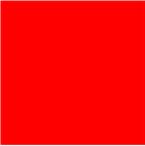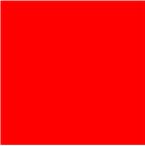# ORACLE®

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.

ORACLE®

INTRODUCTION

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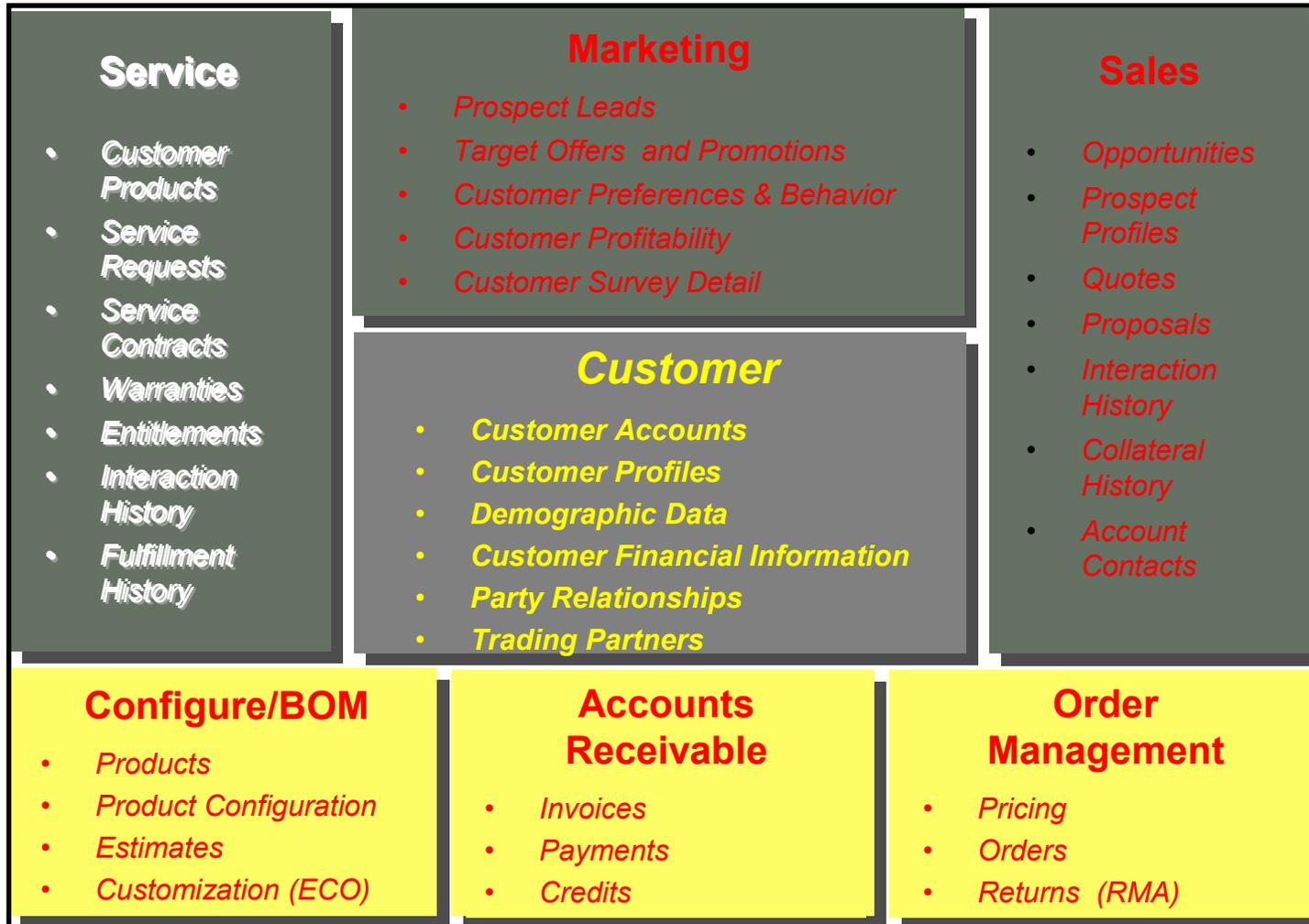- Purpose of CRM – Service
- AME and Workflow

ORACLE®
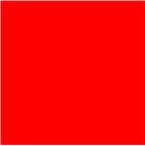
Trading Community Architecture (TCA)

- 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

ORACLE

Integrated View of Customer Model

Service

- Customer Products
- Service Requests
- Service Contracts
- Warranties
- Entitlements
- Interaction History
- Fulfillment History

