

Veritas™ High Availability Agent for Informatica PowerCenter Service Manager Installation and Configuration Guide

AIX, HP-UX, Linux, Solaris

5.0

Veritas High Availability Agent for Informatica PowerCenter Service Manager Installation and Configuration Guide

The software described in this book is furnished under a license agreement and may be used only in accordance with the terms of the agreement.

Agent Version: 5.0.3.0

Document version: 5.0.3.0.1

Legal Notice

Copyright © 2011 Symantec Corporation. All rights reserved.

Symantec, the Symantec logo, Veritas, Veritas Storage Foundation, CommandCentral, NetBackup, Enterprise Vault, and LiveUpdate are trademarks or registered trademarks of Symantec corporation or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.

The product described in this document is distributed under licenses restricting its use, copying, distribution, and decompilation/reverse engineering. No part of this document may be reproduced in any form by any means without prior written authorization of Symantec Corporation and its licensors, if any.

THE DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID. SYMANTEC CORPORATION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH THE FURNISHING, PERFORMANCE, OR USE OF THIS DOCUMENTATION. THE INFORMATION CONTAINED IN THIS DOCUMENTATION IS SUBJECT TO CHANGE WITHOUT NOTICE.

The Licensed Software and Documentation are deemed to be commercial computer software as defined in FAR 12.212 and subject to restricted rights as defined in FAR Section 52.227-19 "Commercial Computer Software - Restricted Rights" and DFARS 227.7202, "Rights in Commercial Computer Software or Commercial Computer Software Documentation", as applicable, and any successor regulations. Any use, modification, reproduction release, performance, display or disclosure of the Licensed Software and Documentation by the U.S. Government shall be solely in accordance with the terms of this Agreement.

Symantec Corporation
350 Ellis Street
Mountain View, CA 94043
<http://www.symantec.com>

Technical Support

Symantec Technical Support maintains support centers globally. Technical Support's primary role is to respond to specific queries about product features and functionality. The Technical Support group also creates content for our online Knowledge Base. The Technical Support group works collaboratively with the other functional areas within Symantec to answer your questions in a timely fashion. For example, the Technical Support group works with Product Engineering and Symantec Security Response to provide alerting services and virus definition updates.

Symantec's support offerings include the following:

- A range of support options that give you the flexibility to select the right amount of service for any size organization
- Telephone and/or Web-based support that provides rapid response and up-to-the-minute information
- Upgrade assurance that delivers software upgrades
- Global support purchased on a regional business hours or 24 hours a day, 7 days a week basis
- Premium service offerings that include Account Management Services

For information about Symantec's support offerings, you can visit our Web site at the following URL:

www.symantec.com/business/support/index.jsp

All support services will be delivered in accordance with your support agreement and the then-current enterprise technical support policy.

Contacting Technical Support

Customers with a current support agreement may access Technical Support information at the following URL:

www.symantec.com/business/support/contact_techsupp_static.jsp

Before contacting Technical Support, make sure you have satisfied the system requirements that are listed in your product documentation. Also, you should be at the computer on which the problem occurred, in case it is necessary to replicate the problem.

When you contact Technical Support, please have the following information available:

- Product release level

- Hardware information
- Available memory, disk space, and NIC information
- Operating system
- Version and patch level
- Network topology
- Router, gateway, and IP address information
- Problem description:
 - Error messages and log files
 - Troubleshooting that was performed before contacting Symantec
 - Recent software configuration changes and network changes

Licensing and registration

If your Symantec product requires registration or a license key, access our technical support Web page at the following URL:

www.symantec.com/business/support/

Customer service

Customer service information is available at the following URL:

www.symantec.com/business/support/

Customer Service is available to assist with non-technical questions, such as the following types of issues:

- Questions regarding product licensing or serialization
- Product registration updates, such as address or name changes
- General product information (features, language availability, local dealers)
- Latest information about product updates and upgrades
- Information about upgrade assurance and support contracts
- Information about the Symantec Buying Programs
- Advice about Symantec's technical support options
- Nontechnical presales questions
- Issues that are related to CD-ROMs or manuals

Support agreement resources

If you want to contact Symantec regarding an existing support agreement, please contact the support agreement administration team for your region as follows:

Asia-Pacific and Japan	customercare_apac@symantec.com
Europe, Middle-East, and Africa	semea@symantec.com
North America and Latin America	supportsolutions@symantec.com

Documentation

Product guides are available on the media in PDF format. Make sure that you are using the current version of the documentation. The document version appears on page 2 of each guide. The latest product documentation is available on the Symantec Web site.

<https://sort.symantec.com/documents>

Your feedback on product documentation is important to us. Send suggestions for improvements and reports on errors or omissions. Include the title and document version (located on the second page), and chapter and section titles of the text on which you are reporting. Send feedback to:

doc_feedback@symantec.com

About Symantec Connect

Symantec Connect is the peer-to-peer technical community site for Symantec's enterprise customers. Participants can connect and share information with other product users, including creating forum posts, articles, videos, downloads, blogs and suggesting ideas, as well as interact with Symantec product teams and Technical Support. Content is rated by the community, and members receive reward points for their contributions.

<http://www.symantec.com/connect/storage-management>

Contents

Technical Support	4	
Chapter 1	Introducing the Veritas High Availability Agent for Informatica PowerCenter Service Manager	11
	About the Veritas agent for Informatica PowerCenter Service Manager	11
	What's new in this agent	12
	Supported software	12
	Features of the Veritas agent for Informatica PowerCenter Service Manager	13
	How the agent makes Informatica PowerCenter Service Manager highly available	13
	High availability for Informatica PowerCenter Service Manager instances running in Solaris zones	14
	Informatica PowerCenter Service Manager agent functions	14
	Online	14
	Offline	15
	Monitor	15
	Clean	16
	Setting up Informatica PowerCenter Service Manager in a VCS cluster	16
Chapter 2	Installing and configuring Informatica PowerCenter Service Manager for high availability	17
	About PowerCenter	17
	Basic resources to cluster a PowerCenter Service Manager	
	Server	18
	Service Group for CFS	18
	Service Group for CVM	19
	Service Group for PowerCenter Service Manager	19
	Virtualizing PowerCenter Service Manager	19

Chapter 3	Installing, upgrading, and removing the agent for Informatica PowerCenter Service Manager	21
	Before you install the Veritas agent for Informatica PowerCenter Service Manager	21
	Prerequisites for installing the agent to support Solaris zones	22
	About the ACC library	22
	Installing the ACC library	23
	Installing the agent in a VCS environment	23
	Removing the agent in a VCS environment	25
	Removing the ACC library	26
	Upgrading the agent in a VCS environment	26
Chapter 4	Configuring the agent for Informatica PowerCenter Service Manager	29
	About configuring the Veritas agent for Informatica PowerCenter Service Manager	29
	Importing the agent types files in a VCS environment	30
	Changing the default restart behaviour	32
	Informatica PowerCenter Service Manager agent attributes	32
	Executing a customized monitoring program	35
Chapter 5	Configuring the service groups for Informatica PowerCenter Service Manager	37
	About configuring service groups for Informatica PowerCenter Service Manager	37
	Before configuring the service groups for Informatica PowerCenter Service Manager	38
	Configuring PowerCenter Service Manager resources for Solaris zones support	38
	Instructing JRE to start running within a “headless” environment	38
Chapter 6	Troubleshooting the agent for Informatica PowerCenter Service Manager	41
	Using the correct software and operating system versions	41
	Meeting prerequisites	42
	Configuring PowerCenter Service Manager resources	42
	Verifying virtualization	42

	Starting the PowerCenter Service Manager instance outside a cluster	42
	Reviewing error log files	43
	Reviewing cluster log files	44
	Using trace level logging	44
Appendix A	Sample Configurations	45
	About sample configurations for the agent for Informatica PowerCenter Service Manager	45
	Sample agent type definition	45
	Sample agent type definition under Solaris zones	46
	Sample configuration	47
	Sample configuration under Solaris zones	51
	Sample service group configurations	55
	Sample service group configuration under Solaris zone	57
Appendix B	Changes introduced in previous releases	61
	Changes introduced in previous releases	61
Index	63

Introducing the Veritas High Availability Agent for Informatica PowerCenter Service Manager

This chapter includes the following topics:

- [About the Veritas agent for Informatica PowerCenter Service Manager](#)
- [What's new in this agent](#)
- [Supported software](#)
- [Features of the Veritas agent for Informatica PowerCenter Service Manager](#)
- [How the agent makes Informatica PowerCenter Service Manager highly available](#)
- [Informatica PowerCenter Service Manager agent functions](#)
- [Setting up Informatica PowerCenter Service Manager in a VCS cluster](#)

About the Veritas agent for Informatica PowerCenter Service Manager

The Veritas High Availability agents monitor specific resources within an enterprise application. They determine the status of resources and start or stop them according to external events.

