



Product Management

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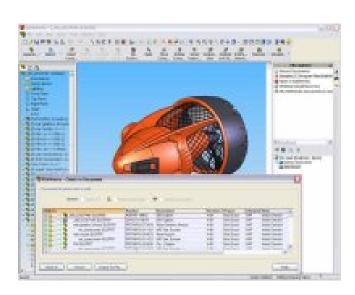
Agenda

- What is Product Lifecycle Management?
- Lifecycle Management
- Business Case
- Product Attribution
- Lifecycle Phases
- Advanced Product Catalog
- Change Management
- R12 & Agile
- Questions & Answers





- Product Data Management
 - Centralized product data attribution
 - Operational
 - User defined
 - Product configuration/structures (i.e. BOMs)
 - Use of metadata and hierarchical structures
 - Role based security







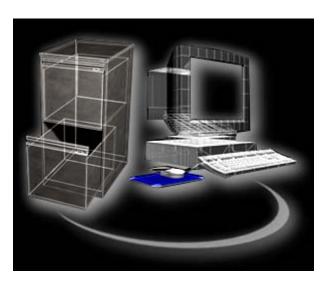
- Change Management
 - Change Process: request, review, investigate, approve, notify, implement
 - E.G. Suggestion Box, Incident Reporting, Process Improvement, Document Review, Eng Change Request, Eng Change Order
 - Workflow driven
 - Impact assessment
 - Change propagation across enterprise
 - Audit Trail







- Document Management
 - Product data attribution & integration
 - E.G. Prints, drawings, & item numbers
 - Intelligent search
 - Workflow lifecycles
 - Read/write/approve security
 - Check in/check out & version control



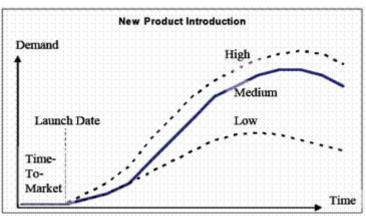




- New Product Introduction (NPI)
 - Item lifecycle management
 - Lifecycle phase gate review
 - Item attribution (in stages)
 - Operational readiness

Sales configuration management (i.e.

Configurator)







- Collaboration
 - Role based security
 - Web conferencing
 - Customer & supplier participation (E-ERP)
 - CAD visualization & markup







- Product Portfolio Management
 - Product platforms, product families, product lines
 - Product duplication
 - Product rationalization
 - KPI's:
 - Rate of Innovation
 - Pace of NPI
 - NPI Costs by lifecycle phase
 - ECO costs







- An implementer's observations:
 - 1. Somewhere between God and world peace
 - 2. It's as much about white paper analysis as it is about software
 - If you're good at business intelligence or like to work with data, you will be good working within a PLM paradigm
 - 4. Process folks find PLM to be nebulous





Oracle PLM - 11i/R12

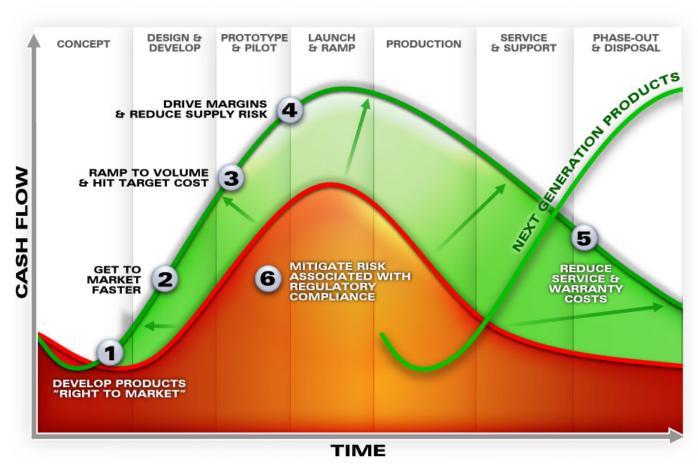
- Product Lifecycle Management
 - Advanced Product Catalog
 - Change Management
- CADView 3D
- Product Information Management Hub
- Product Information Data Library
- Product Data Synchronization
 - GDSN
 - UCCnet
- http://www.oracle.com/applications/plm/plm_collateral.html







Lifecycle Management*



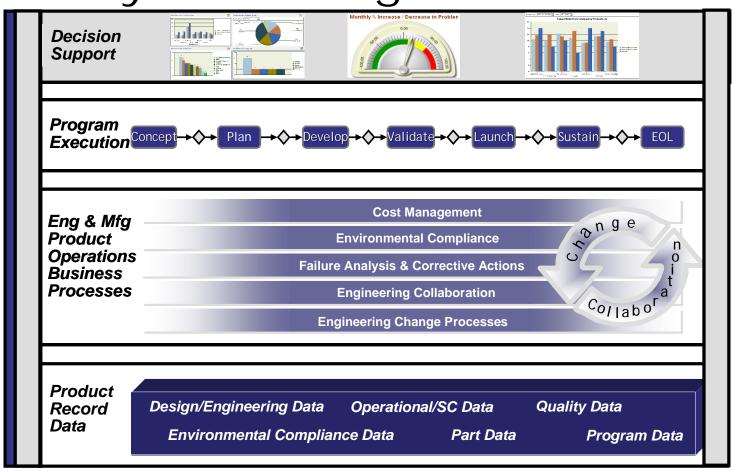
* Acknowledgement, Sarvesh Jagannivas, VP, Oracle PLM Marketing







Lifecycle Management*



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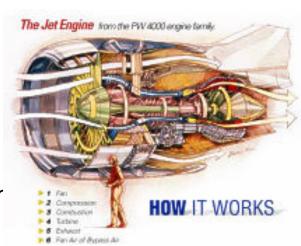






