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

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Preface

This book explains how to use the N1™ Grid Service Provisioning System (Sun N1 SPS) software to capture and deployOracle Database applications and files.

Who Should Use This Book

The main audience for the *Sun N1 Service Provisioning System User's Guide and Release Notes for the Oracle Plug-In 2.0* includes system administrators and operators of Sun N1 SPS software who want to be able to incorporate Oracle Database functionality with Sun N1 SPS software. These users are expected to be familiar with the following:

- The Sun N1 SPS product
- Standard UNIX® and Windows commands and utilities
- The general concepts and management features available in the Oracle Database product

Before You Read This Book

If you are not already familiar with using the Sun N1 SPS software, read the following books:

- *Sun N1 Service Provisioning System 5.1 System Administration Guide*
- *Sun N1 Service Provisioning System 5.1 Operation and Provisioning Guide*
- *Sun N1 Service Provisioning System 5.1 Release Notes*

How This Book Is Organized

Chapter 1 provides an overview of the plug-in solution.

Chapter 2 contains any late-breaking news or known issues for this plug-in.

Chapter 3 explains how to install and configure the plug-in.

Chapter 4 explains how to capture and deploy applications and files through the plug-in and describes the specific component types that are provided with the plug-in.

Related Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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Documentation, Support, and Training

Sun Function	URL	Description
Documentation	`http://www.sun.com/documentation/`	Download PDF and HTML documents, and order printed documents

Sun Function	URL	Description
Support and Training	`http://www.sun.com/supportraining/`	Obtain technical support, download patches, and learn about Sun courses

Typographic Conventions

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

TABLE P–1 Typographic Conventions

Typeface or Symbol	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	Command-line 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*. Perform a *patch analysis*. Do *not* save the file. [Note that some emphasized items appear bold online.]

Shell Prompts in Command Examples

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

TABLE P–2 Shell Prompts

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

CHAPTER 1

Overview of the Oracle Database Plug-In

This chapter explains general information about using Sun N1 Service Provisioning System (Sun N1 SPS) to provision Oracle database software.

The chapter includes the following information:

- "Purpose of the Oracle Database Plug-In" on page 9
- "What the Oracle Database Plug-In Includes" on page 10
- "Requirements for Using the Oracle Database Plug-In" on page 10
- "For More Information About the Oracle Database Software" on page 10

Purpose of the Oracle Database Plug-In

The Sun N1 SPS software provides enhanced capabilities in out-of-the-box support for Oracle 9i and 10g database software. You can provision Oracle database software and databases. The Oracle database support is packaged in a Java™ Archive (JAR) file that loads into a Sun N1 SPS environment. The Oracle database plug-in simplifies the process of deploying Oracle 9i and 10g database software throughout your enterprise.

Note – This release of the Oracle database plug-in only supports Oracle database software in single-instance environments. Support for Oracle RAC (Real Application Clusters) is not included.

What the Oracle Database Plug-In Includes

The Oracle database plug-in enables you to perform the following main functions:

- Install the support scripts needed for creating Oracle database configurations.
- Install Oracle database software across your enterprise.
- Create an Oracle database.

Requirements for Using the Oracle Database Plug-In

The Oracle database plug-in supports Oracle 9i and Oracle 10g database software that runs on Linux and Solaris™ systems. Detailed requirements for using the Oracle database software are provided in the Oracle documentation. To use the plug-in, you need to additionally meet these requirements:

- Have a licensed copy of the Oracle 9i Release 2 or 10g Database software
- Have an installed Sun N1 SPS environment
- Intend to run the Oracle database software on one of the following configurations:
  - Oracle 10g database on Redhat Linux AS 3.0
  - Oracle 10g database on Redhat Linux AS 2.1
  - Oracle 10g database on Solaris 9 for SPARC or x86
  - Oracle 9i Release 2 database on Redhat Linux AS 3.0
  - Oracle 9i Release 2 database on Redhat Linux AS 2.1
  - Oracle 9i Release 2 database on Solaris 9 for SPARC

For More Information About the Oracle Database Software

Using this plug-in presumes that you are familiar with the Oracle Database software. For more information about this product, see the following Oracle information:

- General Information about Oracle Database (`http://www.oracle.com/database/index.html`)

- Documentation for Oracle Database 9i (`http://www.oracle.com/technology/documentation/oracle9i.html`)
- Documentation for Oracle Database 10g (`http://www.oracle.com/technology/documentation/database10g.html`)

CHAPTER 2

Release Notes for Oracle Database Plug-In

This chapter describes late-breaking news and known issues for the Oracle Database Plug-In.

