

# Implementing Oracle Approvals Management for AP and PO

Susan Behn  
Gerald Jones  
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# Agenda

- AME Product Overview
- AME and Approval Workflow
- Sample Business Case Scenarios
  - Payables
  - Purchase Requisitions



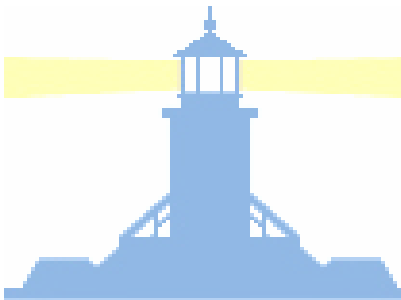
## What is AME?

- Purpose is to find approvers based on business rules
  - AME generates approver list
  - AME returns next approver to calling application
  - Request for next approver re-generates approver list to return next approver to calling application
- Integrated with multiple E-Business applications such as HR, PO and AP
- APIs allow integration with 3<sup>rd</sup> party apps



# Advantages of AME

- Reduce approval cycle times
- Approval Rules can be developed by business users with minimal development assistance
- Approver Lists leverage off existing Oracle hierarchies (e.g. HR supervisor, HR position)
- Approver Lists can also leverage off custom hierarchies
- AME responds to changes such as organization hierarchies or rule changes
- Alternative is workflow customization
  - Requires significant development expertise



# R11/i vs R12

- Operating Units
  - R11/i – Rules are across operating units
    - Must create attribute to limit by OU
  - R12 – Rules are specific to operating unit
- Parallelization Features
  - Available to more transactions in R12
    - Parallel Approvals
    - Position Hierarchy
    - FYI Notifications
  - Not available for all transaction types – MetaLink Id: 338508.1
- Integrated with more applications in R12
  - R11/i – 178 transaction types; R12 – 258 types



# AME Access

- AME uses Oracle Role Based Access Model (RBAC) to access AME components
- Functional Administrator Responsibility
  - Grant access to data
- User Management Responsibility
  - Login in as the SYADMIN user
  - Grant access to roles
    - *Approvals Management Business Analyst* - define business cases
    - *Approvals Management Administrator* - add transaction types, add approver types and view logs

# Business Analyst Dashboard

## Business Analyst Dashboard

This table displays the transaction types in the order you accessed them.

Transaction Types					
Name	Application	Rules	Test	Setup	
<a href="#">Payables Invoice Approval</a>	Payables				
<a href="#">FUN Recipient Intercompany Transaction</a>	Financials Common Modules				
<a href="#">AMW Audit Procedure Approval</a>	Internal Controls Manager				
<a href="#">AMW Control Approval</a>	Internal Controls Manager				
<a href="#">AMW Risk Approval</a>	Internal Controls Manager				

### Recently Updated Rules

This table displays the rules whose definition and usages has changed.

Since number of days

Name	Rule Type	Transaction Type	Action	Date	User	Update
No results found.						

### + Future Active Rules

### + Future Inactive Rules

## Approval Process Setup

### 1. Select the transaction type

### 2. Define the components

Approvals Management uses these components within the approval rules.

[Attributes](#)  
Define attributes to fetch business facts for a specific transaction.

[Conditions](#)  
Define conditions to evaluate attributes within rules. If all conditions in a rule are true then the rule is active for the transaction.

[Action Types](#)  
Enable action types to specify the action to take if a rule is active for a transaction.

[Approver Groups](#)  
Define approver groups to contain approvers who are usually members of peer groups such as payroll or expenses department.

### 3. Define the approval rules

Approval Rules determine the approvers or FYI notification recipients required for a business transaction.

[Rules](#)

### 4. Test Workbench

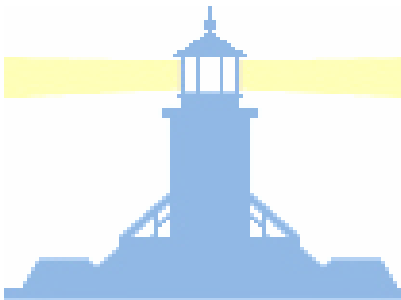
Define test cases or test real transactions to verify the approval setup, rules and associated approvers.

[Test Workbench](#)

### Quick Links

- [Configuration Variables](#)
- [Setup Report](#)





# Administrator Dashboard

**Administrator Dashboard**

This page displays the transaction types and their association with specific Oracle applications.  
\* Indicates required field

**Transaction Types**

Filter: All Payables Invoice Approval

Previous 1-10 Next 10

Name	Transaction Type Key	Application	Update	Delete
<a href="#">AMW Audit Procedure Approval</a>	AP	Internal Controls Manager		
<a href="#">AMW Control Approval</a>	CTRL	Internal Controls Manager		
<a href="#">AMW Risk Approval</a>	RISK	Internal Controls Manager		
<a href="#">BOM ERES Bill of Materials Creation</a>	oracle.apps.bom.billCreate	Bills of Material		
<a href="#">BOM ERES Bill of Materials Update</a>	oracle.apps.bom.billUpdate	Bills of Material		
<a href="#">BOM ERES Operational Routing Creation</a>	oracle.apps.bom.routingCreate	Bills of Material		
<a href="#">BOM ERES Operational Routing Update</a>	oracle.apps.bom.routingUpdate	Bills of Material		
<a href="#">CE Bank Account Signing Authority Approval</a>	CEBASIG	Cash Management		
<a href="#">CHECKLIST</a>	CHECKLISTID	Human Resources		
<a href="#">CWB: Employee Eligibility</a>	EMPELIG	Advanced Benefits		

Previous 1-10 Next 10

**Quick Links**

- [Configuration Variables](#)
- [Exception Log](#)
- [Setup Report](#)
- [Approver Types](#)



**Quick Links**

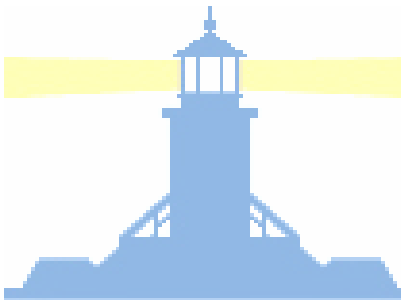
- [Configuration Variables](#)
- [Exception Log](#)
- [Setup Report](#)
- [Approver Types](#)





# AME Building Blocks

- Configuration Variables
- Transaction Types
- Attributes
- Conditions
- Actions/Action Types
- Approver Groups
- Rules



# Configuration Variables

- Control runtime behavior
- Default applies to all transaction types

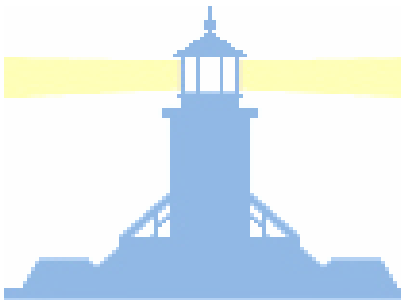
**Configuration Variables**

To use any of the default configuration variables value in your transaction type, leave the specific Transaction Type variable field blank and click Apply.

Transaction Type

Variable Name	Description	Default	Transaction Type
Administrator Approver	An Administrator who should be notified in case of any exceptions in Approvals Management.	<input type="text" value="SYSADMIN"/>	<input type="text"/>
Allow All Approver Types	Whether Approvals Management allows all approver types	No <input type="button" value="v"/>	<input type="text"/>
Allow All Item Class Rules	Whether Approvals Management allows to create subordinate item class rules	No <input type="button" value="v"/>	<input type="text"/>
Allow For Your Information Notifications	Whether Approvals Management allows For Your Information notifications	No <input type="button" value="v"/>	<input type="text"/>
Currency Conversion Window	How many days Approvals Management should look back, at most, to find a currency-conversion rate	<input type="text" value="120"/>	<input type="text"/>
Distributed Environment	Whether Approvals Management runs in a distributed-database environment (yes or no)	No <input type="button" value="v"/>	<input type="text"/>
Production Functionality	What types of production-rule functionality are allowed	No production rules <input type="button" value="v"/>	<input type="text"/>
Purge Frequency	How many days temporary Approvals Management data ages before being purged	<input type="text" value="15"/>	<input type="text"/>
Repeated Approvers	How many times to require an approver's approval, in the absence of forwarding	Once per transaction <input type="button" value="v"/>	<input type="text"/>





# Transaction Types

- What will be approved
  - Invoice, requisition, salary change...
- Custom transaction types can be created

Transaction Types				
Filter	Application	Payables	Go	
Create Transaction Type				
Name	Transaction Type Key	Application	Update	Delete
<a href="#">OIE Expense Reports</a>	APEXP	Payables		
<a href="#">Payables Holds Resolution</a>	APHLD	Payables		
<a href="#">Payables Invoice Approval</a>	APINV	Payables		



# Attributes

- Variables that represents business data (e.g. invoice amount, supplier, etc.)
- Can be static (constant value) or dynamically retrieved at runtime (SQL query)
- Basic attributes seeded for all transaction types
  - Existing attributes can be modified
    - SUPERVISORY\_NON\_DEFAULT\_STARTING\_POINT\_PERSON\_ID – Update to start with a different person
- Create additional attributes for anything linked to transaction id for header (invoice id, requisition id)



# Seeded Attributes

- Examples from the Payables Invoice Approval transaction type

Attribute ▲	Description	Category	Usage Type	Item Class	Data Type	Update	Delete
<a href="#">SUPPLIER INVOICE DISTRIBUTION AMOUNT</a>	Invoice distribution amount	Others	Dynamic	Line Item	Currency		
<a href="#">SUPPLIER INVOICE DISTRIBUTION ASSETS TRACKING FLAG</a>	Flag that indicates if distribution line is tracked in Oracle Assets (Y or N)	Others	Dynamic	Distribution	String		
<a href="#">SUPPLIER INVOICE DISTRIBUTION COST CENTER</a>	Account cost center	Others	Dynamic	Distribution	String		
<a href="#">SUPPLIER INVOICE DISTRIBUTION CREATION DATE</a>	Standard who column	Others	Dynamic	Distribution	Date		
<a href="#">SUPPLIER INVOICE DISTRIBUTION DESCRIPTION</a>	Description	Others	Dynamic	Distribution	String		
<a href="#">SUPPLIER INVOICE DISTRIBUTION EXPENDITURE TYPE</a>	Project expenditure type used to build Accounting Flexfield for project-related distribution line	Others	Dynamic	Distribution	String		
<a href="#">SUPPLIER INVOICE DISTRIBUTION GL ACCOUNT</a>	GL Account	Others	Dynamic	Distribution	String		

# Create Attribute for Sales Tax Approval Rule

- Create an attribute to determine if sales tax lines are present
  - Use this attribute for a rule to require pre-approval for sales tax lines

**Information**  
The query is valid.

**Create New Attribute**  
You can select an approver type for Number data type and a value set that contains business-specific data for Number, String, and Currency data types.