The Veritas agent for Informatica PowerCenter Service Manager provides high availability for all PowerCenter Service Manager servers in a cluster.

See the following Technical Support TechNote for the latest updates or software issues for this agent:

<http://www.symantec.com/business/support/index?page=content&id=TECH46455>

What's new in this agent

The enhancements in this release of the Informatica agent are as follows:

- Added support for Informatica PowerCenter 9.0 and 9.1.

See “[Changes introduced in previous releases](#)” on page 61.

Supported software

The Veritas agent for Informatica PowerCenter Service Manager supports the following software versions:

- | | |
|------------------------|--|
| Veritas Cluster Server | <ul style="list-style-type: none">■ AIX–VCS 4.0, 5.0, 5.1■ HP-UX–VCS 4.1, 5.0■ Linux–VCS 4.0, 4.1, 5.0, 5.1■ Solaris–VCS 4.0, 4.1, 5.0, 5.1 |
|------------------------|--|

and all intermediate Maintenance Packs of these major releases.

Note: In the software disc, no separate agent is provided for VCS 4.0 and 5.1 on Linux and Solaris. To use the agent for VCS 4.0 and 5.1 on both these platforms, use the agent provided for VCS 4.1 and 5.0 respectively.

Similarly, on AIX, to use the agent for VCS 5.1, use the agent provided for VCS 5.0

- | | |
|-------------|-------------------|
| ACC Library | 5.1.3.0 and later |
|-------------|-------------------|

- | | |
|-------------------|---|
| Operating Systems | <ul style="list-style-type: none">■ AIX 5.3 and 6.1 on pSeries■ HP-UX 11i v1 and v2 on PA-RISC HP-UX 11i v2 and v3 on Itanium■ Red Hat Enterprise Linux 4, 5■ SUSE Linux Enterprise Server 9, 10■ Solaris 8, 9, 10 on SPARC including zones |
|-------------------|---|

Informatica PowerCenter 8.1.1, 8.5, 8.5.1, 8.6, 8.6.1, 9.0, 9.1

and all intermediate minor versions of these releases.

Features of the Veritas agent for Informatica PowerCenter Service Manager

The following are the features of the Veritas agent for Informatica PowerCenter Service Manager:

- Support for validation of attributes that are based on agent functions.
The agent can validate attributes in each agent function before the actual data processing starts.
- Support for First Failure Data Capture (FFDC)
In case of a fault, the agent generates a huge volume of the debug logs that enable troubleshooting of the fault.
- Support for Fast First Level Monitor (FFLM)
The agent maintains PID files based on search patterns to expedite the monitoring process.
- Support for external user-supplied monitor utilities
The agent enables user-specified monitor utilities to be plugged in, in addition to the built-in monitoring logic. This enables administrators to completely customize the monitoring of the application.
- Delayed agent function
The agent manages the first monitor after online for slow initializing applications.

How the agent makes Informatica PowerCenter Service Manager highly available

The agent provides the following levels of application monitoring:

- Primary or Basic monitoring
This mode has Process check and Health check monitoring options. With the default Process check option, the agent verifies that the PowerCenterSvcMgr instance processes are present in the process table. Process check cannot detect whether processes are in hung or stopped states.
- Secondary or Detail monitoring

In this mode, the agent runs a utility to verify the status of PowerCenterSvcMgr instance. The agent detects application failure if the monitoring routine reports an improper function of the PowerCenterSvcMgr instance processes. When this application failure occurs, the PowerCenterSvcMgr instance service group fails over to another node in the cluster.

Thus, the agent ensures high availability for PowerCenterSvcMgr instance.

High availability for Informatica PowerCenter Service Manager instances running in Solaris zones

Solaris provides a means of virtualizing operating system services, allowing one or more processes to run in isolation from other activity on the system. Such a "sandbox" is called a "non-global zone." Each zone can provide a rich and customized set of services. The processes that run in a "global zone" have the same set of privileges that are available on a Solaris system today.

VCS provides high availability to applications running in non-global zones by extending the failover capability to zones. VCS is installed in a global zone, and all the agents and the engine components run in the global zone. For applications running within non-global zones, agents run script entry points inside the zones. If a zone configured under VCS control faults, VCS fails over the entire service group containing the zone.

For more details refer to, *Veritas Cluster Server User's Guide*.

The Veritas agent for Informatica PowerCenter Service Manager is zone-aware and can monitor PowerCenterSvcMgr instances running in non-global zones.

Informatica PowerCenter Service Manager agent functions

The agent consists of resource type declarations and agent executables. The agent executables implement the online, offline, monitor and clean operations.

Online

The online operation performs the following tasks:

- Verifies that the required attributes are set correctly.
- Verifies whether the PowerCenter Service Manager Server instance is not ready online. If the instance is online, the online operation exits immediately.
- Kills the PowerCenter Service Manager processes that remain online using the login associated with the specific resource.

- Executes the following command, in context of InfaUser to start the PowerCenter Service Manager instance:

```
$ InfaHome/Server/tomcat/bin/infaservice.sh startup
```
- Verifies whether the PowerCenter Service Manager Server is completely functional.
- Returns the control to HAD.

Offline

The offline operation performs the following tasks:

- Verifies that the required attributes are set correctly.
- Verifies whether the PowerCenter Service Manager Server instance is not offline. If found, the operation kills any existing processes that belong to this instance of PowerCenter Service Manager being clustered, and exits.
- Executes the following command, in context of InfaUser to stop the PowerCenter Service Manager Server instance.

```
$ InfaHome/Server/tomcat/bin/infaservice.sh shutdown
```
- Kills any existing processes that belong to this instance of PowerCenter Service Manager Server after the offline script is executed.
- Returns the control to HAD.

Monitor

The monitor operation performs the states of the PowerCenter Service Manager Servers on all nodes within the cluster.

The operation performs the following tasks:

- Conducts a first level check to determine that the PowerCenter Service Manager Server processes that the user specified in the PowerCenterSvcMgr agent attribute, are running on the system in the cluster. If the first level check does not find these processes running on the node, the check exits immediately, and reports the instance as offline.
- Conducts a second level check if the SecondLevelMonitor attribute is set to a value greater than 0.
- Uses a connect (3c) method to check for the PowerCenter Service Manager Server to listen to the port defined by the Port attribute. The host name needed to perform this check is derived from the InfaHome agent attribute.
- Depending upon the MonitorProgram attribute, the monitor operation performs a customized check using a user-supplied monitoring utility.

See [“Executing a customized monitoring program”](#) on page 35.

Clean

The clean operation performs the following tasks in the event of a failure or an unsuccessful attempt to bring a PowerCenter Service Manager Server instance online or take it offline:

- Attempts to gracefully shut down the PowerCenter Service Manager Server instance, using the following command in context of InfaUser.

```
$ InfaHome/Server/tomcat/bin/infaservice.sh shutdown
```
- Kills the remaining processes pertaining to this PowerCenter Service Manager Server if the instance does not shut down normally.
- Returns the control to HAD.

Note: By default the agent attempts to restart a faulted resource 1000 times before the resource is marked as faulted.

See [“Changing the default restart behaviour”](#) on page 32.

Setting up Informatica PowerCenter Service Manager in a VCS cluster

Follow the steps below to set up Informatica PowerCenter Service Manager in a cluster:

- Set up a VCS cluster.
Refer to *Veritas Cluster Server Installation Guide* for more information on installing and configuring VCS.
- Install and configure Informatica PowerCenter Service Manager for High Availability.
- Install the Veritas High Availability agent for Informatica PowerCenter Service Manager.
See [“Installing the agent in a VCS environment”](#) on page 23.
- Configure the service groups for Informatica PowerCenter Service Manager.
See [“About configuring service groups for Informatica PowerCenter Service Manager”](#) on page 37.
- Enable the Tomcat “headless” process for Informatica PowerCenter 8.1.1. See [“Instructing JRE to start running within a “headless” environment”](#) on page 38.

Installing and configuring Informatica PowerCenter Service Manager for high availability

This chapter includes the following topics:

- [About PowerCenter](#)
- [Basic resources to cluster a PowerCenter Service Manager Server](#)
- [Virtualizing PowerCenter Service Manager](#)

About PowerCenter

Informatica PowerCenter, is a single and unified enterprise data intergration platform, that enables you to access and intergrate data from a business system.

