Sun N1 Service Provisioning System 5.2.1 Release Notes

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Contents

Preface

The Sun N1™ Service Provisioning System 5.2.1 Release Notes contain installation problem details and other information that was not available until immediately before the release of the Sun N1 Service Provisioning System 5.2.1.

Who Should Use This Book

These notes are for users and system administrators who install and use the Sun N1 Service Provisioning System 5.2.1.

Related Books

You might need to refer to the following manuals when you install and use the Sun N1 Service Provisioning System 5.2.1:

- *Sun N1 Service Provisioning System 5.2 Installation Guide*
- *Sun N1 Service Provisioning System 5.2 System Administration Guide*
- *Sun N1 Service Provisioning System 5.2 Operation and Provisioning Guide*
- *Sun N1 Service Provisioning System 5.2 Plan and Component Developer's Guide*
- *Sun N1 Service Provisioning System 5.2 XML Schema Reference Guide*
- *Sun N1 Service Provisioning System 5.2 Command-Line Interface Reference Manual*

You can access the Japanese versions of the manuals on the docs.sun.com Web site at `http://docs.sun.com/app/coll/1139.4?l=ja`.

Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (`http://www.sun.com/documentation/`)
- Support (`http://www.sun.com/support/`)
- Training (`http://www.sun.com/training/`)

Typographic Conventions

The following table describes the typographic conventions that are used in this book.

TABLE P–1 Typographic Conventions

Typeface	Meaning	Example
`AaBbCc123`	The names of commands, files, and directories, and onscreen computer output	Edit your `.login` file. Use `ls -a` to list all files. `machine_name% you have mail.`
`AaBbCc123`	What you type, contrasted with onscreen computer output	`machine_name%` **`su`** `Password:`
aabbcc123	Placeholder: replace with a real name or value	The command to remove a file is `rm` *filename*.
AaBbCc123	Book titles, new terms, and terms to be emphasized	Read Chapter 6 in the *User's Guide*. A *cache* is a copy that is stored locally. Do *not* save the file. **Note:** Some emphasized items appear bold online.

Shell Prompts in Command Examples

The following table shows the default UNIX® system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

TABLE P–2 Shell Prompts

Shell	Prompt
C shell	`machine_name%`
C shell for superuser	`machine_name#`
Bourne shell and Korn shell	`$`
Bourne shell and Korn shell for superuser	`#`

◆ ◆ ◆ CHAPTER 1

What's New in the Sun N1 Service Provisioning System

This chapter briefly describes the new features included in the Sun N1 Service Provisioning System (Sun N1 SPS) software. These features are described in the following sections.

What's New in the Sun N1 SPS 5.2.1 Release

This section describes the following new features in the Sun N1 SPS 5.2.1 release.

Sun N1 Advanced Architecture for SAP Solutions

The Sun N1 SPS 5.2.1 release includes the Sun N1 Advanced Architecture (Sun N1 AA) for SAP Solutions software, a series of modules for installing and administering complex SAP environments. With the Sun N1 AA software, IT operators can deploy, provision, manage, and change pools of resources and application services, and analyze the environment, all from a single Web browser interface. Sun N1 AA software delivers more business flexibility through virtualization, application and resource provisioning, monitoring, and central management.

The Sun N1 AA software includes the following modules.

- **N1 AA Manager –** This module provides the central GUI, a Java-based Web browser interface. This includes the base components for customization, maintenance, and administration that are not directly associated with one of the functional modules.
- **N1 AA Analyzer –** This module enables you to monitor and manage the CPU and memory usage in your environment. The N1 AA Analyzer continually monitors, collects, and displays CPU and memory utilization data on all of the servers and applications in the environment, including

applications other than SAP. Once data is collected, the Analyzer provides reports on capacity planing and a graphical illustration of resource consumption.

- **N1 AA Builder –** The N1 AA Builder is designed to quickly provision operating systems on to bare-metal servers included in your SAP environment. The pre-built models within the N1 AA Builder enable IT operators to build, configure, and update multi-tier application service models for many data center applications. This includes models for the operating systems, patches, and client software, all from a single GUI. The models are stored and centrally administered. The models can be configured for different environments.
- **N1 AA Deployer –** N1 Advanced Architecture for SAP Solutions is a key extension of the N1 Service Provisioning System, leveraging the core provisioning and management capabilities to provide sophisticated customization specific to the SAP applications and business processes. The N1 AA Deployer module is the controller for your application services. The N1 AA Deployer enables you to start, stop, and relocate applications in a virtualized environment. This includes applications that are driven in a Sun Cluster or SAP Adaptive Computing environment. For SAP systems, the N1 AA Deployer enables you to install new SAP Application Instances or remove existing ones.

For more information about the Sun N1 AA software, see the following documents.

- *Sun N1 Advanced Architecture for SAP Solutions 5.2.1 Installation Guide*
- *Sun N1 Advanced Architecture for SAP Solutions 5.2.1 User's Guide*

SAP Plug-in 1.0

The Sun N1 SPS 5.2.1 release includes the SAP plug-in 1.0 software to enable you to manage SAP systems in the Sun Cluster, SAP Adaptive Computing (AC), and default environments. The SAP plug-in provides a set of tested and supported plans and components that enable you to perform the following tasks.

- Create and delete SAP components in the Sun N1 SPS database
- View all SAP components
- Determine the online and offline status of SAP components
- Provision the SAP Application Server with a default exception file
- Create a custom exception file component
- Provision the SAP Application Server with a custom exception file
- GDS component support

For more information about the SAP plug-in 1.0, see the *Sun N1 Service Provisioning System User's Guide for SAP Plug-In 1.0*.

BEA WebLogic 9 Plug-in 1.0

The Sun N1 SPS 5.2.1 release includes the BEA WebLogic plug-in 1.0 software to enable you to easily capture, configure and deploy WebLogic Enterprise, Enterprise JavaBeans™ (EJB) technology, and Web Applications. The WebLogic plug-in provides a set of tested and supported plans and components that enable you to perform the following tasks.

