

Clean Up That Mess! A Mother's Guide to Managing Your E-Business Suite Clutter

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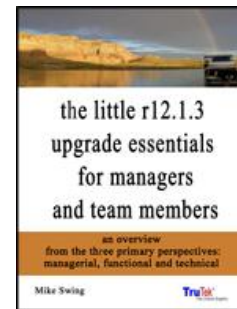
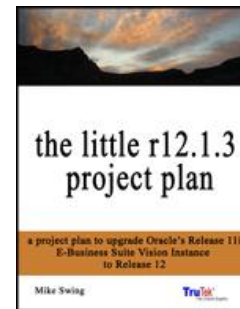
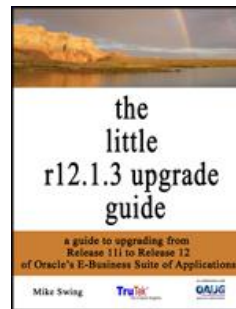
Greece

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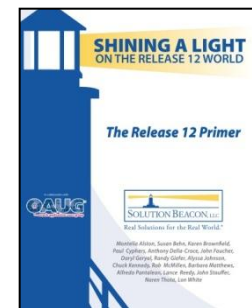
- OAUG Upgrade SIG Board
- OAUG Connection Point Release 12.1 Board
- Oracle Databases Version 7+
- Oracle Applications Release 10+
- Specializing in E-Business Suite Release 12 Upgrade Readiness Assessments and Health Checks, Upgrades, and General Nitpicking

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.



Presentation Objectives

- Review configuration settings, Concurrent Programs and tools that can affect performance
- Learn about Concurrent Programs you can run to clean up administrative tables
- Tidy up your environment before you upgrade; you'll thank me later.
- Use what you've learned to adjust your new Release 12 environment after the upgrade so it performs well



The Last Time I Moved

- Selected the cheapest mover amongst 3 well-known contenders
- Told them I had a lot of stuff
- Told them where I lived and where I was moving to
- Didn't part with my junk
- Forgot to tell them about the hairpin curve at the bottom of my driveway at my new house

The Result

- \$11,000 to move 22,000 pounds of treasured and not so treasured possessions across the country
- \$4,000 for four burly men to hand carry my 22,000 pounds of treasured and not so treasured possessions up my driveway
- 10 years later, still finding treasured and not so treasured possessions. Still can't figure out what to do with all that stuff. And we're still kicking ourselves about the driveway.
- A lesson in coulda, shoulda, woulda



This man loves my family and all our stuff

As You Prepare to Upgrade

- Take care of your current environment so you can focus on preparing for the new environment
- Inspect your current environment – this is your chance to eliminate bad practices and adopt best practices that you'll carry over to the new environment
- Clean it up: Avoid the Jiffy Movers Hairpin Turn Moving Disaster
- Include time in your plan to tune the new environment

Inspect Your Current Environment

- Does your Concurrent Manager configuration perform the way it should?
- Oracle provides lots of ways to adjust the Concurrent Managers; make sure you use them judiciously

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What's Wrong With This Picture?

Concurrent Manager Performance History

CONCURRENT MANAGER	COUNT	TOTAL HOURS	AVG. HOURS	WAITED HOURS	AVG. WAIT
Long Running Manager	77	.79	.01	4384255.11	#####
Quick Manager	216	10.10	.05	14827306.97	#####
Standard Manager	397	7.36	.02	29284205.96	#####

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What Could Cause That?

