T3 - Auditing Oracle Financials

November 9, 2011
• Agenda — Auditing Oracle Financials

Introductions and review course objectives/agenda 8:30 – 8:45

Oracle security overview 8:45 – 10:30
• Oracle Organizational Model
• Oracle EBS R12 Security concepts and Terminology
• Flexfield security
• Module based security

• Application Controls 10:15 -11:45
General Ledger, Payables, Receivables and Purchasing Controls

Lunch 11:45 – 1:15

Introduction to the Oracle Governance, Risk and Compliance Suite 1:15 – 2:45
• Application Access Controls Governor
• Configuration Controls Governor
• Preventive Controls Governor
• Transaction Controls Governor

Oracle GRCM and GRCI Manager and Intelligence

Back to Business
Oracle organizational model
Organization structures in Oracle applications

- Oracle applications supports the creation of various organization structures
  - Defines types of identities and their relationships
  - Determines how transactions flow through the application
  - Is defined during implementation
  - Is central to Oracle software operation
  - Evolved based on needs of multinational organizations
  - Has two conceptual structures:
    - One used by HR
    - One used for operations and accounting
- Normally, the human resource organization structure depicts the organizational elements of the human resource model
- The financial organization structure depicts the organizational elements relevant to the accounting model. This may also be viewed as the enterprise structure
## Enterprise structure terminology

- **Business group**: Represents the highest level in the organization structure, identify certain HR specific attributes like job structures, and grade structures. Multiple ledgers can share the same business group if they share the same business group attributes. Approval hierarchies are impacted by the business group structure.

- **Ledger**: A financial reporting entity that uses a particular chart of accounts, functional currency and accounting calendar.

- **Legal entity**: Legal company for which fiscal or tax reports are generated/published. Assign tax identifiers and other legal entity information.

- **Operating unit**: Used to segregate data for multi-organization applications. Establishes the level for opening and closing periods within the sub-ledger.

- **Inventory organization**: Inventory organizations are the highest level that items are stocked, transacted, received, manufactured and valued.
Financial organization structure

- The Oracle applications financial organization model defines organizations and their relationships.
- The Financial organization model serves as the cornerstone for the Oracle applications products.
- It dictates how transactions flow through different organizations and how these organizations interact with each other.
- Is the foundation of Oracle application products and is a configuration that enables data belonging to multiple business units in an enterprise to use a single installation of Oracle applications.
- Keeps transaction data separate and secure within the logical confines of the defined structure.
- The financial organizational model contains the following:
  - Business groups
  - Ledgers/sets of books
  - Legal entity
  - Operating unit
  - Inventory organization
Business group

- Represents the highest level in the organization structure, identify certain HR specific attributes like job structures, and grade structures
- Multiple ledgers can share the same business group if they share the same business group attributes
- Approval hierarchies are impacted by the business group structure
Ledger (set of books)

– Financial reporting entity that uses a particular combination of the ‘3 Cs’:
  • Chart of accounts
  • Calendar
  • Currency

– Requirement to have at least one set of books defined

– Multiple types of ledgers can exist
  • Primary ledger
    – Books of record
  • Secondary ledger
    – Linked to Primary Ledgers
    – Used where there’s a need for alternate representation of financial information
  • Consolidated ledger
    – Consolidates information from the primary ledgers
Legal entity

– In the Oracle model, the legal entity represents the statutory entities of the organization for which fiscal or tax reports are prepared.

– The Legal Entities which would be established as part of the Enterprise Structure, may be viewed as equivalent to either a legal entity group or specific tax legal entities.
Operating unit

- The operating unit is often designed to represent buying and selling units of the organization.

- Transactional data is partitioned by operating unit in order management, accounts receivable, purchasing, and accounts payable.
Inventory organization

– Typically, is a unit that holds, manufactures or distributes materials
– Oracle Inventory and the manufacturing family of applications are partitioned by inventory organization
– It can only belong to one ledger, legal entity and operating unit structure
– May be divided into sub-inventories
Sub-inventory

– Sub-inventory is a sub-division within an inventory organization

– Allows tracking and management of inventory in logical groups, such as:
  • By product lines
  • By physical location
  • By intended use of production cycle (raw material, customer returns, finished goods, etc.)

– In organizations using standard costing to value inventory, enables accounting of inventory value in each subinventory in a different account
MOAC overview

- **U.S.**
  - Legal entity
  - Operating unit

- **Italy**
  - Legal entity
  - Operating unit

- **France**
  - Legal entity
  - Operating unit

**Single responsibility**

- Functional tasks
  - Accounting
  - Billing, dunning and collections
  - Procurement
  - Order management
  - Payments
  - Data management
Benefits of MOAC

– Improve efficiency
  • Process data across multiple OUs from one responsibility
  • Process transactions more efficiently for companies that have centralized business functions or operate Shared Service Centers
  • Obtain better information for decision making
  • Obtain a global consolidated view of information
  • View information, such as supplier sites and customer sites across multiple OUs

– Reduce costs
  • Speed data entry
  • Reduce setup and maintenance of many responsibilities

– Enhanced user experience
  • Rectifies prior complaints about users needing to be assigned tons of responsibilities to access Multi-Org data
Oracle EBS R12 Security concepts and terminology
Oracle EBS R12 Security concepts and terminology

• The following are the fundamental Oracle EBS R12 security terminology:
  – Users
  – Roles
  – Responsibilities
  – Forms
  – Menus
  – Functions
  – Request groups
Navigation

- Navigating self service
Oracle R12 EBS Security concepts and terminologies

• Following is an example of how various Oracle EBS security concepts work together

Users

Role 1 (e.g. GL Manager)

Responsibility 1 (e.g. GL journal post)

Main menu

Function 1
E.g.: Journal post

Sub menu
E.g.: Journal inquiry

Responsibility 2 (e.g. GL close)

Request group

Program
E.g.: Post journals

Request set
E.g.: Trial balance

Role 2 (e.g. GL Clerk)
User creation

- Users creation using system administrator responsibility

[Image showing a user creation page with responsibilities assigned to user ID JABBOTT]
Oracle R12 EBS Security concepts and terminologies

• Following is an example of how various Oracle EBS security concepts work together
Functions

- Navigation: System Administrator
Functions (cont.)

