

Navigating the Oracle Diagnostics Security Model

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Marijo Erickson

- With Oracle since 1996
 - Support for PA and HRMS applications (2 years)
 - GOLD/Premium Support Engineer (3 Years)
 - AR Product Development (1.5 years)
 - Oracle Diagnostics (5 years)
- Programmer 1984 - 1996
 - Disney IT 1992 - 1996
 - Consultant 1989 – 1992
 - Civic Government 1984 - 1989
- Host Oracle Diagnostics Customer Advisory Board since inception (Nov 2007)
- Oracle Apps 10.4, 10.5, 10.6, 10.7, 11.0.3, 11.5.X, 12.0, 12.1

Hiran Patel

- With Oracle since 1997
 - Team Lead for Oracle Messaging and iAS (3 years)
 - Lead developer Oracle Knowledge Management (3 Years)
 - Oracle Server Center of Expertise (2 years)
 - Manager Support Diagnostics Program Office (2+ years)
- Developer and IT Manager 1993 - 1997
 - Convergys Corporation – Engineer/Developer
 - Cisco and Networking Consultant
 - Simcom Flight Training Centers – IT Manager
- PMP, RHCE, CCNA, MSCE, Java Certified

Joe Imbimbo

- Oracle Diagnostics Customer Advisory Board Member 2007-PRESENT
- Unix Administrator for 12 years and Oracle Applications DBA for over 10 years
- Administered Oracle Apps 10.7SC, 10.7NCA, 11.0.3, 11.5.1, 11.5.7, 11.5.9, 11.5.10.2
- Private, public, university sector experience
- DBA SIG board member, 2000-2003
- Elected to OAUG Board for 2008-2009 term
- Pittsburgh GEO SIG board member 2001-PRESENT

OBJECTIVES

- Introduction to Oracle Diagnostics
- Discussion of Security Model deployed by Oracle Diagnostics in Release 12.1
- Demonstration of Oracle Diagnostics in Release 12.1

Introduction to Oracle Diagnostics

What is Oracle Diagnostics?

- It is not to be confused with Oracle's Software Configuration Manager (another useful tool)
- A tool to collect data about the overall system as well as about functional setups, patches, packages and procedures, and forms for Oracle Service Requests (formerly TARs)
- It can be used proactively (such as running "Period Close" tests prior to the real closing)
- Some of the tests provide recommendations

Purpose of Diagnostics

- Ascertain information about data base and tech stack components such as forms, packages, and java servlets which can be used when evaluating patch pre-requisites
- Assists Oracle support analysts understand the customer environment
- Utilized by functional leads, DBAs to proactively identify issues

Components

- Remote Diagnostic Agent (RDA)
- Diagnostics Pack
- All are installed and maintained through the ADPATCH utility.

ShowDoc - Microsoft Internet Explorer

File Edit View Favorites Tools Help

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Release 12.0 RUP 4 Diagnostics

<p>Applications Core Technology</p> <ul style="list-style-type: none"> • Applications DBA • Oracle Application Object Library 	<p>Business Intelligence</p> <ul style="list-style-type: none"> • Business Intelligence System • Oracle Balanced Scorecard 	<p>CRM Applications Foundation</p> <ul style="list-style-type: none"> • CRM Technical Foundation • Oracle CRM Foundation
<p>Distribution/Supply Chain</p> <ul style="list-style-type: none"> • Inventory Management • Oracle Order Management • Procurement (Purchasing and iProcurement) • Oracle Release Management • Oracle Shipping 	<p>Document Management and Collaboration</p> <ul style="list-style-type: none"> • Document Management and Collaboration 	<p>E-Commerce</p> <ul style="list-style-type: none"> • Oracle Quoting
<p>Financials</p> <ul style="list-style-type: none"> • E-Business Tax • Financials Common Modules • Oracle Assets • Oracle Cash Management • Oracle Collections • Oracle General Ledger • Oracle Payables • Oracle Public Sector Financials (International) • Oracle Receivables 	<p>Human Resource Management Systems</p> <ul style="list-style-type: none"> • Oracle Advanced Benefits • Oracle Human Resources • Oracle Payroll • Oracle Time and Labor 	<p>Manufacturing</p> <ul style="list-style-type: none"> • Item Master • Oracle Bills of Material • Oracle Engineering • Oracle Enterprise Asset Management • Oracle Work in Process
<p>Marketing</p> <ul style="list-style-type: none"> • Oracle Marketing • Trade Management 	<p>Oracle Customer Care</p> <ul style="list-style-type: none"> • Oracle Customer Care 	<p>Oracle Partner Management</p> <ul style="list-style-type: none"> • Oracle Partner Management
<p>Product Lifecycle Management</p> <ul style="list-style-type: none"> • Advanced Product Catalog 	<p>Projects Suite</p> <ul style="list-style-type: none"> • Oracle Grants Accounting • Oracle Projects 	<p>Sales</p> <ul style="list-style-type: none"> • Oracle Sales • Oracle TeleSales
<p>Service</p> <ul style="list-style-type: none"> • Oracle Field Service • Oracle Install Base • Oracle Service • Oracle Spares Management 		