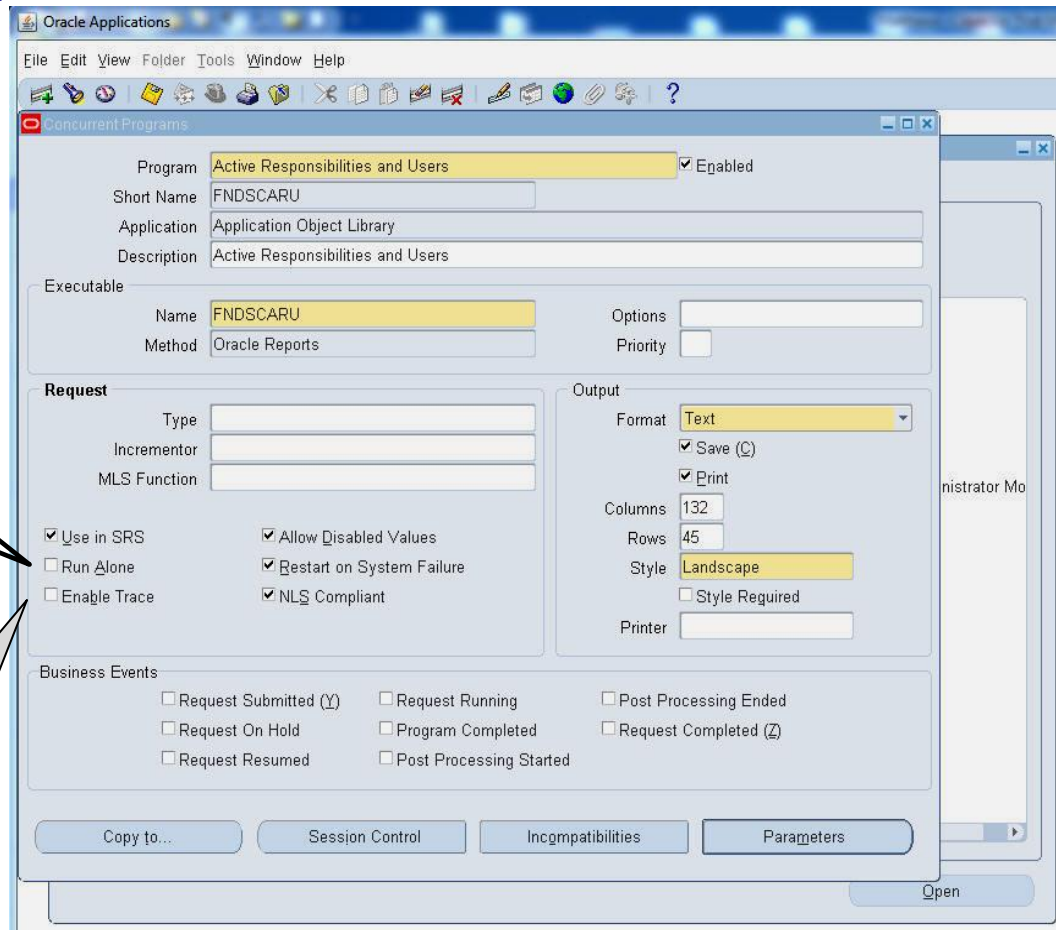
For the odd average performance, remember to periodically re-check performance – expect to change which jobs are assigned to each manager.

For the long wait time, more than a dozen Concurrent Programs were set up to Run Alone. It's very rare to use Run Alone for a program. If someone runs the program unexpectedly, your Concurrent Manager performance could come to a grinding halt.

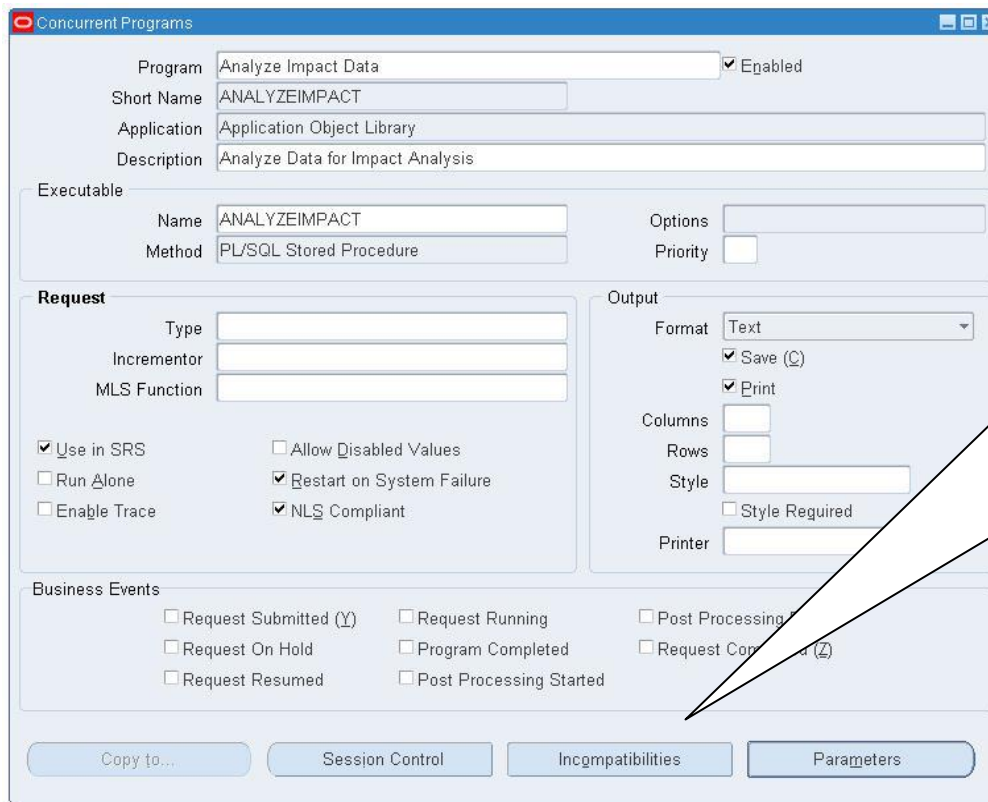
The Culprit: Run Alone

A simple click here can bring your concurrent manager to a grinding halt...

