HP OpenView Service Desk 4.0

VantagePoint Operation Integration Administrator's Guide

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Preface

This guide explains the integration between Service Desk and VantagePoint 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 VantagePoint Operations application and Service Desk.

This guide is organized as follows:

- Chapter 1, “Introduction,” on page 25 describes the architecture of the VantagePoint Operation Integration and gives a brief explanation of what the integration possibilities are.
- Chapter 2, “Installation,” on page 31 describes the installation steps that need to be performed on Service Desk and on your VantagePoint server.
- Chapter 3, “VPO for Windows and Service Desk Configuration,” on page 45 explains how to configure the integration if you are using VantagePoint for Windows.
- Chapter 4, “VP UNIX and Service Desk Configuration,” on page 75 explains how to configure the integration if you are using a VantagePoint for Unix application with Service Desk.
- Chapter 5, “User Tasks,” on page 107 provides examples on how to use the different features supplied with this integration.
- Chapter 6, “Troubleshooting,” on page 125 contains information on the default locations of installed files and other information that may be helpful in solving problems with the integration.

Revision History

When an edition of a manual is issued with a software release, it has been reviewed and tested and is therefore considered correct at the date of publication. However, errors in the software or documentation that were unknown at the time of release, or important new developments, may necessitate the release of a service pack that includes revised documentation. Revised documentation may also be published on the Internet, see “We Welcome Your Comments!” in this preface for the URL.

A revised edition will display change bars in the left-hand margin to indicate revised text. These change bars will only mark the text that has been edited or inserted since the previous edition or revised edition.

When a revised edition of this document is published, the latest revised edition nullifies all previous editions.

Table 1 **Revision History**

Edition and Revision Number	Issue Date	Product Release
First Edition	August, 2001	Service Desk 4.0

Related Publications

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

The Service Desk Documentation

Service Desk provides a selection of books and online help to assist you in using Service Desk and improve your understanding of the underlying concepts. This section illustrates what information is available and where you can find it.

NOTE

This section lists the publications provided with Service Desk 4.0. Updates of publications and additional publications may be provided in later service packs. For an overview of the documentation provided in service packs, please refer to the readme file of the latest service pack. The service packs and the latest versions of publications are available on the Internet. See the section “We Welcome Your Comments!” in this preface for the URLs.

- The `Readme.htm` file on the Service Desk CD-ROM contains information that will help you get started with Service Desk. It also contains any last-minute information that became available after the other documentation went to manufacturing.
- The *HP OpenView Service Desk: Release Notes* give a description of the features that Service Desk provides. In addition, they give information that helps you:

  — compare the current software's features with those available in previous versions of the software;

  — solve known problems.

  The Release Notes are available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Release_Notes.pdf`.
- The *HP OpenView Service Desk: User's Guide* introduces you to the key concepts behind Service Desk. It gives an overview of what you can do with Service Desk and explains typical tasks of different types of Service Desk users. Scenario descriptions are provided as examples of how the described features could be implemented.

The User's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `User's_Guide.pdf`.

- The *HP OpenView Service Desk: Supported Platforms List* contains information that helps you determine software requirements. It lists the software versions supported by Hewlett-Packard for Service Desk 4.0.

  The Supported Platforms List is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Supported_Platforms_List.pdf`.

- The *HP OpenView Service Desk: Installation Guide* covers all aspects of installing Service Desk.

  The Installation Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Installation_Guide.pdf`.

- The *HP OpenView Service Desk: Administrator's Guide* provides information that helps application administrators to set up and maintain the Service Desk application server for client usability.

  The Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Administrator's_Guide.pdf`.

- The *HP OpenView Service Desk: Data Exchange Administrator's Guide* explains the underlying concepts of the data exchange process and gives instructions on exporting data from external applications and importing it into Service Desk. The data exchange process includes importing single service events and batches of data.

  The Data Exchange Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Data_Exchange.pdf`.

- The *HP OpenView Service Desk: VantagePoint Operation Integration Administrator's Guide* explains the integration between Service Desk and VantagePoint for Windows and UNIX®. This guide covers the installation and configuration of the integration and explains how to perform the various tasks available with the integration.

  The VantagePoint Operation Integration Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `VPO_Integration_AG.pdf`.

- The *HP OpenView Service Desk: Migration Guide* provides a detailed

overview of the migration from ITSM 5.7 to Service Desk 4.0, to include an analysis of the differences in the two applications. Detailed instructions in this guide lead through the installation, configuration and other tasks required for a successful migration.

The Migration Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Migration_Guide.pdf`.

- The *HP OpenView Service Desk: API Programmer's Guide* contains information that will help you create customized integrations with Service Desk. This guide depicts the API structure, and explains some of the basic functions with examples for using the Application Programming Interface (API) provided with Service Desk. The API extends the HP OpenView Service Desk environment by providing independent programmatic access to data-centered functionality in the Service Desk application server environment.

  The API Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `API_pg.pdf`.

- The *HP OpenView Service Desk: Web API Programmer's Guide* contains information that will help you create customized integrations with Service Desk using the Service Desk Web API. This API is particularly suited for developing Web applications.

  The Web API Programmer's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Web_API_pg.pdf`.

- The *HP OpenView Service Desk: Data Dictionary* contains helpful information about the structure of the application.

  The Data Dictionary is available as an HTML file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Data_Dictionary.htm`.

- The *HP OpenView Service Desk 4.0 Computer Based Training* (CBT) CD-ROM is intended to assist you in learning about the functionality of HP OpenView Service Desk 4.0 from both a user and a system administrator perspective. The CD-ROM contains demonstration videos and accompanying texts that explain and show how to perform a wide variety of tasks within the application. The CBT also explains the basic concepts of the Service Desk application.

  The *HP OpenView Service Desk 4.0 Computer Based Training* (CBT) CD-ROM will be shipped automatically with the regular Service Desk software. The CBT will be available for shipment shortly after the

release of the Service Desk software.

- The online help is an extensive information system providing:
  - — procedural information to help you perform tasks, whether you are a novice or an experienced user;
  - — background and overview information to help you improve your understanding of the underlying concepts and structure of Service Desk;
  - — information about error messages that may appear when working with Service Desk, together with information on solving these errors;
  - — help on help to learn more about the online help.

  The online help is automatically installed as part of the Service Desk application and can be invoked from within Service Desk. See the following section entitled “Using the Online Help” for more information.

Reading PDF Files

You can view and print the PDF files with Adobe® Acrobat® Reader. This software is included on the HP OpenView Service Desk 4.0 CD-ROM. For installation instructions, see the `readme.htm` file on the CD-ROM.

The latest version of Adobe Acrobat Reader is also freely available from Adobe's Internet site at http://www.adobe.com.

Using the Online Help

You can invoke help from within Service Desk in the following ways:

- To get help for the window or dialog box you are working in, do one of the following:
  - — Press **F1**.
  - — Click the help toolbar button  .
  - — Choose `Help` from the `Help` menu.
  - — Click the help command button 

 in a dialog box.
- To search for help on a specific subject using the table of contents or the index of the help system: choose `Help Contents & Index` from the `Help` menu.

When you are in the help viewer, you can find help on how to use the help system itself by clicking the Help toolbar button:

Service Desk also provides *tooltips* and *"What's This?" help* for screen items like buttons, boxes, and menus.

A *tooltip* is a short description of a screen item. To view a tooltip, rest the mouse pointer on the screen item. The tooltip will appear at the position of the mouse pointer.

"What's This?" help is a brief explanation of how to use a screen item. "What's This?" help generally gives more information than tooltips. To view "What's This?" help:

1. First activate the "What's This?" mouse pointer in one of the following ways:
   - Press **Shift+F1**.
   - Click the "What's This?" toolbar button  .
   - Choose What's This? from the Help menu.
   - In dialog boxes, click the question mark button  in the title bar.

   The mouse pointer changes to a "What's This?" mouse pointer  .
2. Then click the screen item for which you want information. The "What's This?" help information appears in a pop-up window.

To close the pop-up window, click anywhere on the screen or press any key on your keyboard.

Other Related Publications

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

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

Typographic Conventions

The table below illustrates the typographic conventions used in this guide.

Font	What the Font Represents	Example
Italic	References to book titles	See also the *HP OpenView Service Desk: Installation Guide*.
	Emphasized text	*Do not delete* the System user.
Bold	First-time use of a term that is explained in the glossary	The **service call** is the basis for incident registration.
`Courier`	Menu names	You can adjust the data view with the commands in the `View` menu.
	Menu commands	Choose `Save` from the menu.
	Button names	Click `Add` to open the Add Service Call dialog box.
	File names	To start the installation, double-click `setup.htm`.

	Computer-generated output, such as command lines and program listings	If the system displays the text
		`C:\>dir a:`
		`The device is not ready`
		then check if the disk is placed in the disk drive.

`Courier bold`	User input: text that you must enter in a box or after a command line	If the service call must be solved within 30 minutes, enter **`30`**.
`Courier italic`	Replaceable text: text that you must replace by the text that is appropriate for your situation	Go to the folder *X*:\\Setup, where *X* is your CD-ROM drive.

Font	What the Font Represents	Example
Helvetica bold	Keyboard keys A plus sign (**+**) means you must press the first key (**Ctrl** in the example), hold it, and then press the second key (**F1** in the example).	Press **Ctrl+F1**.

We Welcome Your Comments!

Your comments and suggestions help us understand your needs, and better meet them. We are interested in what you think of this manual and invite you to alert us to problems or suggest improvements. You can submit your comments through the Internet, using the HP OpenView Documentation Comments Web site at the following URL:

http://ovweb.external.hp.com/lpe/comm_serv

If you encounter errors that impair your ability to use the product, please contact the HP Response Center or your support representative.

The latest versions of OpenView product manuals, including Service Desk manuals, are available on the HP OpenView Manuals Web site at the following URL:

http://ovweb.external.hp.com/lpe/doc_serv

Software patches and documentation updates that occur after a product release, will be available on the HP OpenView Software Patches Web site at the following URL:

http://support.openview.hp.com/cpe/patches

1 Introduction

The VantagePoint Operations Integration includes a variety of different integration options. This chapter provides a brief explanation of the architecture and the integration options available.

The Architecture

The VantagePoint Operation integration is available for VantagePoint for Windows and VantagePoint Operations for UNIX. The following diagrams show the architecture for each and how the integration possibilities fit into the architecture.

Figure 1-1 VantagePoint for Windows Architecture

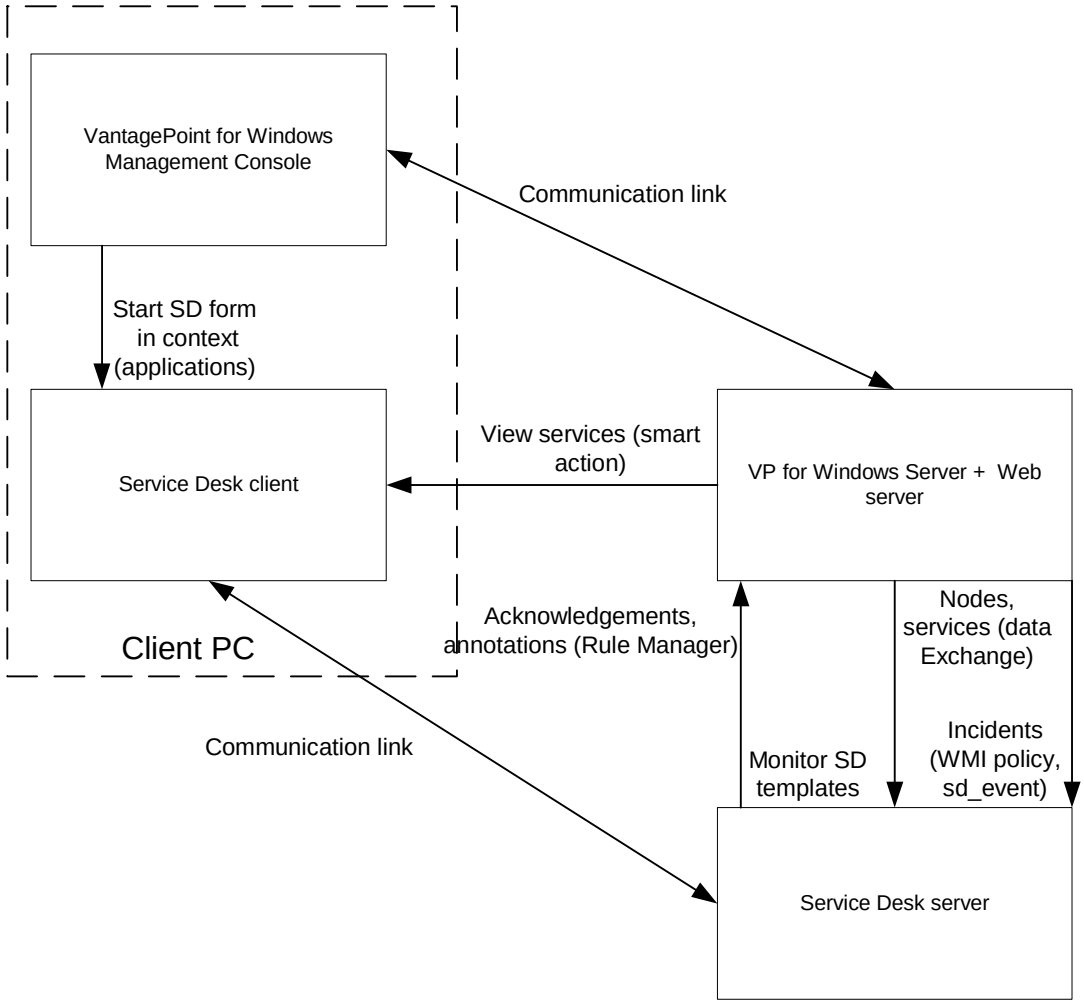
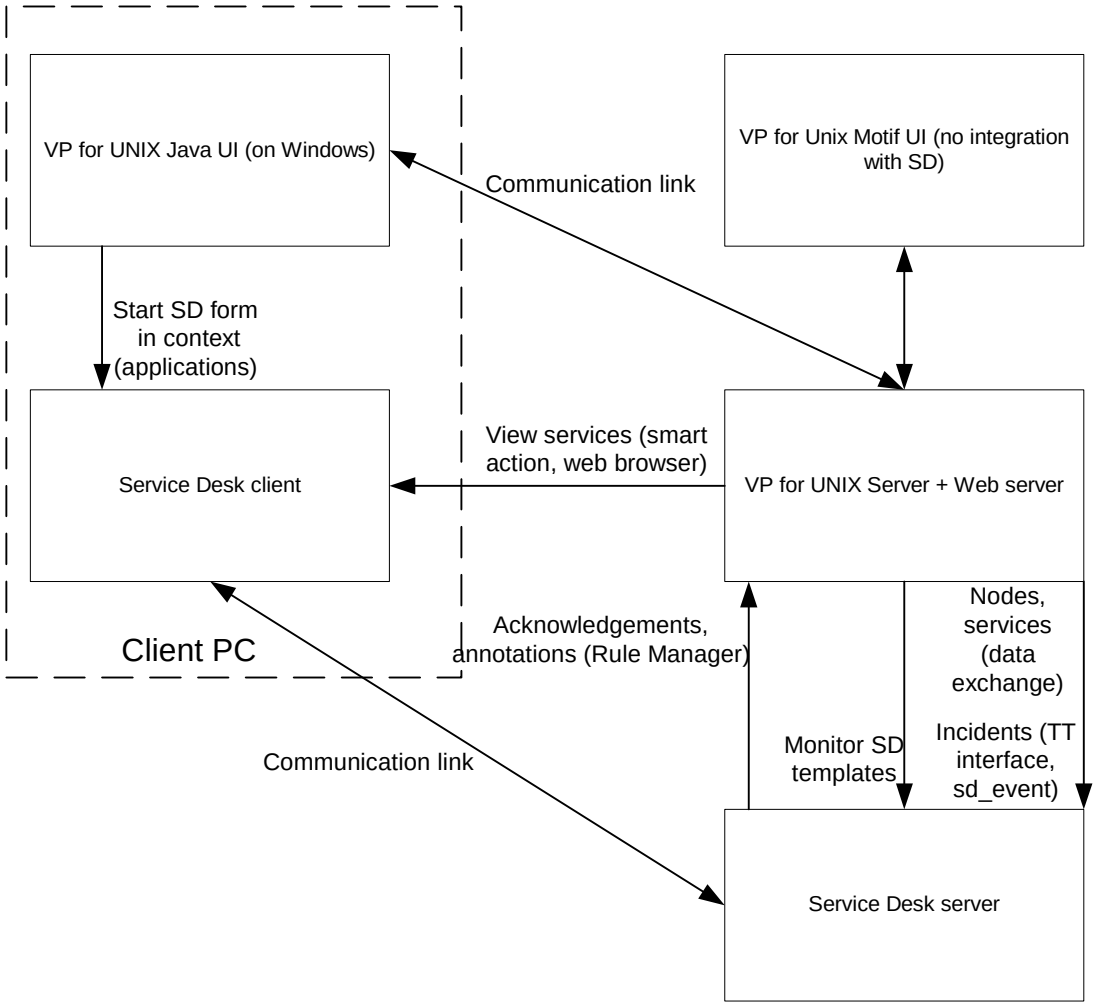


Figure 1-2 VantagePoint for UNIX Architecture



Integration Possibilities

The Service Desk integration with VantagePoint makes it possible to:

- Import nodes and services into Service Desk.
- Send events from VantagePoint to Service Desk.
- Reflect VantagePoint updates in Service Desk.
- Manually forward events to Service Desk.
- Send acknowledgment messages and message annotations from Service Desk to VantagePoint.
- View Service Desk configuration items from VantagePoint
- View VantagePoint service state from a browser.
- Generate a VantagePoint message from Service Desk.
- Monitor Service Desk processes and error log files.
- Suppress node-down messages in VantagePoint.

Importing Nodes and Services into Service Desk

This feature will work with VantagePoint for Windows or UNIX. Node information from VantagePoint can be extracted and imported into Service Desk as configuration items. Data Exchange tasks are supplied a configurable extractor and import mapping with default settings.

There are separate Data Exchange Tasks for UNIX and Windows users. Both require an ODBC link to your Oracle® database. For more information see, “Importing Nodes into Service Desk” on page 108.

Sending Events From VantagePoint

This feature is available for VantagePoint for Windows and for UNIX. VantagePoint for Windows users can send event information to Service Desk using a WMI policy that intercepts `OV_Messages` and uses a Visual Basic script called `Vpw-Sd.vbs` to call `sd_event` and forward attributes to Service Desk. `SD_event` creates a corresponding incident in Service Desk.

VantagePoint for UNIX users can send event information to Service Desk

using the Trouble Ticket interface to call `sd_eventins.sh`.

For more information see “Sending Events From VantagePoint” on page 110.

Reflecting Updates Done in VantagePoint

Currently this feature is only available with VantagePoint for Windows. Changes made to VantagePoint messages from the VantagePoint management console or the API will be reflected in Service Desk. A `WMI policy` that registers the event class `OV_Message_ChangeEvent` is used. When a message change occurs, for example severity change or message text change, the `sd_event` program in Service Desk will be called to update the corresponding incident. See “Reflecting Updates Done in VantagePoint” on page 112 for more information.