\* Indicates required field

\* Name: SB\_SALES\_TAX\_PRESENT

Item Class: Header

\* Description: Returns a number > 0 if sales tax lines are present in the invoice distribution

Data Type: Number

Approver Type: [Dropdown]

Value Set: [Searchable Field]

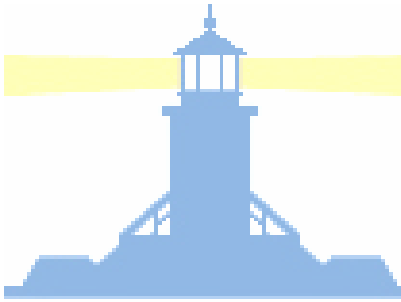
Usage Type: Dynamic

\* Value: 

```
SELECT COUNT(*)
FROM ap_invoice_distributions_all aid,
     ap_tax_codes_all atc
WHERE aid.invoice_id = :transactionId
AND aid.tax_code_id = atc.tax_id
AND aid.line_type_lookup_code in ('TAX')
AND UPPER(atc.name) = 'SALES TAX'
```

Enter SQL query for dynamic attributes.

Buttons: Cancel, Create Another (1), Apply, Validate



# Conditions

- Represent the *IF* part of an approval rule
- Evaluate the value of attributes at runtime
- Result can either be true or false

Condition ▲	Item Class	Condition Type	Update	Delete
<a href="#">APPROVE_MATCHED_INVOICES is False</a>	Header	Ordinary		
<a href="#">APPROVE_MATCHED_INVOICE_LINES is False</a>	Line Item	Ordinary		
<a href="#">PO_MATCHED_INVOICE in (N)</a>	Header	Ordinary		
<a href="#">PO_MATCHED_INVOICE in (Y)</a>	Header	Ordinary		
<a href="#">PROJECT_RELATED_INVOICE in (N)</a>	Header	Ordinary		



# Condition Types

- Ordinary-Regular
  - Compare attribute to value or range

SUPPLIER INVOICE AMOUNT is greater than 10000,USD	Header	Ordinary
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- Ordinary-Exception
  - Used in List Creation Exception Rule Types

SUPPLIER INVOICE LINE TYPE LOOKUP CODE in (UTILITY)	Line Item	Exception
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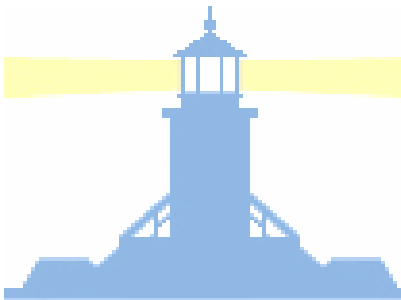
- List Modifier

Any approver is FND Users: SBEHN
Any approver is HR People: Stock, Pat



## Actions/Action Types

- Represent the *Then* part of an approval rule
- Provide instruction to AME when an approval rule has been satisfied
- Determine the approvers and number of approvers
- Action Types are grouping of actions



# Actions/Action Types

- Action Type for Rule Type

- Actions for Action Type

Rules | Test Workbench | Setup

Attributes | Conditions | **Action Types** | Approver Groups

### Action Types

To reinstate changed configuration details to original values click Revert.

Revert (1) Apply

Search

Rule Type Chain Of Authority Go

Use Existing Action Type

Select Name	Description	Rule Type	Order Number	Ordering Mode	Voting Method	Remove
<input checked="" type="radio"/> Absolute job level	Chains of authority based on absolute job level	Chain Of Authority	1	Serial	Serial	
<input type="radio"/> Relative job level	Chains of authority based on relative job level	Chain Of Authority	2	Serial	Serial	
<input type="radio"/> Supervisory level	Chains of authority based on number of supervisory levels	Chain Of Authority	3	Serial	Serial	
<input type="radio"/> Line-item job-level chains of authority	One job-level chain of authority per line item	Chain Of Authority	8	Serial	Serial	
<input type="radio"/> approval-group chain of authority	chain of authority includes an approval group	Chain Of Authority	10	Serial	Serial	

Actions: Absolute job level

Create

Previous 1-5 Next 5

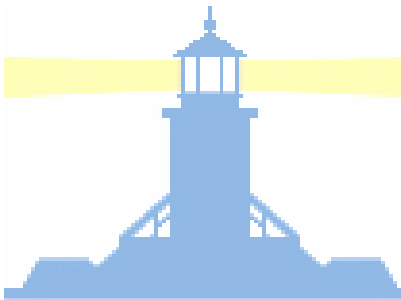
Action	Update	Delete
Require approvals up to at most level 1.		
Require approvals up to at most level 2.		



# Actions/Action Types

Action	Description	Example
Absolute-job-level	~Ascends HR supervisor hierarchy ~Based on specific job level	Require approvals up to at least job level six <ul style="list-style-type: none"><li>• Specific purchase types</li></ul>
Relative-job-level	~Ascends HR supervisor hierarchy ~Based on job level relative to requester's job level	Require approvals at least four levels up <ul style="list-style-type: none"><li>• Pay changes</li></ul>





# Actions/Action Types

Action	Description	Example
Manager-then-Final-Approver	~Ascends HR supervisor hierarchy ~Supervisor and final approver are required to approve	Require approval up to first supervisor and level six final approver <ul style="list-style-type: none"><li>•Capital with CFO approval</li></ul>
Supervisory-Level	Ascends HR supervisor hierarchy a specified number of levels	Require approvals up to three supervisors <ul style="list-style-type: none"><li>•Expenses</li></ul>



# Actions/Action Types

Action	Description	Example
HR-Position	Ascends HR position hierarchy up to a specified position	Require approvals up to Accounting Manager <ul style="list-style-type: none"><li>•HR approvals</li></ul>
Approver-Group Chain-of-Authority	~Ascends custom approver hierarchy ~Builds chain-of-authority type approver list	If transaction item is related to a project <ul style="list-style-type: none"><li>•Approver groups based on project roles</li></ul>



# Actions/Action Types

Action	Description	Example
Final-Authority	Grants final authority to an approver by ending the approval chain when target approver is reached	If Approver is Susan Behn, allow final approval <ul style="list-style-type: none"><li>•VP Approval</li></ul>
Pre and Post Chain-Of-Authority	Approvers are added before or after normal chain-of-authority list build for a transaction	Require IT pre-approval for hardware purchase <ul style="list-style-type: none"><li>•Accounting and Technical</li></ul>





# Static Approver Group

- Approver Types – User, Employee, Position

Attributes | Conditions | Action Types | **Approver Groups**

Setup: Approver Groups >

**Create New Approver Group**

\* Indicates required field

\* Name

\* Description

\* Order Number

Voting Method

**Usage Type**

Query

Dynamic Approver Group requires a SQL.

---

**Group Members**

Enter members for the static approver group.

Approver Type	Approver	Order Number	Delete
<input type="text" value="HR People"/>	<input type="text" value="Stockman, Pat"/>	<input type="text" value="1"/>	<input type="button" value="Delete"/>

# Dynamic Approver Group

- Get key members with role “Project Manager” for each project on invoice distributions

The screenshot shows the Oracle Approver Groups configuration interface. The top navigation bar includes 'Rules', 'Test Workbench', and 'Setup'. Below this, there are tabs for 'Attributes', 'Conditions', 'Action Types', and 'Approver Groups'. The current view is 'Setup: Approver Groups >'. An information message states 'The query is valid.' Below this, the 'Create New Approver Group' section is active. It includes a legend '\* Indicates required field' and buttons for 'Cancel', 'Create Another (1)', and 'Apply'. The configuration fields are: '\* Name' (SB Project Manager), '\* Description' (SB Project Manager based on project id on invoice distribution), '\* Order Number' (1), 'Voting Method' (Order Number), 'Usage Type' (Dynamic), and 'Query' (select 'person\_id'||resource\_source\_id from pa\_project\_parties\_v p, ap\_invoice\_distributions\_all invd WHERE invd.invoice\_id = :transactionId and p.project\_id = invd.project\_id and p.project\_role\_meaning = 'Project Manager' and p.end\_date\_active is null). A red box highlights the value 'Project Manager' in the query. A 'Validate' button is at the bottom right. A note at the bottom states 'Dynamic Approver Group requires a SQL.'