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Oracle Payables

Title	Note Number
Setup	
General	Note:463525.1
Accounting	
Accounting Health Check	Note:463727.1
Internet Expense	
Internet Expense Report Status	Note:463730.1
User Setup	Note:463729.1
Invoice	
Invoice Data	Note:463513.1
Payment	
Payment Process Request (data collector)	Note:463728.1
Payment Document Setup	Note:463526.1

[Top]

Internet

System Snapshot

- A new product group to house the RDA and Diagnostic Pack
- No longer contained within the Applications DBA product group
- Will give RDA more visibility and permit assignment of the diagnostic to functional users (if desired)

Discussion of Security Model Deployed by Oracle Diagnostics in Release 12.1

Evolution of Security Model

- **Functional Security** – Prior to Oracle
Diagnostics 2.5 : All GL users regardless of their application access rights could run a GL test.
- **Introduction of Limited Role Based Security:** January, 2007 in Versions 11.5.9, 11.5.10, 12.0
- **Full implementation of Role Based Security:** Version 12.1

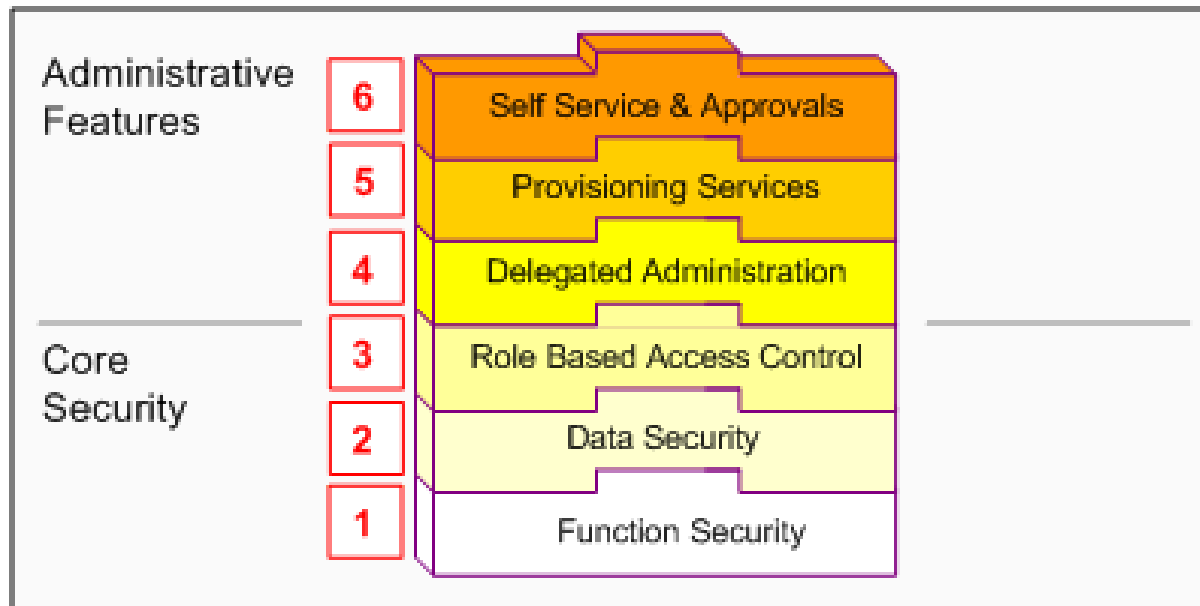
Diagnostics in 11i, 12.0

- **Three Limited Roles**
 - a. **Diagnostics Super User Role** - unrestricted role
 - b. **Application Super User Role** -
Can execute tests with any sensitivity within own product group; execute low and medium sensitivity tests in other products
 - c. **End User Role** – Can execute tests of low sensitivity in its own product group