Manually Forward Events To Service Desk

This feature is currently only available on VantagePoint for UNIX. You can manually register an incident in Service Desk , by using the `Insert Incident` application from within your VantagePoint application. For more information see “Manually Forwarding Messages” on page 113.

Sending Annotations and Acknowledgments

This integration is available for VantagePoint for Windows and for UNIX. Annotations can be sent to VantagePoint when an incident changes and an acknowledgement can be sent when the incident is closed. Agents on the VantagePoint server are sent commands based on database rules created in Service Desk.

“Sending Annotations to VantagePoint” on page 114, and “Sending Acknowledgments to VantagePoint” on page 116 for more information.

Viewing Service Desk CIs from VantagePoint

This feature is only available for VantagePoint for Windows. VantagePoint users can select a node in VantagePoint and launch a tool for opening the corresponding incidents for that configuration item in Service Desk. Service Desk and VantagePoint must be installed on the same machine. For more information see, See “Viewing Service Desk CIs from VantagePoint” on page 29 for configuration information and “Viewing Service Desk CIs from VantagePoint” on page 118 for

information on using the feature.

Viewing VantagePoint Service State From a Browser

This feature is available for VantagePoint for Windows and VantagePoint for UNIX. After installing and configuring one of the recommended Web Servers, VantagePoint service state can be viewed from a browser. See “Viewing VantagePoint Service State” on page 119.

Generating a VantagePoint Message From Service Desk

This feature is available for VantagePoint for Windows and UNIX servers. Smart Actions must be configured and the VantagePoint agent must be installed on the Service Desk client.

For more information see, See “Generate a VantagePoint Message from Service Desk” on page 65 and “Generating a VantagePoint Message From Service Desk” on page 122.

Monitoring Service Desk and Integration Processes

This feature is available both for VantagePoint for Windows and VantagePoint for UNIX servers. For Windows users, VantagePoint log file policies can be used to monitor Service Desk error log files and the Service Desk application server to ensure the integration is functioning properly. You can monitor errors in the Service Desk application server and the VantagePoint management server. The policies can be used to match specific log file lines, assign variables out of the intercepted lines and conduct pattern matching.

VantagePoint for UNIX users can monitor the agent. See “Monitoring Service Desk Processes” on page 124 for details.

Suppressing Messages

This feature is available both for VantagePoint for UNIX servers. It makes it possible to suppress messages coming from the VantagePoint application for items that are undergoing scheduled outages defined in Service Desk.

See “Suppressing Messages in Service Desk” on page 123 for additional information.

2 Installation

This chapter explains the installation tasks for the Service Desk application server, VantagePoint for Windows and VantagePoint for UNIX servers.

Requirements

Refer to the *HP OpenView Service Desk: Installation Guide* for detailed information on system requirements.

NOTE When using the VantagePoint for UNIX integration the correct version of Perl must be installed prior to installing the integration, and must be mentioned first in the path variables. Refer to the Installation Guide for information on the correct version of Perl to use. You can check what version of Perl is installed on your VantagePoint server with the command: `perl -v`

NOTE To create a WBEM ODBC source driver, WMI version 1085 core components are required. These components are available on the VantagePoint installation CD as `wmicore_1085.exe` in the directory `/wmi`.

Installation Overview

The VantagePoint Operation Integration includes a number of files and tools that need to be installed on the Service Desk and the VantagePoint servers. The following checklist shows the recommended order of installation:

1. VantagePoint application (refer to the VantagePoint documentation);
2. Web Server supplied with the VantagePoint application (refer to the VantagePoint documentation);
3. Service Desk server application;
4. Service Desk database;
5. Integrations with `Data Exchange` and `hp OpenView Integration Option (service desk part)` options selected;
6. VantagePoint agents on Service Desk server (refer to the VantagePoint documentation);
7. On your VantagePoint for Windows server:
   - Integrations with the `hp OpenView operation Integration(OVO server part)` option selected.
   - Service Desk agents on all VantagePoint for Windows machines.
   - OvServiceExport.exe if you want to use the HTML Service Viewer.
8. On your VantagePoint for UNIX server install the HPOVSD depot file. You will need to copy it from the Service Desk CD-ROM.

TIP

VantagePoint for Windows users can use either the Apache, or the Microsoft IIS Web server supplied with VantagePoint. VantagePoint for UNIX users should use the Apache Web Server. To check if Microsoft IIS is installed type the following in your browser:
`http://<server>/scripts/OvServiceExport.exe?-format+html`.

To check for Apache:
`http://<server>:<portnumber>/cgi-bin/OVServiceExport.exe?-format+html`

NOTE If Service Desk and VantagePoint are installed on the same application server you can install the integration for both at the same time.

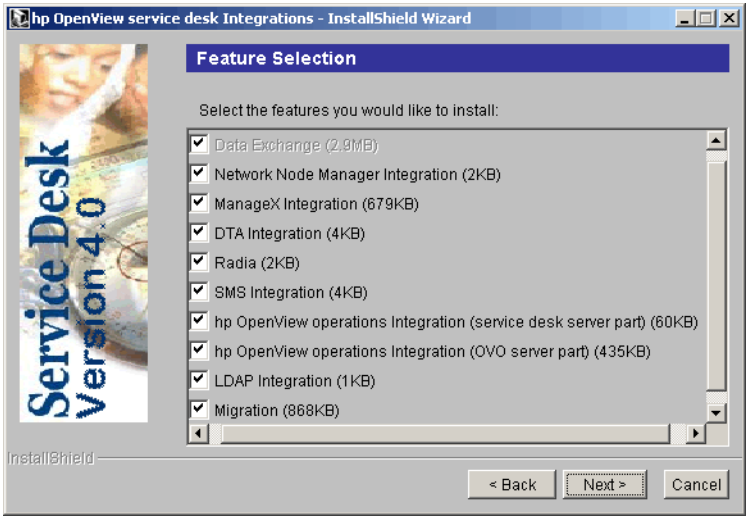
NOTE The VantagePoint Operation Integration for Windows does not work on multiple Service Desk application servers. You can only use it with one Service Desk application server, because of limitations in sd_event and in the distribution and function of the monitoring policies.

Installing on the Service Desk Server

To install the integration on Service Desk:

1. Select the `Integrations` option from the Service Desk CD-ROM;
2. Select the `Custom` installation option.
3. Select `hp OpenView operation Integration (service desk server part).`
4. Click `Next` to install:

Figure 2-1 Installation Features



5. The Installation program will install the integration.

If you are using VantagePoint for UNIX see“VantagePoint for UNIX Server” on page 40 for information on installing the rest of the integration on your UNIX server. If you are running VantagePoint for Windows on a different application server than Service Desk, see “VantagePoint for Windows Server” on page 37.

Installing Demo Data

Demo data can be installed and includes database rules, import

mappings, and smart actions used for this integration. You can save time by using the example rules and smart actions in the demo data rather than creating them manually for the integration.

For information on creating a database and installing demo data, refer to the *HP OpenView Service Desk: Installation Guide*.

To create database rules see “Configuring Database Rules” on page 60 for VPO for Windows or “Configuring Database Rules” on page 88 for UNIX.

VantagePoint for Windows Server

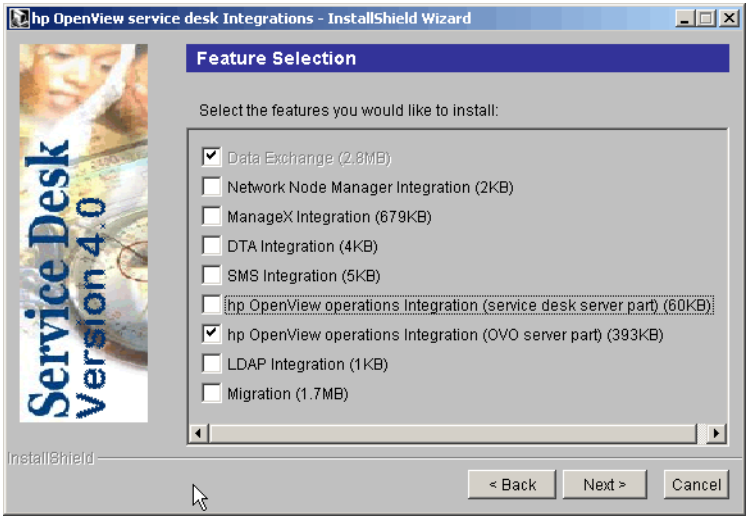
Files and tools need to be installed on the VantagePoint servers for the integration to work. This section explains the integration installation on a VantagePoint for Windows server.

A table showing the key integration files and default locations for the VantagePoint for Windows server, can be found in Chapter 6, “Troubleshooting,” on page 125.

To install the integration on your VantagePoint Operation for Windows server:

1. Insert the Service Desk CD-ROM
2. Select the `Integrations` Option.
3. Select the `Custom` installation option.
4. Select the `hp OpenView operations Integration (OVO part)` check box only:

Figure 2-2 Feature Selection



5. Click `Next` to install.

Installing the HTML Service Viewer

The HP VantagePoint Operation 6.0 HTML Service Viewer makes it possible for you to view services from a browser. VantagePoint for Windows uses a Web Server to perform this function. Refer to the *HP OpenView Service Desk: Installation Guide* for additional information about the Web Servers supported. To install the integration you will need to first copy `OvService Export.exe`.

For Apache users, `OvServiceExport.exe` needs to be put in a directory that Apache can run CGI scripts from (scripts directory).You can find this file in the folder OvServiceExport, which has been created by the integration installation program on the VPW server. The default directory is `cgi-bin`. Apache normally uses the System account when running executable files.

For MS-IIS 5.0 you need to put the `OvServiceExport.exe` file in a directory where the Web Server can start CGI scripts. The default directory is `scripts`. You need to modify the `OvServiceExport.exe` file with *`-cgi`* **`cgi root`** for this directory, for example: *`-cgi scripts`*. You will need to specify the user and accounts authorized to start the cgi scripts.

1. Start the `Internet Services Manager`. From the `Start` button, select `Programs`, `Windows NT4.0 OptionPack`, `Microsoft Information Server`, and then `Internet Services Manager`.
2. Open `Default Web Site`.
3. Click `scripts`. On the right portion of the screen you will see the content of the scripts directory.
4. Right-click `scripts` and then select `Properties`.
5. In the `Virtual Directory` tab verify that the `Execute Permission` parameter is set to `Scripts` and `Executables` and click `OK`.
6. Right-click `OvServiceExport.exe` on the right side of the window and then click `Properties`.
7. Open the `File Security` tab.
8. Click on `Edit` in the `Anonymous access and authentication control` rubric.
9. Enable `Anonymous access` and click `Edit`.
10. Specify a user that has the rights to access VantagePoint for Windows

services, for example: `\Management Server\HP-OVE-User` and the user's password.

11. Close every window with `OK`.

NOTE For additional information review the `readme.htm` file that is included with the `OvServiceExport` tool.

VantagePoint for UNIX Server

Files and tools need to be installed on the VantagePoint servers for the integration to work. This section explains the installation on a VantagePoint for UNIX server.

TIP

To install the JAVA user interface on a Windows machine, copy using ftp `/opt/OV/www/htdocs/ito_op/ITO_JAVA.exe` from your VantagePoint for UNIX server to the `c:\temp` folder of your Windows client machine.

Run `ITO_JAVA.exe` to install the user interface.

Start `ito_op.bat` from the Start menu and fill in the user name, password (default is `opc_op/OpC_op`) and server name. For additional information refer to Chapter 3, in the *VantagePoint Operation for HP-UX: Installation Guide*.

A table listing key items that are installed on the VantagePoint for UNIX server with the default locations can be found at Chapter 6, “Troubleshooting,” on page 125.

Installing Files in the HPOVSD Depot

Install the `hpovsd` depot on your UNIX servers. The depot contains the VantagePoint Operation integration tools in a tar file called `vantagepoint6_SD40.tar`. The depot also contains the; ITO 5.3 integration, `SDevent`, `EventQueuing` and the Service Desk `Agent`.

To install the integration:

1. Copy the `hpovsd.depot` to your tmp directory and then run:
   - `# swinstall -s /tmp/hpovsd.depot`
   - `# cd /opt/OV/SD/vantagepoint`
   - `# tar xvof VantagePoint6_SD40.tar`
   - `# ./install.sh`
2. During the installation you will be asked a number of questions. The answers you give will be used to modify the `sd_event.ini` file located in; `/opt/OV/SD/bin/sd_event.ini`. The questions will be similar to the following:

- What is the version of your Oracle VantagePoint database? **Please enter 7 or 8.**
- What is the name of the Service Desk server? **Enter the server you installed Service Desk on.**
- What is the account to log in to Service Desk (log in name/password)? **Enter the account you created for this Vantage Point server in Service Desk or use the default account from the demo data.**
- What is the Oracle instance name of VantagePoint?**Enter the alias name of the database VantagePoint uses.**
- Do you want to upload the VantagePoint default configuration now? **Enter Y to continue installation**.

3. After answering the initial questions, a series of messages will appear and the installation program will start copying files to the default locations:

```
Starting installation of the VantagePoint integration...
Copying get_vp_attributes and sd_event files...

Copying file vp6.0/Dist-HP-UX-b.11.00_ORA-8.0.5_Release/get_vp_attributes to
/opt/OV/bin/OpC/extern_intf
Copying file sd_eventins.sh to /opt/OV/bin/OpC/extern_intf
Copying file sd_event.sh to /opt/OV/bin/OpC/extern_intf
Copying file sd_eventins.pl to /opt/OV/bin/OpC/extern_intf
Copying file sd_event.ini to /opt/OV/bin

Uploading configuration...
perl is <location where you installed perl>
```

4. During installation a log file called; `install.log`, will be created in the `log` folder. When the installation is successful, you will see the message:

```
Installation of the VantagePoint integration has been completed without
errors.
```

Installing the HTML Service Viewer

The HP VantagePoint Operation HTML Service Viewer is an additional VantagePoint feature packaged with this integration. The Service Viewer makes it possible to view services on the VantagePoint server from a

browser. To install the Service Viewer:

1. Untar the file:
   `/opt/OV/SD/vantagepoint/service_view/vpo_service_view_cgi.tar`
2. Run the install script: **`#/opt/OV/www/cron/install.sh`**
3. In your browser, type the following URL: **`http://<server name:8880/vpo_top_services.html`**

The web page will be updated by the server once every minute. If you see only an input field for a service ID then there are no services registered in the VantagePoint Operation service status engine.

NOTE

`Cron` jobs will also appear in the VantagePoint for UNIX message browser. You can keep the `cron` jobs from appearing by suppressing them in the message source templates.

TIP

You can add the following sample services for demonstration purposes:

```
opcservice -add /opt/OV/OpC/examples/services/banking.xml
opcservice -add /opt/OV/OpC/examples/services/sap.xml
```

Multiple VantagePoint Servers

To support multiple VantagePoint servers you will need to:

- Install the VantagePoint Operation Integration on each server.
- Create a separate account in Service Desk for each VantagePoint server and specify the host name for each account. The host name is used when sending acknowledgments and annotations to the VantagePoint server. For example:

Account	Host
VPW_account1	server1.yourdomain.com
VPW_account2	server2.yourdomain.com

3 VPO for Windows and Service Desk Configuration

Configuration tasks need to be performed on the Service Desk server and the VantagePoint server. Some default settings and values are provided.

Overview

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

- Create a VantagePoint Integration account
- Set the environment variable for Service Desk.
- Import managed nodes as configuration items.
- Import services as configuration items.
- Modify the import mapping for events (forwarded messages).
- Create database rules.
- Create Smart Actions.

The following configuration tasks need to be done in the VantagePoint for Windows application:

- Set the environment variable, OV_PATH.
- Modify the `sd_event.ini` file.
- Modify the forwarding policy (not mandatory).
- Deploy the forwarding policy.
- Deploy monitoring policies.
- Deploy opcmsg.
- Configure VantagePoint tool for viewing configuration items.

Creating a VantagePoint Server Account

Every VantagePoint server that will be integrated with Service Desk needs to have a Service Desk account. UNIX servers need to have an account starting with VPU, and Windows servers need to have an account starting with VPW. The account and host name of the VantagePoint server is used by the database rules to register and send acknowledgments and annotations to the VantagePoint servers. Default accounts will be created when you install your database.

Keep the following in mind when creating accounts for each VantagePoint server you will integrate with Service Desk:

- Accounts must start with VPW or VPU, followed with the server host name, for example *VPW_VantagePointserver1*.
- Create non-user interface accounts for integrations.
- Access rights need to include the Helpdesk role as a minimum.

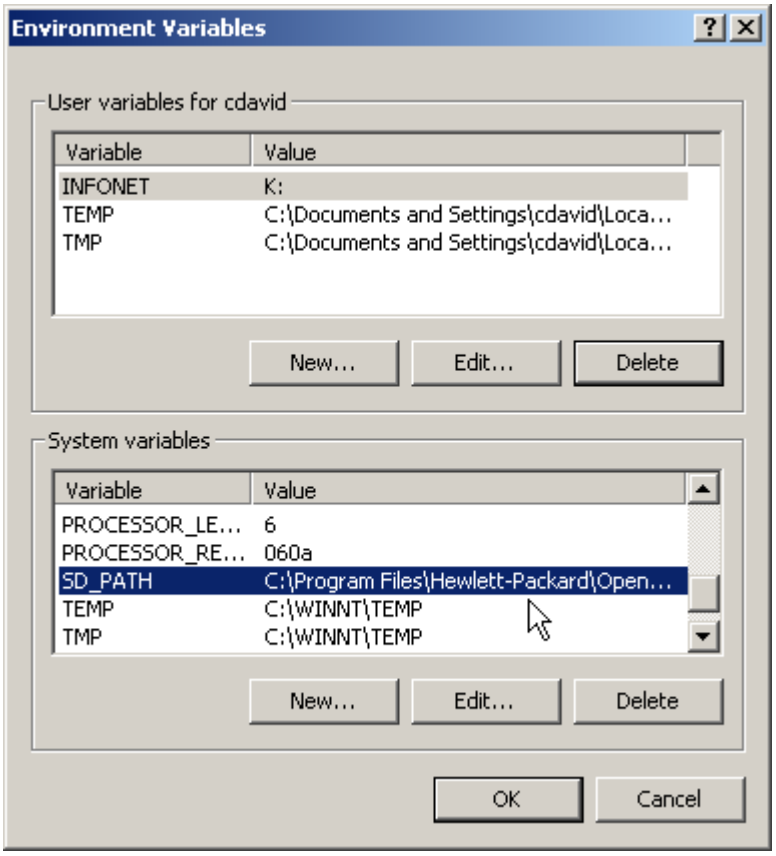
For specific information on creating accounts in Service Desk refer to the *Administrator's Guide* or the O*nline Help*.

Setting the Environment Variable for Service Desk

The environment variable needs to be set on Service Desk application server so that VantagePoint can find the log file for the Service Desk server for monitoring purposes. The variable can be set from the System Properties dialog box:

1. Go to the location where you set environment variables. This differs by operating system, for Windows 2000 users, go to the Start menu, select Settings, then Control Panel, then System and click the Environment Variables button.
2. Select SD_PATH in the `System Variables` portion of the window. If the SD_PATH variable is not present you can create it as shown in the following dialog box. The value field must contain the complete path to the folder where `logserver.txt` is located:

Figure 3-1 System Properties - SD_PATH



3. Click OK when finished.

Putting the Service Desk Bin folder in the Path

If you want to be able to open a Service Desk form while working in VantagePoint you will need to include the Bin folder in the Service Desk path.

