



# WebSphere Product Center: Overview

**Version 5.1**

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**Note!** Before using this information and the product it supports, read the information in “Notices” at the end of this document.

7 September 2004

*This edition of this document applies to WebSphere Product Center (5724-I68), version 5.1, and to all subsequent releases and modifications until otherwise indicated in new editions.*

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# Ch 1 Overview

WebSphere Product Center provides Product Information Management (PIM) solutions to the enterprise that centralize and optimize product data. Relevant and unique content is then delivered to any person, system, partner, or customer. WebSphere Product Center's enterprise solution dramatically accelerates the time to market, increases market share and customer satisfaction, while reducing costs.

Companies across a wide range of industries face challenges to comply with industry-specific mandates and regulations, to create new revenue streams, or to discover innovative ways to reduce costs. A fundamental prerequisite to effectively face these business needs is to establish a single, reliable, integrated source of product information that can be used both internally across the enterprise and externally by customers and trading partners.

WebSphere Product Center, a product information management solution, helps companies assemble an accurate, consistent central repository for storing and managing information regarding products, locations, trading partners, organizations and terms of trade. Powerful tools help users manage, assemble, link and classify product information productively.

Consumer product retailers and consumer electronics manufacturers are some of the leading industries that are broadly adopting product information management solutions. Companies in these industries depend on delivering accurate, timely and comprehensive product information to their customers and trading partners to drive sales and reduce expenses.

These industries also have external mandates for initiatives like global data synchronization and radio frequency identification (RFID), as well as requirements for generating up-to-date product information for e-commerce and business-to-business (B2B) initiatives, and keeping product information consistent across all customer and trading partner touch points. WebSphere Product Center provides the single, reliable repository of product information that allows companies in these

industries to effectively address each of these challenges.

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## **New dynamics**

In recent years, the dynamics of how product information is managed has changed and produced many challenges in streamlining an efficient PIM infrastructure.

- More product variety, shorter life-cycles, complex inter-relationships
- Multiple customer touch-points that require product information
- Multiple consumers of product information
  - Applications and systems
  - Internal users
  - External users
- Increased value of electronic product information as opposed to traditional hard-copy product information

## **Optimizing product information across the enterprise**

Rich, accurate, and up-to-date product information has become a key strategic asset in today's business environment – one that is essential in gaining a sustainable competitive edge.

Manufacturers and distributors require comprehensive, cost-effective product information. But, few enterprises have the infrastructure to fully realize such enormous potential.

Most enterprises today lack the process and systems required to fully realize the potential of their product information. Thus, manufacturers and distributors are turning to WebSphere Product Center for comprehensive, cost-effective PIM solutions.

## **Challenges**

Currently, companies are faced with many issues and time-consuming

tasks in order to manage product information processes.

The following are key challenges in implementing a PIM strategy:

- Lack of central product repository
- Manual and error-prone processes consume resources
- Poor quality product data
- Inability to scale existing content management process
- Inability to track product changes and versions
- Inability to publish specific content and formats to various customers/channels/partners/users
- Inability to collaborate internally and externally
- Inability to track purchasing patterns by channels and customers

With WebSphere Product Center the above issues are resolved, while work efficiency increases and maintenance costs are reduced.

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## **At a glance**

WebSphere Product Center gives customers:

- Flexible, scalable data model to manage and link wide range of product information
- Sophisticated workflow that supports multi-department as well as multi-enterprise business processes
- Intuitive user interface for modeling, managing, viewing, and navigating data models and business processes to match a customer's specific needs
- Robust security that establishes user profiles both internal and external to the enterprise
- Stable, secure open-standards based architecture, which allows integration into the client's existing IT environments
- Built-in synchronization capabilities to integrate with internal legacy systems, enterprise applications, and repositories as well as

to connect with external partners

- Serves as foundational infrastructure for global data synchronization and RFID
- Extendible solution design that integrates seamlessly with WebSphere Business Integration to greatly enhance the value of a customer's product information management solution
- Easy integration with WebSphere Commerce Server to publish rich, consistent, connected and up-to-date product information to Web store front

## **Features of WebSphere Product Center**

WebSphere Product Center provides extensive function for managing all aspects of product information, including and linking information regarding products, locations, trading partners, organizations and terms of trade. Key features of WebSphere Product Center include the following:

- Rich data model for all aspects of product information

Companies can manage various dimensions of product information including item, location, organization, and trading partner data and all the linkages among those including prices and trade terms. With WebSphere Product Center, you can manage item, location, and trading partner information with numerous classification, merchandising, geographic, and operational hierarchies.

WebSphere Product Center's rich data model supports following functions:

- Manage items and various relationships among items (packaging, substitution, cross-sell, up-sell, bundles or prepacks)
- Manage locations, location hierarchies and various attributes related to locations
- Deliver best-in-class category hierarchy support
- Support specific attributes and attribute values



- Category
  - Location
  - Trading partner
  - Relationship
- Organizational modeling with role and attribute level security administration

Product information is often owned and modified by users from multiple departments within a company. With the WebSphere Product Center, companies can segment various attributes of product data as per business responsibility (such as logistics, finance, pricing, marketing, and supplier) and control user actions (view-only, edit, approve) based on their roles. Pricing analysts can enter and update pricing, while marketing users can work on product description, features and benefits. Each user sees the relevant product information based on their role for the most secure and productive user interface. Organization modeling and security for the WebSphere Product Center includes the following function:

- Segment data as per business responsibility through access control groups and selections
  - Provide granular security for permitted user actions by user role
  - Group attributes (attribute collections) by functional areas
  - Specify user access to attribute groups based on functional ownership
  - Provide attribute views and tabs for most intuitive and productive user interface by role
- Extensive business process support

WebSphere Product Center is designed for supporting and enhancing business processes for product information management in an enterprise. Product information such as effective pricing dates can be entered at one or more higher levels

in the hierarchy such as at corporate, region, country, or market level and inherited at lower levels with an option to override if needed. Companies can manage product information in multiple languages, with robust support for managing translation process with third-party translation agencies. WebSphere Product Center powers business processes for an enterprise with following functions:

- Reduces redundant data entry through inheritance
  - Manages data in multiple languages with localized attribute names and values
  - Delivers best in class attribute level workflow
  - Enables collaboration area for internal and external collaboration
- High performance, scalability and reliability

WebSphere Product Center is built for managing millions of products with translated and localized product data for several geographies. Companies can deploy WebSphere Product Center with hundreds of users managing product data for thousands of stores. It is deployed to process numerous data synchronization messages and product information queries per day. Key features that power the high performance, scalability and reliability of the WebSphere Product Center include:

- Combination of J2EE architecture advantages with best design practices
  - Support for application server clustering
  - High user concurrency
  - Large data and batch processing capacity
  - GUI optimized for power user
- Open and interoperable

WebSphere Product Center operates in heterogeneous IT environments. It integrates with industry-leading message bus tools such as WebSphere MQ and supports multiple protocols such as HTTP, FTP and Web services for ease of integration. WebSphere Product Center provides certified connectivity with

leading industry data pools such as UCCnet and Transora. WebSphere Product Center provides:

- Support for various data formats and communication protocols
  - Data mapping console for mapping from and to multiple types of external data model
  - Easy integration with leading enterprise application integration tools, including WebSphere Business Integration, through messaging infrastructure
  - Certified connectivity for industry-leading data pools such as UCCnet and Transora
- Flexible deployment and manageability

WebSphere Product Center provides various tools for fast deployment and ease of management for system administrators. WebSphere Product Center comes with:

- Web-based user interface
- Scheduler for time-based or event-driven scheduling
- System administration tools for database administration and application server performance tuning
- Complete audit trail

## **Benefits of WebSphere Product Center**

Its features translate into valuable benefits for clients. Clients can address industry mandates and regulations, as well as create opportunities for increased revenues and reduced costs. Early adopter industries, which include retailers, consumer products manufacturers, and consumer electronics manufacturers, have recognized a number of benefits from implementing WebSphere Product Center. These benefits can extend to customers in a wide range of industries to meet their product information management needs. Customers using WebSphere Product Center can:

- Synchronize product data between suppliers and retailers to leverage efficiencies and savings with global data synchronization
- Publish new and updated product data to multiple internal systems including enterprise resource planning (ERP), procurement, order management, merchandising, transportation, warehouse, store operations and point-of-sale in a timely manner
- Publish product information to a variety of different customer and trading partner touchpoints, including Web sites, e-commerce sites, portals, kiosks, paper catalog publishing systems, and other internal and external systems
- Feed rich product, location, trading partner, organization and terms of trade information to RFID systems
- Increase revenue from accelerated time-to-market for new products
- Increase customer satisfaction and order size resulting from consistent customer experience across multiple sales channels (Web, mail catalogue, in-store kiosk, or point-of-sale)
- Improve accuracy in ordering, shipment handling and invoicing resulting in lower cost of doing business for retailer and their suppliers
- Reduce costs resulting from reduction in product information errors, automated workflow, and contextual information sharing
- Fuel e-commerce initiatives with rich and inter-linked product information containing event-specific marketing messages, cross-sell, up-sell and bundle or outfit relationships
- Provide enhanced and consistent product information across all internal and external constituents, creating a true multi-enterprise environment
- Manage trade conditions including base cost and promotional information at the corporate, market, and store levels, as needed

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## **WebSphere Product Center components**

Each component of the WebSphere Product Center is based on a

role-based modularized design, which allows a user to easily interpret their role in the product information management cycle.

- Product Manager
- Collaboration Manager
- Data Model Manager
- System Administrator

## **Role-based modular design**

Each of WebSphere Product Center's modules, as identified in the previous section, aligns with a user role. By providing a role-based modular design, users focus on information relevant to their position, which decreases the learning curve and accelerates product training.

<b>Module</b>	<b>Role Name</b>	<b>Role Description</b>
Product Manager	Content Managers/Product Experts	Users that extensively use WebSphere Product Center to manage content
Collaboration Manager and Data Model Manager	Business Process Analysts	Users responsible for setting up the data module and business rules for Content Managers
System Administrator	System Administrator	Users responsible for the uptime of the WebSphere Product Center application and related services

1. Create File Spec - define the incoming file format
2. Create a Catalog - define the catalog/primary spec
3. Map File to Catalog - map the file spec and primary spec
4. Run Feed - populate the catalog with product information

## Create file spec

The first step in the collection of data is to define the origin of the incoming file. Through WebSphere Product Center's GUI wizard, a File spec is created, which represents the data structure of the external file.

The purpose of the file spec is to provide information on how the fields are ordered within the incoming file, one by one. This involves naming each of the fields of the incoming file and providing attribute information on these fields, such as the length and the data type.

A file spec is needed to import an external data source into WebSphere Product Center. If the data source has changed, the file spec can be modified to reflect the change.

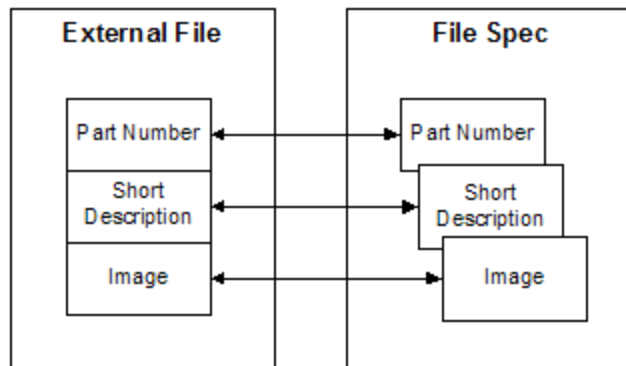


Figure 1 - Creating a file spec

## Nodes

When building a file spec, each field of the incoming file is defined. In WebSphere Product Center, the term node has the same meaning as a field. Thus, each field in a file is a node in a file spec.

To build a file spec, a node is added one at a time. The order of the nodes corresponds to the order of the fields in the file. It is easy to change the order of the nodes after creation.

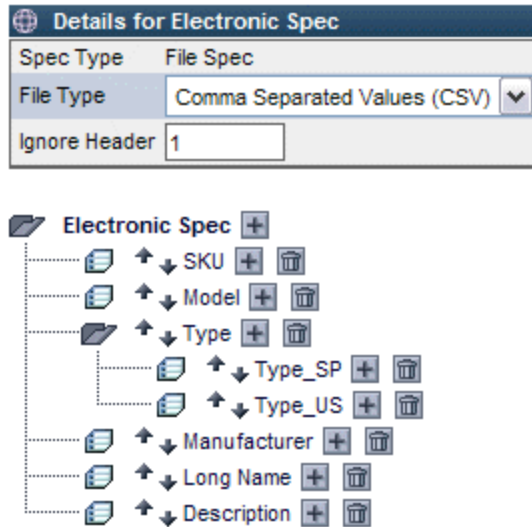


Figure 2 – File spec nodes

## Node parameters

Once the nodes have been added, each node is further defined with parameters, which include such details as maximum length, maximum/minimum occurrence, and the data type.

Details for Model							
Name	Model						
Maximum Length	3000						
Maximum Occurrence	1						
Minimum Occurrence	0						
Type	String						
Display Name	<table border="1"> <thead> <tr> <th>Locale</th> <th>Display Name</th> </tr> </thead> <tbody> <tr> <td>English (United States)</td> <td></td> </tr> <tr> <td>Spanish (Spain)</td> <td></td> </tr> </tbody> </table>	Locale	Display Name	English (United States)		Spanish (Spain)	
	Locale	Display Name					
English (United States)							
Spanish (Spain)							
Default value							
Attribute Collection Associations							
Editable	<input checked="" type="checkbox"/>						
Unique	<input type="checkbox"/>						
Link	<input type="checkbox"/>						
Hidden	<input type="checkbox"/>						
Runtime Searchable	<input type="checkbox"/>						
Non-Persistent	<input type="checkbox"/>						
Localized	<input type="checkbox"/>						

Figure 3 - Defining node parameters

## Save file spec

Once all of the nodes have been defined, the file spec is saved. If needed, changes to the file spec can be made at any time through WebSphere Product Center's Specs console.