- Install and configure WebLogic 9 software on the following systems.

  - WebLogic Domain and Administration Server
  - WebLogic Managed Server
  - WebLogic Clusters
- Create a WebLogic Machine to serve as a Node Manager to administer your Managed Servers and clusters.
- Capture and deploy enterprise applications, web applications, and Java archive files as application archives.
- Group deployment plans with specific application archive files in containers to facilitate complex application deployments.
- Share J2EE libraries between applications.
- Create data sources and multi data sources to configure your applications to use specific databases and connection pools.
- Create and configure Java Messaging Service (JMS) services

For more information about how to use the WebLogic 9 plug-in, see *Sun N1 Service Provisioning System User's Guide for BEA WebLogic 9 Plug-in 1.0*.

New Platform and OS Support for the OS Provisioning Plug-In 3.1

The OS Provisioning plug-in has been updated for the Sun N1 SPS 5.2.1 release. The OS Provisioning plug-in 3.1 includes the following changes.

- **Platform support for SunFire T1000/T2000 systems** - The OS Provisioning plug-in 3.1 now enables you to provision the SunFire T1000/T2000 Advanced Lights Out Management (ALOM) systems. Support for the `sun4v` architecture type has been added to the plug-in variable sets.
- **SuSE Linux Enterprise Server 8 provisioning support** - The OS Provisioning plug-in 3.1 now supports the provisioning of the SuSE Linux Enterprise Server 8 (SLES8) operating system.

For more information about updates to the OS Provisioning plug-in 3.1, see *Sun N1 Service Provisioning System User's Guide for OS Provisioning Plug-In 3.1*.

Support for Sun Java Enterprise System Web Server 7.0 Plug-In

The Sun Java Enterprise System Web Server 7.0 plug-in is included in the 5.2.1 release. The plug-in is provided in the following packages on the Sun N1 SPS 5.2.1 product media.

- `SUNWspsws70` (for Solaris systems)
- `sun-spssws70-1.0-1.noarch.rpm` (for Linux systems)
- `sun-spssws70-1.0-1.msi` (for Microsoft Windows systems)

At the time of the Sun N1 SPS 5.2.1 release, the Sun Java Enterprise System Web Server 7.0 software is not currently available. While the plug-in is provided in the N1 SPS 5.2.1 release, the plug-in has not been fully qualified yet with the Sun Java Enterprise System Web Server 7.0 software and will not be supported until the release of the Web server 7.0 software.

The documentation for the Sun JES Web Server 7.0 plug-in will be published to `http://docs.sun.com/app/docs/coll/1502.1` after the Sun JES Web Server 7.0 software is released.

Plug-In Support for Sun Java Enterprise System Application Server 8.2 Software

The Sun Java Enterprise System Application Server plug-in is included in the Sun N1 Service Provisioning System 5.2 and 5.2.1 release. The plug-in is provided in the following packages on the Sun N1 SPS 5.2.1 product media.

- `SUNWspssas` (for Solaris systems)
- `sun-spssas-3.0-1.noarch.rpm` (for Linux systems)
- `sun-spssas-3.0.msi` (for Microsoft Windows systems)

At the time of the Sun N1 SPS 5.2.1 release, this plug-in supports the file-based deployment of the Sun Java Enterprise System Application 8.1 software. At the time of this release, the Sun Java Enterprise System Application Server 8.2 software is not currently available, and the plug-in has not been fully qualified yet with the Sun Java Enterprise System Application Server 8.2 software. Deployment of the Sun Java Enterprise System Application Server 8.2 software, and package-based deployment of the Sun Java Enterprise System Application 8.1 software, will not be supported until the release of the application server software.

The documentation for the Sun JES Application Server plug-in will be updated on `http://docs.sun.com/coll/1502.1` after the Sun JES Application Server 8.2 software is released.

What's New in the Sun N1 SPS 5.2 Release

This section describes the following new features in the Sun N1 SPS 5.2 release.

Sun N1 SPS Public Java API

The Sun N1 SPS 5.2 release includes a public Java API that enables you to integrate your custom applications or third-party products in your Sun N1 SPS environment. The public Java API provides a mechanism for executing all currently available command line interface (CLI) commands with

strongly typed arguments and results. This feature provides functional parity with the CLI, along with direct access to the Sun N1 SPS infrastructure for querying and managing the Master Server.

For details about the classes and methods included in the Sun N1 SPS public Java API, see *Sun N1 Service Provisioning System JavaDoc*.

New Platform and OS Support for the OS Provisioning Plug-In 3.0

The OS Provisioning plug-in has been updated for the Sun N1 SPS 5.2 release. The OS Provisioning plug-in 3.0 includes the following changes.

- **Support for provisioning RSC-based systems –** The OS Provisioning plug-in 3.0 provides support for provisioning RSC-based systems such as the SunFire v480 and v880 server families.
- **Additional OS provisioning support –** Support for provisioning the following operating systems is included in the OS Provisioning plug-in 3.0.
  - Solaris 8 for SPARC based systems
  - SuSE Linux Enterpise Server 9
  - RedHat AS Linux 4.0 (32- and 64–bit)
  - Microsoft Windows Server 2003 Standard Edition (32- and 64–bit), Enterprise Edition (32- and 64–bit), and WebEdition (32–bit)

For more information, see the *Sun N1 Service Provisioning System User's Guide for OS Provisioning Plug-In 3.1*.

RedHat Linux OS Support for Sun N1 SPS Systems

The Sun N1 SPS 5.2 release includes RedHat Linux 3.0 (64-bit) and 4.0 (32- and 64-bit) support for Sun N1 SPS Master Servers, Remote Agents, Local Distributors, and CLI Clients.