A folder called **<SD product path>**\Client\Bin on a Service Desk client installation, or **<SD product path>**\Server\Bin on a Service Desk server, contains the file SDDataForm.exe. This file is triggered by VantagePoint to send a request via the command line to open a specified Service Desk data form. This will only work when VantagePoint and

Service desk are installed on the same computer. For VantagePoint to find SDDataForm.exe the path must be included in the Windows Environment variables. You can add the bin folder to the path by performing the following steps:

1. Go to the location where you set environment variables. This differs per operating system.
2. Select Path from the list of system variables.
3. Change the value of the path by adding <**SD product path**>\Client\Bin or <**SD product path**>\Server\Bin to the end of the path, which one you add depends on whether you are running VantagePoint on the same machine as the Service Desk server or a client. Use a semi-colon as a separator.
4. Click Set when finished, then OK to save it.
5. Verify that it works by using the DOS command: SDDataForm Incident Configurationitem.Searchcode=XXXXX

Where XXXXX is the search code of a configuration item in your Service Desk database.

NOTE To start Service Desk in context with SDDataForm.exe, the Service Desk Client or Server must be installed on the same machine as VantagePoint.

Importing Nodes Into Service Desk

In Service Desk configuration items need to exist for all nodes managed by VantagePoint. This step needs to be performed so that events coming from the VantagePoint server can find the configuration item they are related to in Service Desk. The VantagePoint server is also a managed node.

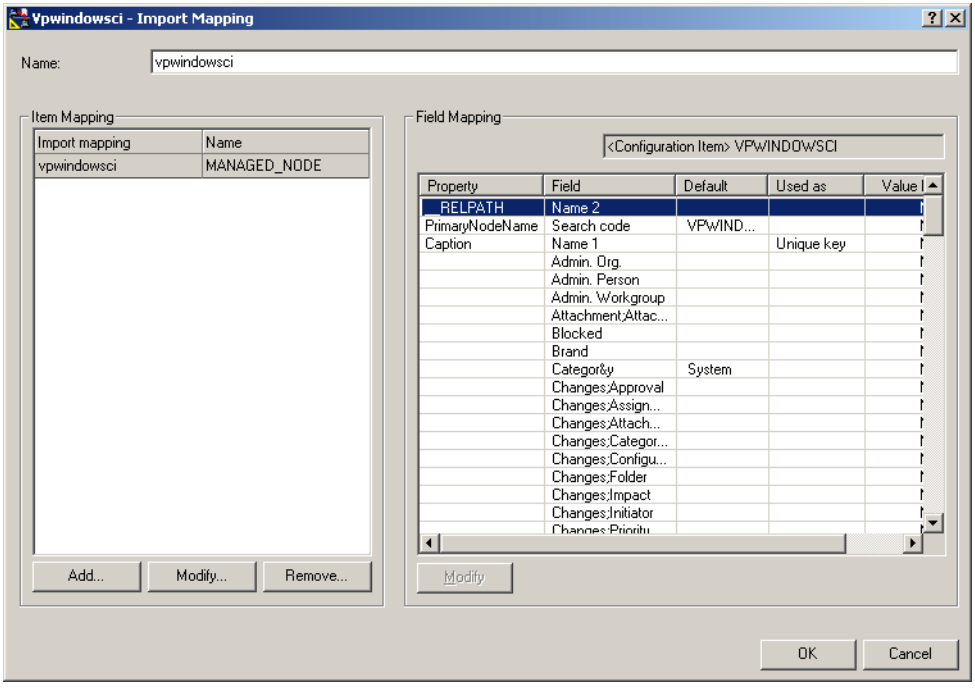
NOTE Changing any item in Service Desk, for example adding or changing the name of a status used for CIs, effects the import mapping used for importing nodes. For the import mapping to work completely you will either need to modify the template used for the import mapping and fill in the right status with the new values for example, or you can modify

your Service Desk application to match the import mapping.

Import Mapping for Importing Nodes

The import mapping for importing nodes as configuration items is shown with default values in the following figure:

Figure 3-2 Import Mapping CI Nodes - Windows



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*.

Configurable Extractor for VPO for Windows Nodes

A configurable extractor is used to define how the nodes should be exported from the VantagePoint database. An example of the extractor file, `vpwindowsci.ini`, with default settings follows:

`vpwindowsci.ini file for Vantage Point for Windows and`

```
Service Desk integration.
; Used for VPW managed node -> SD CI data exchange.

[DSN]
NAME=              WBEM Source
USR=
PWD=
DBQ=               root\HewlettPackard\OpenView\VantagePoint
SERVER=
SYSPROPS=          TRUE
NAMESPACES=
{root\HewlettPackard\OpenView\VantagePoint,deep}
UIDPWDDEFINED=     TRUE

[SYSTEM]
LOG=               TRUE
XML=               TRUE
LOG_FILE=          C:\temp\VPW.log
OUTPUT_FILE=       c:\temp\VPW.txt
XML_OUTPUT_FILE=   c:\temp\VPW.xml
APPLICATION_NAME= VPW

[CLASSES]
NAME=              MANAGED_NODE

[MANAGED_NODE]
SOURCE=            OV_ManagedNode
ATT=               PrimaryNodeName, Caption, __RELPATH
COLUMNS=           OV_ManagedNode.PrimaryNodeName,
OV_ManagedNode.Caption, OV_ManagedNode.__RELPATH
LOADTABLE=         TRUE
```

Importing Nodes From VantagePoint for Windows

A Data Exchange Task is configured in the demo database for performing this action. Nodes can be imported from the Service Desk application server as follows:

1. Create an ODBC link. From the Windows control panel, click `ODBC Data Sources`. Open the `System DSN` tab and select the `WBEM Source`:

NOTE The WBEM ODBC driver must be installed on Windows prior to starting this installation. It is available on the CD-ROM or can be obtained from Microsoft.

Figure 3-3 ODBC Data Source Administrator dialog box

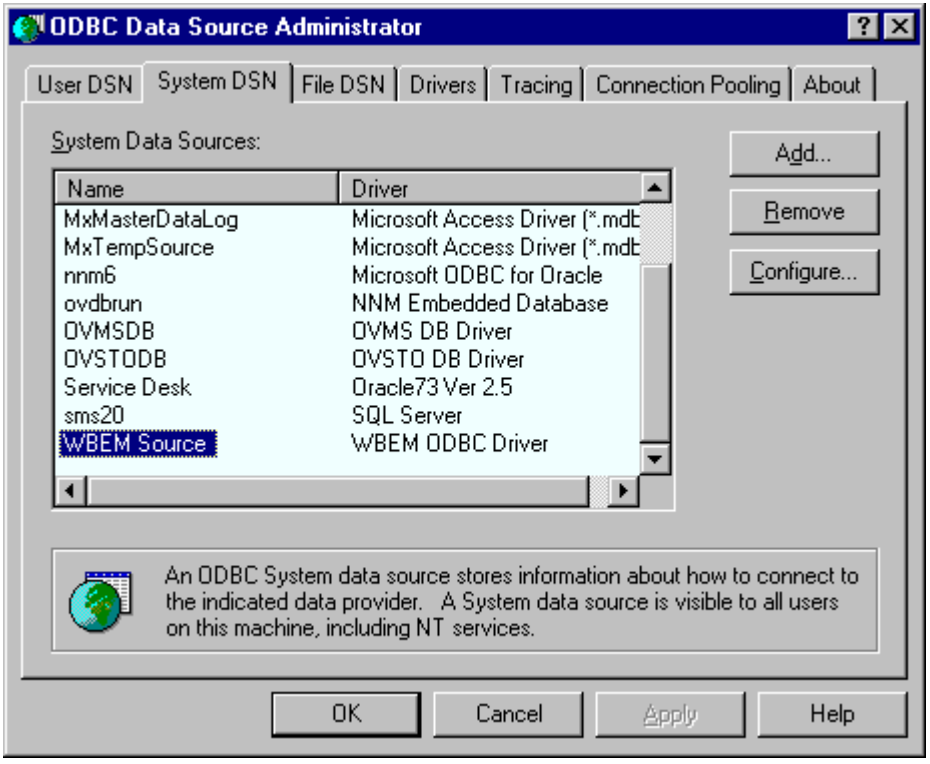
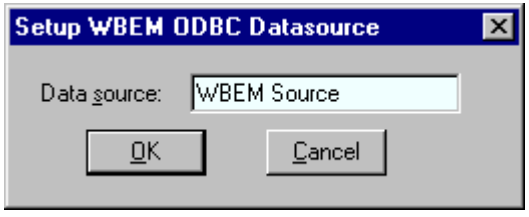
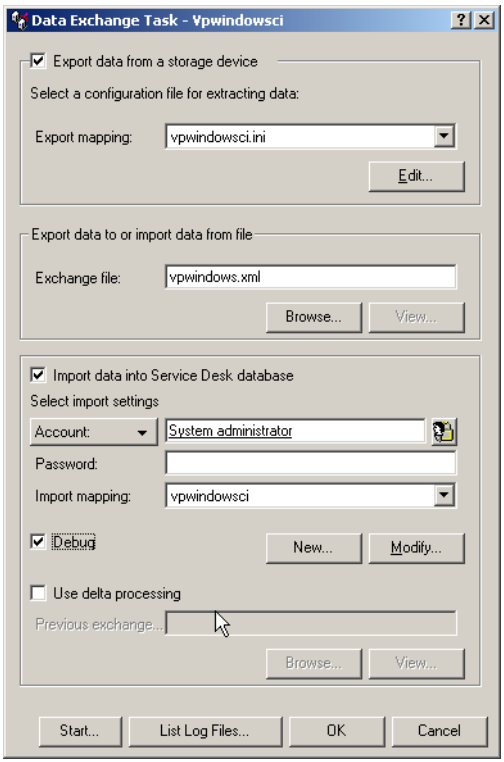


Figure 3-4 Setup WBEM ODBC Datasource



2. Use the Data Exchange task `vpwindowsci` (for Windows servers) to import all managed nodes as configuration items.

Figure 3-5 Importing Managed Nodes - Windows



3. Check the log files `vpwindows_exp.log` and `vpwindowsci_imp_error.log` for errors.

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*.

Multiple VantagePoint Servers

If the VantagePoint for Windows server and the Service Desk application server are not located on the same machine, choose one of the two following options:

Option 1:

1. On the Service Desk application server, install the Microsoft WMI SDK from: *http://msdn.microsoft.com/downloads/sdks/wmi/* This contains the WBEM ODBC driver.
2. Modify the files `vpwindowsci.ini` and `vpwindowsservices.ini`. Under the DSN section, locate the Server=keyword. Specify the VantagePoint server as the value, for example \\MYVPSERVER.
3. Export and import the data on the Service Desk application server.

Option 2:

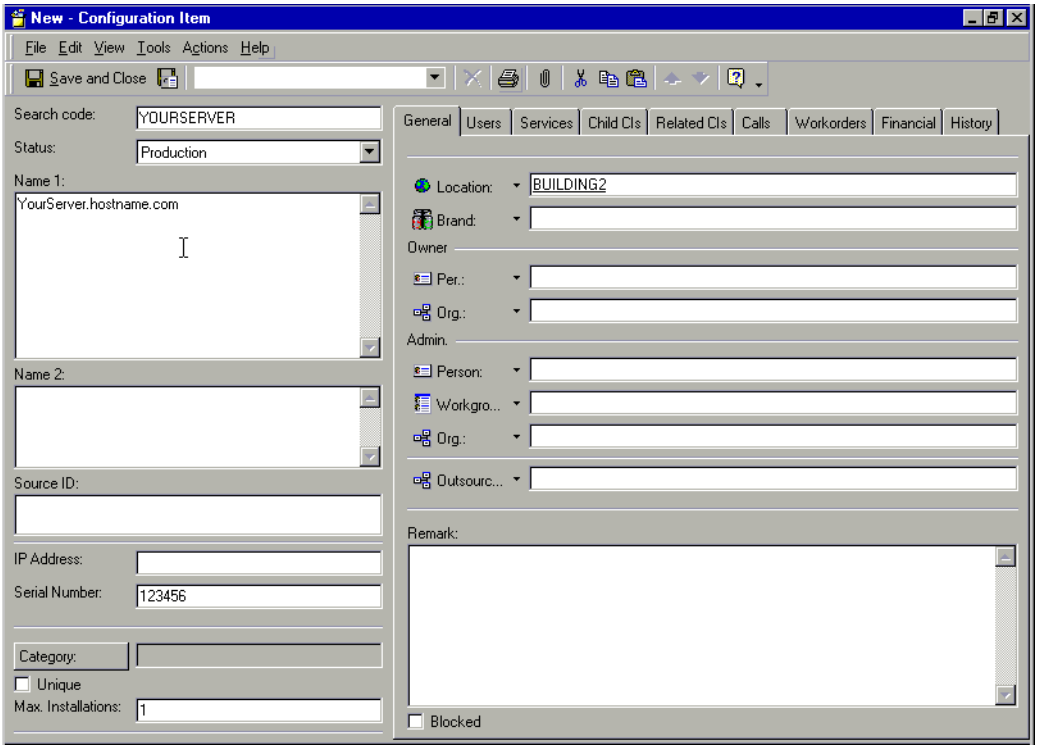
1. Install the Service Desk client, including data exchange and the files `vpwindowsci.ini` and `vpwindowsservices.ini` on the VantagePoint server.
2. Export the data on the VantagePoint server.
3. Move the resulting XML file to the Service Desk application server.
4. Import the data on the Service Desk application server.

Manually Creating a Configuration Item

You can manually create Configuration Items in Service Desk for all or part of your managed nodes. To create a configuration item for a managed node:

1. Open a new Configuration Item dialog box. 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 1` field, enter the complete host name for the managed node:

Figure 3-6 Configuration Item dialog box



Importing Services Into Service Desk

In Service Desk, configuration items can be made for VantagePoint services. A Data Exchange Task is provide with the integration for performing this action. Services can be imported from the Service Desk application server as follows:

1. Create an ODBC link. From the Windows control panel, click `ODBC Data Sources`. Open the `System DSN` tab and select the `WBEM Source`.
2. Update the `DSN` section of the `vpwindowsservices.ini` file.
3. Verify that the `Operational Level Service` category is included in the `VPService` template. See “Creating the Operational Level Service Category” on page 56 for details.
4. Use the Data Exchange task `vpwindowsservices` (for Windows

servers) to import all managed nodes as configuration items.

5. Check the log files `vpwindows_exp.log` and `vpwindowsci_imp_error.log` for errors.

NOTE

Limitations exist when mapping fields in VantagePoint 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 `VPWIndowsCI` is present in the import mapping as a solution to this limitation. If you are importing services from VantagePoint to Service Desk the caption field in the VPW 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 VantagePoint 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. This only applies to the VantagePoint for Windows integration and not the UNIX integration because different ODBC drivers are used.

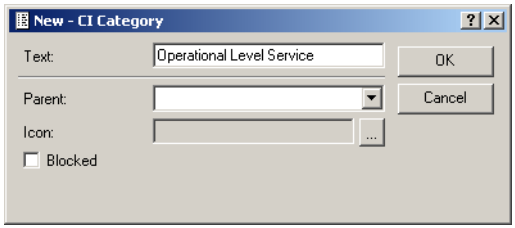
Creating the Operational Level Service Category

The `Operational Level Service` category may already be included in the `VPService` template in your database. The category is used when you import VantagePoint services as Service Desk configuration items.

To create the category and add it to the template if it is not present:

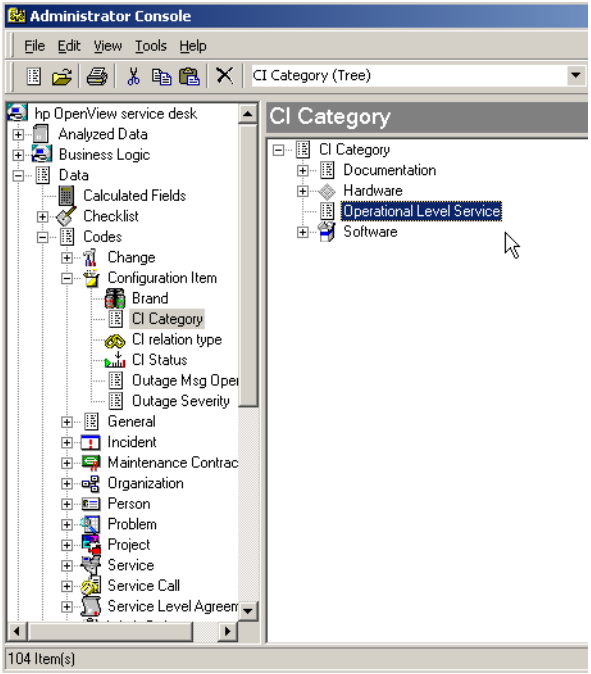
1. From the `Tools` menu select `System`, then click `Data`, then `Codes`, and `Configuration Item` from within the Administrator Console.
2. Click `CI Category`, then right-click in the screen and select `New CI Category` from the menu that appears.
3. In the `New CI Category` dialog box enter `Operational Level Service`, in the `Text` field and leave the `Parent` field empty:

Figure 3-7 New CI Category



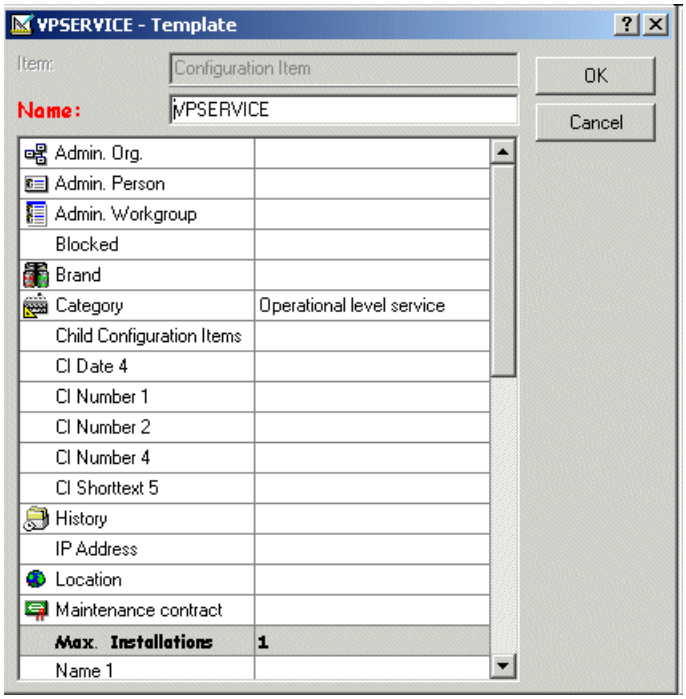
4. Verify that there is no checkmark in the Blocked check box, and click OK:

Figure 3-8 CI Category Operational Level Service



5. Next, you will need to add the new category to your VPSERVICE template. From the Data folder select Templates, then Configuration Item. Open the VPSERVICE template:

Figure 3-9 VPSERVICE - Template



6. Double-click the `Category` entry and use the Quick Find feature to locate the `Operational Level Service` category you created.
7. Select the `Operational Level Service` category and click `OK` to add it to the template.