- "Installation Issues" on page 13
- "Runtime Issues" on page 15

Installation Issues

The following issues are known to exist when installing the Oracle database plug-in.

Oracle 9i Depends on Oracle 10g (6229179)

You might see the following message when importing the Oracle 9i plug-in:

```
Unable to install plug-in "com.sun.oracle9i_DB" version 1.0. This plug-in has a dependency
on another plug-in "com.sun.oracle10g_DB" version 1.0, which was not found. You may need to
install the missing plug-in first before re-trying to install this plug-in. (604010)
```

Workaround: Import the Oracle 10g database plug-in first. Both Oracle database plug-ins depend on the common `OraSpt` component. This component is part of the Oracle 10g plug-in, therefore you must import the 10g database plug-in first.

Uninstall of Oracle 9i on Linux Plan Fails (6227857)

You see the following error message when you run the uninstall plan for Oracle 9i on a RedHat Linux system:

```
"unexpected signal 11" (SIGSEGV) in /lib/ld-linux.so.2 during the call to the
Oracle Universal Installer with the options "-silent -deinstall".
```

Workaround: Manually remove the files.

Incomplete Oracle 10g Uninstall Operation on Linux AS 3.0 Causes Re-Install Operation to Fail (6254511)

Workaround: Manually remove the files. Follow these steps:

1. Remove the `/opt/app/*` Oracle directories.
2. Remove the Oracle directory in which you installed the prep-OS scripts.
3. Delete the oracle user.
4. Delete the oinstall group.
5. Delete the dba group.
6. Remove any Oracle-related files in the `/etc` directory.
7. Remove `init.cssd` files in the `/etc/init.d` directory.
8. Remove CSS files in the `/etc/rc5.d` directory.

Steps will be similar to the following example.

```
# /bin/rm -rf  /opt/app/*
# /bin/rm -rf /oracle
# /usr/sbin/userdel oracle
# /usr/sbin/groupdel oinstall
# /usr/sbin/groupdel dba

[root@booger SUNWn1sps]# cd /etc
[root@booger etc]# ls -l ora*
-rw-rw-r--    1 oracle   oinstall       55 Apr 13 08:48 oraInst.loc
-rw-rw-r--    1 oracle   root          760 Apr 13 10:43 oratab

oracle:
total 8
-rw-r--r--    1 oracle   oinstall       92 Apr 13 10:43 ocr.loc
drwxr-xr-x    3 root     root         4096 Apr 13 08:53 scls_scr

# /bin/rm -fr ora*

# cd /etc/init.d

# /bin/rm -rf init.cssd

# cd /etc/rc5.d
[root@booger rc5.d]# ls *css*
K96init.cssd  S96init.cssd
# /bin/rm -rf K96init.cssd  S96init.cssd
```

Runtime Issues

There are no known runtime issues.

CHAPTER 3

Installing and Configuring the Oracle Database Plug-In

This chapter explains how to install and configure the Oracle Database plug-in.

The chapter contains the following information:

- "Acquiring the Oracle Database Plug-In" on page 17
- "Adding the Oracle Database Plug-In to Sun N1 SPS" on page 18
- "Customizing the Solution for Your Environment" on page 19

Acquiring the Oracle Database Plug-In

The Oracle Database solution is packaged as a *plug-in* to the Sun N1 SPS software. Plug-ins are packaged in Java™ Archive (JAR) files. The plug-in files for the Oracle Database solution are available from the Sun N1 Service Provisioning System Supplement CD or from the Sun Download Center.

The Oracle Database Plug-In is available for import from two different JAR files. Choose the correct file depending on your situation.