At this point, everything about the origin of the data has been defined. The next step is to build a catalog, which determines where the data from the external file will go into WebSphere Product Center.

## 2 - Build master catalog

WebSphere Product Center's powerful content management system is based on a master product information repository that centralizes the entire product, pricing, and descriptive information needed to effectively promote products to the customer base.

To centrally store and manage the product information, a master catalog is created in WebSphere Product Center. The master catalog is the heart of the WebSphere Product Center as it is used to store a



company's product information and provides the following functions:

- Holds information for multiple customers or channels
- Minimizes redundant activities - no need to recreate separate catalogs for every customer
- Reduced errors - central point to make changes and updates
- Refocuses personnel on high-value tasks - manual, time-consuming tasks are automated

## **Create the catalog**

When a catalog is created, an import feed can populate it with the items from an external file or items can be added manually through the user interface. Once the content is pulled into the master catalog, the information can be enhanced and customized through WebSphere Product Center's Product Manager module.

To create a catalog in WebSphere Product Center, a primary spec must be created to define the data fields within in the catalog, thus determining how the catalog will be formatted. The catalog spec is typically defined once, but is flexible to meet changing catalog maintenance needs.

A primary spec can contain as many fields as necessary. Each field can be defined with attribute information and it is required to identify one field as the primary key. The primary key functions as a unique identifier across the catalog.

To organize the catalog information, a hierarchy is created and associated to a catalog. The hierarchy groups the items of the catalog into an ordered structure.

**Note:** The primary spec created for a catalog is much like the file spec in that all of the fields in the catalog are defined with a name and with attribute information.

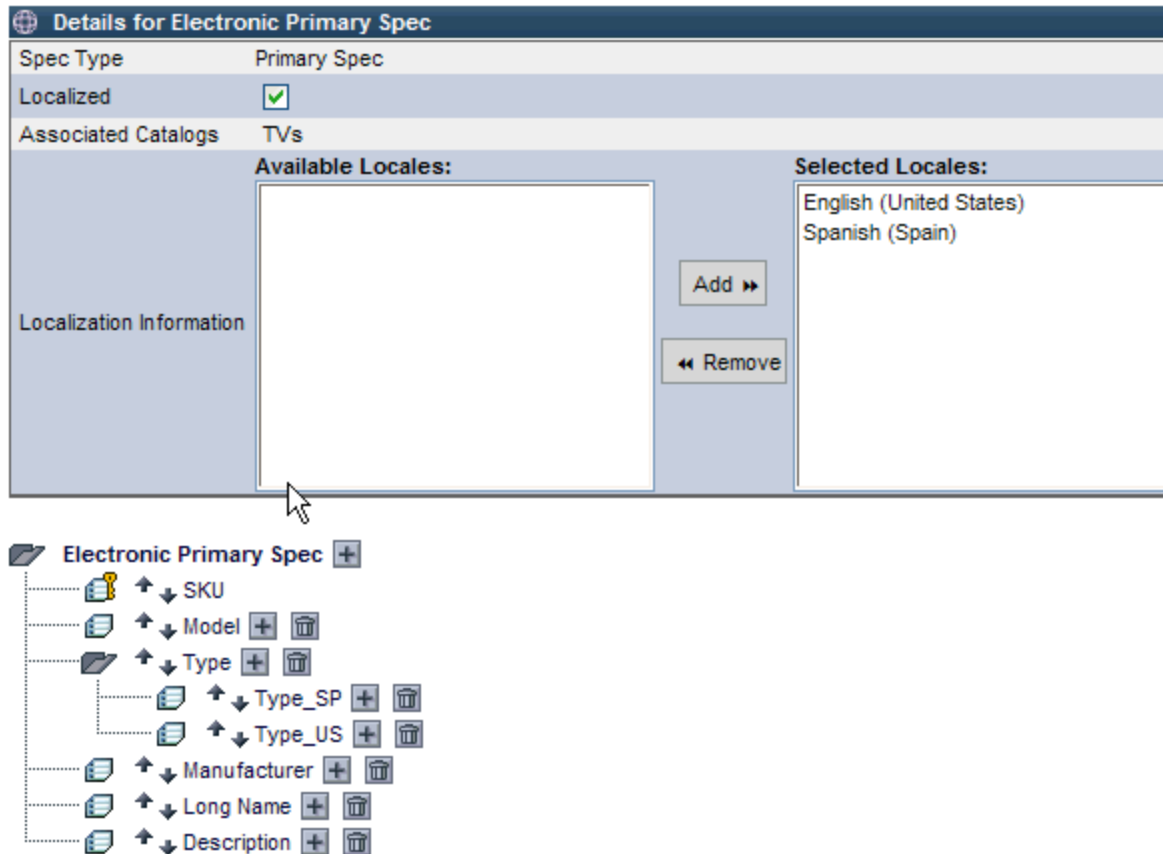


Figure 4 - Defining a primary spec

## Map file spec to catalog

At this point, a file spec has been created to define the external file, a catalog has been created with each of the data fields defined in the catalog spec, and a category spec has been associated to define a categorized structure. The next step is the mapping of the external file to the catalog.

The purpose of mapping is to instruct WebSphere Product Center how the fields in the incoming file should be routed to the fields in the catalog. WebSphere Product Center makes mapping simple through the use of the Mapping Console.

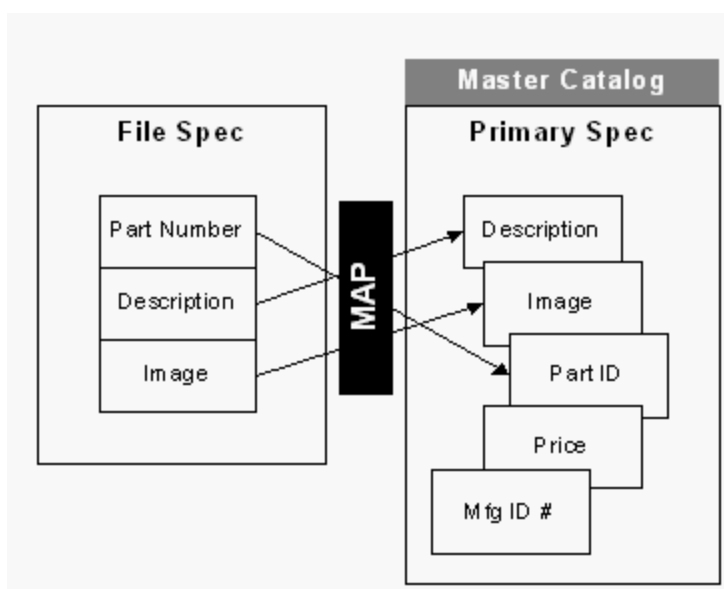


Figure 5 - File spec to primary spec mapping

Once the mapping is completed, a feed may be run to populate the external data into the WebSphere Product Center catalog.