Business Case - Classical Eng

- Aerospace & Defense Contractor:
 - Heavily engineered products and systems
 - Formal engineering processes with emphasis on CAD, CAM, & engineering analysis
 - Specifications, methods, processes require document version control & approval
 - Dynamic change order environment through all lifecycle events
 - Long-term product support through multiple maintenance and field retrofit cycles







Business Case - Configuration

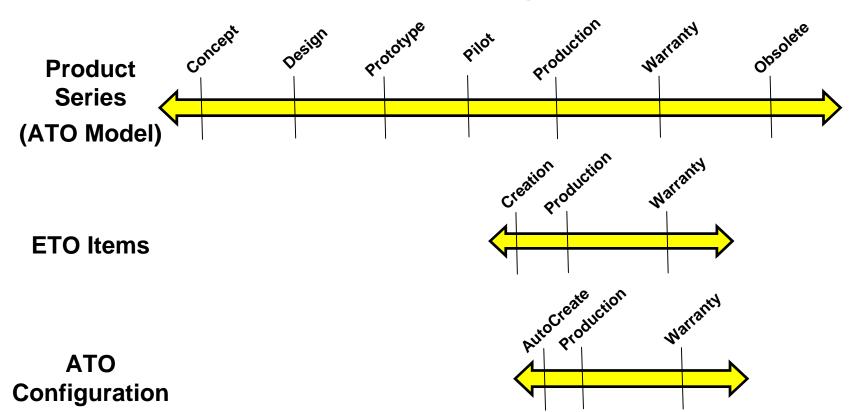
- Furniture Manufacturer:
 - Concept and design centered on product suites
 - Highly configurable products with emphasis on "have it your way"
 - Informal engineering processes with emphasis on graphical
 - Light documentation requirements
 - Heavy engineer-to-order environment
 - Warranty tracking







Business Case - Configuration







Business Case - Catalogs

- Industrial Distributor
 - Product classification by category
 - Light engineering with focus on revisions
 - Cross referencing to industry standards
 - Part numbers
 - Specifications
 - Documentation management
 - Heavy item attribution
 - Warranty requirements







Business Case - Additional

- **Oracle White Papers**
 - Product Lifecycle Management in the Food & Beverage Industry, Feb 2008
 - Product Lifecycle Management in the Medical Device Industry, Jan 2008
 - Product Lifecycle Management in the Pharmaceutical Industry, Feb 2008





- Group product families into logical classifications
- Determine the user defined attributes for the product families
 - Mechanical Specifications
 - Electrical Properties
 - Physical Characteristics
- Identify common attribute information and attribute information specific to different audiences
- Sub-divide the classifications into sub-groups and assign attributes accordingly







Item Catalog

	Category Engines		
	Make Model Price Attribute N		
Calegory Diesel Engines			tegory c Engines
Make Model Price Attribute N Valves Fuel Injection		Make Model Price Attribute N Motor Typ Rating KW	

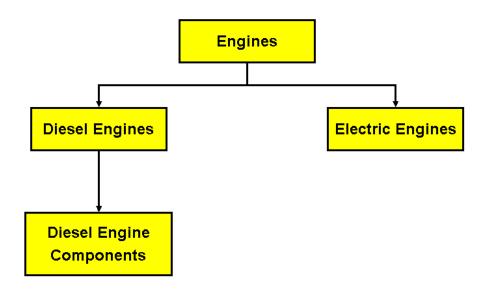
ORACLE!







Item Classification and Hierarchy



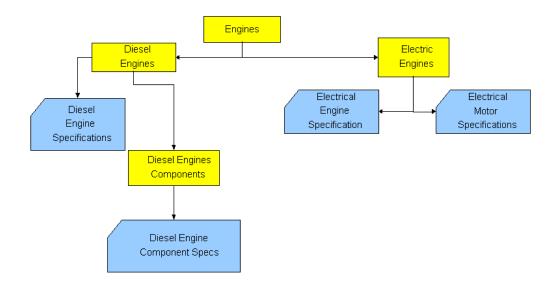
ORACLE"







Item Classification with Unique Requirements



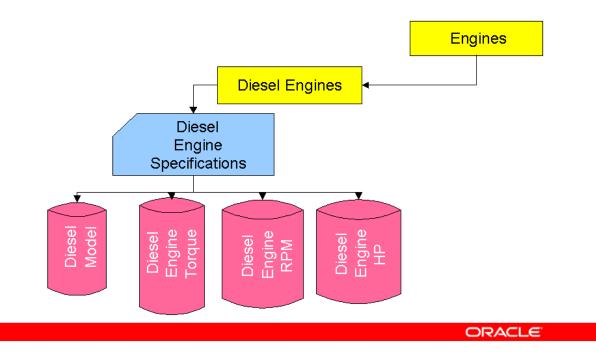
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Item Classifications

