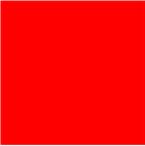




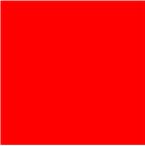
ORACLE®

Customers as Approvers with AME and TCA Hierarchy

Ajoy A. Devadawson
Principal Consultant

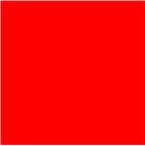


The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.



INTRODUCTION

- About Oracle Consulting
- Profile of Project Organization
- Enterprise Architecture
- Purpose of CRM – Service
- AME and Workflow

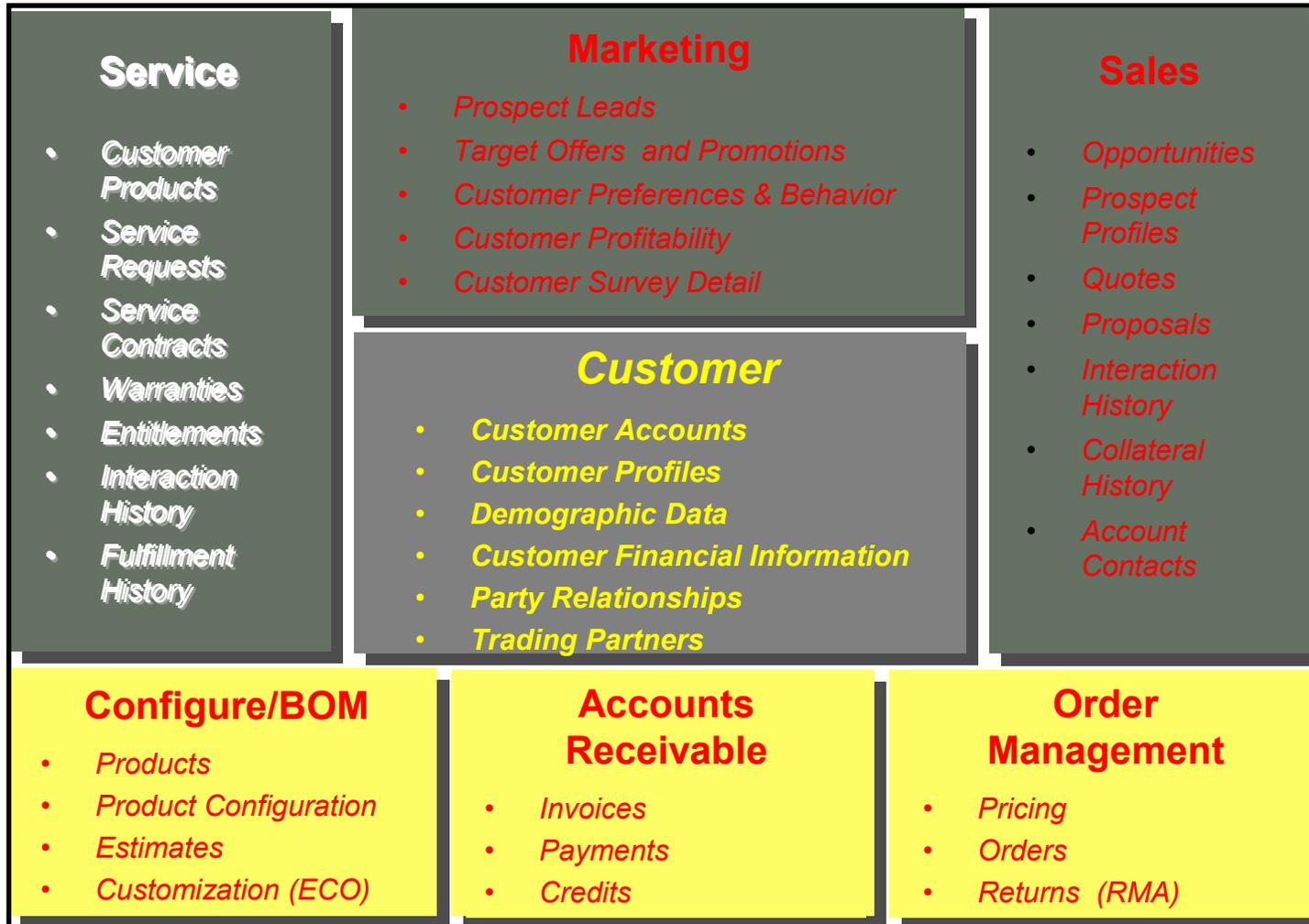


Trading Community Architecture (TCA)