- Oracle 9i Database Plug-In
  - If you are importing the Oracle 9i Database Plug-In for the first time, select the `com.sun.oracle9i_DB_2.0.jar` file.
  - If you have already imported a previous version of the Oracle 9i Database Plug-In, select the `com.sun.oracle9i_DB_1.0_2.0.jar` file.
- Oracle 10g Database Plug-In
  - If you are importing the Oracle 10g Database Plug-In for the first time, select the `com.sun.oracle10g_DB_2.0.jar` file.
  - If you have already imported a previous version of the Oracle 10g Database Plug-In, select the `com.sun.oracle10g_DB_1.0_2.0.jar` file.

Adding the Oracle Database Plug-In to Sun N1 SPS

Note – Two separate JAR files support the Oracle 9i and 10g databases. However, several common components are packaged in the Oracle 10g plug-in. As a result, you must install the Oracle 9i and the Oracle 10g plug-ins to support Oracle 9i. To support Oracle 10g, you have to install only the Oracle 10g plug-in JAR file.

To make a given plug-in known to the Sun N1 SPS product, you need to import the plug-in to the Master Server. If you have already imported previous versions of the Oracle Database Plug-In you need to upgrade to the new plug-ins.

▼ How to Import the Oracle Database 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 5.1 System Administration Guide*

Steps

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 you downloaded the JAR file.**
   - Oracle 9i Database Plug-In
     - If you are importing the Oracle 9i Database Plug-In for the first time, select the `com.sun.oracle9i_DB_2.0.jar` file.
     - If you have already imported a previous version of the Oracle 9i Database Plug-In, select the `com.sun.oracle9i_DB_1.0_2.0.jar` file.
   - Oracle 10g Database Plug-In
     - If you are importing the Oracle 10g Database Plug-In for the first time, select the `com.sun.oracle10g_DB_2.0.jar` file.
     - If you have already imported a previous version of the Oracle 10g Database Plug-In, select the `com.sun.oracle10g_DB_1.0_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 Oracle Database Plug-In using the CLI

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

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

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

- Oracle 9i Database Plug-In
  - If you are importing the Oracle 9i Database Plug-In for the first time, *plugin-filename* is `com.sun.oracle9i_DB_2.0.jar`.
  - If you have already imported a previous version of the Oracle 9i Database Plug-In, *plugin-filename* is `com.sun.oracle9i_DB_1.0_2.0.jar`.
- Oracle 10g Database Plug-In
  - If you are importing the Oracle 10g Database Plug-In for the first time, *plugin-filename* is `com.sun.oracle10g_DB_2.0.jar`.
  - If you have already imported a previous version of the Oracle 10g Database Plug-In, *plugin-filename* is `com.sun.oracle10g_DB_1.0_2.0.jar`.

Customizing the Solution for Your Environment

Remote Agent Requirements

When you install the provisioning software remote agent (RA), be sure to set the RA to run as `root`. Most of the Oracle installation runs as user `oracle`; however, some scripts that are generated during the installation process need to run as `root`.

Shared Memory and Semaphore Settings for Linux Systems

For Linux systems, the following semaphore and shared memory settings apply:

```
kernel.shmmax = 1073741824
kernel.shmall = 536870912
kernel.sem = 250 32000 100 128
net.ipv4.ip_local_port_range = 32768 65000
```

Note – These values are set during installation. You do not have to set them.

The actual value for `kernel.shmmax` differs, depending on the amount of memory in the target host. This value adjusts itself dynamically when the `OraSpt` plan runs.

Shared Memory and Semaphore Settings for Solaris Systems

For Solaris systems, you need to create semaphore and shared memory settings similar to those mentioned above for Linux systems. You should set these values before you install the Oracle database software. See the Oracle documentation for details.

Solaris Patches for Oracle 9i on SPARC Systems

To run Oracle 9i on Solaris SPARC systems, download three Solaris patches from the SunSolve web site and install them on your system:

- 112785-45
- 112963-17
- 113096-03

Note – The patch list might have changed since the release of this document. Check the Oracle web site and SunSolve for the latest patches that apply to Oracle on Solaris systems.

CHAPTER 4

Using the Oracle Database Plug-In

The Oracle Database plug-in provides specific components and functions for working with Oracle 9i and 10g single-instance database software. This chapter describes the following information:

- "Oracle Database Plug-In Process Overview" on page 21
- "Oracle Support Scripts" on page 22
- "Oracle Single-Instance Software" on page 23
- "Creating and Working with the Database" on page 30
- "Components" on page 33
- "Troubleshooting" on page 34

Oracle Database Plug-In Process Overview

Note – This release of the Oracle database plug-in only supports Oracle database software in single-instance environments. Support for Oracle RAC (Real Application Clusters) is not included.