**Source to Destination Mapping**

- ➔ 1 Selected spec map type: File Spec to Catalog.
- ➔ 2 Selected source Specification: Electronic Spec.
- ➔ 3 Selected Catalog destination: TVs.

Enter map name:

Selected Source Attribute

Add Destination Attribute

**Source (Electronic Spec) to Destination (TVs) Mapping**

Source Attribute	Expression	Destination Attribute
Electronic Spec/SKU <input type="button" value="+ ADD"/>	<input type="button" value="map"/>	Electronic Primary Spec/S
Electronic Spec/Model <input type="button" value="+ ADD"/>	<input type="button" value="map"/>	Electronic Primary Spec/M
Electronic Spec/Type/Type_SP <input type="button" value="+ ADD"/>	<input type="button" value="map"/>	Electronic Primary Spec/T
Electronic Spec/Type/Type_US <input type="button" value="+ ADD"/>	<input type="button" value="map"/>	Electronic Primary Spec/T

Figure 6 - Mapping specs

## Setting up an import

The concept of the import is that a user must perform some action on various systems to properly import a set of specified information. This typically involves a high number of parameters that must be specified repeatedly. With WebSphere Product Center's simple GUI wizard, those actions can be specified once, saved, and can be reused thereafter.

Setting up an import feed in WebSphere Product Center involves defining the location and the type of external data source, then specifying how to retrieve and populate a catalog with the imported data.

Once all this information has been provided to WebSphere Product Center, it can be saved in a feed and triggered thereafter, either through a schedule or manually.

## Run import

When all of the steps needed to create an aggregation have been completed, the catalog is then populated with the specified information from the incoming file.

The feed can be set to run manually with a click of a button in the Import Console or automatically using WebSphere Product Center's Scheduler. If desired, the feed may include workflow alerts of successful or incomplete processes.

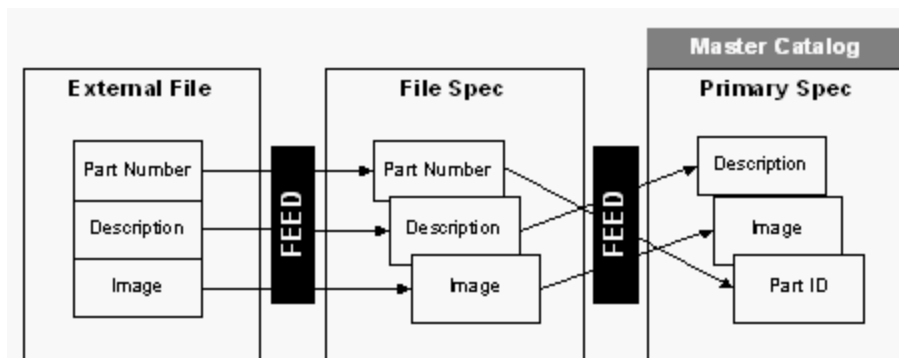


Figure 7 - Run feed to populate catalog

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## 3 - Edit and enhance catalog

With WebSphere Product Center's item management tools, product information becomes:

- Scalable – easily manage a large number of catalogs, SKUs and attributes
- Flexible – support any kind of customer, format, taxonomy, platform, etc.
- Trackable – version control capabilities help you easily track catalog changes, and quickly identify and fix any errors.

### Modifying catalogs

Centralizing product data in WebSphere Product Center eases the task of item management. Through the WebSphere Product Center Product Manager module, the following tasks can be performed:

- Browse and modify a catalog
- View any items within a category
- View the catalog spec
- View and modify the category spec
- Edit the items of a catalog
- View catalog attributes
- Rollback a catalog version
- Search a catalog's content

### Data entry screens

Users can perform content authoring tasks using WebSphere Product Center's data entry screens, which can be customized with tabbed views. The design of the data entry screens allows Content Managers to easily and effectively administer single or bulk edits through one interface.

