console.
12. In the folder tree, right-click **Web Service Extensions** and select **Add
new Web service extension**:
 - Add extension name.
 - Add C:\Inetpub\cgi-bin\OvExportService.exe.

- Select the **Set extension status to allowed** check box.
13. Exit the ISSM console.
 14. To verify that the web service viewer is working, start Internet Explorer and type the following URL:
<http://<web_server_name>/cgi-bin/OvServiceExport.exe?-format+html>

Using the HTML Service Viewer of OvServiceExport

Now everything should be ready to use OvServiceExport.exe with CGI. The URL you need to specify in a web browser to call OvServiceExport.exe follows the following format:

```
http://<web server name>/<cgi  
root>/OvServiceExport.exe?-format+html+ Parameter2+<Value  
of Parameter2>+Parameter3+<Value of Parameter3>+...
```

Example 1 Suppose you installed OvServiceExport.exe in the cgi-bin directory of your Apache web server on the machine webserver.mydomain.com. webserver.mydomain.com is also the OVO Management Server.

The easiest call would be:

```
http://webserver.mydomain.com/cgi-bin/OvServiceExport.exe?-f  
ormat+html
```

This URL would return the status of the Root_Services on webserver.mydomain.com.

Example 2 Suppose you installed OvServiceExport.exe in the directory MyDirectory in the scripts directory of your IIS 6.0 configuration on the server webserver.mydomain.com. VPW.mydomain.com is the OVO Management Server.

Consider the URL:

```
http://webserver.mydomain.com/scripts/MyDirectory/OvServiceE  
xport.exe?-format  
+html+-cgi+scripts/MyDirectory+-server+VPW+-service+VP_SM:Se  
rver+-refresh+120
```

This URL would return the status of the service VP_SM:Server from the management server VPW.mydomain.com. The HTML page would be refreshed every two minutes (120 seconds).

Handling of Non-ASCII Characters

OvServiceExport is able to cope with different languages. Therefore, within the generated XML/HTML output streams non ASCII characters are replaced using the following HTML syntax:

"&#x Hexadecimal value of Unicode character".

For example, ß represents the character 'ß'.

NOTE

If you are using OvServerExport together with CGI, you cannot use a service with non-ASCII characters in its ID (the Caption field does not have this restriction). This would generate invalid CGI calls.

There is no similar restriction if you are writing to files.

Exporting Nodes and Services from OVO for Windows into Service Desk

To import OVO for Windows Nodes and Services into Service Desk, you must first export the nodes and service information from OVO into configuration items in Service Desk.

Editing Configuration Files for Importing Nodes and Services Into Service Desk on Windows 2000

To import Nodes and Services into Service Desk from OVO for Windows you have to edit two configuration files. These files were installed during the OVO for Windows integration installation (see “Install OVO Integration on the OVO Management Server” on page 24).

1. Navigate to <install_dir>\Program Files\HP
OpenView\Data\Datafiles\data_exchange\config
2. `OvSdOvowServices.conf` - Modify this file under the DSN section, locate the `Server` entry and specify the OVO server as the value, for example `\\MYOVOSERVER`.
3. `OvSdOvowCi.conf` - Modify this file under the DSN section, locate the `Server` entry and specify the OVO server as the value, for example `\\MYOVOSERVER`.

NOTE

Limitations exist when mapping fields in OVO for Windows to a Service Desk Search code. The WMI ODBC driver requires search codes to be written in uppercase letters without spaces. A default attribute value called `OVOWindowsCI` is present in the import mapping as a solution to this limitation. If you are importing services from OVO to Service Desk, the caption field in OVO may contain spaces and/or wildcard characters which are not allowed in the search code field of Service Desk and will result in errors in the import log file. As a result, when an external OVO for Windows attribute is imported that contains spaces or is not in uppercase, the default value will be given. Attributes in the wrong format will be given the default value while others meeting the ODBC driver's criteria will be imported with their true values.

Editing Configuration Files for Importing Nodes and Services Into Service Desk on Windows 2003

NOTE

The OVO database user name and password used with the Openview DSN entry is needed to complete the following steps.

You need to edit the the following configuration files. These files were installed during the OVO for Windows integration installation (see “Install OVO Integration on the OVO Management Server” on page 24).

1. Navigate to <install_dir>\Program Files\HP
OpenView\Data\Datafiles\data_exchange\config
2. OvSdOvowServices2003.conf - Modify this file under the DSN section, locate the following entries:

- NAME=Openview
- USR=**ovodatabase_user**
- PWD=**ovodatabase_user_password**

Replace **ovodatabase_user** and **ovodatabase_user_password** with the user name and password defined when OVO was installed.