For more information about OS support in the Sun N1 SPS 5.2 release, see the*Sun N1 Service Provisioning System 5.2 Installation Guide*.

Automatic Upgrade for Remote Agents and Local Distributors

The new `node` command set enables you to use the command line interface (CLI) to upgrade your Remote Agents and Local Distributors. After you migrate the Master Server to the Sun N1 SPS 5.2 release, you can use the `node.au.run` command to automatically upgrade specific hosts, host sets, or all the Remote Agents and Local Distributors in your Sun N1 SPS environment. For increased performance, run several separate `node.au.run` commands in parallel on small host subsets.

For more information, see the *Sun N1 Service Provisioning System 5.2 Command-Line Interface Reference Manual*.

Improvements to Error and Failure Logging

The Sun N1 SPS 5.2 browser interface has been updated to provide a consolidated view of all failures and errors that occur with provisioning plans. The Plans Details Run page now lists all errors and failure on all hosts that are targeted by a plan, rather than requiring you to select the Details link for each individual host to check the provisioning status.

For more information, see the *Sun N1 Service Provisioning System 5.2 System Administration Guide* and *Sun N1 Service Provisioning System 5.2 Plan and Component Developer's Guide*.

Improved Logging for Differential Deployments

The Sun N1 SPS 5.2 release enables you to configure the logging mechanism on Remote Agents to provide detailed information about the changes that occur during a differential deployment. You can edit the `<logger>` element in the `logger_config.xml` file to log the following events.

- If a new file is created
- If an existing file is deleted
- If a file is unchanged

You can then view the log output in the `agent/bin/cr_agent.out` file in the home directory of the Remote Agent.

For more information about configuring logging for differential deployment, see the *Sun N1 Service Provisioning System 5.2 System Administration Guide*.

Enhancements for Editing Variable Sets

The Sun N1 SPS 5.2 release includes the following improvements to the browser interface for editing and managing variable sets.

- **Presentation of variable sets as lists** - For improved navigation and ease of editing, component variable sets are now presented as lists, rather than a flat view, as in previous releases. This improvement reduces the need to scroll through extensive pages of variables.
- **Ability to import or export variable sets to files** - You can now quickly update variable sets for your components by importing variable sets from a file that defines component variables and values. You can also make your variable set available to other components by exporting the variable set to a file. The new actions Import From File and Download, accessible from the Variable Settings Edit screen, enable you to quickly import or export a variable set to a file.
- **Ability to clone variable sets** - You can now create a copy of a variable set that varies from the default set, and share this custom copy with other objects in you Sun N1 SPS environment. The Create Copy link on the Component Variable Settings page enables you to clone the current variable set, and then edit the variable values and name of the variable set. You can then reuse this custom copy of the variable set with other objects by selecting the copy from the Variable Set drop down menu.

For more information about these enhancements, see the *Sun N1 Service Provisioning System 5.2 Plan and Component Developer's Guide* and *Sun N1 Service Provisioning System 5.2 Operation and Provisioning Guide*.

XML Schema Enhancements

The Sun N1 SPS 5.2 XML schema includes the following enhancements.

- The `<return>` step and `return` attribute to the `<install>`, `<uninstall>`, and `<control>` blocks enable you to stop the execution of specific control blocks and optionally return a value to the calling step.

- You can use the <assign> step to assign new values to previously declared local variables. Use this step to with the <install>, <uninstall>, and <control> blocks to assign returned values to local variable values.
- The <assignError> and <assignOutput> child elements of the <execJava> and <execNative> steps enable you to assign the value of the standard output or the standard error stream to local variables.
- The <assignStatus> child element of the <execNative> step assigns the status code of the native OS command to a local variable.

For more information about these enhancements, see the *Sun N1 Service Provisioning System 5.2 XML Schema Reference Guide*.

Commands for Checking Dependencies Between Installed Components

The new `cdb.ic` command set enables you to check the relationships between the components that are currently installed. Two new commands are provided to check dependencies between installed components.

- `cdb.ic.ldo` – This command identifies the installed components on which a specified component depends.
- `cdb.ic.lod` – This command identifies the installed components that depend on a specified component.

For more information on these commands, see the *Sun N1 Service Provisioning System 5.2 Command-Line Interface Reference Manual*.

Permission Requirements for Deleting Run Histories

The Sun N1 SPS 5.2 release provides additional methods to restrict the ability to delete run histories for each plan or comparison that you run. You can use two different methods to enable users to delete run histories.

- Assign the user to the `admin` group
- Enable the `Delete Run History` folder permission on specific host sets.

For more information, see the *Sun N1 Service Provisioning System 5.2 System Administration Guide*.

SSL Keystore Refreshing Enhancement

In past releases, you needed to restart Master Servers and Local Distributors after adding a Remote Agent with SSL authentication to update the SSL keystores. In this release, the Master Server and Local Distributor check for changes to the keystore each time these systems attempt to connect to another Sun N1 SPS application, eliminating the need for system restarts.

For more information, see the *Sun N1 Service Provisioning System 5.2 Installation Guide*.

Component Type Extensibility

You can now extend Sun N1 SPS component types and browse for these extensions in your N1 SPS environment without including the component type in a plug-in.

For more information about component types, see the *Sun N1 Service Provisioning System 5.2 XML Schema Reference Guide*.

Plug-Ins Included in the Sun N1 SPS 5.2 Release

The Sun N1 SPS 5.2 release includes a series of tested and supported application models to enable you to provision a variety of third party applications. These modelled components and plans are packaged as plug-ins to the Sun N1 SPS software.

The Sun N1 SPS 5.2 release includes the following plug-ins.

