

R 12 Upgrade Project:  
*An Overview of the Joys and the Pains*

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# Abstract

Explore the lessons learned from an upgrade project to Release 12. This presentation will provide an overview of the accomplishments and issues that arose while upgrading to R12. All aspects of the project including project management, technical aspects, and functional perspective will be presented. Recommendations will also be presented for how to prepare your corporation for an upgrade to R12.

## Goals/Objective

- To provide an overview of the features and benefits in R12 Oracle Applications
- To provide an overview of an existing Oracle Applications Upgrade Project to Release 12 with focus on the knowledge we have gained and the lessons learned.

# Agenda

- Release 12: Benefits and Changes
- Overview of Current R12 Upgrade
- Thoughts on R12 Upgrades
  - Project Timeframe
  - Preparatory Steps
  - What We Have Learned
- Q & A

# Release 12: "The Global Release"





# Release 12: "The Global Release"



## Global Architecture

### Apps Functions

- Multi-Org Access Control (MOAC)
- Subledger Accounting (SLA)
- Ledgers and Ledger Sets

### Database Structures

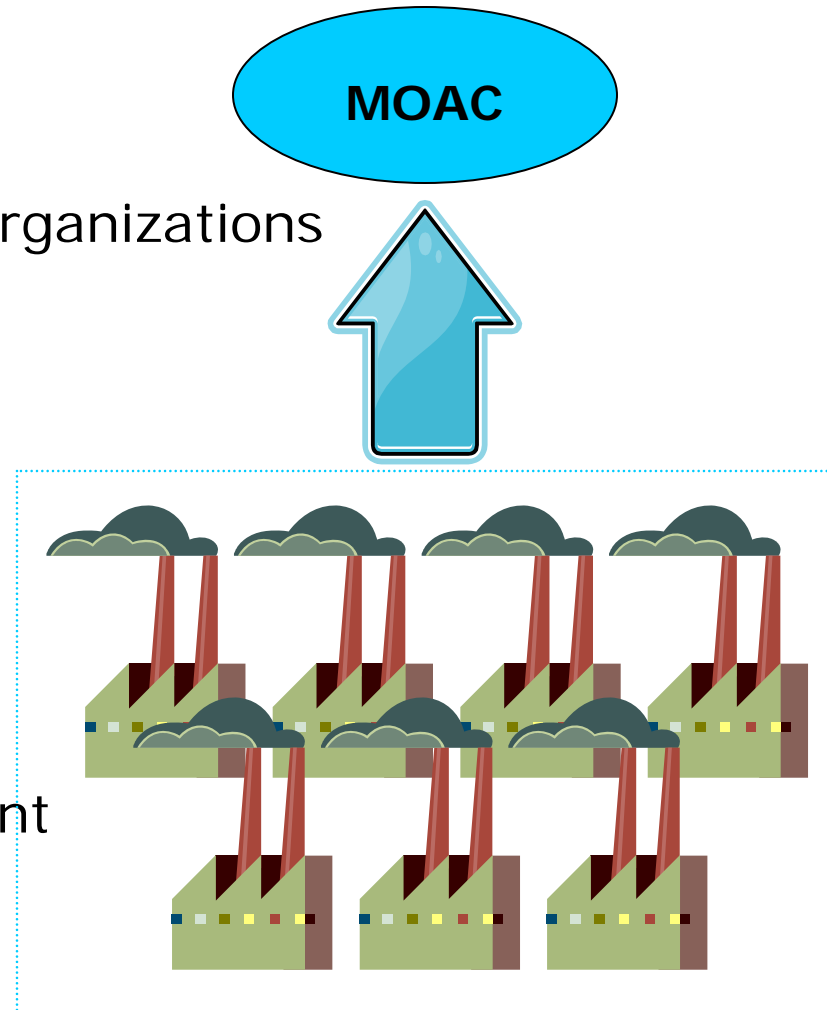
- Trading Community Architecture (TCA)
- Oracle Applications Tablespace Model (OATM)

## Global Business Functions

- New Modules
- E-Business Tax
- Banking Model
- Manufacturing Enhancements

# Release 12: Multi-Organization Access Control

- **What is it?**
  - Centralized Access to All Organizations
- **Why Implement?**
  - Improved Efficiency
- **What is Impacted?**
  - Payables
  - Procurement
  - Supply Chain Management
  - Order Management
  - Customer Data Management
  - Receivables




# Examples of Functions with Multi-Org Access Control:

Area/Module	MOAC Functions
Payables	Funds Disbursement and Receipts
Procurement	Requisitions, Demand, & Purchase Orders
Supply Chain Management	Receiving
Order Management	Order Management
Customer Data Management	Trading Community Architecture (TCA) Credit Card Numbers
Receivables	Billing and Collections



# Examples of Functions with Multi-Org Access Control:

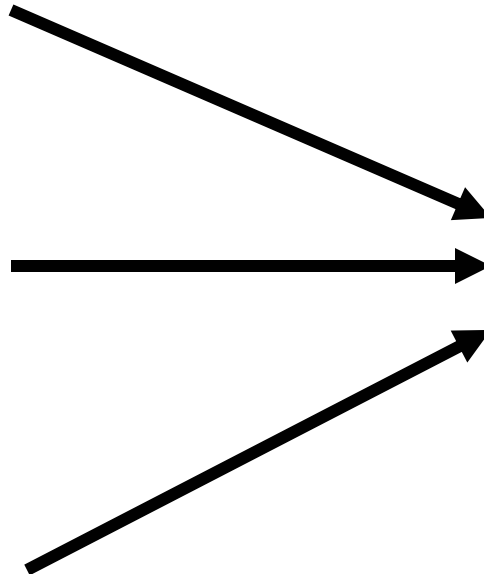
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# MOAC: Centralized Functions by Module

Operating Units



Vendor Invoices



Payables and  
Payments Clerks



Single Responsibility:

- Enter invoices
- Pay invoices

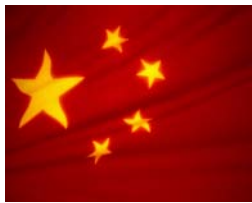
**OR**

Responsibility by OU:

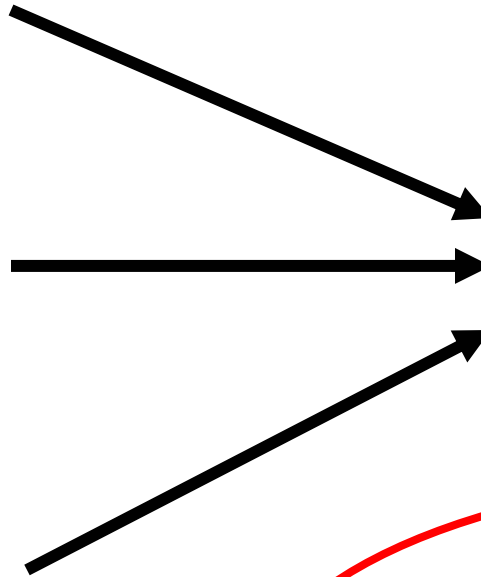
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- Pay invoices

# MOAC: Centralized Functions by Module

Operating Units



Vendor Invoices



Payables and  
Payments Clerks



**Flexible Security**

Single Responsibility:

- Enter invoices
- Pay invoices

**OR**

Responsibility by OU:

- Enter invoices
- Pay invoices



# MOAC: Flexible Security

- Daily Task Access
  - Responsibilities at OU or multi-OU access levels
  - New “templates” for daily functions (ie. Payments) allows for single or multi-OU access
- Reporting
  - Single or Multi-Operating Unit
  - OU parameter added to standard reports
- User Interface
  - Clearly displays operating

# Release 12: "The Global Release"



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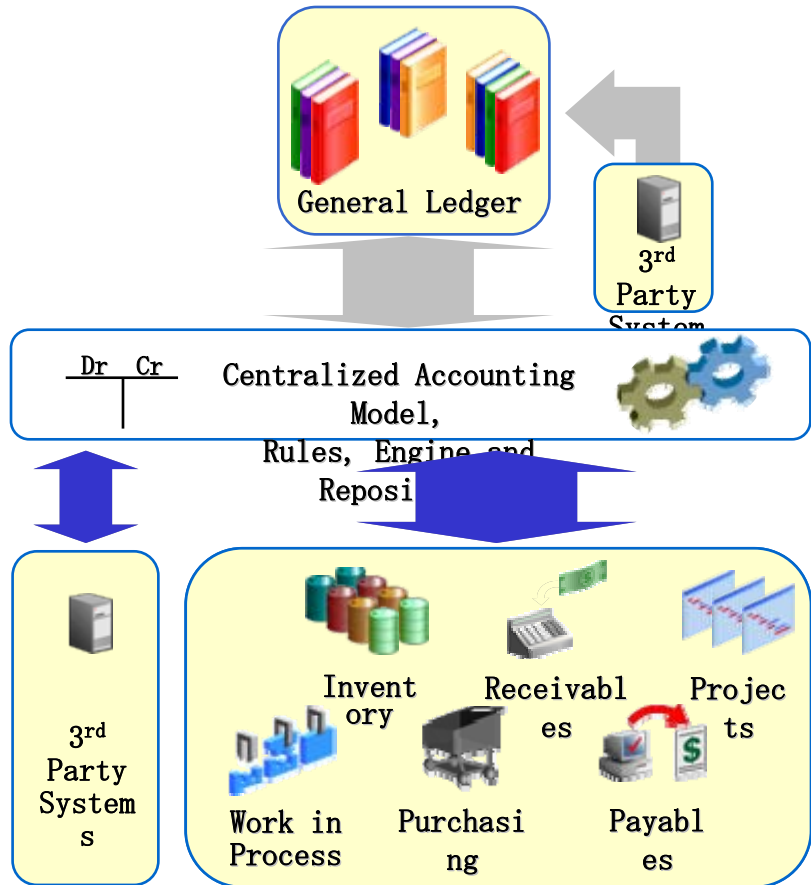
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# Release 12: Subledger Accounting (SLA)



## Subledger Accounting (SLA)

- Accounting Rules
- Ledgers and Ledger Sets
- Reports
- Multiple Representations of same data
- Common Posting to GL (eg. AP and AR)

+Diagram from Burns, Mary (2007); **Overview of the New Financial Architecture in Oracle E-Business Suite Release 12**

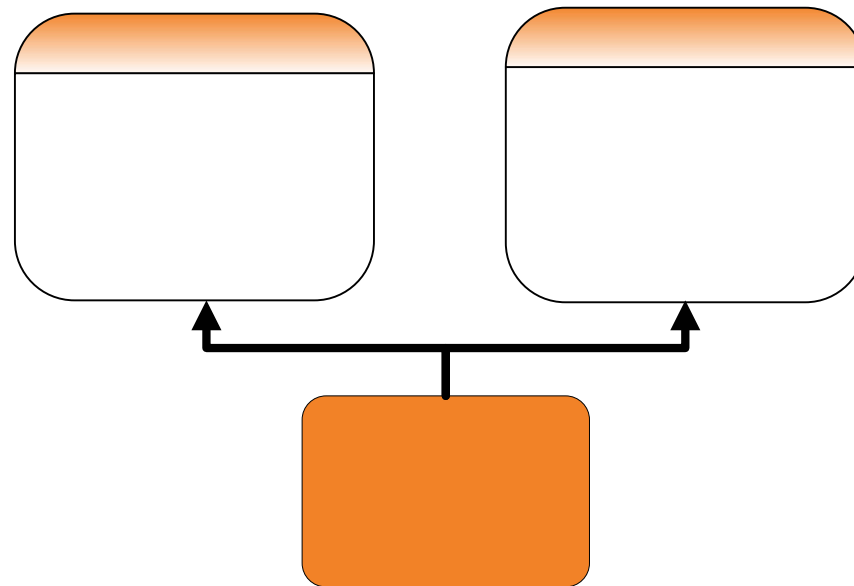


# Benefits of SLA

Benefit	Achieved Via
Corporate Rules	Accounting Standardization
Local Rules	Improved Local Compliance
Increases Control	Common Data Model Data Model and Repository
Increases Auditability	Full Drill Down Capabilities
Streamlines Closing Process	Common Posting Engine
Global Compliance	Multiple Accounting Representation