Modifying the Import Mapping for Events

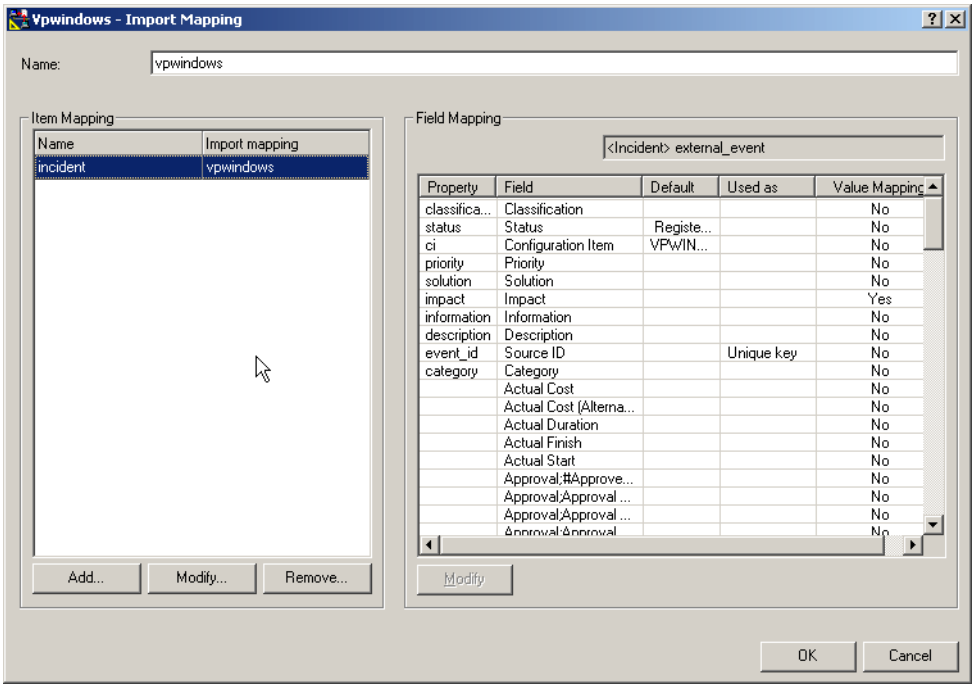
An import mapping with default values, called `vpwindows`, is provided for the VantagePoint Operation integration, you can modify the import mapping as needed.

VantagePoint message attributes are mapped to Service Desk incident attributes.

For detailed information on modifying or creating a new import mapping, refer to the*HP OpenView Service Desk: Data Exchange Administrator's Guide*.

The default import mapping can is shown in the following dialog box:

Figure 3-10 VP Windows Mapping



Mapping Event Information for Windows

You can send event information from VantagePoint to Service Desk using the WMI policy that intercepts OV_Messages and uses a Visual Basic script called `Vpw-Sd.vbs` to call `sd_event` and forward some of the attributes to Service Desk, creating a corresponding incident in Service Desk. The policy must be deployed on the VantagePoint management server machine. The attributes are mapped as follows:

Table 3-1 Default Attribute Mapping - Windows

Properties **Message Attributes**	**Fields**
Id	Event_id
Test (first 80 char)	Description
Original message	Information

Table 3-1 Default Attribute Mapping - Windows

Properties Message Attributes	Fields
Original text	Information
Application	Information
Object	Information
Annotation 1 - Annotation n (concatenated)	Information
OV_Message.GetInstruction()	Solution
OV_ManagedNode.PrimaryNodeName	CI
Severity	Impact (mapped)

Configuring Database Rules

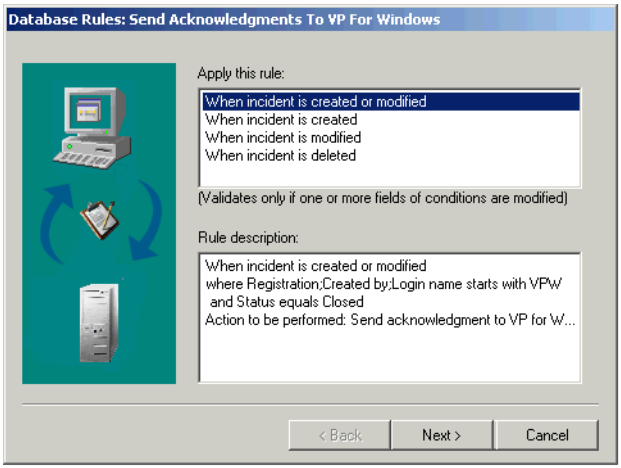
Database rules can be used to send information from Service Desk to VantagePoint. A Service Desk agent must be running on each VantagePoint server to execute the commands specified in the rules. The following sections contain example for setting up rules to send annotations and acknowledgments.

NOTE Clear the Blocked check boxes for the action and for the rule to activate them.

Send Acknowledgment to VantagePoint for Windows

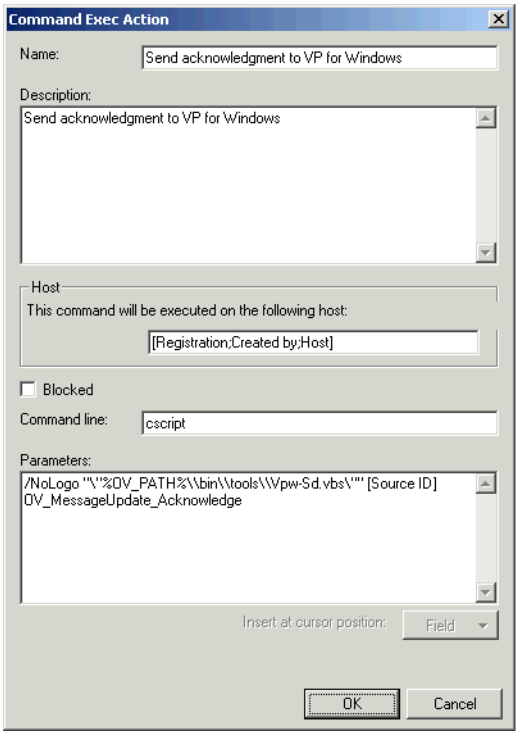
You can configure a database rule to send acknowledgments to VantagePoint for Windows as follows:

Figure 3-11 Database Rule to Send Acknowledgment to VPO for Windows



- For each modified incident;
- if `[Registration; Create by; Login name]`starts with VPW;
- and status is changed to closed;

Figure 3-12 Action to Send Acknowledgment to VPO for Windows



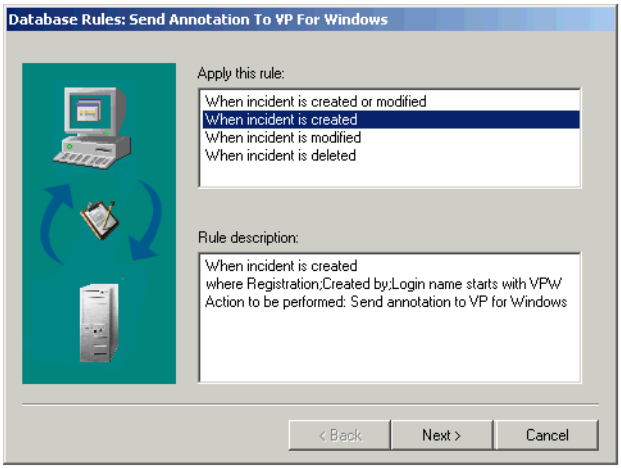
- on Host: `[Registration;Created by;Host]`
- execute the command: `cscript`
- with the parameters: *`/NoLogo "\"%OV_PATH%\\bin\\tools\\Vpw-Sd.vbs\"" [Source ID] OV_MessageUpdate_Acknowledge`*

NOTE To create the environment variable OV_PATH, refer to “Setting the Environment Variable for VantagePoint” on page 68.

Send Annotations to VantagePoint for Windows

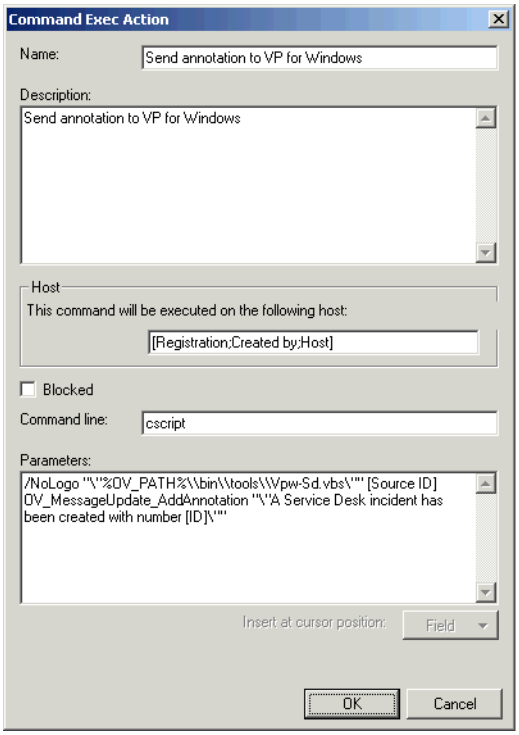
You can configure a database rule to send annotations to VantagePoint for Windows as follows:

Figure 3-13 Database Rule to Send Annotations to VPO for Windows



- for each inserted incident;
- if `[Registration; Created by;Loginname]` starts with VPW;

Figure 3-14 Action for Sending Annotations to VPO for Windows



- execute on host: `[Registration; Created by;Host]`.
- the command: `cscript`
- with parameters:
  `/NoLogo "\"%OV_PATH%\\bin\\tools\\Vpw-Sd.vbs\"" [Source ID] OV_MessageUpdate_AddAnnotation "\"A Service Desk incident has been created with number [ID]\""`

TIP

Create new database rules quickly by using the copy and paste functions. Select a rule that is similar to the rule you want to create and click CTRL+C then CTRL+V to make a copy. Double-click the copied rule to open it and then use the database rules Wizard to change the parameters and the name.

View VantagePoint State from Service Desk

You can view current VantagePoint Service State from a browser in Service Desk. See “Installing the HTML Service Viewer” on page 38, and “Viewing VantagePoint Service State” on page 119 for more information.

See “View The Current Status of a VantagePoint Service From Service Desk” on page 92, for an example of how the smart actions have been set up for VantagePoint on Unix.

NOTE

If you are using smart actions to view service statuses, your VantagePoint Web site needs to be entered in the parameters portion of the smart action. Normally the Web site will be the same as your VantagePoint server.

TIP

A number of functions available with this integration use the Smart Actions feature in Service Desk. To create a new Smart Action:

1. From the `Tools` menu, select `System`, then click `Business Logic`, `Actions`, then `Smart Actions`.
2. Click the item that you want to create a smart action for. For example; a configuration item or a Service Call.
3. Right-click and select `New Smart Action` from the popup menu.

Additional information on setting up and using Smart Actions can be found in the Online Help for Service Desk.

Generate a VantagePoint Message from Service Desk

The `Generate VP message manually` Smart Action can be used to forward an Incident to the VantagePoint operator. If configured correctly this manually generated message will not cause the automatic trouble-ticket interface in VantagePoint to generate a new incident in Service Desk.

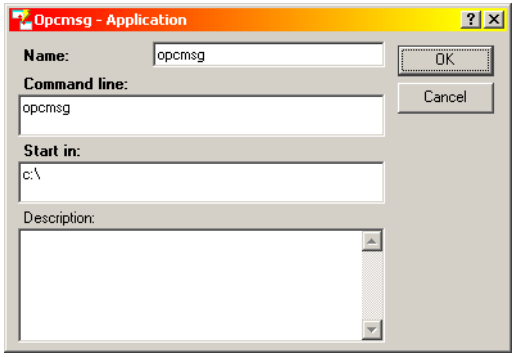
First make sure the VantagePoint Agent is installed on the VantagePoint Management Server. The default location is:
`C:\WINNT\Hewlett-Packard\OVEnterprise\Agent\`*`unique_code`*`\bin`

The opcmsg application can be found in the same folder. The system environment variable PATH contains the exact path to this program, so that it can be called without specifying the folder location. The opcmsg application can be used to forward field information from a Service Desk incident to the VantagePoint Management Server.

To set up the opcmsg application:

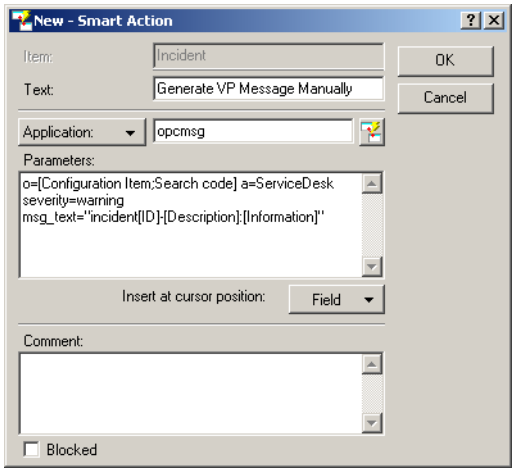
1. Open the Administrator Console in Service Desk, then click Business Logic, and then open Applications.
2. Right-click and select New Application from the menu. Define the application as shown in the following dialog box:

Figure 3-15 Opcmsg Application



3. Next, create a Smart Action using the opcmsg application as follows:

Figure 3-16 Generate VP Message Manually



The parameters entered determine what information from the Incident will be passed to the VantagePoint application. The parameters use the VantagePoint application's opcmsg syntax. In the example above a equals Application, and o equals Object.

Your system administrator will need to provide access to this smart action for all clients that will be using it. The opcmsg command will also need to be deployed to the host machines of the Service Desk clients that will use the command. Only then will it be possible to execute opcmsg to log an event in the VantagePoint Management Server's Active messages window from remote client machines.

For more information on deploying opcmsg, see "Deploying Opcmsg to Service Desk Clients" on page 71.

To stop VantagePoint from forwarding the message to Service Desk, creating a duplicate incident, the Forward Message to Service Desk policy should be configured so that it does not forward messages to Service Desk that originated from Service Desk. The messages will remain in the VantagePoint browser.

VantagePoint for Unix users can use the ForwardTroubleTicket:flag to stop the forwarding of events that originated from Service Desk. This option can be turned on or off in the template by the VantagePoint operator. In VantagePoint for Windows this option cannot be changed in a message, but the option is present for providing compatibility with VantagePoint for UNIX.

VantagePoint for Windows

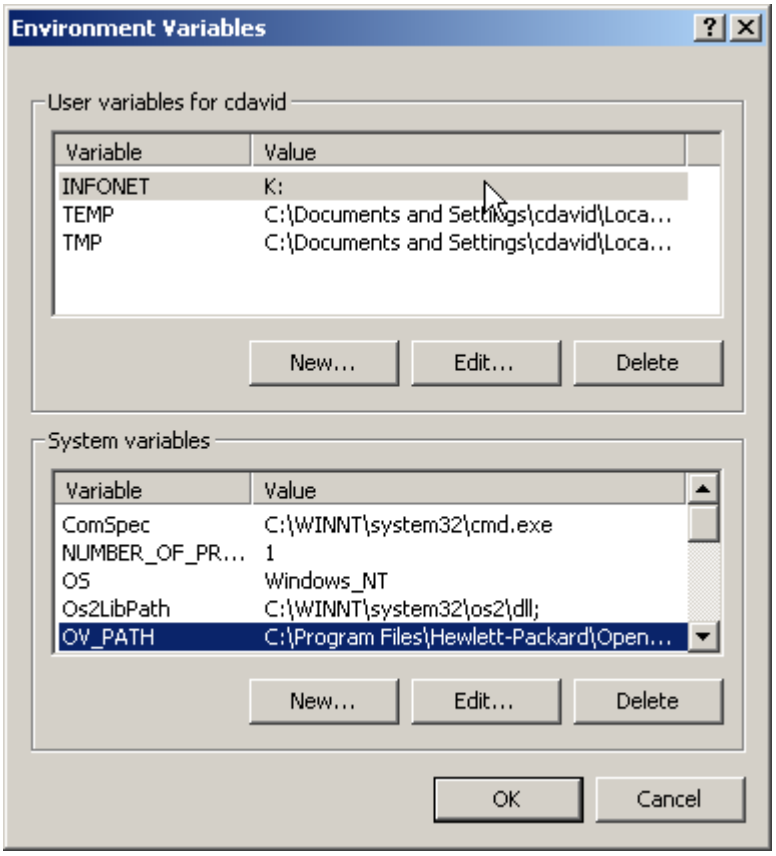
This section explains the configuration tasks to be done in the Vantage Point application. For an overview of all configuration tasks, see “Overview” on page 46.

Setting the Environment Variable for VantagePoint

The environment variable needs to be set on your VantagePoint for Windows application server. To set the variable:

1. Go to the location where you set the environment variables for your Windows operating system.
2. Select OV_PATH in the System Variables portion of the window. If the OV_PATH variable is not present you can create it as shown in the following dialog box:

Figure 3-17 System Properties - OV_PATH



3. Click OK when finished.

Modifying the Configurable Extractor File

Modify the configurable extractor, sd_event.ini. The default location is: *C:\Program Files\Hewlett-Packard\OVEnterprise\bin\tools*. Many of the items will be configured automatically for you during the installation process. You will want to update the ACCOUNT and SERVER entries, as a minimum. If you changed the name of the import mapping supplied with this integration, you will need to enter the new name in

the MAPPING row. A copy of the example sd_event.ini file follows:

```
[SD_Event]
LOGFILE=sd_event.log
ERROR_LOGFILE=sd_event_error.log
ACCOUNT=VPW_server1/Password
SERVER=your server
PORT=30980
MAPPING=vpwindows
CLASSNAME=incident
MODUS=insert
```

Modifying the Forwarding Policy

The policies called Forward message to Service Desk and Forward message changes to Service Desk are configured to forward all major and critical messages that are not log only. You can specify what messages are forwarded by editing the conditions of the policy. To edit the policy:

1. Right-click on the Forward message to Service Desk policy and select All Tasks, then Edit.
2. In the Rules tab, click Modify.
3. Click Add or Modify to change the conditions for each rule.

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

Deploying the Forwarding Policies

The policies called Forward messages to Service Desk and Forward message changes to Service Desk need to be deployed on your application server every time you make a change. To deploy the policy:

1. Right-click on the policy and select All Tasks, then Deploy On.
2. Select your management server node you want to deploy it on.
3. Click OK.

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

Deploying the Monitoring Policies

Policies are supplied to monitor this integration. After installing the integration you need to deploy the policies to the proper locations. The list below shows the policies and where they need to be deployed:

Monitor sd_event logfile	VantagePoint management server
Monitor Service Desk logfile	Service Desk server

Deploying Opcmsg to Service Desk Clients

Opcmsg is used to create VantagePoint 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. To deploy the policy:

1. In the VantagePoint management console, open `Policies grouped by type`.
2. Open the `Open Message Interface` policy group.
3. Select the `opcmsg` policy, right-click and then select `All Tasks`, then `Deploy on`.
4. Select all of the Service Desk client nodes that you want to be able to manually create VantagePoint messages from and click `OK`.