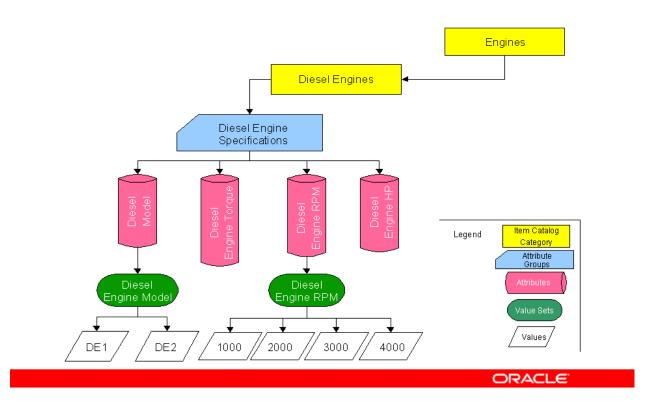






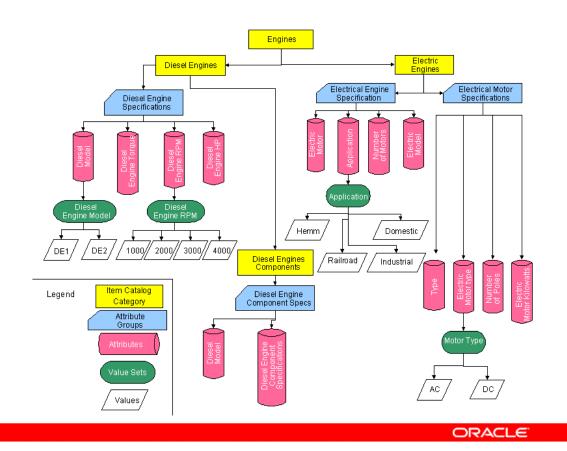


Item Classifications







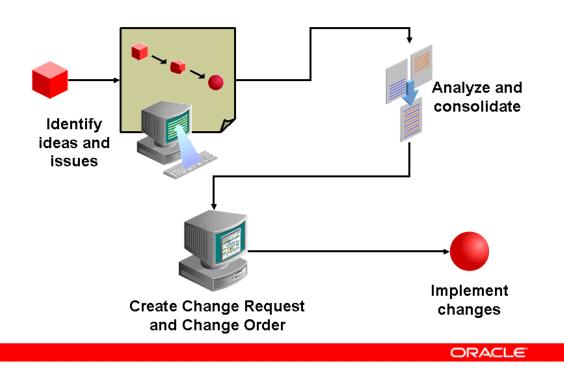






Lifecycle Phases

Standard Change Management Cycle

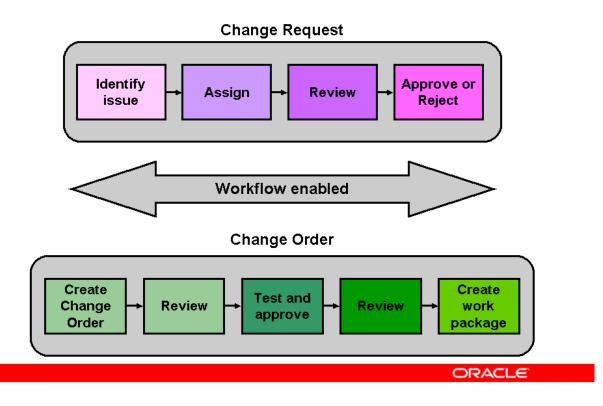






Lifecycle Phases

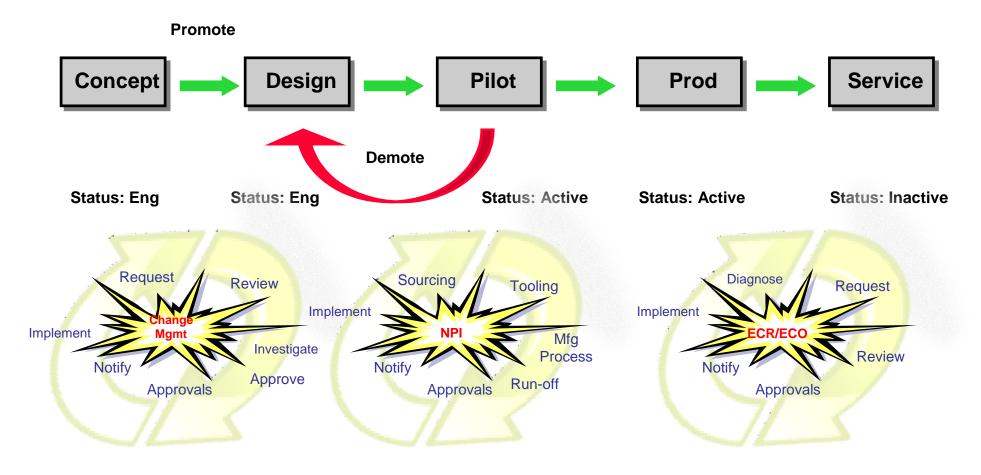
Change Management and Workflow







Lifecycle Phases





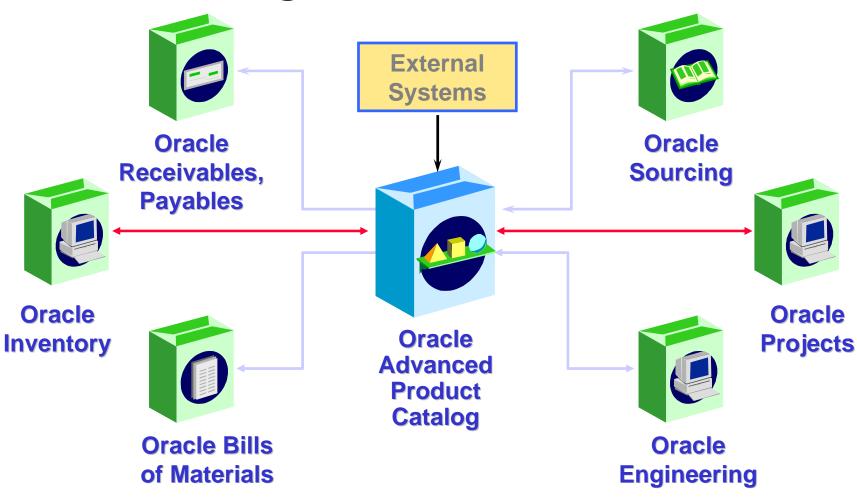


Advanced Product Catalog





APC - Integration







APC - Security

Privilege

- Controls view and edit permissions for a specific database object
- Oracle is pre-seeded with View Item and Edit Item privileges
- User defined privileges are created to control access to items, attribute groups, etc.

