

# Lessons From the Front: Upgrading to Release 12.1

Barbara Matthews

OnCallDBA

[barb@oncalldb.com](mailto:barb@oncalldb.com)

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

United States of America

South America

United Kingdom

Sweden

Australia

Finland

Iceland

Mexico

France

Spain

Singapore

China

Denmark

India

Middle East

Africa

Canada

Portugal

Hungary

Italy

Japan

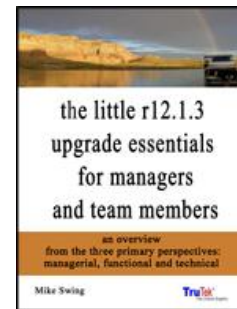
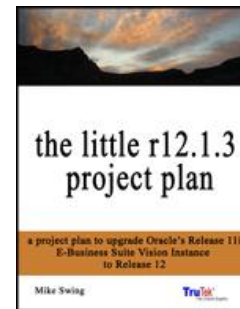
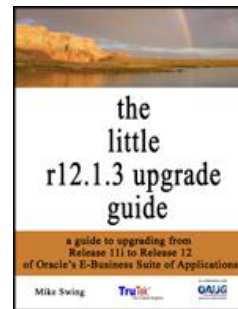
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## Barbara Matthews

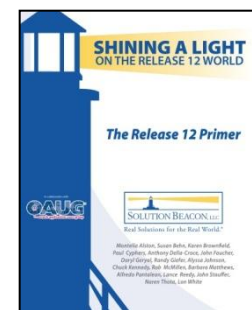
- OAUG Upgrade SIG Board
- OAUG Connection Point Release 12.1 Board
- Oracle Databases Version 7+
- Oracle Applications Release 10+
- Specializing in E-Business Suite Release 12 Upgrade Readiness Assessments and Health Checks, Upgrades, and General Nitpicking

# My Job

- I write, edit and publish big, long-winded technical books (and some shorter ones), presentations, papers, blogs, newsletters, articles based on my consulting experiences...



- <http://oracleebizviews.blogspot.com/>
- Our family motto:  
Anything worth doing is worth over-doing.



## But That's Not All I Do

- You might say I'm in charge of the paper trail
- For Assessments and Health Checks, I send clients a list of questions and a set of scripts
- I review what they send back
- I ask more questions, and may ask the client to run more scripts
- And then I write another book about what I see: what is unusual compared to other E-Business Suite customers, and what needs to be done to get ready to upgrade to Release 12