Key features of Informatica PowerCenter include the following:

- Data migration
- Data synchronization
- Enterprise data warehousing
- Master data management
- Cross-enterprise data integration
- Data governance

- Service-oriented architectures
- Integration competency centers
- Universal data access
- Mission-critical and Enterprise-wide data integration

PowerCenter is available in the following editions:

- PowerCenter Standard Edition
- PowerCenter Real Time Edition
- PowerCenter Advance Edition

Basic resources to cluster a PowerCenter Service Manager Server

A cluster setup for PowerCenter Service Manager, is split into the following three service groups:

- Veritas Cluster Filesystem (CFS)
- Cluster Volume Manager (CVM)
- PowerCenter Service Manager

The PowerCenter Service Manager resources depend on the resources of CFS and CVM service groups, for the prerequisite disk groups, volumes and mount points.

The recommended resources and its setup for each of the above service groups are described in the following subsections.

For information on the service group dependencies,

See [“Sample service group configurations”](#) on page 55.

Service Group for CFS

The CFS service group has the following resources:

- CVM Volume Diskgroup
The CVM disk groups provide an active/active clustered set of volumes that are used to create the CFS, that is mounted in parallel on all configured nodes. Use the CVMVolDg resource type to create this resource.
- CFS Mount
This resource is used to provide the CFS active/active shared file system to PowerCenter infa_shared objects from \$PMROOTDir directory. Such directories include Cache, Storage, SrcFiles, TgtFiles etc.

You can also use this resource to place the Informatica PowerCenter binaries on the shared CFS.

Use the CFSMount resource type to create this resource.

Service Group for CVM

The CVM service group has the following resources.

- CFSfsckd

The CFSfsckd resource is used to start the cluster file system check (using the `fsck` command), daemon, and `vxfsckd` that runs for a cluster mount to succeed.

Use the CFSfsckd resource type to create this resource.

- CVMCluster

The CVMCluster resource controls the overall operation of CVM. The agents of CVMCluster bring up the CVM cluster.

Use the CVMCluster resource type to create this resource.

- CVMVxconfigd

The `vxconfigd` daemon maintains disk and disk group configurations, communicates configuration changes to the kernel, and modifies configuration information stored on the disks. CVMVxconfigd is required in the Cluster Volume Manager service group to start and monitor the `vxconfigd` daemon.

Use the CVMVxconfigd resource type to create this resource.

Service Group for PowerCenter Service Manager

The PowerCenter Service Manager service group contains the Informatica PowerCenter Service Manager resource. This resource starts, stops and monitors the Informatica PowerCenter Service Manager instance. Once the Service Manager is either stopped or started, this resource manages all the subordinate Informatica PowerCenter processes and services within its service framework.

Use the PowerCenterSvcMgr resource type to create this resource.

Virtualizing PowerCenter Service Manager

To ensure that your Service Manager Server can function properly on any node of the cluster, you need to virtualize all the parameters that could be dependent on a particular node.

Review the following basic notes for virtualization:

Host names	When installing and configuring the Service Manager Server, ensure that you enter the virtual host name associated with the IP address used to configure the IP resource. This ensures that if the application needs to be migrated, you are not tied down by the physical IP address given to the Service Manager Server.
Path names	Ensure that your application gets installed on a shared disk so that it is not constrained by anything that is local to the node. If this is not possible every time, make sure that the local data is available on each configured node.

Installing, upgrading, and removing the agent for Informatica PowerCenter Service Manager

This chapter includes the following topics:

- [Before you install the Veritas agent for Informatica PowerCenter Service Manager](#)
- [About the ACC library](#)
- [Installing the ACC library](#)
- [Installing the agent in a VCS environment](#)
- [Removing the agent in a VCS environment](#)
- [Removing the ACC library](#)
- [Upgrading the agent in a VCS environment](#)

Before you install the Veritas agent for Informatica PowerCenter Service Manager

You must install the Veritas agent for Informatica PowerCenter Service Manager on all the systems that will host PowerCenter Service Manager service groups.

Ensure that you meet the following prerequisites to install the agent for Informatica PowerCenter Service Manager.

For VCS, do the following:

- Install and configure Veritas Cluster Server.
For more information on installing and configuring Veritas Cluster Server, refer to the *Veritas Cluster Server Installation Guide*.
- Remove any previous version of this agent.
To remove the agent,
See [“Removing the agent in a VCS environment”](#) on page 25.
- Install the latest version of ACC Library.
To install or update the ACC Library package, locate the library and related documentation in the agentpack tarball.
See [“Installing the ACC library”](#) on page 23.

Prerequisites for installing the agent to support Solaris zones

Ensure that you meet the following prerequisites to install the agent for Informatica PowerCenter Service Manager:

- Install PowerCenter Service Manager to support Solaris zones. For details refer to Informatica user documentation.
- Install and configure the VCS 5.0 or 5.1 environment to support Solaris zones. Refer to the VCS user documentation for details.
- Install the required version of ACC Library.
- Remove any previous version of this agent.

About the ACC library

The operations of a VCS agent depend on a set of Perl modules known as the ACC library. The library must be installed on each system in the cluster that runs the agent. The ACC library contains common, reusable functions that perform tasks, such as process identification, logging, and system calls.

Instructions to install or remove the ACC library on a single system in the cluster are given in the following sections. The instructions assume that the agent's tar file has already been extracted.

Installing the ACC library

Install the ACC library on each system in the cluster that runs an agent that depends on the ACC library.

To install the ACC library

- 1 Log in as superuser.
- 2 Download ACC Library.

You can download either the complete Agent Pack tarball or the individual ACCLib tarball from the Symantec Operations Readiness Tools (SORT) site (<https://sort.symantec.com/agents>).

- 3 If you downloaded the complete Agent Pack tarball, navigate to the directory containing the package for the platform running in your environment.

AIX	<code>cd1/aix/vcs/application/acc_library/version_library/pkg</code>
HP-UX	<code>cd1/hpux/generic/vcs/application/acc_library/version_library/pkg</code>
Linux	<code>cd1/linux/generic/vcs/application/acc_library/version_library/rpms</code>
Solaris	<code>cd1/solaris/dist_arch/vcs/application/acc_library/version_library/pkg</code>

where *dist_arch* is `sol_sparc` or `sol_x64`.

- 4 If you downloaded the individual ACCLib tarball, navigate to the `pkgs` directory (for AIX, HP-UX, and Solaris), or `rpms` directory (for Linux).
- 5 Install the package. Enter **Yes** if asked to confirm overwriting of files in the existing package.

AIX	<code># installp -ac -d VRTSacclib.bff VRTSacclib</code>
HP-UX	<code># swinstall -s `pwd` VRTSacclib</code>
Linux	<code># rpm -i \ VRTSacclib-VersionNumber-GA_GENERIC.noarch.rpm</code>
Solaris	<code># pkgadd -d VRTSacclib.pkg</code>

Installing the agent in a VCS environment

Install the agent for Informatica PowerCenter Service Manager on each node in the cluster.

To install the agent in a VCS environment

- 1 Download the agent from the Symantec Operations Readiness Tools (SORT) site: <https://sort.symantec.com/agents>.

You can download either the complete Agent Pack tarball or an individual agent tarball.

- 2 Uncompress the file to a temporary location, say /tmp.
- 3 If you downloaded the complete Agent Pack tarball, navigate to the directory containing the package for the platform running in your environment.

```
AIX      cd1/aix/vcs/application/powercentersvcmgr_agent/  
        vcs_version/version_agent/pkg
```

```
HP-UX    cd1/hpux/generic/vcs/application/powercentersvcmgr_agent/  
        vcs_version/version_agent/pkg
```

```
Linux    cd1/linux/generic/vcs/application/powercentersvcmgr_agent/  
        vcs_version/version_agent/rpms
```

```
Solaris  cd1/solaris/dist_arch/vcs/application/powercentersvcmgr_agent/  
        vcs_version/version_agent/pkg
```

where, *dist_arch* is sol_x64 or sol_sparc

If you downloaded the individual agent tarball, navigate to the pkgs directory (for AIX, HP-UX, and Solaris), or rpms directory (for Linux).

- 4 Log in as superuser.
- 5 Install the package.

```
AIX      # installp -ac -d VRTSpcsvcmgr.rte.bff VRTSpcsvcmgr.rte
```

```
HP-UX    # swinstall -s `pwd` VRTSpcsvcmgr
```

```
Linux    # rpm -ihv \  
        VRTSpcsvcmgr-AgentVersion-GA_GENERIC.noarch.rpm
```

```
Solaris  # pkgadd -d . VRTSpcsvcmgr
```

- 6 After installing the agent package, you must import the agent type configuration file. See “[Importing the agent types files in a VCS environment](#)” on page 30.

