



BakBone
Redefining Data Protection™

NetVault® : Backup

User's Guide

for the

APM for Oracle Online

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NetVault:Backup APM for Oracle Online - User's Guide

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BakBone Software

NetVault[®]: Backup

User's Guide

Oracle Online APM

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OR.0.0 About the Oracle Online APM

The **NetVault:Backup Application Plugin Module for Oracle Online™** (hereinafter referred to as the “**Oracle Online APM**”) increases application availability by providing fast, online Oracle database backups in Linux, UNIX and Windows-based O/S environments. The main features included in the application module include:

- **Hot Backup:** With the **Oracle Online APM**, user databases remain online and fully accessible during backup operations, assuring no user downtime.
- **Support for Multi-homing:** The **Oracle Online APM** displays all available servers, even when multiple database servers are operating on one machine. Backup and restore operations can be applied to any or all available Oracle servers.
- **Easy to use Graphical User Interface:** Backup and restore operations are controlled from an easy to use graphical user interface.
- **Selectable Database Backup Operations:** The **Oracle Online APM** allows you to backup only what is needed. With the easy to use, point and click user interface, administrators can select precisely what needs to be backed up or restored, including individual tablespaces, archive logs, control files and initialization parameter files.
- **Raw Table Support:** In UNIX environments, the **Oracle Online APM** permits backup of raw and ordinary tablespaces without any user intervention.

OR.1.0 Target Audience

Oracle database administrator skills are not generally required for routine backup operations. However, initial configuration and recovery operations will require Oracle database administrator experience.

OR.2.0 Installing the Oracle Online APM

OR.2.1 Pre-Installation Requirements

Before installing the **Oracle Online APM**:

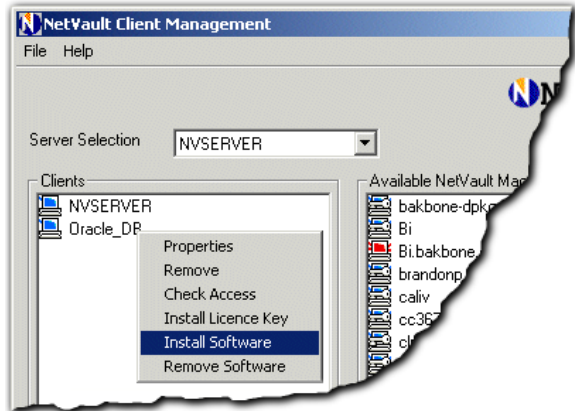
- **NetVault:Backup Server/Client Software Installed** - At least the Client version of NetVault:Backup must be installed on the machine containing the Oracle database.
- **Database in ARCHIVELOG Mode** - The Oracle database must be set to ARCHIVELOG mode.

Important: For redundancy purposes as well as to ensure optimal performance, it is recommended that the NetVault:Backup Server (the machine administering NetVault:Backup backups of the Oracle Database) be a **separate** machine than the machine containing the database itself.

OR.2.2 Installation Procedure

Figure OR-1:
The Client Management window of NetVault:Backup

1. From the machine acting as the NetVault:Backup Server, open the NetVault:Backup **Client Management** window by clicking the **Client Management** button on the NetVault:Backup GUI (or select **Client Management** from the **Administration** pull-down menu).
2. Right-click on the NetVault:Backup machine containing the Oracle database in the **Clients** window and select **Install Software** from the pop-up menu.



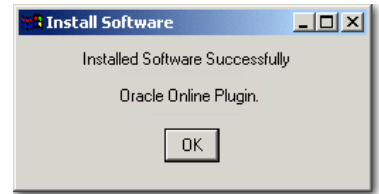
Important:

1. The **Oracle Online APM** must be installed on the machine containing the Oracle database.
2. If the machine containing the database is not the NetVault:Backup Server (as recommended in the **NOTE** box on the previous page), the machine will need to be successfully added to the NetVault:Backup Server via the **Client Management** window before this operation can take place. (For details on adding a Client to a NetVault:Backup Server, please see the *NetVault®: Backup - Administrator's Guide*.)
3. Navigate to the location of the APM **“.npx”** installation file (e.g., the NetVault:Backup APM Installation CD or the directory where it was downloaded). Select the file (e.g., **orfxxxx.npx**) and click on **Open** to proceed.