- BEA WebLogic 6 and WebLogic 7 Plug-In 2.0
- BEA WebLogic 8 Plug-In 3.0
- Linux Plug-In 2.0
- OS Provisioning Plug-In 3.0
- Oracle App Server 10g Plug-In 2.0
- Oracle 9i and 10g Database Plug-In 3.0
- Solaris Plug-In 4.0
- Sun Java System App Server 8.1 Plug-In 3.0
- Sun Java System Web Server 6.0 Plug-In 3.0
- WebSphere 5.1 Plug-In 3.0
- Windows 2000 Plug-In 3.0

For more information about how to use plug-ins to provision these applications, see the N1 Service Provisioning System 5.2 Plug-in Collection (`http://docs.sun.com/app/docs/coll/1329.1`).

Package Delivery of Sun N1 SPS Plug-ins

Starting with the Sun N1 SPS 5.2 release, plug-ins are included on the Sun N1 SPS DVD in native OS packages. The package delivery of plug-ins facilitates the patching and version tracking of the plug-ins in your Sun N1 SPS environment.

To install Sun N1 SPS plug-ins on your Master Server, you first must add the package to the system, then import the plug-in Java archive (JAR) file into your Sun N1 SPS environment.

For more information about adding plug-in packages to your Master Server, see the appropriate plug-in documentation in the N1 Service Provisioning System 5.2 Plug-in Collection (`http://docs.sun.com/app/docs/coll/1329.1`).

WebLogic 8 Plug-In Demo Application

The WebLogic 8 plug-in 3.0 includes a demo application that illustrates how to deploy the BEA WebLogic 8 software and a custom application. The Avitek Medical Records demo application demonstrates how to use the plug-in to perform the following tasks.

- Set up a WebLogic database data source
- Configure the JMS and JDBC resources for the WebLogic Managed Server
- Deploy an enterprise application (EAR) to your Managed Server

For more information about the Avitek Medical Records demo application, see the *Sun N1 Service Provisioning System User's Guide for BEA WebLogic 8 Plug-In 3.0*.

Oracle Database Plug-In 3.0 Enhancements

The Oracle Database plug-in 3.0 includes the following improvements.

- The Start, Stop, and Verify component procedures enable you to start, stop, and check the status of your Oracle 9i or 10g database.
- The Oracle 10g Database plug-in no longer depends on the Oracle 9i Database plug-in. You can install and use the Oracle 10g Database plug-in without installing the Oracle 9i Database plug-in on the same system.

For more information about the Oracle Database plug-in 3.0, see the *Sun N1 Service Provisioning System User's Guide for Oracle Database Plug-In 3.0*.

WebSphere 5.1 Plug-In 3.0 Enhancements

The WebSphere 5.1 plug-in 3.0 includes the following improvements.

- You can now use the deployment manager target to browse for and export existing Data Source and JDBC configurations.
- The plug-in enables you to create and delete J2C authentication aliases.
- The WebSphere 5.1 plug-in 3.0 includes a demo application the demonstrates how to deploy the WebSphere 5.1 software and a sample online stock brokerage application. the Trade3 demo application to perform the following tasks.
  - Capture an enterprise application (EAR)
  - Configure the data source and JMS resources for the application
  - Deploy the application to an application server.

Note – The Trade3 application is not included on the Sun N1 SPS 5.2 product media. To use the WebSphere 5.1 plug-in demo application, you must download the Trade3 application from the WebSphere web site.

For more information about the WebSphere 5.1 plug-in, see the *Sun N1 Service Provisioning System User's Guide for WebSphere Plug-In 3.0*.

◆ ◆ ◆ CHAPTER 2

Updates to the Sun N1 Service Provisioning System 5.2 Release

This chapter contains updated information that applies to the Sun N1 Service Provisioning System 5.2.1 release in May 2006.

Sun N1 Service Provisioning System 5.2.1 Software

The following bugs and issues apply to the Sun N1 Service Provisioning System 5.2.1 software.

Exception Thrown When Listing Resource Groups in Sun N1 Advanced Architecture Graphical User Interface

If you click the Resource Groups link in the N1 Advance Architecture (N1AA) graphical user interface (GUI), the operation fails and the following exception is thrown:

```
Application Error
com.iplanet.jato.NavigationException: Exception encountered
during forward
Root cause = [java.lang.NoSuchMethodError: com.sun.n1.sps.model.
install.InstalledComponentBean.getGeneratedVariableSettings
()Lcom/sun/n1/sps/model/component/GeneratedVariableSettings;]
```

This error occurs on systems that are running the Solaris 9 and Solaris 10 operating systems.

Workaround: Follow these steps.

1. Download and apply the following patches to the Master Server and CLI client.

   These patches are available at `http://sunsolve.sun.com`.

System	Operating System	Patch ID
Master Server	Solaris OS for SPARC based systems	122989–01
	Solaris OS for x86 based systems	122990–01
CLUI	Solaris OS for SPARC based systems	122991–01
	Solaris OS for x86 based systems	122992–02

2. Stop the Sun Java Web Console.

```
# /usr/sbin/smcwebserver stop
```

3. Unregister the N1AA application.

```
# /usr/sbin/smreg remove -a com.sun.web.admin.n1aa_2.2.4
```

4. Reregister the N1AA application.

```
# /usr/sbin/smreg add -a /usr/share/webconsole/n1aa
```

5. Start the Sun Java Web Console.

```
# /usr/sbin/smcwebserver start
```

Error Messages Are Displayed When Attempting to Upgrade Local Distributors and Remote Agents

You are editing a host in the host > details > edit window. If you select the `include remote agent on this physical host` option or the `include local distributor on this physical host` option, and select the `update or prepare host with most recent system updates or services` option, an error similar to the following is displayed:

```
Unable to find upgrade packages to upgrade "Remote agent" on host
"masterserver" from version "5.2" to "5.2.1". (042018)
```

Workaround: To prevent this error, do not select the `update or prepare host with most recent system updates or services` option when editing the host. After the Remote Agent or Local Distributor has been added, use the Prepare Host link in the Hosts window to update the system services.