While you're at it, turn off Trace when you're not using it



Other Ways to Avoid Each Other: Incompatibilities



The screenshot shows the 'Concurrent Programs' configuration window for the program 'Analyze Impact Data'. The 'Incompatibilities' button at the bottom is highlighted with a callout line pointing to the text box on the right.

Program: Analyze Impact Data Enabled

Short Name: ANALYZEIMPACT

Application: Application Object Library

Description: Analyze Data for Impact Analysis

Executable

Name: ANALYZEIMPACT

Method: PL/SQL Stored Procedure

Options:

Priority:

Request

Type:

Incrementor:

MLS Function:

Use in SRS Allow Disabled Values

Run Alone Restart on System Failure

Enable Trace NLS Compliant

Output

Format: Text

Save (S)

Print

Columns:

Rows:

Style:

Style Required

Printer:

Business Events

Request Submitted (Y) Request Running Post Processing (Z)

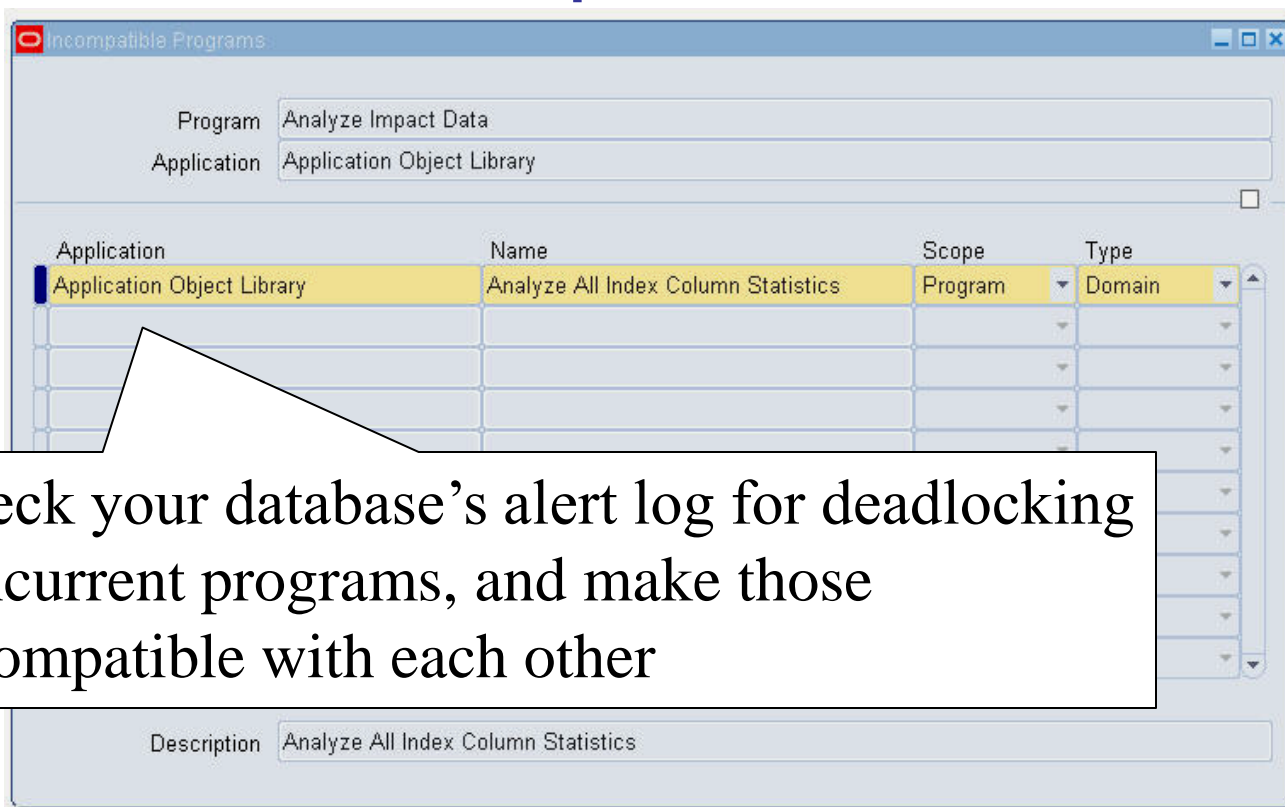
Request On Hold Program Completed Request Completed (Z)

Request Resumed Post Processing Started

Buttons: Copy to... Session Control **Incompatibilities** Parameters

You can click on the Incompatibilities button to set another program to be incompatible with this one