Removing the agent in a VCS environment

You must uninstall the agent for Informatica PowerCenter Service Manager from a cluster while the cluster is active.

To uninstall the agent in a VCS environment

- 1 Log in as a superuser.
- 2 Set the cluster configuration mode to read/write by typing the following command from any node in the cluster:

```
# haconf -makerw
```

- 3 Remove all PowerCenter Service Manager resources from the cluster. Use the following command to verify that all resources have been removed:

```
# hares -list Type=PowerCenterSvcMgr
```

- 4 Remove the agent type from the cluster configuration by typing the following command from any node in the cluster:

```
# hatype -delete PowerCenterSvcMgr
```

Removing the agent's type file from the cluster removes the include statement for the agent from the main.cf file, but the agent's type file is not removed from the cluster configuration directory. You can remove the agent's type file later from the cluster configuration directory.

- 5 Save these changes. Then set the cluster configuration mode to read-only by typing the following command from any node in the cluster:

```
# haconf -dump -makero
```

- 6 Use the platform's native software management program to remove the agent for Informatica PowerCenter Service Manager from each node in the cluster.

Execute the following command to uninstall the agent:

```
AIX # installp -u VRTSpcsvcmgr.rte
```

```
HP-UX # swremove VRTSpcsvcmgr
```

```
Linux # rpm -e VRTSpcsvcmgr
```

```
Solaris # pkgrm VRTSpcsvcmgr
```

Removing the ACC library

Perform the following steps to remove the ACC library.

To remove the ACC library

- 1 Ensure that all agents that use ACC library are removed.
- 2 Run the following command to remove the ACC library package.

```
AIX          # installp -u VRTSaccplib
HP-UX       # swremove VRTSaccplib
Linux       # rpm -e VRTSaccplib
Solaris     # pkgrm VRTSaccplib
```

Upgrading the agent in a VCS environment

Perform the following steps to upgrade the agent with minimal disruption, in a VCS environment.

To upgrade the agent in a VCS environment

- 1 Persistently freeze the service groups that host the application.

```
# hagr -freeze GroupName -persistent
```
- 2 Stop the cluster services forcibly.

```
# hastop -all -force
```
- 3 Ensure that the agent operations are stopped on all the nodes.

```
# ps -ef | grep PowerCenterSvcMgr
```
- 4 Uninstall the agent package from all the nodes. Use the platform's native software management program to remove the agent for Informatica PowerCenter Service Manager from each node in the cluster.

Execute the following command to uninstall the agent:

```
AIX          # installp -u VRTSpcsvcmgr.rte
HP-UX       # swremove VRTSpcsvcmgr
Linux       # rpm -e VRTSpcsvcmgr
Solaris     # pkgrm VRTSpcsvcmgr
```

- 5 Install the new agent on all the nodes.
 See “Installing the agent in a VCS environment” on page 23.
- 6 Copy the new PowerCenterSvcMgrTypes.cf file from the agent's conf directory, to the VCS conf directory /etc/VRTSvcs/conf/config.

VCS version	Operating system	Agent types file
VCS 4.x	<ul style="list-style-type: none"> ■ AIX ■ HP-UX ■ Linux ■ Solaris 	/etc/VRTSvcs/conf/sample_PowerCenterSvcMgr/ PowerCenterSvcMgrTypes.cf
VCS 5.x	<ul style="list-style-type: none"> ■ AIX ■ HP-UX ■ Linux 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes.cf
VCS 5.0	<ul style="list-style-type: none"> ■ Solaris SPARC and x64 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes50.cf
VCS 5.1	<ul style="list-style-type: none"> ■ Solaris SPARC and x64 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes51.cf

Note: If you are using Solaris SPARC or Solaris x64, copy the PowerCenterSvcMgrTypes50.cf file for VCS 5.0 (and its intermediate Maintenance Packs) and PowerCenterSvcMgrTypes51.cf file for VCS 5.1

- 7 Check for the changes in the resource values required, if any, due to the new agent types file.

Note: To note the list of changed attributes, compare the new type definition file with the old type definition file.

- 8 Start the cluster services.

```
# hstart
```

9 Start the agent on all nodes, if not started.

```
# haagent -start PowerCenterSvcMgr -sys SystemName
```

10 Unfreeze the service groups once all the resources come to an online steady state.

```
# hagrps -unfreeze GroupName -persistent
```

Configuring the agent for Informatica PowerCenter Service Manager

This chapter includes the following topics:

- [About configuring the Veritas agent for Informatica PowerCenter Service Manager](#)
- [Importing the agent types files in a VCS environment](#)
- [Changing the default restart behaviour](#)
- [Informatica PowerCenter Service Manager agent attributes](#)
- [Executing a customized monitoring program](#)

About configuring the Veritas agent for Informatica PowerCenter Service Manager

After installing the Veritas agent for Informatica PowerCenter Service Manager, you must import the agent type configuration file. After importing this file, you can create and configure PowerCenter Service Manager resources. Before you configure a resource, review the attributes table that describes the resource type and its attributes.

To view the sample agent type definition and service groups configuration.

See [“About sample configurations for the agent for Informatica PowerCenter Service Manager”](#) on page 45.

Importing the agent types files in a VCS environment

To use the agent for Informatica PowerCenter Service Manager, you must import the agent types file into the cluster.

To import the agent types file using the Veritas Cluster Server graphical user interface

- 1 Start the Veritas Cluster Manager and connect to the cluster on which the agent is installed.
- 2 Click **File > Import Types**.
- 3 In the Import Types dialog box, select the following file:

VCS version	OperatingSystem	Agent types file
VCS 4.x	■ AIX	/etc/VRTSvcs/conf/sample_PowerCenterSvcMgr/
	■ HP-UX	PowerCenterSvcMgrTypes.cf
	■ Linux	
	■ Solaris	
VCS 5.x	■ AIX	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/
	■ HP-UX	PowerCenterSvcMgrTypes.cf
	■ Linux	
VCS 5.0	■ Solaris SPARC and x64	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/PowerCenterSvcMgrTypes50.cf
VCS 5.1	■ Solaris SPARC and x64	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/PowerCenterSvcMgrTypes51.cf

- 4 Click **Import**.
- 5 Save the VCS configuration.

The PowerCenter Service Manager agent type is now imported to the VCS engine.

You can now create PowerCenter Service Manager resources. For additional information about using the VCS GUI, refer to the *Veritas Cluster Server User's Guide*.

To import the agent types file using the Veritas Cluster Server command line interface (CLI), perform the following steps.

- 1 Log on to any one of the systems in the cluster as the superuser.
- 2 Create a temporary directory.

```
# mkdir ./temp
# cd ./temp
```

- 3 Copy the sample file Types.cf.

VCS Version	Operating System	Agent types file
VCS 4.x	<ul style="list-style-type: none"> ■ AIX ■ HP-UX ■ Linux ■ Solaris 	/etc/VRTSvcs/conf/sample_PowerCenterSvcMgr/ PowerCenterSvcMgrTypes.cf
VCS 5.x	<ul style="list-style-type: none"> ■ AIX ■ HP-UX ■ Linux 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes.cf
VCS 5.0	<ul style="list-style-type: none"> ■ Solaris SPARC and x64 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes50.cf
VCS 5.1	<ul style="list-style-type: none"> ■ Solaris SPARC 	/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/ PowerCenterSvcMgrTypes51.cf

The following example assumes VCS 5.0 is installed on AIX:

```
# cp \  
/etc/VRTSagents/ha/conf/PowerCenterSvcMgr/PowerCenterSvcMgrTypes.cf .
```

4 Create a dummy main.cf file:

```
# echo 'include "PowerCenterSvcMgrTypes.cf"' > main.cf
```

5 Create the PowerCenterSvcMgr resource type as follows:

```
# hacf -verify .  
  
# haconf -makerw  
  
# sh main.cmd  
  
# haconf -dump
```

The PowerCenter Service Manager agent type is now imported to the VCS engine.

You can now create PowerCenter Service Manager resources. For additional information about using the VCS CLI, refer to the *Veritas Cluster Server User's Guide*.

Changing the default restart behaviour

The agent by default attempts to restart a faulted PowerCenter Service Manager resource 1000 times before it faults.

To change this default behaviour, execute the following commands:

```
# haconf -makerw  
# hatype -modify PowerCenterSvcMgr RestartLimit RestartLimit  
# haconf -dump
```

where, *RestartLimit* represents the value for the number of times VCS must restart the faulted PowerCenter Service Manager resource, before executing the clean function.

Informatica PowerCenter Service Manager agent attributes

Refer to the required and optional attributes while configuring the agent for Informatica PowerCenter Service Manager.