Support for Sun Java Enterprise System Web Server 7.0 Plug-In

The Sun Java Enterprise System Web Server 7.0 plug-in is included in the 5.2.1 release. The plug-in is provided in the following packages on the Sun N1 SPS 5.2.1 product media.

- `SUNWspsws70` (for Solaris systems)
- `sun-spssws70–1.0–1.noarch.rpm` (for Linux systems)

- `sun-spssws70–1.0–1.msi` (for Microsoft Windows systems)

At the time of the Sun N1 SPS 5.2.1 release, the Sun Java Enterprise System Web Server 7.0 software is not currently available. While the plug-in is provided in the N1 SPS 5.2.1 release, the plug-in has not been fully qualified yet with the Sun Java Enterprise System Web Server 7.0 software and will not be supported until the release of the Web server 7.0 software.

The documentation for the Sun JES Web Server 7.0 plug-in will be published to `http://docs.sun.com/app/docs/coll/1502.1` after the Sun JES Web Server 7.0 software is released.

Plug-In Support for Sun Java Enterprise System Application Server 8.2 Software

The Sun Java Enterprise System Application Server plug-in is included in the Sun N1 Service Provisioning System 5.2 and 5.2.1 release. The plug-in is provided in the following packages on the Sun N1 SPS 5.2.1 product media.

- `SUNWspssas` (for Solaris systems)
- `sun-spssas-3.0-1.noarch.rpm` (for Linux systems)
- `sun-spssas-3.0.msi` (for Microsoft Windows systems)

At the time of the Sun N1 SPS 5.2.1 release, this plug-in supports the file-based deployment of the Sun Java Enterprise System Application 8.1 software. At the time of this release, the Sun Java Enterprise System Application Server 8.2 software is not currently available, and the plug-in has not been fully qualified yet with the Sun Java Enterprise System Application Server 8.2 software. Deployment of the Sun Java Enterprise System Application Server 8.2 software, and package-based deployment of the Sun Java Enterprise System Application 8.1 software, will not be supported until the release of the application server software.

The documentation for the Sun JES Application Server plug-in will be updated on `http://docs.sun.com/coll/1502.1` after the Sun JES Application Server 8.2 software is released.

◆ ◆ ◆ CHAPTER 3

Sun N1 Service Provisioning System 5.2 Issues

This chapter describes Sun N1 Service Provisioning System 5.2 issues that are known to be problems.

Installation Issues

This section describes known issues with installation.

Windows: Resource Check Ins Might Be Rejected (6396403)

Per a recent change in the way resource space is managed, the variable used to configure the Master Server resource repository size has changed in name and function. Therefore, the default configuration files need to be changed.

The new variable, `rsrc.minMSRepoVolFreeSpace`, specifies the minimum number of bytes of disk space that should remain available before further resource check ins are rejected. If a value is not given to `rsrc.minMSRepoVolFreeSpace`, the Master Server can use as much disk space as needed, up to the entire disk.

Workaround: On Windows Master Servers, manually delete configuration variable `rsrc.maxMSRepoSize` and add the new configuration variable `rsrc.minMSRepoVolFreeSpace`. Both variables pertain to the management of resource disk space on the Master Server.

Windows: Windows 2000 Installation Might Fail When Configuring HTTPS (6398475)

While installing the Sun N1 Service Provisioning System 5.2 Master Server on Windows, the installation fails when selecting the `I Am Ready to Specify the HTTPS configuration now` option. When choosing this option, the installer prompts for `keystore` file path and `keystore` password. The installation might fail by throwing the following error:

```
Error 1720: There is a problem with this windows installer package. A script required
for this install to complete could not be run. Contact your support personnel or
package vendor.
```

The possible causes for this error are:

- File path provided for the `keystore` file is invalid
- The password given is not a valid password for the `keystore` file

Workaround: To prevent an error, verify the following:

- The file path is valid and is accessible
- The file type is a valid `keystore` file
- The password provided for the `keystore` file is valid

As an alternative, you can also select the `I will specify the HTTPS configuration after the install` option instead of the `I am ready to specify the HTTPS configuration now` option and perform keystore configuration later.

For more information, see "Creating a Keystore File and Keystore Password for HTTPS Connections" in *Sun N1 Service Provisioning System 5.2 Installation Guide*.

Problems Starting the Master Server on Solaris Systems That Do Not Meet Minimum System Configuration Requirements (6395197)

The N1 SPS Master Server uses the PostgreSQL database. PostgreSQL requires a shared memory segment when it is started. If the PostgreSQL's request for a shared memory segment exceeds available memory, then database startup fails with the following error message on the console:

```
Error! Failed to initialize the database (exit value was 1). Exiting..

The installation of the Master Server is incomplete. It can be removed by using the
following command:

# pkgrm SUNWspsms SUNWspsc1
```

Also the db error log would contain a message similar to the following:

```
IpcMemoryCreate: shmget(key=5432001, size=426688512, 03600) failed: Not enough space
```

It is recommended, to stop all other processes that might be using shared memory during master server installation. If the master server could not be installed even after upgrading the physical RAM, refer to Chapter 10, "Upgrading to the Sun N1 Service Provisioning System 5.2," in *Sun N1 Service Provisioning System 5.2 Installation Guide*. This chapter describes the steps required to migrate the Master Server from this machine to a different one that meets the minimum system requirements.

Workaround: The workaround for this issue is to increase the physical RAM on the system. The Master Server cannot be installed on systems that do not meet the minimal system configuration requirements.

The minimal system configuration requirements for Master Server are documented at "Master Server Hardware Requirements" in *Sun N1 Service Provisioning System 5.2 Installation Guide*.