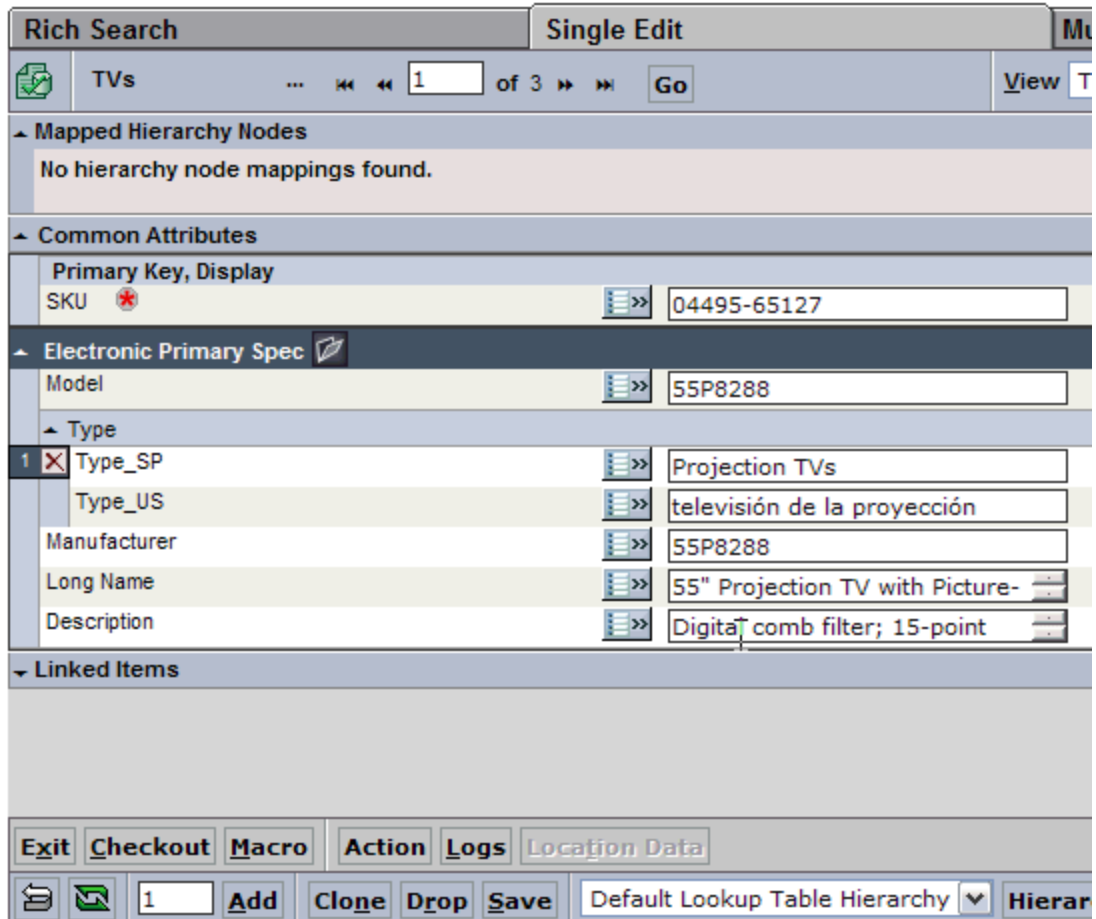


Figure 8 - Single Edit screen

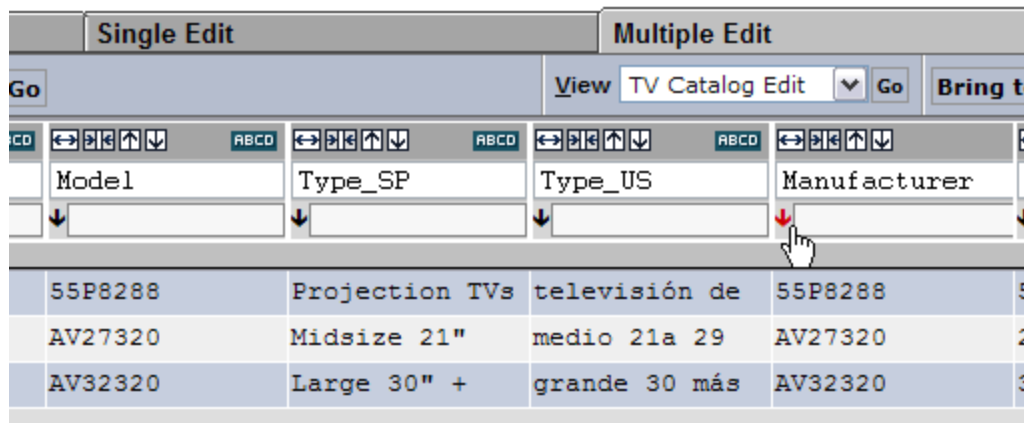


Figure 9 – Multiple Edit screen

## Catalog differences

Version control can be implemented to audit content changes. Users can view changes between versions and if needed, rollback to a prior catalog version. For quality control purposes, a user can view items in a catalog that have been added, deleted, modified, or unchanged.

## Catalog rollbacks

Catalog rollbacks are used to revert to a previous catalog version. As all catalogs are created with version control, a user can rollback to a previous catalog version, if needed. This can be especially useful if changes that were made to a catalog were later determined to be unnecessary or otherwise done by accident.

## Catalog searches

Catalog searches are made simple using the left pane search feature provided for each catalog. Search for an item or category and the results are displayed in the left pane. For a more detailed search, create a Basic or Advanced selection. There is also a Rich Search screen available, which provides a more detailed search based on nodes and values.

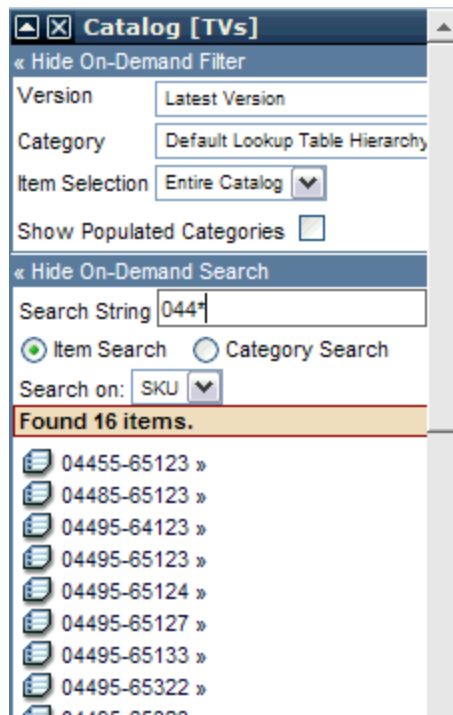


Figure 10 - Catalog search feature in Left Pane

Figure 11 - Rich Search

## 4 - Create custom catalogs

Custom catalogs can be created to address customer specific needs (unique item selections, contract pricing, customer-specific merchandising based on previous buying activity, etc.) or to support different customer markets. With WebSphere Product Center, there is no need to create separate catalogs with duplicate information.

### Linked catalogs

A powerful feature of WebSphere Product Center allows linking between two catalog specs via any attribute. This allows for multiple links and the modeling of more complicated relationships between catalogs.

Each catalog can hold its own custom fields, but can also inherit fields of another catalog based on the catalogs link relationship. Thus, common information is leveraged through a set of catalogs and customized information can be stored in the custom catalog. For example, pricing information stored in one catalog can be linked to core product



information in another.

## **Hierarchy**

Building a hierarchy provides an information structure (taxonomy) that can be used by the catalog. In effect, a hierarchy provides a categorized structure for the catalog.

Within WebSphere Product Center, catalogs and hierarchies are two independent entities. This means that it is possible to build one or many catalogs without any information relative to the categorization of the items in it. The content is stored independently of a hierarchy.

It is also possible to build one or multiple hierarchies, which can be associated with many different catalogs. Once a hierarchy is created, catalogs can be associated to hierarchies in a many-to-many fashion. This means that a catalog can use multiple hierarchies, and a hierarchy can be used by many catalogs.

The association of a catalog to a hierarchy allows the view of information in any taxonomy (UNSPSC, UDEX, eCl@ss, custom industry standard, etc.).

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## **5 - Publish catalog**

Syndication (Export), in WebSphere Product Center, is the method used to distribute or publish product information to any destination.

Once all of the information in the catalogs has been cleansed and edited, WebSphere Product Center allows you to create catalogs customized for any internal or external destination. The custom catalogs can be automatically published to customers, partners, and print catalogs, or to a corporate website.

Using WebSphere Product Center's Export Console, the following tasks are performed:

- Export catalogs in any format

- Publish variances
- Publish subsets of content
- Merge destination-specific data and standard information

## **Destination spec**

When a syndication is created in WebSphere Product Center, a destination spec is created to define the exact requirements of the destination file. Similar to a file spec or catalog spec, each node of the destination spec is defined with attributes.

During syndication, the selection of a destination spec will generate a file that adheres to the specified requirements.

## **Group of items**

The Export module allows a basic or advanced selection of a group of items from an entire catalog to be pushed to a specific destination.

The basic selection includes the catalog, catalog version, and the category tree used for syndication. An advanced selection allows you to specify a set of rules to choose a group of items from a catalog. The selection is used only for the latest catalog version and is saved for future use.

## **Syndication type**

By selecting the syndication type, WebSphere Product Center provides the user with the option of selecting whether to syndicate an entire catalog or simply to update a catalog. This allows the syndication of catalog variances.

## **Catalog to destination specification map**

The Catalog to Destination Specification map is similar to the File to Catalog Map in that it instructs WebSphere Product Center how the fields in the catalog should be routed to the fields in the destination file.

This mapping must occur for a successful syndication.

## **Distribution destinations**

A catalog, once syndicated, can be sent out to multiple destinations for purposes of approval and/or verification. The distribution component of syndication allows a user to select the destinations to where the catalog is to be sent. The catalog can be sent out in the form of an email (in the body of the email) or ftp.

