

HP Service Oriented Architecture Manager

Installation Guide

Version: 2.50

Windows®, HP-UX, Linux



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Supported Platforms	7
System Requirements	7
SOA Manager	7
WSM Intermediary	8
WSM J2EE Agent	8
WSM .NET Agent.....	9
Supported Specifications.....	9
Hostname	9
Environment Variable Settings.....	9
Installing SOA Manager.....	10
Side-by-Side Installation.....	10
Windows Installation	10
HP-UX Installation.....	11
Linux Installation	12
Entering an SOA Manager License	13
Uninstalling	13
Upgrading from Version 2.0 to 2.1	14
Installation	14
SOA Manager	14
Intermediary	16
Upgrading from Version 2.1 to 2.50	16

SOA Manager	16
Intermediary	17
Steps to be Performed Post Upgrade	18
Business Service Impact.....	18
Users.....	18
Custom Service	18

The HP Service Oriented Architecture (SOA) Manager installation installs both the SOA Manager and the Web Services Management (WSM) Intermediary. Instructions for the WSM J2EE Agent and the WSM .NET Agent are included in the *HP SOA Manager User Guide* located in the /Documentation directory of the CD.

Supported Platforms

The components of the SOA Manager are supported on the following platforms:

Component	Microsoft Windows 2003 Server	HP-UX PA-RISC 11.11i	HP-UX Itanium 11.23	RH Linux Advanced Server 4.0
SOA Manager	X	X	X	X
WSM Intermediary	X	X	X	X
WSM J2EE Agent	X	X		X
WSM .NET Agent	X			

System Requirements

The components of the SOA Manager have the following system requirements:

SOA Manager

CD-ROM Drive	2X
Processor	Intel platforms: 400 MHz or higher x86 platforms: 200 MHz or higher
RAM	Windows or UNIX: 512 MB per processor
Java	JDK 1.4.2_12 only
Disk Space	64 MB (installation) 256 MB (runtime)

Databases Supported	Oracle 10g–Consult the Oracle documentation for specific system requirements
Browsers	Microsoft Internet Explorer 7 Mozilla Firefox 2.0

WSM Intermediary

CD-ROM Drive	2X
Processor	Intel platforms: 400 MHz or higher x86 platforms: 200 MHz or higher
RAM	Windows or UNIX: 512 MB per processor
Java	JDK 1.4.2_12 only
Disk Space	64 MB (installation) 256 MB (runtime)
Browsers	Microsoft Internet Explorer 7 Mozilla Firefox 2.0

WSM J2EE Agent

CD-ROM Drive	2X
Processor	Intel platforms: 400 MHz or higher x86 platforms: 200 MHz or higher
RAM	Windows or UNIX: 512 MB per processor
Java	Version provided with WebLogic Server
Disk Space	64 MB (installation) 256 MB (runtime)
Application Server	WebLogic Server 8.1.x–Consult the WebLogic documentation for specific system requirements
Additional Software	Ant 1.5.x–Consult the Ant documentation for specific system requirements

WSM .NET Agent

CD-ROM Drive	2X
Processor	Intel platforms: 400 MHz or higher
RAM	512 MB per processor
Java	JDK 1.4.2_12 only
Web Server	Microsoft Internet Information Services (IIS) version 5+— Consult the IIS documentation for specific system requirements
Additional Software	Microsoft .NET Framework version 1.1.4322—Consult the .NET Framework documentation for specific system requirements

Supported Specifications

The SOA Manager supports the following specifications:

- HTTP 1.1
- Web Services Definition Language (WSDL) 1.1
- Simple Object Access Protocol (SOAP) 1.1
- Web Services Interoperability (WS-I) Basic Profile 1.1
- WS-I Attachments Profile 1.0
- Web Services Security (WS-Security) 1.0
- .NET Web Services Enhancements (WSE) 1.0
- Universal Description, Discovery and Integration (UDDI) 2.0.4

Hostname

The hostname for the SOA Manager system must resolve to only one DNS qualified name. The same is true for the broker, the J2EE agent and the .Net agent systems.

Environment Variable Settings

The installation creates a system environment variable called `MIP_JAVA_HOME`. After the installation is complete, verify that the environment variable was created and that it is set to the JDK directory. In addition, the installation asks you for the JDK that you want to use. See the “System Requirements” section above for Java requirements.