# Benefits of SLA - Example

- Multiple Accounting Representation = Global Compliance
  - Same data, different view



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# Release 12: Ledgers and Ledger Sets

## No More SOBs!

**Ledgers & Ledger Sets**

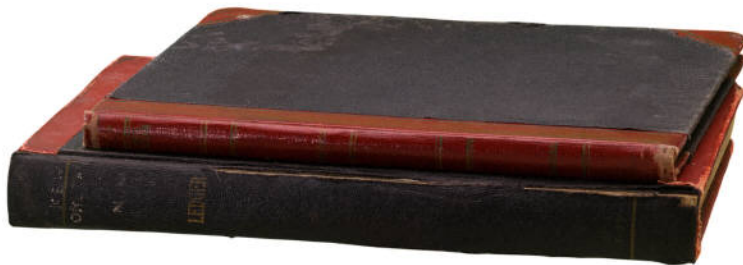


~~**Set of Books**~~

# Release 12: Ledgers and Ledger Sets

**Ledger – Repository of Financial Truth**

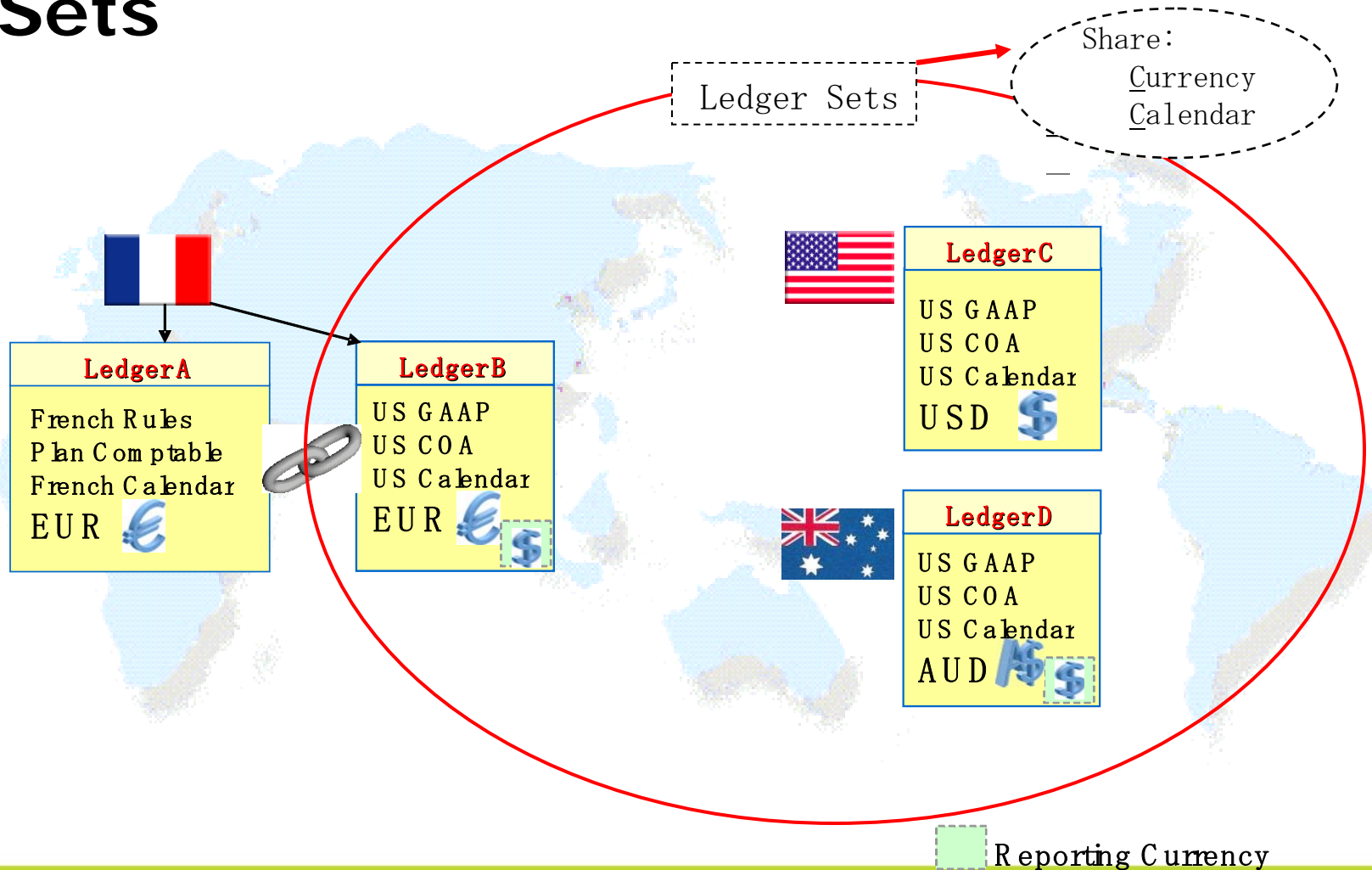
- **Accounting Method**
- **Chart of Accounts**
- **Calendar**
- **Currency**



**Ledger Sets – Global Information at a Glance**

- **Chart of Accounts**
- **Calendar**

# Release 12: Ledgers and Ledger Sets





# Release 12: "The Global Release"



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## Global Business Functions

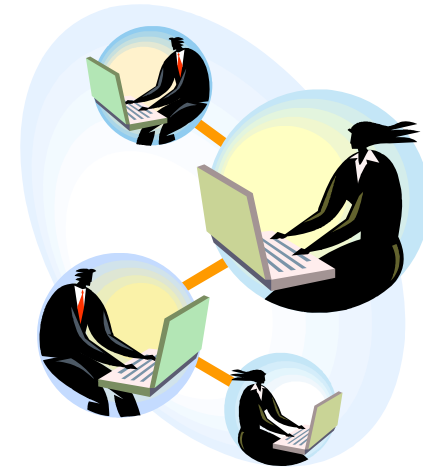
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# Release 12: Database Changes