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

Configuring VantagePoint Tools

A VantagePoint tool is supplied with this integration for viewing Service Desk configuration items when you have the related node selected in VantagePoint. After installing the integration, you need to configure the target nodes for the tool. Tools can be:

- run on the nodes you specify;
- configured to permit users to choose the nodes on which the tool will run;
- run in the context of a service (run on the node that hosts that service).

Use the `Target` tab in the Tool Properties dialog box to select the nodes

on which you want the tools to run. You must also specify `Node List` in the `Execute On` list. This configures the tool to run on all the nodes in the `Predefined Node List`.

If you prefer to allow your users to determine where a tool is to be run, you must choose `Selected Node` in the `Execute On` list. When the tool is executed, a list appears from which users choose the location (service or node) where the tool will run.

For additional information on using VantagePoint Tools, refer to the Online Help in the *VantagePoint for Windows* application.

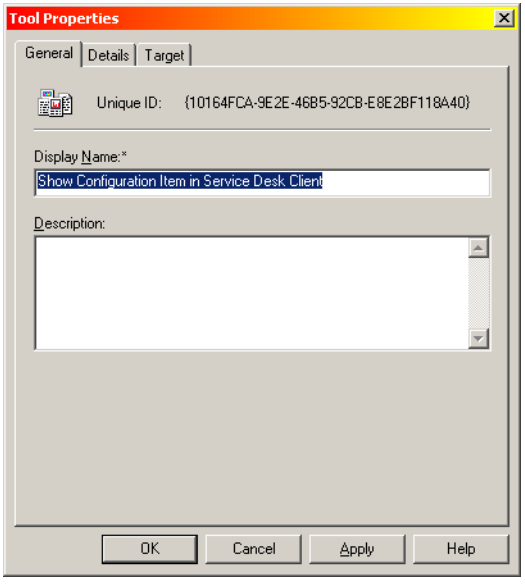
Viewing Service Desk CIs from VantagePoint

This section shows how to configure a VantagePoint for Windows tool to open a Service Desk configuration while working in VantagePoint.

In your VantagePoint for Windows application:

1. Open the Tool Properties dialog box and enter a name for the tool in the General tabbed page:

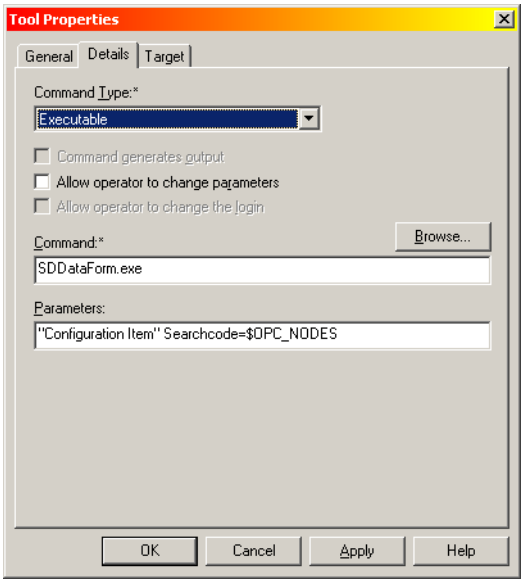
Figure 3-18 Show Configuration Item - General tab



2. Open the Details tabbed page and enter **`Executable`** in the `Command`

Type field:

Figure 3-19 Show Configuration Item - Details tab



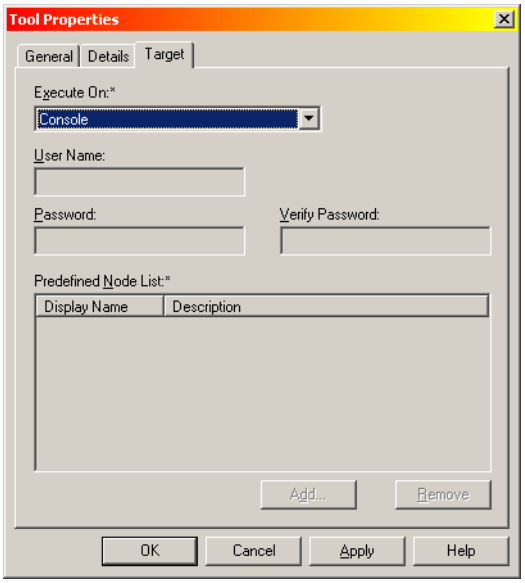
3. In the Command field enter **SDDataform.exe**. This is the Service Desk program capable of opening a dialog box. You will need to have put the Bin folder in the path for the VantagePoint to find SDDataform.exe, see “Putting the Service Desk Bin folder in the Path” on page 48.

4. In the Parameters field enter **"Configuration Item" Searchcode=$OPC_NODES**.

   If you used the default import mapping to import node information, PrimaryNodeName data is imported into the Configuration Item field Searchcode. It is recommended that you use unique search codes to prevent errors.

5. In the Target tabbed page enter **Console** in the Execute On: field. This will allow the program to interact with your console:

Figure 3-20 Show Configuration Item - Target tab



4 VP UNIX and Service Desk Configuration

The configuration tasks that need to be performed in Service Desk and on the VantagePoint for UNIX server are explained in this chapter.

Overview

The following configuration steps need to be performed on your Service Desk and your VantagePoint for Unix application servers.

On the Service Desk application server:

- Create a VantagePoint Integration account.
- Set the environment variable for Service Desk.
- Import managed nodes as configuration items.
- Import services as configuration items.
- Modify the import mapping for events (forwarded messages).
- Configure database rules.
- Configure Smart Actions.
- Configure outage planning to suppress messages (optional).

On your VantagePoint Server running on UNIX:

- Modify the `sd_event.ini` file.
- Configure mkoutage.conf and templates for outage planning (optional).
- Make Service Desk a VantagePoint user.
- Move the Service Desk application to Application Bank.
- Modify the message source templates.
- Deploy the monitoring policies
- Configure the Service Desk agent.

Creating a VantagePoint Server Account

Every VantagePoint server that will be integrated with Service Desk needs to have a Service Desk account. UNIX servers need to have an account starting with VPU. The account and host name of the VantagePoint server are used by database rules to register and send acknowledgments and annotations to the VantagePoint servers.

For specific information on creating accounts in Service Desk refer to the

Administrator's Guide or the O*nline Help*.

Setting the Environment Variable for Service Desk

The environment variable needs to be set on Service Desk application server so that VantagePoint can find the log file for the Service Desk server for monitoring purposes. If the SD_PATH variable is not present you will need to enter the value field with the complete path to the folder where logserver.txt is located. See "Setting the Environment Variable for Service Desk" on page 47 for an example.

Importing Nodes Into Service Desk

In Service Desk configuration items need to be made for all nodes managed by VantagePoint. This step needs to be performed so that events coming from the VantagePoint server can find the configuration item they are related to in Service Desk. The VantagePoint server is also a managed node.

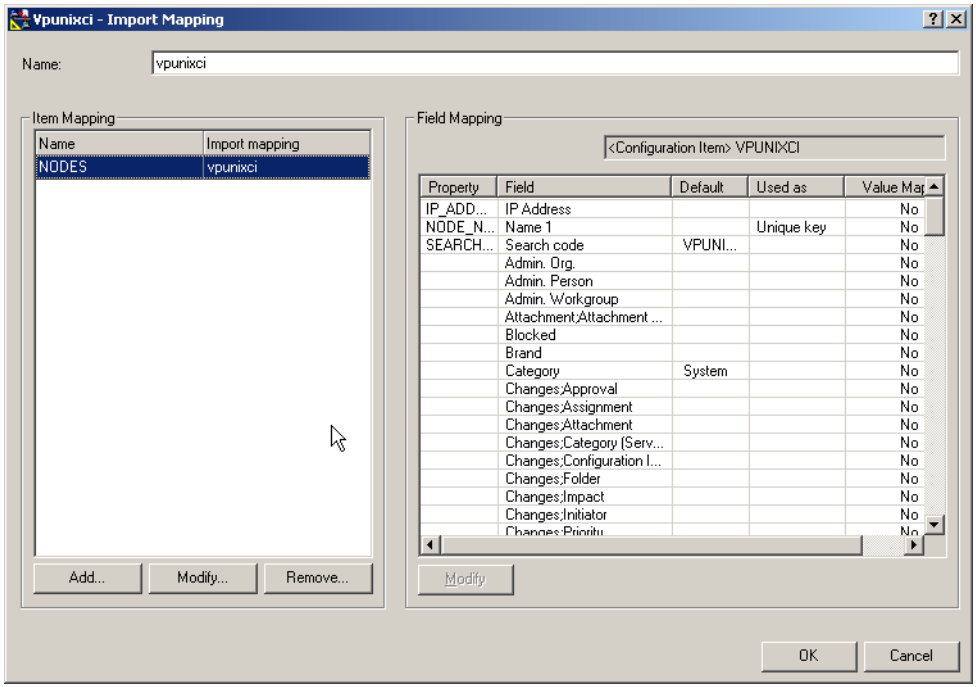
NOTE

Changing any item in Service Desk, for example adding or changing the name of a status used for CIs, effects the import mapping used for importing nodes. For the import mapping to work completely you will either need to modify the template used for the import mapping and fill in the right status with the new values for example, or you can modify your Service Desk application to match the import mapping.

Import Mapping for Importing Nodes

The import mapping for importing nodes as configuration items is shown with default values in the following figure:

Figure 4-1 Import Mapping CI Nodes - Unix



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*.

Configurable Extractor for VP Unix Nodes

A configurable extractor is used to define how the nodes should be exported from the VantagePoint database. An example of the extractor file with default settings is provided with this integration, vpunixci.ini,for UNIX:[DSN]

```
NAME=VP for Unix

USR=opc_op

PWD=opc_op


[SYSTEM]

LOG=TRUE
```

```
XML=TRUE

LOG_FILE=vpunixci.log

OUTPUT_FILE=vpunixci.txt

XML_OUTPUT_FILE=vpunixci.xml

APPLICATION_NAME=vpunixci


[CLASSES]

NAME=nodes

-- create a searchcode from the node name by taking the first
part

-- to the period, make it upper case and remove hyphens

[nodes]

SOURCE=OPC_NODE_NAMES

ATT=[searchcode],[node_name],[ip_address]

COLUMNS=replace(upper(substr([node_name],1,
instr([node_name],'.')-1)), '-','') as [searchcode],
[node_name],trunc((ip_address/(256*256*256))) || '.' ||
trunc(mod(([ip_address]/(256*256)),256)) || '.' ||
trunc(mod(([ip_address]/256),256))  || '.' ||
mod([ip_address],256) as [ip_address]

-- (([ip_address]/(256*256*256)) Mod 256) & "." &
((([ip_address]/(256*256)) Mod 256)) & "." &
((([ip_address]/256) Mod 256)) & "." & ([ip_address] Mod
256) as [ip_address]

condition=[node_name] is not null

LOADTABLE=TRUE
```

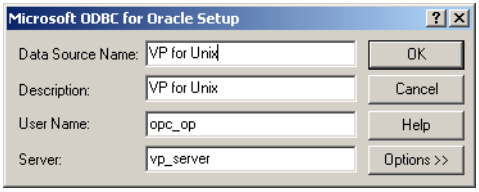
Importing Nodes From VantagePoint for UNIX

A Data Exchange Task is configured in the demo database for performing this action. The Oracle database must be accessible from the Service Desk application server for this action to work. Nodes can be imported from the Service Desk application server as follows:

1. Create an ODBC link to the VantagePoint server. The ODBC link VP

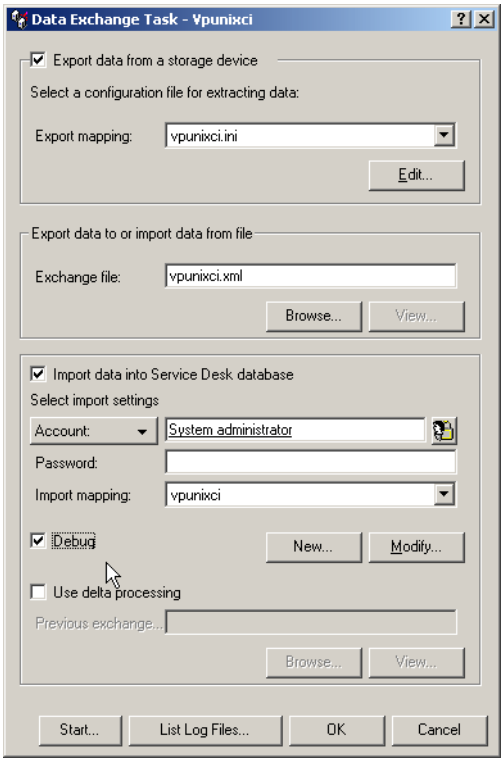
for Unix is automatically created during installation. From the Windows control panel, click ODBC Data Sources. Select the System DSN tab. In the Server field enter the Oracle connect string for the VantagePoint for UNIX database. The Oracle instance name is openview by default. The following figure shows and example ODBC link for a VantagePoint for UNIX Oracle database as an example:

Figure 4-2 ODBC Link for VP UNIX Oracle database



2. After the link is established, use the Data Exchange task vpunixci (for UNIX servers) to import all managed nodes as configuration items. The default user name and password is opc_op, it can be changed if needed. The open task will resemble the following:

Figure 4-3 Data Exchange Task for Importing Nodes for UNIX



3. Check the log files `vpunix_exp.log` and `vpunixci_imp_error.log` for errors.

For additional information about how to use Data Exchange for export and importing data, please refer to 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. This may be easier when adding one or two nodes rather than running the Data Exchange process again.

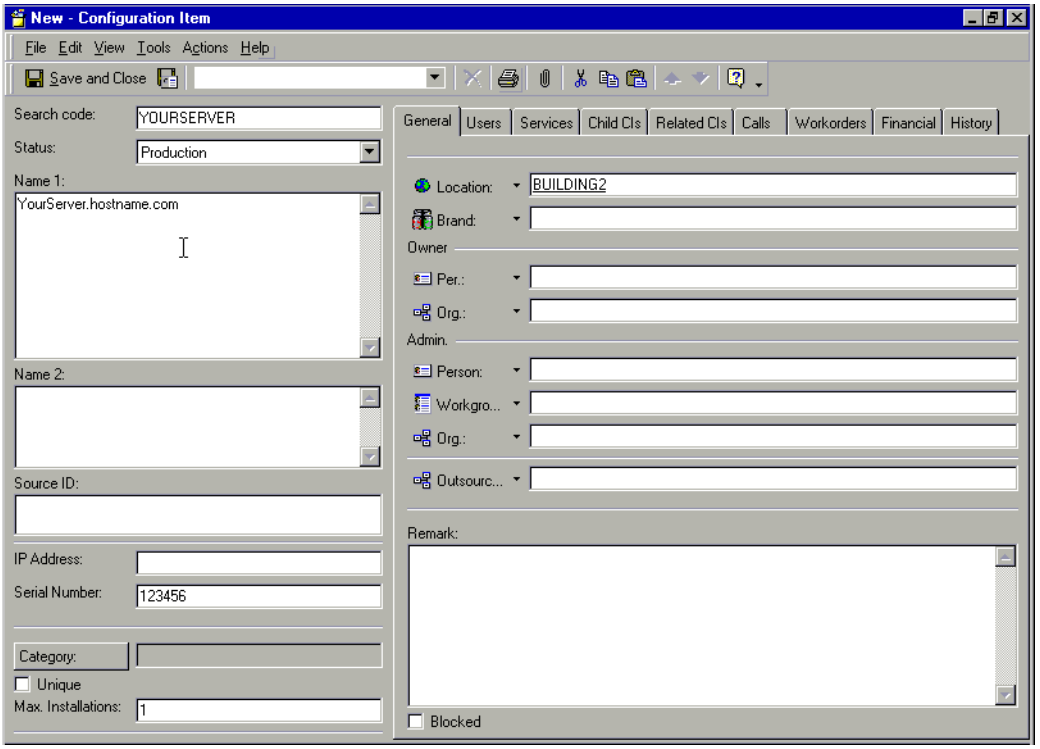
To create a configuration item for a managed node:

1. Open a new Configuration Item dialog box. 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 1` field, enter the complete host name for the managed node:

Figure 4-4 Configuration Item dialog box



Importing VantagePoint for UNIX Services

To export Services from VantagePoint for UNIX and import them as configuration items in Service Desk, you will need to save the data in ASCII text format and use an ODBC text editor as explained in the following steps:

1. An ODBC text link to the `vp_services.txt` file is created when you install this integration. If you need to, you can create it manually as follows:

a. Select the System DSN tab and click Add.

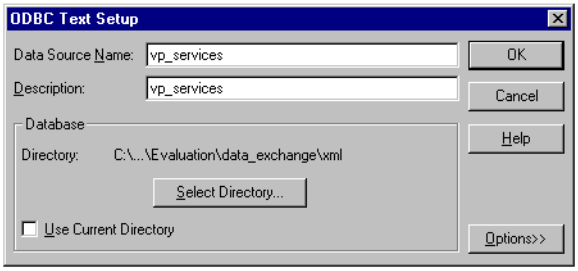
b. Select Microsoft Text Driver and then click Finish.

c. Enter **vp_services** in the Data Source Name field.

d. Enter **vp_services** in the Description field.

e. Click Select Directory and enter *Service Desk product path*\data_exchange\xml. Clear the Use Current Directory check box:

Figure 4-5 ODBC Text Link



2. A file was created called schema.ini in: *product path*\data_exchange\xml. If the creation of the file did not occur, you can create the file manually. This file is used to define the structure of the vp_services.txt file. An example of this file follows:

```
[vp services.txt]
ColNameHeader=False
Format=CSVDelimited
MaxScanRows=1
CharacterSet=OEM
Col1=ITEM Char Width 255
Col2=COLUMN1 Char Width 255
Col3=COLUMN1 Char Width 255
Col4=COLUMN1 Char Width 255
Col5=COLUMN1 Char Width 255
```

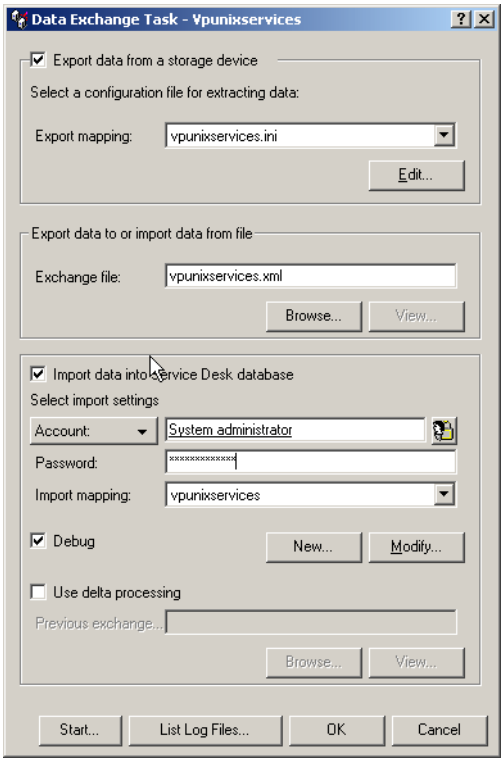
3. Another configuration file called vpunixservices.ini is installed automatically during installation. Verify that the file is located in the *Service Desk product path*\data_exchange\config folder. You may need to change the default settings in the DSN section. An example of the file follows:

```
[DSN]
NAME=vp_services
USR=
PWD=
[SYSTEM]
LOG=TRUE
XML=TRUE
LOG_FILE=vpunixservices.log
OUTPUT_FILE=vpunixservices.txt
XML_OUTPUT_FILE=vpunixservices.xml
APPLICATION_NAME=vpunixservices
[CLASSES]
NAME=SERVICES,DEPENDENCIES
-- For services :
-- column1 = searchcode
-- column2 = name
-- column3 = label
-- column4 = title
[SERVICES]
SOURCE=vp_services.txt
ATT=[COLUMN1],[COLUMN2],[COLUMN3],[COLUMN4]
COLUMNS=[COLUMN1],[COLUMN2],[COLUMN3],[COLUMN4]
CONDITION=[ITEM]='SERVICE'
LOADTABLE=TRUE
-- For dependencies :
-- column1 = source
-- column2 = target
-- column3 = type (DEPENDENCY or COMPOSITION)
[DEPENDENCIES]
SOURCE=vp_services.txt
```

```
ATT=[COLUMN1],[COLUMN2],[COLUMN3]
COLUMNS=[COLUMN1],[COLUMN2],[COLUMN3]
CONDITION=[ITEM]='RELATION'
LOADTABLE=TRUE
```

4. Verify that the `Operational Level Service` category is included in the `VPService` template in Service Desk. See "Creating the Operational Level Service Category" on page 56 for details on how to create it if it is not present.
5. On the VantagePoint for UNIX server, in `/opt/OV/SD/vantagepoint`, run `./vp_services` to generate a complete list of services and to transform the service information into a comma separated file called `vp_services.txt` that can be read by Data Exchange
6. Transfer the generated file to *`Service Desk product path`*`\data_exchange\xml` on your Service Desk application server with the `ftp` command.
7. Open and run the import task in Data Exchange called: `vpunixservices`. An example of the open task follows:

Figure 4-6 Import Services Task for UNIX



8. At the bottom of the Data Exchange dialog box, click `List Log Files`. Open `vpunixservices_imp_error.log` when it appears in the file window and check if any errors are written into the file.