Important: Based on the operating system being used, the directory path on the installation CD for this software may vary, but the file required for installation of this APM should be entitled **“orfxxxx.npx”** (where “xxxx” represents various software platforms and version numbers).

Figure OR-2:
The dialog box appears upon successful installation of the Oracle Online APM

- The installation process will occur automatically and once the installation has completed, a successful installation message will appear in the **Install Software** dialog box (as shown in the figure).

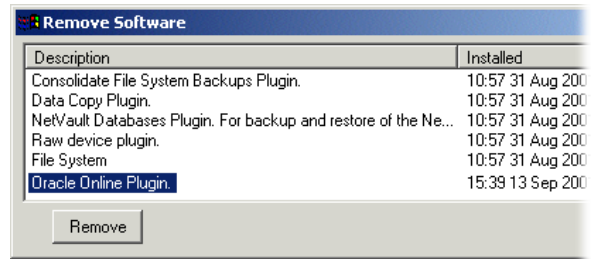


The APM is now installed and ready for use.

OR.2.3 Removing the Oracle Online APM

Figure OR-3:
The Remove Software window with the Oracle Online APM selected for removal

- From the machine acting as the NetVault:Backup Server, open the NetVault:Backup **Client Management** window by clicking the **Client Management** button on the NetVault:Backup GUI (or select **Client Management** from the **Administration** pull-down menu).



- Right-click on the NetVault:Backup machine containing the **Oracle Online APM** in the **Clients** window and select **Remove Software** from the pop-up menu.
- In the **Remove Software** window, select the **Oracle Online Plugin** item from the list and click the **Remove** button.
- A dialog box will appear asking for confirmation of the remove command. Click **OK** to proceed (or **Cancel** to abort). Clicking **OK** results in the removal of the software and a confirmation message will appear. Click **OK** to close this dialog box and return to the **Client Management** window.

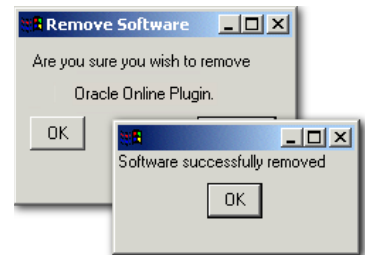


Figure OR-4:
The two dialog boxes issued during the removal process for this APM

OR.3.0 Configuring the Oracle Online APM

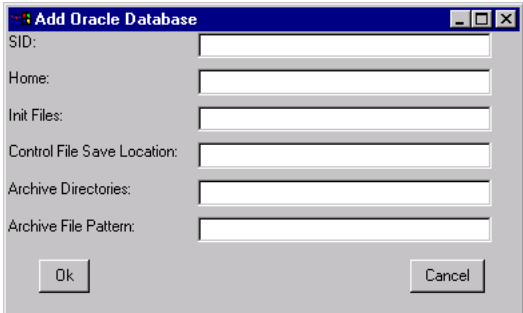
The sections below offer configuration information for use of this APM.

OR.3.1 Adding an Initial Database (Windows-based Operating Systems)

1. Launch the NetVault GUI and access the **Backup** window (i.e., via on of the **Backup** buttons or the **Backup** command in the **Operations** pull-down menu).

*Figure OR-5:
The Add
Oracle
Database
window on a
Windows 2000
operating
system*

2. In the **Selections** tab, locate the Client acting as the Oracle Database Server and double-click on it (or right-click on it and select **Open** from the pop-up menu).



3. In the list of APMs and plugins displayed, locate the **Oracle Online APM** and double-click on it (or right-click on it and select **Open** from the pop-up menu). The **Add Oracle Database** window will be revealed. Find and enter the appropriate information in each of the fields as described in the following sub-sections.

Important: Information in this window does not need to be entered in field order. The easiest way to obtain the required information is by following the instructions offered in the sections that follow, in the order they are revealed.

OR.3.1.a The SID Field

The **“SID”** is the unique name for the Oracle database instance and can be up to **eight** alphanumeric characters in length. To find the SID in a Windows-based installation, follow the instructions outlined below:

1. From the Windows desktop, access the **Control Panel** utility (e.g., **Start > Settings > Control Panel**).
2. Access the **Services** window. Locate the **Administrative Tools** icon and double-click on it to open it. From this window, the **Services** icon can be found. Double-click on this icon to launch the necessary window.
3. In the window that appears, scroll down in the list of available items until the entry **“OracleService<SIDname>”** is located. The value revealed in place of **“<SIDname>”** is the necessary value.



