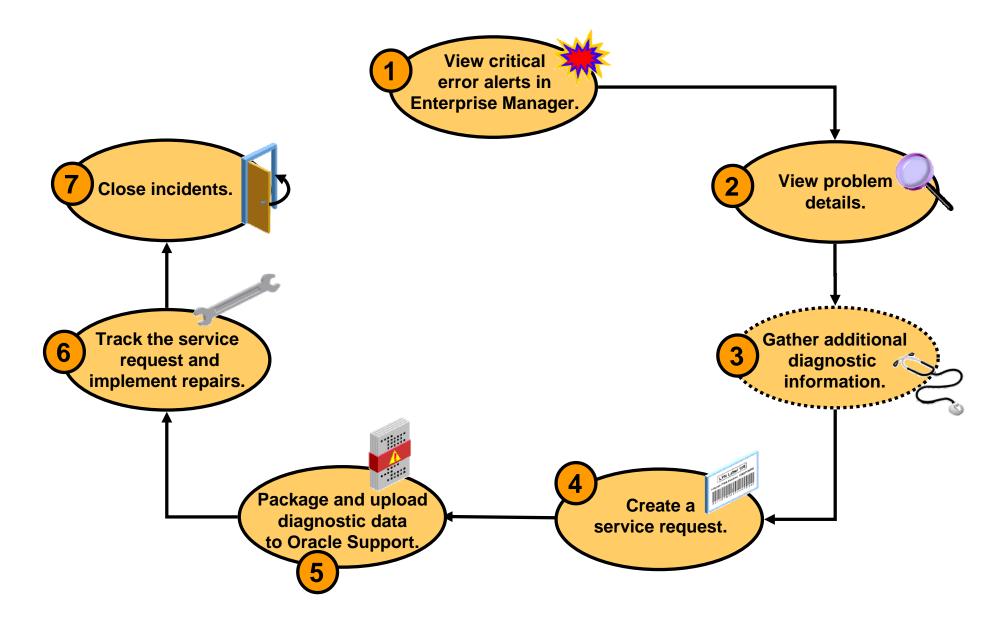


Objectives

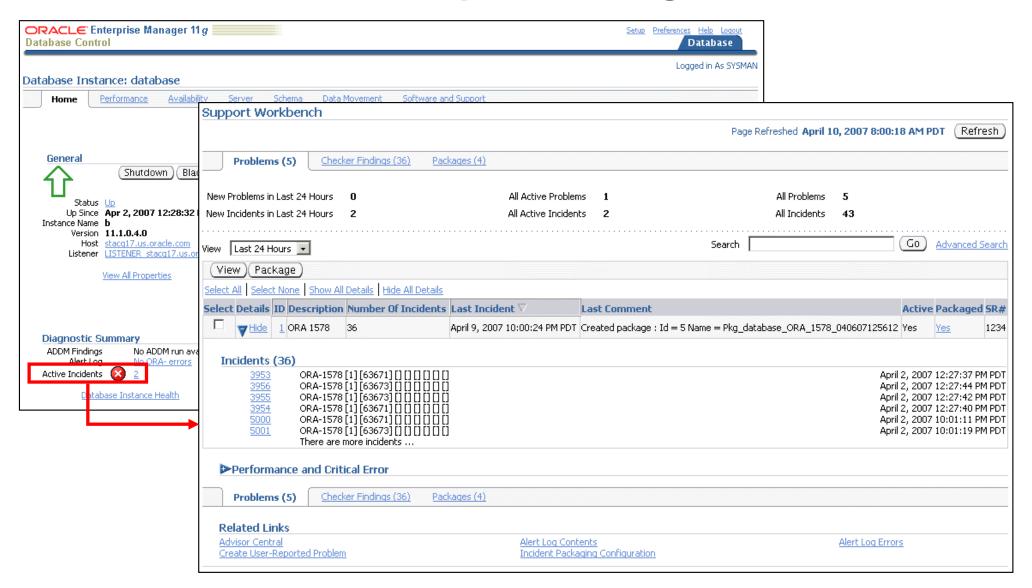
After completing this lesson, you should be able to:

- Use the Enterprise Manager Support Workbench
- Work with My Oracle Support
- Search My Oracle Support
- Log service requests (SR)
- Manage patches
 - Apply a patch
 - Stage a patch

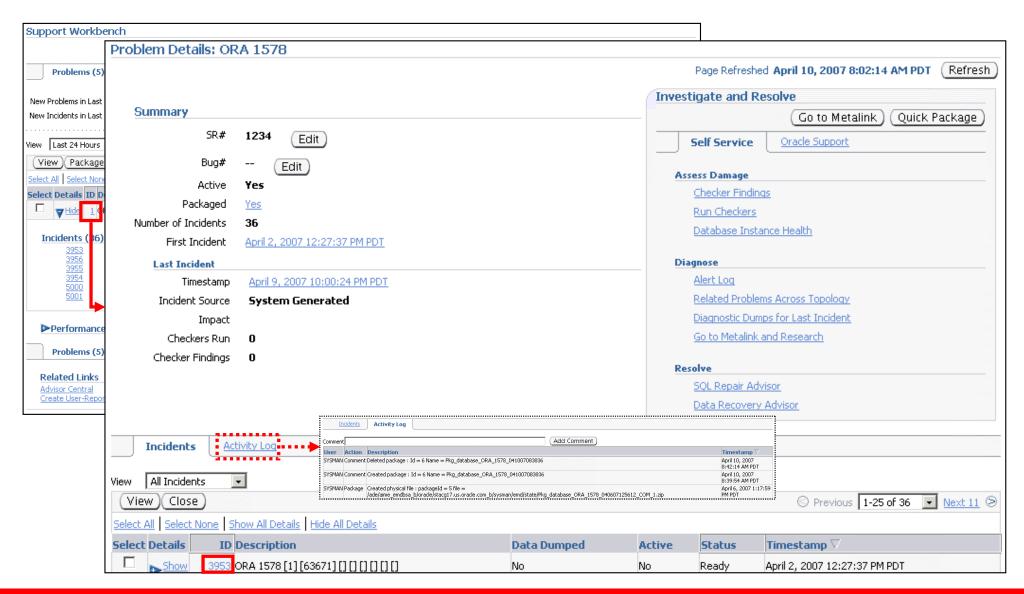
Using the Support Workbench