- Data Structure for Customers, Partners, Vendors and their Employees
- Customer Data Management (CDM) with Customers Online, Customer data Librarian and Customer Data Hub
- Party Relationships for Organizations, People and Items
- Third party integration with D&B
- eLocations Spatial data integration in R12



Integrated View of Customer Model



Relationships – Hierarchical & Lateral



The screenshot shows the Oracle Customers Online interface in a Microsoft Internet Explorer browser. The page title is "M29002 HQTRS CO CLR 37 Relationships". The breadcrumb trail is "Home > Customers > Relationships". The main content area displays a table of relationships for the selected organization.

Relationships Table:

Name	Relationship Role	Start Date	Update	Remove
M29001 CLR 37 30	D&B Parent	10-Jul-2007		
M29002 SVC CO CLR 37	Repair Depot Provider	16-Jul-2007		

User Management (UMX) Roles

The screenshot displays the Oracle Applications Administration User Management interface. The page title is "User Details - Microsoft Internet Explorer". The address bar shows the URL: http://dl-dumfries.gcssmc.com:8010/OA_HTML/OA.jsp?page=/oracle/apps/fnd/umx/userAdmin/webui/UserSearchPG&_ri=0&language_code=US&_ti=1064572065&retainAM=Y&ad. The page header includes the Oracle logo and "Applications Administration". Navigation links include Home, Logout, Preferences, Help, and Diagnostics. The main navigation bar shows "User Management" and "Users". The current page is "Update User: msgtwood".

Fields for user details include:

- Prefix
- First Name: **Anthony**
- Middle Name
- Last Name: **Wood**
- Suffix
- * User Name: msgtwood
- Email
- Status: **Active**
- * Active From: 16-Jul-2007
- Active To

Buttons: Cancel, Reset Password, Save, Apply. A "Quick Tips" box states: "Personal information originates from the HR system and cannot be updated here".

Below the user details, there is a section for "Roles" with a note: "Changes can only be made for roles you have been granted administrative privileges." An "Assign Roles" button is present. A table lists assigned roles:

Details	Role	Description	Status	Remove
Show	Purchasing Super User	Oracle Purchasing Super User Responsibility for GUI	Assigned	
Show	GCSS-MC IR Approver 2	GCSS-MC IR Approver 2	Assigned	

Buttons: Cancel, Reset Password, Save, Apply. Navigation links: User Management | Home | Logout | Preferences | Help | Diagnostics. Copyright (c) 2006 Oracle. All rights reserved.

Service Request – Field Service

The screenshot displays the Oracle Applications interface for a Service Request. The window title is "Oracle Applications - DEV4 Conversion (GCEDD) - Cloned from CRP1 on 14-Aug-2007". The main form is titled "Service Request (1000056000004 - Need To Replace Cable Assembly) - America/New_York".

Form Fields:

- Contact Type:** (Dropdown)
- Customer Type:** Organization
- Organization:** M11162-1st BN 5th
- ID#:** (Field)
- Number:** 1000056000004
- First:** (Field)
- Name:** M11162-1st BN 5th
- NIIN:** (Field)
- Reported:** 10-APR-2007 18:12
- Last:** (Field)
- Account:** 1163
- TAMCN:** (Field)
- Type:** Maintenance
- Email:** (Field)
- Number:** 1623
- Instance:** (Field)
- Status:** Open
- Relationship:** (Field)
- Phone:** (Field)
- Phone Type:** (Field)
- Serial:** (Field)
- Priority:** 03
- DCD:** (Field)
- Group:** M11160 Reque
- Owner:** (Field)

Navigation Tabs: Subject, Workbench, Contacts / Addresses, Tasks, Interactions, Related Objects, Service History, Charges, Work Orders.