## Trading Community Architecture (TCA)-

Centralized location for any trading partner including:

- Customers
- Suppliers
- Employees
- Banks



## Benefits

- Centralized information
- Global view of customers and vendors

# Release 12: Database Changes

## Oracle Applications Tablespace Model (OATM)

Consolidation of 300+ tablespaces to 12:

- 1 Base Tables
- 1 Index Mgmt
- 10 database management:
  - Undo
  - Temporary
  - System



## Benefits

- Ease of management
- Efficient Space Utilization
- Options: Uniform extent allocation or auto allocate

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# Release 12: Global Business Functions

**Global Business Functions Achieved through:**

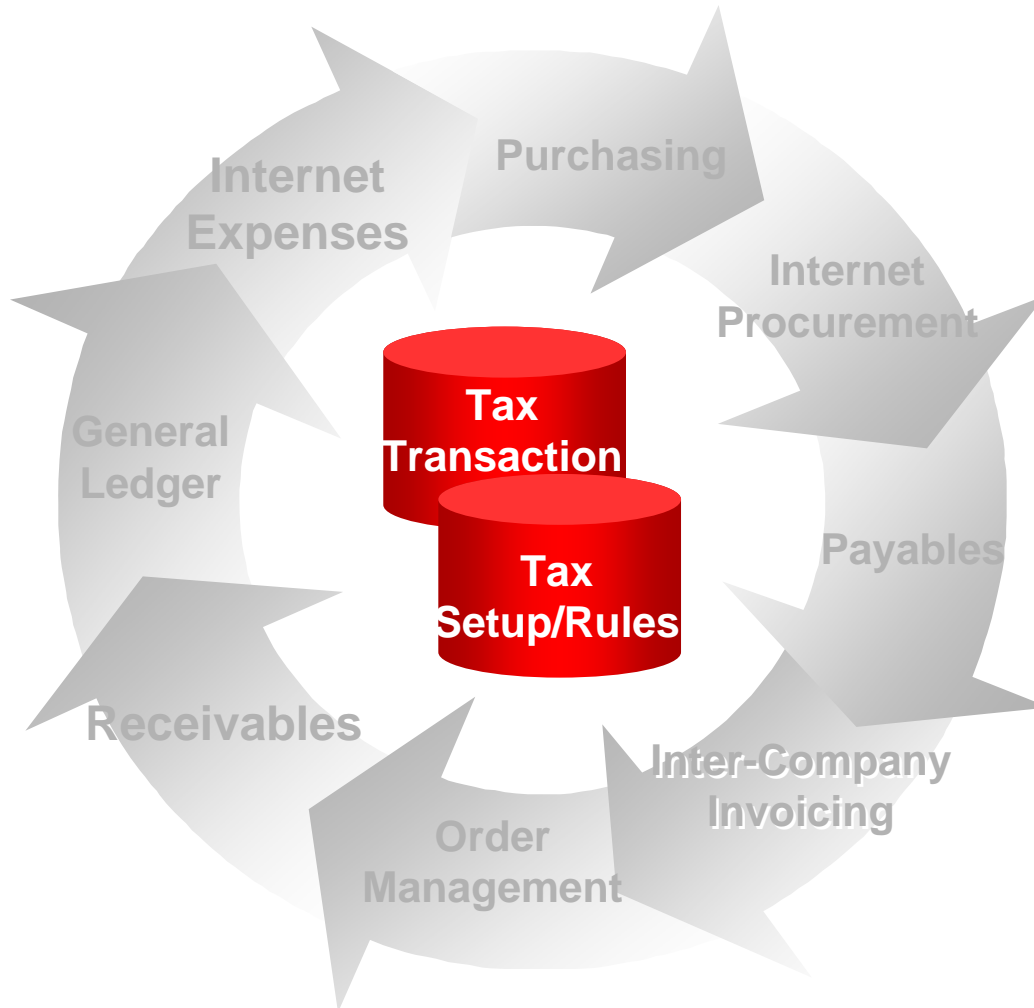
## **Several New Modules**

- Payments
- E-Business Tax
- Sourcing Optimization
- Project Portfolio Planning
- Service Desk
- Case Management
- Clinical Data Repository
- Customer Loyalty
- Utility Biller
- Financial Consolidation Hub
- Healthcare Intelligence