Also, if Master Server installation was successful, but fails to start up due to shared memory constraints, the shared memory requirement of the Master Server could be reduced by using one, or both, of the following methods:

- Reduce the `max_connections` and `shared_buffers` parameters in the postgres configuration file `$BASEDIR/N1_Service_Provisioning_System_5.2/server/postgres/data/postgresql.conf`. Set `max_connections` to 32 and `shared_buffers` to 8,000.
- Reduce the `db.maxconnections` property in the `$BASEDIR/N1_Service_Provisioning_System_5.2/server/config/config.properties` file to 30.

Windows: Installation Fails When User Does Not Have Correct Privileges or Incorrect Password Is Entered (6394017)

The user is installing a Master Server, Remote Agent, or Local Distributor on a Windows system. If the user chooses to run the Windows Service as `Other Account`, the user needs to provide a username that has `Log on as a service` privileges. If the user types an invalid password or the username does not have `Log on as a service` privileges, the installed services fail to start.

When the services fail to start, one of the following error messages is displayed:

- Master Server

  After reboot, the installation will fail because the database setup requires that the postgres services are running. Since the credentials given for the `Other Account`are invalid, the postgres service fails to start, the installation hangs, and the following error message is displayed:

  ```
  At least one service or driver failed during system startup. Use Event Viewer to examine the event log for details.
  ```

- Remote Agent

  ```
  Error 1920.Service cragent (cragent) failed to start. Verify that you have sufficient privileges to start system services.
  ```

- Local Distributor

  ```
  Error 1920.Service crdistributor (crdistributor) failed to start. Verify that you have sufficient privileges to start system services.
  ```

This error occurs because the user typed an invalid password or the username does not have `Log on as a service` privileges. Username validation only validates the existence of the user on that computer. The credentials are not checked to see if the password is valid for that user or if the username has "Log on as a service" privileges.

Workaround: To prevent this error, implement one of the following workarounds:

- Verify that the password to be entered for the `Other Account`is valid and that the username has `Log on as a service` privileges.
- Select the `System Account` option instead of the Other Account option. In this case, the user is not required to provide a username or password. The installation will continue and the services will run under the SYSTEM user.

Uninstallation Issues

This section describes known issues with uninstallation.

Side-by-Side Upgrade of a Windows Master Server Uninstall Fails (6188943)

When you are performing a side-by-side upgrade of a Windows Master Server, immediate uninstallation fails. Uninstallation might require manual intervention and reboot to complete.

Workaround: Stop the Master Server service from the Services application in the Windows Control Panel before running the Master Server uninstallation. After the uninstallation completes, the Master Server services are still present. Reboot the machine to remove the Master Server services entries in the Services application in the Windows Control Panel.

Uninstallation Window Displays Previous Sun N1 Service Provisioning System Version Value (6189043)

After upgrading a Sun N1 Service Provisioning System Windows version of the Local Distributor or Remote Agent to the next version, if you uninstall that Local Distributor or Remote Agent, the title of the uninstallation window displays the previous version.

Workaround: The uninstallation program proceeds properly. Ignore the erroneous title.

Runtime Issues

This section describes known runtime issues.

Windows: Database Optimization Should Be Performed On a Regular Basis

If database optimization is not performed on a regular basis, performance deteriorates.

Workaround: Manually schedule a database optimization task.

This is a two phase process.

Note – The following steps are performed on the Master Server.

---

1. Creation of Database Optimization Script

   Create a new Windows command file called *file_name*`.cmd` in the `server\bin\` directory of the Master Server installation. Copy the following text to the *file_name*`.cmd` file.

   ```
   REM No changes need to be made to the script after this line
   cd %SPS_MS_DIR%\bin
   ..\cygwin\bin\bash.exe roxdbcmd vacuumdb -d rox
   ```

2. Scheduling

   a. Choose Start ⇒ Settings ⇒ Control Panel ⇒ Scheduled Tasks.

   b. Start the Task Scheduler Wizard by double-clicking Add Scheduled Task in the Scheduled Tasks folder. Click Next.

c. Click Browse to open the Select Program To Schedule dialog box. Navigate to the `optimizedb.cmd` file.

d. Choose the frequency of task runs.

   It is recommended that you run the task daily. Your options in subsequent screens will depend on your choices. The following steps assume that the user selected the daily option.

e. Enter the time when the task should be run. Click Next.

Note – It is advisable to run the database optimization task when the system is not being used. Choose the scheduling time accordingly.

---

f. Type the name and password of the user who is associated with this task. Click Next.

   Make sure that you choose a user with sufficient permissions to run the program. By default, the wizard selects the name of the user who is currently logged on.

g. Click Finish.

   The task is scheduled.

h. For confirmation of successful task scheduling, it is advisable to choose Start ⇒ Settings ⇒ Control Panel ⇒ Scheduled Tasks and check the Task Exit Status Code. A successful task run is indicated by code `0x0`.

Note – Please note that the scheduled run of the task should be completed before observing the exit status code.

   For more information on Windows task scheduling options, see `http://www.microsoft.com/technet/scriptcenter/guide/sas_man_lpja.mspx`.

- To delete the task, press Delete after selecting this task.
- To modify the scheduling options, right click on the task and choose properties and make the necessary modifications.

`Backup` and `Restore` Commands Fail To Restart Master Server (6398090)

When the `backup` and `restore` scripts are run, the Master Server with an SSL configuration fails to restart after the execution of these commands.

Workaround: Perform one of the following options:

- When the following message is displayed, type the keystore password:

  ```
  Starting the Master Server... This may take a moment.
  ```

- Start the Master Server manually.

Folder Add Command Fails With Permission Problems (6382198)

When a user tries to create a folder by using the `fdb.f.add` command, folder creation fails despite the `parents` argument being set to `true`.