Viewing Critical Error Alerts in Enterprise Manager



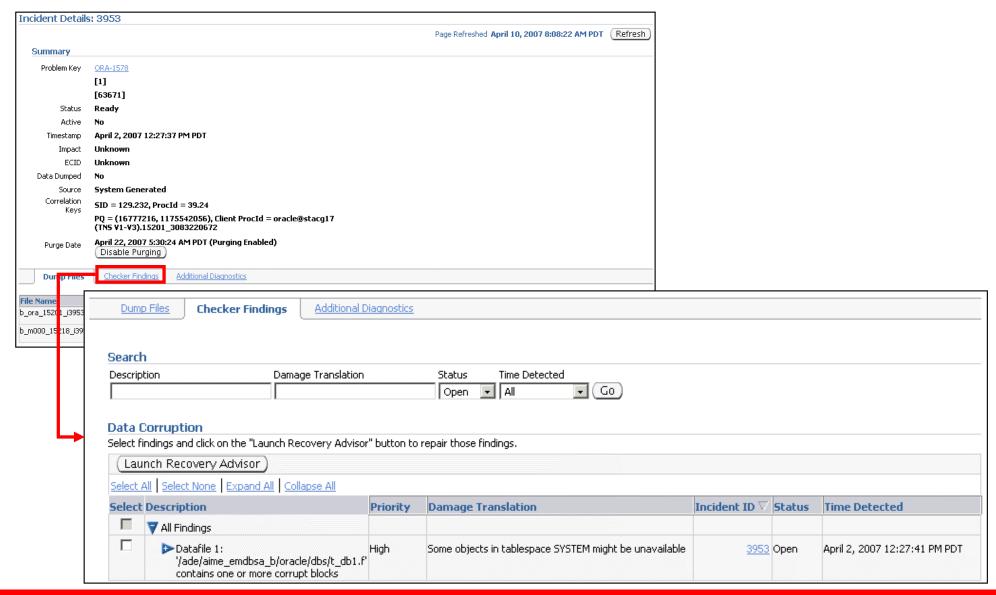
Viewing Problem Details



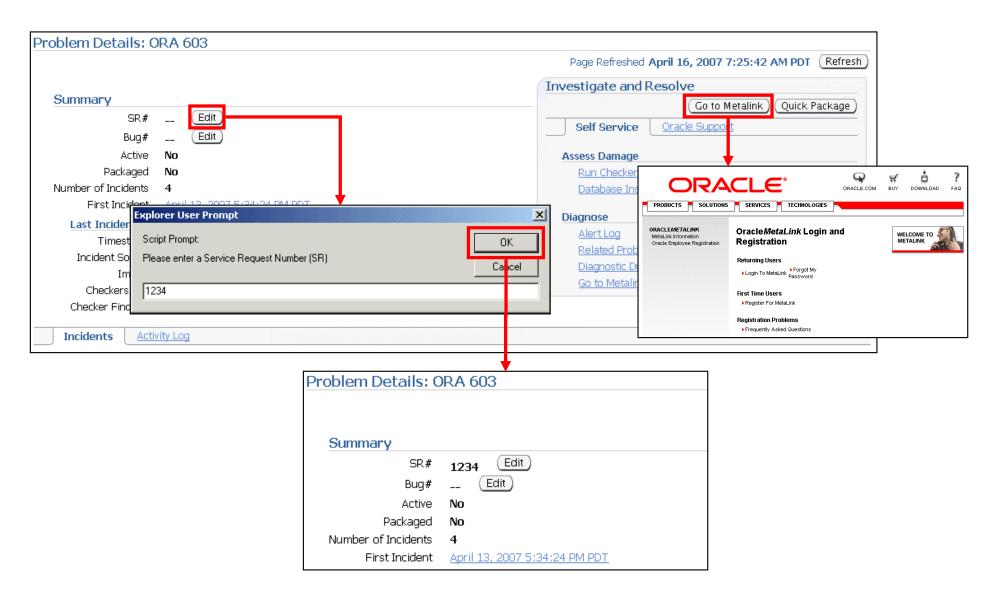
Viewing Incident Details: Dump Files



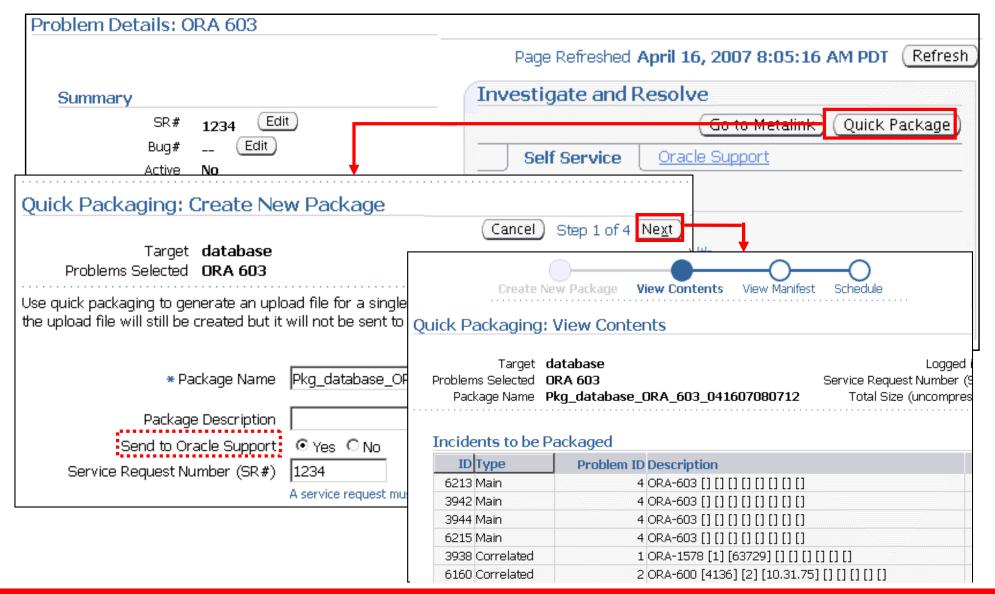
Viewing Incident Details: Checker Findings