**2,400+ New Capabilities**

# E-Business Tax



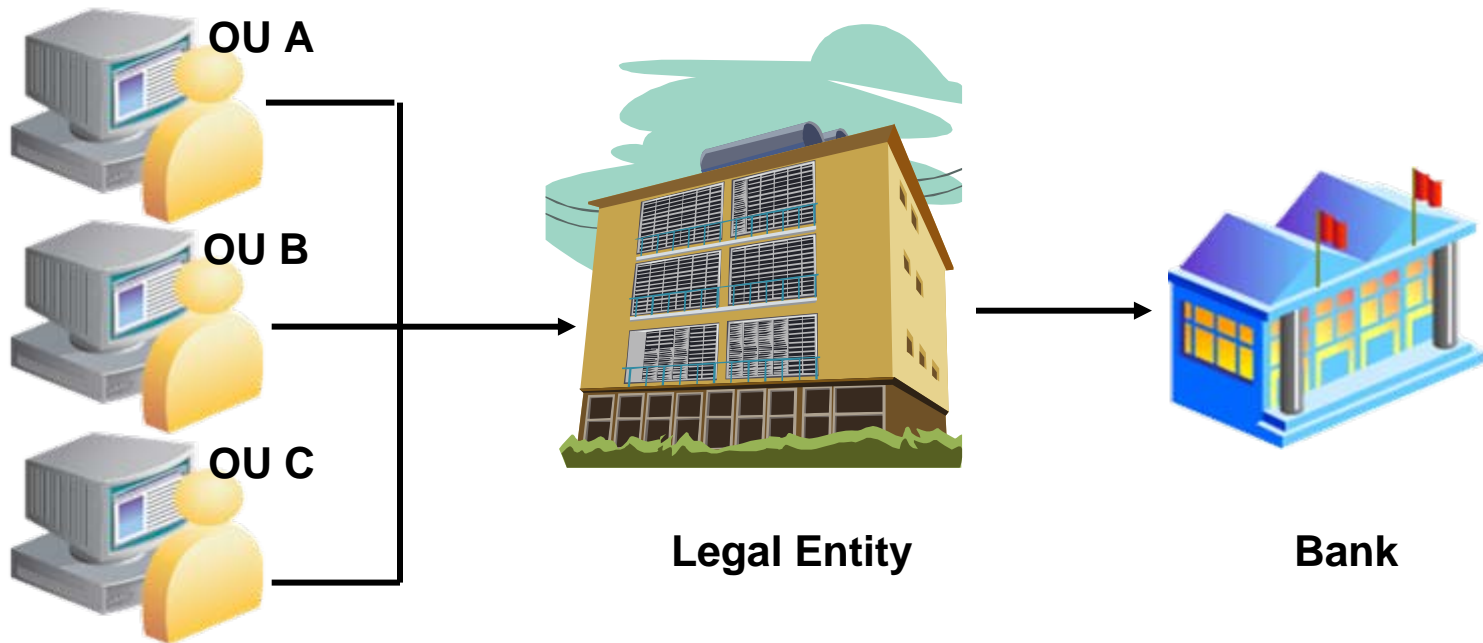
## E-Business Tax

- Centralized repository for all modules
- Vertex and Taxware integration
- Tax Simulator functionality



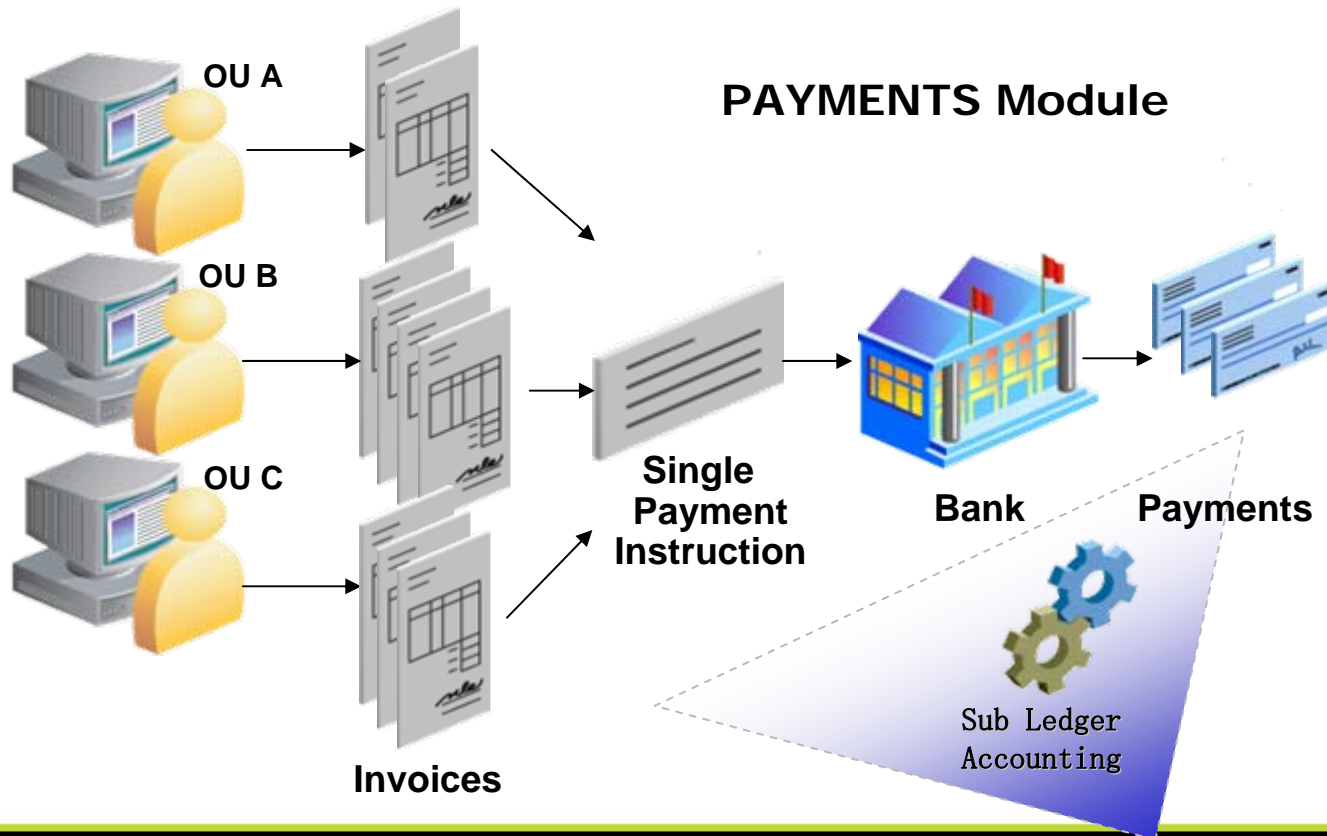
# New Banking Model

Bank Accounts tied to Legal Entity rather than each Operating Unit



# New Banking Model

Centralized banking allows for increased efficiency in daily tasks



# Manufacturing Enhancements

- Manufacturing Execution System (MES)
- Converged Single Source Global Inventory
- Demantra
- Transportation Management

# Manufacturing Enhancements

- Manufacturing Execution System (MES)
  - “One Stop Shop” for Shop Floor Operations including:
    - WIP
    - Quality
    - Time and Labor Tracking
    - On-line Instructions and Requirements
    - Clock In/Clock Out
  - Designed for both Discrete and Process