# Presentation Objectives

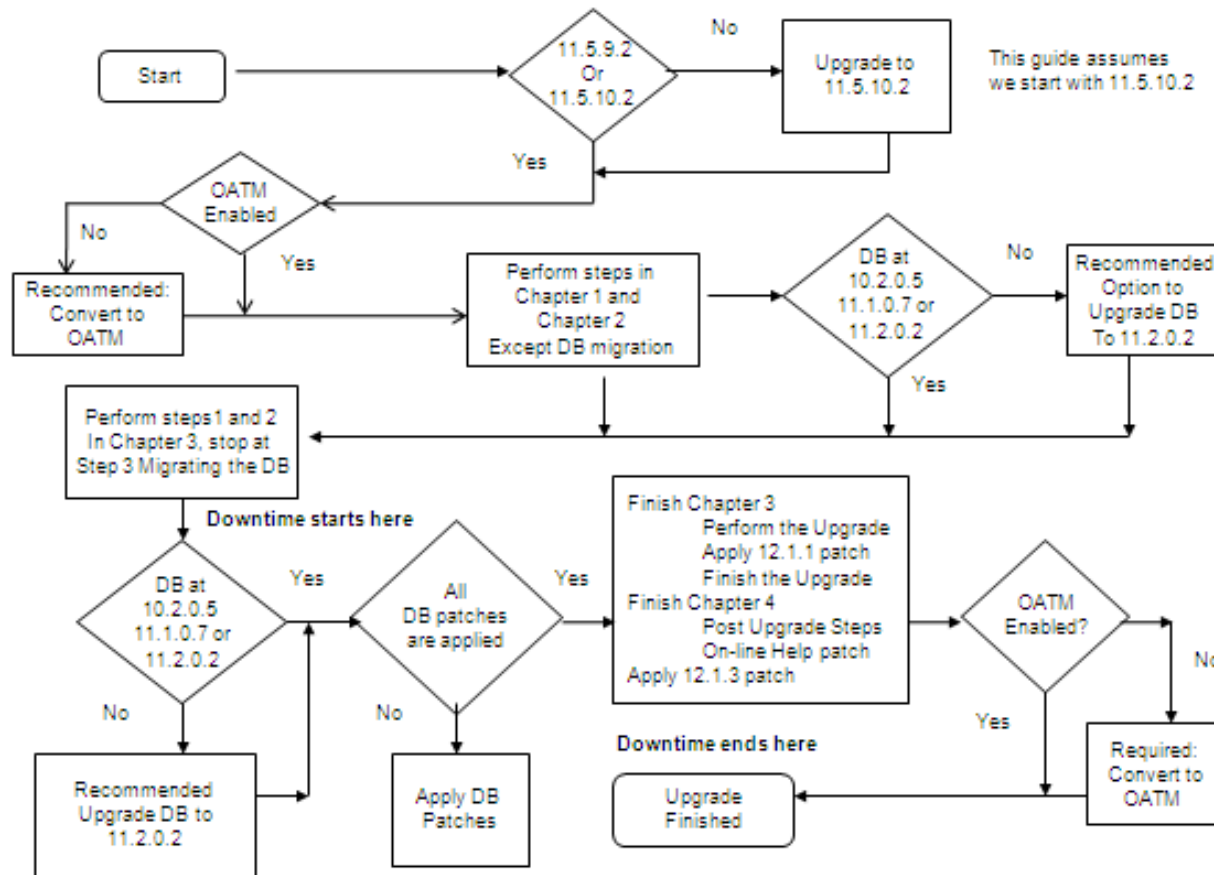
- Describe lessons learned from upgrading to Release 12.1.3 over and over and over
- This presentation is based on an article by Mike Swing, TruTek and Barbara Matthews, On Call DBA, that will be published in the Winter 2011 Insight Magazine. Watch for *The Big Picture – Upgrading to Release 12.1*

# Assess Your Situation

An Assessment should document your current state:

- Your architecture
- Software Versions: the OS, the DB, the Applications
- Status of Mandatory Release 11i Baseline Patching
- Upgrades you must do before upgrading to R12
- Issues that must be resolved before upgrading or after
- TUMS steps you do not need to do
- Technology Stack Validation Utility results
- patchsets.sh results
- And anything else you can think of

# How Hard Can it Be?



# High Level Upgrade Steps

- Assessment/Health Check – Determine Your Overall Readiness and Plan
- Patch/Upgrade R11i Where Necessary – OATM, Release 11i Mandatory Extended Support Patches, ATG RUP7, AD.I.7, HR, RDBMS 11gR2
- First Pass – Upgrade to R12 to See What Issues You Have – This is a Technical Upgrade
- Determine Customizations Impact and Functional Impact
- Do More Upgrade Passes, Apply More Patches, Customize and Document, Refine Your Process
- Test and Rollout

# It Takes Longer If You Haven't Stayed Current

Our Last Release 11.5.7 Upgrade:

- Upgraded the RDBMS from Version 9i to 10gR2 to 11gR2
- Migrated to Oracle Applications Tablespace Model (OATM)
- Upgraded the E-Business Suite from 11.5.7 to 11.5.10.2 to R12.1.3+

Six days, around the clock



# Use the Biggest, Fastest Computers Possible...

- With as much CPU and memory as possible
- Running the fastest disk I/O
- Using Raid 1+0 rather than Raid 5
- With san tools available so you can do fast backups and restores

United States of America

South America

United Kingdom

Sweden

Australia

Finland

Iceland

Mexico

France

Spain

Singapore

China

Denmark

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Middle East

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Greece

# Use Those Powerful Computers During the Upgrade

Some clients upgrade on older non-production hardware and then switch to new hardware for the production go-live

“Using Grandma’s old PC, found in the back of the closet”

- Speed up your upgrade by using the production hardware – iterations will go so much faster
- Reduce the possibility of experiencing technical difficulties with the hardware or operating system by using the hardware and operating system that will be used for production
- Only set up the hardware and operating system once
- Give your technical staff a break – the faster the hardware, the faster they can provide new instances for testing

# Script Anything That Can Be Scripted

- Automate the upgrade process to eliminate manual steps
- Use Oracle tools like FNDLOAD or iSetup to migrate your setups
- Consider third-party tools to assist with testing and tracking customizations

