Sun N1 Service Provisioning System User's Guide for Linux Plug-In 2.0

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Contents

Preface

The *Sun N1 Service Provisioning System User's Guide for Linux Plug-in 2.0* contains information about installing, configuring, and using N1 Service Provisioning System to provision Linux RPM files.

Who Should Use This Book

The main audience for the *Sun N1 Service Provisioning System User's Guide for Linux Plug-in 2.0* includes system administrators and operators of N1 Service Provisioning System software who want to be able to deploy Linux files with N1 Service Provisioning System software. These users are expected to have the following background:

- Familiar with the N1 Service Provisioning System product
- Familiar with standard UNIX® and Microsoft Windows commands and utilities
- Familiar with the general concepts associated with Linux and RPM

Before You Read This Book

If you are not already familiar with using the N1 Service Provisioning System software, read the following books:

- *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 Release Notes*

How This Book Is Organized

Chapter 1 provides an overview of the Linux Plug-In.

Chapter 2 provides a list of installation and runtime issues.

Chapter 3 explains how to install and configure the Linux Plug-In.

Chapter 4 describes how to capture and deploy Linux RPM files and identifies the specific component types in the Linux Plug-In.

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

Overview of Linux Plug-In

This chapter explains general information about using N1 Service Provisioning System to provision Linux RPM files and applications. The chapter contains the following information:

Purpose of the Linux Plug-In

The Linux Plug-In adds an RPM (Red Hat Package Manager) file component type to N1 Service Provisioning System software. An RPM file contains all the pieces needed for an application. By creating components of the RPM file component type, you can then deploy those components to other Linux systems. In other words, you deploy the application contained in the RPM file to those systems.

What the Linux Plug-In Includes

The Linux Plug-In includes the `RPM file` component type. This component type identifies a Linux RPM file.

Requirements for Using the Linux Plug-In

Any host on which you intend to deploy Linux RPM files must be running one of the following releases.

- Red Hat Enterprise Linux 2.1 Advanced Server
- Red Hat Enterprise Linux 3.0 Advanced Server (32- and 64-bit)
- Red Hat Enterprise Linux 4.0 Advanced Server (32- and 64-bit)

◆ ◆ ◆ CHAPTER 2

Release Notes for the Linux Plug-In

This chapter describes late-breaking news and known issues with the Linux plug-in.

Installation Issues

There are no known installation issues.

Runtime Issues

There are no known runtime issues.

◆ ◆ ◆ CHAPTER 3

Installing and Configuring the Linux Plug-In

This chapter contains the following information:

Acquiring the Linux Plug-In

Acquiring the Linux plug-in is a two-step process. First, you must add the package file that contains the Linux plug-in JAR file to your system. Then you must import the Linux plug-in JAR file.

The Linux plug-in is packaged as a *plug-in* to the N1 Service Provisioning System software. The plug-in files for the Linux plug-in are available from the N1 Service Provisioning System 5.2 DVD or from the Sun Download Center.

Once the package file is added to your system, the Linux Plug-In is available for import from two different JAR files. Choose the correct file depending on your situation.

- If you are importing the Linux Plug-In for the first time, acquire the `com.sun.linux_2.0.jar` file.
- If you have already imported the previous version of the Linux Plug-In, acquire the `com.sun.linux_1.1_2.0.jar` file.

1. Add the file containing the JAR file:
   - "Adding the Linux Plug-In for Solaris" on page 14
   - "Adding the Linux Plug-In for Linux" on page 14
   - "Adding the Linux Plug-In for Windows" on page 14
2. Import the JAR file - "Importing the Linux Plug-In to N1 Service Provisioning System" on page 15.

Adding the Linux Plug-In for Solaris

The Linux plug-in is contained in the `SUNWspslnx`package.

▼ To Add the Linux Plug-In Package for Solaris

1. **In a terminal window, become superuser.**
2. **Move to the directory containing the plug-in package.**
3. **Type the following command and press Return.**

   `# pkgadd -d` *package_directory* **`SUNWspslnx`**

   The standalone JAR file is in the `/opt/SUNWn1sps/plugins/com.sun.linux/` directory. The upgrade JAR file is in the `/opt/SUNWn1sps/plugins/com.sun.linux/Upgrade`directory.

Adding the Linux Plug-In for Linux

The Linux plug-in is contained in the `sun-spslnx-2.0-1.noarch.rpm` file.

▼ To Add the Linux Plug-In Package for Linux

1. **In a terminal window, become superuser.**
2. **Move to the directory containing the** `sun-spslnx-2.0-1.noarch.rpm` **file.**
3. **Type the following command and press Return.**

   `# rpm -i` *package_directory***`sun-spslnx-2.0-1.noarch.rpm`**

   The standalone JAR file is in the `/opt/sun/N1_Service_Provisioning_System/plugins/com.sun.linux` directory. The upgrade JAR file is in the `/opt/sun/N1_Service_Provisioning_System/plugins/com.sun.linux/Upgrade` directory.

Adding the Linux Plug-In for Windows

The Linux plug-in is contained in the `sun-spslnx-2.0.msi` Microsoft Installer (MSI) package file.