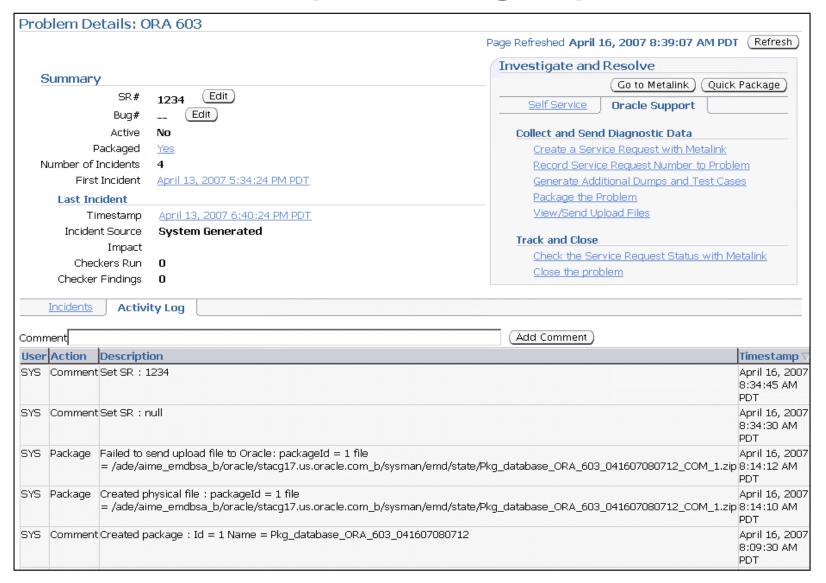
Creating a Service Request



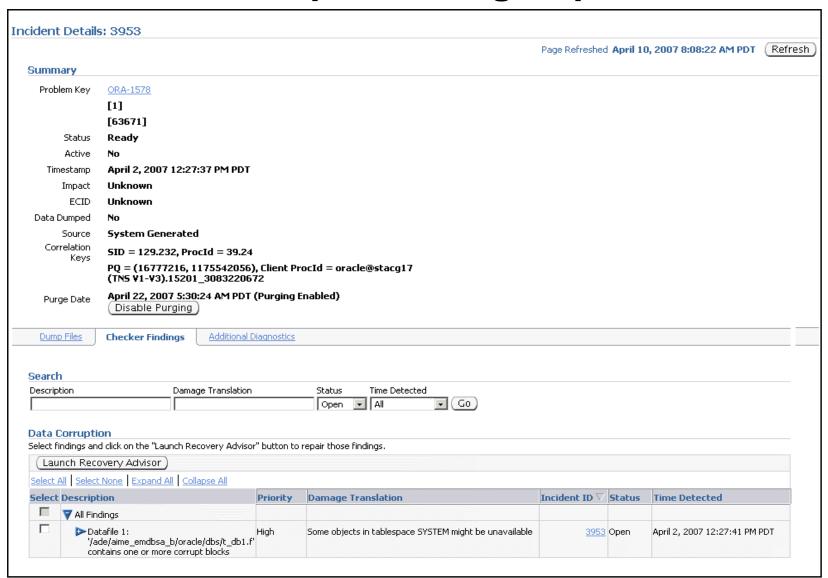
Packaging and Uploading Diagnostic Data to Oracle Support