NOTE An example text file called `vp_services_sample.txt` is delivered with this integration. You can rename it to `vp_services.txt` and use it for demonstration purposes.

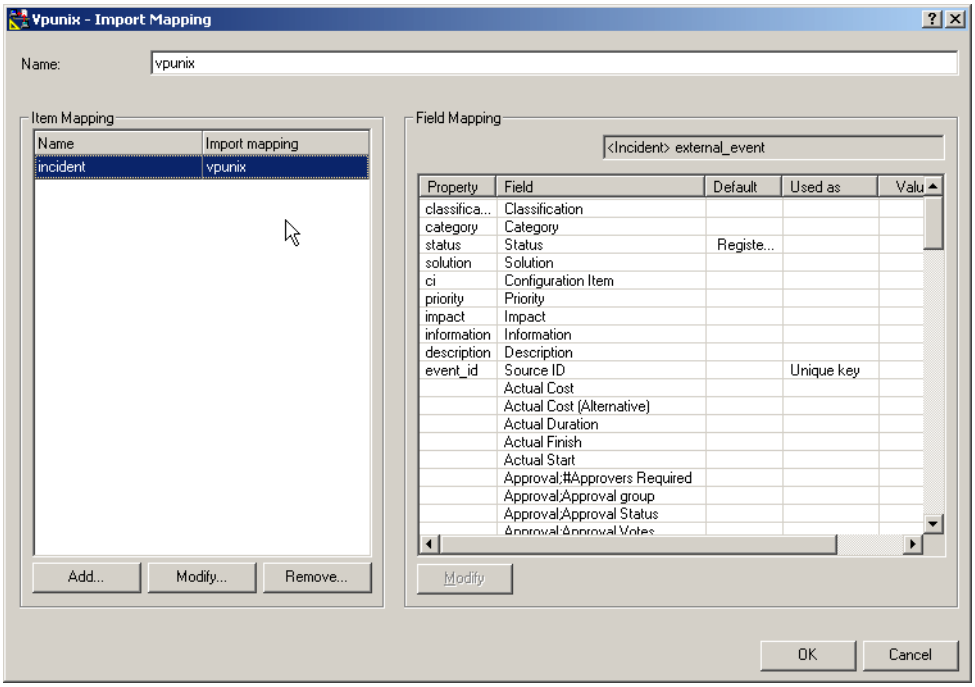
NOTE To view another example of importing data from an ASCII text file, see Appendix A, “Examples” in the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

Modifying the Import Mapping for Events

An import mapping file with default values is provided for the VantagePoint Operation integration, you can modify the import mapping as needed. For additional information on import mapping, refer to the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

The default import mapping supplied with this integration follows for VantagePoint on UNIX.

Figure 4-7 Import Mapping for VantagePoint on UNIX



The interface for forwarding messages to Service Desk uses the VantagePoint API to get message details. This provides access to 48 message attributes in VantagePoint, for example (on UNIX), message ID, message text, instructions, and annotations. You can configure the `sd_eventins.pl` file to insert VantagePoint message attributes into the `Remark` and `Information` fields of an incident in Service Desk. For Example: `information=\"Application: $VantagePoint_params{APPLICATION}; Object: $VantagePoint_params{OBJECT}\".`

For detailed information on modifying or creating a new import mapping, refer to the*HP OpenView Service Desk: Data Exchange Administrator's Guide*.

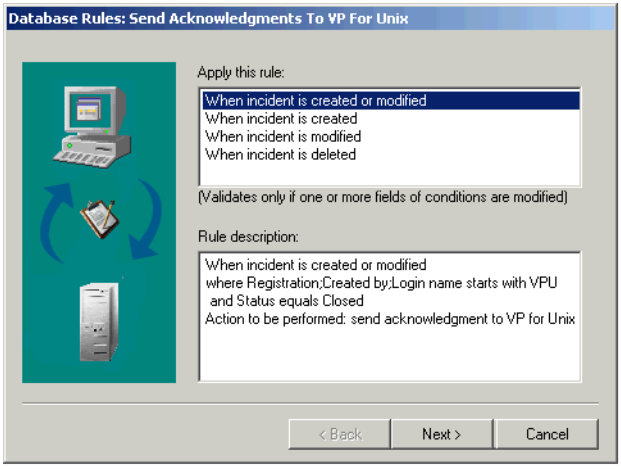
Configuring Database Rules

Database rules can be used to send information from Service Desk to VantagePoint. A Service Desk agent must be running on each VantagePoint server to execute the commands specified in the rules. The following sections contain examples for setting up rules to send annotations and acknowledgments, and for starting the outage tool mkoutage in VantagePoint.

Send Acknowledgment to VantagePoint for UNIX

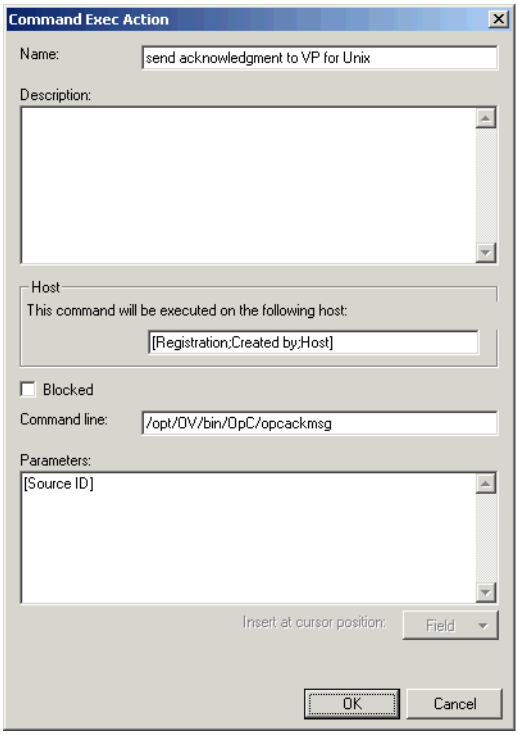
To send acknowledgment messages to VantagePoint for Unix, the database rule can be configured as follows:

Figure 4-8 Database Rule to Send Acknowledgments to VPO for UNIX



- for each modified incident;
- if [Registration; Created by;Loginname]starts with VPU;
- and status is changed to closed;

Figure 4-9 Action to Send Acknowledgments to VPO for UNIX

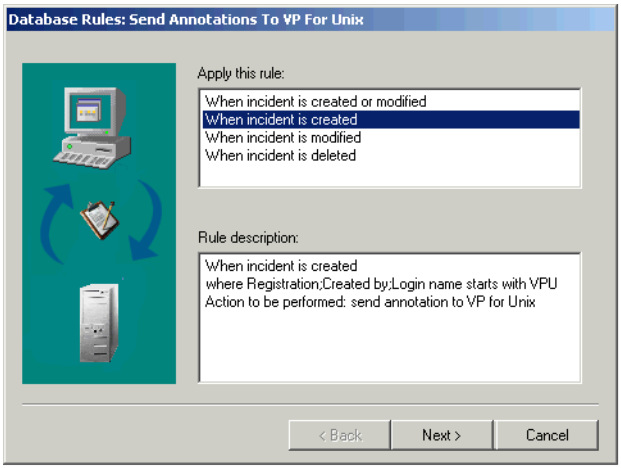


- on host: `[Registration;Created by;Host]`
- then execute the command: `/opt/OV/bin/OpC/opcackmsg`
- with the parameter: *`[Source Id]`*

Send Annotations to VantagePoint for UNIX

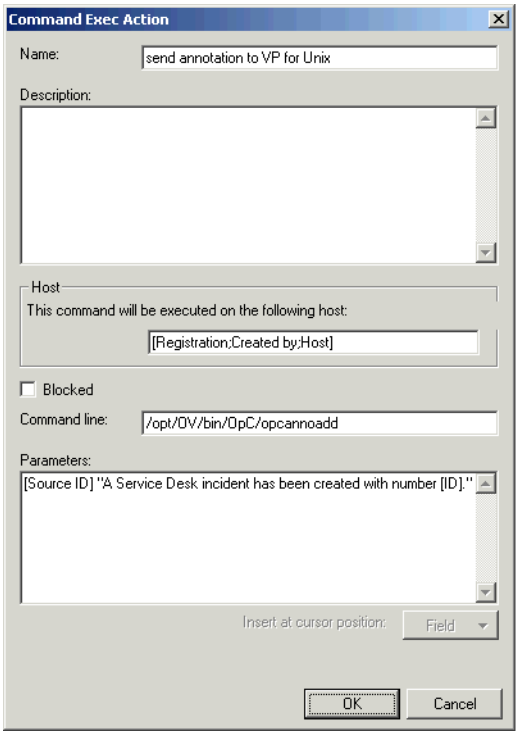
To send annotations to VantagePoint for UNIX, the database rule can be configured as follows:

Figure 4-10 Database Rule to Send Annotations to VPO for UNIX



- for each inserted incident;
- if [Registration; Created by;Loginname] starts with VPU;

Figure 4-11 Action to Send Annotations to VPO for Unix



- execute on host `[Registration; Created by;Host]`
- the command: `opt/OV/bin/OpC/opcannoadd`
- with parameters: *`[Source ID] "A Service Desk incident has been created with number [ID]."`*

NOTE `opcackmsg` and `opcannoadd` are not part of the VantagePoint Operation Integration software, they are part of the VantagePoint application and are located in `/opt/OV/bin/OpC`.

Creating New Database Rules

Additional information about creating database rules can be found in the *HP OpenView Service Desk: Administrator's Guide*.

TIP Create new database rules quickly by using the copy and paste functions. Select a rule that is similar to the rule you want to create and click CTRL+C then CTRL+V to make a copy. Double-click the copied rule to open it and then use the Wizard to change the parameters and the name.

View The Current Status of a VantagePoint Service From Service Desk

These smart actions make it possible for helpdesk employees or specialists to view the current state of a VantagePoint service in a Web browser. In the examples, the service is identified by the name1 field of the configuration item. When configuring this Smart Action, ensure that you enter the correct VantagePoint server name.

Item	Configuration Item
Name	Show VP for Unix service State
Application	Internet Explorer
Parameters	*http:/VPU_server:8880/OvCgi/vpo_service_viewer?[Name 1]*

Item	Incident Item
Name	Show VP for Unix service State
Application	Internet Explorer
Parameters	*http:/VPU_server:8880/OvCgi/vpo_service_viewer?[Name 1]*

Item	Service Call
Name	Show VP for Unix service State
Application	Internet Explorer

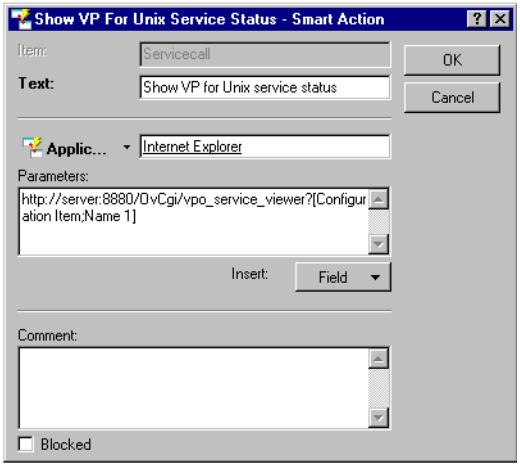
Parameters	*http:/VPU_server:8880/OvCgi/vpo_service_viewer?[Configuration Item;Name 1]*

NOTE

If you are using smart actions to view service statuses, your VantagePoint Web site needs to be entered in the parameters portion of the smart action. Normally the Web site will be the same as your VantagePoint server.

The following dialog box is an example of a smart action configured to show VantagePoint service state for a service call in Service Desk:

Figure 4-12 Show VantagePoint for UNIX Service Status



TIP

A number of functions available with this integration use the Smart Actions feature in Service Desk. To create a new Smart Action:

1. From the `Tools` menu, select `System`, then click `Business Logic`, `Actions`, then `Smart Actions`.
2. Click the item that you want to create a smart action for. For example; a configuration item or a Service Call.

3. Right-click and select `New Smart Action` from the popup menu.

Additional information on setting up and using Smart Actions can be found in the Online Help for Service Desk.

Manually Send a Message to VantagePoint

Smart actions are available in the demo data for this integration. One smart action makes it possible for users to send a message to the VantagePoint application to notify the VantagePoint operators that a problem is detected. If configured correctly this manually generated message will not cause the automatic trouble-ticket interface to generate an incident in Service Desk.

See “Generate a VantagePoint Message from Service Desk” on page 65 for an example of how this can be configured.

Configuring Service Desk for Outage Planning

You can configure outage planning in Service Desk to send outage information to your VantagePoint for Unix server to suppress messages.

To download outage periods from Service Desk to VantagePoint you will need to:

- Install the VantagePoint integration, see “Installation” on page 31.
- Enter occasional planned outages in the work order dialog box for the effected CI, (details can be found in the Online Help).
- Enter periodic outages in the Periodic Outage tab in effected CI dialog box, (details can be found in the Online Help).
- Create an account for mkoutage.
- Configure a database rule for periodic outages, see “Creating a Database Rule for Periodic Outage Information” on page 95.
- Configure a database rule for occasional outages, see “Creating a Database Rule for Occasional Outage Information” on page 97.
- Configure the `mkoutage.conf` file located on your VantagePoint server (`/opt/OV/SD/bin/mkoutage.conf`).

NOTE For troubleshooting information, see “Mkoutage Outage Planning” on page 127.

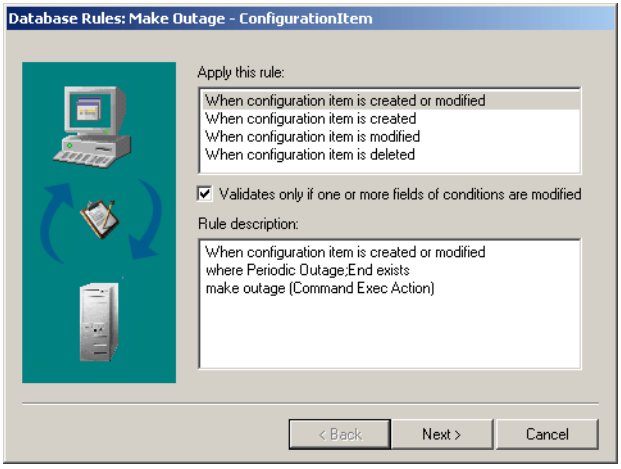
Create an Account for mkoutage

Create an integration account for mkoutage so that it can access information in Service Desk. The account must have access rights to view all configuration items and service calls. Limit the access rights of this account to prevent the account from being used by a Service Desk client.