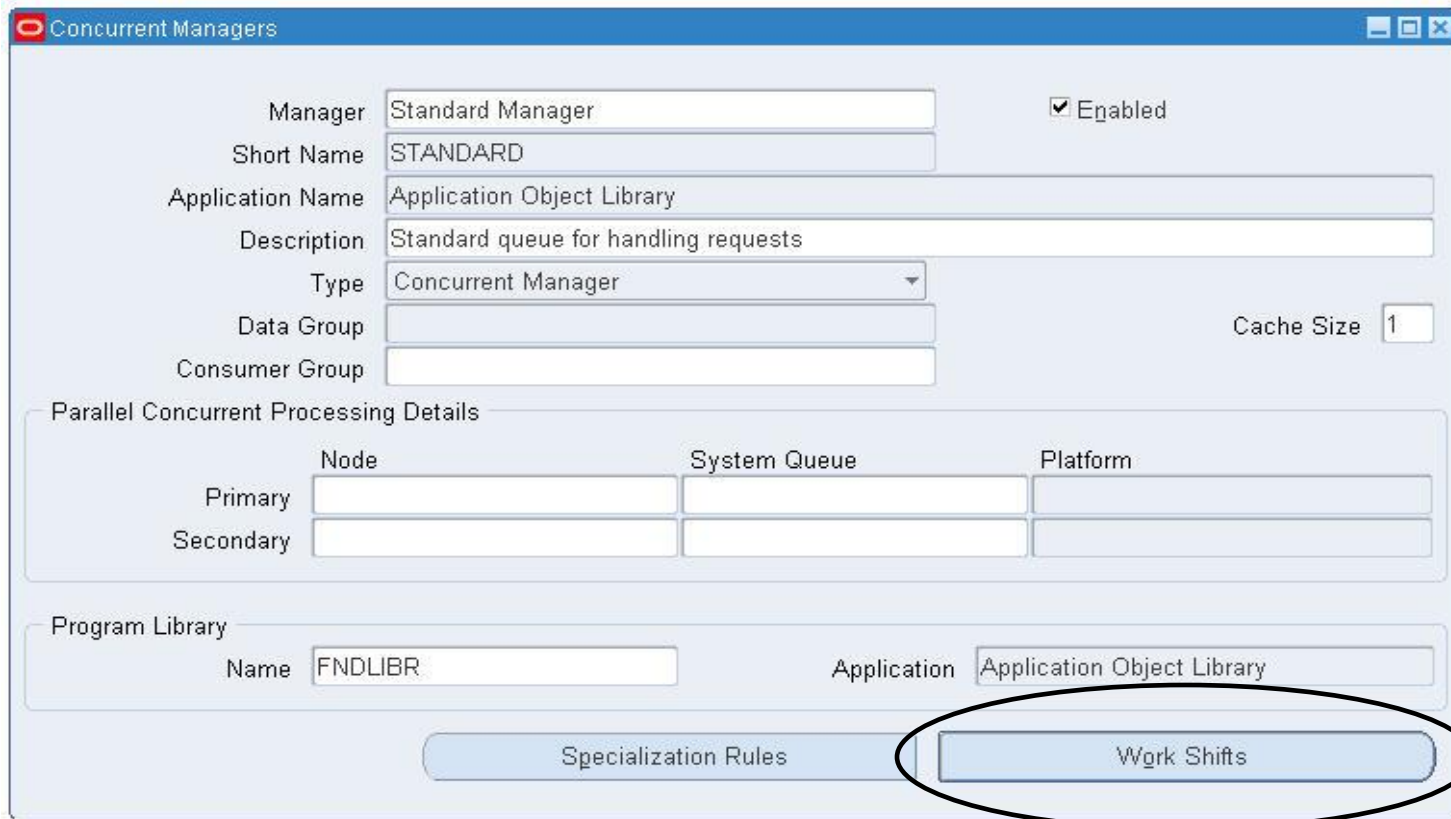
Other Ways to Avoid Each Other: Incompatibilities



Application	Name	Scope	Type
Application Object Library	Analyze All Index Column Statistics	Program	Domain

Check your database's alert log for deadlocking concurrent programs, and make those incompatible with each other

Check the Concurrent Manager Setup: Workshifts



Concurrent Managers

Manager: Standard Manager Enabled

Short Name: STANDARD

Application Name: Application Object Library

Description: Standard queue for handling requests

Type: Concurrent Manager

Data Group: Cache Size: 1

Consumer Group:

Parallel Concurrent Processing Details

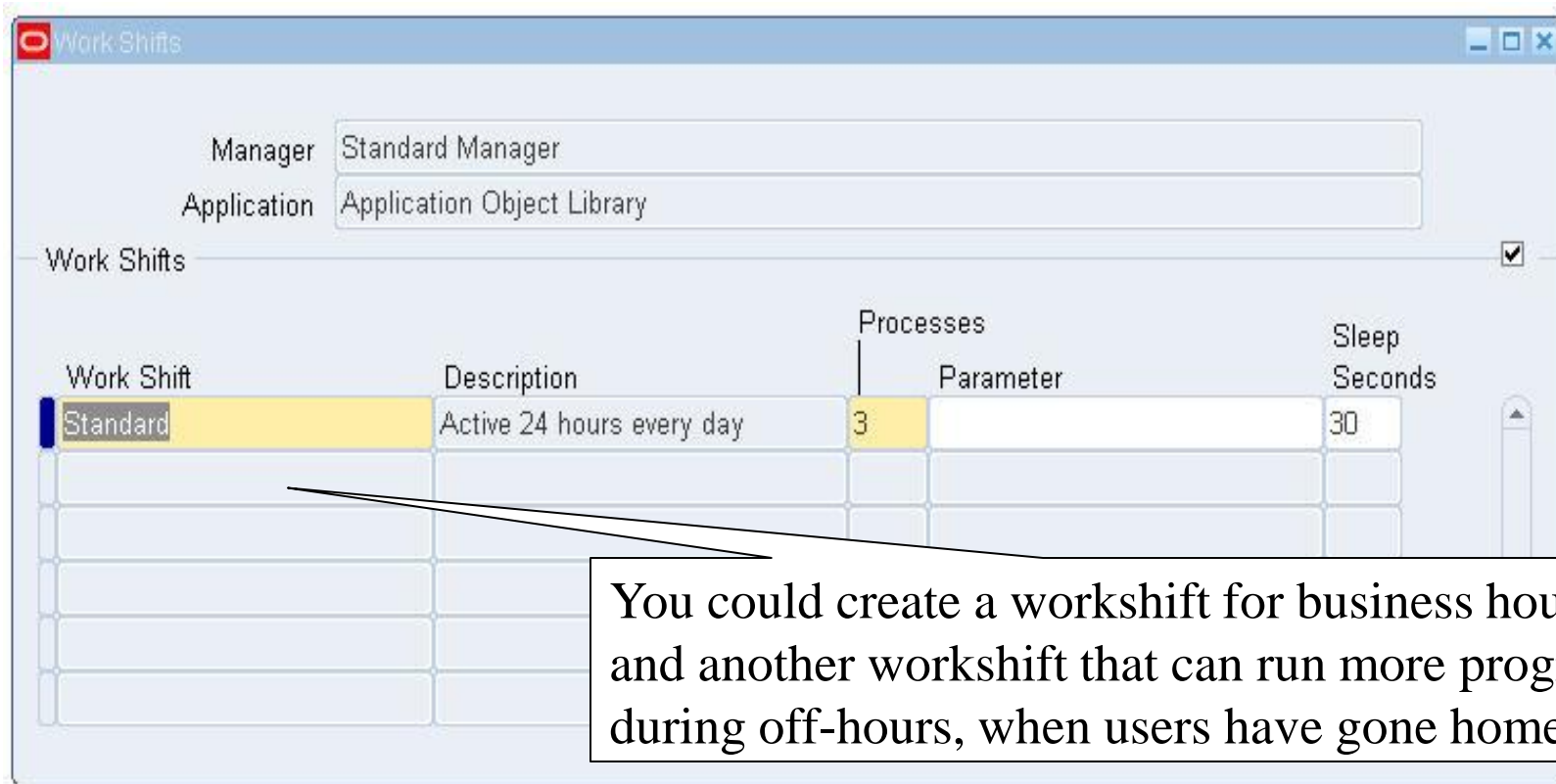
	Node	System Queue	Platform
Primary	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input type="text"/>	<input type="text"/>