Marketing

- Prospect Leads
- Target Offers and Promotions
- Customer Preferences & Behavior
- Customer Profitability
- Customer Survey Detail

Sales

- Opportunities
- Prospect Profiles
- Quotes
- Proposals
- Interaction History
- Collateral History
- Account Contacts

Customer

- Customer Accounts
- Customer Profiles
- Demographic Data
- Customer Financial Information
- Party Relationships
- Trading Partners

Configure/BOM

- Products
- Product Configuration
- Estimates
- Customization (ECO)

Accounts Receivable

- Invoices
- Payments
- Credits

Order Management

- Pricing
- Orders
- Returns (RMA)

ORACLE®

Relationships – Hierarchical & Lateral

User Management (UMX) Roles

Service Request – Field Service

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

ORACLE

How does AME work?

Start

Get Next Approver

Notify Next Approver

Final Approver?

Approve?

End (Approved)

End (Rejected)

No

Yes

Yes

No

- AME
- Workflow

ORACLE

AME with TCA/UMX

```
┌─────────────────────────┐        ┌─────────────────────────┐
│          T C A          │        │        R O L E S        │
│       ---------         │        │      ------------       │
│ ¬Organizations          │        │ ¬Assign Roles to Approvers│
│ ¬Persons                │        │ ¬Eligibility check during │