Creating a Database Rule for Periodic Outage Information

Configuration items are used to register periodic outage information. You can configure a database rule to send periodic outage information to VantagePoint for Unix as follows:

Figure 4-13 Database Rule Periodic Outages



- When a configuration item is created or modified;
- Where the condition `Periodic Outage, OutageEnd; exists`:

Figure 4-14 Conditions for Periodic Outage

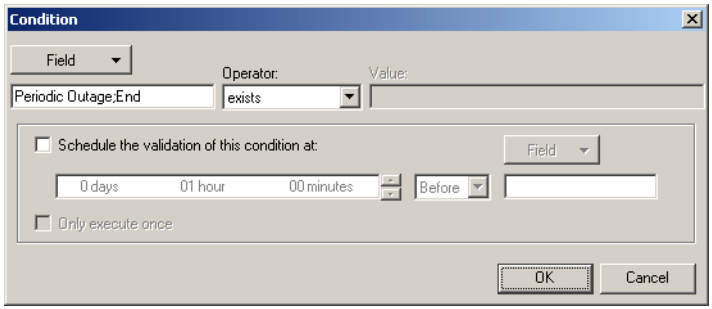
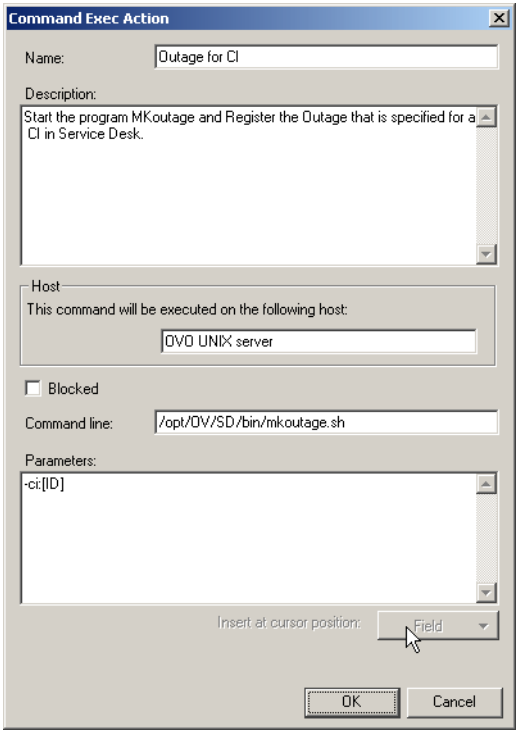


Figure 4-15 Action for Periodic Outages

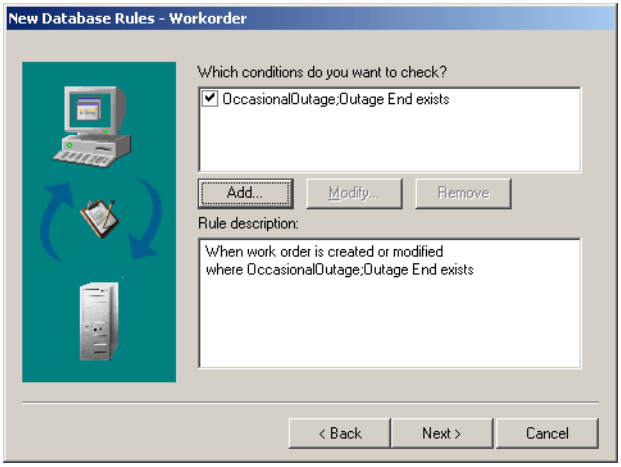


- execute on host: Your VantagePoint for UNIX server
- the command: /opt/OV/SD/bin/mkoutage.sh
- with parameters: -CI:[ID]

Creating a Database Rule for Occasional Outage Information

The work order item is used to plan occasional outages. You can configure a database rule to start mkoutage in VantagePoint for occasional outages as follows:

Figure 4-16 Database Rule for Occasional Outages



- When a work order item is created or modified;
- Where the condition: `Periodic Outage, Outage End; exists`:

Figure 4-17 Conditions for Occasional Outage

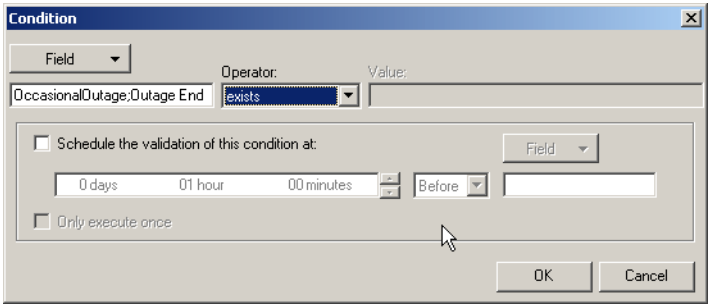
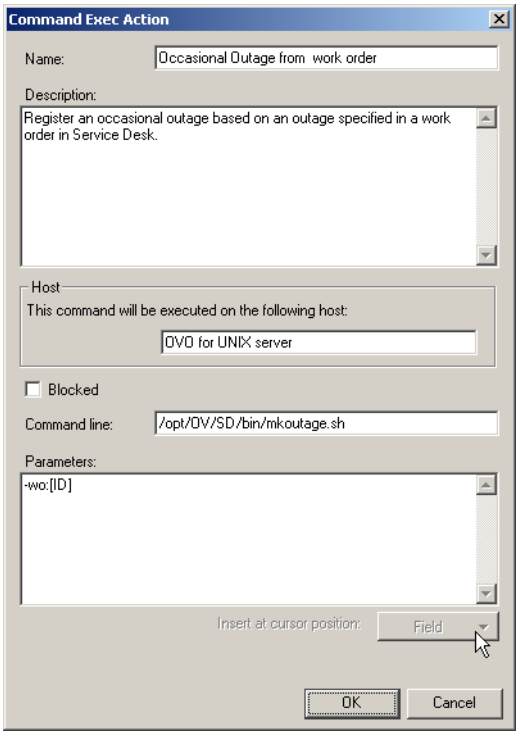


Figure 4-18 Action for Occasional Outages



- execute on host: Your OVO for Unix server
- the command line: /opt/OV/SD/bin/mkoutage.sh
- with parameters: -WO:[ID]

VantagePoint for UNIX

This section explains the configuration tasks to be done on the VantagePoint for UNIX application server.

Modifying the Configurable Extractor File

The file `sd_event.ini` is a configurable extractor used to extract information from VantagePoint. It can be found in the Service Desk `/opt/OV/SD/bin` folder. You will want to update the `ACCOUNT` and `SERVER` entries in the configuration file, as a minimum. If you change the name of the default import mapping, you will need to enter the new name in the `MAPPING` row. A example of the `sd_event.ini` file follows:

```
[SD_Event]
LOGFILE=sd_event.log
ERROR_LOGFILE=sd_event_error.log
ACCOUNT=VPU_server1/Password
SERVER=yourserver
PORT=30980
MAPPING=vpunix
CLASSNAME=incident
MODUS=insert
LANGUAGE=GB
```

Configuring VantagePoint for Outage Planning

The settings for mkoutage are defined in the file: `/opt/OV/SD/bin/mkoutage.conf`. The following table explains what needs to be entered in each section of the file:

Table 4-1 mkoutage.conf File

[SD]	This section of the file will contain Service Desk information.
hostname	Enter the host name of the Service Desk application server.

Table 4-1 mkoutage.conf File

Username	Enter the user name from the account you will be using for this portion of the integration. The system account is entered by default and should be changed to an integration account.
Password	Enter the password that goes with the user name for the account.
[VPO]	This section will contain VantagePoint specific information.
outage_template_file	Enter the file name, including the path where the VPO outage template is located. The default is `/etc/opt/OV/share/conf/OpC/mgmt_sv/respmgrs/outage`. It is possible that you already have this template at another location. If the template does not exist, you will need to create a blank template file at this location and with this file name.
reconfigure_request_cmd	This is the VPO command telling the management server to process the outage template file. The default is `opccfgout -update`. In most cases it will not require modification.
syntax_check_cmd	This contains the VPO command used to parse the outage template file for errors. The default is `opcmomchk -outage`, in most cases it does not need to be modified.

For information on configuring the Service Desk portion of mkoutage, see “Configuring Service Desk for Outage Planning” on page 94. For information on using outage planning after it is configured, refer to “Suppressing Messages in Service Desk” on page 123, and Outage Planning in the Service Desk Online Help.

The Outage Template File

An outage template file is used for managing the outage time periods in VantagePoint. This template is updated by the program mkoutage when one of the database rules specified for outage planning are triggered. You may already have an outage template file on your VantagePoint server. If the file exists, you can prevent errors by placing the file in the location with the name that is specified in the `mkoutage.conf` file. If you have

never used outage planning in VantagePoint this file might not exist and you will need to create it, by creating a blank text file that matches the information specified in the `mkoutage.conf` file for the `outage_template_file` entry.

An example of an existing outage template file follows:

```
TIMETEMPLATES
TIMETEMPLATE "timetmpl for Configuration Item 28"
DESCRIPTION "timetmpl for Configuration Item 28"
TIMETMPLCONDS
TIMETMPLCOND
TIMECONDTYPE Match
TIME FROM 07:00 TO 11:00
WEEKDAY ON Saturday
TIMETEMPLATE "timetmpl for Workorder 740"
DESCRIPTION "timetmpl for Workorder 740"
TIMETMPLCONDS
TIMETMPLCOND
TIMECONDTYPE Match
TIME FROM 10:00 TO 11:59
DATE ON 07/29/2001
CONDSTATUSVARS
CONDSTATUSVAR "pckay004" True
CONDSTATUSVAR "ovweb" True

RESPMGRCONFIGS
RESPMGRCONFIG
DESCRIPTION "responsible manager configuration for
Configuration Item 28"
MSGTARGETRULES
MSGTARGETRULE
DESCRIPTION "message target rule 1 for Configuration Item 28"
MSGTARGETRULECONDS
MSGTARGETRULECOND
DESCRIPTION "message target rule 1 cond for Configuration Item
28"
CONDSTATUSVAR "pckay004"
SEVERITY Unknown
NODE IP 172.24.1.198 "PCKAYAK P3 900 Mhz "
APPLICATION "PC"
MSGCONDTYPE Match
MSGOPERATIONS
MSGOPERATION
TIMETEMPLATE "timetmpl for Configuration Item 28"
SUPPRESS
RESPMGRCONFIG
```

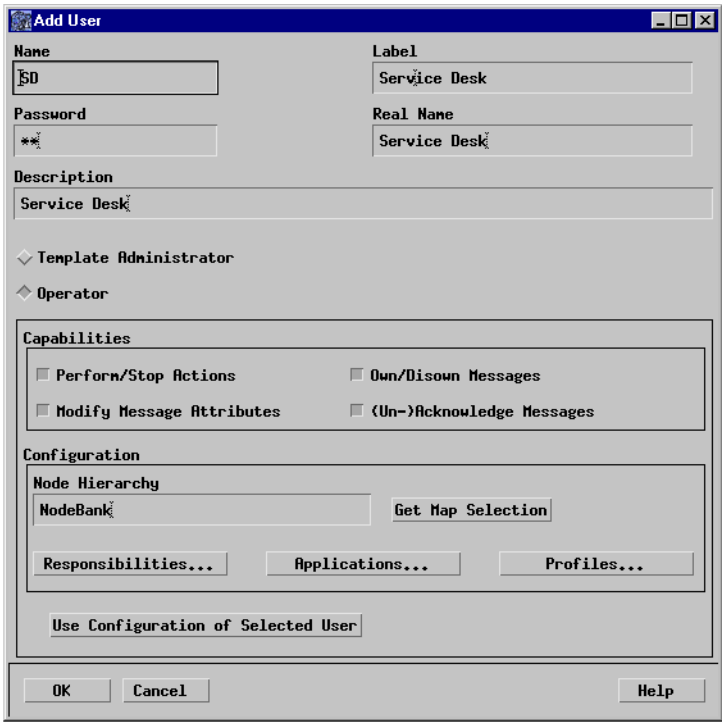
```
DESCRIPTION "responsible manager configuration for Workorder
740"
MSGTARGETRULES
MSGTARGETRULE
DESCRIPTION "message target rule 1 for Workorder 740"
MSGTARGETRULECONDS
MSGTARGETRULECOND
DESCRIPTION "message target rule 1 cond for Workorder 740"
CONDSTATUSVAR "ovweb"
SEVERITY Warning
NODE IP 172.24.1.1 "OpenView 3 Webserver "
APPLICATION "ovweb"
MSGCONDTYPE Match
MSGOPERATIONS
MSGOPERATION
TIMETEMPLATE "timetmpl for Workorder 740"
SUPPRESS
```

Making Service Desk a VantagePoint User

Make Service Desk a VantagePoint user called SD. The commands sd_event.sh and sd_eventins.sh create new incidents. These commands use the SD user in VantagePoint to gather information from VantagePoint. The SD operator in VantagePoint owns the messages as soon as they are forwarded to Service Desk, making it possible to distinguish VantagePoint messages from other messages in Service Desk.

1. From the `Window` menu in VantagePoint select `User bank` to manually create a user.

Figure 4-19 Add User dialog box



2. In the Name field enter **SD** and give it the password **sd**.
3. Enter **Service Desk** in the Label, Real Name and Description fields.
4. Make the SD user an Operator.
5. Click Responsibilities and select HP-UX to select all responsibilities.
6. Click OK when finished.

Moving the Service Desk Application to an Operator

To view Service Desk nodes and incidents from your Java user interface you will need to move the applications to the User Bank as follows:

1. Open the VantagePoint User Bank from your Motif user interface.
2. Right-click an operator, for example opc_adm, select Modify, then

click Applications.

3. From the Windows menu open the VantagePoint Application Bank and select the Service Desk icon.
4. Drag the Service Desk icon to the Applications of User: opc_adm dialog box.
5. Click OK in the Modify User opc_adm dialog box.

Modifying the Message Source Templates

The Message Source Templates need to be configured to specify conditions for forwarding messages to the Trouble Ticket interface, Service Desk. After modifying the Message Source templates you will need to redistribute them to your client systems. To adjust the Message Source templates from the Motif user interface or the VantagePoint server you will need opc_adm administrator rights:

1. Open Message Source Templates and select Default.
2. Click Group Management Server and then select the items you want sent to Service Desk, Bad su (switch user) for example.
3. Click Conditions, select a condition and then the Forward to Trouble Ticket check box.

Message Templates need to be distributed to the VantagePoint client systems whenever they are updated. To distribute the templates:

1. From the Windows menu, in your VantagePoint Motif or server interface, click Node Bank.
2. Select the Server icon.
3. From the Actions menu select Agents then Install/update SW and config.
4. Select Templates, Actions, Monitors, and Commands.
5. Click OK. The updated templates will be sent to the client systems.

Deploying the Monitoring Policies

The monitoring policies installed with this integration need to be deployed from your Motif interface to the proper locations after installation. The list below shows the policies and where they need to be

deployed:

SD_VP	VantagePoint management server
SD_VP_ACK	VantagePoint management server
SD_APP_SERVER_LOG	Service Desk server
SD_APP_SERVER	Service Desk server

Configuring the Service Desk Agent

The Service Desk agent installed on your VantagePoint for UNIX server needs to be configured as follows:

1. Open the file: `/sbin/init.d/hpovsdagent`.
2. Check the following variables. If they are not accurate modify them:

JAVA	The absolute path to the java virtual machine.
CLASSPATH	The path containing all used classes, including those from the Java Runtime environment.
APPSERVER	The name of the Service Desk application server.
AGENTUSER	The Unix account in which commands are executed.

An example of how this may look in the file follows:

```
JAVA=/opt/java1.2/bin/java
CLASSPATH=/opt/OV/SD/classes/hpovsdagent.zip:/opt/java1.2
/jre/lib/rt.jar:/opt/OV/SD/classes/mclasses.zip
APPSERVER=sd_server
AGENTUSER=root
```

5 User Tasks

This chapter provides some examples of how this integration can be used. Each section contains at least one use case and lists the steps for performing the task for VantagePoint for Windows and VantagePoint for UNIX as applicable.

Importing Nodes into Service Desk

VantagePoint nodes are equivalent to configuration items in Service Desk. For Service Desk to relate incidents to a piece of equipment that equipment or node needs to be registered as a configuration item. Data Exchange is used to automate the process of extracting the node data from VantagePoint and import the nodes as configuration items in Service Desk.

VantagePoint for Windows

To export nodes from VantagePoint for Windows and import them as configuration items in Service Desk use the Data Exchange task called `vpwindowsci` from the Service Desk application server. For configuration information see “Importing Nodes Into Service Desk” on page 49.

VantagePoint for UNIX

To export nodes from VantagePoint for UNIX and import them as configuration items in Service Desk use the Data Exchange task `vpunixci` from the Service Desk application server. For specific information see “Importing Nodes Into Service Desk” on page 77.

NOTE

Currently Data Exchange cannot detect deleted or outdated nodes. For example, you import all nodes into Service Desk as configuration items. Six months later 30 of your nodes are replaced by more modern equipment. You can reconcile your data exchange data and use the change list produced to identify obsolete items. See the Reconciliation section in the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

Importing Services and Relations

VantagePoint service information can be imported as configuration items into Service Desk using the Data Exchange feature. This makes it possible to relate Service Desk incidents to VantagePoint services. Dependency and composition relations are also imported. Dependency relations are horizontal, for example the purchasing system and the human resource department are both dependent on an Oracle database. Composition relations are parent-child relations, for example `Email service` is the parent of the `US email service` and `European email service`. The relations are added to the `Related CIs` field of the configuration item when they are imported.

VantagePoint for Windows

To export nodes from VantagePoint for Windows and import them as configuration items in Service Desk use the Data Exchange task called `vpwindowsservices` from the Service Desk application server. For specific information see “Importing Services Into Service Desk” on page 55.

VantagePoint for UNIX

To export Services from VantagePoint for UNIX and import them as Configuration Items in Service Desk you will need to save the data in ASCII text format and use an ODBC text editor. The complete procedure is explained in“Importing VantagePoint for UNIX Services” on page 82.

NOTE An example text file called `vp_services_sample.txt` is delivered with this integration. You can rename it to `vp_services.txt`.

NOTE To review an additional example of importing data from an ASCII text file, see Appendix A, “Examples” in the *HP OpenView Service Desk: Data Exchange Administrator's Guide*.

Sending Events From VantagePoint

Service Desk can be used as the Trouble Ticket interface for VantagePoint Operations. You can configure VantagePoint 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.

VantagePoint for Windows

If you are using VantagePoint for Windows you can send event information from VantagePoint to Service Desk using the WMI policy called `Forward messages to Service Desk` that intercepts `OV_Messages` and uses a Visual Basic script called `Vpw-Sd.vbs` to call `sd_event` and forward attributes to Service Desk. `SD_event` creates a corresponding incident in Service Desk. The policy must be deployed on the VantagePoint management server.

To send event information from the VantagePoint for Windows management console to Service Desk:

1. Configure the integration, see “Deploying the Forwarding Policies” on page 70.
2. Once configured, event information that meets the conditions set for the policy will automatically be sent to Service Desk. To change what message information is sent to Service Desk you will need to modify the conditions and distribute the changed policy to your client computers. See “Modifying the Forwarding Policy” on page 70.
3. After a message is sent to Service Desk, the severity label will turn white to show that it is owned by Service Desk.

VantagePoint for UNIX

If you are using VantagePoint for UNIX you can send event information to Service Desk using the Trouble Ticket interface to call `sd_eventins.sh`. To send event information from the VantagePoint for UNIX to Service Desk:

1. Configure the integration, see “Manually Send a Message to VantagePoint” on page 94.
2. Once configured, event information that meets the criteria of the message source templates will automatically be sent to Service Desk. To change what event information is sent to Service Desk you will need to modify the message source templates and distribute them to your client computers. See “Modifying the Message Source Templates” on page 104.
3. After a message is sent to Service Desk, the severity label will turn white to show that it is owned by Service Desk.

Reflecting Updates Done in VantagePoint

Changes made to VantagePoint messages from the VantagePoint windows management console or the API will be reflected in Service Desk.

VantagePoint for Windows

A WMI policy that registers the event class `OV_Message_ChangeEvent` is used. When a message change occurs, for example severity change, message text change, the `sd_event` program in Service Desk will be called to update the corresponding incident.

To reflect updates done in VantagePoint for Windows in your Service Desk application:

1. Install and configure the integration.
2. Once the `Forward message changes to Service Desk` policy is distributed, message updates will be sent to Service Desk automatically. The import mapping determines what attributes are sent to Service Desk.

VantagePoint for UNIX

This feature is not yet available for VantagePoint on UNIX.

Manually Forwarding Messages

This feature makes it possible for users to send a message to the Service Desk application. A message may need to be manually forwarded 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.

VantagePoint for Windows

This feature is not yet available on VantagePoint for Windows.

VantagePoint for UNIX

VantagePoint or UNIX users can use the Application Bank to manually forward messages:

1. Start the Message Browser in the VantagePoint for Motif user interface.
2. Select the messages you want to send.
3. From the `Actions` menu select `Start`, then `Service Desk` and click `Insert Incident`. The selected messages will be sent to Service Desk.
4. The severity label will turn white when a message is sent to Service Desk, showing that Service Desk owns the message.

Sending Annotations to VantagePoint

Annotating a message in VantagePoint 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 in the demo database for sending an annotation to VantagePoint whenever an incident is created as a result of an event being sent from VantagePoint to Service Desk. The database rule can also be configured to send an annotation to the VantagePoint application whenever the status of that incident changes. Database rules can be turned on/off and modified from the Service Desk. Agents on the VantagePoint server are sent commands, generated from a database rule in Service Desk, that call the `Vpw-Sd.vbs` script (Windows) or `opcannoadd` (UNIX) in VantagePoint.