New Security Model

- Based upon Role Based Access Control (RBAC)
- ANSI Standard promoted by National Institute of Standards and Technology
- RBAC sits on top of Data Security and Function Security layers which were present in the previous security model though not via the same mechanisms

Schematic Diagram of Model



GRANTS

Grants - Windows Internet Explorer

http://dtp1nx04.us.oracle.com:8000/OA_HTML/OA.jsp?page=/oracle/apps/fnd/security/grants/webui/GrantSummaryPG&OAI

File Edit View Favorites Tools Help

Grants

The search is case insensitive.

Name

Grantee Type

Grantee

Set

Object

Name	Grantee Type	Grantee	Set	Object	Data Context Type	Access Policy	Last Update	Duplicate	Update	Delete
Application Super User Functional Grant	Group Of Users	Application Super User Role	Application Super User Permission Set				28-Oct-2007			
Application Super User Configuration Data Security Grant	Group Of Users	Application Super User Role	OAM Diagnostics Instance Set Menu	Limit Diagnostic Application Access	Instance Set	OAM Diagnostic Configuration IS for own apps	28-Oct-2007			
Application Super User Group Data Security Grant	Group Of Users	Application Super User Role	OAM Diagnostics Instance Set Menu	Limit Diagnostic Test Access	Instance Set	OAM Diagnostic Sensitivity IS	29-Nov-2007			

Security Core Services Personalization File Manager Home Logout Preferences Help Diagnostics

Functional Grants

- Specified in permission sets
- Independent of responsibilities
- Restricts access to functions

Functional Grant in 12.1 Diagnostics

ORACLE Applications Administration Home Logout Preferences Diagnostics

Security Core Services Personalization File Manager

Grants Permissions **Permission Sets**

Security: Permission Sets >

Permission Set: OAM_COLLABORATE_SUPER_USER_PS Duplicate Update Delete

Name AP Collaborate 08 Super User Permission Set
Code OAM_COLLABORATE_SUPER_USER_PS
Description Permission Set for Collaborate 08 Super User

Permission Set Manager Hierarchy of Children Direct Parents Grants

Permission Set	Permission	Description
Select Test Function		
Execute Test Function		
View Reports Function		
Report Function		
Diagnostics Setup Function		

Return to Permission Set Search Duplicate Update Delete

Security Core Services Personalization File Manager Home Logout Preferences Diagnostics

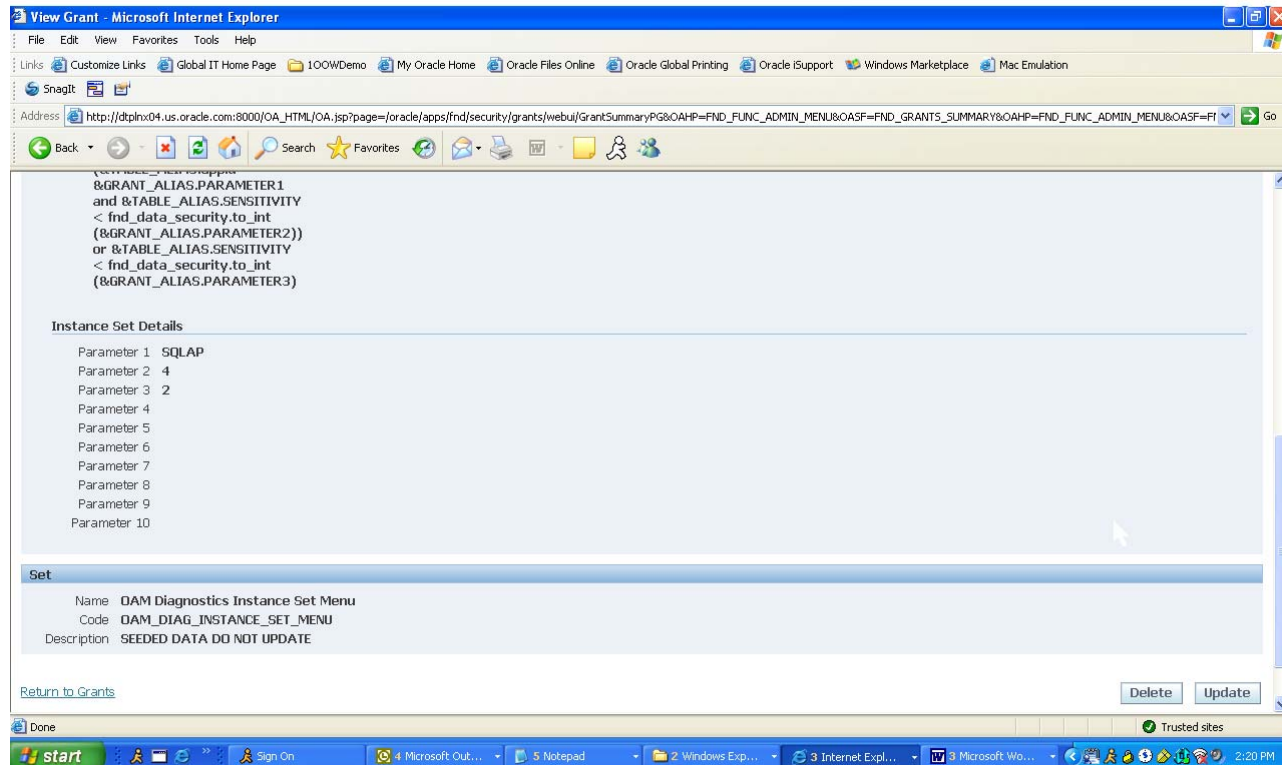
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start Sign On Microsoft Outlook Notepad Windows Explorer Internet Explorer Microsoft Word 3:13 PM