▼ To Add the Linux Plug-In MSI File for Windows

1. **Move to the directory containing the `linux.msi` file.**

2. **Double-click the `sun-spslnx-2.0.msi` file.**

   The Installer GUI starts. The JAR file is copied to the `c:\Program Files\N1 Service Provisioning System\plugins\com.sun.linux` directory. The upgrade JAR file is in the `c:\Program Files\N1 Service Provisioning System\plugins\com.sun.linux\Upgrade` directory.

Importing the Linux Plug-In to N1 Service Provisioning System

To make a given plug-in known to the N1 Service Provisioning System product, you need to import the plug-in. To import a plug-in, follow these steps as explained in detail in Chapter 5, "Plug-In Administration," in *Sun N1 Service Provisioning System 5.2 System Administration Guide*.

▼ How to Import the Linux Plug-in Using the Browser Interface

To import or upgrade a plug-in, follow these steps as explained in detail in Chapter 5, "Plug-In Administration," in *Sun N1 Service Provisioning System 5.2 System Administration Guide*

1. **In the Administrative section of the browser interface main window, click Plug-ins.**

2. **In the Action column of the Plug-ins page, click Import.**

3. **Browse to the location where of the JAR file.**

   - If you are importing the Linux Plug-In for the first time, select the `com.sun.linux_2.0.jar` file.
   - If you have already imported a previous version of the Linux Plug-In, select the `com.sun.linux_1.1_2.0.jar` file.

4. **Click the Continue to Import button.**

   When the import complete successfully, a plug-in details page appears and shows you the objects that the plug-in provides.

▼ How to Import the Linux Plug-in Using the CLI

You can also import a plug-in by using the command line.

◗ **To import a plug-in file from the CLI, type:**

```
% cr_cli -cmd plg.p.add -path plugin-filename -u username -p password
```

- If you are importing the Linux Plug-In for the first time, *plugin-filename* is `com.sun.linux_2.0.jar`.
- If you have already imported the previous version of the Linux Plug-In, *plugin-filename* is `com.sun.linux_1.1_2.0.jar`.

Customizing the Solution for Your Environment

You should grant no permissions to the `/com/sun/linux` folder.

Patching the Linux Plug-In

Check the SunSolve (`http://sunsolve.sun.com`) site for available patches for the Linux Plug-In. To apply the patch, follow the instructions in the patch `README` file.

◆ ◆ ◆ CHAPTER 4

Using the Linux Plug-In

This chapter explains how to use the Linux Plug-In. The chapter contains the following information:

Capturing and Deploying Linux RPM Files

Deploying Linux applications across your enterprise basically involves two processes:

- Capturing the RPM file from an existing location into a component
- Deploying that file to other Linux systems

▼ How to Capture a Linux RPM File

Before you can deploy a file across systems, you have to make the file known to the N1 Service Provisioning System software and wrap it into a component.

1. **From the main page in the N1 Service Provisioning System browser interface, click Create New Component.**

   The Components page appears.

2. **Click the Create link in the Action column.**

3. **Type a name for the component.**

4. **Select `com.sun.linux#RPM file` as the component type.**

   The platform type changes to `system#RedHat Linux - any version`.

5. **(Optional) Type a label and description for the component.**

6. **Select the host and path name from which to capture the RPM file.**

7. **Click Check in.**

▼ How to Deploy a Linux RPM File

1. **Capture the component as described above.**

2. **Go to the Components section of the N1 Service Provisioning System application.**

3. **Choose the component to deploy.**

4. **Click Run in the Actions column next to the Install procedure.**

   A plan details page appears for running the installation procedure.

5. **Choose a target host.**

   The target host needs to be running a version of the Linux operating system that matches the component to deploy.

6. **For the `installPath` component variable, specify the location on the target host where you want to install the RPM file. The value for the `installPath` variable is treated as a relative path to the default Remote Agent directory, unless you specify an absolute path, such as `/opt`.**

7. **For the `pkgName` component variable, specify the package name that exists in the RPM file.**

   On a Linux server, the following command prints the package name.

   ```
   # rpm -qp path-of-rpm-file --qf '%{NAME}'
   ```

   Note – If you do not provide a package name or type the wrong name, the file cannot deploy and an error message displays. Because the `stdout` message for the failed step displays the actual package name, you can also use the error message to determine what the `pkgName` component variable should be.

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8. **Click Run Plan.**

▼ How To Uninstall a Linux RPM File

1. **Go to the Components section of the N1 Service Provisioning System application.**

2. **Choose the component for the RPM that you want to uninstall.**

3. **Click Run in the Actions column next to the Uninstall procedure.**
   A Plan Details Run page displays for running the uninstallation procedure.
4. **In the Current Installations field, click on the host from which you want to remove the RPM.**
5. **Click Run Selected Installations.**
   The uninstall plan for the component is displayed.
6. **Click Run Plan (includes preflight).**

Component Types

The `RPM file` component type identifies a Linux RPM file component. When you create a component that uses this file type, the component has a default installation and a default uninstallation process.

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