OR.3.1.b The Init Files Field

In order to start an instance, Oracle must read a parameter file - a text file containing a list of instance configuration parameters. Usually this file is named **INIT.ORA** or **INIT<sid>.ORA**, where “<sid>” is operating system-specific.

Important: Some sites may require that multiple parameter files be backed up in order to run a successful recovery. This is specific to the Oracle version and the site installation or configuration and the selected Init file(s) should be verified with an Oracle administrator. Multiple instances are indicated in a comma-separated list.

To locate the Init files in a Windows-based installation, perform these steps:

1. Choose the **Tools>Find>Files or Folders** command and search for “*.ora” on the drive where Oracle is installed. Note the pathname to the following file:
C:\oracle\ora92\admin\<SIDname>\pfile\init.ora
2. Enter **both** the exact path and file name for the Init file in the **Init Files** field.

OR.3.1.c The Home Field

The **Home** value is the top level directory where the Oracle software is installed. For Windows operating systems it will be similar to the following:

C:\oracle

To find the value assigned to **ORACLE_HOME** on a Windows-based installation, perform the following steps:

1. Launch the **regedit** application and search for ORACLE_HOME, which should return the following, or similar, information:

ORACLE_HOME “C:\oracle\ora92”

OR.3.1.d The Control File Save Location Field

Control files are binary files that record the physical structure of the database. Information in the control file includes the database name, names and locations of associated databases and online redo log files, timestamps for database creation, current log sequence number and checkpoint information.

The control file for an Oracle database is created at the same time as the database. By default, at least one copy of the control file must be created when the database is created and is essential for database recovery.

The new entry **must be the full path to and unique file name of the location where the copy will be stored**. The new file must be writable by Oracle.

Important: Do not specify the newly copied control file to be stored in the same location as the current control file.

Locating the Control File

Locate the file entitled “**init.ora**” and search for the name of the current control file(s). When designating the name of the control file save location, make sure not to use those found in the “**init.ora**” file.

OR.3.1.e The Archive Directories Field

The value to be input in the **Archive Directories** field varies depending on the **LOG_ARCHIVE_DEST** or **LOG_ARCHIVE_DEST_n** parameters, as revealed in the **Oracle Init (parameter) File** for the relevant Oracle instance. The entire path value revealed for the archive log directory must be input in the **Archive Directory** field. An example entry is shown below:

log_archive_dest_1 = C:\oracle\ora92\admin\testdb\archive

Important:

1. If a question mark (“?”) exists in the archive directory entry in the **Init File**, the default value of “**ORACLE_HOME**” will be used.
2. If multiple archive directories are to be used, input each in this field, separated by a comma.

OR.3.1.f The Archive File Pattern Field

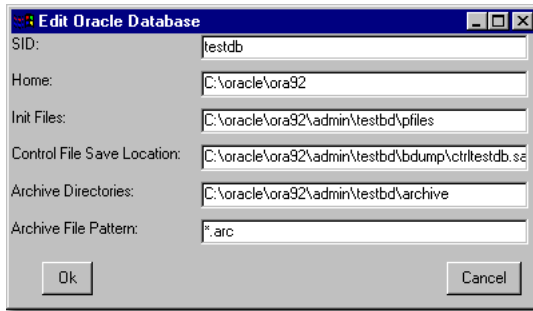
The appropriate value input in the **Archive File Pattern** field will vary depending on what is established for the **LOG_ARCHIVE_FORMAT** setting in the **Oracle Init (parameter) File** for the relevant Oracle instance. A few example entries are shown below:

- If **LOG_ARCHIVE_FORMAT = "%t_%s_%r.dbf"**, then the archive file pattern should be “***.dbf**”.
- If **LOG_ARCHIVE_FORMAT = "%t_%s.arc"**, then the archive file pattern should be “***.arc**”.
- If **LOG_ARCHIVE_FORMAT = "arc%s.%t"**, then the archive file pattern should be “**arc*.***”.

OR.3.1.g Completing and Confirming All Entries

Once all of the entries have been completed in the **Add Oracle Database** window, it will appear similar to the example shown in the figure (depending on the operating system in use). Once completed, click on **OK** to confirm all settings and close this window.