# Rules

- Represent the translation of an organization business approval rule in AME
- Associate one or more conditions to a rule
  - When the rule applies
- Select an **action type** to build approver list
  - What to do when the conditions are met



# Rule Types

- List Creation
  - Generate Chain-of-Authority Approver Lists
    - IF INVOICE\_AMOUNT > \$500K , THEN REQUIRE APPROVALS UP TO 2 SUPERVISORS
- List-Creation Exceptions
  - Uses one ordinary condition and one exception condition
    - IF INVOICE\_AMOUNT < 1000 AND (Exception) COST\_CENTER IS IN (0743) THEN REQUIRE APPROVALS UP TO 2 SUPERVISORS
- Combination
  - Combination of actions
    - IF REQUESTER IS 'JOHN DOE', REQUIRE PRE-APPROVAL FROM TEAM LEAD, POST-APPROVAL FROM AP MANAGER



# Rule Types

- List-Modification
  - Used to extend or reduce final approver authority
    - IF INVOICE\_AMOUNT > 5000 AND PAYGROUP IS 'COMPEQUIP' AND ANY APPROVER IS GERALD JONES GRANT FINAL AUTHORITY
- Substitution
  - Allows an approver on approver list to be substituted for another person
    - IF ANY APPROVER IS GERALD JONES, THEN SUBSTITUTE SUSAN BEHN FOR THE APPROVER
- Pre- and Post-List
  - Approvers are inserted either before or after the normal chain-of-authority approver list
    - IF LINE-TYPE IS 'TAX', THEN REQUIRE PRE-APPROVAL FROM TAX DEPARTMENT



# Rule Example

- Standard Invoice > \$10K needs approval by 1 superior plus CEO

Rules >		
<b>Rule: Invoice Needs CEO Approval</b>		
Name	Invoice Needs CEO Approval	End Date 31-Dec-4712
Rule Type	List Creation	
Item Class	Header	
Start Date	14-Nov-2002	
<b>Conditions</b>		
Condition	Condition Type	Item Class
SUPPLIER_INVOICE_AMOUNT is greater than 10000,USD	Ordinary	Header
TRANSACTION_SET_OF_BOOKS_ID is equal to 1	Ordinary	Header
SUPPLIER_INVOICE_TYPE_LOOKUP_CODE in (STANDARD, Standard, standard)	Ordinary	Header
<b>Actions</b>		
Action Type	Action	
Supervisory level	Require approvals up to the first superior.	
approval-group chain of authority	Require approval from Operations CEO	





# Testing Workbench

- 11i.AME.B provides a testing workbench to allow defined business rules to be evaluated and tested against transactions
- Testing workbench allows user to verify various aspects of setups
  - Are attribute values, particularly custom attributes, retrieving values correctly?
  - Does the invoice satisfy the appropriate rule?
  - Is the proper approver chain being generated for the transaction based on the rule chosen?
- Examples will be shown in Business Cases later in this presentation

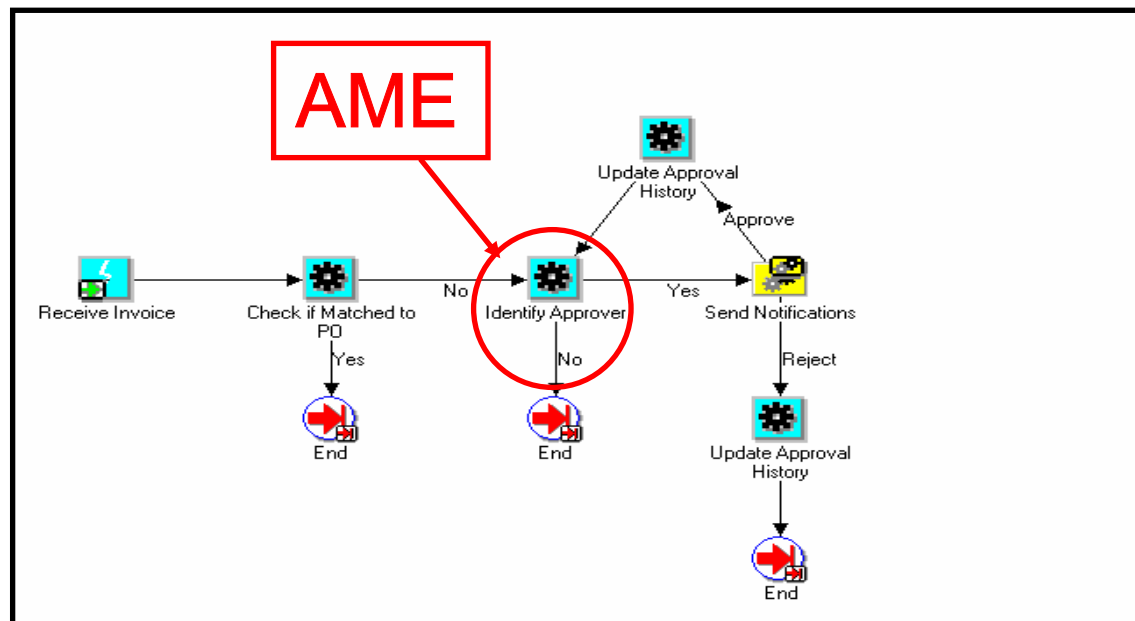


# AME and Approval Workflows

- Approval routing is controlled by AME rules via workflow
- Approval workflow sends request to AME to find approvers
- AME sends person\_id or user\_id back to workflow
- Workflow sends notification to person or user identified by AME
- Workflow continues to send notifications until
  - Approval from authorized approver is reached
  - Invoice is rejected
  - Approver list is exhausted

# AME and Approval Workflow

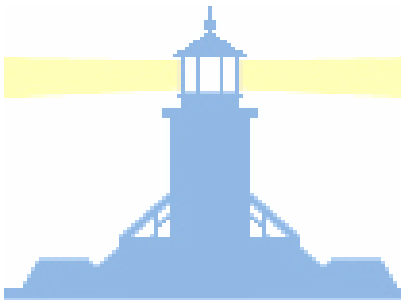
- Invoice Approval Workflow *Identify Approver* node calls the AME API to identify next approver
- Workflow sends the notification





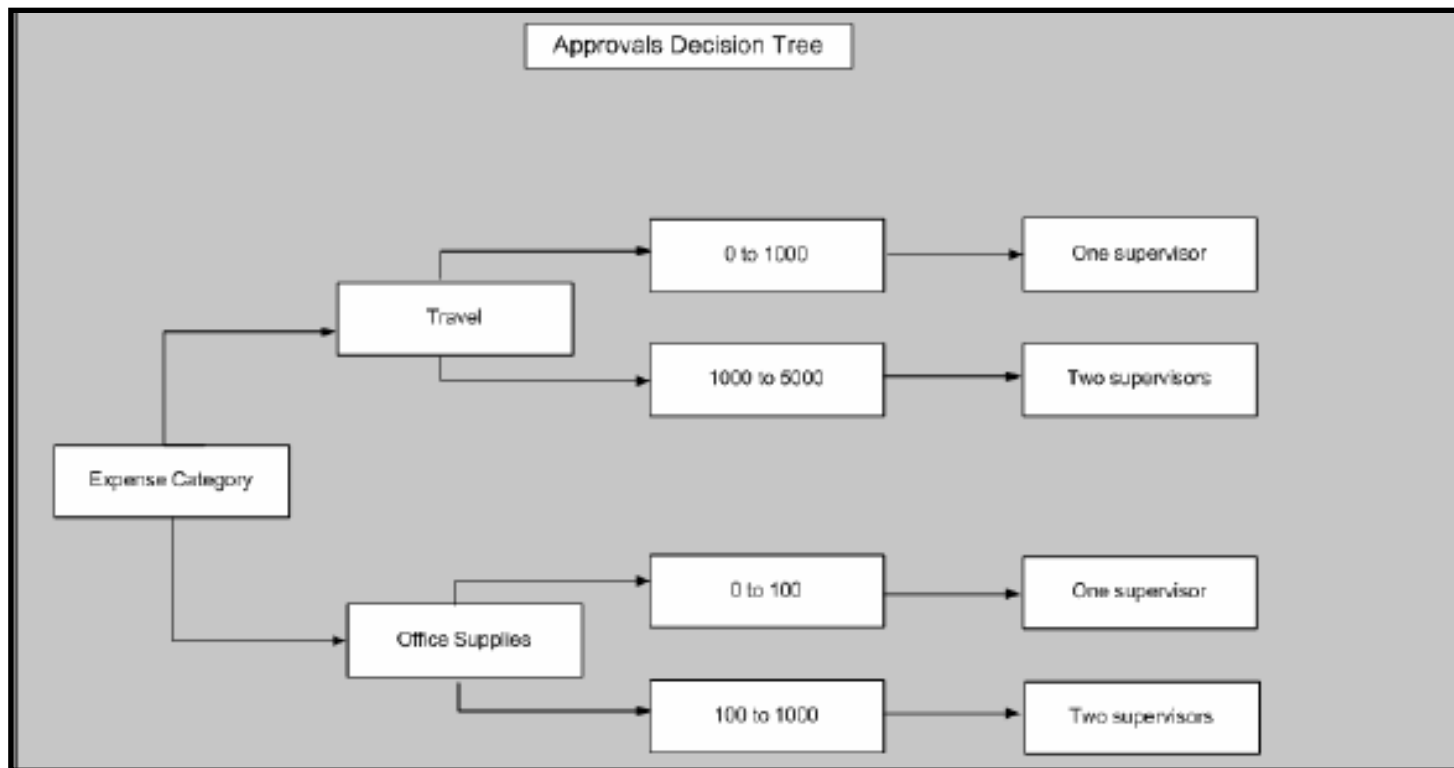
## Planning for AME

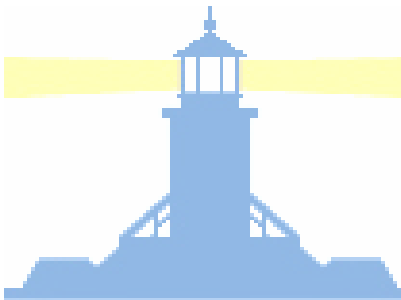
- Plan for all corporate rules using flow charts or decision trees
  - Gain support from the management team and users
  - Provides basis for testing
  - Improves overall logic by identifying combinations
  - Identify alternatives
  - Speeds implementation process
  - Identifies potential problems