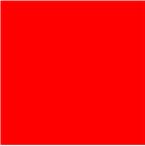
Table:

Date	Number	Type	Status	Priority	Owner	Subject	Description	Publish
10-APR-20...	13000	Maintenance	Assigned	High	M11160 R...	Armour Replace...	Armour Replacement / Upgrade	<input checked="" type="checkbox"/>

Task Details:

- Type:** Maintenance
- Status:** Assigned
- Priority:** High
- Restrict Closure:**
- Owner Type:** Group Resourc
- Owner:** M11160 Reque
- Assignee Type:** Employee Res
- Assignee:** Miller, CW02 R
- Num:** 13000
- Subject:** Armour Replacement / Upgra
- Desc:** Armour Replacement / Upgrade
- Planned Effort:** 1 Day
- Planned Start:** 10-APR-2007 18:00:00
- Scheduled Start:** 12-APR-2007 00:00:00
- Actual Start:** (Field)
- Planned End:** 11-APR-2007 18:00:00
- Scheduled End:** 13-APR-2007 00:00:00
- Actual End:** (Field)
- Duration:** (Field)
- Private:**
- Publish:**

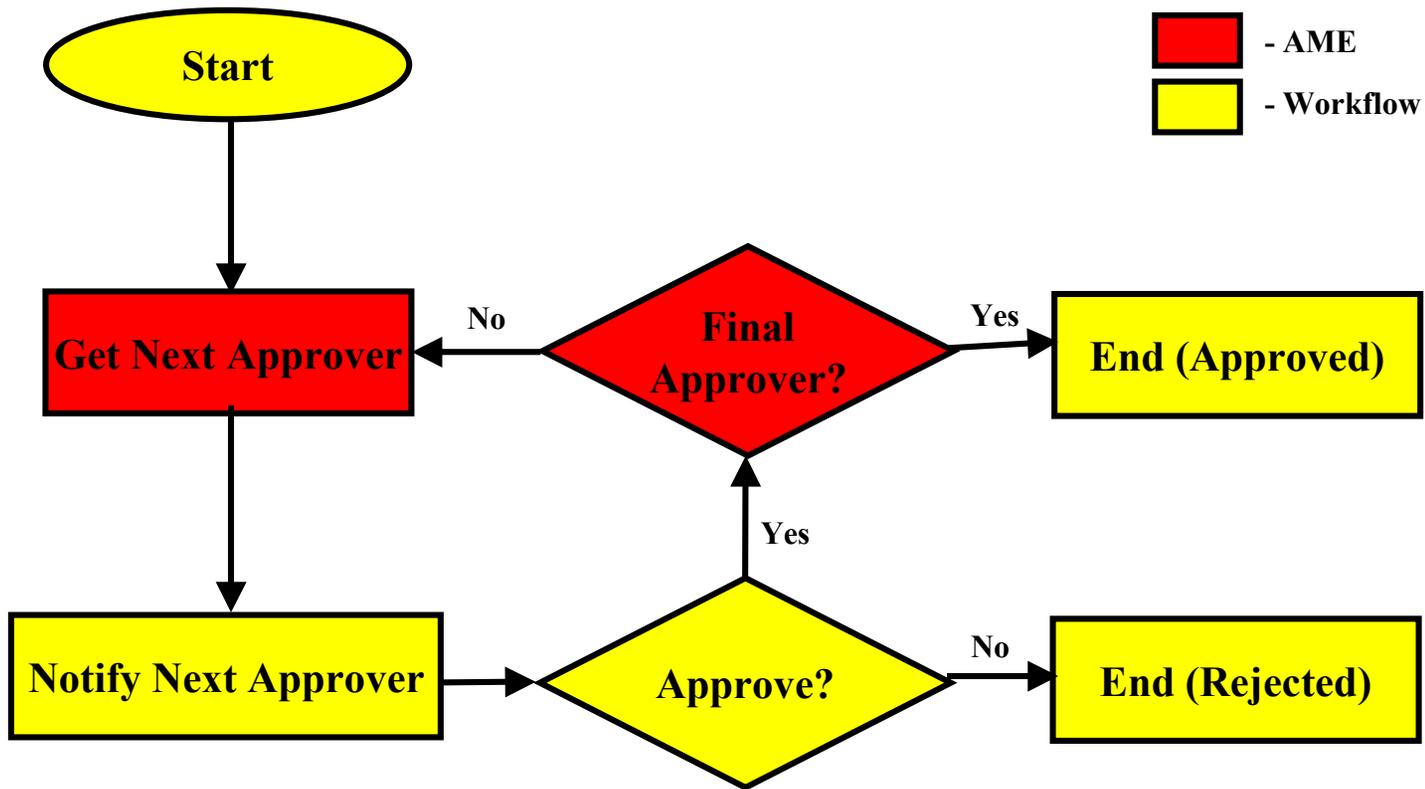
Buttons: Copy Task, Task Notes, Debrief, Use Template, Launch Workflow, More..