- Defining parameter QUERY_ONLY="YES" enables the function to be inquiry only function
Oracle R12 EBS Security concepts and terminologies

• Following is an example of how various Oracle EBS security concepts work together
Menus

- **Navigation: System**

![Menu Tree Diagram]

**Menu Tree Displays Menu in Tree Structure**

**Menu Assignment to Menu**

**Function Assignment to Menu**
Oracle R12 EBS Security concepts and terminologies

- Following is an example of how various Oracle EBS security concepts work together.
Oracle R12 EBS Security concepts and terminologies

- Following is an example of how various Oracle EBS security concepts work together.

```
+------------------+
| Users            |
+------------------+
  +----------------+      +----------------+      +----------------+
  | Role 1          |      | Role 2          |      | Responsibility 1 |
  | (e.g. GL Manager)|      | (e.g. GL Clerk) |      | (e.g. GL journal post) |
  +----------------+      +----------------+      +-------------------+
       |                  |      |                  |      | Main menu         |
       | Responsibility 2|      |                  |      | Request group     |
       | (e.g. GL close) |      |                  |      |                   |
       +----------------+      +----------------+      +-------------------+
            |                  |      |                  |      | Function 1        |
            |                  |      |                  |      | E.g.: Journal post|
            |                  |      |                  |      | Sub menu          |
            |                  |      |                  |      | E.g.: Journal inquiry|
            +----------------+      +----------------+      +-------------------+
                |                  |      |                  |      | Program           |
                |                  |      |                  |      | E.g.: Post journals|
                +----------------+      +----------------+      +-------------------+
                      |                  |      |                  |      | Request set       |
                      |                  |      |                  |      | E.g.: Trial balance|
                      +----------------+      +----------------+      +-------------------+
```

Trust in, and value from, information systems
San Francisco Chapter
### Request groups

- **Responsibility Creation — System Admin>Security>Responsibility>Define**

![Image of Responsibility Creation screen]

- **Request Group assigned to responsibility**

<table>
<thead>
<tr>
<th>Available From</th>
<th>Description</th>
<th>Menu</th>
<th>Web Host Name</th>
<th>Web Agent Name</th>
<th>Application</th>
<th>Responsibility Name</th>
<th>Request Group Name</th>
<th>Effective Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Applications</td>
<td></td>
<td>GL_SUPERUSER</td>
<td></td>
<td></td>
<td>General Ledger</td>
<td>General Ledger Super User</td>
<td>GL Concurrent Program Group</td>
<td>01-JAN-1951</td>
</tr>
</tbody>
</table>
Oracle R12 EBS Security concepts and terminologies

• Following is an example of how various Oracle EBS security concepts work together
Responsibilities

- Responsibility Creation — System Admin>Security>Responsibility>Define

Responsibilities window with the following details:
- **Responsibility Name**: General Ledger Super User
- **Effective Dates**:
  - From: 01-JAN-1951
  - To: blank
- **Available From**:
  - Oracle Applications
  - Oracle Self Service Web Applications
  - Oracle Mobile Applications
- **Menu**:
  - GL_SUPERUSER
- **Main Menu**:
  - GL_SUPERUSER
- **Securing Attributes**:
  - GL_SU_GIS
- **Request Group**
  - Name: GL_Concurrent Program Group
  - Application: General Ledger

**Note**: The diagram highlights the assignment of the Request Group and Main Menu to the responsibility.
Oracle R12 EBS Security concepts and terminologies

• Conclusion
Oracle R12 EBS Security concepts and terminologies

• Conclusion
  – Users, Responsibilities, request groups, menus, functions can be created in oracle forms
  – Users access oracle functionality via a responsibility
  – Functions are building blocks of Oracle security
  – Menu is a logical grouping of functions and is accessible via a responsibility
  – Concurrent programs are assigned to a responsibility via a request group
Flexfield security
Flexfield security

- Flexfields are codes made up of meaningful segments (intelligent keys) to identify general ledger accounts, part numbers, and other business entities.
- Chart of accounts structure is made up of several segments that represent dimensions of business.
- Restricts access to specific segment values.
- Enable security for a particular segment or parameter by checking enable security for that segment or parameter.
- Assign rule to a responsibility using the assign security rules window.
Flexfield security — Field level security

- Function>Setup>Financials>Flexfields>Key>Security>Define
Flexfield security — Field level security (cont.)

- Function — Setup>Financials>Flexfields>Key>Security>Assign
Flexfield security

• Conclusion
  – Flexfields are building blocks of Oracle’s accounting structure
  – Flexfields are of two major types key Flexfield and Descriptive Flexfield
  – Key Flexfield forms the accounting structure in Oracle EBS
  – Descriptive Flexfield can be used to add information to an existing field in the application
  – Security for Flexfields is governed at the responsibility level
Module based security
(HR security, project security, purchasing, buyer, treasury security)
HR security

- HRMS security restricts data access based on security model
  - Users access the system through Oracle responsibility that is linked to a security profile and/or a security group
  - Access control
    - Security group determines which business group
    - Security profile determines which records within the business group
HR security (cont.)

- Assigning users to a responsibility, security profile, and business group

![Diagram of HR security relationships]
Assigning multiple security profiles to a responsibility

Assigning a responsibility to multiple business/security groups

HR security (cont.)
Project security

– Projects can have role based security
– Project team members can be assigned roles
– Roles define what users can do in a project, i.e., add tasks, query labor costs, etc
– Seeded access controls are available that determine level of access in a project
Project security (cont.)

- Navigation: Setup>Projects>Roles
Project security (cont.)

- Navigation: Projects>Key Members
Purchasing security

– Purchase requisitions can only be created by employees
– Purchase Orders can only be created by buyers
– Only employees can be created as buyers
– Default shipping locations can be assigned to buyers
Purchasing security (cont.)

- Navigation: Purchasing>Setup>Personnel>Buyers

Only Buyers can enter purchase order
Miscellaneous security-inventory org security

- Inventory organizations are used extensively in inventory, purchasing and other material management modules
- Users can have restricted transacted access to inventory organizations
- Responsibilities will be assigned inventory organizations
- If an inventory organization is assigned a responsibility, the inventory organization is available only to the assigned responsibility
Miscellaneous security-inventory org security (cont.)

- **Inventory Organization Security** — **Inventory Super User > Setup > Organization > Organization Access**

![Organization Access](image)

<table>
<thead>
<tr>
<th>Org</th>
<th>Application</th>
<th>Name</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Purchasing</td>
<td>Purchasing, SSC Worldwide</td>
<td></td>
</tr>
<tr>
<td>000</td>
<td>Inventory</td>
<td>Inventory, SSC Worldwide</td>
<td></td>
</tr>
<tr>
<td>000</td>
<td>Purchasing</td>
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<tr>
<td>000</td>
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</tr>
<tr>
<td>000</td>
<td>Inventory</td>
<td>Inventory, SSC US OU 02</td>
<td></td>
</tr>
</tbody>
</table>

Organization Name: **SSC - Item Master**
Miscellaneous security

• Conclusion
  – Modules have unique security features independent of system administration
  – Module based security exists in HRMS, projects, inventory, purchasing, treasury, etc.
  – HR security is driven primarily by organization structure
  – Project Security is role based and governs access in a project
  – User access in inventory based modules is restricted using inventory organization access
  – Purchasing security is employee based
  – Treasury security governs access to deals and company
Application controls
General Ledger Controls
General ledger overview