[Table 4-1](#) lists the required attributes for the Informatica PowerCenter Service Manager agent.

Table 4-1 Required attributes

Required attributes	Description
ResLogLevel	<p>Specifies the logging detail performed by the agent for the resource.</p> <p>The valid values are as follows:</p> <ul style="list-style-type: none"> ■ ERROR: Only logs error messages. ■ WARN: Logs above plus warning messages. ■ INFO: Logs above plus informational messages. ■ TRACE: Logs above plus trace messages. TRACE is very verbose and should only be used during initial configuration or for troubleshooting and diagnostic operations. <p>Default: INFO</p> <p>Example: INFO</p>
InfaUser	<p>Specifies the account name under which the agent executes programs to manage the Service Manager.</p> <p>Default: ""</p> <p>Example: infaPC</p>
EnvFile	<p>Specifies the full path to the file that the agent sources use to set the environment before executing any Service Manager programs. This attribute should be set as a local attribute and should point to a unique environment file on each configured node.</p> <p>Symantec recommends to create this file preferably in the InfaHome directory.</p> <p>The supported shell environments are: Bourne, Korn, and C shell.</p> <p>Default: ""</p> <p>Example,</p> <p>On nodeA: /u01/app/infa_bin/PowerCenter/nodeA/envfile</p> <p>On nodeB: /u01/app/infa_bin/PowerCenter/nodeB/envfile</p>
Port	<p>Represents the port number dedicated for the PowerCenter Administration Console. The monitor agent function uses this value to determine if the console responds to HTTP requests.</p> <p>This is a required attribute only if SecondLevelMonitor is enabled.</p> <p>Default: 6001</p> <p>Example: 6001</p>

Table 4-1 Required attributes (*continued*)

Required attributes	Description
InfaHome	<p>Represents the Service Manager installation directory.</p> <p>Default: ""</p> <p>Examples:</p> <p>On nodeA: /u01/app/infa_bin/PowerCenter/nodeA</p> <p>On nodeB: /u01/app/infa_bin/PowerCenter/nodeB</p>
HostName	<p>Specifies the IPv4 address or host name of the virtual host which is configured for the Informatica PowerCenter instance. This attribute should be set as a local attribute on each configured node.</p> <p>Default: ""</p> <p>Examples:</p> <p>On nodeA: pwrsvcmgr-01</p> <p>On nodeB: pwrsvcmgr-02</p> <p>Where, pwrsvcmgr-01 and pwrsvcmgr-02 are the virtual hosts configured for hosting the PowerCenter Service Manager resources on nodeA and nodeB respectively.</p>

Table 4-2 lists the optional attributes for the PowerCenterSvcMgr agent.

Table 4-2 Optional attributes

Optional attributes	Description
MonitorProgram	<p>Absolute path name of an external, user-supplied monitor executable. If specified, the monitor function executes this file to perform an additional state check of the server. There are no restrictions for what actions the external monitor program performs to determine the state of the server.</p> <p>For information about setting this attribute:</p> <p>See “Executing a customized monitoring program” on page 35.</p> <p>Default: ""</p> <p>Example 1: /u01/app/infa_bin/PowerCenter/nodeA/bin/monitor.sh</p> <p>Example 2: /u01/app/infa_bin/PowerCenter/nodeB/bin/monitor.pl <i>arg1 arg2</i></p>

Table 4-2 Optional attributes (*continued*)

Optional attributes	Description
SecondLevelMonitor	<p>Used to enable second-level monitoring. Second-level monitoring is a deeper, more thorough state check of the Service Manager. The numeric value specifies how often the monitoring routines must run. 0 means never run the second-level monitoring routines, 1 means run routines every monitor interval, 2 means run routines every second monitor interval. This interpretation may be extended to other values.</p> <p>Note: Exercise caution while setting SecondLevelMonitor to large numbers. For example, if the MonitorInterval is set to 60 seconds and the SecondLevelMonitor is set to 100, then the second level check is executed every 100 minutes, which may not be as often as intended. For maximum flexibility, no upper limit is defined for SecondLevelMonitor.</p> <p>Default: 0</p> <p>Example: 1</p>

Executing a customized monitoring program

You can configure the monitor function to execute a custom monitor utility to perform a user-defined Service Manager Server state check. The utility is executed in the context of the UNIX user that is defined in the InfaUser attribute. The environment is set by sourcing the file specified in the EnvFile attribute.

The monitor function executes the utility specified in the MonitorProgram attribute if the following conditions are satisfied:

- The MonitorProgram attribute value is set to a valid executable utility.
- The first level process check indicates that the PowerCenter Service Manager instance is online.
- The SecondLevelMonitor attribute is set to 1 and the second level check returns the server state as "online" or the SecondLevelMonitor attribute is set to a value greater than 1, but the second level check is deferred for this monitoring cycle.

The monitor function interprets the program exit code as follows:

- 110 or 0 Service Manager Server instance is online
- 100 or 1 Service Manager Server instance is offline

Any other Service Manager Server instance is unknown
value

To ensure that the custom monitor utility is always available to the agent, Symantec recommends storing the file in the directory where the Service Manager Server is installed.

Configuring the service groups for Informatica PowerCenter Service Manager

This chapter includes the following topics:

- [About configuring service groups for Informatica PowerCenter Service Manager](#)
- [Before configuring the service groups for Informatica PowerCenter Service Manager](#)
- [Configuring PowerCenter Service Manager resources for Solaris zones support](#)
- [Instructing JRE to start running within a “headless” environment](#)

About configuring service groups for Informatica PowerCenter Service Manager

Configuring the Informatica PowerCenter Service Manager service group involves creating the PowerCenter Service Manager service group, its resources, and defining attribute values for the configured resources. You must have administrator privileges to create and configure a service group.

You can configure the service groups using one of the following:

- The Cluster Manager (Java console)
- Veritas Operations Manager

- The command-line

Before configuring the service groups for Informatica PowerCenter Service Manager

Before you configure the PowerCenter Service Manager service group, you must:

- Verify that VCS is installed and configured on all nodes in the cluster where you will configure the service group.
Refer to the *Veritas Cluster Server Installation Guide* for more information.
- Verify that the Veritas agent for Informatica PowerCenter Service Manager is installed on all nodes in the cluster.
See [“Installing the agent in a VCS environment”](#) on page 23.

Configuring PowerCenter Service Manager resources for Solaris zones support

To enable the agent for Informatica PowerCenter Service Manager to support Solaris zones, ensure that you perform the following configuration steps:

- Install PowerCenter Service Manager on dedicated Solaris zones.
- Preferably, follow the Symantec recommendation of installing zones on a shared disk for convenient configuration, failover, and maintenance.
- Make sure that the name of the Solaris zone is the same as the virtual host name that you use to install and configure the PowerCenter Service Manager.
- In a VCS environment, ensure that you have set the value of ContainerName attribute to the name of the Solaris zone.
By default the agent function executes in the Global zone.

Instructing JRE to start running within a “headless” environment

For PowerCenter 8.1.1, the startup script “`infaservice.sh`” by default, does not start the underlying Tomcat server with the “headless” option. It is this process that the agent searches in order to flag the application as ONLINE.

If the “headless” option is not used then rendering of charts do not work on the PowerCenter Administration Console. This is because the Java process is not able

to render the charts, as it lacks the GUI/X-Window capability for doing this. This, however, has no bearing on the repository or integration service operation.

To instruct the JRE to start the Tomcat “headless” process, add the following lines to the environment file being registered with the EnvFile agent attribute:

```
INFA_JAVA_OPTS="-Xmx512m -Djava.awt.headless=true"  
  
export INFA_JAVA_OPTS
```

This example assumes an environment file for the Bourne-shell. Bounce the entire PC domain after making this change.

Troubleshooting the agent for Informatica PowerCenter Service Manager

This chapter includes the following topics:

- [Using the correct software and operating system versions](#)
- [Meeting prerequisites](#)
- [Configuring PowerCenter Service Manager resources](#)
- [Verifying virtualization](#)
- [Starting the PowerCenter Service Manager instance outside a cluster](#)
- [Reviewing error log files](#)

Using the correct software and operating system versions

Ensure that no issues arise due to incorrect software and operating system versions. For the correct versions of operating system and software to be installed on the resource systems:

See [“Supported software”](#) on page 12.

Meeting prerequisites

Before installing the agent for Informatica PowerCenter Service Manager, double check that you meet the prerequisites.

For example, you must install the ACC library on VCS before installing the agent for Informatica PowerCenter Service Manager.

See [“Before you install the Veritas agent for Informatica PowerCenter Service Manager”](#) on page 21.