Roles

- A collection of privileges granted to a user on a specific object, such as an item
- Control which system users can view and edit information
- Role based security is assigned to each user for use on an item, catalog, catalog category, and change cat







APC - Security

- Item Roles
 - The item role assigned to a user determines which actions (by the person) can be performed on an item
 - E.G. Design Engineer role can view and edit items
 - Answers question "Who can manage items . . ."
 - Item roles can be assigned to individual people, groups, company, or all users
 - Item roles can be assigned at the item, item catalog category, or organization level
 - Direct role assignment role is explicitly granted to a user for an item

◆ security-role

security-roleType

Inherited role assignment – role is inherited from a item catalog category or organization







APC - Security

	Item	Item Cat Category	Org
People	•Most Secure	•Less Secure	•Least Secure
	•Most Maint.	•Less Maint.	•Less Maint
	•Ind Items	•Set of Items	•All items
			•Admin Only
Group	•Most Secure	•Less Secure	•Least Secure
	Less Maint.	•Less Maint.	•Less Maint
	•Ind Items	•Set of Items	•All items
			•~ EBS Resp
Company	 Not realistic 	•Less Secure	•Least Secure
		Less Maint.	Least Maint.
		•Set of Items	•All items
All Users	•Not realistic	•Less Secure	•Least Secure
		•Less Maint.	•Lease Maint.
		•Set of Items	•All items
			•~ many Oracle sites



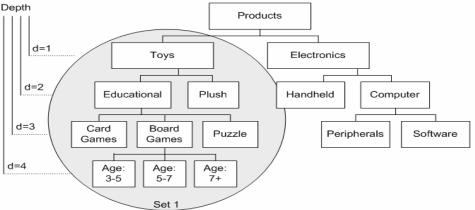


APC - Item Catalog Category (ICC)

- The item catalog consists of an organization's items. An item catalog category provides a hierarchical taxonomy for user defined information
 - Hierarchical a structure with parent/child relationships
 - Taxonomy a system of classification
- Item catalog categories allow a process of classifying user defined information in an organized structure
 - User defined attributes, item attachments, images, URLs

Traditionally, user information stored in flex fields. Now, stored as

user defined attributes







APC - ICC

- System behavior can be associated with these categories and, subsequently, to items:
 - User defined attribute validation
 - User defined attribute functions
 - Security roles and privileges
 - User defined inquiries
 - User defined reporting formats
 - Item lifecycles, phases, and status
- System behavior can be inherited by establishing parent/child relationships





APC - Terminology

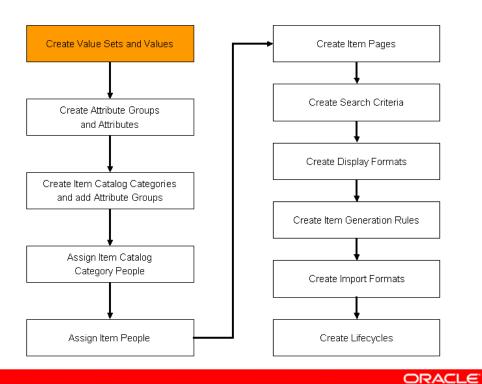
Inventory	APC	
Item Attributes	Operational Attributes	
Descriptive Flex Fields	~User Defined Attributes	
Category Set	Catalog	
Item Category	Catalog Category Catalog Sub-Category	
Item Master	Item Catalog	
Item Catalog Group	Item Catalog Categories	
Catalog Group Descriptive Elements	Item Catalog Attributes	





APC - Method

Creating Item Catalog Categories







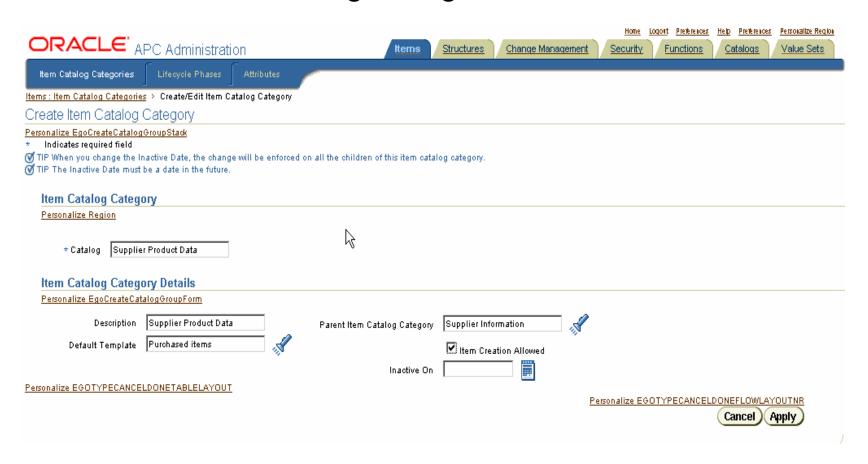
Create the Item Catalog Categories – Parent

ORACLE' APC Administration	1	Items	Structures Change Mar	Home Security	Logott Preferences Functions	Help Preterences Catalogs	Personalize Region Value Sets
Item Catalog Categories Lifecycle Phases	Attributes						
Items : Item Catalog Categories > Create/Edit Item Cata	og Category						
Create Item Catalog Category							
Personalize EgoCreateCatalogGroupStack * Indicates required field Of TIP When you change the Inactive Date, the change word the Inactive Date in the future.	ill be enforced on all the children	of this item catalo	g category.				
Item Catalog Category							
Personalize Region							
* Catalog Supplier Information Item Catalog Category Details							
Personalize EgoCreateCatalogGroupForm							
Description Supplier Information	Parent Item Ca	atal a Category					
Default Template		.,,	Item Creation Allowed	_ <i>7</i> /			
Personalize EGOTYPECANCELDONETABLELAYOUT	<i>*</i> /	Inactive On	L				
				<u>Personalize E</u>	OOTYPECANCELD		pply pply