Working with the Oracle database plug-in is a multi-step process.

1. Procure the Oracle database software for use on individual nodes.
2. Define the directory structure in which you want your Oracle installation to reside.
3. Download any required patches from the Oracle web site.

Note – At present, the known Oracle patch applies to Oracle 9i for Linux systems. In addition, to run Oracle 9i on Solaris SPARC systems, install the Solaris patches mentioned in "Solaris Patches for Oracle 9i on SPARC Systems" on page 20.

4. Define the directory structure that you want applied to your target Oracle installations.
5. For Oracle 9i:
   - Ensure that the `syspass` session variable is set.
   - Install Oracle 9i software and support scripts, as explained in "How to Install Oracle Single-Instance Software for Oracle Database 10g" on page 23.
   - Create the Oracle 9i database, as explained in "How to Create the Oracle 9i Database" on page 31.
6. For Oracle 10g:
   - Install Oracle 10g software and support scripts, as explained in "How to Install Oracle Single-Instance Software for Oracle Database 10g" on page 23.
   - Create the Oracle 10g database, as explained in "How to Create the Oracle 10g Database" on page 31.

Oracle Support Scripts

The Oracle support scripts primarily perform steps such as creating appropriate Oracle users, defining shared memory, and creating semaphore settings. These scripts are contained in the OraSpt component. The support scripts are installed when you install the single-instance software.

Oracle Users and Groups

The OraSpt component creates one OS user and two OS groups:

- User: `oracle`
- Group: `oinstall`
- Group: `dba`

If a group exists in NIS or LDAP, the support scripts append "n1" to the group name. Thus, if a group `dba` exists, the plug-in creates a user `n1dba`.

Oracle Single-Instance Software

The SingleInst component encapsulates and deploys files for the single-node Oracle database software.

▼ How to Set Session Variables

Before you install the Oracle database software or create any databases, you must set the session variable `sysPass`. This variable acts as the default password for the database users SYS and SYSTEM.

Note – The password that you define here is also the password that you use to run SQL*Plus.

To set the session variable in the Sun N1 SPS browser interface, follow these steps.

Steps

1. **At the top of the window in the Sun N1 SPS browser interface, click Session Variables.**
2. **In the Session Variable field, type `syspass`.**
3. **In the Password column, check the box.**
4. **In the Value field, type the password to use for the database users SYS and SYSTEM.**

   The password encrypts as you type.
5. **In the Action column, click Create.**
6. **Provide the appropriate password when prompted.**

▼ How to Install Oracle Single-Instance Software for Oracle Database 10g

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 10g.**
2. **On the Oracle Database 10g Common Tasks page, click Install.**

3. **On the Plans Details page, click Run.**

4. **Choose variables to use for the Oracle support scripts.**

Note – The first time you install the Oracle 10g Database Plug-In you must create a variables set other than `default`.

- **To use an existing variables set, select a name from the drop-down menu in the OraSpt component row of the Plan Parameters table.**
- **To create a new variables set, click Select from List in the OraSpt component row of the Plan Parameters table.**

  a. **Click Create Set.**

  b. **Type a name for the variables set in the Set Name field.**

  c. **In the field for installPath, provide the full path to the location into which you want the support scripts installed.**

     For example, `/var/tmp/Ora_Spt`.

  d. **In the field for installerHome, provide the full path to the location of the Oracle software files.**

     For example, `/mnt/Ora10gR1`.

     This path can point to a CD or to some other location in which you have placed the appropriate files. For Oracle 10g, the installerHome variable points to the top directory of the software CD, which is the parent directory above the `Disk1` directory.

  e. **For single-instance support files, verify that the racInstall field is set to `FALSE`.**

  f. **Save the variables set.**

  g. **Select the variables set that you just saved from the drop-down menu in the OraSpt component row of the Plan Parameters table.**

5. **Choose variables to use for the single-instance software.**

- **To use an existing variables set, select a name from the drop-down menu in the SingleInst component row of the Plan Parameters table.**
- **To create a new variables set, click Select from List in the SingleInst component row of the Plan Parameters table.**

  a. **Click Create Set.**

  b. **Type a name for the variables set.**

c. **In the field for installPath, provide the full path to the location where you want to place the Oracle silent response file.**

   For example, `/var/tmp/Oracle10g`.

d. **If a component already exists on this host for which the default value for ORACLE_HOME_NAME is used, define a value for the variable ORACLE_HOME_NAME.**

Note – Two components installed in the same physical host cannot have the same ORACLE_HOME_NAME.