- Payables
- Receivables
- Fixed assets
- Inventory
- Other sources
- General ledger
- Purchasing
- Financial statements (BS and IS)
- Trial balance
Accounting

– Accounting in Oracle financials is based on four characteristics:
  - Chart of accounts
  - Currency
  - Calendar
  - Accounting conventions
Ledgers

– Ledger:
  • Ledgers replace the concept of Set of Books (SOB) in Release 12
  • Defined as one or more legal or business entities that share a common chart of accounts, calendar, currency and accounting method

– Ledgers can be defined as:
  – Primary ledger
  – Secondary ledger
  – Currency reporting
Ledger sets

**Ledger set 1**

- **Ledger A**
  - U.S. GAAP
  - U.S. CoA
  - U.S. Calendar
  - USD

- **Ledger B**
  - French rules
  - U.S. CoA
  - U.S. Calendar
  - EUR

- **Ledger C**
  - U.S. GAAP
  - U.S. CoA
  - U.S. Calendar
  - AUS

**Ledger set 2**

- **Ledger D**
  - U.S. GAAP
  - U.S. CoA
  - U.S. Calendar
  - USD

- All ledger in a ledger set must have the same
  - Calendar
  - Chart of accounts
Data access sets

– Data access sets:
  • Controls which ledgers can be accessed by different responsibilities
  • Can grant read-only or read and write access to data in a ledger
  • Oracle General Ledger automatically creates a data access set when a Ledger is created or if a Ledger set is defined
Key controls

- Journals are approved systematically in Oracle, according to the approval limits pre-defined in the system. **Completeness/valuation**
- Imported journals (from feeder modules) cannot be modified in the general ledger. **Valuation**
- Oracle only allows balanced entries to be posted. If used, accounts used for suspense posting of journal entries are properly configured in Oracle and balances are reviewed and cleared on a regular basis. **Valuation**
- Cross-validation rules have been enabled and developed to help ensure the accuracy of data entry. **Valuation**
- Cross-validation rules overwrite Dynamic Inserts Flexfield definitions are frozen so that account code combinations are enforced. **Completeness/existence or occurrence**
- Rollup groups are frozen indicating that they cannot be changed. **Completeness/presentation and disclosure**
Key GL controls

– Journal approval
– Journal authorization limits
– Flexfield definition
– Cross validation rules
– Flexfield security rules
– GL accounts definition
– Ledger accounting options
– Open/close GL periods
– GL calendar definition
### Journal approval

- **Navigation:** Setup > Journal > Sources

![Journal Sources](image)

<table>
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<tr>
<th>Source</th>
<th>Source Key</th>
<th>Description</th>
<th>Import Journal References</th>
<th>Effective Date Rule</th>
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<td>123</td>
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<td>123</td>
<td>✓</td>
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<tr>
<td>AX Inventory</td>
<td>I C Translator</td>
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<tr>
<td>AX Payables</td>
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<td>✓ ✓ ✓ ✓ ✓</td>
<td>Roll Date</td>
</tr>
</tbody>
</table>
Journal authorization limit

- Navigation: Setup > Employees > Limit

![Journal Authorization Limits Table](image-url)

<table>
<thead>
<tr>
<th>Ledger</th>
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</table>
Key Flexfield segments

- Navigation: Setup > Financials > Flexfields > Key > Segments
GL account

- Navigation: Setup > Accounts > Combinations
Cross validation rules

- Navigation: Setup > Financials > Flexfields > Key > Rules
Flexfield security rule

- Navigation: Setup > Financials > Flexfields > Key > Security > Define
Assign Flexfield security rule

- Navigation: Setup > Financials > Flexfields > Key > Security > Define

![Image of Assign Security Rules interface]

- Security Rules:
  - Application: General Ledger
  - Responsibility: General Ledger, Vision Banking, Analyst
  - Name: Co 01-03
  - Description: Please enter company 01-03.
Flexfield values

- Navigation: Setup > Financials > Flexfields > Key > Values
Calendar

- Navigation: Setup > Financials > Calendar > Accounting

![Calendar interface with periods]

<table>
<thead>
<tr>
<th>Prefix</th>
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<td>3</td>
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<td>31-MAY-2006</td>
<td>May-06-06</td>
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</table>
Accounting options

- Navigation: Setup > Accounting setup manager > Accounting Setups > Subledger Applications
Open close periods

- Navigation: Setup > Open Close

![Open and Close Periods (Vision Operations (USA))]()

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<thead>
<tr>
<th>Status</th>
<th>Period</th>
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<th>To Date</th>
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Auto post

- **Navigation:** Setup > Journal > Auto Post

![Auto Post Criteria Set (Vision Operations (USA))]
Document sequence

- Navigation: Setup > Financial > Sequences > Document > Define

<table>
<thead>
<tr>
<th>Name</th>
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<th>To</th>
<th>Type</th>
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<td>ABC</td>
<td>Payables</td>
<td>28-APR-2009</td>
<td>01-MAY-2009</td>
<td>Automatic</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>ACH</td>
<td>Receivables</td>
<td>01-JAN-1990</td>
<td></td>
<td>Automatic</td>
<td></td>
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<tr>
<td>ACHDE</td>
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<td></td>
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<tr>
<td>ACHNL</td>
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<tr>
<td>AR_GL_Journals</td>
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<tr>
<td>Auto - Mixed</td>
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<td>10-JUN-2005</td>
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<td>Automatic</td>
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<tr>
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<td>10-JUN-2005</td>
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<td>1000</td>
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<tr>
<td>Automatic Receipt</td>
<td>Receivables</td>
<td>01-JAN-2001</td>
<td>01-JAN-2001</td>
<td>Automatic</td>
<td></td>
<td>20000</td>
</tr>
</tbody>
</table>
Payables controls
Payables overview

1. Receive invoice from the suppliers
2. Create invoice
3. Create payment
4. Send payment to supplier
5. Transfer data to general ledger
6. Transfer data to general ledger
Payables key controls

- Invoices are authorized through a systematic match of the PO price, invoice price and quantity received; Holds are automatically generated for discrepancies.

Valuation, right and obligations

- System holds on the invoices cannot be released unless the error is rectified. Valuation

- Date used for accounting date for invoices during accounting entry agrees to business process. Completeness

- Employee expense reports are approved by managers per established approval limits. Valuation and completeness
Payables key controls (cont.)