Data Security Grants

- Specifies a data object and an instance set or specific instance
- Instance set is a group of rows
- Specific instance is a single row
- Data security extends Function security by controlling user access to data sets or actions on these data sets

Custom Data Security Grant in 12.1 Diagnostics



Data Security Grant Parameters

- **Parameter One:** Application Short Name you want to link to
- **Parameter Two:** Sensitivity Allowed on that application
- **Parameter Three:** Sensitivity Allowed on all other application tests

Sensitivity Levels Explained

- **Value of Four:** Access to tests of low, medium, and high sensitivity tests
- **Value of Three:** Access to low and medium sensitivity tests
- **Value of Two:** Access only to low sensitivity tests
- **Value of One:** No access to any tests

Configuration Data Security Grants

- Instance set that provides configuration permission on the Application it is linked to
- One parameter: Short name

Custom Configuration Data Security Grant

The screenshot displays the Oracle Applications Administration web interface in Microsoft Internet Explorer. The browser address bar shows the URL: `http://dplnv04.us.oracle.com:8000/OA_HTML/OA.jsp?page=/oracle/apps/fnd/security/grants/webui/GrantSummaryPG&OAHF=FND_FUNC_ADMIN_MENU&OASF=FND_GRANTS_SUMMARY&OAHF=FND_FUNC_ADMIN_MENU&OASF=FND_FUNC_ADMIN_MENU&OASF=FND_FUNC_ADMIN_MENU`.

The page title is "ORACLE Applications Administration". The navigation menu includes "Security", "Core Services", "Personalization", and "File Manager". The "Security" section is expanded to show "Grants", "Permissions", and "Permission Sets".

The main content area displays the configuration for a security grant:

- View Grant:** AP Collaborate Super User Configuration Data Security Grant
- Name:** AP Collaborate Super User Configuration Data Security Grant
- Description:** Collaborate 08
- Effective From:** 28-Oct-2007
- Effective To:**

Security Context

- Grantee Type:** Group Of Users
- Grantee:** AP Collaborate 08 Super User
- Operating Unit:**
- Responsibility:**

Data Security

- Object:** Limit Diagnostic Application Access

Data Context

- Type:** Instance Set
- Name:** OAM Diagnostic Configuration IS for custom apps
- Description:** Instance Set used to give configuration permission on custom application

Predicate

```
&TABLE_ALIAS.appid =
&GRANT_ALIAS.PARAMETER1
```

Instance Set Details

- Parameter 1: SQLAP
- Parameter 2:
- Parameter 3:
- Parameter 4:
- Parameter 5:
- Parameter 6:
- Parameter 7:
- Parameter 8:
- Parameter 9:

The interface includes "Delete" and "Update" buttons for the grant. The Windows taskbar at the bottom shows the system time as 4:53 PM.

Demonstration

Questions and Answers