---

e. **In the field for installerHome, provide the full path to the location of the Oracle software files.**

   For example, `/mnt/Ora10gR1`.

   This path can point to a CD or to some other location in which you have placed the appropriate files. The installerHome variable points to the top directory of the software, which is the parent directory above the `Disk1` directory.

f. **In the field for ORACLE_BASE, provide the path to the root directory into which you want the Oracle software to be installed.**

   For example, `/opt/app/oracle`.

g. **To run the Oracle listener on this host, set the value for crListener to `TRUE`.**

Note – You should run only one Oracle listener per physical host.

---

h. **Verify that the softGroup and dbaGroup variables are correct.**

   i. **On the target host, type the following command: `id -a oracle`.**

   ii. **Note the group names that were created for the `oracle` user.**

   iii. **If the group names are different from the default names in the softGroup or dbaGroup fields, change those values as appropriate.**

i. **Verify that the TOPLEVEL_COMPONENT variable exactly matches the version of Oracle to install.**

   For example, if you intend to install 10.1.0.3.0, you must change the value of the TOPLEVEL_COMPONENT variable from its default of `10.1.0.2.0` to `10.1.0.3.0`.

j. **Change other variables as appropriate.**

Note – For the oraPrflFile variable, the environment file must be either a Bourne shell, Korn shell, or bash profile. C shell is not supported.

---

k. **Save the variables set.**

l. **Select the variables set that you just saved from the drop-down menu in the SingleInst component row of the Plan Parameters table.**

6. **To select the target host, click Select from List next to the Target Host field on the Plans Details Run page.**

Note – Although the plug-in enables you to install this component into a host set, host sets are more likely to make sense for a RAC install rather than a single-instance install.

---

7. **To install the software, click Run Plan (includes preflight).**

▼ How to Install Oracle Single-Instance Software for Oracle Database 9i

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 9i.**
2. **On the Oracle Database 9i Common Tasks page, click Install.**
3. **On the Plans Details page, click Run.**
4. **Choose variables to use for the Oracle support scripts.**

Note – The first time you install the Oracle 9i Database Plug-In you must create a variables set other than `default`.

- **To use an existing variables set, select a name from the drop-down menu in the OraSpt component row of the Plan Parameters table.**
- **To create a new variables set, click Select from List in the OraSpt component row of the Plan Parameters table.**

  a. **Click Create Set.**

b. **Type a name for the variables set.**

c. **In the field for installPath, provide the full path to the location into which you want the support scripts installed.**

For example, `/var/tmp/Ora_Spt`.

d. **In the field for installerHome, provide the full path to the location of the Oracle software files.**

For example, `/mnt/Ora9iR2`.

The installerHome variable points to the top directory of the software, which is the parent directory above the `Disk1` directory. For Oracle 9i on Linux, the installerHome variable points to the directory that contains Oracle Patch No. 3006854.

Note – The Oracle database plug-in does not support changing CDs during the installation process. Because Oracle 9i has three physical CDs, you should copy the CDs to a single location from which all information can be accessed.

---

e. **To run Oracle 9i on Linux, set the oracleRel variable to `9iR2`.**

f. **For single-instance support files, verify that the racInstall field is set to `FALSE`.**

Note – This release of the Oracle database plug-in only supports Oracle database software in single-instance environments. Support for Oracle RAC (Real Application Clusters) is not included. As a result, the racInstall variable must remain set to `FALSE`.