– Invoice tolerances
– Expense signing limits
– Invoice holds
– Payable options
– Financial options
– Key reports
Invoice tolerances

- Setup tolerances for 3-way matching
- Navigation: Setup > Invoice > Tolerances

![Invoice Tolerances (US8-OU-9203)](image)

**PO Matching**

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Hold Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Ordered</td>
<td>Qty Ord</td>
</tr>
<tr>
<td>Maximum Quantity Ordered</td>
<td>Max Qty Ord</td>
</tr>
<tr>
<td>Quantity Received</td>
<td>Qty Rec</td>
</tr>
<tr>
<td>Maximum Quantity Received</td>
<td>Max Qty Rec</td>
</tr>
<tr>
<td>Price</td>
<td>Price</td>
</tr>
<tr>
<td>Exchange Rate Amount</td>
<td>Max Rate Amount</td>
</tr>
<tr>
<td>Shipment Amount</td>
<td>Max Ship Amount</td>
</tr>
<tr>
<td>Total Amount</td>
<td>Max Total Amount</td>
</tr>
</tbody>
</table>

**Tax**

<table>
<thead>
<tr>
<th>Tolerance</th>
<th>Hold Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax</td>
<td>Tax Variance</td>
</tr>
<tr>
<td>Tax Amount Range</td>
<td>Tax Amount Range</td>
</tr>
</tbody>
</table>
Expense signing limit

– Setup the approval limit for expense reports
– Navigation: Setup > Employees > Signing Limit
Invoice holds

- Navigation: Setup > Invoice > Hold and Release Name
- Prevent a transaction from completing and puts the transaction on hold until the specific condition is resolved/satisfied
Payables options — Invoice

- GL date basis (The date payables uses as the default accounting date for invoices during invoice entry).
- Use invoice approval workflow
- Navigation: Setup > Options > Payables Options (Invoice tab)
Payables options — Matching

- Navigation: Setup > Options > Payables Options (Matching tab)
  - Allow final matching
  - Allow distribution level matching
  - Allow matching account override
Financial options

- Navigation Path: Setup > Options > Financial Options > Supplier Entry
  - Hold unmatched invoices
  - Automatic numbering
Financial options (cont.)

- Navigation Path: Setup > Options > Financial Options > Accounting
  - Future periods in payables (Invoices can be entered in future periods)
  - Default liability account for suppliers and invoices
Key reports

– Missing document numbers report
– Matching hold detail report
– Invoice on hold report
– Invoice aging report
– Distribution set listing
– Payment exceptions report
– Stopped payments report
– Void payment register
Receivable controls
AR overview

1. Ship goods to customers
2. Invoice creation
3. Create receipt
4. Transfer data to general ledger
5. Transfer data to general ledger
AR transactions

- AR Invoices
- Credit memo’s
  - Can create on-account credits
  - Can apply credits to open invoices, debit memos, and chargeback’s
- Debit memo’s
- Adjustments/write off’s
  - These include negative and positive adjustments
  - Approvals are set for adjustments and based on dollar limits
- Commitments
  - Deposits
  - Guarantee’s
Receivables configuration controls

- Transaction types & Transaction sources
- Auto invoicing rules
- Auto accounting rules
- Accounting rules
- Approval limits
- Profile classes
- Accounting method and posting
- Payment terms and override payment terms
- Allow unearned discount
Transaction types and sources

– Transaction types
  • Natural application/allow over application rules
  • Class
  • Open receivable
  • Allow freight
  • Tax calculation
  • Creation sign
  • Accounting

– Batch sources
  • Manual
  • Imported
Transaction types

- Navigation: Setup > Transactions > Transaction Types
Transaction sources

- Navigation: Setup > Transactions > Sources
Auto invoicing

– Auto Invoice allows import and generation of invoices, credit memos, etc.
– Sales tax is calculated automatically
– Revenue can be set to run automatically or manually
Auto invoice line ordering rules

- Navigation: Setup > Transactions > Auto Invoice > Line ordering rules
Auto accounting

- AutoAccounting: Can be used to generate default accounting flexfields for each invoice and credit memo. The values may be derived or constant segment
- Benefit of AutoAccounting: Greater accuracy (less data entry errors)
- Risk of AutoAccounting: If configuration not correct, could result in incorrect entries
Auto accounting (cont.)

- Navigation: Setup > Transactions > Auto Accounting
Accounting rules

- Navigation: Setup > Transactions > Accounting Rules
Approval limits

- Navigation: Setup > Transactions > Approval Limits
Receivables reports

- Accounting rules listing report
- Aging reports
- Audit report by document number
- Duplicate customer report
- Incomplete invoices report
- Reversed receipts report
- Setup details report
Purchasing controls
Purchasing and receiving overview

**Purchasing**

1. Create requisition
2. Auto create
3. Purchase order
4. Approve purchase orders
5. Send the PO to supplier

**Receive goods from suppliers**

1. Create receipt
2. Transfer to general ledger
Purchasing key controls

– Document types
– Approval groups/limits
– Buyers definition
– Purchasing options
– Receiving options
– Financial options
– Key reports
Purchasing key controls (cont.)

– Edit checks help ensure valid purchase order data entry based on predefined values. **Completeness**

– Purchase orders and requisitions are approved systematically in Oracle, according to the approval limits pre-defined in Oracle. **Valuation, right and obligations**

– Requisitions, Purchase orders, and receipts are automatically/sequentially numbered. **Completeness**

– System requires a user to be listed as buyer to be able to create a purchase Order. **Valuation, right and obligations**

– Goods received are accurately recorded and matched to purchase orders. Over receipt, receipt for unordered items, and substitute receipts are not allowed. **Valuation, right and obligations**

– Oracle is set up with accrual on receipt for expense and inventory items, which help ensure that the unvouchedered receipts GL account is automatically updated. **Completeness**
Purchasing — Document types

- Types of document types: Purchase agreement, purchase order, release orders, requisition and RFQ’s/quotations
- Navigation: Purchasing > Setup > Purchasing > Document Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Document Type Layout</th>
<th>Contract Terms Layout</th>
<th>Update Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auction Buyer Auction</td>
<td>Sourcing Buyer Auction</td>
<td>Sourcing Style Sheet</td>
<td>Oracle Contract Terms Template</td>
<td></td>
</tr>
<tr>
<td>Change Order Request Requisition</td>
<td>Change Order Request: Requisition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Agreement Blanket</td>
<td>Blanket Purchase Agreement</td>
<td>Blanket Agreement Stylesheet with Logo</td>
<td>Oracle Contract Terms Template</td>
<td></td>
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<tr>
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<td>Contract Purchase Agreement</td>
<td>Contract Agreement Stylesheet with Logo</td>
<td>Oracle Contract Terms Template</td>
<td></td>
</tr>
<tr>
<td>Purchase Order Planned</td>
<td>Planned Purchase Order</td>
<td>Standard Purchase Order</td>
<td>Oracle Contract Terms Template</td>
<td></td>
</tr>
<tr>
<td>Quotation ABC</td>
<td>ABC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quotation Bid</td>
<td>Bid Quotation</td>
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<tr>
<td>Quotation Catalog</td>
<td>Catalog Quotation</td>
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<td></td>
</tr>
<tr>
<td>Quotation Standard</td>
<td>Standard Quotation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release Blanket</td>
<td>Blanket Release</td>
<td>Blanket Release Stylesheet with Logo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release Scheduled</td>
<td>Scheduled Release</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Procurement — Document types