Program Library

Name: FNDLIBR Application: Application Object Library

Specialization Rules **Work Shifts**

Check the Concurrent Manager Setup: Workshifts



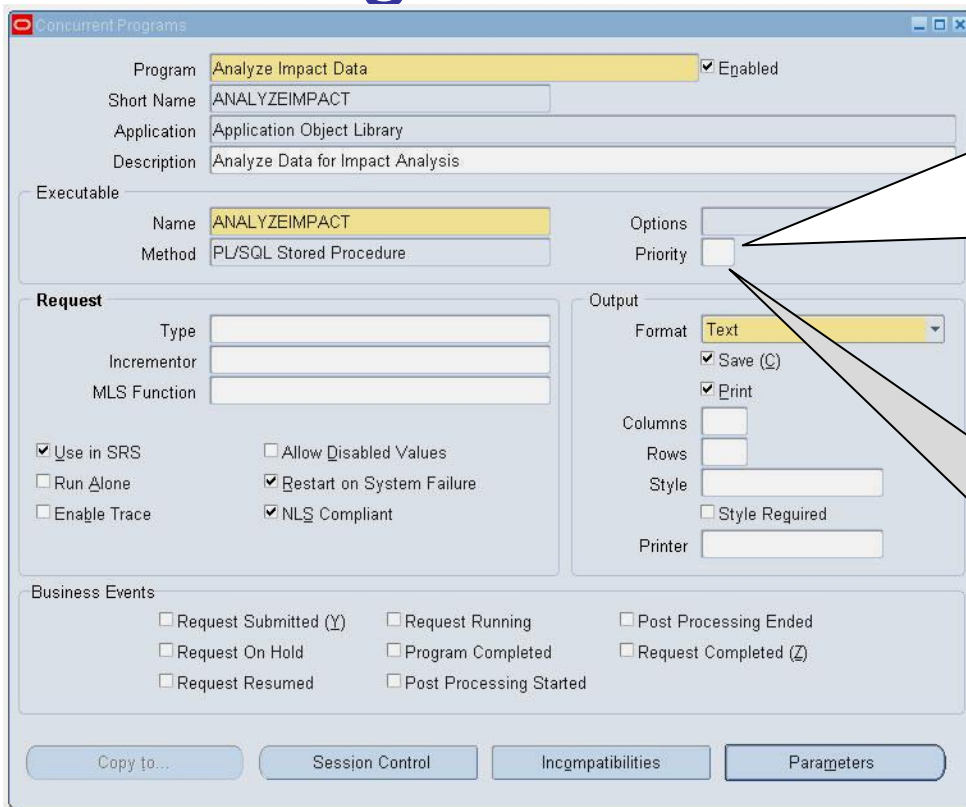
Manager: Standard Manager
 Application: Application Object Library

Work Shifts

Work Shift	Description	Processes	Parameter	Sleep Seconds
Standard	Active 24 hours every day	3		30

You could create a workshift for business hours, and another workshift that can run more programs during off-hours, when users have gone home

Other Ways to Confuse the Queuing Algorithm: Over Prioritize



Concurrent Programs
 Program: Analyze Impact Data Enabled
 Short Name: ANALYZEIMPACT
 Application: Application Object Library
 Description: Analyze Data for Impact Analysis
 Executable Name: ANALYZEIMPACT
 Method: PL/SQL Stored Procedure
 Options Priority:
 Request Type:
 Incrementor:
 MLS Function:
 Use in SRS Allow Disabled Values
 Run Alone Restart on System Failure
 Enable Trace NLS Compliant
 Business Events
 Request Submitted (Y) Request Running Post Processing Ended
 Request On Hold Program Completed Request Completed (Z)
 Request Resumed Post Processing Started
 Copy to... Session Control Incompatibilities Parameters

The default priority for all Concurrent Programs is 50. Set it below 50 if you want a Concurrent Program to always run before other Concurrent Programs.