Configuring PowerCenter Service Manager resources

Before using PowerCenter Service Manager resources, ensure that you configure the resources properly. For a list of attributes used to configure all PowerCenter Service Manager resources, refer to the agent attributes.

Verifying virtualization

Verify that your application does not use anything that ties it down to a particular node of the cluster.

See [“Virtualizing PowerCenter Service Manager ”](#) on page 19.

Starting the PowerCenter Service Manager instance outside a cluster

If you face problems while working with a resource, you must disable the resource within the cluster framework. A disabled resource is not under the control of the cluster framework, and so you can test the PowerCenter Service Manager instance independent of the cluster framework. Refer to the cluster documentation for information about disabling a resource.

You can then restart the PowerCenter Service Manager instance outside the cluster framework.

Note: Use the same parameters that the resource attributes define within the cluster framework while restarting the resource outside the cluster framework.

Execute the following commands to start, stop or monitor the Service Manager Server outside the cluster framework.

To start `$ InfaHome/server/tomcat/bin/infaservice.sh startup`

To stop `$ InfaHome/server/tomcat/bin/infaservice.sh shutdown`

To monitor Verify whether the PowerCenter Service Manager processes are running as InfaUser by executing the following command.

`$ telnet HostName Port`

Note: The agent uses the connect (3c) method to check whether Administration Console of the PowerCenter Service Manager is listening to the port defined by the *Port* agent attribute on the host defined by the *HostName* agent attribute.

Reviewing error log files

If you face problems while using PowerCenter Service Manager or the agent for Informatica PowerCenter Service Manager, refer to your product documentation to locate the log files, to investigate the problems.

The common reasons for issues are as follows:

- | | |
|---|---|
| Insufficient privileges | Files that need to be created, written to, would be created as InfaUser. Check if necessary privileges have been set. |
| Incorrect port, environment or parameter settings | Verify that ports have been properly configured and declared. Typically, ports from 1 through 1024 are reserved for the superuser.

Ensure that parameters to the agent are correctly defined. |
| Expired licenses | Check the application log files for any error messages related to expired licenses.

Ensure that the license keys/files have been placed at the appropriate location, as needed by the application. |
| Broken symlinks, missing files, and libraries | Verify your installation.

Make sure that nothing is broken, and all dependencies for the executables are met. |
| Insufficient disk space or system parameters | Ensure that the file-system has sufficient space for creation of temporary files that the application might need.

Verify that the kernel has been tuned for sufficient IPC resources, file descriptors and meets the hardware requirement. Consult your product documentation for these details. |

Consult your application expert if needed.

Reviewing cluster log files

In case of problems while using the agent for Informatica PowerCenter Service Manager, you can access the engine log file for more information about a particular resource. The engine log file is located at `/var/VRTSvcs/log/engine_A.log`.

Using trace level logging

The `ResLogLevel` attribute controls the level of logging that is written in a cluster log file for each PowerCenter Service Manager resource. You can set this attribute to `TRACE`, which enables very detailed and verbose logging.

If you set `ResLogLevel` to `TRACE`, a very high volume of messages are produced. Symantec recommends that you localize the `ResLogLevel` attribute for a particular resource.

Note: Starting with version 5.1.1.0 of the ACC library, the `TRACE` level logs for any `ACCLib` based agent are generated locally at the location `/var/VRTSvcs/log/Agent_A.log`.

To localize `ResLogLevel` attribute for a resource

- 1 Identify the resource for which you want to enable detailed logging.
- 2 Localize the `ResLogLevel` attribute for the identified resource:

```
# hares -local Resource_Name ResLogLevel
```

- 3 Set the `ResLogLevel` attribute to `TRACE` for the identified resource:

```
# hares -modify Resource_Name ResLogLevel TRACE -sys SysA
```

- 4 Test the identified resource. The function reproduces the problem that you are attempting to diagnose.

- 5 Set the `ResLogLevel` attribute back to `INFO` for the identified resource:

```
# hares -modify Resource_Name ResLogLevel INFO -sys SysA
```

- 6 Review the contents of the log file. Use the time noted in Step 4 and Step 6 to diagnose the problem.

You can also contact Symantec support for more help.

Sample Configurations

This appendix includes the following topics:

- [About sample configurations for the agent for Informatica PowerCenter Service Manager](#)
- [Sample agent type definition](#)
- [Sample agent type definition under Solaris zones](#)
- [Sample configuration](#)
- [Sample configuration under Solaris zones](#)
- [Sample service group configurations](#)
- [Sample service group configuration under Solaris zone](#)

About sample configurations for the agent for Informatica PowerCenter Service Manager

The sample configuration graphically depicts the resource types, resources, and resource dependencies within the service group. Review these dependencies carefully before configuring the agent for Informatica PowerCenter Service Manager. For more information about these resource types, see the *Veritas Cluster Server Bundled Agents Reference Guide*.

Sample agent type definition

The sample agent type definition for Informatica PowerCenter Service Manager are as follows:

For VCS 4.x

```
type PowerCenterSvcMgr (  
    static int RestartLimit = 1000  
    static str ArgList[] = { ResLogLevel, State, IState,  
        InfaUser, EnvFile, HostName, Port, InfaHome,  
        SecondLevelMonitor, MonitorProgram }  
    str ResLogLevel = INFO  
    str InfaUser  
    str EnvFile  
    str HostName  
    int Port = 6001  
    str InfaHome  
    int SecondLevelMonitor = 0  
    str MonitorProgram  
)
```

For VCS 5.0

```
type PowerCenterSvcMgr (  
    static int RestartLimit = 1000  
    static str AgentFile = "/opt/VRTSvcs/bin/Script50Agent"  
    static str AgentDirectory = "/opt/VRTSagents/ha/bin/  
        PowerCenterSvcMgr"  
    static str ArgList[] = { ResLogLevel, State, IState,  
        InfaUser, EnvFile, HostName, Port, InfaHome,  
        SecondLevelMonitor, MonitorProgram }  
    str ResLogLevel = INFO  
    str InfaUser  
    str EnvFile  
    str HostName  
    int Port = 6001  
    str InfaHome  
    int SecondLevelMonitor = 0  
    str MonitorProgram  
)
```

Sample agent type definition under Solaris zones

```
type PowerCenterSvcMgr (  
    static str ContainerType = Zone  
    static str AgentDirectory = "/opt/VRTSagents/ha/bin/  
        PowerCenterSvcMgr"  
    static str AgentFile = "/opt/VRTSvcs/bin/Script50Agent"  
    static int RestartLimit = 1000
```

```
static i18nstr ArgList[] = { ResLogLevel, State, IState,  
InfaUser, EnvFile, HostName, Port, InfaHome,  
SecondLevelMonitor, MonitorProgram }  
str ResLogLevel = INFO  
str InfaUser  
str EnvFile  
str HostName  
int Port = 6001  
str InfaHome  
int SecondLevelMonitor  
str MonitorProgram  
str ContainerName  
)
```

