



IBM Software Group

WebSphere® Process Server V6 WebSphere Integration Developer V6

Relationship manager



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This presentation will focus on the Relationship Manager feature of WebSphere Process Server and WebSphere Integration Developer V6.0.

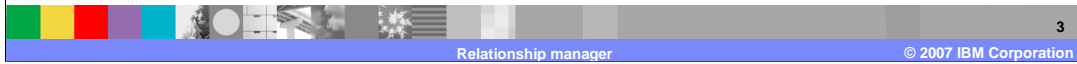
Goals

- Provide an overview of support for data relationships
- Explain the capabilities for the relationship manager

The goals of this presentation are to provide an overview of the Relationship service included with WebSphere Process Server and explain the capabilities of the Relationship Manager for working with relationship and role instances.

Agenda

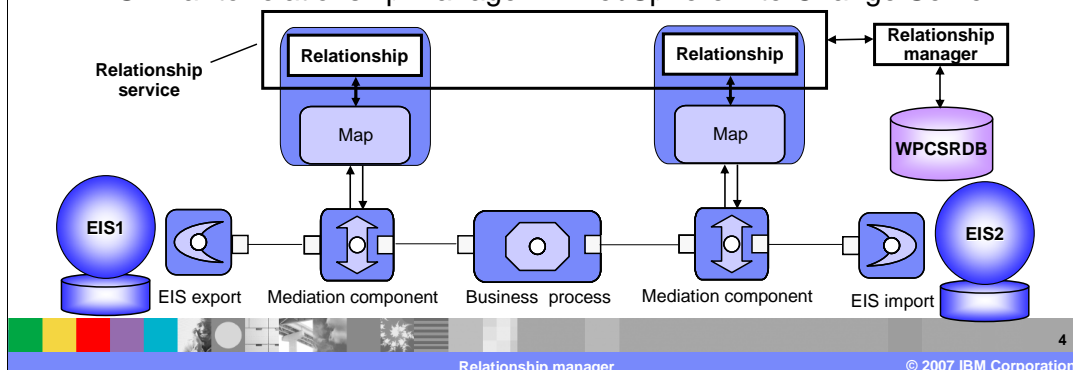
- **Relationship manager overview**
- Summary



This section will provide an overview of the Relationship Manager.

Support for relationships

- WebSphere Process Server includes a relationship service for execution of relationships
 - ▶ Provides the same capabilities as the WebSphere InterChange Server V4 relationship service
 - ▶ Also supports user-defined properties at relationship and role levels
- Relationship manager also included
 - ▶ Similar to relationship manager in WebSphere InterChange Server V4



WebSphere Process Server includes support for data relationships between different enterprise systems. In order for data from one system to reach another system and be mapped correctly to that system, a relationship must be defined that indicates the data mapping. For each data instance passing through WebSphere Process Server, the relationship will be used and an instance recorded for that specific data in a database (WPCSRDB). This relationship instance can then be reused on additional transactions involving the same data instance. This support included by WebSphere Process Server, is very similar in functionality to the relationship support in WebSphere InterChange Server. In order to view and manage these relationships, a relationship manager is also included in WebSphere Process Server. The relationship manager allows you to view relationships and roles that have been established for your data. The relationship manager in WebSphere Process Server is also very similar to the relationship manager support included with WebSphere InterChange Server.

Relationship manager overview

- Relationship manager provides an interface for working with relationship and role instances
 - ▶ View relationship and role schema information
 - ▶ Retrieve instances based on various query types
 - ▶ Create and delete relationship instances
 - ▶ Modify the contents of a relationship instance, such as adding and deleting role instances
 - ▶ Set property values of relationship and role instances
 - ▶ Activate and deactivate role instances
 - ▶ Rollback instance data
- Available through administrative console or MBean in WebSphere Process Server
 - ▶ Stand-alone or Network Deployment environment

Relationship manager is a tool for manually manipulating relationship data to correct errors found in automated relationship management or provide more complete relationship information. In particular, it provides a facility for retrieving and modifying relationship instance data.

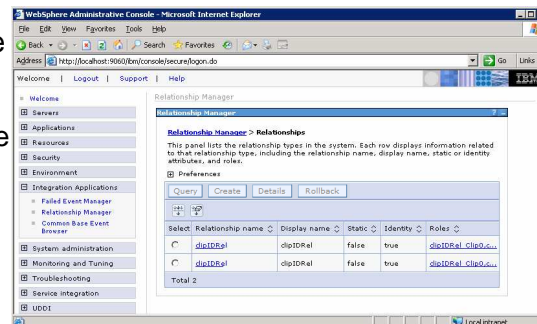
You can use relationship manager to manage entities at all levels: the relationship instance, participant instance, and attribute data and property data levels. For example, you can use relationship manager to:

- Create and delete relationship instances
- Modify the contents of a relationship instance, such as adding and deleting participants
- Add a participant's data and copy and paste the data of a participant from another relationship into the relationship instance, creating a new participant (as long as the participant types are identical)
- Activate and deactivate participants
- Retrieve participants based on instance IDs or data
- Recover from error conditions. For example, when corrupt or inconsistent data from a source application has been sent to the generic and destination application relationship table, you can use relationship manager to rollback the data to a point in time when you know the data is reliable.

The Relationship Manager is actually a server resource that is available through the Administrative Console or MBean. It is available in both a single stand-alone server environment or a Network Deployment environment.