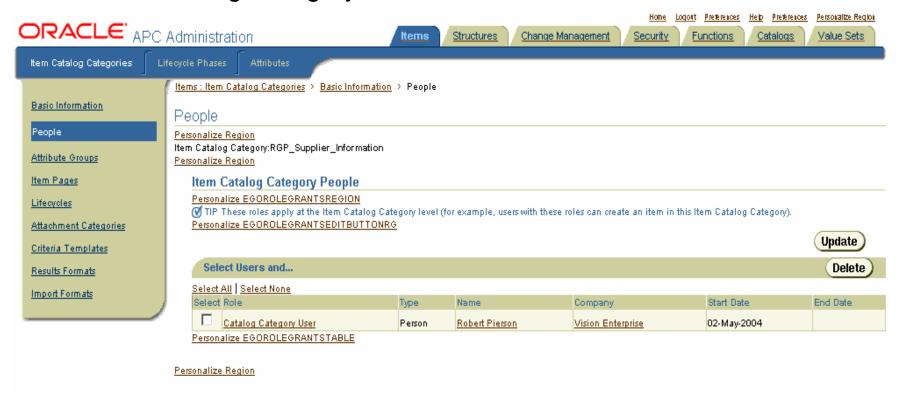
Create the Item Catalog Categories – Child







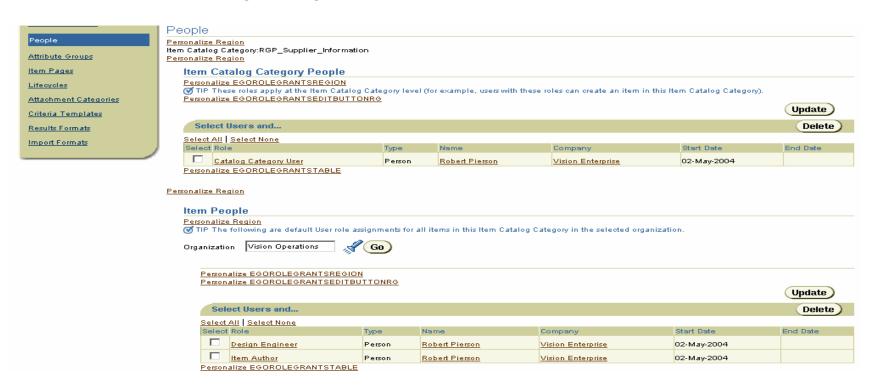
- Assign roles for Item Catalog Categories
 - The Catalog Category User role







- Assign roles for Item Catalog Categories
 - The Design Engineer & Item Author roles







APC - Attribute Groups

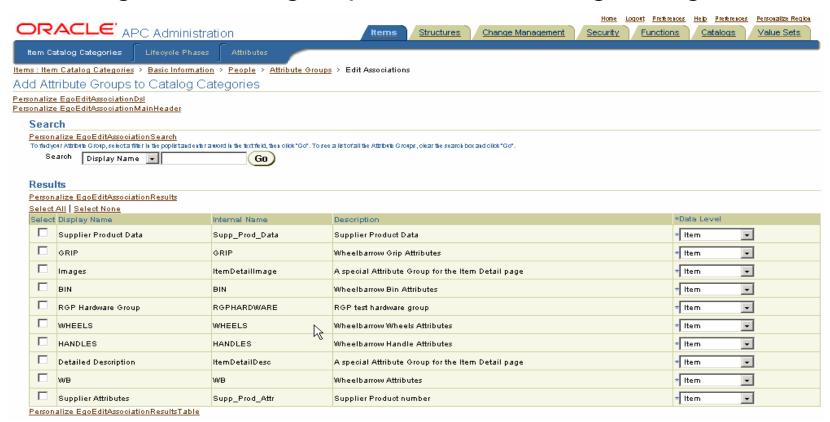
- Catalog Items
 - Operational attributes control system behavior in eBusiness
 Suite
 - User defined attributes provide more information, such as characteristics and specifications
- Attributes are defined by their names and values, and are saved within the same attribute group
- Attribute groups are associated with item catalog categories
 - All items within an item catalog category have the same attributes







Assign attribute groups to Item Catalog Categories







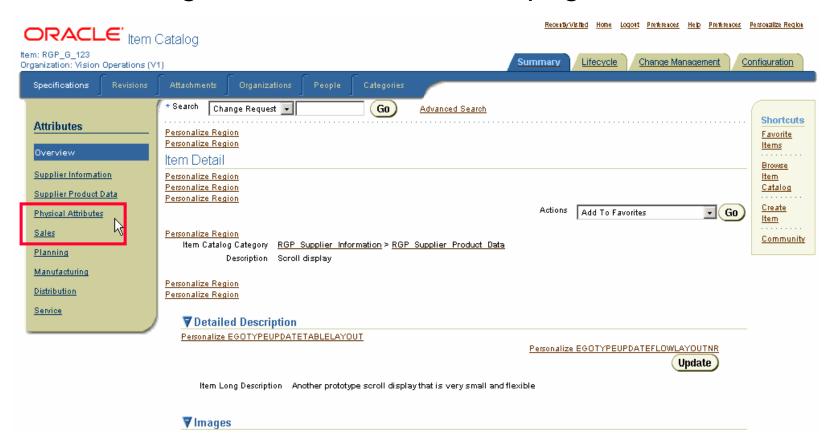
Assign attribute groups to Item Catalog Categories