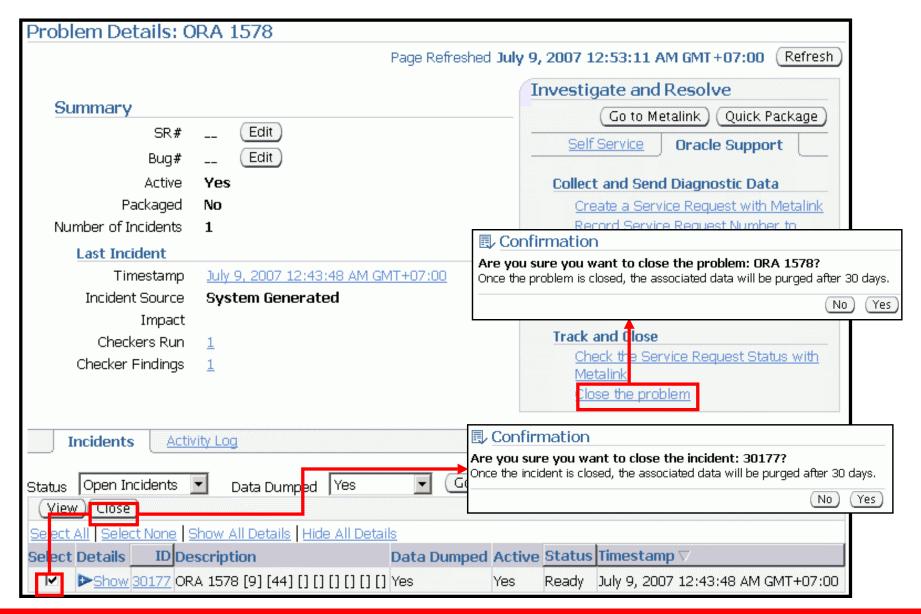
Tracking the Service Request and Implementing Repairs



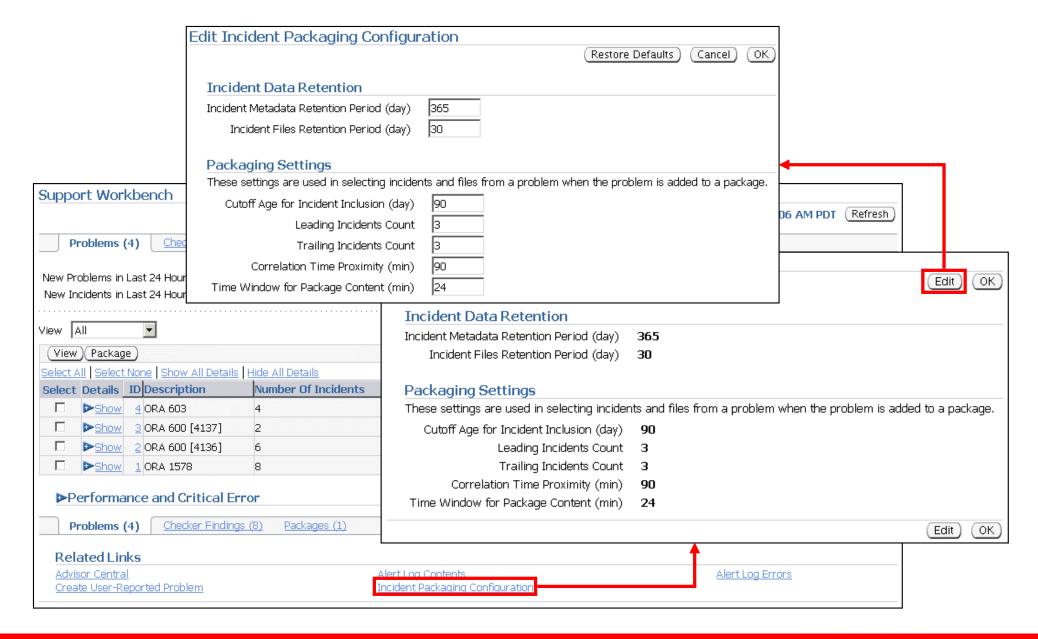
Tracking the Service Request and Implementing Repairs