VantagePoint for Windows

To send annotations to VantagePoint for Windows from Service Desk:

1. Install the demo data and configure the integration, see “Send Annotations to VantagePoint for Windows” on page 62.
2. Turn on the database rule, `send annotations to VP for Windows`:
   - From the `Tools` menu in Service Desk (server) select `System`. In the Administrators Console navigate to the `Business Logic` folder and open `Database Rules`. Double-click the `Incident` item.
   - Annotation rules are available for VantagePoint for Windows and VantagePoint for UNIX, make sure you use the correct one. Open the rule and use the Database Rule wizard to verify that the definition for the rule is accurate and that the rule is not blocked.

Once the rule is configured and turned on (not blocked) it will automatically send annotations to VantagePoint.

VantagePoint for UNIX

To send annotations to VantagePoint for UNIX from Service Desk:

1. Install the demo data and configure the integration, see “Send Annotations to VantagePoint for UNIX” on page 89.
2. Turn on the database rule, `send annotations to VP for Unix`:
   - From the `Tools` menu in Service Desk (server) select `System`. In the `Administrators Console` navigate to the `Business Logic` folder and open Database Rules. Double-click the `Incident` item.
   - Annotation rules will be visible for VantagePoint for Windows and VantagePoint for UNIX, make sure you use the correct one. Open the rule and use the Database Rule wizard to verify that the definition for the rule is accurate and that the rule is not blocked.

     Once the rule is configured and turned on (not blocked) it will automatically send annotations to VantagePoint.

Sending Acknowledgments to VantagePoint

Acknowledging a message is similar to filing a bill after it is paid. You want to retain a copy of the transaction to verify that you have paid the bill, and as a reference to compare with future bills. After you have finished working with a message you remove it from your desktop and file it away for easy future reference. Typically you acknowledge a message because:

- You have finished work on the message and resolved any related problems.
- You have another message in your Message Browser describing the same event.
- You no longer need the message, for example, if the message has low severity and requires no action.

Database rules are available in the demo database for acknowledging messages from VantagePoint whenever an incident that was created as a result of a VantagePoint event is closed in Service Desk. Database rules can be turned on/off and modified in the Business Logic section of the System Administrator's Console. Agents on the VantagePoint server are sent commands, generated by a database rule in Service Desk, that call the `Vpw-Sd.vbs` script in VantagePoint.

VantagePoint for Windows

To send acknowledgments to VantagePoint for Windows from Service Desk:

1. Install the demo database and configure the integration, see "Send Acknowledgment to VantagePoint for Windows" on page 60.
2. Turn on the database rule, `send acknowledgments to VP for Windows`:
   - From the `Tools` menu in Service Desk (server) select `System`. In the Administrators Console navigate to the `Business Logic` folder and open `Database Rules`. Double-click the `Incident` item.
   - Acknowledgment rules will be visible for VantagePoint for Windows and VantagePoint for UNIX, make sure you use the correct one. Open the rule and use the Database Rule wizard to

verify that the definition for the rule is accurate and that the rule is not blocked.

Once the rule is configured and turned on (not blocked) it will automatically send annotations to VantagePoint.

VantagePoint for UNIX

To send acknowledgments to VantagePoint for UNIX from Service Desk:

1. Install and configure the integration, see “Send Acknowledgment to VantagePoint for UNIX” on page 88.
2. Turn on the database rule, `send acknowledgments to VP for Windows`:
   - From the `Tools` menu in Service Desk (server) select `System`. In the Administrators Console navigate to the `Business Logic` folder and open `Database Rules`. Double-click the `Incident` item.
   - If you installed the demo database, acknowledgment rules will be visible for VantagePoint for Windows and VantagePoint for UNIX, make sure you use the correct one. Open the rule and use the Database Rule wizard to verify that the definition for the rule is accurate and that the rule is not blocked.

     Once the rule is configured and turned on (not blocked) it will automatically send acknowledgements to VantagePoint.

Viewing Service Desk CIs from VantagePoint

While working in VantagePoint for Windows you can view related configuration items in Service Desk.

The `View Node Info` action opens the configuration item form in Service Desk. The node selected is passed as a parameter using $OPC_NODES. The application can only be started with the Windows user interface.

See "Viewing Service Desk CIs from VantagePoint" on page 72 for information on how to set up the tool to perform this action in VantagePoint.

TIP

If the Service Desk dialog box does not open, verify that the Bin folder is in the path. For more information see "Setting the Environment Variable for Service Desk" on page 47.

VantagePoint for Windows - View Configuration Items

To call the Service Desk user interface when you are working in the VantagePoint for Windows management console:

1. Select the node that you want to view as a configuration item in Service Desk.
2. Right-click and select `All Tasks`, then `Launch Tool`.
3. In the Tool to Execute dialog box select `Show Configuration Item in Service Desk Client`.
4. Click `Launch`.

Viewing VantagePoint 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 VantagePoint services that are down. The manager clicks the `Top VP 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.

VantagePoint on Windows

In Service Desk, add a shortcut to view the overall state of VantagePoint services. To create the shortcut:

1. From the `Start` menu select `Programs` and then left-click on the entry for Service Desk 4.0.
2. Select `Add Shortcut` from the popup menu that appears.
3. In the `Name` field, enter the name you want the shortcut to have and select the URL option with the following URL:
   `http://`**`server`**`/cgi-bin/ovserviceexport.exe?-format+html[+-service+`**`service name`**`.]`

   For viewing top services, remove the service name from the end of the URL.
4. Click `OK` to save the shortcut.

5. When you click on the shortcut a hierarchical view of services will be visible. Click each service to view more detail information. The view will be refreshed every sixty seconds.

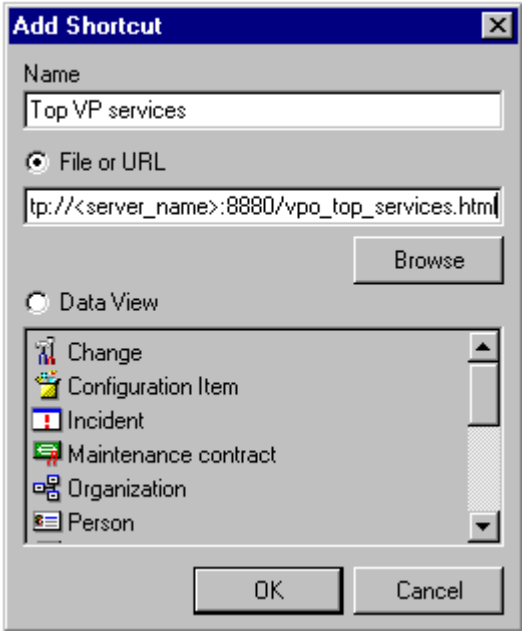
VantagePoint on UNIX

There are two Smart Actions available for viewing VantagePoint services. Services can be viewed for a service call, an incident, or for a configuration item. From the `Action` menu in Service Desk select: `Show VP for Unix service state`.

Another option is to add a shortcut in Service Desk, to view the overall state of VantagePoint for UNIX services. To create the shortcut:

1. From the `Start` menu select `Programs` and then left-click on the entry for Service Desk 4.0.
2. Select `Add Shortcut` from the popup menu that appears.
3. In the `Name` field, enter the name you want the shortcut to have and select the URL option with the following command line: **`http://<server_name>:8880/vpo_top_services.html`**.

Figure 5-1 Create a Shortcut to View Top VantagePoint Services



4. Click OK to save the shortcut.
5. When you click on the shortcut a hierarchical view of services will be visible. Click each service to view more detail information. The view will be refreshed every sixty seconds.

Generating a VantagePoint Message From Service Desk

If a helpdesk employee becomes aware of a problem in the IT infrastructure and creates an incident in Service Desk. However, an error message does not exist for the problem in the VantagePoint application. The helpdesk employee, can use a smart action in Service Desk to pass the incident information to the VantagePoint application, creating a new error message in VantagePoint.

VantagePoint for Windows

To generate a VantagePoint message from the Service Desk user interface:

1. Select or open an incident in Service Desk.
2. From the `Actions` menu in Service Desk click the `Generate VP message manually` action.
3. A new message will be created in VantagePoint.

VantagePoint for UNIX

To generate a VantagePoint message from the Service Desk user interface:

1. Select or open an incident in Service Desk.
2. From the `Actions` menu in Service Desk click the `Generate VP message manually` action.
3. A new message will be created in VantagePoint.

Suppressing Messages in Service Desk

You can suppress node-down messages that are sent to Service Desk from a VantagePoint for UNIX server by using mkoutage to download outage information. Two types of outages are recognized: periodic, or recurring outages, and occasional, or incidental outages. Outage planning is administrative task in Service Desk, it can only be used to suppress messages when installed with the VantagePoint integration.

NOTE It is not possible to automatically detect if outage periods manually entered on your VantagePoint 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 VantagePoint application.

NOTE Outages planned for a Service Level Agreement in Service Desk cannot be downloaded into VantagePoint.

Monitoring Service Desk Processes

VantagePoint log file policies can be used to monitor the log files for the agent (UNIX only), sd_event, and the Service Desk application 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.

VantagePoint for Windows

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. The policy `monitor sd_event logfile` is used to monitor the VantagePoint management server. The policy `Monitor Service Desk logfile` is available for monitoring the Service Desk application server.

VantagePoint for UNIX

Once the policies are deployed, detected errors are sent to the message browser automatically. SD_VP and SD_VP_ACK must be deployed on the VantagePoint application server. SD_APP_SERVER_LOG and SD_APP_SERVER must be deployed on the Service Desk application server. Instructional text is provided with the error messages to help solve detected problems.

SD_VP	For monitoring the VantagePoint management server (`sd_event_error.log`).
SD_VP_ACK	For monitoring the Service Desk agent on the VantagePoint management server (`hpovsdagent.log`).
SD_APP_SERVER_LOG	For monitoring the Service Desk application server (`logserver.txt`).
SD_APP_SERVER	For monitoring the Service Desk application server.

6 Troubleshooting

This chapter contains troubleshooting information for using the VantagePoint operation for UNIX or Windows with Service Desk.

Troubleshooting Information

This section contains information that may be helpful in locating and solving errors that occur when using this integration.

Potential Windows Error Messages

This section explains error messages you may encounter in `sd_event_error.log`, followed by a possible solution.

Viewing Items Error

Error message: `You are not allowed to view this type of item.`

Solution:

1. From the `Tools` menu in Service Desk, click `System`, then `Security`, then `Access`, and `Role`.
2. Open the `Helpdesk role` and select `View` access for the `Account` item.
3. Click `OK` and then restart the Service Desk application server.

Server Response Error

Error message in `sd_event_error.log`.
`SERVER RESPONSE=ERROR: null criteriu`

Solution: This error occurs when the VantagePoint message can not be accessed by the `get_vp_attributes` command. Verify that you have added Service Desk (SD) as a user in VantagePoint with the correct password and that the Service Desk user has access to messages.

UNIX Log Files

- The file `/var/opt/OV/SD/log/applog.txt` shows when the Service Desk agent was started.
- The file `/var/opt/OV/SD/log/hpovsdagent.txt` contains output and errors from the Service Desk agent.
- The file `/opt/OV/SD/bin/sd_event_error.log` contains errors regarding the automatic and manual forwarding of events to Service

Desk.

Acknowledgments and Annotations on VantagePoint for UNIX

This section contains some troubleshooting tips to help you resolve errors that may occur in the acknowledgment and annotation portions of this integration.

From the Tools menu in Service Desk, select System, then click Business Logic, then Database Rules. Open the Incident item to view the database rule. Verify that the:

- rule is not blocked;
- conditions are met;
- action is not blocked.

On your VantagePoint for Unix server verify that your agent files are installed as follows:

- /sbin/init.d/hpovsdagent
- /opt/OV/SD/classes/hpovsdagent.zip
- /opt/OV/SD/classes/mclasses.zip

Verify that the agent is running: /sbin/init.d/hpovsdagent status.

Check for errors in the log file: /var/opt/OV/SD/log/*.log

Mkoutage Outage Planning

To begin troubleshooting mkoutage you might want to look for possible causes in the log file, mkoutage.log located in /opt/OV/SD/bin. If that is unsuccessful you can continue the troubleshooting or testing by starting mkoutage manually as described in the following paragraphs:

You can start the Mkoutage utility used for outage planning manually from the command line, for testing or troubleshooting. To start it, run mkoutage.sh with either the -ci or -wo flag followed by the ID for the item. Configuration items (-ci) are used for periodic outages, work orders (-wo) for occasional outages.

This command will connect mkoutage to the Service Desk application server, where it will examine the outage data specified for the item

entered in the command line. If sufficient information is available, it will create a new template entry and attempt to add it to the template file, then send a request to the VantagePoint server to process the file again.

If the template entry is successfully added, `mkoutage` will remove all obsolete template entries in the template sections it controls that have end dates before the current date and time. This is done to control the size of the template. `Mkoutage` will only delete entries in the sections that are surrounded by the comments: "#SD_TIMETEMPLATES_START" , "#SD_TIMETEMPLATES_END", "#SD_RESPMGRCFGS_START", and "#SD_RESPMGRCFGS_END"

Tips for Demonstrations and Testing

This section contains information that can be used when testing or demonstrating the integration in a non-production environment. For VantagePoint for UNIX users some example services are available and this section lists commands that can be used to list and assign access to the services:

- Add the sample services for demonstration purposes:
  ```
  # opcservice -add
  /opt/OV/OpC/examples/services/banking.xml
  # opcservice -add /opt/OV/OpC/examples/services/sap.xml
  ```
- List of top services:
  ```
  # opcservice -list
  ```
- List of all services:
  ```
  # opcservice -list -sub
  ```
- Assign an operator to a service tree. This enables the operator to view the assigned services in the Java user interface. The example below will assign the banking services:
  ```
  # opcservice -assign opc_op banking
  ```
- Show the services that users have access to:
  ```
  # opcservice -operators
  ```

Integration Item Reference List

The following tables are provided to give you an overview of the various files and configured items included in this integration and their use. The tables include the various import mappings, configuration files, applications (UNIX), policies, database rules, smart actions and other

key tools provided with this integration:

Table 6-1 Configuration (ini) Files

Name	Use
sd_event.ini	For importing events into Service Desk.
vpwindowci.ini	For importing VPO for Windows nodes as configuration items into Service Desk.
vpunixci.ini	For importing VPO for UNIX nodes as configuration items into Service Desk.
vpwindowsservices.ini	For importing services from VPO for Windows into Service Desk.
vpunixservices.ini	For importing services from VPO for UNIX into Service Desk.

Table 6-2 Import Mapping

Name	Use
sd_event	For mapping VPO events to Service Desk (Incident) item and attributes.
vpwindowci	For mapping VPO for Windows nodes to configuration item and attributes in Service Desk.
vpunixci	For mapping VPO for UNIX nodes to configuration item and attributes in Service Desk.
vpwindowsservices	For mapping services from VPO for Windows to Service Desk configuration items.

Table 6-2 Import Mapping

Name	Use
vpunixservices	For mapping services from VPO for UNIX to Service Desk configuration items.

Table 6-3 Applications in VPO for UNIX

Name	Use
Insert Incident	For inserting error messages from VantagePoint for UNIX into Service Desk as an incident.
View Incident Info	For viewing incidents in Service Desk that are related to VPO for UNIX messages.
View Node	For viewing configuration items in Service Desk that are related to VPO for UNIX nodes.

Table 6-4 Database Rules in Service Desk

Name	Use
Send acknowledgments to VP for Unix.	For sending an acknowledgement to VantagePoint for UNIX.
Send acknowledgments to VP for Windows	For sending an acknowledgements to VantagePoint for Windows.
Send annotations to VP for Unix.	For sending annotations to VP for UNIX.
Send annotations to VP for Windows.	For sending annotations to VP for Windows.

Table 6-5 Smart Actions in Service Desk

Name	Use
Generate VP message manually	To manually insert a Service Desk incident as a message in VPO for UNIX.
Show VP for Unix service state	To view the state of VantagePoint for UNIX services with a Web browser.
Show VP for Windows service state	To view the state of VantagePoint for Windows services with a Web browser.

Table 6-6 Policies in VPO for Windows

Name	Use
Forward messages to Service Desk	To forward a message from VantagePoint to Service Desk.
Forward message changes to Service Desk	To forward message changes from VantagePoint to Service Desk.
Monitor Service Desk log file	To monitor the Service Desk log file for errors.
Monitor sd_event log file	To monitor the sd_event log file for errors.

Table 6-7 Tools in VPO for Windows

Name	Use
Show Configuration Item in Service Desk Client	To view the configuration item in Service Desk that is related to the node selected in VantagePoint.

Table 6-8 Accounts in Service Desk

Name	Use
VPW_server1/servicedesk	Default account created for the VantagePoint for Windows server. Server accounts must start with VPW or VPU.
VPU_server1/servicedesk	Default account created for the VantagePoint for UNIX server. Server accounts must start with VPW or VPU.

Table 6-9 Monitoring Files in VPO for UNIX

Name	Use
SD_VP	For monitoring sd_event on the VantagePoint management server.
SD_VP_ACK	For monitoring the Service Desk agent on the VantagePoint management server
SD_APP_SERVER_LOG	For monitoring the Service Desk application server.
SD_APP_SERVER	For monitoring the Service Desk application server.
sd_access.exe	Used by SD_APP_SERVER to check if access is authorized.

Table 6-10 Monitoring Policies in VPO for Windows

Name	Use
Monitor sd_event logfile	For monitoring sd_event on the VantagePoint management server.

Table 6-10 Monitoring Policies in VPO for Windows

Name	Use
Monitoring Service Desk Logfile	For monitoring the Service Desk application server.

Installation Reference Tables

Table 6-11 Service Desk Server

File	Default Location
vpunixci.ini and vpwindowsci.ini	*Service Desk product path*\data_exchange\config
vpunixservices.ini and vpwindowsservices.ini	*Service Desk product path*\data_exchange\config
sd_access.exe	*Service Desk product path*\bin
vp_mappings.sql	runs in repository account to add import mapping to database.

Table 6-12 VantagePoint Server - Windows Platform

File	Default Location
sd_event.exe	VantagePoint Product Path\bin\tools
sd_event.ini	VantagePoint Product Path\bin\tools
Vpw-Sd.vbs	VantagePoint Product Path\bin\tools
queuectl.exe enqueue.exe dequeue.exe	VantagePoint Product Path\bin\tools
Monitor Service Desk logfile (policy)	VPW database

Table 6-12 VantagePoint Server - Windows Platform

File	Default Location
Monitor sd_event logfile (policy)	VPW database
Forward messages to Service Desk (policy)	VPW database
Forward message changes to Service Desk (policy)	VPW database

Table 6-13 VantagePoint Server - UNIX Platform

File	Default Location
sd_event.ini	/opt/OV/SD/bin
sd_event	/opt/OV/SD/bin
sd_event.sh in Trouble Ticket Interface	VantagePoint database
sd_event.sh	/opt/OV/bin/OpC/extern_intf
sd_eventins.sh	/opt/OV/bin/OpC/extern_intf
sd_eventins.pl	/opt/OV/bin/OpC/extern_intf
get_vp_attributes	/opt/OV/bin/OpC/extern_intf