Relationship manager user interface

- Available through administrative console as an integration application
 - ▶ Accesses WPRCSDB database to retrieve persistence information of relationship and role instances
- View installed relationships and relationship instances
 - ▶ View custom properties
- Query on relationship-based instances or role-based instances
- Rollback relationship instance data from a specific time period



6

A graphical user interface is provided for the Relationship manager in the Administrative console, allowing you to configure, query, view, and perform operations on relationship runtime data. For each relationship instance, relationship manager can display a hierarchical listing of its participants. Each participant fills a role in the relationship and has instance data, properties, and key attributes. The relationship tree also provides detailed information about each of the participants in the relationship instance, such as the type of entity, its value, and the date it was last modified. A relationship instance ID is automatically generated when the relationship instance is saved in the relationship table. Relationship manager will display this instance ID at the top level of the relationship tree. Different relationships can be queried and rolled back based on specific time periods.

Relationship manager configuration

- Cache size hint limits memory usage
- Block cursor support
- Single data source for all

The screenshot shows the 'Relationship Manager' configuration window for the 'Relationship Service'. The window title is 'Relationship Manager' and the breadcrumb is 'Relationship Manager > Relationship Service'. Below the breadcrumb, it says 'Use this page to view and set the configuration properties for the relationship service.' The main content area is titled 'Configuration' and is divided into two sections: 'General Properties' and 'Additional Properties'.

General Properties:

- Name: WPS Relationship Service
- Relationship Service version: 6.0
- Cache Size Hint [Relationship Instance Count]: 5000

Additional Properties:

- Relationships: [Relationships](#)

Datasource:

- Datasource: jdbc/WPSDB
- Datasource is on z/OS

At the bottom of the configuration area are three buttons: 'OK', 'Reset', and 'Cancel'.

The cache size hint has been added to limit the amount of results in memory per page. By setting the cache size hint, the relationship service will only retrieve the given amount of relationship instances. The relationship manager shows the next/back buttons and get only additional rows as are shown at once in the table. The block cursor support addresses a major potential problem where a possible large return set could either leave the relationship manager in an unresponsive state or potentially the server could run out of memory.

There can be one data source specified for all the relationships and this data source is configured as part of the Relationship Service.

Relationship service manager

Relationship Manager

Relationship Manager > Relationships

This panel lists the relationship types in the system. Each row displays information related to that relationship type, including the relationship name, display name, static or identity attributes, and roles.

Preferences

Query Details Rollback **Create**

Select	Relationship name	Display name	Static	Identity
<input type="radio"/>	test	test	false	false
<input type="radio"/>	shaprelationships	shaprelationships	false	false

Total 2

New 'create' button

Relationship Manager

Relationship Manager > Relationships > Query test > Relationship instances

This panel lists the results from the query of relationship instances and includes the relationship instance ID, property values, and role instance names.

Preferences

Maximum rows: 3

Retain filter criteria.

Max column width: 900

Apply Reset

Details Create Delete Apply changes

Select	Relationship instance ID	Property values	instances
<input type="radio"/>	1	relProp1=ww	test_triangle,test_triangle,test_triangle
<input type="radio"/>	2	relProp1=fea	test_triangle,test_triangle
<input type="radio"/>	3		test_triangle,test_triangle,test_triangle,test_triangle

Page: 1 of 3 Total 7 Go To Page 3

New 'go page' text box and cursor support

A create button has been added to the relationships panel and a go to page entry field allows moving directly to a specific instance in the relationship viewer.

Roles support

- Roles group added
- Create and delete added

The screenshot shows the 'Relationship Manager' interface. The breadcrumb trail is 'Relationship Manager > Relationships > Query test > Relationship instances > 1'. Below this, a text box states: 'This panel displays detailed information for the selected relationship instance, including the relationship name, relationship instance ID, role base information, and property values.'

The form is divided into several sections:

- General Properties:** Contains input fields for 'Relationship name' (value: http://test/test) and 'Relationship instance ID' (value: 1).
- Property values:** A table with columns 'Name', 'Type', 'Default value', and 'Value'.

Name	Type	Default value	Value
relProp1	string	qwe	lrw
relProp2	string	ffeefff	
relProp3	string	fadafa	
- Role information:** A new section containing two tables. The first table is for 'test_triangle' and the second for 'test_ball'. Each table has columns 'Select', 'ID', 'Logical State', 'Key Attributes', and 'Property Values'. Below each table are 'Create' and 'Delete' buttons.

Select	ID	Logical State	Key Attributes	Property Values
<input type="checkbox"/>	1	active	label=big	

Select	ID	Logical State	Key Attributes	Property Values
<input checked="" type="checkbox"/>	1	active	label=big	
<input checked="" type="checkbox"/>	2	active	label=big	

Callouts from the image:

- 'New section for Role information.' points to the 'Role information' section.
- 'Instance id link.' points to the '1' in the 'ID' column of the 'test_triangle' table.
- 'add and delete role instance buttons' points to the 'Create' and 'Delete' buttons below the 'test_ball' table.

At the bottom of the window, there are 'Apply', 'OK', 'Reset', and 'Cancel' buttons. The footer shows 'Relationship manager' and '© 2007 IBM Corporation'.

Relationship roles have been added to the relationship instance form to group the participating instances together. This lets you see all relevant data at once. In the new section for role information each role type associated with this relationship instance will have a table that lists all instances created for that role type. Users could delete or create new instances from here. Clicking on the instance ID link shows the role instance detail where a user can change the key attribute values and other properties. You can add and delete role instances also.

Agenda

- Relationship manager overview
- **Summary**

This section will provide a summary of this presentation.

Summary

- Instances of relationships are populated with the data that associates information from different applications by the relationship service
- Relationship manager is provided to relationship and role instances



The key point of this presentation is that WebSphere Process Server maintains relationship instance information as data passes from one application to another. This information can be managed using the relationship manager included with WebSphere Process Server.

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