Item Catalog with user defined item pages







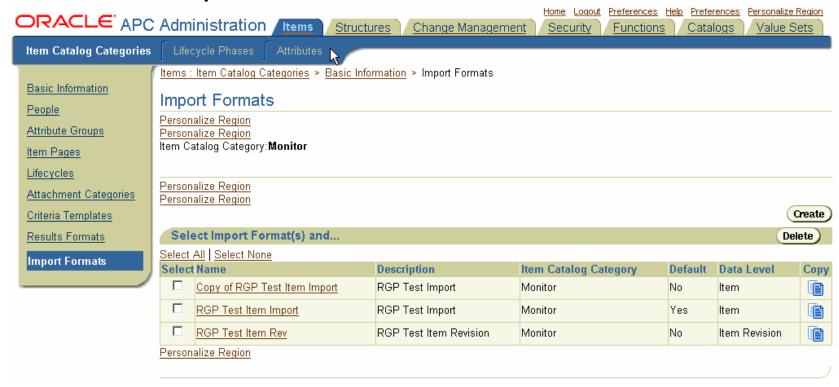
APC - Item Imports

- APC provides the following import capabilities from Excel
 - Items Creation & Update
 - Item Revisions
 - Item Categories
- Web ADI is required





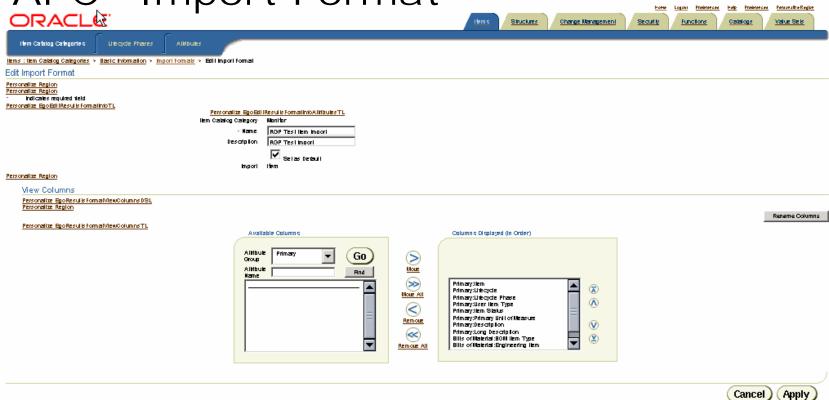
APC - Import Format







APC - Import Format







APC - Item Imports

- Interface Tables
 - Item & Operational Attributes MTL_SYSTEM_ITEMS_INTERFACE
 - User Defined Attributes EGO_ITM_USR_ATTR_INTRFC
 - Item People EGO_ITEM_PEOPLE_INT





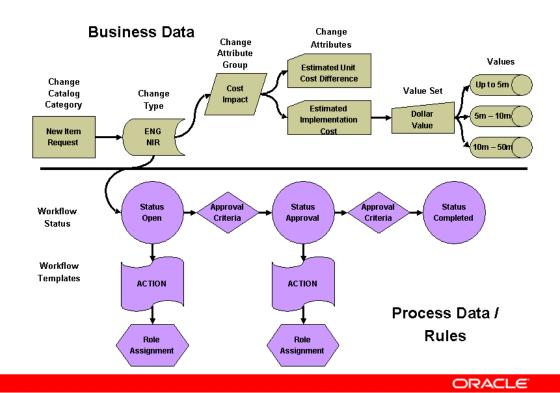
Change Management





Change Mgmt - Workflow

Oracle Solution

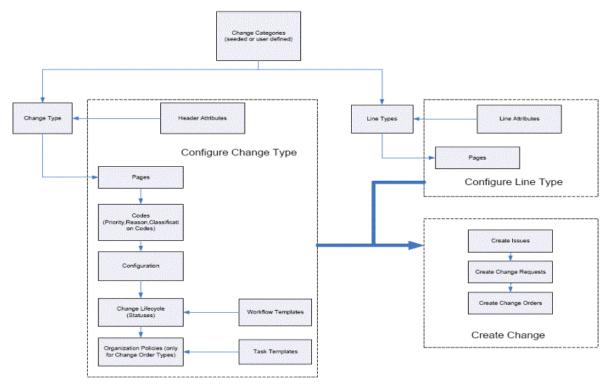






Change Mgmt - Method

Change Management Setup Overview



ORACLE

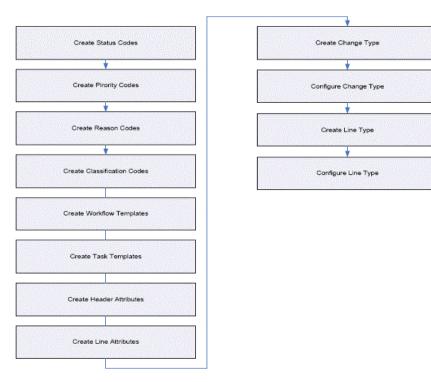






Change Mgmt - Method

Change Management Setup Overview (continued)