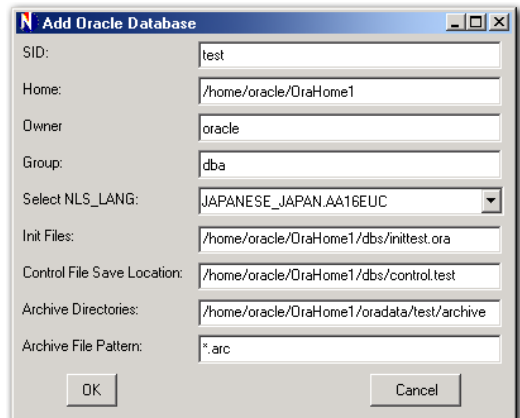
Figure OR-6:
All of the fields of the Configure window successfully filled out for a Windows-based installation of the APM



OR.3.2 Adding an Initial Database (Linux/UNIX-based Operating Systems)

Figure OR-7:
The Add Oracle Database window for Linux/UNIX-based operating systems

1. Launch the NetVault GUI and access the **Backup** window (i.e., via on of the **Backup** buttons or the **Backup** command in the **Operations** pull-down menu).
2. In the **Selections** tab, locate the Client acting as the Oracle Server and double-click on it (or right-click on it and select **Open** from the pop-up menu).
3. In the list of APMs and plugins displayed, locate the **Oracle Online APM** and double-click on it (or right-click on it and select **Open** from the pop-up menu). The **Add Oracle Database** window will be revealed. Find and enter the appropriate information in each of the fields as described in the following sub-sections.



Important: Information in this window does not need to be entered in field order. The easiest way to obtain the required information is by following the instructions offered in the sections that follow, in the order they are revealed.

OR.3.2.a The SID Field

The “**SID**” is the unique name for the Oracle database instance and can be up to **eight** alphanumeric characters in length. To find the SID in a Linux/UNIX-based installation, perform the following steps:

1. Determine the number of Oracle instances running on the server for each instance by issuing the following command:

ps -ef | grep pmon

2. A result will be returned similar to the following (where **<SIDname>** is the desired ID value):

```
oracle 350 1 0 10:05:25 ? 0:00 ora_pmon_<SIDname>
```

OR.3.2.b The Init Files Field

In order to start an instance, Oracle must read a parameter file, a text file containing a list of instance configuration parameters. Usually this file is named **INIT.ORA** or **INIT<sid>.ORA**, where “**<sid>**” is operating system-specific.

Important: Some sites may require that multiple parameter files be backed up in order to run a successful recovery. This is specific to the Oracle version and the site installation or configuration and the selected Init file(s) should be verified with an Oracle administrator. Multiple instances are indicated in a comma-separated list.

To find the Init files in a Linux/UNIX-based installation, perform the following steps:

1. From a terminal session, issue the following command:

```
find / -name *.ora -print
```

2. A list of files will be returned. In that list, find the file shown below to get the Init file name:

```
<ORACLEhome>/admin/<SIDname>/pfile/init <SIDname>.ora
```

OR.3.2.c The Home Field

The **Home** value is the top level directory where the Oracle software is installed. It may be similar to the following: **/var/opt/oracle**.

Important: Do not put a slash at the end of the value in the **Home** field. (For example, **do not** enter the value **/home/oracle9/**.) If a slash is added at the end of the field, the following error will be displayed: **“ORA-01034: ORACLE not available”**.

To find the value assigned to ORACLE_HOME on UNIX, perform the following:

1. Connect to the ORACLE instance via server manager and issue the command:

```
host echo $ORACLE_HOME
```

2. The resulting path that will be returned is the exact path that is required in the **Home** field and may look similar to the following:

```
/u01/app/oracle/product/9.2.0
```

OR.3.2.d The Owner Field

Input the user-owner of the database in this field. This could either be the default value of “**oracle**” (i.e., if the database was created with the default login of “**oracle**”) or the user name manually supplied when the database was originally created (e.g., via Oracle’s **create database** command).

OR.3.2.e The Group Field

The group to which the above named owner belongs. For example, in the default Oracle configuration described in the previous section, *The Owner Field*, the user “**oracle**” would belong to the default group “**dba**”. Otherwise, input the manually created group name to which the selected owner belongs.

OR.3.2.f The Select NLS_LANG Field

In this field, select the desired language that tablespace items displayed in the NetVault:Backup GUI will appear in, for each newly added Oracle database. This can be changed on a per database basis, through the use of the **Edit** command accessed by right-clicking on a database after it has been successfully added.