3. OvSdOvowCi2003.conf - Modify this file under the DSN section, locate the following entries

- NAME=Openview
- USR=**ovodatabase_user**
- PWD=**ovodatabase_user_password**

Replace **ovodatabase_user** and **ovodatabase_user_password** with the user name and password defined when OVO was installed.

5

OVO for UNIX Integration Installation

This chapter describes how to install the OVO Integration on a UNIX platform.

About the OVO Integration (UNIX) Installation

The OVO Integration (UNIX) installs all the software and the utilities that are needed by the integration: OvObsLoadObject, OvObsAgent, and Data Exchange.

Install OVO Integration on the OVO Management Server

Installation Prerequisites

- HP-UX installed with the latest patches and running
- OVO for UNIX installed and running
- Service Desk Management Server installed and running
- HTTP protocol enabled in Server Settings on the Service Desk Management Server. To enable the HTTP protocol:
 1. Log on to the system on which the Service Desk Management Server is installed.
 2. Depending on the operating system, run one of the following commands to launch the Server Configuration program:
 - UNIX: `/opt/OV/bin/OvObsServerSettingsEditor`.
 - Windows: Start>Programs>HP OpenView>Server Settings.
 3. Navigate to the Protocols tab.
 4. Select HTTP from the **Protocol** drop-down list.
 5. Select the **Enable this protocol** check box.
 6. From a command prompt, use the `ovc` command to restart the `ovobs` process:

```
ovc -restart ovobs
```
- Service Desk Client installed and running (it is not mandatory to install the Service Desk Client on the OVO Management Server)

Before you Start the Install Procedure

- Read the contents of Chapter 2 “Preparing to Install HP OpenView Service Desk 5.0” of the HP OpenView Service Desk Installation Guide, including the section “HP OpenView Installer – Overview” – this contains a description of the HP OpenView Installer and associated screens.
- Ensure that you have the appropriate permissions required to install the software. You need root access to install this software.

Install Procedure

1. Locate the execution file:

`<UnPackDir>/ovouintegration_5.xxx.yyy_setup.bin` (where `xxx` is the version number, and `yyy` is the build number).

2. Run the execution file to start the installation. The **Introduction** window of HP OpenView Installer displays.
3. The installation now follows the standard HP OpenView Installer process as described in Chapter 2 of the HP OpenView Service Desk Installation Guide.

NOTE

The OVO for UNIX integration install procedure installs all the necessary software packages needed to run this integration.

4. Login to the OVO console and deploy the Openview for Operations agent on the Service Desk client machine; see the OVO user documentation for installation instructions. This step only needs to be performed for Service Desk clients that need to send events to OVO. The OVO agent is required by the OVO integration to forward an incident from Service Desk to the OVO management server.
5. To support multiple OVO Management Servers you need to install the OVO Integration on each OVO Management Server.
6. See Chapter 6, “OVO for UNIX Integration Configuration,” on page 47 for further instructions on how to complete the setup of this integration.

NOTE

Once the installation steps are completed, check if the Service Desk agent is running on the OVO Management Server (using the command `ovc -status`); `ovobsag` should be listed as a running service. If the service is not running, type the following command: `ovc -start ovobsag`.

The installation of the integration software on the OVO Management Server stops the OVO agent that runs on the OVO Management Server. You need to restart the OVO agent manually using the command `/opt/OV/bin/opcagt -start`.

6

OVO for UNIX Integration Configuration

This chapter describes the configuration tasks to be performed in Service Desk and on the OVO for UNIX Management server.

Overview

The OVO integration configuration consists of automated and manual tasks:

- Upload configuration data into OVO Operations - See “Running the Configuration Script” on page 49
- Creation of configuration files for each OVO Management Server (automatic) - See “Running the Configuration Script” on page 49
- Preparation of configuration data for uploading into Service Desk (automatic) - See “Running the Configuration Script” on page 49
- Upload the configuration data into Service Desk (manual) - See “Uploading the Configuration Data into Service Desk” on page 49
- Modify database rules related to the outage functionality (manual)
- Change default passwords (manual, optional)
- Perform Configuration Tasks in OVO - See “Configuration Tasks in OVO” on page 52
- Deploy the Oracle JDBC Driver - See “Deploy the Oracle JDBC Driver” on page 52.