# Planning for AME

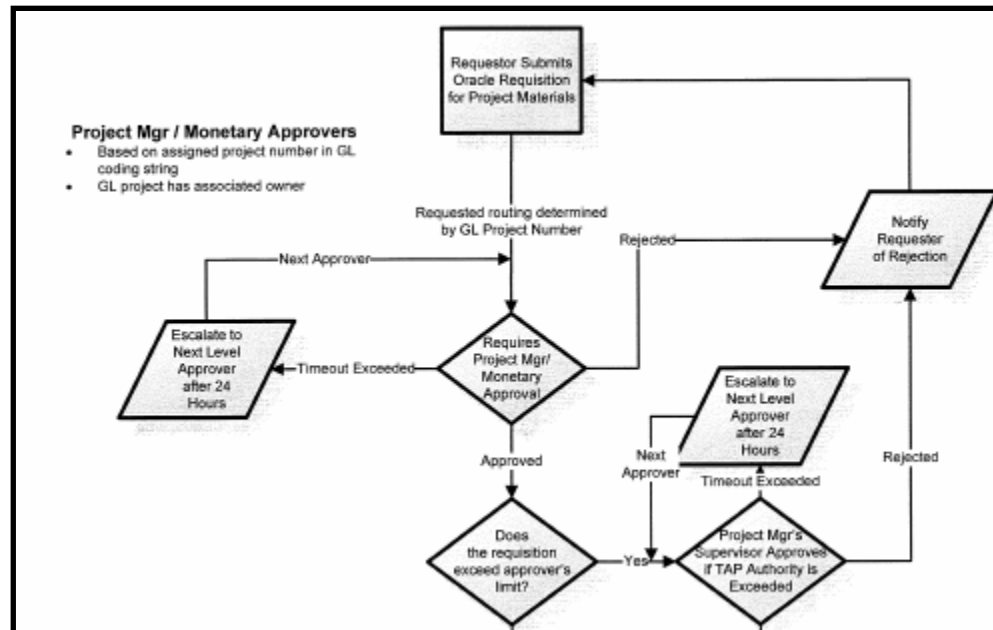
- Sample decision tree






# Planning for AME

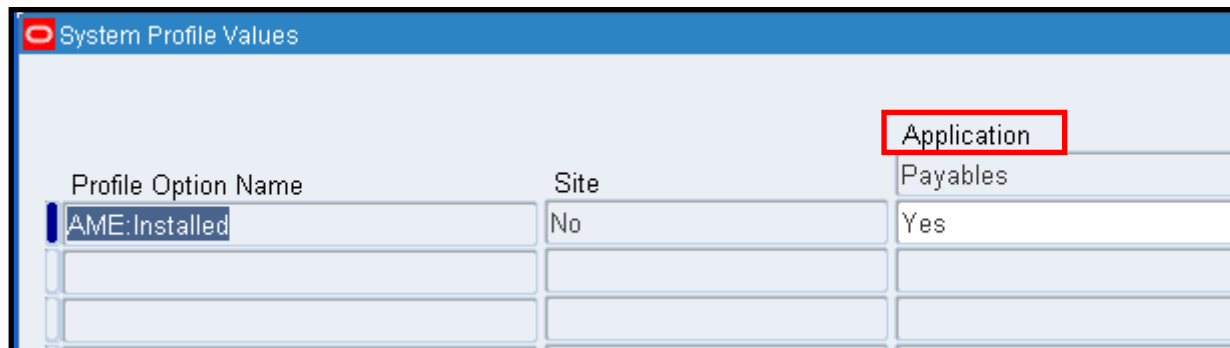
- Sample approval flow





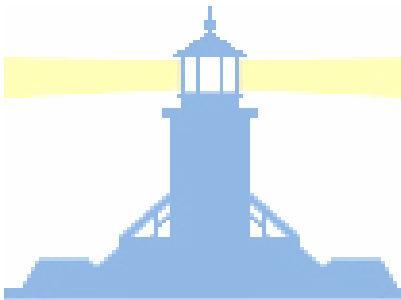
# Payables Expense Reports Setup for AME

- Setup requirements vary by transaction type
  - Refer to the user guide for the application
- Options required for Payables Expense Reports



The screenshot shows a 'System Profile Values' window with a table. The 'Application' column header is highlighted with a red box. The table contains the following data:

Profile Option Name	Site	Application
AME:Installed	No	Yes



# Payables Invoices Setup for AME

- Options required for Payables Invoices

The screenshot shows the 'Payables Options (Payables Manager)' window. The 'Operating Unit' is set to 'Vision Operations'. The 'Approval' tab is selected. The following options are checked:

- Use Invoice Approval Workflow
- Allow Force Approval
- Approval Processing Sequence**
  - Require Validation Before Approval
  - Require Accounting Before Approval

Red arrows point to the checked boxes for 'Use Invoice Approval Workflow', 'Allow Force Approval', and 'Require Validation Before Approval'.

# Purchasing Setup for AME

- Options required for Requisitions
- Enter the approval transaction type for the document type to use AME.
  - PURCHASE\_REQ for Purchase Requisition Approval
  - INTERNAL\_REQ for Internal Requisition Approval

ORACLE Purchasing

Diagnostics Home Logout Preferences Personalize Page

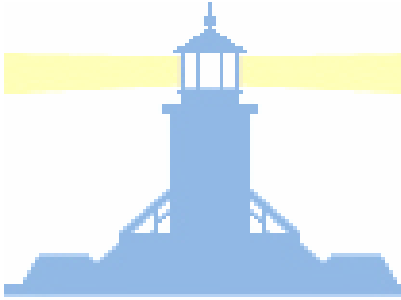
**Update Document Type: Requisition Purchase for Vision Operations**

\* Indicates required field

Cancel Apply

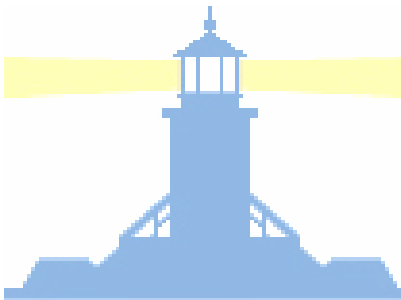
\* Document Name: Purchase Requisition

Approval	Control
<input checked="" type="checkbox"/> Owner Can Approve	Security Level: Public
<input checked="" type="checkbox"/> Approver Can Modify	Access Level: Full
<input type="checkbox"/> Can Change Forward-To	Autocreate Workflow: PO Create Documents
Approval Workflow: PO Requisition Approval	Autocreate Workflow Start Process: Overall Document Creation/Launch
Workflow Start Process: Main Requisition Approval	<input checked="" type="checkbox"/> Use Contract Agreements for Auto-Sourcing
<b>Approval Transaction Type: PURCHASE_REQ</b>	<input type="checkbox"/> Include Non-Catalog Requests
Forward Method: Direct	
Default Hierarchy: Materials	



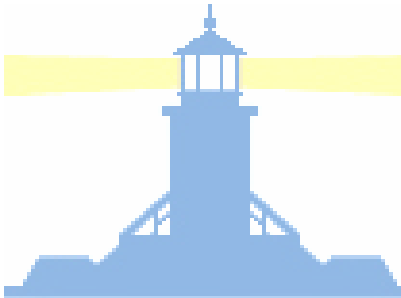
## Business Case 1 - Payables

- Require 1 supervisor approval from invoice requester for any invoice  $\geq$  \$500 and  $\leq$  \$10,000
- Applies only to non-project related
- Applies only to non-PO matched invoices



## Business Case 1 – AME Components

- Transaction Type = Payables Invoice Approval
- Attributes
  - None – attributes used in this rule are seeded
- New Conditions
  - PO\_MATCHED\_INVOICE = N
  - PROJECT\_RELATED\_INVOICE = N
  - SUPPLIER\_INVOICE\_AMOUNT >= \$500 and <= \$10,000
- Actions/Action Types – use existing action types
  - Supervisory Level – Require approvals up to the 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> supervisor
- New Rules
  - Supervisor Rule



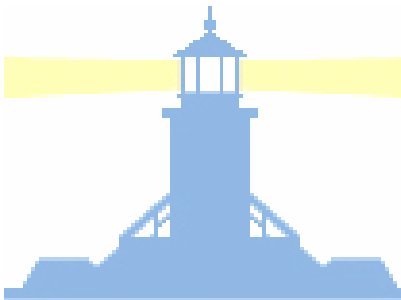
# Business Case 1 - Conditions

- PO Matched Invoice
- Project Related Invoice
- Invoice Amount Range

Condition: PO_MATCHED_INVOICE in (N)	
Condition Type	Ordinary
Item Class	Header
Attribute Name	PO_MATCHED_INVOICE
Data Type	String
Condition	PO_MATCHED_INVOICE in (N)

Condition: PROJECT_RELATED_INVOICE in (N)	
Condition Type	Ordinary
Item Class	Header
Attribute Name	PROJECT_RELATED_INVOICE
Data Type	String
Condition	PROJECT_RELATED_INVOICE in (N)

Condition: SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal t...	
Condition Type	Ordinary
Item Class	Header
Attribute Name	SUPPLIER_INVOICE_AMOUNT
Data Type	Currency
Condition	SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal to 10000,USD



# Business Case 1 - Rule

- Require 1 supervisor level approval

Rules | Test Workbench | Setup

Rules >

**Rule: Simple Invoice between \$500 and \$10,000 Requires Manager Approval**

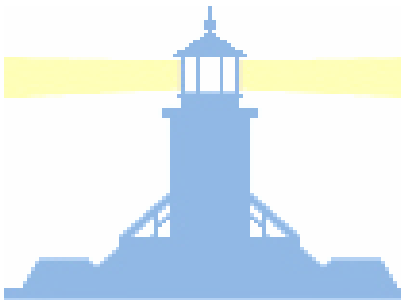
Name	Simple Invoice between \$500 and \$10,000 Requires Manager Approval	End Date	31-Dec-4712
Rule Type	List Creation		
Item Class	Header		
Start Date	28-Sep-2004		

**Conditions**

Condition	Condition Type	Item Class
PO_MATCHED_INVOICE in (N)	Ordinary	Header
PROJECT_RELATED_INVOICE in (N)	Ordinary	Header
SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal to 10000,USD	Ordinary	Header
TRANSACTION_SET_OF_BOOKS_ID is equal to 1	Ordinary	Header

**Actions**

Action Type	Action
Supervisory level	Require approvals up to the first superior.