Important:

1. The **Select NLS_LANG** variable should be the same as the value set for **NLS_LANG** variable on the Oracle server.
2. For information about the languages available for the **Oracle Online APM** and their corresponding **NLS_LANG** values, see the section, *Language Support* on page 19.

OR.3.2.g The Control File Save Location Field

Control files are binary files that record the physical structure of the database. Information in the control file includes the database name, names and locations of associated databases and online redo log files, timestamps for database creation, current log sequence number and checkpoint information.

The control file for an Oracle database is created at the same time as the database. By default, at least one copy of the control file must be created when the database is created and is essential for database recovery.

The new entry **must be the full path to and unique file name of the location where the copy will be stored**. The new file must be writable by Oracle.

Important: Do not specify the newly copied control file to be stored in the same location as the current control file.

Locating the Control File

Locate the file entitled “**init.ora**” and search for the name of the current control file(s). When designating the name of the control file save location, make sure not to use those found in the “**init.ora**” file.

OR.3.2.h The Archive Directories Field

The **Archive Directory** value required by this field can be found in the **Init (parameter) File** for a Linux/UNIX-based installation of Oracle. The entire path value revealed for the archive log directory must be input in the **Archive Directory** field. An example entry is shown below:

log_archive_dest_1 = /oracle/ora92/archive

Important:

1. If a question mark (“?”) exists in the archive directory entry in the **Init File**, the default environmental variable value of “**ORACLE_HOME**” will be used.
2. If multiple archive directories are to be used, input each in this field, separated by a comma.

OR.3.2.i The Archive File Pattern Field

The **Archive File Pattern** for both Linux/UNIX-based operating systems is “*.arc”. Therefore, this value should appear in this field.

OR.3.2.j Completing and Confirming All Entries

Figure OR-8:
All of the fields of the *Configure window* successfully filled out for a Linux/UNIX-based installation of the APM

Once all of the entries have been completed in the **Add Oracle Database** window, it will appear similar to the example shown in the figure (depending on the operating system in use). Once completed, click on **OK** to confirm all settings and close this window.

SID:	prod
Home:	/oracle/product/9.2.0
Init Files:	/oracle/product/9.2.0/dbs/initproddb.ora
Control File Save Location:	/oradata/proddb/control_proddb.dbf
Archive Directories:	/oracle/product/9.2.0/archive
Archive File Pattern:	*.arc

OR.3.3 Editing a Database

Once a database has been successfully set up for recognition by the APM, its configured information can be edited as desired. This can be accomplished by following the steps outlined below.

Figure OR-9:
The *Edit Oracle Database dialog box* for a Windows-based operating system

1. From the **Selections** tab of the **Backup** window, drill down the tree structure into the **Oracle APM** and locate the desired database.
2. Right-click on the database and select the **Edit Database** command from the pop-up menu to

Edit Oracle Database	
SID:	testdb
Home:	C:\oracle\ora92
Init Files:	C:\oracle\ora92\admin\testbd\pfiles
Control File Save Location:	C:\oracle\ora92\admin\testbd\bdump\ctrltestdb.se
Archive Directories:	C:\oracle\ora92\admin\testbd\archive
Archive File Pattern:	*.arc
<input type="button" value="Ok"/> <input type="button" value="Cancel"/>	

open the **Edit Oracle Database** window. This dialog box is identical to the **Add Oracle Database** window.

3. Modify the appropriate information as required. See the section, *Adding an Initial Database (Windows-based Operating Systems)* on page 8 or the section, *Adding an Initial Database (Linux/UNIX-based Operating Systems)* on page 11 for details on the fields available and appropriate values for each.
4. Click **OK** to confirm any changes and close this window.

OR.3.4 Adding Additional Databases

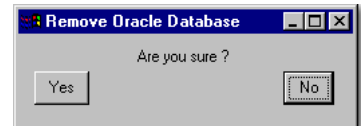
With an initial database added to the **Oracle Online APM** for access, the process used to add additional databases differs slightly, and is covered below:

1. With the **Backup** window accessed, locate the Client serving as the Oracle Database Server and open it (by double-clicking on it or right clicking on it and selecting the open command from the pop-up menu).
2. Locate the **Oracle Online APM** and right-click on it.
3. In the pop-up menu that is revealed, select the **Add Database** command.
4. The **Add Oracle Database** window will be revealed. Based on the operating system installed on the target Oracle Database Server, perform the following:
 - **Windows-based Oracle Database Server** - Repeat **Step 3**, as outlined in the section, *Adding an Initial Database (Windows-based Operating Systems)* on page 8.
 - **Linux/UNIX-based Oracle Database Server** - Repeat **Step 3**, as outlined in the section, *Adding an Initial Database (Linux/UNIX-based Operating Systems)* on page 11.