## **Alerts**

Syndications can be configured to trigger alerts to multiple parties, based on user-defined conditions. Create alerts to notify of successful or failed import or export feeds.

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## Ch 2 Information flow

This chapter outlines how product information is managed using WebSphere Product Center. The key to building an efficient PIM infrastructure is to centralize the information into a single structured repository. The following five processes constitute the flow of product information, managed using WebSphere Product Center:

- Collect and validate product information
- Build master catalog
- Edit and enhance catalog
- Create customized catalogs
- Publish catalogs

**Note:** The information flow described in this chapter is an example of a simple way of creating a catalog of information. WebSphere Product Center can import and export data of varying complexities and formats.

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### 1 - Collect and validate product information

The first task of WebSphere Product Center's PIM flow is to collect data from multiple external systems and bring them into WebSphere Product Center. External systems include ERP, legacy, databases, and spreadsheets. Utilizing WebSphere Product Center's Import Console, data is imported into catalogs from various data sources.

The collection of data consists of defining and performing numerous data and file feeds into WebSphere Product Center. As the data is being loaded, it can be cleansed and standardized to meet business requirements. Assembling all of the pieces of data creates a product catalog that is complete and easily browsed.

The following steps are performed in collecting data into WebSphere Product Center:

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# Ch 3 Graphical interface overview

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## Home

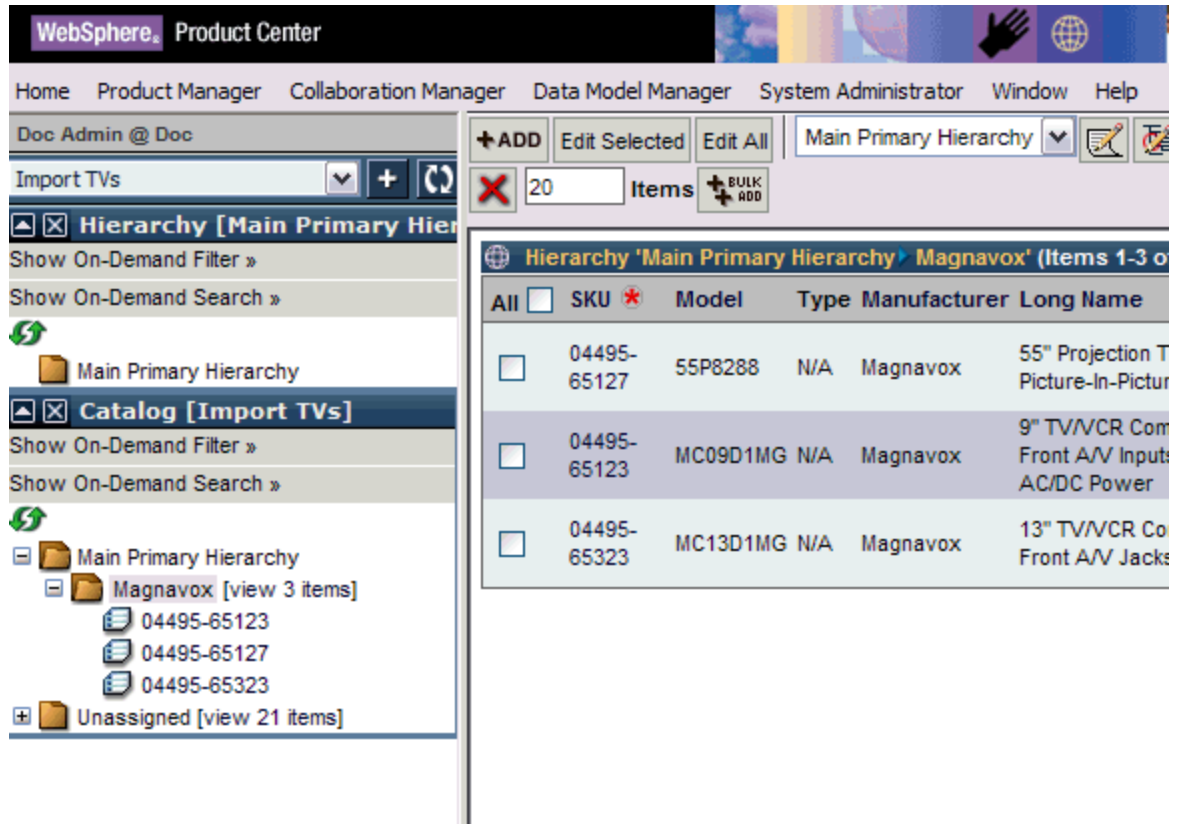


Figure 12 – WebSphere Product Center user interface

After the WebSphere Product Center login, the home page appears with the Left Pane Access, the Collaboration Console, and the menu bar with access to all of WebSphere Product Center's PIM modules.

The Left Pane access bar can be configured to view bookmarks, selections, last visited, catalogs and more. Once a catalog is added, it is simple to view and edit catalog items. The user interface can be further customized using the My Settings component.

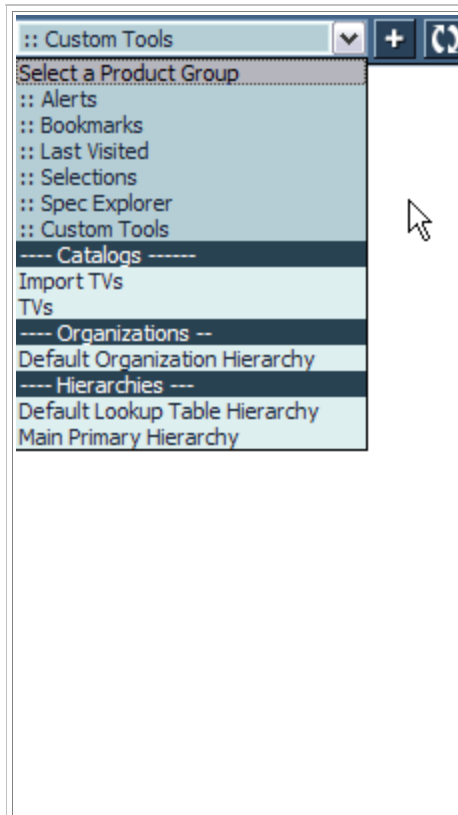
## Home Menu and Signout

The Home menu provides access to the following screens:

- My Home - brings the Collaboration Screen View, similar to what a user sees when first logging into WebSphere Product Center
- My Task List - a customizable view to display specific tasks such as Approvals or User Activity
- My Settings - allows the user to set specific application setting such as Timezone, Rows of data displayed per screen, etc.
- My Profile - allows the user to reset their password, change contact information, etc.
- Signout - returns to the user login screen
- Exit - closes the Internet session

## Navigation

Navigating WebSphere Product Center is made simple with the use of the user-friendly left hand menu. The drop-down menu will add options for navigation providing access to the following:



- **Alerts** – presents the status and number of alerts
- **Bookmarks** – user may bookmark areas of WebSphere Product Center
- **Last Visited** – stores the last pages that have been visited
- **Selections** – saved catalog selections
- **Spec Explorer** - search and view specs that have been created
- **Custom Tools** - list of all WebSphere Product Center applications (customized applications)
- **Catalogs** - all catalogs available to the user
- **Organizations** - list of organization that can be added to the Left Pane
- **Hierarchies** - list of hierarchies that can be added to the Left Pane

## Hide Left Pane

Increase the amount of workspace that is available on the screen by hiding the Left Pane. From the menu bar, select **Window > Hide Left Pane**.

