

# Care and Feeding of Release 11i – Administration and Maintenance

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## Abstract

The focus of this presentation will be to share "real world" experience as well as tips and techniques to administer and maintain the complex Oracle Applications environment delivered with Release 11i. Release 11i is the biggest and most complex applications release ever! There have already been 10 11i releases with major changes to tools and technology stack. Each release addresses bug fixes and has added new module functionality.

There are three specific Oracle environments that must be supported for Release 11i – database, applications and web. Administering and maintaining these environments has become a full time job for the Applications DBA. All environments require differing levels of support but each has to be maintained to fully utilize the Release 11i applications. We will discuss all of these administration and maintenance processes for the Apps DBA and will share "real world" recommendations for each.

## Release 11i Overview

Release 11i is the biggest most complex Oracle Applications Release ever. There have been 10 CD bundle releases so far, each containing major changes to the tools and technology stack, bug fixes, and new functionality.

### Release 11i Basics to Remember

- Release 11i is not a static release
- Release 11i installs everything regardless of licensing
- Release 11i contains constantly evolving technology components
- Release 11i point upgrades introduce significant changes to functionality and technology
- Release 11i has significant interdependencies of Critical Pseudo Products: AD, FND, AK, HZ (TCA), OWF, TXK, ADX, SHT, ATG, AU, FWK, OAM

### Completely new architecture - true three tier:

- Internet Computing Architecture (ICA)
- Technology Stack – Forms, Java, Apache (html)
- Oracle 8i/9i – CBO, Partitioning

### There are multiple Application Server components:

- Forms-Based: ERP, Back Office
- HTML/JAVA-Based: Self Service, Workflow, “i” Products
- Business Intelligence: Discoverer 3i/4i, Reports

### Increased Modules, Functionality, and Features:

- Release 10.7 40 products
- Release 11.0.x 50 products
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- Release 11.5.5 161 products
- Release 11.5.6 175 products
- Release 11.5.7 179 products
- Release 11.5.8 191 products

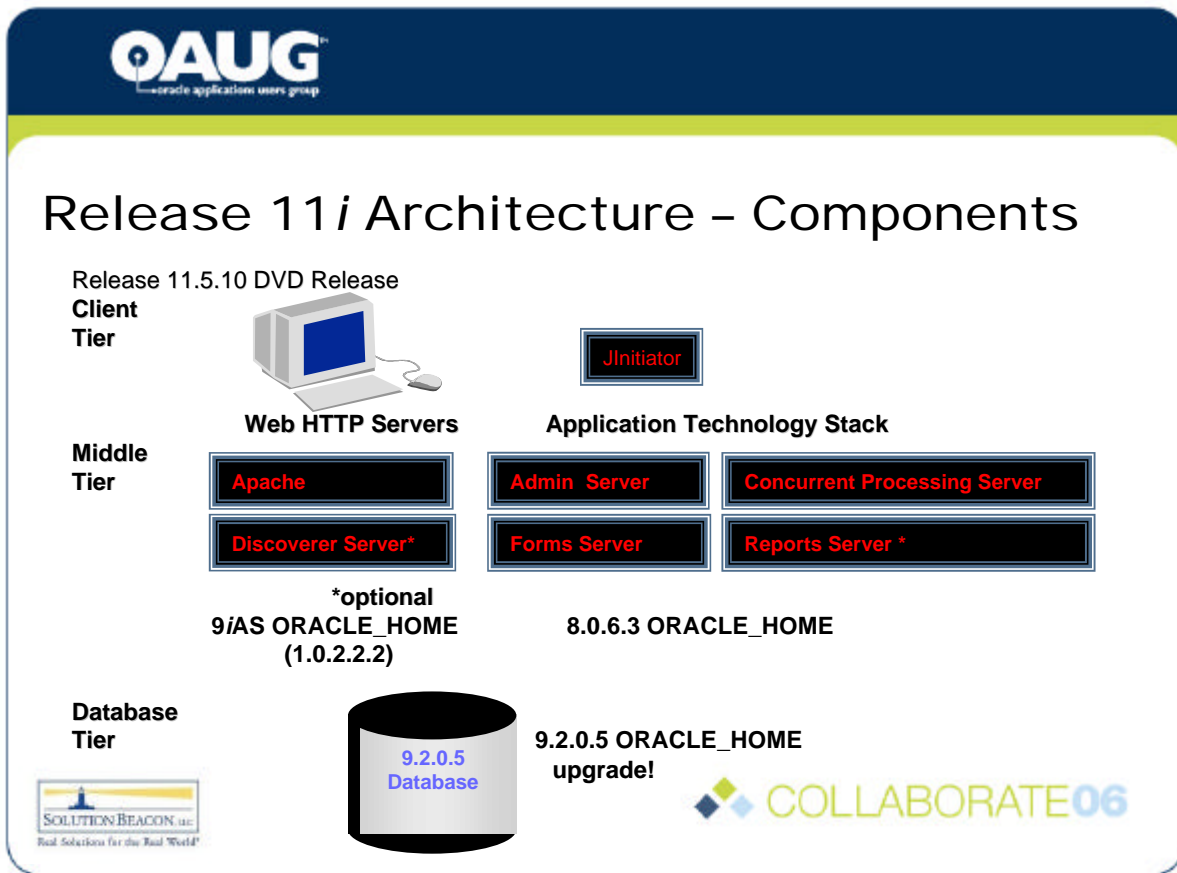
- Release 11.5.9                      197 products
- Release 11.5.10                    209 products

More stable functionality (technical and applications as well as performance) continuously appears with each major patch release:

- 11.5.5/6                    -    ~ 20,000 bug fixes
- 11.5.7                     -    ~ 40,000 bug fixes
- 11.5.8                     -    > 60,000 bug fixes
- 11.5.9                     -    > 100,000 bug fixes
- 11.5.10                   -    ~ 180,000 bug fixes

### Release 11i – All or Nothing

With Release 11i, all application modules are installed (software and database), regardless of licensing. There is also no sharing of software or objects with the Oracle-supported installation. Increased interdependencies of critical products include AD, FND, AK, HZ (TCA), OWF, TXK, and OAM. OLTP, batch, and web co-exist in Release 11i.