Configuring Your Environment

This section describes the main configuration steps that must be performed before the integration can begin the bidirectional transfer of information between OVO and Service Desk.

Running the Configuration Script

This section describes the tasks that you need to perform in order to properly configure your system for this integration. To start the configuration process, run the following command on the OVO Management Server: `/opt/OV/bin/ovsdovosetup.sh`

Follow the onscreen instructions. Once the script has completed, perform the tasks described in the following sections.

Uploading the Configuration Data into Service Desk

To upload configuration data into Service Desk, perform the following tasks:

- Upload the Service Desk configuration data using the Service Desk client. After running the `ovsdovosetup.sh` script (this file prepares the configuration data file for uploading), copy the file `/var/opt/OV/conf/obs/data_exchange/ovsdintegrationsdconfig.xml` to a Service Desk client machine. Start the Service Desk client and select **File>Configuration Exchange>Import**. The **Configuration-Exchange Import Wizard** appears. Click **Next** on the first page of the import wizard and click **Add**, and browse to the directory containing `ovsdintegrationsdconfig.xml`, select this file, and click **Start import**. After importing the configuration data, exit the client.

If you have multiple OVO Management Servers, you need to run the `ovsdovosetup.sh` script for each server.

NOTE

You only need to upload the Service Desk configuration data once. Therefore, do not upload the configuration data into Service Desk if you have already performed an upload during the configuration of the first OVO Management Server.

You need to create an integration account for each additional OVO Management Server. Check that the following information is supplied under Accounts in the OpenView Console:

- The Account name starts with OVOU.

It is good practice to include the name of the OVO management server in the name of the account. For example, if the hostname of your OVO management server is merlin, name the account OVOU_merlin.

- In **Host**, type the hostname of the OVO Management Server.
- Set **Account Type** to Integration.
- Under the **Roles** tab, select the **OVO Integration** role

Modify Database Rules Related to the Outage Functionality

You need to modify four database rules to facilitate outage work. These rules are:

- OVO occasional outage from work order - For workorders
- OVO periodic outage from CI - For configuration items
- OVO periodic outage from schedule - For schedules
- OVO periodic outage from schedule element- For schedule elements

To modify database rules:

1. Log into the HP OpenView Console using a role that includes administrator privileges and select the work-space category **HP OpenView Configuration**. Detailed information on database rules is available in the online help.

2. Navigate to the **Actions & Rules** work space. In the **Actions & Rules** tree, select **Rules**.
3. In the **Rules** tree, select **Database Rules**. First, select the object (Workorder, Schedule, Configuration Item, and Schedule Element) and then select the rule you need to modify:
 - OVO occasional outage from work order
 - OVO periodic outage from CI
 - OVO periodic outage from schedule
 - OVO periodic outage from schedule element
4. Navigate to the **Command Exec** action page of the database rules wizard and click **Edit** for the action you want to modify (under “**What actions do you want to be performed?**”).
5. The **Command Exec Action** window displays. Enter the hostname of the OVO Management Server (in place of `myovoserver.mydomain.com`) in the **Host** section.

NOTE

If you have multiple OVO Management Servers, you need to create additional Command Exec Actions in Service Desk for each server. Enter the hostname for each management server in your system.

Change Default Passwords (manual, optional)

This is an optional setting, but for security reasons it is advised to change the OVO for UNIX and OVO for UNIX Outage account passwords in Service Desk. Please refer to the online help (Password Settings) for information on how to change your default passwords. The default password is `Password4OpenV!ew`.

Once the passwords are changed in Service Desk, you have to duplicate these changes in the Integration configuration files on the OVO Management Server. Open the configuration files in a text editor and locate the password entry. The files are:

- `ovsdmkoutage.conf`: located in `var/opt/OV/conf/sd`
- `ovsdevent.conf`: located in `var/opt/OV/conf/obs/loadobject`

NOTE

If you run the `ovsdovosetup.sh` script more than once after you changed the passwords, you must repeat the password change as described in this section. The account passwords that you have already specified above are replaced by default passwords every time the script is executed.

The OVO for UNIX Outage account consumes one named user license. An integration account cannot be used.

Configuration Tasks in OVO

Log in to the OVO console and add the responsibility of the Service Desk message group to the appropriate operators.

Log in to the OVO console and configure OVO message source templates by switching on the **Forward to Trouble Ticket** for messages you want forwarded to Service Desk. Assign and install/update the modified templates to the managed node(s). See the OVO for UNIX user documentation for detailed instructions.