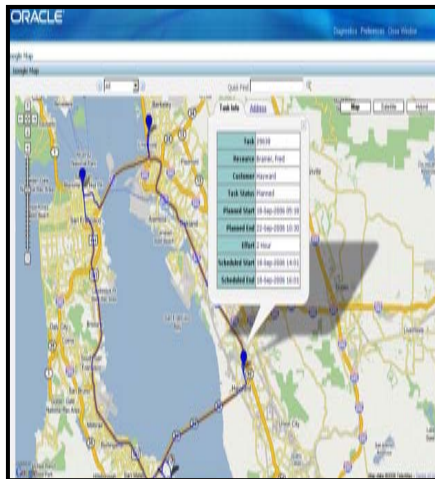
# Manufacturing Enhancements

- Converged, Single Source Global Inventory Model
  - Discrete and Process Mfg Data in Common Data Model
  - Globalization: single source of information for mixed-mode manufacturers
  - Process Flow is the most impacted
  - Requires separate organizations for process vs. discrete

# Manufacturing Enhancements

## Demantra

- Point solution (not part of EBS)
- Advanced Demand Management
- Trade Promotion Management
- “Real Time” Sales Operations Planning



## Transportation Management

- Freight Cost Reduction
- 100% Web-based
- Highly Configurable
- Global Business Support



# “The Global Release” Summary

\* Global Architecture

\* Global Business Functions

Results Equal...

- Increased Efficiency in Daily Tasks
- New Functionality
- New Terminology
- Primary Focus on Globalization

# Agenda

- Release 12: Benefits and Changes
- • Overview of Current R12 Upgrade
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# Overview of Current Upgrade

- Upgrade Levels:
  - Application: 11.0.3 → (11.5.10) → 12.0.2
  - Database: 8.0.6 → 10g
- Customizations
  - Minimal extensions/customizations
  - Custom Interface between legacy Order Entry System and Apps

# Overview of Current Upgrade

- Existing Modules:
  - General Ledger
  - Payables
  - Inventory
  - Bill of Materials
  - MRP
  - Engineering
  - Purchasing
  - Cash Mgmt
- New Modules:
  - Payments
  - E-Business Tax
  - Legal Entity Configurator
  - Subledger Accounting

# Overview of Current Upgrade

- Client Team:
  - Project Sponsor
  - IT Staff (2)
  - Steering Committee
  - SMEs:
    - Finance
    - Purchasing
    - Material Control
    - Engineering
    - Planning

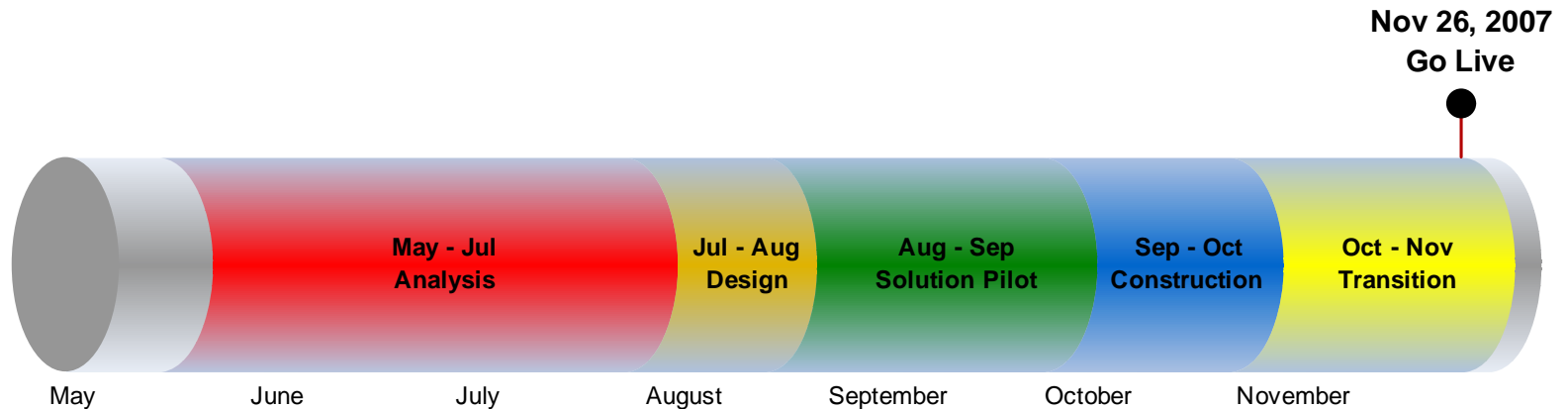


# Overview of Current Upgrade

- Traust Team:
  - Project Manager/BA
  - Manufacturing BA
  - Financials BA
  - Developer
  - DBA