- ▶ SOA Manager and WSM intermediary will not start if the MIP_JAVA_HOME environment variable is not set.

Installing SOA Manager

The instructions in this section install both the SOA Manager and the WSM intermediary. Instructions are provided for Windows, HP-UX, and Linux systems. Instructions for the WSM J2EE Agent and the WSM .NET Agent are included in the *HP SOA Manager User Guide* located in the /Documentation directory of the CD.

- ▶ The WSM intermediary and SOA Manager infrastructure are licensed. During the installation, an evaluation license is installed, and these components may be evaluated for 60 days. Thereafter, a license must be purchased. Unlicensed components will fail to start and a license expiration message is written to the log file. For information on licensing, see the “Entering an SOA Manager License” section below after completing the installation instructions in this section.

Side-by-Side Installation

Different versions of SOA Manager can be installed on a single system. The installer includes a version number as part of the installation directory name in order to differentiate between the different versions. However, you cannot currently run different versions of SOA Manager at the same time on a single system. You can only run one version at a time.

This feature allows you to maintain previous versions of SOA Manager while testing or implementing newer versions.

Windows Installation

To install SOA Manager on the Windows platform:

- 1 Log in to the system as a root/admin user.
- 2 Place the SOA Manager CD in the CD-ROM. The CD automatically starts and the start page displays. If the CD does not automatically start, use the Windows Explorer to view the contents of the CD. Double-click the `index.html` that is in the root of the CD.

- ▶ The installer fails if it is executed outside of the CD directory structure. To install SOA Manager without the CD, copy the entire contents of the CD (not just the installer executable) onto the target system. Then run the installer from within the copied CD directory structure.

- 3 From the start page, click **SOA Manager** located in the Available Installation Components section.

- 4 Open `Installation/Disk1\InstData\Windows\VM` and run `HPSOAManagerInstaller2.5.exe`. The installation prepares followed by the Introduction screen. Follow the on-screen instructions for installing SOA Manager and WSM intermediary.
 - ▶ During the installation, a dialog box displays and asks you to select a 1.4 JVM to be used by the SOA Manager. You must select a JDK JVM and not a JRE. In addition, the JDK version must be 1.4.2_12.
 - ▶ During the installation, you are asked whether you want to have the SOA Manager and/or the intermediary installed as Windows services. If you do not select to have the components installed as Windows services, you can do so at a later time using instructions provided in the *HP SOA Manager User Guide*. If you are installing in a production environment, it is recommended that you install both the SOA Manager and the intermediary as Windows services.
- 5 After the installation is complete, review the log of the installation for any warnings or errors (`<install_dir>/HP_SOA_Manager_2.5_InstallLog.xml`). `<install_dir>` refers to the directory in which you installed HP SOA Manager.
- 6 If this is your first time installing SOA Manager or intermediary, read the *HP SOA Manager User Guide* for instructions on setting up and using these components.

HP-UX Installation

To install SOA Manager on a UNIX platform:

- 1 Log in to the system as a `root/admin` user.
- 2 Place the SOA Manager CD in the CD-ROM.
- 3 Open a command prompt and mount the CD if your system is not set to automatically mount. See your platform documentation for detailed mounting instructions.

▶ The installer fails if it is executed outside of the CD directory structure. To install SOA Manager without the CD, copy the entire contents of the CD (not just the installer executable) onto the target system. Then run the installer from within the copied CD directory structure.

- 4 From the mount directory, change directories to `/Installation/Disk1/InstData/<UNIX_Platform>/VM`.
- 5 Declare the `HPSOAManagerInstaller2_5.bin` an executable with global permissions:

```
chmod +x HPSOAManagerInstaller2_1.bin
```

- 6 Run the installer:

```
sh HPSOAManagerInstaller2_5.bin
```

The installation prepares followed by the Introduction screen. Follow the on-screen instructions for installing SOA Manager and intermediary.



During the installation, a dialog box displays and asks you to select a 1.4 JVM to be used by the SOA Manager. You must select a JDK JVM and not a JRE. In addition, the JDK version must be 1.4.2_12.

- 7 After the installation is complete, review the log of the installation for any warnings or errors (`<install_dir>/HP_SOA_Manager_InstallLog.xml`).
- 8 If this is your first time installing SOA Manager or intermediary, read the *HP SOA Manager User Guide* for instructions on setting up and using these components.