Deploy the Oracle JDBC Driver

Copy the Oracle JDBC driver `ojdbc14.jar` to the directory `/opt/OV/java/drivers` on the OVO Management Server; this file is located on the Service Desk management server in the `nonOV/obs` subdirectory of the installation directory. The Oracle JDBC driver is required for accessing the OVO Oracle database.

Make sure the jar file has the correct ownership and permissions. The file must be owned by bin and must be in the bin group. Issue the following command from a command line to set the correct ownership:

```
chown bin:bin ojdbc14.jar
```

The permissions of the jar file must be read-only for everyone. Issue the following command from a command line to set the correct permissions:

```
chmod 444 ojdbc14.jar
```

NOTE

The Oracle JDBC driver must be deployed on each OVO Management Server.

7 **User Tasks**

This chapter describes the OVO Integration tasks that need to be performed on a regular basis.

Exporting and Importing Service and Nodes From OVO into Service Desk

All nodes and services managed by OVO should have a corresponding configuration item in Service Desk. This task needs to be performed so that events coming from the OVO server can be linked with the correct configuration item in the Service Desk database.

NOTE The OVO Management Server is also a managed node.

Importing Nodes and Services From OVO for Windows

Nodes can be imported from the OVO for Windows Management server as follows:

NOTE

Pre-requisite: On Windows 2003 (not applicable for Windows 2000), navigate to <install_dir>\Program Files\HP OpenView\lbin\sd\ovow\ and run `ovsdsync.exe` from the command prompt window. This will configure the OVO SQL Server database so that the database tables are populated by OVO Services and Nodes, and made readable for Service Desk.

1. In the OpenView Console, navigate to **Data** workspace in the **OV Configuration Workspace** group.
2. In the Data treeview, select **Data Exchange>Data Exchange Task**.
3. Select **File>New>Data Exchange Task**. The **New-Data Exchange Task** dialog box appears.
4. To export the nodes from OVO for Windows, select **Export** and using **Quick Find**, navigate to <install_dir>\Program Files\HP OpenView\Data\Datafiles\data_exchange\config\OvSdOvowCi.conf and click **Open**. If you are using Windows 2003, select

Exporting and Importing Service and Nodes From OVO into Service Desk

```
<install_dir>\Program Files\HP
OpenView\Data\Datafiles\data_exchange\config\OvSdOvowCi2
003.conf.
```

5. For exporting Services, select **Export** and using **Quick Find**, navigate to <install_dir>\Program Files\HP OpenView\Data\Datafiles\data_exchange\config\OvSdOvowServices.conf and click **Open**. If you are running on Windows 2003, select <install_dir>\Program Files\HP OpenView\Data\Datafiles\data_exchange\config\OvSdOvowServices2003.conf.
6. Specify the name and location of the Exchange file (temporary file) that will be populated with the results of the export process as defined in the respective configuration files.
7. Select **Import** and using **Quick Find**, select the **Application Account** that you want to use for importing (the account name should begin with OVOW).
8. Select the correct import mapping using **Quick Find**,
 - OvSdOvowCi (import mapping for configuration items)
 - OvSdOvowServices (import mapping for Services)
 - OvSdOvowCi2003 (import mapping for configuration items on Windows 2003)
 - OvSdOvowServices2003 (import mapping for Services on Windows 2003)
9. Save and close the **New-Data Exchange Task** dialog.
10. Right-click on the newly created Data Exchange Task and select **Start**.
11. The **Import Process** dialog box appears and shows the progress of the import/export process. When finished, close this dialog box.

For additional information about how to use Data Exchange for exporting and importing data, please refer to the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

Importing Nodes from OVO for UNIX

The `ovsdexchovonodes.sh` script extracts the nodes from OVO and imports them into Service Desk. This script can be started from the application bank in the OVO user interface. This script calls `OvObsExporter` to export the node data into an XML file, and then calls `OvObsImporter` to import the node data from this XML file into Service Desk.

For additional information on modifying the import mapping, refer to the Chapter entitled “Import Mapping” in the *HP OpenView Service Desk: Data Exchange Administrator’s Guide*.

Manually Creating a Configuration Item

You can manually create configuration items in Service Desk for all or part of your managed nodes. Refer to the Service Desk online help for detailed instructions on how to create a configuration item for a managed node:

1. Open a new **Configuration Item** dialog. This can be done by selecting **Configuration Item** from the shortcut bar or selecting New then **Configuration Item** from the **File** menu.
2. In the **Search code** field, enter the name of the managed node.
3. In the **Name** field, enter the Fully Qualified Domain Name (FQDN) for the managed node.