## Navigation map

WebSphere Product Center's navigation map displays a detailed level of every WebSphere Product Center component, which is separated by the five main components of the top-level toolbar.

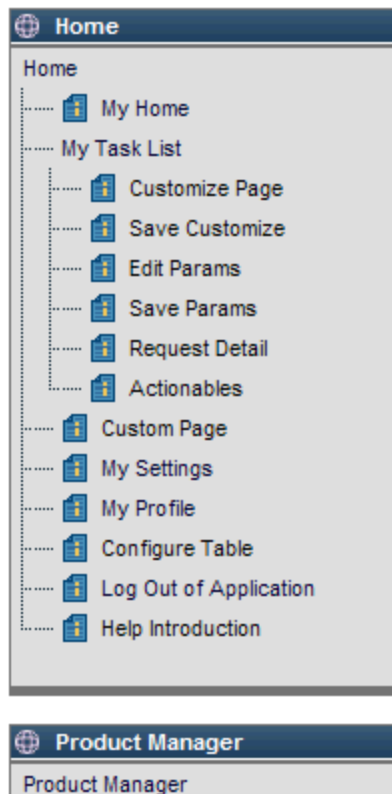


Figure 14 - WebSphere Product Center 's navigation map

## Menu bar

At the top of the application is a menu bar with a series of buttons that navigate to the major functional areas of the application. This

role-based, modularized design allows users to work within modules that are relevant to their assigned tasks.

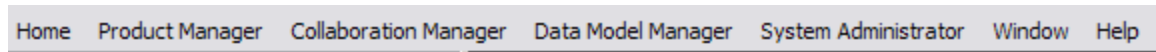


Figure 15 – Menu bar

Click on a menu option on the top-level toolbar and drag your mouse over to view all of the associated components in the menu. These drop-down menus have been provided for efficient navigation through WebSphere Product Center.

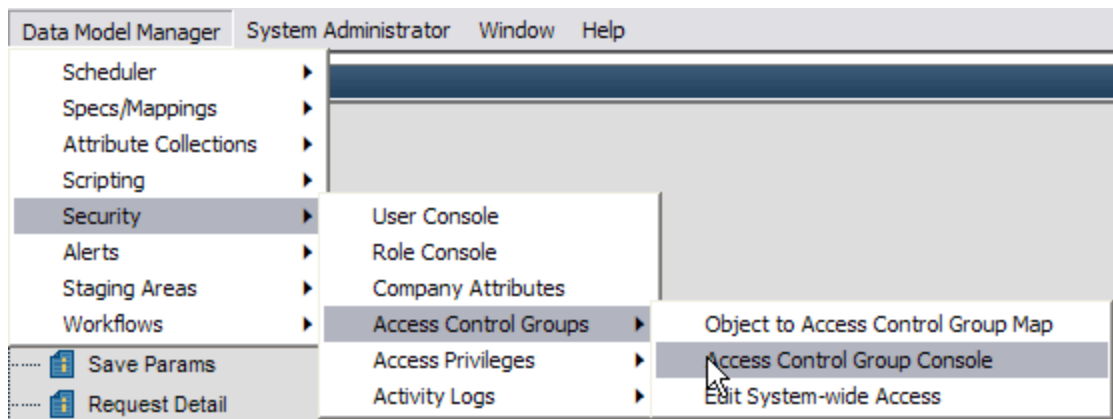


Figure 16 – Dynamic menus

The following sections describe each major functional area of the application.

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## Product Manager Module - "Manage the information"

The Product Manager module, designed for business users, reduces the complexity in managing content from multiple sources and audiences. It allows users the ability to provide customer-focused content.



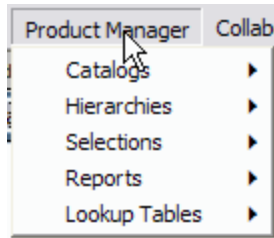


Figure 17 - Product Manager menu selections

The Product Manager module offers the following features:

- Catalog creation and management
- Category Hierarchy/Taxonomy creation and management
- Lookup Table creation and management
- Item selections

## Catalogs

Access the catalog console and other options that allow the management of catalogs. The Catalog menu items allow a user to create a new catalog, rollback to a previous catalog, analyze differences between two catalogs, etc.

## Hierarchies

The Hierarchies menu items allow the management of hierarchies, very similar to how catalogs are managed. Update Hierarchies (Category and Organization hierarchies).

## Selections

Create a basic item selection on a catalog that will display a user-defined collection of data. The item selections are saved in the Items Selection Console for future use and can be edited as needed. When updating content, users can use the saved selection to perform mass updates to a user defined set of content.

## Reports

WebSphere Product Center's reporting component, within the Product Manager module, uses the scripting engine to create reports that help analyze how catalogs are being processed. For example, a report can be created to provide a summary of all categorized items in all published versions of a catalog.

It is simple to create a report once and run it against one catalog or many different catalogs. The report can be delivered to a specified location, such as by email, ftp, or post.

## Lookup tables

Lookup tables are provided to enhance the content management functionality available in WebSphere Product Center. They are used to perform search and replace functions within a catalog, and can also be used to validate data contained in specific catalog fields.

---

## Collaboration Manager "Control Input/Output"

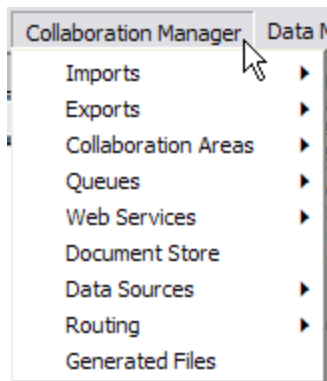


Figure 18 - Collaboration Manager menu selections

The Collaboration Manager offers the following features:

- Import and Export in any format
- Imports from different sources
- Export to different destinations
- Creation and management of web services
- Document store

- Collaboration area creation
- Queues creation and management
- Web Services console activities
- Creation of data sources
- Manage routing to destination groups

## **Imports**

The Import component aggregates a company's internal and external content sources into the WebSphere Product Center application. Once the information is centrally stored, the information can then be managed effectively.