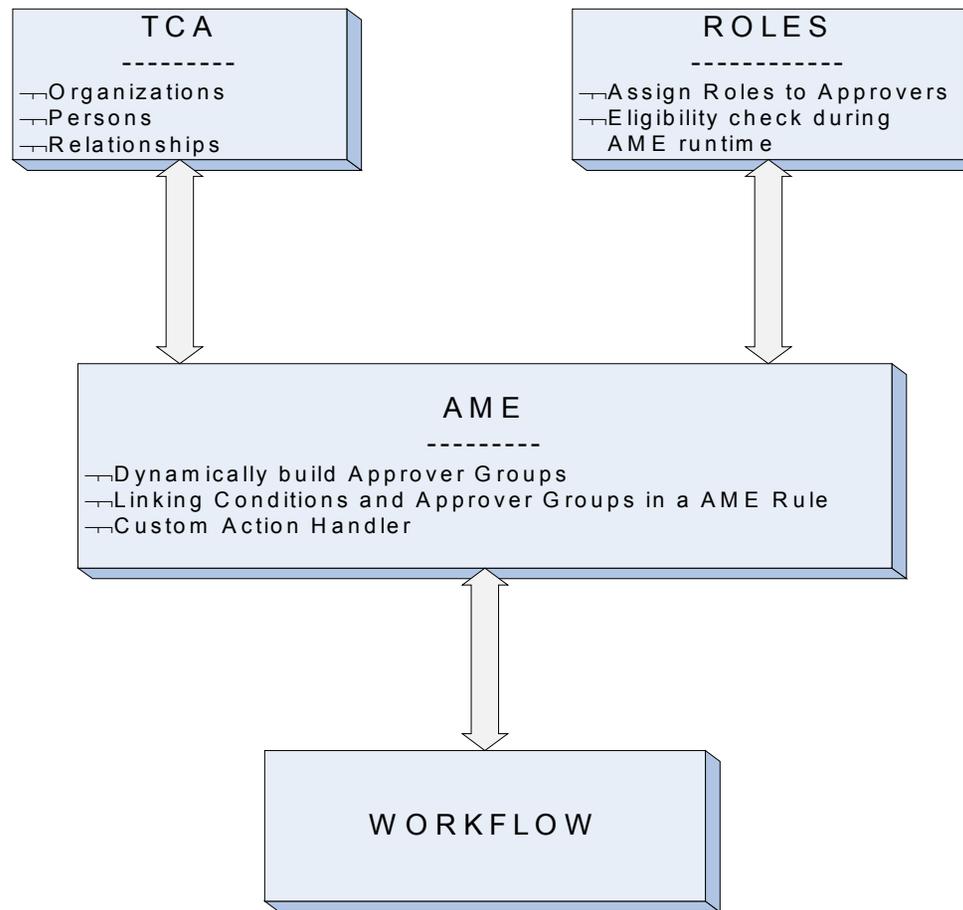
Overview of AME

- Highly extensible approval rules engine
- Design approval rules without/minimal code
- Integrated into eBusiness suite
- Dynamically generate approval list
- Maintains history of approval status

How does AME work?



AME with TCA/UMX



AME Administrator Dashboard

ORACLE
Approvals Management

Warning
Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on.

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

Transaction Types
Filter: Application | Field Service | Go
Create Transaction Type

Name	Transaction Type Key	Application	Update	Delete
XXMC Service Request	SERVEREQ	Field Service		

Unused Approver Groups

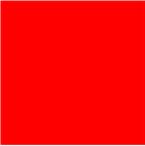
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[Privacy Statement](#)

Quick Links

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



Components of AME

- Attributes (e.g., UMX_ROLE)
- Conditions (e.g., UMX_ROLE in ('XXMC SR Approver A'))
- Action Types (e.g., 'Approval-group chain of Authority', 'HR Position')
- Action Handler (program to build Approver Group based on Action Type)
- Approver Groups (list of approvers who have to approve notifications)
- Rules (link Conditions to Approver Groups)

AME Attribute

The screenshot shows the Oracle Approvals Management web interface in Microsoft Internet Explorer. The browser title is "Update Attribute - Microsoft Internet Explorer". The address bar shows the URL: `http://dl-kellog.gcssmc.com:8010/OA_HTML/OA.jsp?page=/oracle/apps/per/ame/attributes/webui/AttributeUpdatePG&_ti=951796959&retainAM=Y&addBreadCrumb=Y&oapc`. The page header includes the Oracle logo and "Approvals Management" with a transaction type of "XXMC Service Request". Navigation links include "Return to Dashboard", "Home", "Logout", "Preferences", "Help", "Diagnostics", "Rules", "Test Workbench", and "Setup".