OR.3.5 Removing a Database

1. From the **Selections** tab of the **Backup** window, drill down the tree structure into the **Oracle APM** and locate the desired database for removal.
2. Right-click on the database to access the available pop-up menu.
3. Choose **Remove Database** from the pop-up menu. The **Remove Oracle Database** dialog box will open.
4. Confirm removal of the database by clicking **Yes**. To cancel the command, click **No**.

Figure OR-10:
The dialog box
issued during
the removal
process for a
database

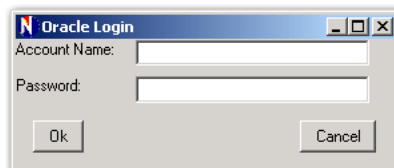


OR.3.6 Setting a New Database Password

If the password used by a target instance of an Oracle database is changed in Oracle itself, after it has been set up with the **Oracle Online APM**, it must be updated within the APM as well. To accomplish this follow the steps below.

1. From the **Selections** tab of the **Backup** window, drill down the tree structure into the **Oracle APM** and locate the desired database.
2. Right-click on the database to access the available pop-up menu.
3. Choose **Set Database Password** from the pop-up menu. The **Set Database Password** dialog box will open.
4. Input the **Account Name** and new **Password** value in the appropriate fields and click on **OK** to update the password information.

Figure OR-11:
The dialog box issued during the process of setting a database password



OR.4.0 Backup with the Oracle Online APM

To perform a backup using the **Oracle Online APM**, follow these steps:

Important: The Oracle database to be backed up must be in ARCHIVELOG mode, with Automatic Archival STARTED (i.e., it must have the Archive Logger running).

1. Open the NetVault:Backup **Backup** window by clicking the **Backup** button on the command toolbar or by choosing the **Operations Backup** command. The NetVault:Backup **Backup** window displays the list of Clients in the **Selections** tab.
2. Select the desired Client, right-click and choose **Open** from the pop-up menu or double-click the Client to display the list of installed APMs.
3. Double-click the **Oracle Online APM** to display the databases which may be backed up on the selected Client. If this is the first time the APM has been opened, the **Oracle Login** dialog box will open and the relevant **Account Name** and **Password** for the database must be supplied. If necessary, see the Oracle database administrator for this information.
4. A database must first be successfully added to continue further with a backup. For complete information on adding a database, see the sections, *Adding an Initial Database (Windows-based Operating Systems)* on page 8 or *Adding an Initial Database (Linux/UNIX-based Operating Systems)* on page 11.

Figure OR-12:
The Oracle Login dialog Box

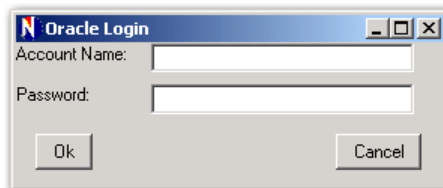
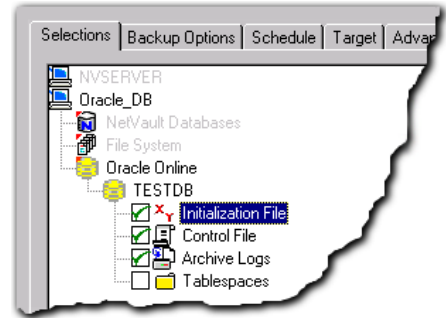


Figure OR-13:
The Selections
tab of the
Backup
window with
various Oracle
database
items selected
for a backup