- Document types: Purchase agreement, purchase order, release, and requisition
- Navigation: Purchasing > Setup > Purchasing > Document types
Approvals overview

- Approval hierarchies let you automatically route documents for approval. There are two kinds of approval hierarchies:
  - Employee/supervisor relationships: Organization hierarchies
  - Position hierarchies — Jobs/positions hierarchies

- Define approval groups
  - Define the approval amount limits and accounts which can be approved

- Assign approval groups
  - Assign approval group to a job code for a document type
Define approval groups

- Navigation: Setup > Approvals > Approval Groups

![Approval Groups screenshot]

<table>
<thead>
<tr>
<th>Operating Unit</th>
<th>Name</th>
<th>Description</th>
<th>Enabled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>[ ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval Rules</th>
<th>Amount Limit</th>
<th>Low Value</th>
<th>High Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object</td>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assign approval groups

- Assign approval group to a job code for a specific document type
- Navigation: Setup > Approvals > Approval Assignments
Buyers

- Only buyers can create purchase orders (regardless of access to the purchase orders form)
- Navigation: Setup > Personnel > Buyers

- Setup
- Personnel
  Employees
  Jobs
  Positions
  Position Hierarchy

Buyers
Purchasing options

- **Document control**
  - Price tolerance percentage
    - Enforce price tolerance percentage (% by which the Autocreated PO line price cannot exceed the requisition line price)
  - Price tolerance amount
    - Enforce price tolerance amount (amount by which the Autocreated PO line price cannot exceed the requisition line price)
  - Cancel requisitions (Cancel requisitions upon cancellation of auto created POs)
  - Enforce buyer name (Enforce entry of only the buyer’s name on PO)
  - Enforce supplier hold (If you do not want to approve POs for suppliers on hold)

- **Receipt accounting**
  - Accrue expense item
  - Accrue inventory item

- **Document numbering**
  - Automatic numbering of PO and requisition
Purchasing options (cont.)

• Document defaults
  – Match approval level:
    • Two–way: Purchase order and invoice quantities must match within tolerance before the corresponding invoice can be paid
    • Three–way: Purchase order, receipt, and invoice quantities must match within tolerance before the corresponding invoice can be paid
    • Four–way: Purchase order, receipt, inspection, and invoice quantities must match within tolerance before the corresponding invoice can be paid
    • Note: The invoice match option in the purchase order and the match approval level here are independent options. The invoice match option determines whether payables performs invoice matching to the purchase order or the receipt. You can perform whichever invoice match option you want on a shipment regardless of the match approval level you choose here
Purchasing options (cont.)

- Navigation: Setup > Organizations > Purchasing Options
Purchasing options (cont.)

- Navigation: Setup > Organizations > Purchasing Options
Receiving options

- Navigation: Setup > Organizations > Receiving Options
  - Allow unordered receipt
Financials options

- Navigation: Setup > Options > Financial Options > Accounting
Financials options (cont.)

- Navigation: Setup > Options > Financial Options > Supplier — Purchasing
Key reports

– Purchasing
  • Purchasing interface errors report
  • Purchase price variance report
  • Invoice price variance report

– Receiving
  • Receiving exceptions report
  • Uninvoiced receipts report
  • Unordered receipts report
  • Receipt adjustments report
Introduction to GRC
What is GRC?

<table>
<thead>
<tr>
<th>Governance</th>
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<tbody>
<tr>
<td>• Governance is the responsibility of senior executive management and focuses on creating organizational transparency by defining the mechanisms an organization uses to enforce that its constituents follow established processes and policies.</td>
<td></td>
</tr>
<tr>
<td>• A proper governance strategy implements systems to monitor and record current business activity, takes steps to comply with agreed policies, and provides for corrective action in cases where the rules have been ignored or misconstrued.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>• Risk Management is the process by which an organization sets the risk appetite, identifies potential risks, and prioritizes the tolerance for risk based on the organization’s business objectives.</td>
<td></td>
</tr>
<tr>
<td>• Risk Management leverages internal controls to manage and mitigate risk throughout the organization.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compliance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Compliance is the process that records and monitors the policies, procedures, and controls needed to enable compliance with legislative or industry mandates as well as internal policies.</td>
<td></td>
</tr>
</tbody>
</table>

The goal of Governance Risk and Compliance (GRC) is to help a company efficiently put policies and controls in place to address its compliance obligations while at the same time gathering information that helps proactively run the business.
Evolution of GRC

– Governance, Risk Management, and Compliance (GRC) are three distinct disciplines that, in the past, have existed in silos within organizations and considered to be separate from mainstream business processes and decision making.

– Most organizations have viewed governance, risk, and compliance as discrete activities.

– Today, many organizations are starting to coordinate these activities by adopting a GRC program.

– This approach is helping organizations create efficiencies, achieve a holistic view of the environment, and ensure greater accountability.
GRC and Internal Audit
Internal audit’s role

– Participate in cross-functional ‘what if’ discussions to reconsider risks and identify action plans
– Help design risk management/monitoring processes (i.e., controls!) to address risks
– Redirect audit resources to reassessed highest risk areas
– Internal audit review of risk management and organizational governance
– Provide independent, objective assessments on:
  • Appropriateness of governance structures, risk, and compliance processes
  • Operating effectiveness of governance activities, risk, and compliance processes
– Act as catalysts for change by:
  • Advising or advocating improvements in governance structure and practices
  • Providing assurance on the risk management, control, and governance
## Summary — The value of IA and GRC technology

### IA
- Enables audit resource/project planning, efficiencies and accountability
- Supports an audit methodology
- Enables reporting and decision making
- Facilitates a common language and single source of data (workpapers, reports, observations, outstanding items, risk assessments, etc.)
- Allows proactive monitoring of task, issue, and observation tracking
- Provides audit trails

### GRC
- Moves organization beyond financial controls and regulatory compliance
- Enables strategic risk support
- Minimizes silos
- Promotes risk management accountability
- Facilitates data security
- Enables data transparency and reporting
- Aligns risk assessment methodologies
- Enhances proactive tracking of actionable items and issues/observation

- **IA Technologies are expanding their GRC capabilities...**
Summary (cont.)

– GRC processes in an enterprise are distinct disciplines, however, by integrating these disciplines, it can help drive a company to effectively and efficiently address compliance obligations. In addition, once these integrated disciplines are formed, an enterprise will be able to obtain the pertinent information to manage their business risks.

– There are number of GRC tools available in the market that help integrate and enable the GRC processes.

– Implementing a GRC enterprise solution is a journey, but if implemented correctly, it can lead to a number of financial and operational efficiencies in the future.