# Business Case 1 - Test

- Create Invoice
  - Invoice Amount \$2600, Project is null, Invoice is not matched to PO
- Susan Behn is Requester, Pat Stock is Susan's Supervisor

Invoice Workbench (Payables Manager)										
Batch Control Total					Batch Actual Total					
Sbehn										
Type	PO Number	Project	Requester	Trading Pa	Supplier Num	Supplier Site	Invoice Date	Invoice Num	Invoice	Invoice Amount
Standard			Behn, Susan D	Dell Comp	5092	DELL	31-OCT-2007	OOW_AME_CASE1	USD	2,600.00

Num	Type	Amount	GL Date	Account	Project	PO Number
1	Item	2,600.00	31-OCT-2007	01-110-7530-0000-000		



# Testing Workbench

- Get the ID of the transaction
- Run real transaction test
- Enter transaction id and click 'GO'

Rules | Test Workbench | Setup

Test Workbench

Run Real Transaction Test (1)

Test Cases

Create

Select Name	Description	Last Updated	Update	Delete
No results found.				

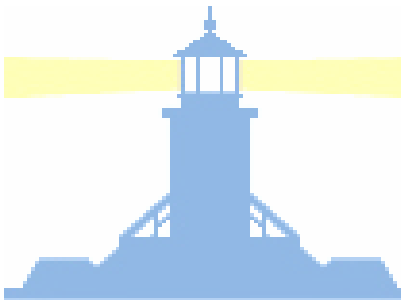
Real Transaction Test

\* Indicates required field

Cancel | Save for Later (1) | Run Test Case (2)

\* Transaction Id  Go

TIP Transaction ID is the ID of a real transaction which AME uses to evaluate rules and generate approvers.



# Testing Workbench

- Scroll down to view values of all attributes
- Click Run Test Case to see test results

Expand All | Collapse All

Focus Transaction Data	Value
Parameters	
Mandatory Attributes	
Header Attributes	
Line Item Attributes	
Cost Center Attributes	
Project Code Attributes	
Distribution Attributes	
Distribution ID: 1369669	
SUPPLIER_INVOICE_DISTRIBUTION_LAST_UPDATE_DATE	31-Oct-2007
SUPPLIER_INVOICE_DISTRIBUTION_PA_ADDITION_FLAG	E
SUPPLIER_INVOICE_DISTRIBUTION_PA_QUANTITY	
SUPPLIER_INVOICE_DISTRIBUTION_PO_BUYER_EMP_NUM	
SUPPLIER_INVOICE_DISTRIBUTION_PO_MATCHED	N
SUPPLIER_INVOICE_DISTRIBUTION_PO_REQUESTER_EMP_NUM	
SUPPLIER_INVOICE_DISTRIBUTION_REFERENCE_1	
SUPPLIER_INVOICE_DISTRIBUTION_REFERENCE_2	
SUPPLIER_INV_DISTRIBUTION_EXPENDITURE_ITEM_DATE	
SUPPLIER_INV_DISTRIBUTION_LINE_TYPE_LOOKUP_CODE	ITEM
SUPPLIER_INV_DIST_PROJECT_ACCOUNTING_CONTEXT	
JOB_LEVEL_NON_DEFAULT_STARTING_POINT_PERSON_ID	
SUPERVISORY_NON_DEFAULT_STARTING_POINT_PERSON_ID	
SUPPLIER_INVOICE_DISTRIBUTION_ASSETS_TRACKING_FLAG	N
SUPPLIER_INVOICE_DISTRIBUTION_COST_CENTER	110
SUPPLIER_INVOICE_DISTRIBUTION_CREATION_DATE	31-Oct-2007
SUPPLIER_INVOICE_DISTRIBUTION_DESCRIPTION	
SUPPLIER_INVOICE_DISTRIBUTION_EXPENDITURE_TYPE	
SUPPLIER_INVOICE_DISTRIBUTION_GL_ACCOUNT	7530
SUPPLIER_INVOICE_DISTRIBUTION_GL_BALANCING	D1

Cancel Save for Later (1) Run Test Case (2)



# Testing Workbench

- Displays Final approver list
- Use + to show details for rules and approvers
- View Approval Process Stages to view additional details such as repeated approvers

Rules | Test Workbench | Setup

Test Workbench > Real Transaction Test >

**Run Real Transaction**

To review the process stages that Approvals Management took to arrive at the applicable rules and approver list, click View Approval Process Stages.

[View Approval Process Stages \(1\)](#)

Transaction ID 155959

**Applicable Rules**

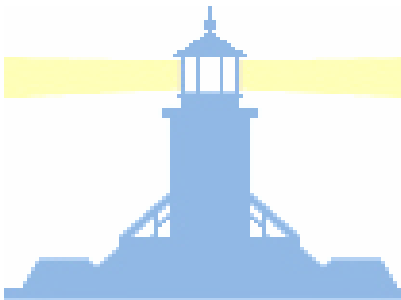
Details	Description	Class	Rule Type	Category
<a href="#">+ Show</a>	Simple Invoice between \$500 and \$10,000 Requires Manager Approval	Header	List Creation	Approver

**Final Processed Approver List**

Details	Order Number	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	1	HR People	Stock, Pat	Approver	

[Return to Test Workbench](#)

[View Approval Process Stages \(1\)](#)



# Testing Workbench

- Rule details expanded
  - Shows rule applied, applicable conditions met and resulting actions
    - \$2,600 invoice with null project and null PO meets conditions

Details	Description	Class	Rule Type	Category
<input type="checkbox"/> Hide	Simple Invoice between \$500 and \$10,000 Requires Manager Approval	Header	List Creation	Approver
	Item Id	155959		
	Start Date	28-Sep-2004		
	End Date	31-Dec-4712		
	Applicable Conditions	PO_MATCHED_INVOICE in (N) PROJECT_RELATED_INVOICE in (N) SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal to 10000,USD		
	Actions	Require approvals up to the first superior.		



# Testing Workbench

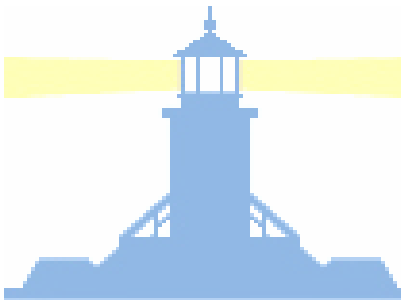
- Approver List Details Expanded
  - Shows why this approver, Pat Stock, was selected

Final Processed Approver List					
Details	Order Number	Approver Type	Approver	Category	Status
<input type="checkbox"/> Hide	1	HR People	Stock, Pat	Approver	
		Item Class	<b>Header</b>		
		Item Id	<b>155959</b>		
		Chain Number	<b>1</b>		
		Sub List	<b>Chain of Authority</b>		
		Action Type	<b>Supervisory level</b>		
		Source	<b>rule generated</b>		
		Source Rules	Simple Invoice between \$500 and \$10,000 Requires Manager Approval		
		Productions			



## Business Case 2 - Payables

- For project related invoices, require pre-approval from key project members in the following roles:
  - Project Manager
  - Director
- Require approval for project related invoices as follows:
  - 500 - 10K      Go up supervisor hierarchy 1 level
  - >10K          Go up supervisor hierarchy 2 levels



## Business Case 2 – AME Components

- Transaction Type = Payables Invoice Approval
- New Conditions
  - SUPPLIER\_INVOICE\_AMOUNT  $\geq$  \$500 and  $\leq$  \$10,000
  - SUPPLIER\_INVOICE\_AMOUNT  $>$  \$10,000
- Actions/Action Types – use existing action types – not new
  - Supervisory Level – Require approvals up to the 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> supervisor
  - Pre-chain-of-authority approvals – pre-approval from approver groups
- New Dynamic Approver Groups to find employee in key role
  - SB\_PROJECT\_MANAGER
  - SB\_DIRECTOR
- New Rules
  - Option 1 \*\*\*This options shown in example on following slides
    - Combination Rule for \$500 to \$10,000
    - Combination Rule  $>$  \$10,000
  - Option 2
    - Pre-Approval Rule
    - Supervisor Rule




## Business Case 2 - Conditions

- **SUPPLIER\_INVOICE\_AMOUNT**  $\geq 500$  and  $\leq 10K$

Condition Type	<b>Ordinary</b>
Item Class	<b>Header</b>
Attribute Name	<b>SUPPLIER_INVOICE_AMOUNT</b>
Data Type	<b>Currency</b>
Condition	<b>SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal to 10000,USD</b>

