



Oracle CPUs and PSUs with GridApp Clarity™

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Today's Agenda

- Why Patch?
- Oracle opatch
- Oracle CPUs
- Oracle PSUs
- GridApp Systems
- Demonstration of GridApp Clarity™
- Summary

Why Patch?

- In the past, organizations only patched databases when:
 - They hit a bug
 - They were required by an app vendor
 - The “if it ain’t broke, don’t fix it” mentality”
- Today organizations patch because of:
 - Security concerns
 - Regulatory compliance
 - Database vendor pressure
- Patching is increasingly becoming a required part of database administration

Oracle opatch

- OPatch
 - Oracle patching utility
 - Originally OS-neutral, but now vendor specific opatch is required for newer types of patching
 - Includes OCM
- Opatch apply
 - Patch ID = applied patch
 - “old style” Oracle patching

Oracle opatch (cont'd)

- OPatch napply
 - Overall patch ID
 - Each bug/issue fixed has a “molecule” ID
 - Molecules allow organizations to pick and choose which fixes to apply
- napply Challenges
 - Organizations must now evaluate each individual fix for severity
 - If 50% of the molecules applied, is a database patched?

- Quarterly security fixes
 - Does not fix functional bugs
 - Each fix is listed out individually by severity
 - Each individual fix is an napply “molecule”

- Application process
 - Review CPU and decide which molecules to apply
 - Stage patch on the server
 - Stop database
 - `opatch napply –skip_subset –skip_duplicates`
 - Start database
 - Run catbundle
 - Recompile views and packages if it has not been done before on the database (may require disabling RAC)

- Quarterly security *and* bug fixes
 - Includes CPU
 - Includes recommended bug fixes that do not change the optimizer
 - Delivered as an “apply” patch
 - Once PSUs are applied, should not/difficult to switch back to CPUs
 - PSU patches can easily conflict with one-off patches that have been applied to the ORACLE_HOME

Oracle PSUs (cont'd)

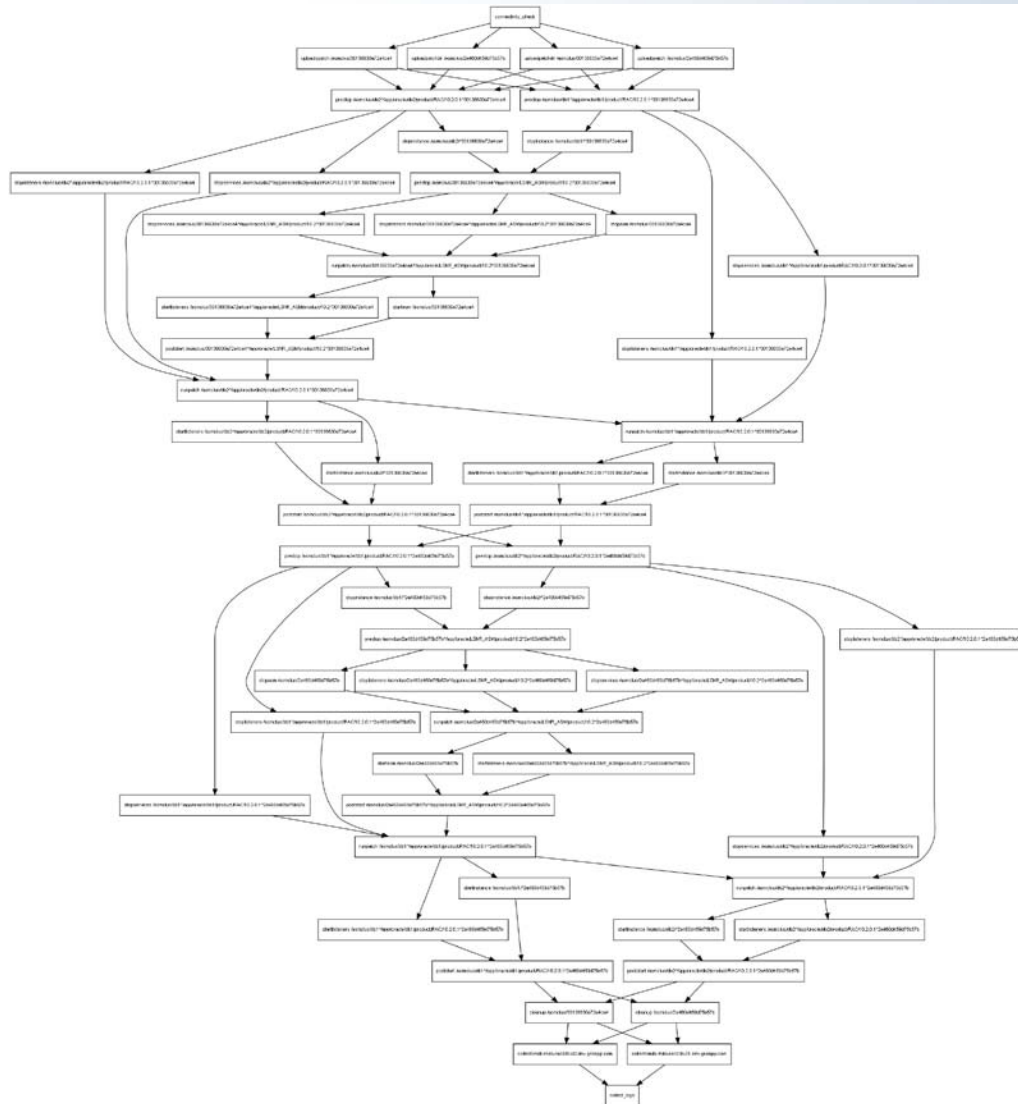
- Application process
 - Review PSU
 - Stage patch on the server
 - Check for conflicts
 - Stop databases and listeners in home
 - opatch apply (-force)
 - Apply replacement overlay patches
 - Start database
 - Run catbundle
 - Recompile views and packages if it has not been done before on the database

GridApp Systems

www.gridapp.com

- GridApp Systems is the only automation company that focuses solely on the database
- GridApp Clarity™ provides automation for database patching, such as Oracle PSUs and CPUs, rolling patches for SQL Server and Oracle RAC, and provisioning new databases with inline patches
- GridApp Clarity is used to patch thousands of databases at customer sites around the world

GridApp Patch Dynamic Workflow



GridApp Clarity™ Demo

Summary

- Database patching is growing increasingly critical due to security and regulatory concerns
- Oracle is attempting to make patching simpler, but has succeeded in increasing the complexity and effort required
- GridApp Clarity is the industry-leading solution for database patching

Q&A