– GRC benefits to internal audit and other compliance groups are evident, however, internal audit should play a crucial role in setting the direction of the GRC implementation.
Introduction to Oracle’s GRC Product
Overview of Oracle GRC

Oracle GRC Platform consists of three major components: GRC Controls, GRC Manager (GRCM), and GRC Intelligence (GRCI)

– **GRCI**
  - Visibility into compliance readiness and responsiveness
  - Risk and performance analytics and dashboarding
  - Planning, modeling, reporting, and analysis of GRC activities.

– **GRCM**
  - Central GRC repository
  - Documentation of critical business policies, processes, controls, risks, and issues
  - Test plans and performance of control tests
  - Automatic initiation of testing review and approval processes
  - Capture and storage of test evidence

– **Application Access Controls Governor**
  - SOD controls at the access point or entitlement level
  - Simulation feature to report conflicts before deploying access model changes

– **Transaction Controls Governor**
  - Allows continuous monitoring of policies, controls, and transactions within the Oracle ERP application

– **Preventive Controls Governor**
  - Allows prevention of control violations from occurring and reduces expensive detection and remediation cycles.

– **Configuration Controls Governor**
  - Enforce data and application integrity
  - Audit changes to key configurations and operational data

Cross-Enterprise: Enables Integrated Risk and Compliance Management

Oracle Specific: Enables control automation and monitoring

Back to Business
Oracle GRC Controls suite
Oracle GRC Controls Suite Overview

Application Access Controls Governor (AACG)
- Implements segregation-of-duties (SOD) rules, which identifies responsibilities or functions that should not be assigned simultaneously to individual users for Oracle and PeopleSoft Applications.
- SOD rules can prevent such assignments from occurring, or uncover them so that they can be properly managed.
- Can also grant users temporary access to duties they do not ordinarily fulfill, and then guard against conflicts by auditing all actions performed by such users.

Transaction Controls Governor (TCG)
- Continuously monitors key business transactions in real time.
- Using this data, the application identifies suspicious activity, inappropriate business practices, or explicit control violations.
- Notifications are immediately routed to the responsible parties, ensuring that proper remedial action is taken.

Configuration Controls Governor (CCG)
- Enforces application and data integrity by monitoring changes in application configurations.
- Provides the ability to set up auditing parameters and audit changes to key configurations and operational data.

Preventative Controls Governor (PCG)
- PCG prevents unauthorized changes to critical application data and setups. It also enforces real-time policy changes at a granular application level.
Application Access Controls Governor (AACG)

- Detect and prevent control failure

Monitor control effectiveness

Detective controls
- What privileges users have
- What is changed in the process
- What are the execution patterns

Access controls

Configuration controls
- What users can do
- Who changed the setup and why

Preventive controls

Transaction controls
- How users execute processes

Enforce policies in context
AACG — Process flow

- Provides fine grained access control and SOD
- Defines access controls, analyzes access, provides remediation, enforces controls, and handles exceptions

Define access controls → Conflict analysis → Remediation (Clean-up) → Preventive provisioning → Compensating policies

Detection

- Define access business rules, policies, conditions, etc
- Initiate SOD conflict and user access analysis
- Remediate and analyze via in-built reports and what-if simulation

Prevention

- Enforce real-time SOD controls during user provisioning
- Provide mitigating controls for overrides and monitor access
AACG — Policy definition

• Access policy

Access points
- Element level of definition that can include responsibilities, menus, functions, and concurrent programs.

Access policy
- Define conflicts by joining access points and entitlements through various relationships (and or or).

Policy type
- Prevent
- Monitor
- Approval required
AACG — Conflict analysis

- Conflict analysis

Conflict analysis

- This gives a list of policies that are violated by assigning conflicting SOD to users.
- It reports results at the path level to resolve SOD conflicts.
- It can be generated by scheduling job or real time.
- SOD analysis is at the responsibility level.

Conflict reports can also be run and exported from the Report Center where parameters to view can be selected.
AACG — Simulation

- Simulation

Simulation
  - Run what-if simulation to test proposed access changes before remediation in Oracle EBS

List of users that are impacted by the simulation scenario
AACG — Preventive provisioning

- Preventive provisioning

Access to the responsibility is end dated till the conflict analysis is run.
AACG — Preventive provisioning (cont.)

• Preventive provisioning
AACG — Compensating controls

- Compensating controls

Payment Tab is removed
Preventive Controls Governor (PCG)

- Detect and prevent control failure

Detective controls
- What privileges users have
- What is changed in the process
- What are the execution patterns

Access controls
- What users can do

Configuration controls
- Who changed the setup and why

Transaction controls
- How users execute processes

Enforce policies in context

Monitor control effectiveness
# PCG — Features

| Form rules... | Form rules enable users to write rules that modify the security, navigation, field, and data properties of Oracle E-Business Suite forms. These are used to design application controls and define access restrictions for transactions. When conflict remediation could not be performed. |
| Flow rules... | The Flow rules application defines and implements business processes and sets of actions to be completed in specified sequences. Flow rules could be primarily used to define approval workflows. |
| Audit rules... | Audit rules enable users to track changes to the values of fields in database tables. |
PCG — Form rules

• Form rule elements — Target a form, block, or field

  - It specifies an “event” that triggers processing and defines customizations to the target form, blocks, or fields.
  - These are applied to users and responsibilities.
  - Used to assign security attributes, set navigation paths, create messages, define default values, List of Value, or other field attributes, run SQL statements, or run processes defined in flow Rules.
PCG — Flow rules

- Notify or request approval
- Alert designated persons to errors or exceptional conditions
- Event-driven notifications or approvals
PCG — Flow rules (cont.)

• Flow rule — Periodic user access reviews

Select all supervisors and direct reports with their responsibility access.

Notify supervisors of direct reports’ user access, with the ability to approve or reject that access automatically.

Back to Business
PCG — Audit rules

• Audit rule — Table selection

A table must belong to an audit group, and so an essential step in the auditing process is to create groups.

This tab can be used to select the columns from each audit table.
<table>
<thead>
<tr>
<th>User Name</th>
<th>Transaction</th>
<th>Time Stamp</th>
<th>Column Name</th>
<th>Old Value</th>
<th>New Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMCLAUGHLIN</td>
<td>Insert</td>
<td>07-OCT-2004 16:57:15</td>
<td>Name</td>
<td>JAN-ADJ 07-OCT-2004</td>
<td>JAN-ADJ 07-OCT-2004</td>
</tr>
</tbody>
</table>

Group Name: GL JOURNALS
Table Name:
Start Date:
End Date:
Username:
Number of Days: 1
Configuration Controls Governor (CCG)

• Detect and prevent control failure

- **Monitor control effectiveness**
  - Detective controls
    - What privileges users have
    - What is changed in the process
    - What are the execution patterns
  - Access controls
    - What users can do
  - Configuration controls
    - Who changed the setup and why
  - Transaction controls
    - How users execute processes

- **Enforce policies in context**
CCG — Process flow

- Provides internal control of ERP application setup and detailed change management procedures
- Enforces data and application integrity, audit changes to setup configurations, and continuous monitor of the changes.