# Original Project Timeline

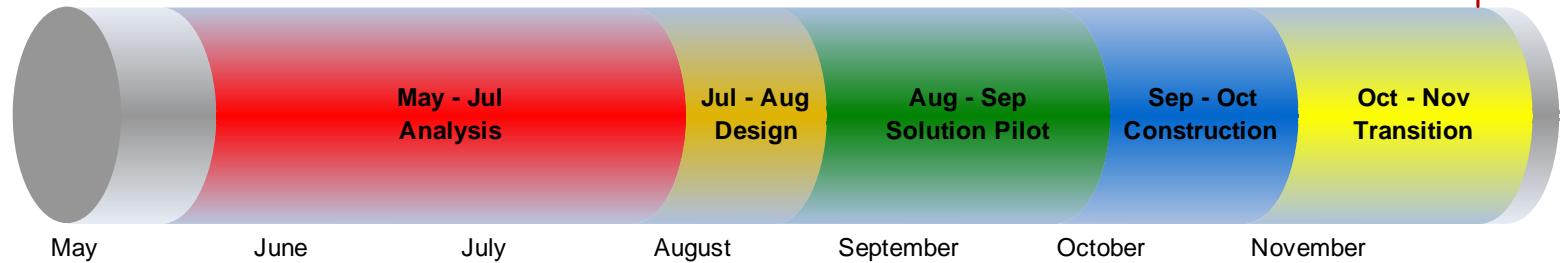


- Timeline:
  - 6 Months
  - 5 Phases

Nov 26, 2007

Go Live

# Original Project Timeline



<b>Analysis</b>	<ul style="list-style-type: none"> <li>• Business Requirements Analysis</li> <li>• Infrastructure Planning/DBA Work</li> </ul>
<b>Design</b>	<ul style="list-style-type: none"> <li>• Test Case Creation and Approval</li> <li>• Upgrade “playbook” creation by DBA’s</li> </ul>
<b>Solution Pilot</b>	<ul style="list-style-type: none"> <li>• First Upgrade Dry Run (UDR-1)</li> <li>• Review of UDR-1</li> <li>• Business Process Design for Cutover/Go Live Period</li> </ul>
<b>Construction</b>	<ul style="list-style-type: none"> <li>• UDR-2 and UDR-3</li> <li>• User Acceptance Testing (UDR-4)</li> </ul>
<b>Transition</b>	<ul style="list-style-type: none"> <li>• Final Practice Simulation (UDR-5)</li> <li>• Go Live!</li> <li>• Stabilization</li> </ul>

# Project Timeline Slippage

- Why?
  - Infrastructure Issues:
    - Migration to 64-bit application and database tier
    - Issues generated during upgrade from 11.0.3 to 12
  - Module Issues:
    - Payables – Invoice Workbench
    - Payments
    - Reports - mostly Payables

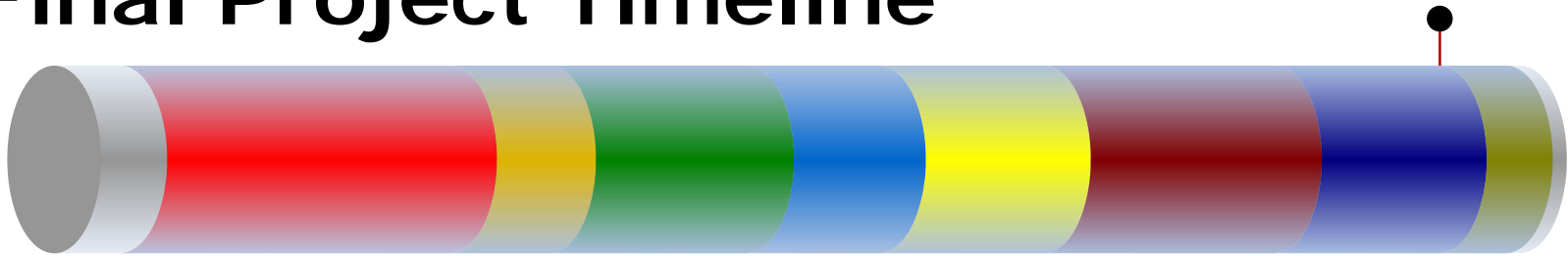
# Project Timeline Slippage

- Count of open service requests (as of 10/07)

Category	SRs
AP Invoice Workbench	6
Payments	2
Reports - Payables	4
Reports - Purchasing	2

- Risk Mitigation
  - First - Oracle Customer Service Rep
  - Second – Oracle Critical Accounts
  - Prioritization of SRs to focus Oracle Development

# Final Project Timeline



- Timeline:
  - 8.5 Months
  - 5 Phases
  - 2 Extensions
  - 1 additional upgrade dry run



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# Project Timeframe

- Considerations
  - Number of Modules
    - Current Project = 8 + 4 new = 12
    - Number of Months = 5.5 + 1.5
  - Number of Customizations
    - Forms
    - Reports
    - Where do customizations reside? In modules with significant changes?

# Project Timeframe (cont.)

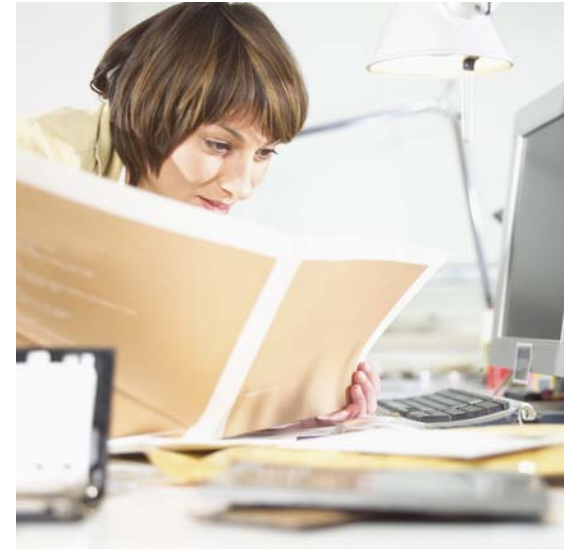
- Considerations (cont)
  - Experience with R12
    - New Forms
    - New Setups
    - New Modules
    - “Re-learning” of the apps
  - Areas of greatest estimated vs. actual timeframes
    - Test Cases
    - New module Setups
    - Service Requests

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# Preparatory Steps

- Functional Team Prep
  - Read, read, read
    - Implementation Guide
    - Upgrade Guide
    - Individual Module Guide



- Practice in Vision Environment
  - New navigations
  - New “feel” to the apps

# Preparatory Steps

- Technical Team Prep
  - New Technology Training
    - Based on Forms 10
    - Utilizes Fusion Middleware/Application Developer Framework
    - BI Publisher
    - JDeveloper





# Customizations/Extensions

- Forms Customizations
  - Traditional Forms
    - Based on Forms 10
  - Self-service forms
    - OA Framework Personalization
      - Allows you to personalize by adding and hiding fields or making fields required
      - Difficult to customize because not just one form
        - » Java Classes
        - » XML Files
        - » “Metadata Files”
        - » JSP Files

# Customizations/Extensions

- Reports Customizations
  - Traditional Reports
    - Based on Reports 10g
  - BI Publisher (previously XML Publisher)
    - XML, XSL-FO
    - Large number of RTF templates available
      - Easily customized
      - Still require some XSL-FO coding (more difficult)
    - Output Options:
      - PDF, Excel, HTML, Word, PowerPoint
    - Font Options (as long as installed on server)