Linux Installation

To install SOA Manager on the Linux platform:

- 1 Log in to the system as a `root/admin` user.
- 2 Place the SOA Manager CD in the CD-ROM.
- 3 Open a command prompt and mount the CD if your system is not set to automatically mount. See your platform documentation for detailed mounting instructions.



The installer fails if it is executed outside of the CD directory structure. To install SOA Manager without the CD, copy the entire contents of the CD (not just the installer executable) onto the target system. Then run the installer from within the copied CD directory structure.

- 4 From the mount directory, change directories to `/Installation/Disk1/InstData/Linux/VM`.
- 5 Declare the `HPSOAManagerInstaller2_5.bin` an executable with global permissions:

```
chmod +x HPSOAManagerInstaller2_5.bin
```

- 6 Run the installer:

```
sh HPSOAManagerInstaller2_5.bin
```

The installation prepares followed by the Introduction screen. Follow the on-screen instructions for installing HP SOA Manager and intermediary.



During the installation, a dialog box displays and asks you to select a 1.4 JVM to be used by the SOA Manager. You must select a JDK JVM and not a JRE. In addition, the JDK version must be 1.4.2_12.

- 7 After the installation is complete, review the log of the installation for any warnings or errors(`<install_dir>/HP_SOA_Manager_InstallLog.xml`).
- 8 If this is your first time installing SOA Manager or intermediary, read *HP SOA Manager User Guide* for instructions on setting up and using these components.



After the installation is complete, verify that the environment variable MIP_JAVA_HOME was created and that it is set to the JDK directory. If the variable is not created, you must manually create it and set it to the JDK directory.

Entering an SOA Manager License

The SOA Manager's licenses are installed using the License Manager. You must obtain a permanent license (contact your HP sales representative) for the following SOA Manager licenses:

Product Number	Product Name
T4670AA	HP SOA Manager Pilot
T4671AA	HP SOA Manager Small
T4672AA	HP SOA Manager Medium
T4673AA	HP SOA Manager Large
T3282AA	HP SOA Manager Intermediary
T3281AA	HP SOA Manager WSM Agent (.NET or J2EE)

Detailed instructions for installing licenses are included in the License Manager's Online Help. In addition, you must be logged in to the system as a root/admin user.

To start the License Manager:

Windows:

Select **Start | Programs | HP OpenView SOA Manager 2.5 | SOA Manager 2.5 | License Manager**. Or, from the command line, run:

```
<install_dir>\bin\win32\miplicense.bat
```

UNIX:

To start the SOA Manager License Manager on UNIX, from the command line, run:

```
<install_dir>/bin/unix/miplicense
```

Uninstalling



Uninstalling the SOA Manager removes the MIP_JAVA_HOME system variable. Other SOA Manager installations on the system will fail, once the variable is removed. You must manually add this variable back if your system contains additional SOA Manager installations.

The installer for SOA Manager creates uninstall files and places them in the `<install_directory>/UninstallerData` directory. Windows users can use **Add/Remove Program** located in the **Control Panel**. Instructions for uninstalling the WSM .NET Agent and the WSM J2EE Agent are located in the *HP SOA Manager User Guide*.

Upgrading from Version 2.0 to 2.1

This section provides the tasks that are required to upgrade an SOA Manager installation from version 2.0 to 2.1. The tasks in this section are required in order to maintain any current settings, service models, as well as any database information.

Installation

Install SOA Manager 2.1 using the instructions in the “Installing SOA Manager” section above.



SOA Manager 2.1 cannot be installed in the same directory as SOA Manager 2.0.