**Detection**
- Define leading practice policies and operating rules.
- Record changes to sensitive setup data. Compare before and after values for changes.
- Monitor for setup inconsistencies across multiple instances.

**Prevention**
- Require conditional approval (e.g., exceed threshold).
- Confirm that setups and data updates conform to valid values.
CCG — Definition creation

Apps Definition Workbench

Object: Definition: Financials 1 Instance: APS11510 Type: Snapshot Application: AR 11.5.10

Add object...

Object: AR Payment Terms

<table>
<thead>
<tr>
<th>Operator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>--- Select one ---</td>
</tr>
<tr>
<td>Base Amount</td>
<td>--- Select one ---</td>
</tr>
<tr>
<td>Description</td>
<td>--- Select one ---</td>
</tr>
<tr>
<td>Allow Discount on Partial Payments</td>
<td>--- Select one ---</td>
</tr>
<tr>
<td>Collect Credit Card Prepayment</td>
<td>--- Select one ---</td>
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<td>Credit Check</td>
<td>--- Select one ---</td>
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<td>Discount Basis</td>
<td>--- Select one ---</td>
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<td>Effective Date From</td>
<td>--- Select one ---</td>
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<td>Effective Date To</td>
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<td>Print Lead Days</td>
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<td>Installment Options</td>
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<tr>
<td>Cutoff Day of Month</td>
<td>--- Select one ---</td>
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<tr>
<td>Last day of month</td>
<td>--- Select one ---</td>
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</table>

Snapshot definition

- Records the setup data for a specified Oracle Module on a specified ERP instance
CCG — Compare configurations

- Comparison report between two snapshots

<table>
<thead>
<tr>
<th>Field</th>
<th>Value A</th>
<th>Value B</th>
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</thead>
<tbody>
<tr>
<td>Date First Hired</td>
<td>05-JUL-55</td>
<td>01-SEP-99</td>
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<td></td>
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<td><a href="mailto:brian.adams@vision.com">brian.adams@vision.com</a></td>
<td><a href="mailto:badmin@vision.com">badmin@vision.com</a></td>
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</tr>
</tbody>
</table>
CCG — Monitor configuration changes

• Edit the definition to specify what you want to track

- Select the type of changes that need to be tracked — All, Insert, Update, Delete

Apps Definition Workbench

<table>
<thead>
<tr>
<th>Definition Basics</th>
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</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
<tr>
<td>Instance</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Type</th>
<th>Change Tracking</th>
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<tbody>
<tr>
<td>Application</td>
<td>HPA 8.8</td>
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</table>

- Include in Scheduleable Items list

<table>
<thead>
<tr>
<th>Objects</th>
<th>All</th>
<th>Insert</th>
<th>Update</th>
<th>Delete</th>
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<tr>
<td>401g(17) ODI/AVL Limit</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<td>401o(17) Parameters</td>
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<tr>
<td>401o(17) TRA88 Limits</td>
<td>☐</td>
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<td>415 Limits Parameters</td>
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<tr>
<td>412g(1) Limit</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>Delayed Retirement Credit</td>
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<td>☐</td>
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<tr>
<td>Duration</td>
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<tr>
<td>Function Result</td>
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<tr>
<td>Group Definition</td>
<td>☐</td>
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<tr>
<td>Max Taxable Wage Base</td>
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<td>PBOC Rates</td>
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<td>Plan Limits</td>
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<tr>
<td>Self Service Calc Defaults</td>
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<td>☐</td>
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<td>☐</td>
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</tbody>
</table>
CCG — Monitor configuration changes (cont.)

- Monitor the changes with audit trail

![Change Tracking by Setup Object Diagram]

**Query Definition:**
- **Database Instance:** V011
- **Application:** Oracle GL 11.0.3
- **Object:** Set of Books

**Change Session Information:**
- **Change Date:** 14-MAR-00 13:32:45
- **Set of Books Name:** Vision Operations (USA) 1
- **App User Name:** PPOTTER
- **Responsibility Name:** General Ledger, Vision Operations (USA)

**Table Name:** GL_SETS_OF_BOOKS
- **Set of Books Name:** Vision Operations (USA) 1

<table>
<thead>
<tr>
<th>Field Information</th>
<th>Description</th>
<th>Old Value</th>
<th>New Value</th>
<th>Changed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future Periods</td>
<td>FUTURE_ENTERABLE_PERIODS_LIMIT</td>
<td>XYZ Company Set of Books</td>
<td>Vision Operations Books</td>
<td>x</td>
</tr>
<tr>
<td>Allow Posting</td>
<td>SUSPENSE_ALLOWED_FLAG</td>
<td>3</td>
<td>5</td>
<td>x</td>
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<tr>
<td>Enable Journal Entry Tax</td>
<td>ENABLE_AUTOMATIC_TAX_FLAG</td>
<td>No</td>
<td>Yes</td>
<td>x</td>
</tr>
</tbody>
</table>

**What?**
- Change in Future Periods and Allow Posting

**Where?**
- GL_SETS_OF_BOOKS Table

**When?**
- Change Date: 14-MAR-00 13:32:45

**Who?**
- App User Name: PPOTTER
- Responsibility Name: General Ledger, Vision Operations (USA)
CCG — Monitor configuration changes (cont.)

- Detect and record changes to sensitive setup data
- Require settings and data updates conform to valid values
- Require conditional approval for changes to sensitive setup data

Supplier Setup

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Address</th>
<th>Terms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acme</td>
<td>123 Main St, Center City, NY 12345</td>
<td>Net 60</td>
</tr>
<tr>
<td>Wells F</td>
<td>812 Corp</td>
<td></td>
</tr>
</tbody>
</table>

GRC Controls Message

Your change has been submitted for approval by: John Doe

Configuration Change Policy
If payment terms are changed:
(1) Require an approval
(2) Audit the change
(3) Require a reason

GRC Controls Audit Report

<table>
<thead>
<tr>
<th>DateTime</th>
<th>User</th>
<th>Entity</th>
<th>Field</th>
<th>Old</th>
<th>New</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 3..</td>
<td>Johnson</td>
<td>Acme</td>
<td>Invoice Amt</td>
<td>Net 30</td>
<td>Net 60</td>
</tr>
</tbody>
</table>
CCG — Manage data integrity

- Mask sensitive data, disable buttons, confirm data input, etc.
  - Granular user interface restrictions
  - Restrict access to data or actions
  - Embedded control enforcement

**Employee Update**

- **Name**: John Doe
- **Address**: 123 Main St, Center City, NY 12345
- **SSN**: XXX-XX-XXXXX
- **Salary**: $53,000.00
- **Supervisor**: Mary Smith, John Jones, Phil Johnson, Sue Thompson, Sally Struthers, Bill Seibel