The main content area is titled "Update Attribute : UMX_ROLE" and includes a warning message: "Warning: Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on." Below the warning, the form fields are as follows:

- Name: UMX_ROLE
- Item Class: Header
- * Description: UMX Role
- Data Type: String
- Approver Type: None
- Value Set: (empty)
- Usage Type: Dynamic
- * Value: `select XXMC_SR_APPROVAL_UMX_ROLE(:transactionId) from dual`

Buttons for "Cancel", "Apply", and "Validate" are present. The Windows taskbar at the bottom shows the system time as 12:41 AM.

AME Condition

The screenshot shows the Oracle Approvals Management web application interface. The browser window title is "Update Condition - Microsoft Internet Explorer". The address bar shows the URL: http://dl-kellog.gcssmc.com:8010/OA_HTML/OA.jsp?page=/orade/apps/per/ame/conditions/webui/ConditionSearchPG&_ri=800&OAH=AME_BUS_HOMEPAGE_MENU&OASF=1. The page header includes the Oracle logo and "Approvals Management" with the transaction type "XXMC Service Request". Navigation links include "Return to Dashboard", "Home", "Logout", "Preferences", "Help", "Diagnostics", "Rules", "Test Workbench", and "Setup". The main content area shows the "Update Condition: UMX_ROLE in (XXMC SR Approver A)" page. A warning message states: "Warning: Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on." Below this, the condition details are displayed: Condition Type: Ordinary, Attribute: UMX_ROLE, Data Type: String, Item Class: Header. There are "Cancel" and "Apply" buttons. A section titled "Show rules using this condition" contains a table with "String Values". The table has two columns: "String Value" and "Delete". The first row contains "XXMC SR Approver A" and a delete icon. There is an "Add Another Row" button below the table. At the bottom of the page, there are navigation links: "Rules", "Test Workbench", "Setup", "Return to Dashboard", "Home", "Logout", "Preferences", "Help", "Diagnostics", "Privacy Statement", and "About this Page". The footer shows "Copyright (c) 2006, Oracle. All rights reserved." The Windows taskbar at the bottom shows the start button, several open applications, and the system clock showing 1:06 AM.

AME Action Type

ORACLE Approvals Management
Transaction Type: XXMC Service Request

Return to Dashboard Home Logout Preferences Help Diagnostics
Rules Test Workbench Setup

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

Warning
Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on.

Action Types
To reinstate changed configuration details to original values click Revert.

Search
Rule Type: All Go

Use Existing Action Type

Select Name	Description	Rule Type	Order Number	Ordering Mode	Voting Method	Remove
<input checked="" type="radio"/> approval-group chain of authority	chain of authority includes an approval group	Chain Of Authority	1	Serial	Serial	

Actions: approval-group chain of authority

Action	Update	Delete
Require approval from SR Approver A		

Revert (1) Apply

Rules | Test Workbench | Setup | Return to Dashboard | Home | Logout | Preferences | Help | Diagnostics

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About this Page

AME Approver Group

The screenshot displays the Oracle Approvals Management web application in Microsoft Internet Explorer. The browser title is "Update Approver Group - Microsoft Internet Explorer". The address bar shows the URL: `http://dl-kellog.gcssmc.com:8010/OA_HTML/OA.jsp?page=/oracle/apps/per/ame/approvergroups/webui/ApproverGroupsOverviewPG&ri=800&OAH=AME_BUS_HOMEPAGE`. The page header includes the Oracle logo and "Approvals Management" with a transaction type of "XXMC Service Request". Navigation links include "Return to Dashboard", "Home", "Logout", "Preferences", "Help", "Diagnostics", "Rules", "Test Workbench", and "Setup".