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# What We Have Learned

## Lessons Learned/Challenges



- The Upgrade
- Financial Reports
- Training
- Financial Setups



# What We Have Learned

- The Upgrade
  - 11.0.3 to 11.5.10 interim
    - Longest, most difficult part of upgrade
    - Different issues each run through
  - 11.5.10 interim to 12.0.2
    - Streamlined upgrade
    - Minimal Issues
    - Option: Maintenance Wizard
      - Assists with upgrades and patches
      - Requires additional database

# What We Have Learned

- Financial Reports
  - Moved to new data structure
  - Moved to BI Publisher format
  - Several not functioning correctly
    - Includes critical reports:
      - AP and PO Reconciliation
      - Purchase and Invoice Price Variance
      - 1099 Reports
  - Recommendations:
    - Increase testing time
    - Perform detailed validation



# What we have learned

- Training
  - Increase time for training, especially in Financials
  - Users need hands-on activity prior to UAT
  - Increase comfort level



- New navigation
- Movement between traditional forms → Self service → traditional forms
- New modules

- Training Example: GL Drilldown
  - Navigating between traditional and self-service forms

The screenshot displays the Oracle GL Drilldown interface, illustrating the transition between traditional and self-service forms. The top window, titled "Journal Entry Inquiry (MATE PRECISION TOOLING)", shows a table of journal entries with columns for Batch Status, Source, Category, Period, and Batch Name. Below this, the "Journals (MATE PRECISION TOOLING)" window provides detailed information for a specific journal entry, including Journal, Description, Ledger, Period, Balance Type, and Conversion details. The "Lines" tab is active, showing a table of journal lines with columns for Line, Account, Debit (USD), Credit (USD), and Description. The bottom window, titled "View Journal Entry Lines", shows the "Advanced Search" section with various filters and a table of results. A red arrow points to the "MATE PRECISION TOOLING" entry in the results table.

Line	Account	Debit (USD)	Credit (USD)	Description
1	01.000.1200	8,465.71		Journal Import Created
2	01.000.1410	2,103.30		Journal Import Created
3	01.000.1410		389.32	Journal Import Created

Select Ledger	Account	GL Date	Accounting Class	Accounted DR	Accounted CR
<input checked="" type="radio"/> MATE PRECISION TOOLING	01.000.1410	24-Jan-2007	Item Expense		389.32PT

# What We Have Learned

- Financial Setups
  - Release and Module Manuals in Infancy
  - Oracle Analysts
    - Leads well-trained
    - First-line Analyst – usually requires assistance of lead
  - Oracle SR work
    - Overall very good
    - Fastest resolutions with OWC sessions
      - Analysts learning and training

# Summary

- Release 12 is truly a Globalization Upgrade
- Streamlined upgrade process from 11.5.10 → 12.0.2
- Training
  - Technical staff
  - Exposure to R12 for Functional staff
  - End users: new modules, new navigation style
- R12.0.2 – validation seems good except for reports
- R12 literature – lacking in information

Q & A

# Release 12: Additional Screen Shots



# • Payments Dashboard

Home | Templates | Payment Process Requests | Payment Instructions | Payments

Close

**Search**

Template ▼

Go

**Shortcuts**

- ◆ [Submit Cash Requirements Report](#)
- ◆ [Create Template](#)
- ◆ [Schedule Payment Process Request](#)
- ◆ [Submit Single Payment Process Request](#)
- ◆ [Create Printed Payment Instructions](#)
- ◆ [Create Electronic Payment Instructions](#)
- ◆ [Review Completed Payments](#)
- ◆ [Stop or Void Payments](#)

**Concurrent Requests**

- ◆ [Submit a Request](#)
- ◆ [Monitor Requests](#)

**Payments Dashboard**

**Today's Payment Process Requests**

Need Action	Program Errors	Processing	User Terminated	Completed	Total
0	0	2	0	0	2

**Pending Actions**

Details	Payment Process Request	Created Date	Payment Process Request Status	Start Action
No results found.				

**Today's Payment Process Requests**

Data 100.00%

Completed   
  Need Action   
  Program Errors  
 User Terminated   
  Processing

- Payables Invoices - now have lines

Invoice Workbench (Payables Manager) - test

Batch Control Total  Batch Actual Total

Operating Unit	Customer Taxpayer ID	Type	PO Number	Trading Pa	Supplier Num	Supplier Site	Invoice Date	Invoice Num	Invoice
USA MPT GLOBAL		Standard							USD

1 General   2 Lines   3 Holds   4 View Payments   5 Scheduled Payments   6 View Prepayment Applications

Summary

Items

Retainage

Prepayments Applied

Withholding

Subtotal

Tax

Freight

Miscellaneous

Total

Amount Paid

USD

Status

Status

Accounted

Approval

Holds

Scheduled Payment Holds

Description

Actions... 1   Calculate Tax   Tax Details   Corrections   Quick Match   Match   All Distributions

# • Supplier Entry

Close V

**Suppliers**

- ◆ Quick Update
- ◆ Company Profile
  - Organization
  - Tax Details
  - Address Book
  - Contact Directory
  - Business Classification
  - Products & Services
  - Banking Details
  - Surveys
- ◆ Terms and Control
  - Accounting
  - Tax and Reporting
  - Purchasing
  - Receiving
  - Payment Details
  - Invoice Management

Suppliers >

**Update ESSE A - 1554: Quick Update**


\* Indicates required field

\* Supplier Name

Supplier Number **1554**

Alternate Supplier Name

Registry ID **3357**

Inactive Date    
(example: 29-Nov-2007)

Alias

---

**Supplier Sites**

Site Status  Site Name  Operating Unit

**Key Purchasing Setups** **Key Payment Setups**

Site Name	Operating Unit	Ship-To Location	Bill-To Location	Ship Via	Pay On	Alternate Pay Site	Invoice Summary Level	Create Debit Memo from RTS Transaction	Gapless Invoice Numbering	*Selling Company Identifier
REMIT TO	USA MPT GLOBAL MASTER	USA MPT	BILL TO SITE	UPS COLLECT #560-4				<input type="checkbox"/>	<input type="checkbox"/>	