- Importation of any format
  - Multiple file formats (delimited, XML, etc.)
  - Multiple data protocols (FTP, direct from database)
  - Multiple data types (items, images, taxonomies)
- Validation of incoming data
- Standardization of data
- Selection of character sets, including double-byte
- Mapping of data to multiple catalogs through GUI
- Complex cleansing through business rules and look-up tables
- Comprehensive workflow and approvals
  - Process routing and approvals
  - Quality control alerts
- Provides connectors to internal systems and external trading partners

## **Exports**

The Export component eases the generation of export files into any format, which reduces the complexity in managing syndication across multiple customers and exchanges. The following features are offered:

- Export in multiple formats
- Publish variances and subsets of content

- Merge destination-specific data and standard information
- Maximize value of product information
- Simple mapping through GUI
- Complex cleansing through business rules and look-up tables
- Support for major standards
- Ability to easily add new destinations

## **Collaboration areas**

Create a Collaboration Area and attach the collaboration area to a workflow. Collaboration areas can be created for Hierarchy workflows and for Item workflows.

## **Queues**

Queue is a WebSphere Product Center construct serving as a receiving and transmission point for messages. A script supports each Queue.

## **Document store**

The Document Store is the area within WebSphere Product Center where every incoming and every outgoing file is stored. This includes aggregation feeds, scripts, reports, and specification files. For auditing purposes, search capabilities are provided.

Every file that goes through WebSphere Product Center is copied and stored into the Document Store. Thus, the Document Store can be utilized as a backup engine.

## **Data sources**

Create a number of data sources that define how data source files are to be imported into WebSphere Product Center.

## **Routing**

Create a distribution group that defined to receive notice on scheduled activities.

## Generated files

Search and view all generated files based on a given date range for a specified destination.

---

## Data Model Manager - "Manage the process"

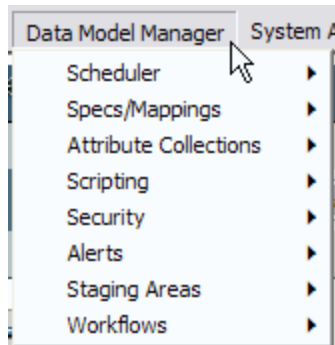


Figure 19 - Data Model Manager menu selections

The Data Model Manager module offers the following features:

- Scheduling and monitoring of jobs
- Configuring the data model
- Managing business processes through scripting
- Administration of users, roles, organizations
- Creating alerts
- Creating workflows for maintaining hierarchies and managing items belonging to catalogs

### Scheduler

The Scheduler provides a unified view to manage all jobs that have been scheduled within WebSphere Product Center. Through the Jobs Console, a job can be executed based on a defined timetable and monitored with status information.

### Specs/Mappings

Through the Specs console, users can View, Create, and Edit Specs for Files, Primary, Lookup, Destination, Secondary Specs, and Scripts. Once a spec is created; it can be mapped to the respective sources using the Spec Mappings console.

## **Attribute collections**

An attribute collection is a group of attributes that will be associated or behave the same way in a given context.

For example, a subset of attributes can be created for an electronic product catalog with an attribute set for features. This section can have multiple feature "types" (technical, marketing, etc.) Therefore, an attribute subset can be created for "technical" attributes and "marketing" attributes.

The subset of attributes can be used to create views, tabs, workflows, inheritance rules, privileges, etc. Associating a subset is more efficient than associating individual attributes.

## **Scripting**

The Scripting Engine in WebSphere Product Center allows for extremely sophisticated data manipulations during aggregations, syndications, and whenever pulling information to and from WebSphere Product Center. The engine relies on standard Java Script, which lowers the scripting learning curve.

Through the scripting engine, users can apply business rules to standardize data, calculate fields, run custom reports, perform rules-based cleansing, and validation.

## **Security**

Several functional features that define access and privileges to objects. This includes the creation of users, roles, access groups, and defining privileges, and setting locales for the company.

Manage User Roles - Privileges are not set to the individual, rather to the role that they are assigned to. Control a user's privileges by creating a

customized role with permissions to specific WebSphere Product Center functionalities (i.e. content reviewer, content approver, catalog manager.) To apply the permissions, assign user's to a role.

Access Control Groups - Use WebSphere Product Center's Access Control Groups (ACGs) to set the permissions in accordance with which user(s) can view/edit specific catalogs. Create an access group and assign it to a role. Then, assign a user to one or multiple roles, depending on the user's responsibilities. You can also apply security to an object by assigning an access control group to an item (i.e. a specific catalog).

## **Alerts**

The alerts functionality is in essence WebSphere Product Center's messaging system. Alerts can be tied to any type of event in WebSphere Product Center and can be used to notify specific users or groups of users that a specific event has occurred. Events can range from a successful syndication to a problem during aggregation or a new order that surpasses a predetermined dollar amount. WebSphere Product Center supports a number of different alerts that accommodate a wide variety of events.

## **Staging Areas**

Create a staging area to publish the export of data. This allows the verification of a proper export before scheduling an export to a destination.

## **Workflows**

The PIM process can be managed through the definition of a workflow. The Workflow Console is used to create a workflow process, containing multiple instances that are viewable through the definition display.

A workflow instance can be created to appear in the Workflow Console and based on the status, an alert can be sent to notify that an approval is needed before it is escalated to the next step in the workflow.

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## System Administrator "Analyze the environment"

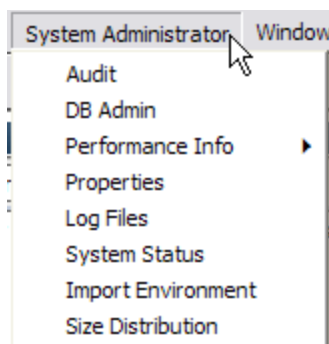


Figure 20 - System Administrator menu selections

This module is where monitoring of WebSphere Product Center and of the database are performed: access is typically reserved for a very technical user who may not necessarily have access to the rest of the application.

Managing the WebSphere Product Center environment is made simple through the System Administrator module, which provides the following functionality:

- Audit logger
- Database administration
- Monitor application performance
- Review system properties
- View system logs
- Analyze system status
- Check blob size distributions for the Docstore
- Import company environment into current company



## **Audit**

The Search Audit Log function allows the searching of the log that stores every event within WebSphere Product Center that can be recorded. All activities performed by a user can be viewed for a defined timeframe.

## **Database Admin**

The database administration component allows a system administrator to query and alter the database using SQL commands.

## **Performance Info**

Monitor various parts of the system and monitor the JVM using the various tools available. These allow you to monitor the number of running processes, and other info about the system health. Logging levels and other server data can also be controlled from here.

## **Properties**

This component allows a user to view the current default configuration properties for the system through the WebSphere Product Center GUI.

## **Log files**

Select from a list of system logs and view the tail length of the selected log. Look for error messages to help troubleshoot system issues.

## **System status**

View the long or short status of the various services: event processor, queue manager, scheduler, admin, and application server. Stop or abort any service as needed.

## **Import Environment**

Import a company environment into the current company. This feature would allow the import of a company environment in a test environment into a production environment.

## **Size Distribution**

The blob size distribution allows a user to check the distribution size of various paths in the document store. Analyze distribution of space used for various directories.

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