Sample configuration

The sample agent type definition for Informatica PowerCenter Service Manager is as follows:

```
include "types.cf"  
include "CFSTypes.cf"  
include "CVMTypes.cf"  
include "PowerCenterSvcMgr.cf"  
  
cluster PowerCenter (  
  UserNames = { admin = eHIaHChEidIIgQIcHF }  
  ClusterAddress = "10.182.4.208"  
  Administrators = { admin }  
  UseFence = SCSI3  
  HacliUserLevel = COMMANDROOT  
)  
  
system nodeA(  
)  
  
system nodeB (  
)  
  
group ClusterService (  
  SystemList = { nodeA= 0, nodeB = 1 }  
  UserStrGlobal = "LocalCluster@https://10.182.4.208:8443;"  
  AutoStartList = { nodeA, nodeB }  
  OnlineRetryLimit = 3
```

```
OnlineRetryInterval = 120
)

IP webip (
  Device = eth0
  Address = "10.182.4.208"
  NetMask = "255.255.224.0"
)

NIC csgnic (
  Device = eth0
)

VRTSWebApp VCSweb (
  Critical = 0
  AppName = vcs
  InstallDir = "/opt/VRTSweb/VERITAS"
  TimeForOnline = 5
  RestartLimit = 3
)

VCSweb requires webip
webip requires csgnic

// resource dependency tree
//
// group ClusterService
// {
//   VRTSWebApp VCSweb
//     {
//       IP webip
//         {
//           NIC csgnic
//         }
//       }
//     }
// }

group Informatica_cfs (
  SystemList = { nodeA= 0, nodeB = 1 }
  AutoFailOver = 0
  Parallel = 1
```

```
AutoStartList = { nodeA, nodeB }
)

CFSSMount infabin_mnt (
  MountPoint = "/u01/app/infa_bin"
  BlockDevice = "/dev/vx/dsk/infa_bindg/infa_binvol"
  MountOpt = largefiles
)

CFSSMount infashared_mnt (
  MountPoint = "/u01/app/infa_shared"
  BlockDevice = "/dev/vx/dsk/infa_shareddg/infa_sharedvol"
  MountOpt = largefiles
)

CVMVolDg infabin_voldg (
  CVMDiskGroup = infa_bindg
  CVMActivation = sw
)

CVMVolDg infashared_voldg (
  CVMDiskGroup = infa_shareddg
  CVMActivation = sw
)

requires group cvm online local firm
infabin_mnt requires infabin_voldg
infashared_mnt requires infashared_voldg

// resource dependency tree
//
// group Informatica_cfs
// {
//   CFSSMount infabin_mnt
//   {
//     CVMVolDg infabin_voldg
//   }
//   CFSSMount infashared_mnt
//   {
//     CVMVolDg infashared_voldg
//   }
// }
```

```
group PowerCenterServiceManager (
    SystemList = { nodeB = 0, nodeA= 1 }
    AutoFailOver = 0
    Parallel = 1
    AutoStartList = { nodeB, nodeA}
)

PowerCenterSvcMgr Informatica (
    InfaUser = infaPC
    EnvFile @nodeB = "/u01/app/infa_bin/PowerCenter/nodeB/envfile"
    EnvFile @nodeA= "/u01/app/infa_bin/PowerCenter/nodeA/envfile"
    InfaHome @nodeB = "/u01/app/infa_bin/PowerCenter/nodeB"
    InfaHome @nodeA= "/u01/app/infa_bin/PowerCenter/nodeA"
)

requires group Informatica_cfs online local firm

// resource dependency tree
//
// group PowerCenterServiceManager
// {
//   PowerCenterSvcMgr Informatica
// }

group cvm (
    SystemList = { nodeA= 0, nodeB = 1 }
    AutoFailOver = 0
    Parallel = 1
    AutoStartList = { nodeA, nodeB }
)

CFSfsckd vxfsckd (
)

CVMcluster cvm_clus (
    CVMClustName = PowerCenter
    CVMNodeId = { nodeA= 0, nodeB = 1 }
    CVMTransport = gab
    CVMTimeout = 200
)
```

```
)

CVMVxconfigd cvm_vxconfigd (
  CVMVxconfigdArgs = { syslog }
)

cvm_clus requires cvm_vxconfigd
vxfscsd requires cvm_clus

// resource dependency tree
//
// group cvm
// {
//   CFSfscsd vxfscsd
//   {
//     CVMCluster cvm_clus
//     {
//       CVMVxconfigd cvm_vxconfigd
//     }
//   }
// }
// }
```

Sample configuration under Solaris zones

This section provides a sample configuration under Solaris zone support for the agent for Informatica PowerCenter Service Manager.

```
include "types.cf"
include "CFSTypes.cf"
include "CVMTTypes.cf"
include "PowerCenterSvcMgrTypes50.cf"

cluster tpm-cluster-kr (
  UserNames = { admin = dqrJqlQnrMrrPzrLqo,
    z_inf_zone_tpm-lab-33 = ImnFmhMjnInnLvnHmk,
    z_inf_zone_tpm-lab-34 = cmnFmhMjnInnLvnHmk }
  ClusterAddress = "127.0.0.1"
  Administrators = { admin }
)
```

```
system tpm-lab-33 (  
  )  
  
system tpm-lab-34 (  
  )  
  
group cfs_inf_cfsmount1 (  
  SystemList = { tpm-lab-34 = 0, tpm-lab-33 = 1 }  
  AutoFailOver = 0  
  Parallel = 1  
  AutoStartList = { tpm-lab-33, tpm-lab-34 }  
  )  
  
CFSMount cfsmount1 (  
  Critical = 0  
  MountPoint = "/mnt1"  
  BlockDevice = "/dev/vx/dsk/shareddg1/testvol"  
  MountOpt @tpm-lab-34 = "cluster"  
  MountOpt @tpm-lab-33 = "cluster"  
  NodeList = { tpm-lab-33, tpm-lab-34 }  
  )  
  
CVMVolDg cvmvoldg1 (  
  Critical = 0  
  CVMDiskGroup = shareddg1  
  CVMActivation @tpm-lab-34 = sw  
  CVMActivation @tpm-lab-33 = sw  
  )  
  
requires group cvm online local firm  
cfsmount1 requires cvmvoldg1  
  
// resource dependency tree  
//  
// group cfs_inf_cfsmount1  
// {  
//   CFSMount cfsmount1  
//     {  
//       CVMVolDg cvmvoldg1  
//     }  
// }
```

```
group cvm (
  SystemList = { tpm-lab-34 = 0, tpm-lab-33 = 1 }
  AutoFailOver = 0
  Parallel = 1
  AutoStartList = { tpm-lab-33, tpm-lab-34 }
)

CFSfsckd vxfsckd (
  ActivationMode @tpm-lab-34 = { sharedddl = sw }
  ActivationMode @tpm-lab-33 = { sharedddl = sw }
)

CVMcluster cvm_clus (
  CVMClustName = tpmclust
  CVMNodeId = { tpm-lab-33 = 0, tpm-lab-34 = 1 }
  CVMTransport = gab
  CVMTimeout = 200
)

CVMvxconfigd cvm_vxconfigd (
  Critical = 0
  CVMvxconfigdArgs = { syslog }
)

vxfsckd requires cvm_clus
cvm_clus requires cvm_vxconfigd

// resource dependency tree
//
// group cvm
// {
//   CFSfsckd vxfsckd
//   {
//     CVMcluster cvm_clus
//     {
//       CVMvxconfigd cvm_vxconfigd
//     }
//   }
// }
// }
```

```
group powercentersvcmgr_zone (
  SystemList = { tpm-lab-33 = 0, tpm-lab-34 = 1 }
  Parallel = 1
  AutoStartList = { tpm-lab-33, tpm-lab-34 }
)

NIC powercentersvcmgr_nic (
  Device = bge0
)

PowerCenterSvcMgr powercenterssvcmgr_res (
  InfaUser = infa
  EnvFile = "/home2/infa/.profile"
  HostName @tpm-lab-33 = inf1
  HostName @tpm-lab-34 = inf2
  InfaHome @tpm-lab-33 = "/u01/app/infa_bin/PowerCenter8.6.1/inf1"
  InfaHome @tpm-lab-34 = "/u01/app/infa_bin/PowerCenter8.6.1/inf2"
  SecondLevelMonitor = 1
  ContainerName @tpm-lab-33 = inf1
  ContainerName @tpm-lab-34 = inf2
)

Zone powercentersvcmgr_zone (
  ZoneName @tpm-lab-33 = inf1
  ZoneName @tpm-lab-34 = inf2
)

requires group cfs_inf_cfsmount1 online local firm
powercenterssvcmgr_res requires powercentersvcmgr_zone
powercentersvcmgr_zone requires powercentersvcmgr_nic

// resource dependency tree
//
// group powercentersvcmgr_zone
// {
//   PowerCenterSvcMgr powercenterssvcmgr_res
//     {
//       Zone powercentersvcmgr_zone
//         {
//           NIC powercentersvcmgr_nic
//         }
//     }
// }
```

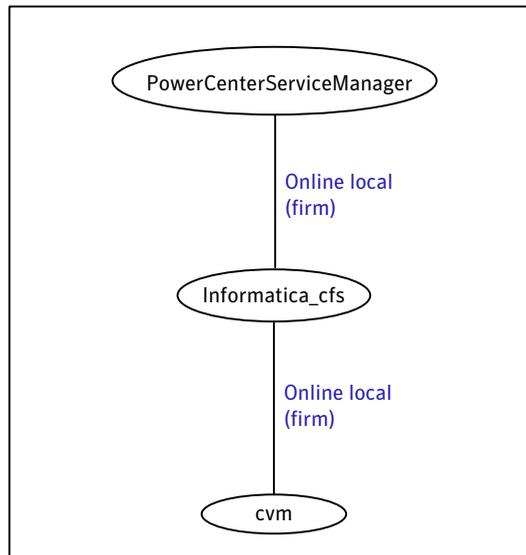
```
// }
```

Sample service group configurations

This section includes the sample service group configurations in a VCS environment.

[Figure A-1](#) shows the service group dependency between CVM, CFS and PowerCenter service groups.

Figure A-1 Group dependency of service groups for CVM, CFS and PowerCenter Service Manager



[Figure A-2](#) shows a service group for Cluster File System.