---

g. **Save the variables set.**

h. **Select the variables set that you just saved from the drop-down menu in the OraSpt component row of the Plan Parameters table.**

5. **Choose variables to use for the single-instance software.**

- **To use an existing variables set, select a name from the drop-down menu in the SingleInst component row of the Plan Parameters table.**
- **To create a new variables set, click Select from List in the SingleInst component row of the Plan Parameters table.**

a. **Click Create Set.**

b. **Type a name for the variables set.**

c. **In the field for installPath, provide the full path to the location where you want to place the Oracle silent response file.**

   For example, `/var/tmp/Oracle9iR2`.

d. **If a component already exists on this host for which the default value for ORACLE_HOME_NAME is used, define a value for the variable ORACLE_HOME_NAME.**

Note – Two components installed in the same physical host cannot have the same ORACLE_HOME_NAME.

---

e. **In the field for installerHome, provide the full path to the location of the Oracle software files.**

   For example, `/mnt/Ora9iR2`.

   The `installerHome` variable points to the top directory of the software, which is the parent directory above the `Disk1` directory. For Oracle 9i on Linux, the `installerHome` variable points to the directory that contains Oracle Patch No. 3006854.

Note – The Oracle database plug-in does not support changing CDs during the installation process. Because Oracle 9i has three physical CDs, you should copy the CDs to a single location from which all information can be accessed.

---

f. **In the field for ORACLE_BASE, provide the path to the root directory into which you want the Oracle software to be installed.**

   For example: `/opt/app/oracle9`

g. **To run the Oracle listener on this host, set the value for crListener to `TRUE`.**

Note – You should run only one Oracle listener per physical host.

---

h. **Verify that the softGroup and dbaGroup variables are correct.**

   i. **On the target host, type the following command: `id -a oracle`.**

   ii. **Note the group names that were created for the `oracle` user.**

   iii. **If the group names are different from the default names in the softGroup or dbaGroup fields, change those values as appropriate.**

i. **Verify that the TOPLEVEL_COMPONENT variable exactly matches the version of Oracle to install.**

j. **Change other variables as appropriate.**

Note – For the oraPrflFile variable, the environment file must be either a Bourne shell, Korn shell, or bash profile. C shell is not supported.

---

k. **Save the variables set.**

l. **Select the variables set that you just saved from the drop-down menu in the SingleInst component row of the Plan Parameters table.**

6. **To select the target host, click Select from List next to the Target Host field on the Plans Details Run page.**

Note – Although the plug-in enables you to install this component into a host set, host sets are more likely to make sense for a RAC install rather than a single-instance install.

---

7. **To install the software, click Run Plan (includes preflight).**

▼ How To Uninstall Oracle Single-Instance Software for Oracle Database 10g

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 10g.**
2. **In the Oracle Database 10g Common Tasks Page, click Uninstall.**
3. **In the plans > details page, click the run button.**
4. **Select the host.**
   - Type the host name in the target host text field.
   - Use the Select From List link.
     a. Click the Select From List link.
     b. Select the server from the Current Found Hosts list.
     c. Click the Add Hosts to Main Window button.
5. **Select the Cleanup Users, Install File and Start Scripts check box.**

Note – If the Cleanup Users, Install File and Start Scripts check box is not selected for a Linux uninstall, a subsequent installation of the database might fail.

6. **Click Run Plan (includes preflight).**

▼ How To Uninstall Oracle Single-Instance Software for Oracle Database 9i

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 9i.**
2. **In the Oracle Database 9i Common Tasks Page, click Uninstall.**
3. **In the plans > details page, click the run button.**
4. **Select the host.**
   - Type the host name in the target host text field.
   - Use the Select From List link.
     a. Click the Select From List link.
     b. Select the server from the Current Found Hosts list.
     c. Click the Add Hosts to Main Window button.
5. **Select the Cleanup Users, Install File and Start Scripts check box.**

Note – If the Cleanup Users, Install File and Start Scripts check box is not selected for a Linux uninstall, a subsequent installation of the database might fail.