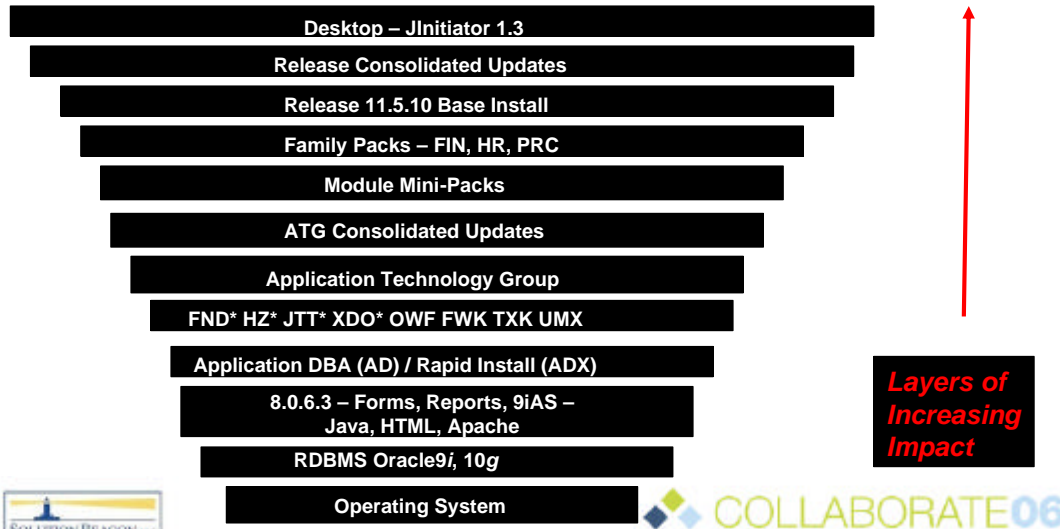


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### Release 11i Technology

Oracle E-Business Suite Applications are significantly more complex than the Oracle Applications of 5 years ago. Today's Applications DBA must be an Applications Technology Specialist as the database becomes just one of many components in an ever increasing Applications technology stack. Support roles have expanded from the typical Applications DBA and Applications System Administrator to also include Workflow Administrator and more recently, XML Administrator.

## 11.5.10.2 – Applications Interdependencies – February 2006



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### Release 11i Patching

Monitor your patch levels against available patches. In addition to the commercial utilities available, Oracle continues to significantly improve the utilities to manage this effort including Patchsets.sh, OAM Patch Advisor, InfoBundle11i.zip to reference just a few.

If you do not have a proactive patching strategy, at a minimum be prepared to address the quarterly security patches now available.

### Release 11i Performance

Before pursuing elaborate performance tuning measures, there are some basic activities that should be a part of every of managing every Release 11i environment.

#### Patch Current

Oracle continues to make performance improvements with each major and minor release. No performance tuning initiative for long term benefit should be undertaken against a software technology stack that is out of date. Patch current to get the latest, greatest optimized code, and current interdependencies between modules.

#### Monitor and Enhance Pinning Strategy – Convert to Trigger Pinning for Release 11i

Most performance improvement can be gained from pinning large, frequently used packages. Pinned objects are expensive in terms of memory space, since other not-pinned objects need this memory space, too. In general do not pin all objects or rarely used objects – this could even decrease database performance. Pinning objects in the shared pool can provide a tremendous increase in database performance, if it is done correctly but is highly dependent on

the module mix. Since pinned objects reside in the SQL and PLSQL memory areas, they do not need to be loaded and parsed from the database, which saves considerable time. See MetaLink note 301171.1

#### Gather Statistics for Environment – Only in Release 11i

Release 11i uses the Cost Based Optimizer (CBO) to choose the most efficient execution plan for queries based on data distribution. Thus CBO requires that statistics be generated frequently for all schemas. This can greatly improve performance. Always using computed statistics for optimal CBO performance especially for selected problem schemas. See MetaLink note 141532.1

#### Purge and Cleanup

Keep audit, login and request data appropriately cleaned up. These items contribute significantly to overall system performance. At a minimum, all purges should be run prior to major initiatives.

### *Additional Sources of Information and Tools*

[www.solutionbeacon.com](http://www.solutionbeacon.com)

[www.oaug.org](http://www.oaug.org) - Specifically the Upgrade Special Interest Group (SIG) section

#### *About the Author*

*John Stouffer of Solution Beacon, LLC has presented and moderated at local, regional, national, and international conferences for Oracle Applications users and support staff including DOUG, FWOUG, Atl-OAUG, HOUG, and SROAUG meetings, NCOAUG, SCOAUG/SCOUG conferences, and numerous OAUG conferences held in North America. John conducted the Release 11i Installation and Upgrade Workshops at the OAUG Fall 2001, Spring and Fall 2002, Connection Point 2003, 2004, and 2005 conferences, and Collaborate 06, as well as co-sponsored regional Release 11i workshops with OAUG across the US each year. Honored as OAUG Member of the Year for 2004, John has over 18 years experience with Oracle database administration with more than 12 years supporting Oracle Applications environments including installation, implementations, upgrades, and system reviews. He currently chairs the OAUG Upgrade SIG and Oracle Fusion Council for OAUG.*