The Name field is used by the OVO Integration to identify the configuration item. The incident that is created by the OVO Integration relates the configuration item to the incident using the Name field. The configuration item corresponds to the node the incident originates from.

If the Name field does not contain the FQDN, the incident is still created, but the Configuration Item field of the incident will be empty, which makes the incident less useful.

Forwarding Messages

This section describes the message-forwarding functionality of the OVO Integration.

By default, messages in OVO have the Service Desk Management Server in the node field and the Configuration Item of the incident in the object field.

You can arrange to have the name of the configuration item instead of the Service Desk Management Server displayed in the node field. You can do this by modifying the Send Incident To OV Operations smart action.

To modify the smart action:

1. Log on to the system on which the OVO integration and Service Desk client are installed.
2. From the OpenView Console, select the Actions and Rules workspace from the OV Configuration workspace group.
3. Select Actions > Smart Action > Incident.

The smart actions for incidents are listed in the right panel.

4. Right-click the Send Incident To OV Operations smart action and select **Edit**.

The Send Incident To OV Operations Smart Action dialog box opens.

5. Add a new line to the list of parameters, type node=, click **Insert Attribute**, then select **Configuration Item> Name**.

The new parameter should be displayed as follows in the list of parameters:

```
node=[Configuration Item;Name]
```

6. Click **OK**.

Manually Forward Messages to OVO from Service Desk

Smart actions are available for this integration. A smart action makes it possible for users to forward a message to the OVO Management Server to notify the OVO operators that a problem is detected.

To manually create an event in OVO based on an incident in Service Desk:

- Open an existing incident form in Service Desk. Check that the severity field is not empty.
- On the menu bar, select **Action> Send Incident To OV Operations**.

The incident is then forwarded to OVO and is displayed in the OVO Message browser.

Manually Forwarding Messages from OVO to Service Desk (OVO for UNIX)

This feature makes it possible for users to manually forward a message to Service Desk. You may need to manually forward a message when:

- A message is created that was not detected by the automatic fault detection application
- A message is created that is not configured to be sent to Service Desk.

To manually forward messages:

1. Open the message browser in the OVO Console.
2. Select the messages you want to forward.
3. From the Application Bank select **Insert Incidents**. The selected messages are sent to Service Desk.
4. The severity label will turn white when a message is sent to Service Desk, showing that Service Desk now owns the message.

Outage Planning (OVO for UNIX)

You can prevent Service Desk from receiving OVO for UNIX server messages by letting OVO suppress the messages when an outage is planned. This is done by using mkoutage to download outage information from Service Desk and upload this information into OVO. The download and upload processes are performed automatically through the use of database rules in Service Desk. Two types of outages are recognized: periodic (or recurring outages) and occasional (or incidental outages). Outage planning is an administrative task in Service Desk, and it can only be used to suppress messages when installed with the OVO integration.

NOTE

It is not possible to automatically detect if outage periods manually entered on your OVO server application conflict with outage periods sent from Service Desk. If a conflict occurs, the result may be an error in the outage time period in the OVO application.

To define outages in Service Desk:

- To enter occasional planned outages in the work order dialog box, see the **Plan Incidental Outages** topic in the Online Help.
- To enter Periodic Outages in Service Desk, navigate to the **Configuration Item** form, select the **Downtime** tab, and click **New**. The **New-Schedule-CI** dialog appears. Select the previously defined schedule and select **Planned Downtime** from the **Type** drop-down list and click **OK**.

Viewing OVO Service State

A browser can be used to view all services that are not working or just top level services that are not working, depending on the URL used. The services are color coded to show the level of importance: red equals critical; orange equals major; yellow equals minor; and light blue (Cyan) equals warning. The following scenarios are designed to give you an idea of how this feature might be used:

- A support manager wants an update on the state of the top level OVO services that are down. The manager clicks the Top OVO services shortcut on the desktop and gets a view of all top level services currently down.
- A specialist is working at a customer site and needs an update on the services that are down. The specialist enters the service viewer URL, in the browser of a computer with Internet access, and gets a view of all services that are down.
- The customer support center begins to receive numerous calls for service. To get a quick overview of services that are currently down the help desk engineer uses the Service viewer shortcut on the desktop to quickly locate the down service and answer the calls.

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