6. **Click Run Plan (includes preflight).**

Creating and Working with the Database

About the Database

The Oracle database comes in three flavors:

- General purpose – General use database for mixed transactions

- Data warehouse – Database optimized for responding to long-running and "ad hoc" queries
- Transaction processing – Transaction-oriented database intended for handling many short transactions and canned queries

▼ How to Create the Oracle 9i Database

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 9i.**
2. **On the Oracle Database 9i Common Tasks page, click Create.**
3. **On the Plans Details page, click Run.**
4. **On the Plan Details Run page, select the target host on which you want to create the database.**
5. **On the Plan Details Run page, provide plan variables information.**
   a. **Change the name of the Oracle Service, if needed.**
      For Oracle 9i, the service name should be `or9i`.
   b. **To make this service the default service, click the checkbox.**
   c. **Type the name of the database template to apply to this database.**
      By default, the database template is `General_Purpose`. This template implies that the database will be used for a mixture of transaction types. The other possible templates are:
      - `Data_Warehouse` – Database optimized for responding to long-running and "ad hoc" queries
      - `Transaction_Processing` – Transaction-oriented database intended for handling many short transactions and canned queries
   d. **If needed, change the character set to use for the database.**
      By default, the character set is Western European (ISO 8859). For more information about character sets in Oracle, see the Oracle documentation.
6. **Click Run Plan (includes preflight).**

▼ How to Create the Oracle 10g Database

Steps

1. **In the Common Tasks section of the Sun N1 SPS browser interface, select Oracle Database 10g.**

2. **On the Oracle Database 10g Common Tasks page, click Create.**

3. **On the Plans Details page, click Run.**

4. **On the Plan Details Run page, select the target host on which you want to create the database.**

5. **On the Plan Details Run page, provide plan variables information.**

   a. **Change the name of the Oracle Service, if needed.**

      For Oracle 10g, the service name should be `or10g`.

   b. **To make this service the default service, click the checkbox.**

   c. **Type the name of the database template to apply to this database.**

      By default, the database template is `General_Purpose`. This template implies that the database will be use for a mixture of transaction types. The other possible templates are:

      - `Data_Warehouse` – Database optimized for responding to long-running and "ad hoc" queries
      - `Transaction_Processing` – Transaction-oriented database intended for handling many short transactions and canned queries

   d. **Choose the storage type to use for this database.**

      - **By default, the storage type is FS (file system).**
      - **ASM (Automatic Storage Management) provides support for a highly-available (RAID) solution.**

        See the Oracle documentation for more information and additional user setup that you would need to perform.

        To use the ASM storage type, you need to provide additional information in four fields.

        i. **Type a list of raw disks to use for ASM.**

        ii. **Choose the type of ASM redundancy to provide.**

        iii. **Type the name of the disk group to use for ASM.**

        iv. **Type the password to use for ASM management.**

      - **RAW provides no support for file system utilities.**

   e. **Choose whether to manage your enterprise from a local web site or a central web site.**

      If you choose to manage from a central web site, provide the URL.

Note – To use centralized management, you must install the management agent on the target before you create the database. You can choose to use local management now and change to centralized management later.

f. **If needed, change the character set to use for the database.**

   By default, the character set is Western European (ISO 8859). For more information about character sets in Oracle, see the Oracle documentation.

g. **(Optional) To enable Flash backups, type the path to the backup directory.**

6. **Click Run Plan (includes preflight).**

Using Oracle 9i and 10g on the Same Host

Once you have installed the software and created the databases, you need to combine Oracle net services configuration to run both versions of the software on a single host. Essentially, you should combine net service names and listener information into a single listener on the host. For more information, see the Oracle documentation.

Components

The Oracle Database Plug-In includes two components:

- `OraSpt`
- `SingleInst`

`OraSpt` Component

The `OraSpt` component provides support files for the Oracle database.

`SingleInst` Component

The `SingleInst` component encapsulates and deploys files for the single-node Oracle database software.

Troubleshooting

Problem: You encounter an error when installing the database software.

Solution: Check the value of your installerHome variable. The variable automatically appends certain information to the installerHome value. For example, if the Oracle software is in the directory `/appsrc/Disk1/runInstaller`, set the installerHome variable to just `/appsrc`. When needed, the plug-in appends `Disk1/...` to the path defined in the installerHome variable.

Problem: You encounter a failure when deploying a component.

Solution: Follow these steps:

1. Remove any files deployed in the path specified by either the installPath or the ORACLE_BASE variable.
2. Remove the file `oraInst.loc` in the `/etc` directory on Linux systems or in the `/var/opt/oracle` directory on Solaris systems.
3. Kill any processes that the `oracle` user owns.
4. Try the deployment again.

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