Setting `-parents true`, only creates the new folder and its immediate parent. The following example fails because folder f1 does not exist.

```
r_cli -cmd fdb.f.add  -parents true -fullname /group1/f1/f2/f3 -u user1 -p user1
```

The following error message is displayed:

```
Unable to save folder /group1/f1/f2/ due to permissions problem. (013011) access
denied (com.raplix.rolloutexpress.systemmodel.userdb.FolderPermission
folder:129159219047-1139319070874-31478-1381549121 write)
```

This happens when a user does not have administrator rights, but is a member of the group that owns the folder.

Workaround: When using the `-parents true` option, do not require the command to create more than the new folder and its immediate parent.

Container Component Creation Fails When Platform Is Not Equal To `system#any` (6408383)

If you attempt to create a component of type `system#container` and platform is not equal to `system#any`, component creation fails. The following error message is displayed:

```
Unable to perform the requested operation An unexpected error occurred. Try using the
menu on the left or other links on the page to navigate to the page you want and try
again.
```

Workaround: Perform one of the following:

- After the error message is displayed, click the browser Back button. The browser will return to the edit page with the new platform type selected. The user can then continue editing.
- User can create a container component with platform `system#any` and change the platform to another value.

Snapshot Data For Nested Components Might Not Be Purged When the Nested Components Get Reinstalled

If a nested component that is installed by way of the installation of a container component, creates snapshots, the snapshot data on the Remote Agent might not get purged when the nested component is uninstalled by the reinstall of the container component. This might lead to the Remote Agent, on which the nested component was installed, to consume more disk space than it should since the orphaned snapshot data was not purged.

Workaround: The orphaned snapshot data might be purged by installing and then uninstalling a simple component that creates snapshots on the Remote Agent with orphaned snapshot data. The install and uninstall cause the Remote Agent to compare its snapshot data with the Master Server. The result is that the snapshot data is purged for all the components that are no longer installed on the Remote Agent.

System Might Hang When Using SSL on Red Hat Linux Advanced Server 3

If you are running the Sun N1 Service Provisioning System on Red Hat Linux Advanced Server 3, the system might hang when using Secure Socket Layer (SSL) connections.

SSL uses SecureRandom which uses `/dev/random` to generate random numbers. Red Hat Linux Advanced Server 3 includes a bug that causes `/dev/random` not to collect entropy. Since `/dev/random` does not generate numbers unless sufficient entropy is collected, applications hang when attempting to read random data from `/dev/random`.

Workaround: Choose one of the following workarounds:

- Do not use SSL as a connection type. Choose TCP/IP or SSH.
- Remove `/dev/random` and replace it with a symbolic link to `/dev/urandom`. `/dev/urandom` is less secure than `/dev/random`, but the system does not hang when the provisioning system attempts an SSL connection on Red Hat Linux Advanced Server 3.0.

Plan Execution Pauses for 10 Minutes on `execJava` in Preflight on IBM AIX Remote Agents (6313197)

On an IBM AIX remote agent, the plan execution for `CreateManagedServerPlan` might pause for 10 minutes on an `execJava` step.

Workaround: None.

Check In Current Does Not Report Errors for Components That Do Not Support Check In Current (5063014)

The Check In Current operation enables you to ensure that the version of a component in the Master Server repository is the most recent. The Master Server checks its version of the component against the version on the source host. The check is based on metadata regarding the location of the component that was gathered at the time of previous check in.

You cannot perform the Check In Current operation on all component types. Typically, component types that can be browsed using the browser interface are eligible for the Check In Current operation.

When performing a bulk Check In Current operation, if you select a component type that does not support the Check In Current operation, the operation completes with no errors. The results displayed in the Progress dialog box for component types that are not supported might be empty or might represent historical data.

Workaround: No workaround is available.

System Might Hang When Using SSL on Red Hat Linux Advanced Server 3.0 (5084676)

If you are running the Sun N1 Service Provisioning System on Red Hat Linux Advanced Server 3.0, the system might hang when using Secure Socket Layer (SSL) connections.

SSL uses SecureRandom which uses `/dev/random` to generate random numbers. Red Hat Linux Advanced Server 3.0 includes a bug that causes `/dev/random` not to collect entropy. Since

`/dev/random` does not generate numbers unless sufficient entropy is collected, applications hang when attempting to read random data from `/dev/random`.

Workaround: Choose one of the following workarounds:

- Red Hat plans to include a patch in Update 3 to correct the problem. Apply the patch from Red Hat to your system when the patch is available. For more information about the Red Hat patch, see `http://bugzilla.redhat.com/bugzilla/show_bug.cgi?id=117218`.
- Do not use SSL as a connection type. Choose TCP/IP or SSH.
- Remove `/dev/random` and replace it with a symbolic link to `/dev/urandom`. `/dev/urandom` is less secure than `/dev/random` but the system does not hang when the provisioning system attempts an SSL connection on Red Hat Linux Advanced Server 3.0.

Notification Rules Might Cause Plans to Run Slowly (6176243)

If you create a notification rule that has few criteria or no criteria, plans might appear to run slowly. The plan does not complete slowly, but the display of the plan results might be delayed.

Workaround: When creating a notification rule, use as many criteria as possible. More criteria for a notification rule decreases the number of notification emails the provisioning system sends across the network. A lower number of notification emails is less likely to interfere with the display of plan results.

Issues Interacting With the Windows 2000 Plug-In

This section describes known issues with the Windows 2000 plug-in.

Changing a Microsoft IIS Setting and Then Resetting It Might Result in Differences Being Found (6189034)

When performing model to install comparisons that include snapshots of IIS settings, if an IIS setting is changed and then changed back to its original value on the target server, comparison results might indicate differences when no difference exists. In particular, IIS metabase properties that are inherited from parent nodes, such as read/write web site permissions or default document settings, are prone to this behavior.

Workaround: Ignore the differences that are found in these cases.

Cannot Uninstall Windows IIS Application (6197564)

When you uninstall a Windows IIS Application, the Master Server browser interface displays that the uninstallation was successful. However, the COM+ applications are not completely removed. The COM+ applications remain in the Add/Remove Software Programs in the Control Panel.