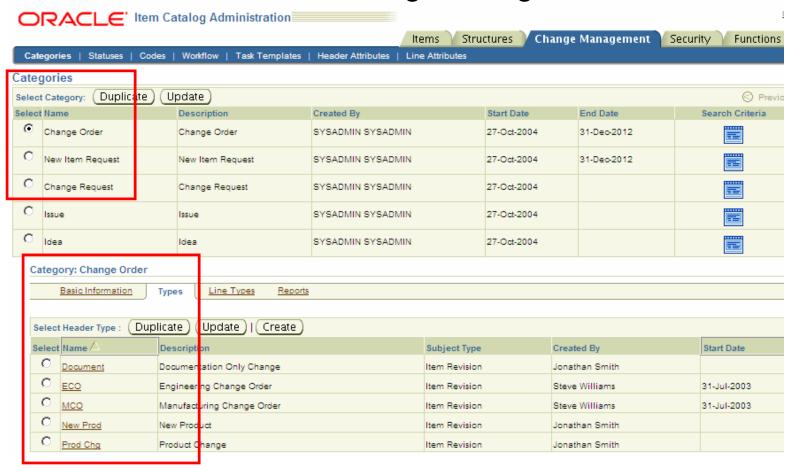






Change Mgmt - Categories

Create or use seeded Change Categories

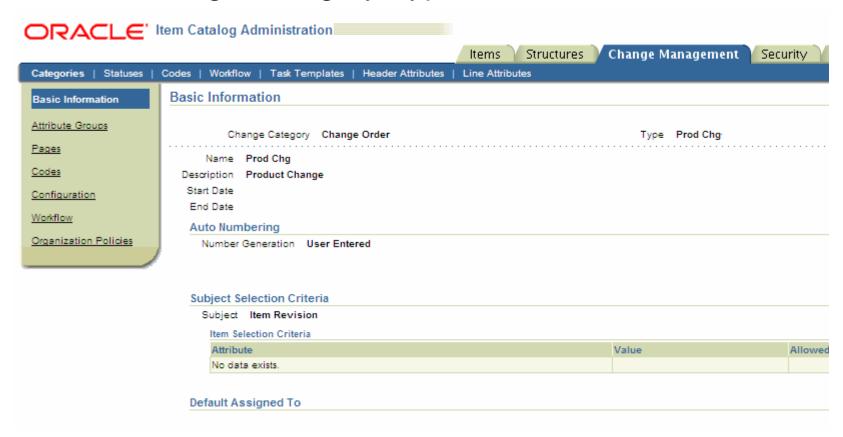






Change Mgmt - Category Types

Create Change Category Types







Change Mgmt - Attributes

Create Header Attribute Groups



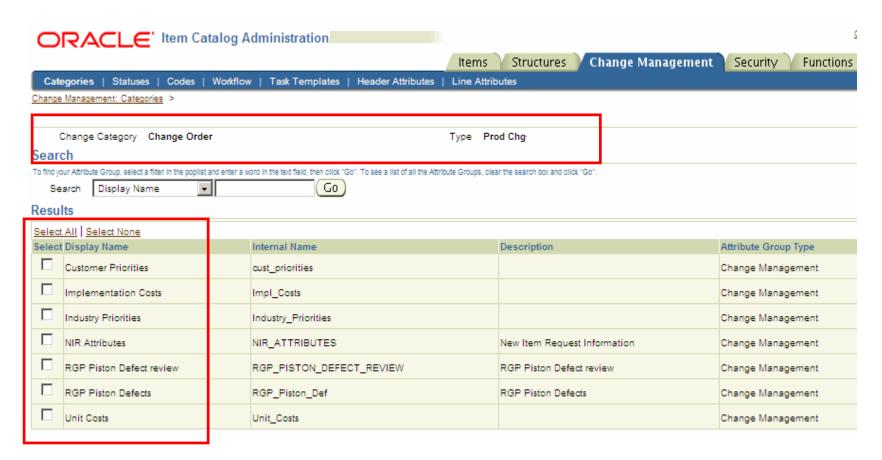






Change Mgmt - Attributes

Assign Header Attribute Groups to Change Category Type

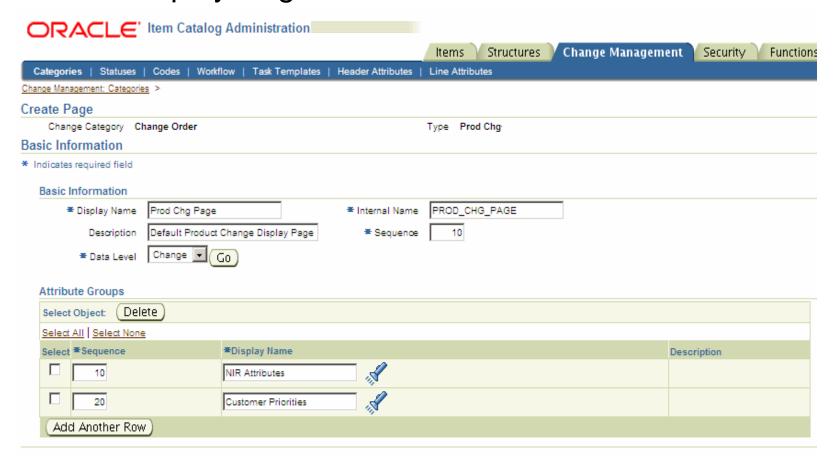






Change Mgmt - Pages

Create Display Page

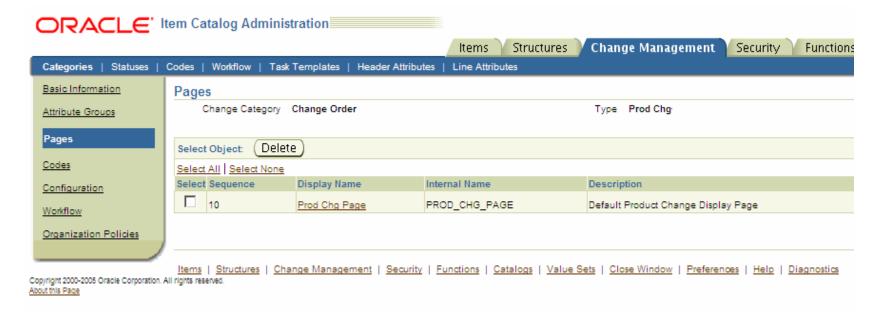






Change Mgmt - Pages

Create Display Page

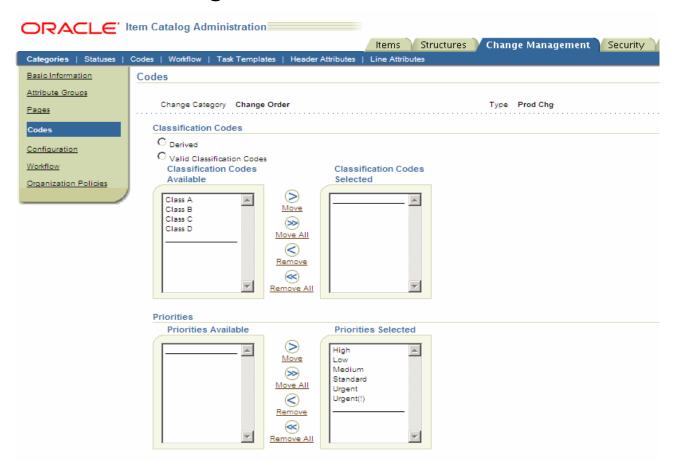






Change Mgmt - Codes

Create Change Reason codes









Change Mgmt - Configuration

Creates Change Type entry form configuration









Change Mgmt - Workflow

Creates basic workflow process

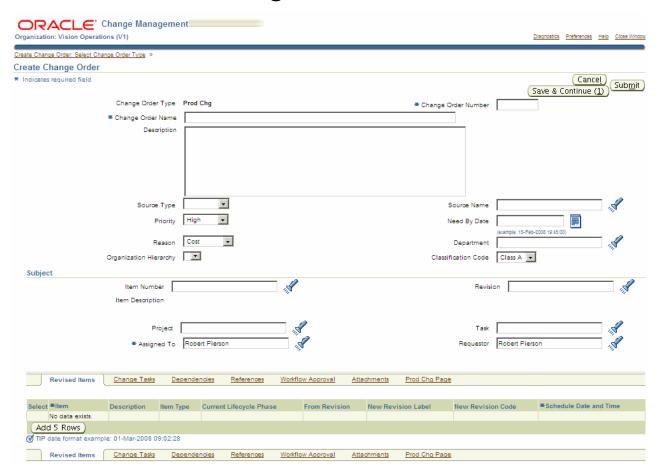






Change Mgmt - ECO Entry

• ECO: Product Change

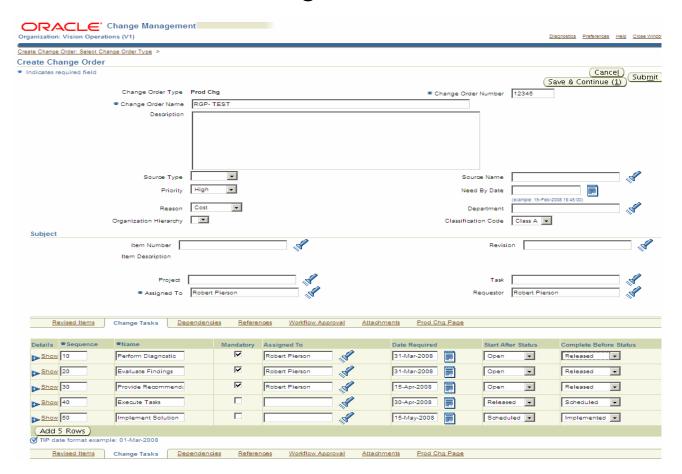






Change Mgmt - ECO Entry

• ECO: Product Change







PLM - Responsibilities

- Seeded Responsibilities
 - Development Manager
 - Development Manager Portal
 - Development Engineer
 - Development Engineer Portal
 - Manufacturing Engineer
 - Manufacturing Engineer Portal
 - Product Manager
 - Product Manager Portal
 - Program Manager
 - Program Manager Portal
 - Project Engineer
 - Project Engineer Portal
 - Supplier Engineer





- Mass updates for items
 - Mass item org assignment via workflow/Excel
 - Mass item category assignment via workflow/Excel
 - Mass item attribute update via workflow/Excel