SOA Manager

To upgrade the SOA Manager:

- Start the 2.0 version of SOA Manager.
- Use the Export business services feature from the SOA Manager web interface to export the business services that are to be migrated to the 2.1 installation.
- Stop the 2.0 version of SOA Manager.
- If you changed any General Settings or UDDI Settings, then migrate the changes from the `<2.0_install_dir>/conf/networkservices/mipServer.xml` file to the 2.1 installation. When using Oracle, be sure to copy the Oracle configuration from the 2.0 `mipServer.xml` into the 2.1 `mipServer.xml`. Do not copy the 2.0 `mipServer.xml` into the 2.1 installation directory. Instead copy each entry that was changed in the 2.0 `mipServer.xml` into the 2.1 `mipServer.xml`.
- If you changed or added any alert recipients, then migrate the changes from the `<2.0_install_dir>/conf/notification.xml` file to the 2.1 installation. Do not copy the 2.0 `notification.xml` into the 2.1 installation directory. Instead copy each entry you changed in the 2.0 `notification.xml` into the 2.1 `notification.xml`.
- If you changed any Email Settings, then migrate the changes from the `<2.0_install_dir>/conf/notification.xml` file to the `<2.1_install_dir>/conf/networkservices/mipServer.xml` file. Note that the format of the files is different.

— `<2.0_install_dir>/conf/notification.xml`

```
<target class="com.hp.wsm.sn.notification.target.SmtpAlertTarget">
  <property name="smtpHost" value="host.acme.com"/>
  <property name="port" value="25"/>
</target>
```

```

<property name="password" value="xxx" />
<property name="userName" value="support.person" />
<property name="from" value="support.person@acme.com" />
<instance name="email" enabled="true">
  <property name="body" value="{message}" />
  <property name="subject" value="[{$severity}] {$id} -
${category}" />
  <property name="to" value="support.person@acme.com" />
</instance>
</target>

```

— <2.1_install_dir>/conf/networkservices/mipServer.xml

```

<entry name="mail.smtp.host">host.acme.com</entry>
<entry name="mail.smtp.port">25</entry>
<entry name="mail.smtp.user">support.person</entry>
<entry name="mail.smtp.pass">xxx</entry>
<entry name="mail.smtp.from">support.person@acme.com</entry>
<entry name="mail.smtp.enabled">true</entry>

```

- When using Oracle:
 - Add the new tables from <2.1_install_dir>/data/oracle/Upgrade2.0Db-Oracle9i to the Oracle database.
- When using HSQL:
 - Copy all the files in the <2.1_install_dir>/data/hsqldb from the 2.0 installation to the 2.1 installation.
 - Add the new tables from <2.1_install_dir>/data/hpsqldb/Upgrade2.0Db into the HSQL database.
 - From a command prompt, change directories to <2.1_install_dir>/lib/ext.
 - Run: java -cp hsqldb.jar org.hsqldb.util.DatabaseManager.
 - In the Type field, select **HSQL Database Engine Standalone**.
 - In the URL field, replace <<database/path?>> with <2.1_install_dir>/data/hsqldb/sn.
 - Click **OK**.
 - Copy all the lines from the <2.1_install_dir>/data/hsqldb/Upgrade2.0Db file and paste it into the upper right box in the HSQL Database Manager
 - Click **Execute**.
 - Exit the HSQL Database Manager.
- Start the 2.1 version of SOA Manager.
- Use the Import business service feature from the SOA Manager web interface to import the business services that were exported from the 2.0 installation.

- After starting the 2.1 version of SOA Manager, go to the following web page: http://<host>:5002/bse/support/clean_versions.jsp. This page is used to correct defects in a migrated SOA Manager 2.0 database. Click **Remove** to remove excess rows. This operation could take from several minutes up to an hour to complete depending on the number of rows. The web page shows the progress as rows are removed.

Intermediary

- If you changed any HTTP Settings, then migrate the changes from the `<2.0_install_dir>/conf/broker/mipServer.xml` file to the 2.1 installation. Do not copy the 2.0 `mipServer.xml` into the 2.1 installation directory. Instead copy each entry you changed in the 2.0 `mipServer.xml` into the 2.1 `mipServer.xml`.
- If you changed any SSL Settings, then migrate the changes from the `<2.0_install_dir>/conf/mipServer.xml` file to the 2.1 installation. Do not copy the 2.0 `mipServer.xml` into the 2.1 installation directory. Instead copy each entry you changed in the 2.0 `mipServer.xml` into the 2.1 `mipServer.xml`.
- Copy the jar files from `<2.0_install_dir>/conf/broker` to the 2.1 installation.
- Start the 2.1 version of the intermediary.

Upgrading from Version 2.1 to 2.50

If you have SOA Manager version 2.0, you cannot upgrade directly to SOA Manager version 2.5. You must first upgrade to version 2.1 before upgrading to version 2.5. You cannot install SOA Manager 2.1 and SOA Manager 2.50 in the same directory.