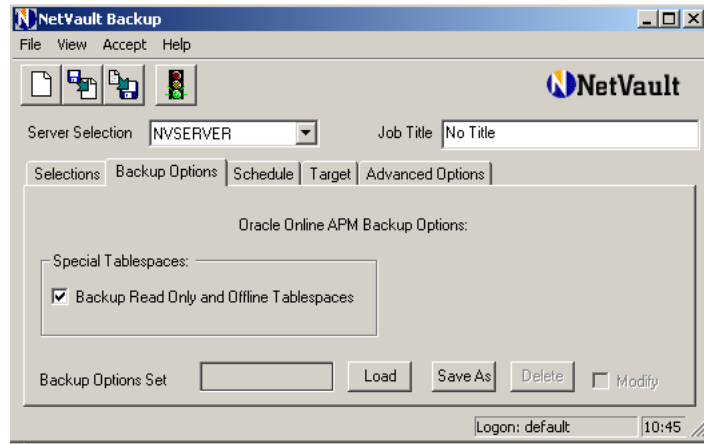
5. Choose the data for a backup by selecting the relevant check box on each database or database item(s).
6. Once the desired data is selected for a backup, it is recommended that a **Backup Selection Set** be generated to eliminate the need to repeatedly select the same items for a backup. For complete details on this process, please see the *NetVault®: Backup - Administrator's Guide*.



Important: Oracle Online makes it possible to either archive or clear online logs. If the **Archived Logs** item is selected for inclusion in a backup job, only logs that have been successfully archived will be included in the backup (i.e., cleared online logs will not be included).

7. Click the **Backup Options** tab to set the job options. The **Backup Options** tab will appear as shown in the following figure.

Figure OR-14:
The Backup
Options tab



8. In the **Special Tablespaces** field, select **Backup Read Only and Offline Tablespaces** if you want to backup any tablespaces that are in either read only or offline mode along with other tablespaces. If you disable this option, these tablespaces will not be backed up and the backup job could fail. This option is enabled by default.
9. Supply the required parameters for the **Schedule**, **Target** and **Advanced Options** tabs as appropriate. These parameters are not unique to the **Oracle Online APM**. See the *NetVault®: Backup - Administrator's Guide* for complete details on the options available in these tabs.

10. Enter a suitable name for the job in the **Job Title** field.
11. Launch the backup job by clicking the **Submit** button on the command toolbar (or by selecting **Submit Backup** from the **Accept** pull-down menu). See the *NetVault®: Backup - Administrator's Guide* for information on viewing the job status, progress and log.

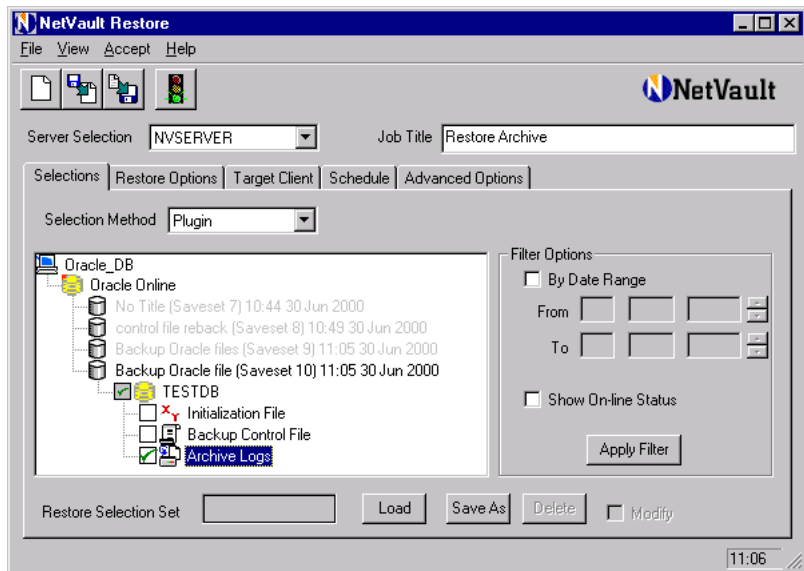
OR.5.0 Restoring Data with the Oracle Online APM

To perform a restore using the **Oracle Online APM**, follow these steps:

Important: While it is not necessary to take a complete Oracle Database offline to perform a restore of selected tablespaces, each individual tablespace that is to be restored to **must be** taken offline **prior** to performing the restore. Please refer to the relevant Oracle documentation for instructions on taking a database's tablespace(s) offline.

1. Open the NetVault:Backup **Restore** window by clicking the **Restore** button on the command toolbar or by choosing the **Restore** command from the **Operations** menu. The NetVault:Backup **Restore** window displays the list of Clients which have restorable data in the **Selections** tab.
2. Select the desired Client, right-click and choose **Open** from the pop-up menu or double-click the Client to display a list of the APM's which have data available to be restored.
3. Open the **Oracle Online APM** to display all backup savesets present on the selected Client.
4. Open the desired backup saveset and select the data items to be restored.