Figure A-2 Sample service group for Cluster File System

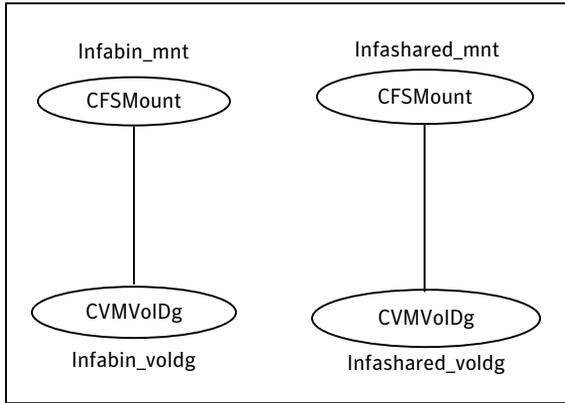


Figure A-3 shows a service group for Cluster Volume Manager.

Figure A-3 Sample service group for Cluster Volume Manager

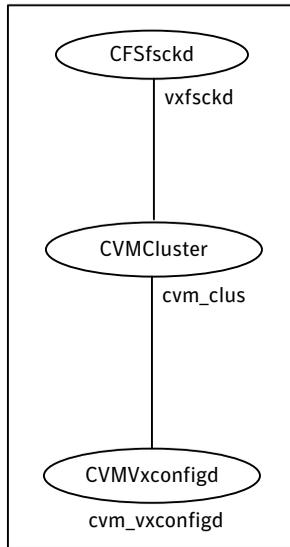
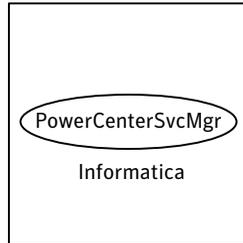


Figure A-4 shows the resource view of PowerCenter Service Manager on all systems.

Figure A-4 Resource view of PowerCenter Service Manager on all systems

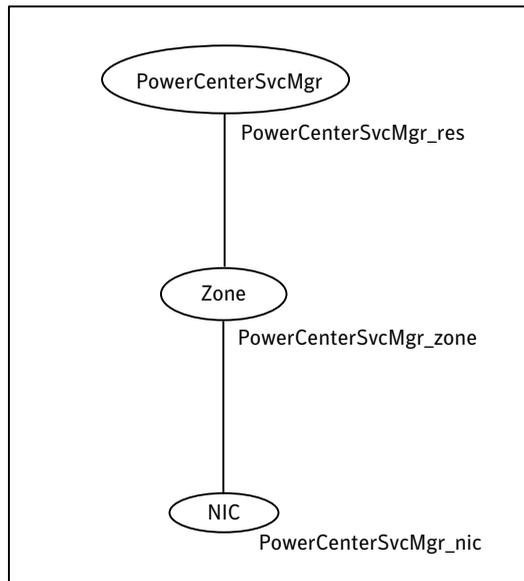


Sample service group configuration under Solaris zone

This section includes the sample service group configurations under Solaris zone.

[Figure A-5](#) shows a service group for a PowerCenter Service Manager instance, if the virtual IP used by the application is identical to the zone name.

Figure A-5 Service group for a PowerCenter Service Manager instance, if the virtual IP used by the application is identical to the zone name.



[Figure A-6](#) shows the sample service group for Cluster Volume Manager

Figure A-6 Sample service group for Cluster Volume Manager

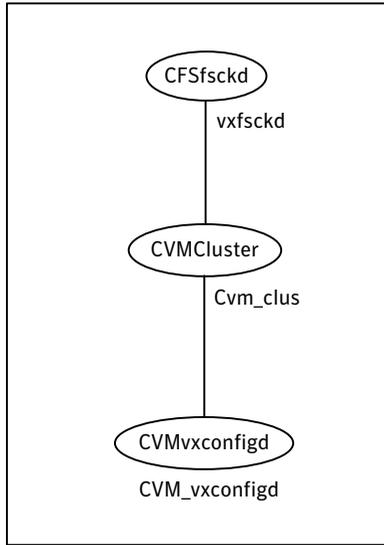


Figure A-7 shows the sample service group for Cluster File System

Figure A-7 Sample service group for Cluster File System

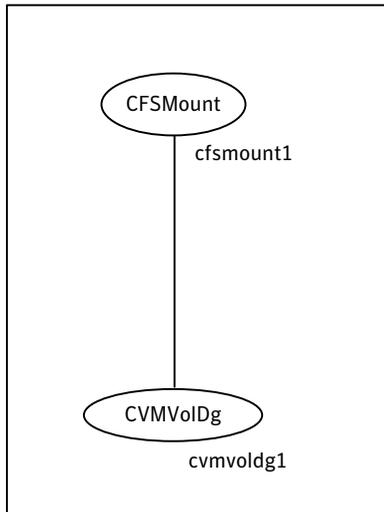
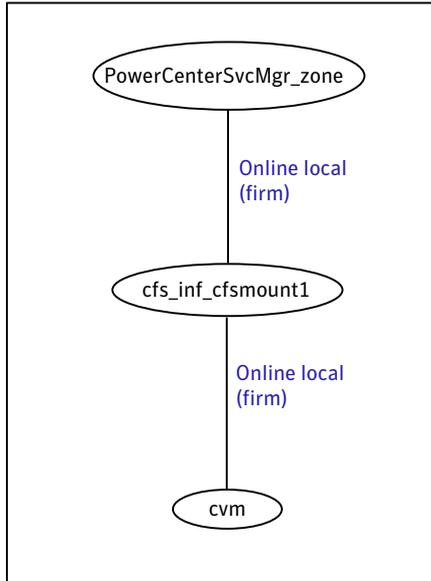


Figure A-8 shows the Group dependency of service groups for CVM, CFS and PowerCenter Service Manager under Solaris zones

Figure A-8 Group dependency of service groups for CVM, CFS and PowerCenter Service Manager under Solaris zones



Sample service group configuration under Solaris zone

Changes introduced in previous releases

This appendix includes the following topics:

- [Changes introduced in previous releases](#)

Changes introduced in previous releases

The enhancements in the previous releases of the Informatica agent are as follows:

- Added support for Solaris zones.
- Added support for VCS 5.1 on AIX, Linux, and Solaris.
- Added support for Informatica PowerCenter 8.1.1.

Index

A

- about
 - configuring service groups 37
- about ACC library 22
- ACC library
 - installing 23
 - removing 26
- agent
 - features 13
 - importing agent types files 30
 - installing, VCS environment 23
 - optional attributes 34
 - overview 11
 - required attributes 32
 - supported software 12
 - uninstalling, VCS environment 25
 - upgrading 26
 - what's new 12
- agent attributes 32
 - EnvFile 33
 - HostName 34
 - InfaHome 34
 - InfaUser 33
 - MonitorProgram 34
 - port 33
 - ResLogLevel 33
 - SecondLevelMonitor 35
- agent configuration file
 - importing 30
- agent functions 14
 - clean 16
 - monitor 15
 - offline 15
 - online 14
- agent installation
 - general requirements 21
 - requirements for Solaris zones 22
 - steps to install 23

B

- before
 - configuring the service groups 38

C

- changing default restart behaviour 32
- clustering Service Manager Server
 - basic resources 18
- configuring monitor function 35

E

- executing custom monitor program 35

I

- Informatica PowerCenter Service Manager
 - configuring resources for Solaris zones 38

L

- logs
 - reviewing cluster log files 44
 - reviewing error log files 43
 - using trace level logging 44

P

- PowerCenter Service Manager
 - configuring resources 42
 - starting instance outside cluster 42
 - virtualization 19
 - Host names 20
 - Path names 20

R

- removing agent, VCS environment 25

S

- sample agent type definition 45
- Sample agent type definition under Solaris zones 46

- Sample configuration
 - under Solaris zones 51
- sample configuration 47
- Sample service group configuration
 - under Solaris zone 57
- sample service group configurations 55
- service group
 - sample configurations 55
- Service Manager Server
 - clustering
 - basic resources 18
- setting
 - PowerCenter Service Manager in a cluster 16
- Solaris zone support
 - configuring PowerCenter Service Managerresources 38
 - installation requirements 22
- Solaris zones support
 - Sample configuration 51
- starting the PowerCenter Service Manager instance
 - outside a cluster 42
- supported software 12

T

- troubleshooting
 - meeting prerequisites 42
 - reviewing error log files 43
 - reviewing cluster log files 44
 - using trace level logging 44
 - using correct software 41
 - verifying virtualization 42

U

- uninstalling agent, VCS environment 25
- upgrading agent 26