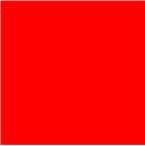
The main content area is titled "Update Approver Group : SR Approver A" and includes a "Warning" message: "Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on." Below the warning, there are "Cancel" and "Apply" buttons. The page is divided into sections: "Attributes", "Conditions", "Action Types", and "Approver Groups". The "Approver Groups" section is active, showing "Setup: Approver Groups" and a "Rules Using the Approver Group" section.

The "Details" section contains the following configuration fields:

- Name: SR Approver A
- * Description: SR Approver A
- * Order Number: 1
- Voting Method: Serial
- Usage Type: Dynamic
- Query:

```
select xxmc_ame_tca_achand.create_list
(:transactionId, 'SERVEREQ', 'XXMC SR Approver A', 1, 1,
null, null) from dual
```

The Windows taskbar at the bottom shows the Start button and several open applications, including "2 Win...", "Microsoft...", "GCSS_M...", "xxmc_a...", "Update ...", "Orade ...", and "Orade S...". The system clock shows 2:22 AM.

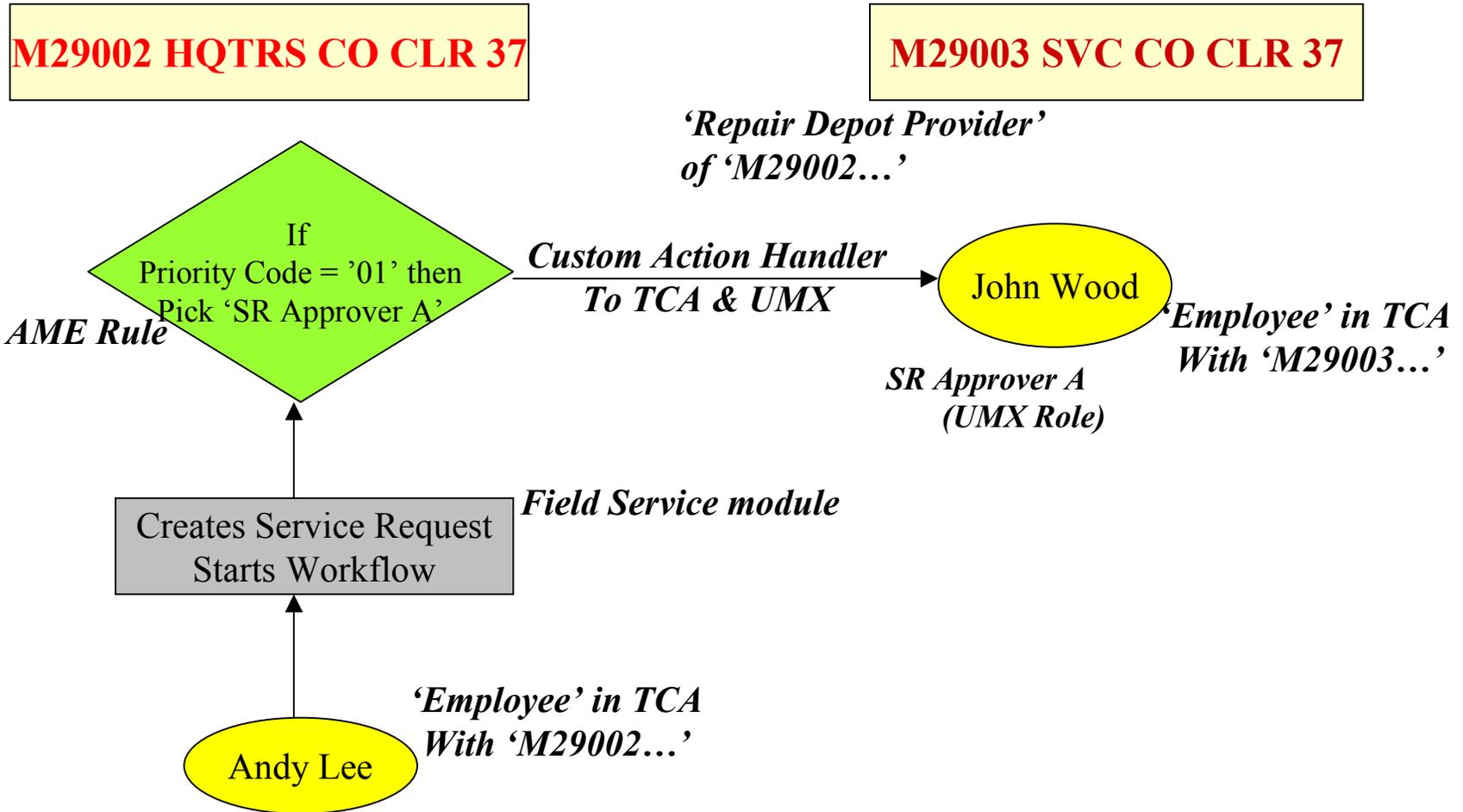


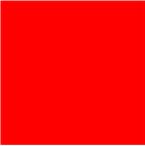
Custom Action Handler

The Custom Handler has the following features:

- Builds Approver Groups of People attached to organizations in TCA
- Recognizes Roles assigned to People
- Callable from within AME module, thereby integrating TCA and UMX modules
- Can climb TCA hierarchy to find next approver who could be in requestor's org or in a higher level org
- Can find another approver who is in another org attached to requestor's org through a relationship

Approval Structure





Action Handler Logic

- Get Organization of document creator from TCA, based on employee/employer relationship.
- Find approvers in that organization with proper UMX Roles.
- If approvers are not found in that organization, go to organization which are related to this one.
- Get approver from that organization and send the approver info back to workflow.
- If approved, check for next approver.
- If rejected, the workflow ends.

AME Rule

ORACLE Approvals Management
Transaction Type: XXMC Service Request

Return to Dashboard Home Logout Preferences Help Diagnostics

Rules Test Workbench Setup

Enter Rule Details Add Conditions Add Actions **Review**

Warning
Low-level logging is currently enabled. Your application will not perform as well while low-level logging is on.

Create New Rule: Review Cancel Back Step 4 of 4 Finish

Name	SR Approver A	End Date	31-Dec-4712
Rule Type	List Creation	Priority	1
Item Class	Header		
Start Date	13-Oct-2007		

Conditions

Condition	Condition Type	Item Class
UMX_ROLE in (XXMC SR Approver A)	Ordinary	Header

Actions

Action Type	Action
approval-group chain of authority	Require approval from SR Approver A

Cancel Back Step 4 of 4 Finish

Rules | Test Workbench | Setup | Return to Dashboard | Home | Logout | Preferences | Help | Diagnostics

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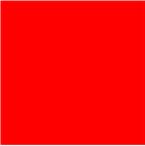
Action Handler SQL Statements

Get Organization of a Document Creator:

```
select hporg.party_id, hporg.party_name, hp.party_name
into l_orgpartyid, l_orgparty, l_perparty
from hz_parties hporg, hz_party_relationships hpr, hz_parties hp
where hp.party_type = 'PERSON'
and hp.person_identifier = p_person_id
and hp.status = 'A'
and hp.party_id = hpr.subject_id
and hpr.party_relationship_type = p_emp_relation
and hpr.status = 'A'
and sysdate between hpr.start_date and nvl( hpr.end_date,
g_endoftime)
and hpr.object_id = hporg.party_id
and hporg.status = 'A'
and hporg.party_type = 'ORGANIZATION';
```

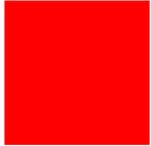
Get Approver from a Organization:

```
select rownum arownum, hpper.person_identifier, hpper.party_name
into l_rownum, l_person_id, l_perparty
from hz_parties hpper, umx_role_assignments_v ura, fnd_user fu,
hz_party_relationships hpr
where hpr.object_id = p_orgpartyid
and hpr.party_relationship_type = p_emp_relation
and hpr.status = 'A'
and sysdate between hpr.start_date and nvl( hpr.end_date,
g_endoftime)
and hpr.subject_id = hpper.party_id
and hpper.status = 'A'
and hpper.party_type = 'PERSON'
and hpper.person_identifier = fu.employee_id
and sysdate between fu.start_date and nvl( fu.end_date, g_endoftime)
and fu.user_id = ura.user_id
and sysdate between ura.active_from and nvl( ura.active_to,
g_endoftime)
and ura.display_name = p_appr_role
and rownum <= p_max_approvers;
```



Useful References

- Approvals Management Responsibilities and Setup in AME.B – Metalink Note # 434567.1
- FAQ on AME – Note # 431815.1
- AME Developer's / Implementation Guide – Note # 289927.1
- TCA Documentation Resources, R12 – Note # 396778.1
- Oracle TCA Best Practices – Note # 269124.1
- Email: ajoy.devadawson@oracle.com



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