Figure OR-15:
The Selections
tab of the
Restore
window



5. There are no **Restore Options** available with this APM. Supply the required parameters for the **Schedule**, **Target Client** and **Advanced Options** tabs as appropriate. These parameters are not unique to the **Oracle Online APM**. See your *NetVault®: Backup - Administrator's Guide* for complete details on the options available in these tabs.
6. Enter the name of the job in the **Job Title** box.
7. Submit the restore job by clicking the **Submit** button on the command toolbar.
8. See the *NetVault®: Backup - Administrator's Guide* for information on viewing the job status, progress and log.

Important: When restoring data, an Oracle database administrator may be required to apply additional Oracle-specific recovery procedures.

OR.6.0 Language Support

The following table lists the languages available for the **Oracle Online APM**, and their corresponding **NLS_LANG** values.

Language	NLS_LANG Value
Arabic	ARABIC_UNITED ARAB EMIRATES.AR8MSWIN1256
Brazilian Portuguese	BRAZILIAN PORTUGUESE_BRAZIL.WE8ISO8859P1 BRAZILIAN PORTUGUESE_BRAZIL.UTF8
Catalan	CATALAN_CATALONIA.WE8ISO8859P1
Chinese Simplified	SIMPLIFIED CHINESE_CHINA.ZHS16CGB231280 SIMPLIFIED CHINESE_CHINA.UTF8
Chinese Traditional	TRADITIONAL CHINESE_TAIWAN.ZHT16BIG5
Croatian	CROATIAN_CROATIA.EE8MSWIN1250
Czech	CZECH_CZECH REPUBLIC.EE8MSWIN1250
Danish	DANISH_DENMARK.WE8ISO8859P1
Dutch	DUTCH_THE NETHERLANDS.WE8ISO8859P1
English	AMERICAN_AMERICA.WE8ISO8859P1 AMERICAN_AMERICA.US7ASCII AMERICAN_AMERICA.UTF8 ENGLISH_UNITED KINGDOM.WE8ISO8859P1
Finnish	FINNISH_FINLAND.WE8ISO8859P1
French	FRENCH_FRANCE.WE8ISO8859P1 FRENCH_FRANCE.UTF8
German	GERMAN_GERMANY.WE8ISO8859P1 GERMAN_GERMANY.UTF8
Greek	GREEK_GREECE.EL8MSWIN1253

Language	NLS_LANG Value
Hebrew	HEBREW_ISRAEL.IW8MSWIN1255 HEBREW_ISRAEL.UTF8
Hungarian	HUNGARIAN_HUNGARY.EE8MSWIN1250
Italian	ITALIAN_ITALY.WE8ISO8859P1 ITALIAN_ITALY.UTF8
Japanese	JAPANESE_JAPAN.JA16EUC JAPANESE_JAPAN.JA16SJIS JAPANESE_JAPAN.UTF8
Korean	KOREAN_KOREA.KO16KSC5601 KOREAN_KOREA.KO1616KSCCS KOREAN_KOREA.UTF8
Norwegian	NORWEGIAN_NORWAY.WE8ISO8859P1
Polish	POLISH_POLAND.EE8MSWIN1250
Portuguese	PORTUGUESE_PORTUGAL.WE8ISO8859P1
Romanian	ROMANIAN_ROMANIA.EE8MSWIN1250
Russian	RUSSIAN_CIS.CL8MSWIN1251
Slovak	SLOVAK_SLOVAKIA.EE8MSWIN1250
Spanish	SPANISH_SPAIN.WE8ISO8859P1 SPANISH_SPAIN.UTF8
Spanish Latin American	LATIN AMERICAN SPANISH_AMERICA.WE8ISO8859P1
Swedish	SWEDISH_SWEDEN.WE8ISO8859P1
Turkish	TURKISH_TURKEY.WE8ISO8859P9

OR.7.0 Troubleshooting

The following table describes commonly encountered problems and possible solutions.

Symptom	Error	Explanation
Backup fails to run	<i>Failed to connect to database</i>	The Oracle instance that you were trying to backup is shut down.
Backup fails to run	<i>ORA-01031: insufficient privileges on Oracle backup</i>	The account used for the Oracle APM had insufficient privileges to dump online log files to archive.
Backup fails to run	<i>ORA-01123: cannot start online backup; media recovery not enabled</i>	The Oracle instance is not running in archivelog mode.