# Clean Up Your Release 11i Database

- Don't move — and process — data that you don't need
- Archive any data that can be archived
- Review Oracle's seeded Purge programs to see if there are any that you could be using to decrease the size of your database

SEE BARBARA MATTHEWS' *CLEAN UP THAT MESS! A MOTHER'S GUIDE TO MANAGING YOUR E-BUSINESS SUITE CLUTTER*

United States of America

South America

United Kingdom

Sweden

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# Upgrade to RDBMS 11.2.0.2 in Advance If You Can

- You don't have to, but...
  - Upgrading in advance shortens your downtime window.
  - Using the latest software from Oracle during your upgrade to R12.1 may also shorten your downtime window.
  - Not having to do any more database upgrades for a while after the upgrade to R12.1.3+? **Priceless**
- The tradeoff, though, is that you'll have to test the RDBMS 11.2.0.2 upgrade
- Of course, that lets you test how good you are at testing

SEE *IT'S TIME TO UPGRADE TO ORACLE DATABASE VERSION 11GR2!*, OAUG INSIGHT MAGAZINE, SEPTEMBER 2010

# Understand Upgrade by Request

- Upgrade certain CRM, Financials, Procurement, Projects and Supply Chain Management data during the upgrade
- Process the rest after the upgrade is complete
- By default, the upgrade migrates data *for the current fiscal year and the periods of the previous fiscal year that are necessary to ensure there are at least six periods in the upgrade*
- As part of your upgrade planning, be sure that your functional users understand Oracle's default processing — they may want to process *more* than just the default during the upgrade downtime

# Apply the Release 11i Mandatory Extended Support Baseline Patches in Advance

- Use Patch Wizard and MOS Doc. ID: 883202.1
- If there's a higher patch than the minimum, *usually* apply the higher patch
- Aside from the advantages of being supported by Oracle, using the latest patches streamlines the R12 upgrade
- There is nothing quite like figuring out that you have to apply a boatload of one-off patches while you're trying to get through the R12.1.1 maintenance pack

# Start with a Smooth First Pass Upgrade

Avoid the bucking bronco:

- Apply ATG RUP7 and AD.I.7
- At least apply the minimum HR.K.RUP3 if you're behind on HR
- HR changes a lot in R12 and requires a lot of one-off patches if you aren't current to get through the R12.1.1 maintenance pack
- Look for more patches for ATG RUP7, AD.I.7, the RDBMS (more on that later...)

## When You ASSume...

**Just because the First Pass Upgrade went smoothly doesn't mean the rest of the upgrade will**

- Your pesky test team is going to find all kinds of problems for you to fix, which may break other things
- You still have to figure out customizations, but you don't have to do that for the First Pass

# Don't Forget About OATM

Sooner or later, you need to get your tablespaces migrated to the Oracle Applications Tablespace Model (OATM)

Most companies migrate in advance on Release 11i

United States of America

South America

United Kingdom

Sweden

Australia

Finland

Iceland

Mexico

France

Spain

Singapore

China

Denmark

India

Middle East

Africa

Canada

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# How To Organize For The Upgrade

# Get Yourself a Big Binder

1. OK, you can use a folder on your computer.
2. The point is, you need to save the material that led you to do what you decided to do, because someday, someone will want to know *why* you did that, and if you go back to the *current* version of the document, it may not reflect the instructions you so faithfully followed.
3. Why is this important? Because sometimes being able to prove that you did what you were supposed to do is your only consolation in an argument about why you did what you did when you did what you did.

# Build a Spreadsheet

1. Save the My Oracle Support Notes that you use
2. Track all the steps
3. Build a spreadsheet

# Look for “Known Issues” MOS Notes

- Oracle releases a substantial patch like RUP7
- Users apply the patch and find issues over time
- Oracle creates a “Known Issues with Patch XYZ” for many of the big patches (but not all)
- The Known Issues MOS Document may include additional patches or statuses of bugs related to the original patch
- Even if you’ve already upgraded to RUP7, track the Known Issues document, because those patches may affect the R12 upgrade