Workaround: Manually remove the remaining COM+ applications.

To prevent this problem, when you install the application, increase the value of the `shutdownDelaySecs` variable.

Issues Interacting With the BEA WebLogic Plug-In

This section describes known issues with the WebLogic plug-in.

EJB Component Is Not Uninstalled (5109783)

If you run the default uninstall procedure for an EJB component that was deployed to more than one virtual WebLogic managed server and select only one of the managed servers to be uninstalled, the EJB component does not appear to be uninstalled from the managed server.

After the uninstall, if you click the tab on the WebLogic console for the managed server from which you uninstalled the EJB, the console correctly reports that the EJB is no longer deployed. Also, when you click the EJB tab, the console reports that the EJB is no longer targeted at the managed server from which it was uninstalled.

However, on the EJB tab, the console reports that the EJB is deployed on the managed server.

If you uninstall the EJB from all managed servers, the EJB is removed from the WebLogic console correctly.

Workaround: The WebLogic Plug-In is uninstalled correctly. Ignore the erroneous display.

Comparison Fails With Snapshot Error When WebLogic Application Was Deleted From the WebLogic Console (6186456)

If you deploy a WebLogic web application that contains a web application container with a WAR file and web application settings and include a snapshot and then delete the web application from the WebLogic Console, the following error displays if you run a model to install comparison on the web application component:

```
Could not complete operation on webapp domain.
No such webapp exists on domain /domain/. (310101)
```

The comparison should report a difference between the model and what is installed on the server. However, the comparison fails.

Workaround: No workaround is available.

Comparison Does Not Report Differences For Undeployed Components (6186457)

If you use the WebLogic Console to undeploy a WebLogic WAR or EJB component from a managed server or cluster, the WebLogic Console reports that the WAR or EJB component is still targeted to that managed server or cluster. Consequently, if you run a model to install comparison on the managed server or cluster, the comparison reports no differences. The model to install comparison checks the WebLogic Console and reports targeted applications as deployed.

Workaround: No workaround is available.

Comparison Results Incorrect for Content Changes Made to the On Disk Representation of WebLogic Application Archives (6196108)

If a WebLogic application is installed using the Sun N1 Service Provisioning System 5.2 and then content changes are made to the on disk WAR archive on the administration server, the changes are not reported in comparison results. The problem does not occur when configuration changes are made.

Workaround: Comparisons can be customized using the generate and prepare extensions with more capabilities to preprocess the on disk representation prior to running the comparison. This type of customization might require some advanced scripting.

SSL Connections to WebLogic Administration Servers Are Not Supported (6203385)

When setting up a WebLogic administration server in the Sun N1 Service Provisioning System 5.2, clicking the Secure checkbox will attempt to set up connectivity using SSL. This selection causes an error when attempting to perform actions that require access to the WebLogic administration server.

Workaround: Always setup WebLogic administration server connections with requiring SSL connectivity. Do not select the Secure checkbox.

Localization Issues

This section describes issues encountered when using the Sun N1 Service Provisioning System 5.2 in locales other than the English locale.

Search Pattern With Non-ASCII Latin-1 Characters Does Not Work Correctly (6302462)

In the Latin-1 locale environment, non-ASCII characters should not be used in the search pattern. For example, umlauts in German and accents in French. The desired match might not be in the returned set when the find operation is executed.

Workaround: Latin-1 locale users should not use non-ASCII characters as the input to the find command. Using non-ASCII characters might not return the desired result. Use only ASCII characters in these locales.

Locale Sensitive Sorting Is Not Supported

String–based data within the Sun N1 Service Provisioning System is sorted using the standard dictionary lexicon. Locale-specific collation is not performed. Consequently, accented versions of characters appear in a different position than the same unaccented characters.

Upgrading Issue

Update Hosts Progress Dialog Box Does Not Continuously Refresh (6383815)

If you click the Update Entire Host Network button during an upgrade of remote agents or local distributors where the database has thousands of hosts, the Update Host Progress dialog box might not continuously refresh. The dialog box provides the current status for approximately 20 minutes. Although the dialog box stops refreshing, the upgrade continues.

Workaround: Go to the Hosts List page and click the View Current Host Updates link.

◆ ◆ ◆ CHAPTER 4

End–of–Software Support Statements

This chapter lists end–of–support statements.

Current Release

No features were removed in the Sun N1 Service Provisioning System 5.2 release.

Future Releases

The following features might not be supported in a future release of the Sun N1 Service Provisioning System.

Sun N1 Service Provisioning System WebLogic 7.0 Plug-In

The Sun N1 Service Provisioning System WebLogic 7.0 Plug-In might not be supported in a future release of the Sun N1 Service Provisioning System.

Universal User Group

The `universal` user group might not be supported in a future release of the Sun N1 Service Provisioning System. Equivalent functionality is available by using the `registered` user group. For more information about the `registered` user group, see "registered User Group" in *Sun N1 Service Provisioning System 5.2 System Administration Guide*.

◆ ◆ ◆ CHAPTER 5

Documentation Issues

This chapter describes know issues related to documentation.

Sun N1 Service Provisioning System User's Guide and Release Notes for the WebSphere Plug-In 2.0

This section describes corrections to specific chapters in the Sun N1 Service Provisioning System User's Guide and Release Notes for the WebSphere Plug-In 2.0.

Entire Document

All occurrences of the following text should be read as version 5.1, not version 2.0.

- WebSphere 2.0 application server
- WebSphere 2.0 infrastructure
- WebSphere 2.0 software
- WebSphere 2.0 environment

Configuring the WebSphere 2.0 Environment (Task)

The sentence after Step 7 of "How to Install a JDBC Provider Component," should read as follows:

You can target the JDBC provider component to one of the following hosts.