- **SUPPLIER\_INVOICE\_AMOUNT**  $> 10K$

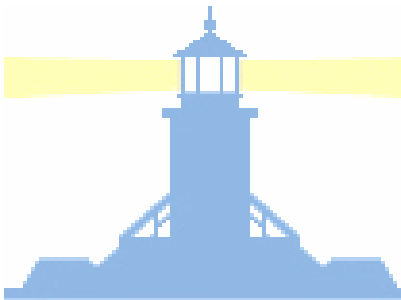
Condition Type	<b>Ordinary</b>
Item Class	<b>Header</b>
Attribute Name	<b>SUPPLIER_INVOICE_AMOUNT</b>
Data Type	<b>Currency</b>
Condition	<b>SUPPLIER_INVOICE_AMOUNT is greater than 10000,USD</b>



## Business Case 2 – Approver Groups

- Create SB\_PROJECT\_MANAGER approver group as shown
- Also Create SB\_PROJECT\_DIRECTOR approver group with 'Director' as role

Name	SB Project Manager
* Description	SB Project Manager based on project id on invoice distribution
* Order Number	1
Voting Method	Order Number
Usage Type	Dynamic
Query	<pre>select 'person_id: '    resource_source_id from pa_project_parties_v p, ap_invoice_distributions_all invd WHERE invd.invoice_id = :transactionId and p.project_id = invd.project_id and p.project_role_meaning = 'Project Manager' and p.end_date_active &gt; sysdate</pre>



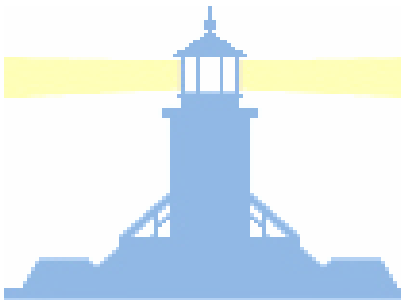
## Business Case 2 - Actions

- Use existing actions and select pre-chain-of-authority-approvals

Use Existing Action Type			
Select Name	Description	Rule Type	
<input checked="" type="radio"/> <a href="#">pre-chain-of-authority approvals</a>	group approvals before the chain of authority	Pre List Approval Group	
<input type="radio"/> <a href="#">post-chain-of-authority approvals</a>	group approvals after the chain of authority	Post List Approval Group	

- Approval Groups will be available as actions

Require pre-approval from SB Project Director		
Require pre-approval from SB Project Manager		



# Business Case 2 - Rules

- Combination Rule for Project Invoices 500 – 10K

**Update Rule: SB Project Related Invoice Approval \$500 - \$10,000 USD**

\* Indicates required field

Item Class: **Header**      \* End Date: 31-Dec-4712

Rule Type: **Combination**

\* Name: SB Project Related Invoice Approval \$500 - \$10,000 USD

\* Start Date: 01-Nov-2007  
(example: 17-Oct-2007)

**Other Instances of this Rule**

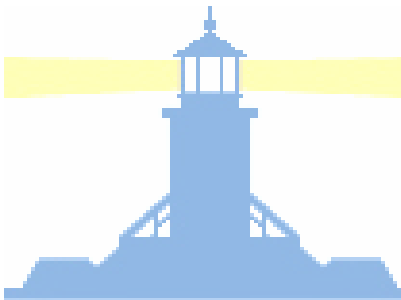
**Conditions**

Condition	Condition Type	Item Class	Remove
TRANSACTION_SET_OF_BOOKS_ID is equal to 1	Ordinary	Header	<input type="button" value="Remove"/>
PO_MATCHED_INVOICE in (N)	Ordinary	Header	<input type="button" value="Remove"/>
SUPPLIER_INVOICE_AMOUNT is greater than or equal to 500 and less than or equal to 10000,USD	Ordinary	Header	<input type="button" value="Remove"/>
PROJECT_RELATED_INVOICE in (Y)	Ordinary	Header	<input type="button" value="Remove"/>

**Actions**

Action Type	Action	Remove
Supervisory level	Require approvals up to the first superior.	<input type="button" value="Remove"/>
pre-chain-of-authority approvals	Require pre-approval from SB Project Manager	<input type="button" value="Remove"/>
pre-chain-of-authority approvals	Require pre-approval from SB Project Director	<input type="button" value="Remove"/>





# Business Case 2 - Rules

- Combination Rule for Project Invoices > 10K

**Update Rule: SB Project Related Invoice Approval > \$10,000 USD**  
 \* Indicates required field

Cancel Apply

Item Class: **Header**      \* End Date: 31-Dec-4712

Rule Type: **Combination**

\* Name: SB Project Related Invoice Approval > \$10,000 USD

\* Start Date: 01-Nov-2007  
(example: 17-Oct-2007)

---

**Other Instances of this Rule**

---

**Conditions**

Add Condition

Condition	Condition Type	Item Class	Remove
TRANSACTION_SET_OF_BOOKS_ID is equal to 1	Ordinary	Header	
SUPPLIER_INVOICE_AMOUNT is greater than 10000,USD	Ordinary	Header	
PROJECT_RELATED_INVOICE in (Y)	Ordinary	Header	
PO_MATCHED_INVOICE in (N)	Ordinary	Header	

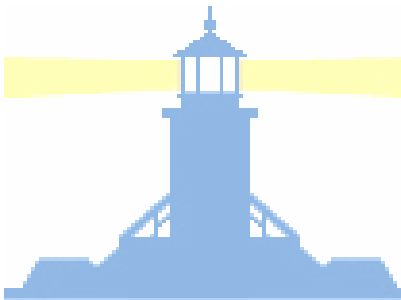
---

**Actions**

Add Action

Action Type	Action	Remove
Supervisory level	Require approvals up to the first two superiors.	
pre-chain-of-authority approvals	Require pre-approval from SB Project Manager	
pre-chain-of-authority approvals	Require pre-approval from SB Project Director	






## Business Case 2 - Test

- Create Invoice with Project on distribution line
- Invoice Amount \$6000 related to Project
- Susan Behn is Requester, Pat Stock is Susan's Supervisor
- Pat Stock is also Project Manager for FP201

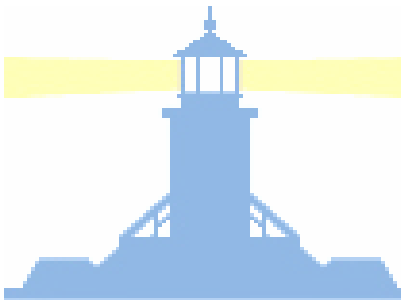
Distributions (Payables Manager) - Vision Operations, OOW\_AME\_CASE2.1, Dell Computers

Line Number

Line Description



Num	Type	Amount	Project
1	Item	6,000.00	FP201



# Business Case 2 - Test

- Run real transaction test
- Note there are only two approvers
  - Expected three approvers - Project Manager, Project Director, Supervisor
- View Approval Process Stages for more details

Rules | **Test Workbench** | Setup

Test Workbench > Real Transaction Test >

**Run Real Transaction**

To review the process stages that Approvals Management took to arrive at the applicable rules and approver list, click [View Approval Process Stages \(1\)](#)

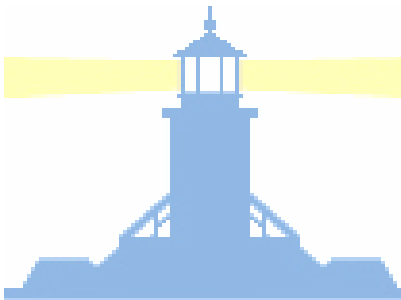
Transaction ID **155960**

**Applicable Rules**

Details	Description	Class	Rule Type	Category
<a href="#">+ Show</a>	SB Project Related Invoice Approval \$500 - \$10,000 USD	Header	Combination	Approver

**Final Processed Approver List**

Details	Order Number	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	1	HR People	Stock, Pat	Approver	
<a href="#">+ Show</a>	2	HR People	Nichols, Nancy	Approver	



# Business Case 2 - Test

- Pat Stock is repeated (Supervisor and Project Manger)
- Repeated approvers are suppressed - Pat will only get approval request once

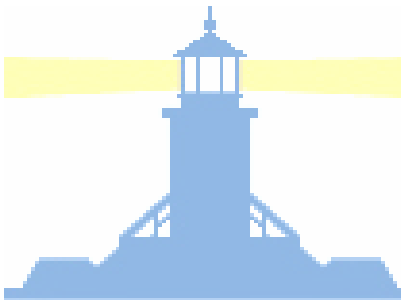
Default Approver List				
Details	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	HR People	Stock, Pat	Approver	
<a href="#">+ Show</a>	HR People	Nichols, Nancy	Approver	
<a href="#">+ Show</a>	HR People	Stock, Pat	Approver	

Approver List After Supressing Repeated Approvers				
Details	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	HR People	Stock, Pat	Approver	
<a href="#">+ Show</a>	HR People	Nichols, Nancy	Approver	
<a href="#">+ Show</a>	HR People	Stock, Pat	Approver	REPEATED

Final Approver List					
Details	Order Number	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	1	HR People	Stock, Pat	Approver	
<a href="#">+ Show</a>	2	HR People	Nichols, Nancy	Approver	



# View Approval History from Invoice

- After initiation of approval

Invoice Approval History (Payables Manager, OOW\_AME\_CASE2.1)

Approval Context	Action Date	Line Num	Action	Approver
Invoice Approval	01-NOV-2007		Sent	Stock, Pat
Invoice Approval	01-NOV-2007		Future	Nichols, Nancy

- After Pat Stock approves

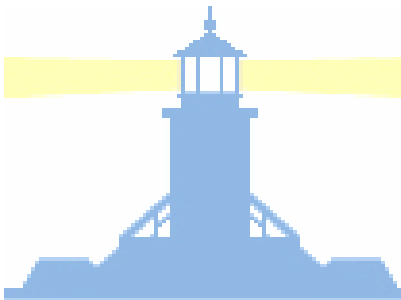
Invoice Approval History (Payables Manager, OOW\_AME\_CASE2.1)