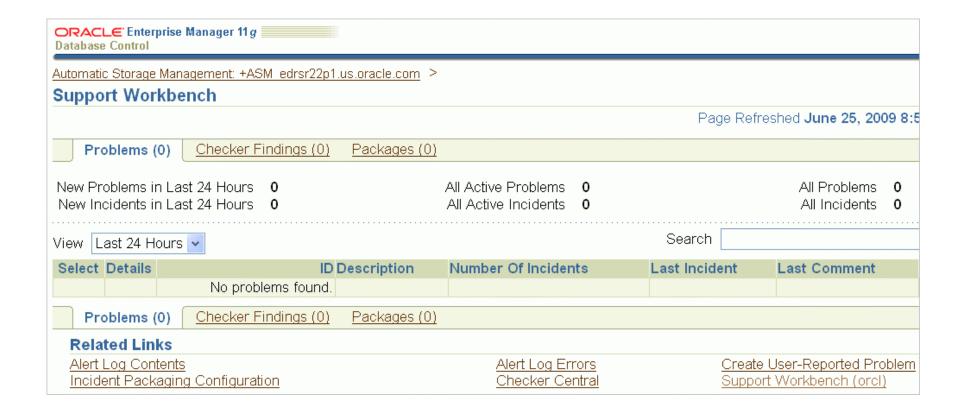
Closing Incidents and Problems



Incident Packaging Configuration



Enterprise Manager Support Workbench for ASM



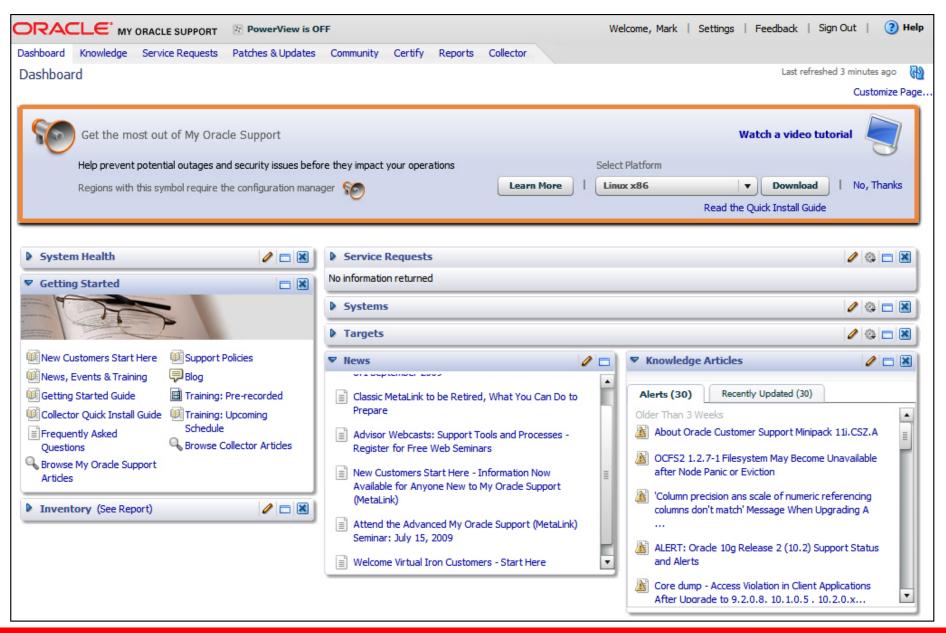
Working with Oracle Support

- Oracle Support Services (OSS) provides 24 × 7 solution support.
- Support is delivered in the following ways:
 - My Oracle Support Web site
 - Telephone
 - Oracle Direct Connect (ODC) remote diagnostic tool
- The Customer Support Identifier (CSI) number is used to track the software and support that are licensed to each customer.

My Oracle Support Integration

- Enterprise Manager automatically alerts users to new critical patches.
- The Enterprise Manager patch wizard can be used to select an interim patch.
- You can review the patch's README file from within Enterprise Manager.
- You can download the selected patches from My Oracle Support into the Enterprise Manager patch cache.

Using My Oracle Support



Researching an Issue

To research an issue on My Oracle Support, perform the following steps:

- 1. Perform a keyword search.
- Review the documentation.
- 3. Use the self-service toolkits.
- 4. Use the automated diagnostic tests and business flows.
- 5. Search for applicable patches.
- 6. Log a service request (SR).

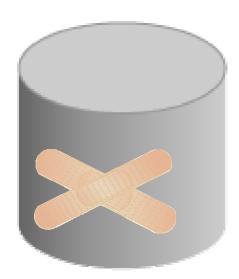
Logging Service Requests

- Log an SR by clicking the Service Request tab on the My Oracle Support home page.
- My Oracle Support performs searches based on the CSI number and SR profile.
- Provide the following information when logging an SR:
 - Explanation of the issue, including error messages
 - Steps taken to troubleshoot the issue
 - Software version
 - Steps required to reproduce the problem
 - Business impact of the issue