Don't overdo using lower priorities

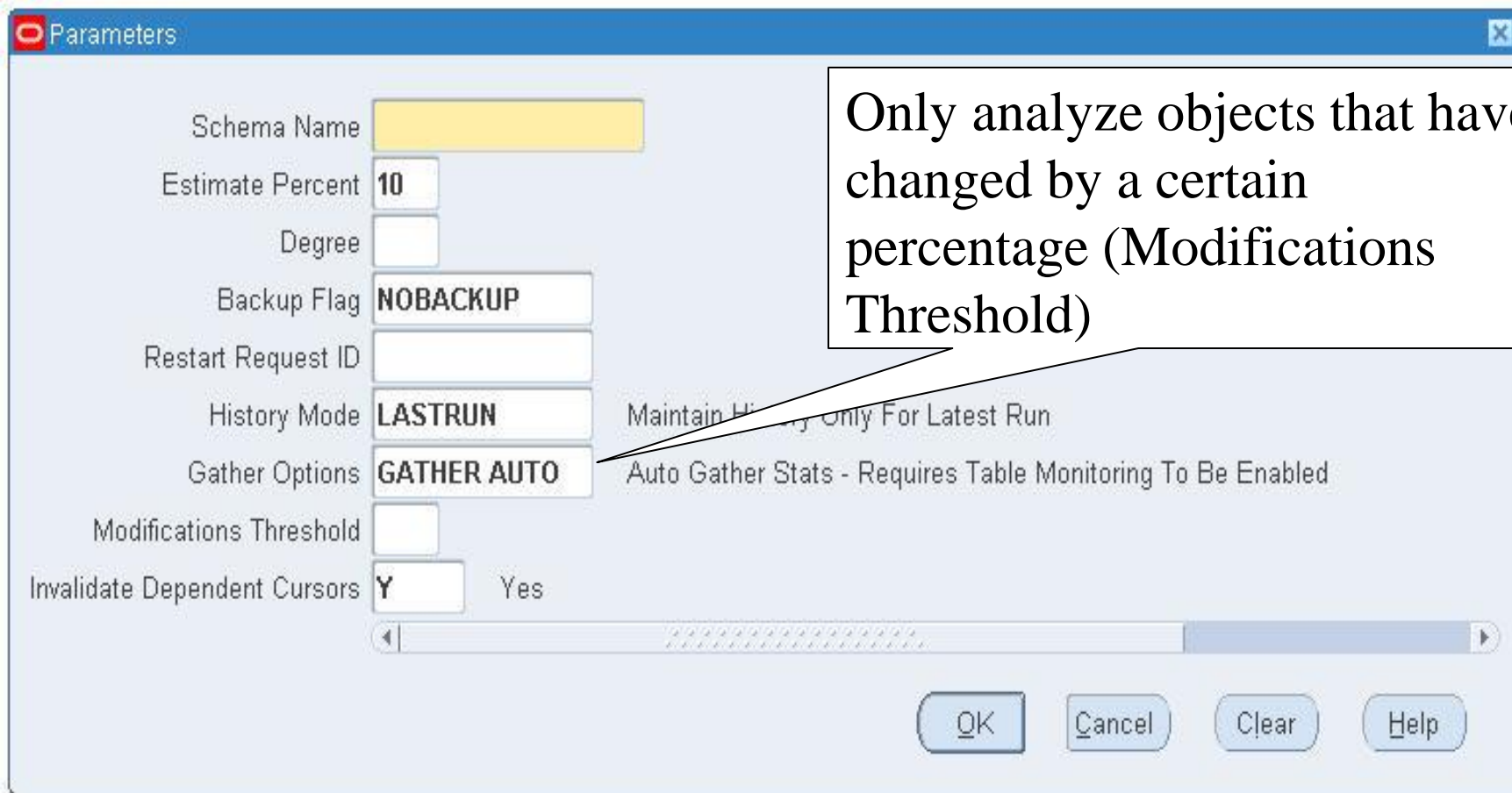
Consider Creating a Custom Concurrent Manager

1. Assign Concurrent Programs that ALWAYS run fast
2. Exclude them from the Standard Manager and other managers where they are assigned
3. No, they don't run faster just because you called the manager the Quick Manager... they just get to run sooner
4. Why make a reprint get in line behind a big job?

If 1 Runs Fast, Could 1000 Run Even Faster?

1. Resist the urge to pummel your database or server
2. Remember that your online users are getting carpel tunnel syndrome waiting for the commit to go through
3. Find the balance – our family motto: We'd like everyone to be not too unhappy at any given time.

Gather Schema Statistics Options



Parameters

Schema Name

Estimate Percent

Degree

Backup Flag

Restart Request ID

History Mode Maintain History Only For Latest Run

Gather Options Auto Gather Stats - Requires Table Monitoring To Be Enabled

Modifications Threshold

Invalidate Dependent Cursors Yes

Only analyze objects that have changed by a certain percentage (Modifications Threshold)

So What Does This Have to Do With Upgrading?

1. Chances are, both you and Oracle will implement new programs
2. Which Concurrent Manager should they be assigned to?
3. You'll likely change your hardware, your operating system, and you may switch from 32 bit to 64 bit
4. You'll probably upgrade your database version, and you may add more memory and CPUs
5. It's time to review the overall performance of your Concurrent Manager configuration, and the setup decisions you've made in the past

You've Organized Your Clutter; Now It's Time to Clean Out Your Closets



Purging

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Purge: FND_CONCURRENT_REQUESTS

1. Run Purge Concurrent Requests and/or Manager Data Concurrent Program daily
2. Most customers purge data older than 7-30 days
3. Oracle recommends keeping the fnd_concurrent_requests table under 25,000 rows
4. Consider additional Purges that delete data about concurrent requests that run most (more than 500 times per month)
5. When might that data come in handy? Use it to help build your test plan for your R12 upgrade

Purge: FND_LOGINS

1. Run Purge Signon Audit data Concurrent Program at least weekly
2. There is a bug with the Concurrent Program setup with Release 11i that requires that the request be run via a script using the conbsub command

Purge, Purge, Purge: FND_LOBS

1. FND_LOBS are attachments
2. The only way to get rid of them is for Oracle to write a Concurrent Program for the Module you used to load them up
3. They can take up an enormous amount of space
4. They can make exporting and importing your database take a very long time

Purge, Purge, Purge: FND_LOBS

5. There's very little you can do about it
6. Change pctversion to 0 instead of the default of 10%, since you rarely update an attachment
7. Test and apply Patch 9004099 for orphaned records, if you haven't already
8. Consider exporting/importing to make the pctversion take affect on existing data instead of just new data
9. Log enhancement requests for more Concurrent Programs to clean up FND_LOBS