Approval Context	Action Date	Line Num	Action	Approver	Amount Reviewed
Invoice Approval	01-NOV-2007		Sent	Stock, Pat	0.00
Invoice Approval	01-NOV-2007		Approved	Stock, Pat	6,000.00
Invoice Approval	01-NOV-2007		Sent	Nichols, Nancy	0.00



## Business Case 3 - Purchasing

- Requisition approvals are based on supervisor level approvals based on total requisition amount
  - 0 to 25K                      1 Supervisor
  - 25K to 50K                  2 Supervisors
  - 50K to 100K                3 Supervisors
  - > 100K                      4 Supervisors
- New vehicle purchases must be approved by a director level
  - Directors have an approval authority job level = 5
- Pre-approvals are required for some requisitions based on item category
  - Computer PC and Server purchases must be pre-approved by the IT manager



## Business Case 3 – AME Components

- Transaction Type = Purchase Requisition Approval
- Attributes
  - None – attributes used in this rule are seeded
- New Conditions
  - ITEM\_CATEGORY = AUTOMOTIVE.VEHICLE
  - ITEM\_CATEGORY in COMPUTER.{PC, SERVER}
  - REQUISITION\_TOTAL – Create conditions for each range
- Approval Groups
  - IT Approver - approval group for IT purchases
- New Rules
  - Supervisor rules based on requisition total
  - Pre-Approval rule for computer purchases
  - Absolute Job Level rule for vehicle purchases



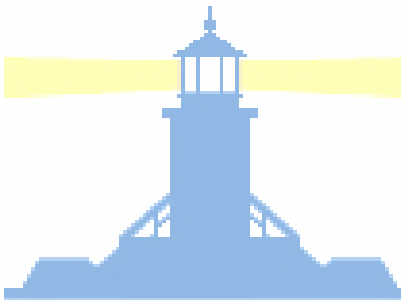
# Business Case 3 - Conditions

- Item Category Conditions
  - Vehicle
  - Computer Equipment

Condition ▲	Item Class	Condition Type
<a href="#">ITEM_CATEGORY in (425.00, AUTOMOTIVE.VEHICLE)</a>	Line Item	Ordinary
<a href="#">ITEM_CATEGORY in (COMPUTER.PC, COMPUTER.SERVER)</a>	Line Item	Ordinary

- Requisition Total Conditions

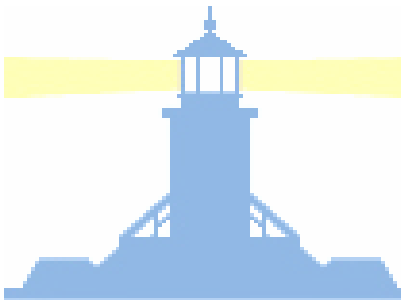
Condition ▲	Item Class	Condition Type
<a href="#">REQUISITION_TOTAL is greater than 100000,USD</a>	Header	Ordinary
<a href="#">REQUISITION_TOTAL is greater than 25000 and less than or equal to 50000,USD</a>	Header	Ordinary
<a href="#">REQUISITION_TOTAL is greater than 50000 and less than or equal to 100000,USD</a>	Header	Ordinary
<a href="#">REQUISITION_TOTAL is greater than or equal to 0 and less than or equal to 25000,USD</a>	Header	Ordinary



# Business Case 3 – Approval Group

- Approval Group for IT Purchases

Approval Group <a href="#">Return to Top</a>					
Details	Name	Description	Type	Order Number	Voting Regime
<a href="#">Hide</a>	IT Approver	Approver required for all IT Purchases	Static	1	Serial
Members					
Name		Approver Type	Order Number		
Stockman, Pat		HR People	1		



# Business Case 3 – Rules

- Requisition Total Rules
  - Rule 1 shown
  - Rules 2-4 similar with different ranges and action

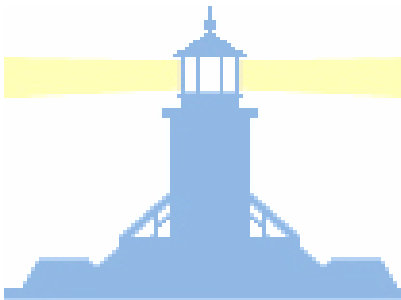
Rules	Test Workbench	Setup
Rules >		
<b>Rule: VO Supervisor Rule 1, 0-25K</b>		
Name	VO Supervisor Rule 1, 0-25K	End Date 31-Dec-4712
Rule Type	List Creation	
Item Class	Header	
Start Date	21-Jul-2004	
<b>Conditions</b>		
<b>Condition</b>	<b>Condition Type</b>	<b>Item Class</b>
REQUISITION_TOTAL is greater than or equal to 0 and less than or equal to 25000,USD	Ordinary	Header
<b>Actions</b>		
<b>Action Type</b>	<b>Action</b>	
Supervisory level	Require approvals up to the first superior.	



# Business Case 3 – Rules

- Pre-Approval Rule for Computer Purchases

Rules	Test Workbench	Setup
Rules >		
<b>Rule: Computer Purchases Rule</b>		
Name	Computer Purchases Rule	End Date 31-Dec-4712
Rule Type	Pre List Approver Group	
Item Class	Header	
Start Date	01-Nov-2007	
<b>Conditions</b>		
<b>Condition</b>	<b>Condition Type</b>	<b>Item Class</b>
ITEM_CATEGORY in (COMPUTER.PC, COMPUTER.SERVER)	Ordinary	Line Item
<b>Actions</b>		
<b>Action Type</b>	<b>Action</b>	
pre-chain-of-authority approvals	Require pre-approval from IT Approver	



# Business Case 3 – Rules

- Set the Approval Authority Setup → Personnel → Jobs
- Absolute Job Level Rule for Vehicle Purchases

Job Group: Vision Corporation  
Name: DIR300.Director  
Dates: 01-JAN-1987 -  
**Approval Authority: 5**  
 Additional Employment Rights  
 Benchmark Job  
Benchmark Job Name:  
Further Information: Exempt.Professionals...Officials and M [ 30 ]

Buttons: Evaluation, Requirements, Valid Grades

Name: Vehicle End Date: 31-Dec-4712  
Rule Type: Purchase Rule  
Item Class: Header  
Start Date: 01-Nov-2007

Conditions		
Condition	Condition Type	Item Class
ITEM_CATEGORY in (AUTOMOTIVE,VEHICLE)	Ordinary	Line Item

Actions	
Action Type	Action
absolute job level	Require approvals up to at least level 5.

Buttons: Cancel, Back, Step 4 of 4, Finish

# Business Case 3 – Test 1

- Create Requisition for New Car
  - Category = AUTOMOTIVE.VEHICLE – (need job level 5 or above approval)
  - Amount = \$32K – (need approval from 2 supervisors)


**Checkout: Requisition Information**


\* Indicates required field


\* Requisition Description

**Delivery**

Urgent



\* Need-By Date    
(example: 20-Oct-2007 19:45:00)


\* Requester  

\* Deliver-To Location    
[Enter one-time address](#)


Deliver to Maintenance

**Item**

\* Description   

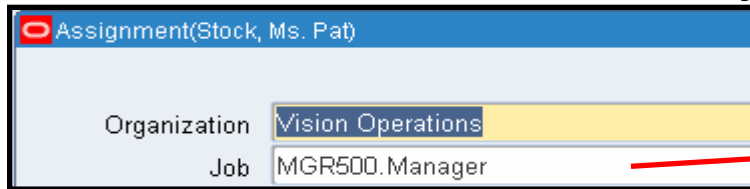
\* Category  

\* Amount

\* Currency  

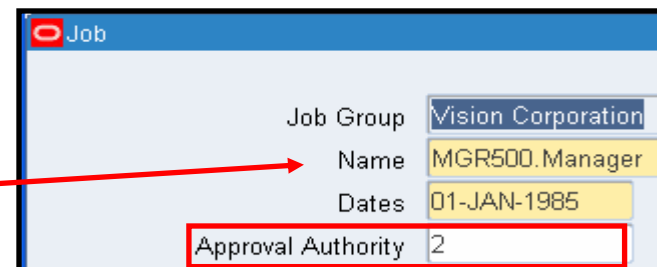
# Business Case 3 – Test 1

- Susan's Supervisor is Pat Stock
  - Pat Stock's Authority



Assignment(Stock, Ms. Pat)

Organization	Vision Operations
Job	MGR500.Manager



Job

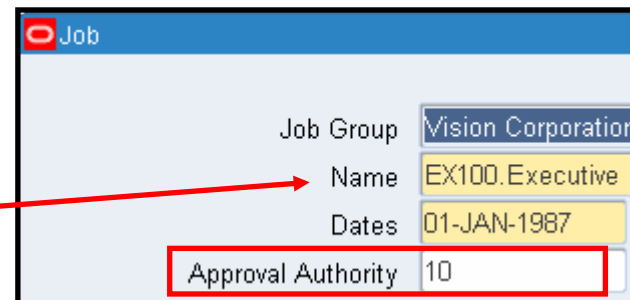
Job Group	Vision Corporation
Name	MGR500.Manager
Dates	01-JAN-1985 -
Approval Authority	2

- Pat Stock's Supervisor is Casey Brown
  - Casey Brown's Authority



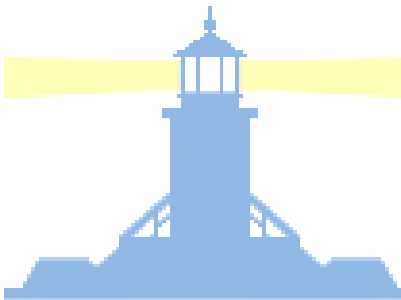
Assignment(Brown, Ms. Casey)