- Change Management for item/item revision attachments
 - Specify items and attachments
 - Author and specify changes
 - Route for approval
 - Manually or automatically implement





- Change Management for item/item revision attachments
 - Specify items and attachments
 - Author and specify changes
 - Route for approval
 - Manually or automatically implement
- Change Management for the Item Master attributes (finally!)
 - Manage changes to item master using workflow
 - Use change management for review & approval
- Common Bills: material attribute control at org level
 - Operation number, WIP supply type, WIP supply sub locator, supply locator, include in cost rollup







- Document Management
 - Integration between OCS & EBS
 - Document Management
 - Hierarchical relationships, document entity, document numbering, file associations with documents, document metadata
 - Document check-in/check-out, versioning
 - Document lifecycle





- Direct integration between Configurator and user defined attributes
 - Direct import as configurator properties
 - Property based compatibility rules





Agile

- Transaction is consummated July 2007
- Best in breed solution
- Go forward investment will be Agile
 - Existing Oracle PLM will be supported
 - Oracle PIM will be supported and enhanced to address Agile integration
- Agile Product Lifecycle Management (PLM) Overview, 22 Feb 2008, NCOAUG presentation
- http://www.oracle.com/agile/index.html
- http://www.oracle.com/technology/documentation/agile.html





Questions & Answers





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