│ ¬Relationships          │        │   AME runtime           │
└─────────────────────────┘        └─────────────────────────┘
            ↕                                  ↕
┌───────────────────────────────────────────────────────────┐
│                          A M E                            │
│                       ---------                           │
│ ¬Dynamically build Approver Groups                        │
│ ¬Linking Conditions and Approver Groups in a AME Rule     │
│ ¬Custom Action Handler                                    │
└───────────────────────────────────────────────────────────┘
                           ↕
                ┌──────────────────────┐
                │     W O R K F L O W  │
                └──────────────────────┘
```
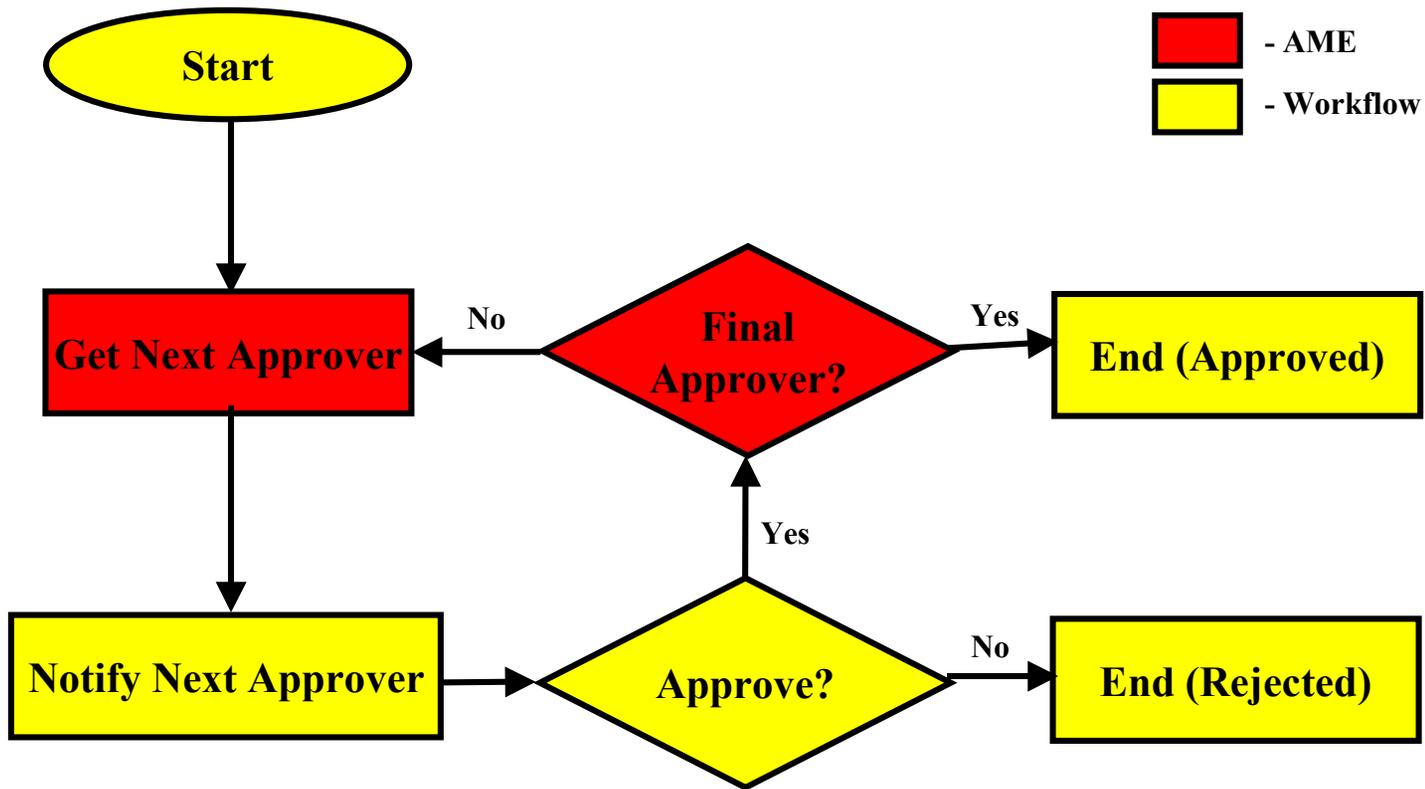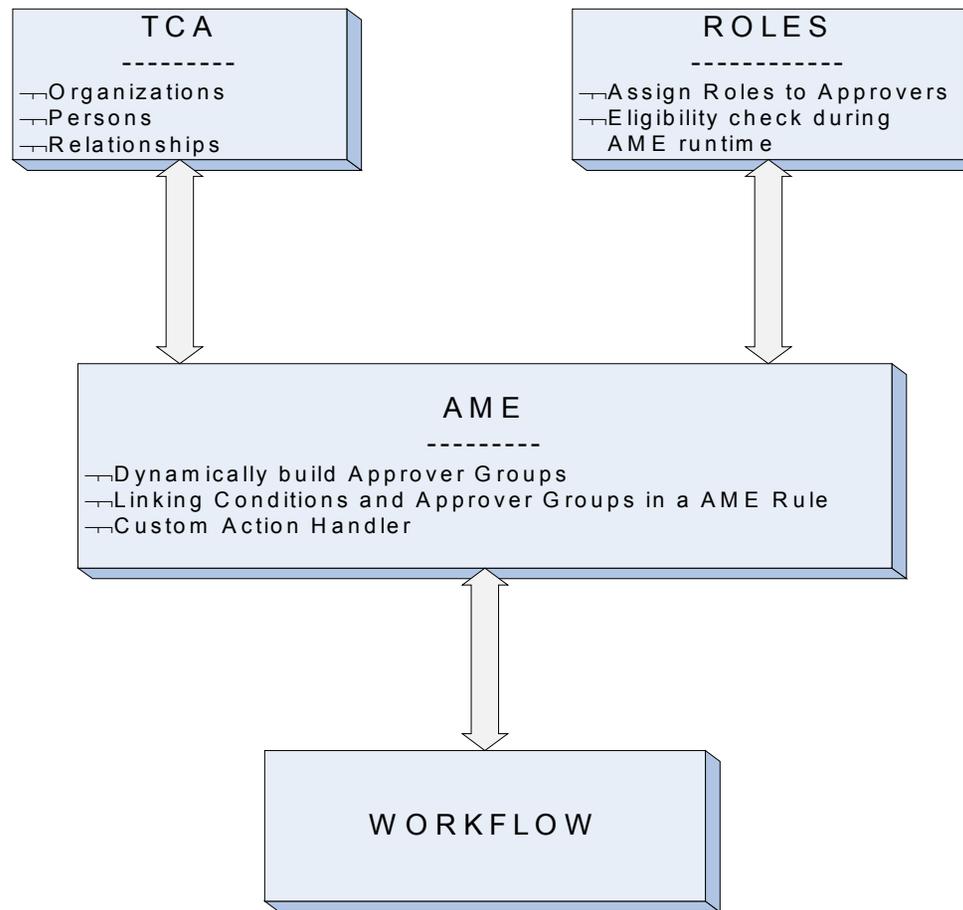
ORACLE

AME Administrator Dashboard

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

AME Condition

AME Action Type

AME Approver Group

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

ORACLE®

Approval Structure

M29002 HQTRS CO CLR 37

M29003 SVC CO CLR 37

'Repair Depot Provider'
of 'M29002…'

If
Priority Code = '01' then
Pick 'SR Approver A'

Custom Action Handler
To TCA & UMX

John Wood

AME Rule

'Employee' in TCA
With 'M29003…'

SR Approver A
(UMX Role)