Managing Patches

Kinds of patches

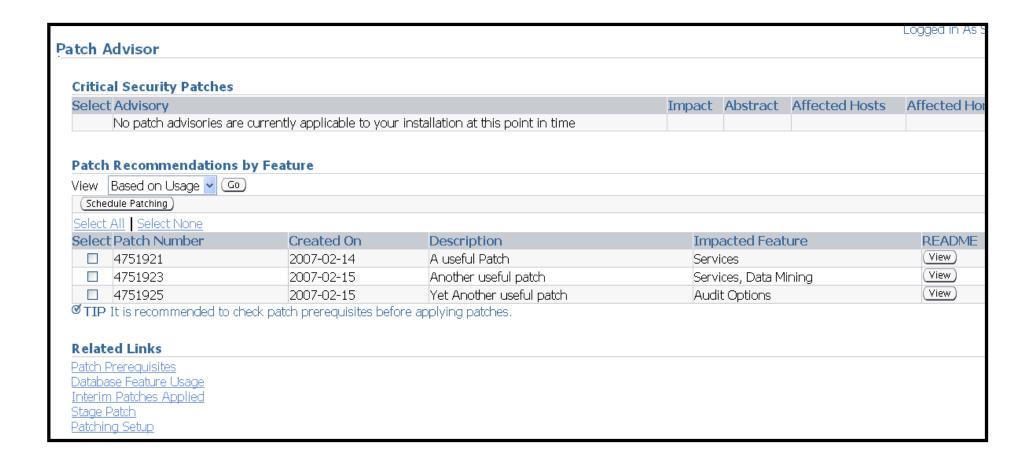
- Interim patches
 - For specific issues
 - No regression testing
- CPUs (Critical Patch Updates)
 - Critical security issues
 - Regression testing
 - Does not advance version number
- Patch releases



Applying a Patch Release

- Patch releases are fully tested product fixes that:
 - Do not include new functionality
 - Affect only the software residing in your Oracle home on installation
 - Contain individual bug fixes
 - Carry version numbers
- To apply a patch:
 - 1. Determine your Oracle software environment.
 - 2. Set your My Oracle Support login credentials.
 - 3. Stage the patch release.