Organization	Vision Corporation
Job	EX100.Executive



Job

Job Group	Vision Corporation
Name	EX100.Executive
Dates	01-JAN-1987 -
Approval Authority	10



# Business Case 3 – Test 1

- Vehicle Purchase Rule and Amount Based Rule 2 apply
- Repeated Supervisors are suppressed

Rules | **Test Workbench** | Setup

Test Workbench > Real Transaction Test >

**Run Real Transaction**

To review the process stages that Approvals Management took to arrive at the applicable rules and approver list, click View Approval Process Stages. [View Approval Process Stages \(1\)](#)

Transaction ID 133980

**Applicable Rules**

Details	Description	Class	Rule Type	Category
<a href="#">+ Show</a>	Vehicle Purchase Rule	Header	List Creation	Approver
<a href="#">+ Show</a>	VO Supervisor Rule 2, 25K - 50K	Header	List Creation	Approver

**Final Processed Approver List**

Details	Order Number	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	1	HR People	Stock, Pat	Approver	
<a href="#">+ Show</a>	2	HR People	Brown, Casey	Approver	



## Business Case 3 – Test 2

- Create Requisition for Computer Purchase
  - Category = COMPUTER.PC – (need IT pre-approval)
  - Amount = \$3K – (need approval from 1 supervisor)

**Checkout: Requisition Information**

\* Indicates required field

\* Requisition Description: New Computer

**Delivery**

Urgent

\* Need-By Date: 06-Nov-2007 00:00:00  
(example: 20-Oct-2007 19:45:00)

\* Requester: Behn, Susan D

\* Deliver-To Location: HR- New York  
[Enter one-time address](#)

Deliver to Maintenance

**Item**

\* Description: Computer - Laptop

\* Category: COMPUTER.PC

\* Amount: 3000

\* Currency: USD

Special Information

# Business Case 3 – Test 2

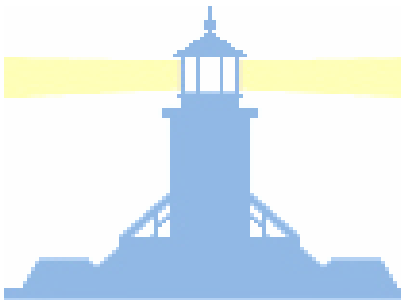
- Computer Purchase Rule applies
  - Pat Stockman from approver group
- Amount Based Rule 1 applies
  - Pat Stock (Susan Behn’s supervisor)

The screenshot displays the Oracle Approvals Management interface. At the top, there are tabs for 'Rules', 'Test Workbench', and 'Setup'. Below the tabs, the breadcrumb path is 'Test Workbench > Real Transaction Test >'. The main heading is 'Run Real Transaction', followed by a description: 'To review the process stages that Approvals Management took to arrive at the applicable rules and approver list, click View Approval Process Stages.' A button labeled 'View Approval Process Stages (1)' is visible. The transaction ID is '134006'. There are two main sections: 'Applicable Rules' and 'Final Processed Approver List'. A red box highlights the 'Computer Purchases Rule' in the 'Applicable Rules' table and the first two rows of the 'Final Processed Approver List' table.

Details	Description	Class	Rule Type	Category
<a href="#">+ Show</a>	VO Supervisor Rule 1, 0-25K	Header	List Creation	Approver
<a href="#">+ Show</a>	Computer Purchases Rule	Header	Pre List Approver Group	Approver

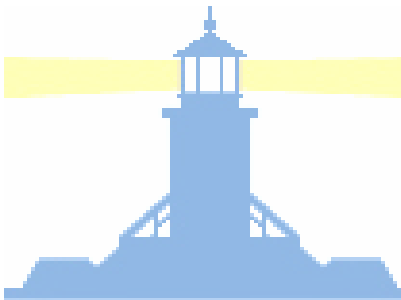
  

Details	Order Number	Approver Type	Approver	Category	Status
<a href="#">+ Show</a>	1	HR People	Stockman, Pat	Approver	
<a href="#">+ Show</a>	2	HR People	Stock, Pat	Approver	



## Advanced Options – Custom Signing Limits

- All purchase requisitions must be approved by each employee in the supervisor chain until an employee is found with sufficient signing limit for the total requisition amount
  - Create an attribute to call a pl/sql function to return the number of levels
  - Create conditions for each level
    - SB\_CUSTOM\_APPRVAL\_LEVEL = 1, 2, 3, ...
  - Create rules for each condition create
    - If SB\_CUSTOM\_APPROVAL\_LEVEL = 1, then require approval from 1 supervisor level



# Advanced Options – Custom Signing Limits

- Create an attribute to call a pl/sql function to traverse the hierarchy and return the number of approval levels

Name	SB_CUSTOM_APPROVAL_LEVEL
Item Class	Header
* Description	Number of supervisor levels required to reach an adequate signing limit from a custom table
Data Type	Number
Approver Type	None
Value Set	
Usage Type	Dynamic
* Value	Select XX_AME_FUNCTIONS.approval_level(:transactionId) from dual

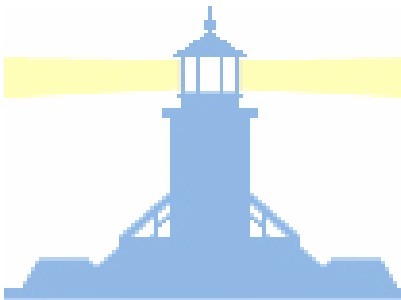
Enter SQL query for dynamic attributes.



# Advanced Options – Custom Signing Limits

- Create conditions for each approval level
  - SB\_CUSTOM\_APPROVAL\_LEVEL = 1, 2, 3, ...

Condition ▲	Item Class	Condition Type
<a href="#">SB_CUSTOM_APPROVAL_LEVEL is equal to 1</a>	Header	Ordinary
<a href="#">SB_CUSTOM_APPROVAL_LEVEL is equal to 2</a>	Header	Ordinary
<a href="#">SB_CUSTOM_APPROVAL_LEVEL is equal to 3</a>	Header	Ordinary
<a href="#">SB_CUSTOM_APPROVAL_LEVEL is equal to 4</a>	Header	Ordinary



# Advanced Options – Custom Signing Limits

- Create rules for each approval level
  - If SB\_CUSTOM\_APPROVAL\_LEVEL = 1, then require approval from 1 supervisor level

Rule: SB_CUSTOM_APPROVAL_LEVEL Level 1		
Name	SB_CUSTOM_APPROVAL_LEVEL Level 1	End Date 31-Dec-4712
Rule Type	List Creation	
Item Class	Header	
Start Date	02-Nov-2007	
Conditions		
Condition	Condition Type	Item Class
SB_CUSTOM_APPROVAL_LEVEL is equal to 1	Ordinary	Header
Actions		
Action Type	Action	
Supervisory level	Require approvals up to the first superior.	



# References

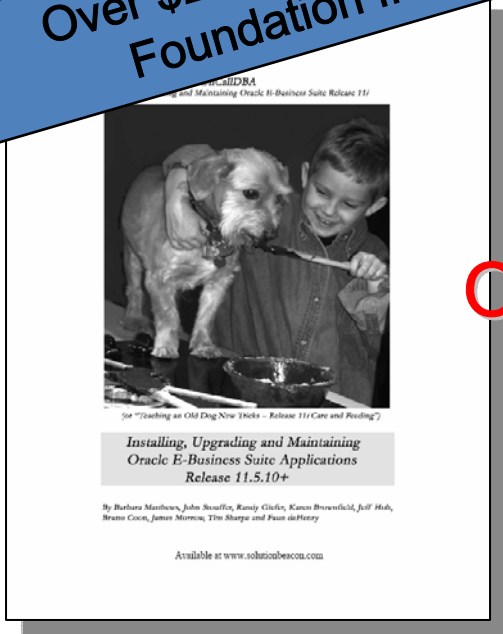
- *Oracle Approvals Management Implementation Guide Rel 11i* Part No. B25324-01, MetaLink Note 336901.1
- *Oracle Approvals Management Developers Guide Release AME.B*, MetaLink Note 289927.1
- *How to Implement the Invoice Approval Workflow*, MetaLink Note 269057.1
- *Oracle Payables Users Guide 11i* Part No. A81180-07
- *Oracle Approvals Management Not Enabled? What does it take to Enabled It?*, MetaLink Note 413300.1
- *About Oracle Approvals Management Minipack B*, MetaLink Note 336004.1



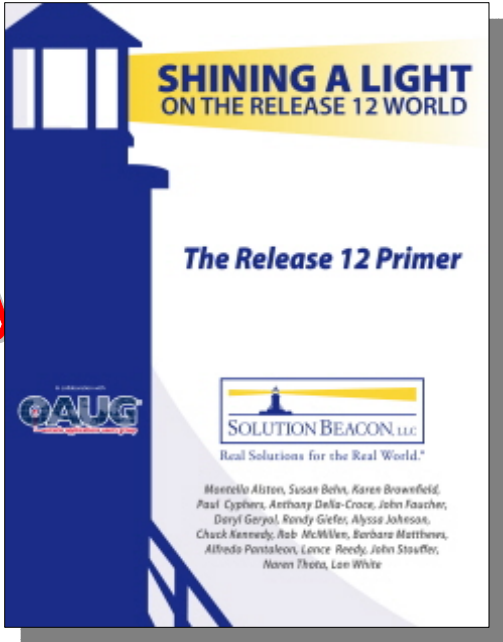
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# Questions and Answers

Thank You!

Susan Behn

[sbehn@solutionbeacon.com](mailto:sbehn@solutionbeacon.com)

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