# Look at These MOS Documents... and Then Look Again... and Again...

- Oracle's *Oracle Applications Upgrade Guide: Release 11i to Release 12.1.3*, Part No. E16342-03
- 881505.1, Interoperability Notes Oracle EBS 11i with Oracle Database 11gR2 (11.2.0.2)
- 1058763.1, Interoperability Notes Oracle E-Business Suite Release 12 with Oracle Database 11g Release 2 (11.2.0.2)
- 1080973.1, Oracle E-Business Suite Readme, Release 12.1.3
- 1127593.1, R12.1: Oracle Financials Pre-Upgrade Patch – Supplemental List for EBS CUP

# Identify and Log Your Customizations

- Interfaces, Concurrent Programs, Menus, Reports, Responsibilities, Request Sets, Request Groups, Forms, Functions, Personalizations, Printer Definitions, Flexfields, Value Sets, Profile Options, Custom Oracle Alerts and modifications to seeded Workflows
- Dealing with customizations may be the biggest task you do

SEE DONNA CAMPBELL'S *WHAT YOU NEED TO KNOW ABOUT IDENTIFYING CUSTOMIZATIONS BEFORE UPGRADING*

# Use Patch Wizard After You've Upgraded to R12.1.3

- Patch it first
- Then run it and it will tell you:
  - Additional important patches that you should consider applying
  - If you applied any patches in pre-install mode (you did), it will list those as well
- You can tell it to stop telling you about patches that you know you've already applied
- Test and apply the new patches
- Don't be surprised if your users find patches that Patch Wizard doesn't tell you about. Patch Wizard is a great tool, but it's not perfect

SEE JOHN STOUFFER'S *THE PATCH WIZARD PATH TO FEWER ERRORS*

# Patch Patch Patch Patch Patch

- Application Server Release 3 (10.1.3) Patchset 5 (10.1.3.5.0)
- Several Forms 10.1.2.3.0 fixes have been consolidated in bundle Patch 9593176
- Have any new modules come out since 12.1.3?
- What about HR RUP 4?

# Practice the Upgrade Repeatedly

And by *repeatedly*, I mean more than two times

- If you're not dreaming every night about the upgrade steps...
- If you're a DBA and you don't have a secret instance tucked away somewhere that you upgrade just to test out a theory...
- If you're a DBA and you haven't figured out how to expense a case of Five Hour Energy Drinks...
- If you're a manager and you believe the DBAs, developers, end users and consultants when they say they've made "very few customizations" ...

... then you may not be ready to go-live

# Test Test Test Test Test Test

- By the time you're ready to go into production, you need to have a repeatable test plan that your test team has documented that can be used over and over (**was that redundant?**)
  - ... because Oracle isn't going to stop creating patches
  - ... because Release 12.2 is just around the corner
  - ... because Fusion isn't just a dream
- The Oracle E-Business Suite of Applications will continue to change – a lot
- You need to be able to test in the future without reinventing the wheel each time

# Keep Patching Until You Finish User Acceptance Testing (UAT)

- And then draw the line, because there will *always* be another patch that you *could* apply
- Only apply patches that fix something that is broken after UAT

# Read Up and Learn from Others

- [www.trutek.com](http://www.trutek.com) – Release 12 Upgrade Readiness Assessments, First Pass Upgrades, and Oracle E-Business Suite Consulting
- <http://blogs.oracle.com/chan> - Steven Chan, Director of Applications Technology Integration for Oracle – wonderful articles explaining the nuances of the Applications - *THE ORACLE APPLICATIONS BLOG*
- [www.oaug.org](http://www.oaug.org) – Oracle Applications User Group
- [www.integrigy.com](http://www.integrigy.com) – Independent analysis of quarterly CPU/PSU
- [www.justadba.com](http://www.justadba.com) – John Stouffer's blog
- [www.OnCallDBA.com](http://www.OnCallDBA.com) – E-Business Suite books, Health Checks and Assessments and concurrent manager expertise
- <http://oracleebizviews.blogspot.com/> - my blog

# Conclusion

*“Upgrading Makes Me Sweat”* (Barbara Matthews)

*“Upgrading Makes You Perspire”* (Barbara Matthews’ mother)

United States of America

South America

United Kingdom

Sweden

Australia

Finland

Iceland

Mexico

France

Spain

Singapore

China

Denmark

India

Middle East

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# Questions and Answers

Barbara Matthews  
[barb@oncalldb.com](mailto:barb@oncalldb.com)  
[www.oncalldb.com](http://www.oncalldb.com)

Thank You!