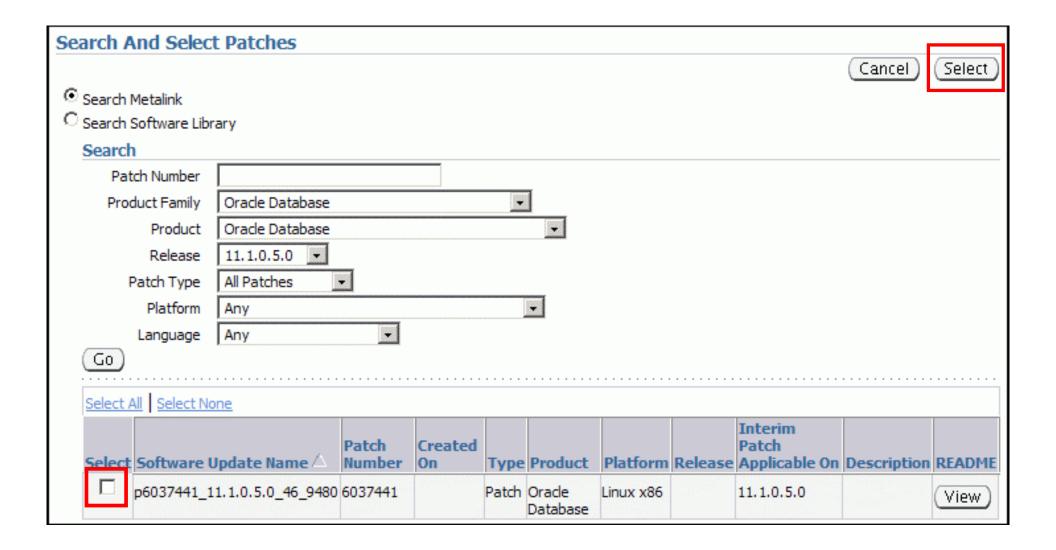
Using the Patch Advisor



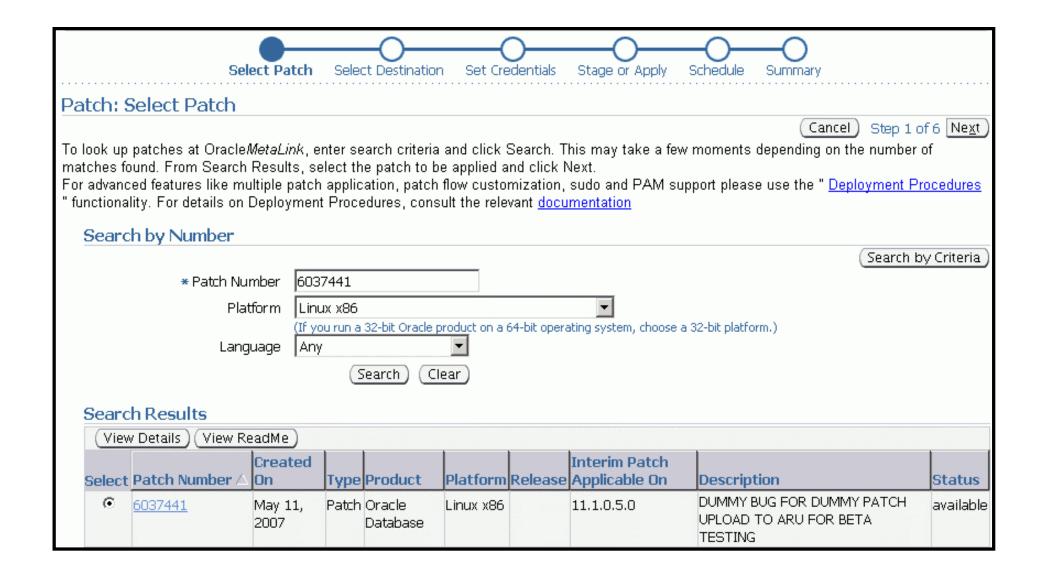
Using the Patch Wizard



Applying a Patch



Staging a Patch



Online Patching: Overview

For a bug fix or diagnostic patch on a running Oracle instance, online patching provides the ability to do the following:

- Install
- Enable
- Disable



Installing an Online Patch

- Applying an online patch does not require instance shutdown, relinking of the Oracle binary, or instance restart.
- OPatch can be used to install or uninstall an online patch.
- OPatch detects conflicts between two online patches, as well as between an online patch and a conventional patch.
- To determine if a patch is an online patch:

```
opatch query -is_online_patch <patch location>
OR
opatch query <patch location> -all
```

Benefits of Online Patching

- No down time and no interruption of business
- Extremely fast installation and uninstallation times
- Integrated with OPatch:
 - Conflict detection
 - Listed in patch inventory
 - Works in RAC environment
- Persist across instance shutdown and startup

Conventional Patching and Online Patching

Conventional Patches	Online Patches
Require down time to apply or remove	Do not require down time to apply or remove
Installed and uninstalled via OPatch	Installed and uninstalled via OPatch
Persist across instance startup and shutdown	Persist across instance startup and shutdown
Take several minutes to install or uninstall	Take only a few seconds to install or uninstall

Online Patching Considerations

- Online patches are supported on the following platforms:
 - Linux x86 32/64
 - HP Itanium
 - Sun Sparc Solaris 64
 - AIX
 - Windows x86 32/64
- Some extra memory is consumed.
 - Exact amount depends on:
 - Size of patch
 - Number of concurrently running Oracle processes
 - Minimum amount of memory: Approximately one OS page per running Oracle process

Online Patching Considerations

- There may be a small delay (a few seconds) before every Oracle process installs or uninstalls an online patch.
- Not all bug fixes and diagnostic patches are available as an online patch.
- Use online patches in situations when down time is not feasible.
- When down time is possible, you should install all relevant bug fixes as conventional patches.

Quiz

Which of the following statements are true about online patches?

- Can be installed using OPatch
- 2. Require down time to apply
- 3. Persist across instance startup and shutdown
- 4. Do not require down time to remove

Summary

In this lesson, you should have learned how to:

- Use the Support Workbench
- Work with Oracle Support
- Search My Oracle Support
- Log service requests
- Manage patches
 - Apply a patch release
 - Stage a patch release

Practice 18 Overview: Using EM Tools for Alerts and Patches

This practice covers using the Support Workbench to investigate a critical error.