Field Service module

Creates Service Request
Starts Workflow

'Employee' in TCA
With 'M29002…'

Andy Lee

ORACLE
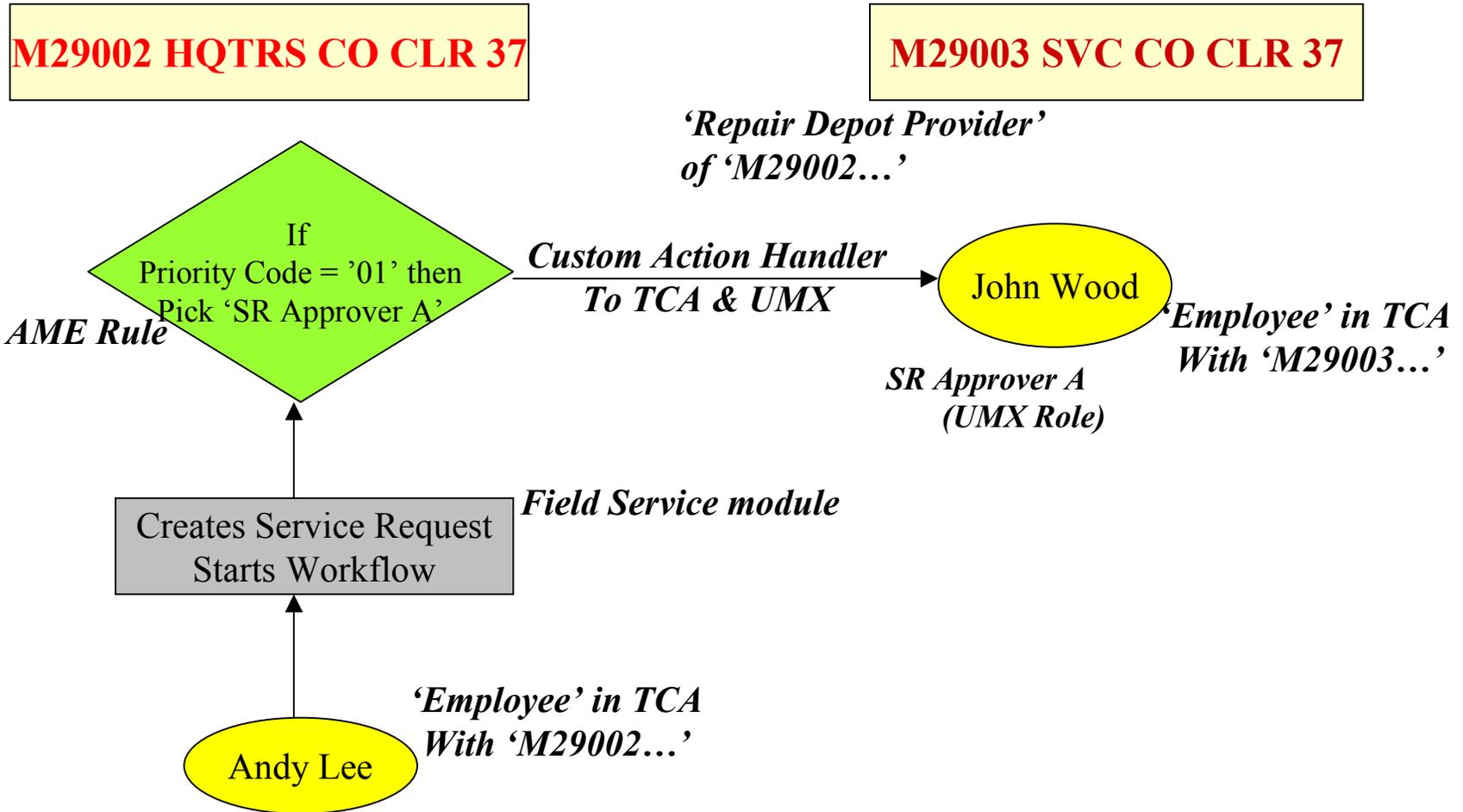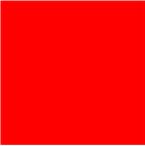
Action Handler Logic

- 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

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;
```
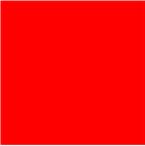
Useful References

- 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
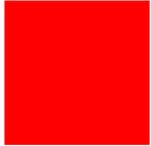
ORACLE

For More Information

search.oracle.com

AME	🔍

or

oracle.com

ORACLE IS THE **INFORMATION** COMPANY

ORACLE®