**Notes**:
- Conceal SSN number if user is NOT from HR dept
- Employees can only view the Salary field (can’t update)
- Employees can only select supervisor from the drop-down list
Transaction Controls Governor (TCG)

• Detect and prevent control failure
Extensive transaction monitors

- Detect patterns of heightened risk in business activity
- **Test against material thresholds**
  - Journal Entry > $ threshold
  - Employee Checks (individual and sum) > $ threshold
- **Search for anomalies**
  - Purchase Order terms differ from vendor
  - Sales orders > acceptable $ range
- **Sampling of transactions**
  - Fourth quarter invoices
  - Days sales outstanding balances
- **Detect fraudulent behavior**
  - PO changes after approval
  - Duplicate suppliers with same address
- **Embed contextual/automated compensating controls**
  - Alert on customer transactions over $ threshold
  - Prevent journals from being entered and posted by same individual
Transaction Controls Governor (TCG) — Process flow

- Used for real-time monitoring of policies, controls, and transactions within the enterprise
- Detect and prevent erroneous and fraudulent transactions
- Monitor transactions to detect business policy violations or unacceptable levels of risk.

Detection

Prevention

Define best practice policies and operating rules

Monitor transactions against the policies and level of risk

Detect the violation against the policies and address the violation

Require conditional approval
TCG — Define transaction analysis

- Create a model
TCG — Define transaction analysis
TCG — Define models

[Diagram showing a process flow and a screenshot of a software interface related to transaction governance, risk, and compliance controls.]
TCG — Monitor transaction analysis

- Data results
TCG — Detect and address suspects

• Pattern results
## Oracle GRC Controls Suite — Summary

<table>
<thead>
<tr>
<th>Product</th>
<th>Example</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Control Governor</td>
<td>A user who can create a supplier cannot pay the supplier</td>
<td>Detects all the responsibilities that have these two privileges</td>
</tr>
<tr>
<td>Preventive Control Governor</td>
<td>A user who can create a supplier can pay other suppliers, but not the same one he created</td>
<td>Since this is preventive, this will prevent any fraud from occurring</td>
</tr>
<tr>
<td>Transaction Control Governor</td>
<td>Check the responsibility to see if there are any users who have created a supplier and approved a payment</td>
<td>Detects suspects that point to some kind of fraudulent activity</td>
</tr>
<tr>
<td>Configuration Control Governor</td>
<td>Check if someone has changed the billing address of a supplier</td>
<td>Detects various setup changes in a transaction</td>
</tr>
</tbody>
</table>
Oracle GRCM and GRCI Manager and Intelligence
Risk mgmt integration with GRCM/GRCi technology

- Risk and control assessment processes can be enhanced using GRC technologies

**Data Repository**

- Risk and Controls Repository
- Organizational Hierarchy (Perspective)
- Document Storage and Management

- Several locations within application to store documentation
- Risk and Controls Library and attributes to house
- Multiple options for structuring business process data

**Audit/Review Process**

- Assess and Test
- Issue Management & Remediation Plans
- Certification and Reporting

- Number of options to execute an assessment (Process / Risk / Controls)
- Number of options to document issues and remediation steps
- Delivered Reports and Opportunity for Ad/Hoc Reporting via GRCi

**Application Administration**

**Back to Business**
GRC Manager functionality

• Integrated Risk & Compliance Management Solution

Geared towards one master library that is linked to multiple regulations:

• Organization / Perspectives
• Process (Base Object)
• Risks
• Controls
• Controls Test Plans
• Assertion
• Assessments
• Action Items
• Issues
• Remediation Plans
• Surveys
• Revision History
• Relevant Documentation
• Workflows - Review and Approval
GRC Manager functionality (cont.)

• Perspectives - Organizational Hierarchy

• Perspectives (Hierarchies) are used to provide business users access to processes, risk and/or controls based on their roles and responsibilities within the organization.

• Align Regulations, Policies, Business Processes and associated controls to Organization Structure
GRC Manager functionality (cont.)

- **Assess and test**

  Several options to execute an assessment or test:
  - Business Process Assessment
  - Business Process Test
  - Test Plan Creation and Execution
  - Ad/Hoc Test of Controls
  - Survey
  - Data Collection and Approval
GRC Manager functionality (cont.)

Several options to execute an assessment or test:
- Business Process Assessment
- Risk Assessments
- Controls Assessments
- Perspective Assessments
GRC Manager functionality (cont.)

- Risk Assessment

Risk Assessment entails determining the level of risk through risk analysis, risk evaluation based on the business context, devising the risk treatment strategy based on the cost-benefit analysis for risk & controls, create and initiate assessment, and review and approve assessments.
GRC Manager functionality (cont.)

• Issue management and action items
  • Document, address, and resolve issues and action items
  • Delivered workflows for both
  • Attach relevant documentation
  • Assign Owners
  • Track Progress
  • Set up alerts and notifications to enhance the process structure
GRC Manager functionality (cont.)

• Document Storage and Management

Several locations within application to store documentation such as:
• Process Flow Diagrams
• Process Narratives
• Test Results Documentation
• Test Instructions
• Issue/Action Item documentation
• Comments
GRC Intelligence functionality

- Certification and reporting
  - Delivered Reports within GRC Manager application
  - Prebuilt dashboards aggregate information from GRC sources
  - Respond to KRI and issues
  - Configure to meet your specific needs
  - Based on Oracle Business Intelligence Enterprise Edition (OBIEE)
  - User friendly reporting capability
  - Create user and user group specific dashboards
  - Use dashboard information to drill down to detail
GRC — Summary of benefits

- The Integrated risk and compliance management framework will present opportunities to consolidate functional activities currently performed.
- Time and effort saved due to redundant activities can be used for other important initiatives within the governance groups.

<table>
<thead>
<tr>
<th>Cost reduction/avoidance</th>
<th>Operational efficiency</th>
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<tbody>
<tr>
<td>- Reduced number of controls through the creation of integrated requirements</td>
<td>- Improved risk and compliance reporting consistency and quality with assessment standard metrics and criteria</td>
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<tr>
<td>- Reduced duplication of testing efforts</td>
<td>- Improved control decisions through a risk-based business case methodology</td>
</tr>
<tr>
<td>- Reduced last minute requests for information through automated compliance calendar functionality</td>
<td>- Improved visibility and practicality of identifying operating risks through risk rationalized control baselines linked to requirements</td>
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<tr>
<td>- Reduced business fatigue from multiple, inconsistent assessment and reporting requirements through process consolidation</td>
<td>- Improved the ability to perform trending and analytics through standardized control baselines</td>
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<td>- Reduced reliance on spreadsheets which require significant manipulation to generate audience-specific reports through automated workflow execution</td>
<td>- Improved business unit and internal audit ability to meet skill position requirements through business rules enabled, automated workflow system</td>
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The actual benefits realized will depend on how risk and compliance is managed in the organization.
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