Purge: Self Service Sessions

1. Run Purge Inactive Sessions Concurrent Program at least weekly
2. Removes data from ICX_SESSIONS, ICX_SESSION_ATTRIBUTES, ICX_TRANSACTIONS, ICX_TEXT, ICX_CONTEST_RESULTS_TEMP, ICX_FAILURES, ICX_REQUISITIONER_INFO and FND_SESSION_VALUES tables

Purge: WORKFLOW

1. Run Purge Obsolete Workflow Runtime Data Concurrent Program daily
2. Run for items with a Persistence Type of Temporary
3. Choose an appropriate Age for data retention, and leave Item Type and Item Key blank
4. See Susan Behn and Karen Brownfield's papers and book, they're the experts

Purge: FND_LOG_MESSAGES

1. For Release 11i, run Purge Debug Log and System Alerts Concurrent Program daily
2. For Release 12, run Purge Debug Log and Closed System Alerts daily
3. May have to apply one-off Patch 8989384
4. Purges FND_EXCEPTION_NOTES,
FND_OAM_BIZEX_SENT_NOTIF,
FND_LOG_METRICS,
FND_LOG_UNIQUE_EXCEPTIONS,
FND_LOG_EXCEPTIONS, FND_LOG_MESSAGES,
FND_LOG_TRANSACTION_CONTEXT, and
FND_LOG_ATTACHMENTS

Purge: WSH_EXCEPTIONS

- If this table grows very large, see MOS Doc. ID: 358994.1 and 842728.1

Purge: FND_ENV_CONTEXT

- If this table grows very large, see MOS Doc. ID: 419990.1

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Purge: PERFSTAT (statspack)

1. If you have a very large PERFSTAT –owned table, consider if you need to save all that data:

```
SELECT to_char(snap_time,'YYYY MON') snapdate,
       count(*)
FROM perfstat.stats$snapshot
GROUP BY to_char(snap_time, 'YYYY MON')
ORDER BY 1;
```

2. Can be purged with
 \$ORACLE_HOME/rdbms/admin/sppurge.sql or
 sptrunc.sql

You've Organized Your Clutter; You've Cleaned Out Your Closets; Now Tighten Up Your Environment

OATM and Customizations

Don't Forget About OATM

1. OATM:

- Uses fewer and more consolidated tablespaces
- Uses Locally Managed Tablespaces
- Accounts for the I/O characteristics of an object
- Reclaims space after migration
- Provides Real Application Cluster (RAC) support

2. Before, during, or after, you need to migrate to the Oracle Applications Tablespace Model (OATM) if you haven't already

Don't Forget About OATM

2. Advantages of Migrating Before:

- It's a big job, do it separately from the rest to keep the migration out of the R12 downtime window
- Migrate beforehand to reorganize your fragmented data
- Migrating during the upgrade is one more thing that could go wrong
- If you do it after, it's more work after a long, complex upgrade

Clean Up Your Customizations

- Maintaining customizations costs money
- Eliminate customizations if you can
- Now's your chance to clean up and organize and follow standards to make future upgrades easier

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Don't Let Your Customizations Haunt You

Really. This is it. Your chance to finally go wild and standardize your environment. Go on. Just do it. Because those customizations could be with you for every new release...12.1.3, 12.2, Fusion...



Determine Customizations Impact

- Understand what constitutes a customization
- Make a list of each potential customization
- Review new Oracle functionality to determine if any customizations can be eliminated
- Determine which customizations should be kept
- Understand if there are tools that can no longer be used

Determine Customizations Impact

- Decide if you should fix broken customizations on the R12 side
- Learn how to use new tools if needed
- Review Oracle naming conventions for customizations
- Determine how to maintain the customizations
- Customize and test... and DOCUMENT

Conclusion

"You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose. You're on your own. And you know what you know. And YOU are the one who'll decide where to go..." (Dr. Seuss)

Research these suggestions on My Oracle Support
 Test them on your test environment
 Expect to do more tuning when you get to Release 12

You may have a perfectly legitimate reason for
 doing something that is not "standard"
 but steer clear of
 "because that's the way it was when I took over this job"

Links

- <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.RedRiverSolutions.com – Release 11*i* and Release 12 Upgrade Health Checks and Oracle E-Business Suite consulting
- www.trutek.com – Release 12 Upgrade Readiness Assessments, First Pass Upgrades, and Oracle E-Business Suite Consulting
- www.oaug.org – Oracle Applications User Group
- www.integrigy.com – Independent analysis of quarterly CPU/PSU
- www.justadba.com – John Stouffer's blog
- www.OnCallDBA.com – E-Business Suite books, Health Checks and Assessments and concurrent manager expertise
- <http://oracleebizviews.blogspot.com/> - my blog

Questions and Answers

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Thank You!