You can upgrade to SOA Manager version 2.50 from either version 2.1 or version 2.1.

SOA Manager

To upgrade SOA Manager:

- Start the 2.1 version of SOA Manager.
- Use the Export business service feature from the SOA Manager web interface to export the business services that are to be migrated to the 2.50 installation.
- Stop the 2.1 version of SOA Manager.
- If you changed any General Settings or UDDI Settings, then migrate the changes from the `<2.1_install_dir>/conf/networkservices/mipServer.xml` file to the 2.50 installation. When using Oracle, be sure to copy the Oracle configuration from the 2.1 `mipServer.xml` into the 2.50 `mipServer.xml`. Do not copy the 2.1 `mipServer.xml` into the 2.50 installation directory. Instead copy each entry that was changed in the 2.1 `mipServer.xml` into the 2.50 `mipServer.xml`.

- If you changed or added any alert recipients, then migrate the changes from the `<2.1_install_dir>/conf/notification.xml` file to the 2.50 installation. Do not copy the 2.1 `notification.xml` into the 2.50 installation directory. Instead copy each entry you changed in the 2.1 `notification.xml` into the 2.50 `notification.xml`.
- When using Oracle:
 - Add the new tables from `<2.5_install_dir>/data/oracle/Upgrade2.1Db-Oracle` to the Oracle database.
- When using HSQL:
 - Copy all the files in the `<2.1_install_dir>/data/hsqldb` from the 2.1 installation to the 2.50 installation.
 - Add the new tables from `<2.5_install_dir>/data/hpsqldb/Upgrade2.1Db` into the HSQL database.
 - From a command prompt, change directories to `<2.5_install_dir>/lib/ext`.
 - Run: `java -cp hsqldb.jar org.hsqldb.util.DatabaseManager`.
 - In the Type field, select **HSQL Database Engine Standalone**.
 - In the URL field, replace `<<database/path?>>` with `<2.5_install_dir>/data/hsqldb/sn`.
 - Click **OK**.
 - Copy all the lines from the `<2.5_install_dir>/data/hsqldb/Upgrade2.1Db` file and paste it into the upper right box in the HSQL Database Manager
 - Click **Execute**.
- Exit the HSQL Database Manager.
- Start the 2.50 version of SOA Manager.
- Use the Import business services feature from the SOA Manager web interface to import the business services that were exported from the 2.1 installation.

Intermediary

- If you changed any HTTP Settings, then migrate the changes from the `<2.1_install_dir>/conf/broker/mipServer.xml` file to the 2.50 installation. Do not copy the 2.1 `mipServer.xml` into the 2.50 installation directory. Instead copy each entry you changed in the 2.1 `mipServer.xml` into the 2.50 `mipServer.xml`.
- If you changed any SSL Settings, then migrate the changes from the `<2.1_install_dir>/conf/mipServer.xml` file to the 2.50 installation. Do not copy the 2.1 `mipServer.xml` into the 2.50 installation directory. Instead copy each entry you changed in the 2.1 `mipServer.xml` into the 2.50 `mipServer.xml`.
- Copy the jar files from `<2.1_install_dir>/conf/broker` to the 2.50 installation.
- Start the 2.50 version of the intermediary.

Steps to be Performed Post Upgrade

You must perform the steps listed in the following sections after upgrading SOA Manager to version 2.50.

Business Service Impact

During an upgrade, all the business services are set to the default value of MEDIUM for business impact. You must manually edit the business service configuration using the SOA Manager web interface and change the business impact to suit your requirements.

Users

SOA Manager stores user information in a database. If you had users added in the configuration file, you might be required to create the same users in the database using the SOA Manager web interface.

If you had created `support` and `admin` users for configuration or resources, SOA Manager sets a default password for these users and maps these users to the admin user role by default, after an upgrade. The SOA Manager administrator can reset the password using the SOA Manager web interface.

Custom Service

After an upgrade, SOA Manager treats all the migrated Web services as custom web services, which cannot be managed from the SOA Manager web interface. If you want to convert these services to manage them from the SOA Manager web interface, you must remove the Web service configuration and use the Provision Service feature to provision the service again. During service provisioning, you must make sure that you specify the original Web service name, associate the correct policies, and redeploy the service to the correct policy enforcement point.