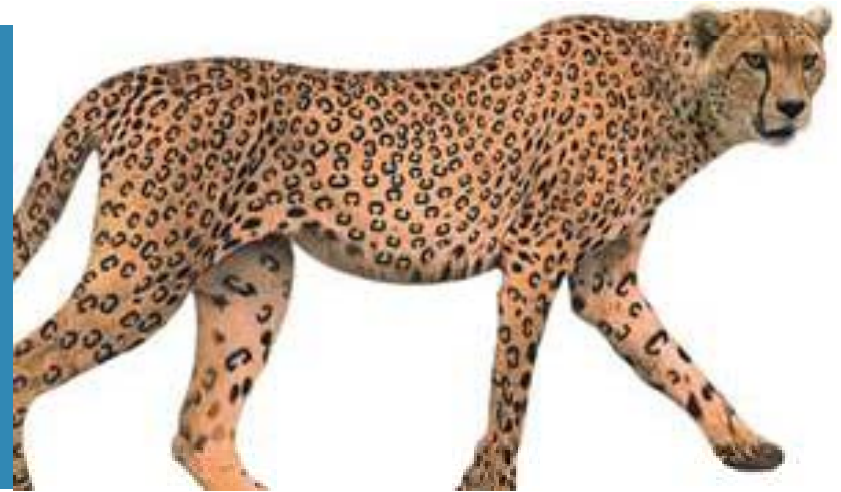


Informatica 9x : Integration Service



Session 2 : Integration Service

About the Author

Created By:	Cognizant Academy
Credential Information:	
Version and Date:	INFORMATICA9X/PPT/S2/0309/1.0

Cognizant Certified Official Curriculum



Icons Used



Questions



Tools



**Hands on
Exercise**



**Coding
Standards**



**Test Your
Understanding**



Reference



Try it Out



**A Welcome
Break**



Contacts

Integration Service : Overview

- **Introduction:**

- This module gives a brief overview about Integration Service

Integration Service : Objective

- **Objective:**

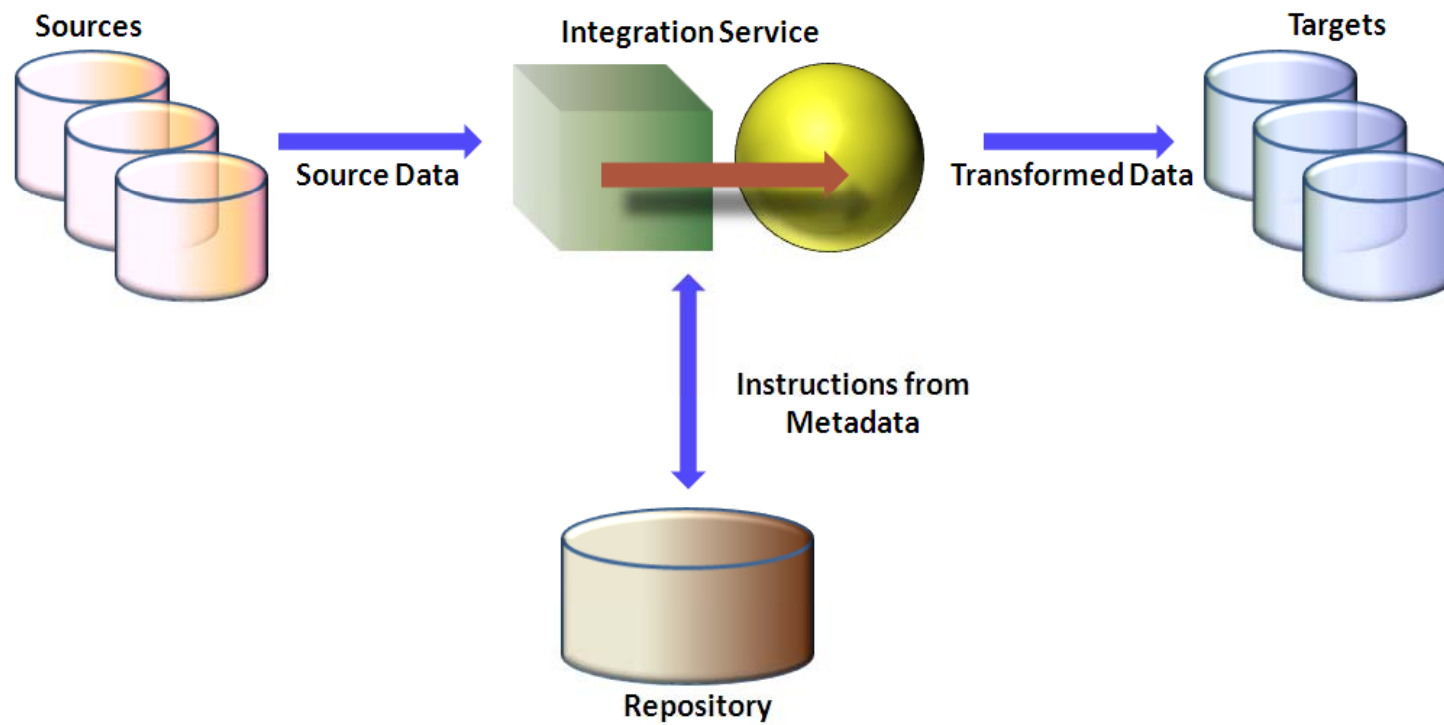
After completing this chapter, you will be able to

- » Understand the Integration Service
- » Understand the Components of the Integration Service
- » Create and Configure Integration Service

Integration Service

- The PowerCenter Integration Service
 - » Manages the scheduling and execution of workflows
 - » Reads mapping and session information from the repository
 - » Extracts data from the mapping sources and stores the data in memory while it applies the transformation rules that you configure in the mapping
 - » Loads the transformed data into the mapping targets
- High performance can be achieved using symmetric multi-processing systems
- The PowerCenter Integration Service can
 - » Start and run multiple workflows concurrently
 - » Concurrently process partitions within a single session

Informatica Architecture



Integration Service Components

- Integration Service Process
- Load Balancer
- Data Transformation Manager (DTM) Process

Integration Service Process

- Integration Service starts one or more Integration Service Processes to run and monitor workflows
- The Integration Service process accepts requests from the PowerCenter Client and from *pmcmd*
- Tasks
 - » Manages workflow scheduling
 - » Locks and reads the workflow
 - » Reads the parameter file
 - » Creates the workflow log
 - » Runs workflow tasks and evaluates the conditional links connecting tasks
 - » Starts the DTM process or processes to run the session
 - » Writes historical run information to the repository
 - » Sends post-session email in the event of a DTM failure

Load Balancer

- Dispatches tasks to achieve optimal performance and scalability
- When you run a workflow, it dispatches the Session, Command, and predefined Event-Wait tasks within the workflow
- Functionalities
 - » Dispatch process
 - » Resources
 - » Resource provision threshold
 - » Dispatch mode
 - » Service Levels

Data Transformation Manager (DTM)

Process

- Retrieves and validates session information from the repository
- Performs pushdown optimization when the session is configured for pushdown optimization
- Adds partitions to the session when the session is configured for dynamic partitioning
- Forms partition groups when the session is configured to run on a grid
- Expands the service process variables, session parameters, and mapping variables and parameters
- Creates the session log
- Validates source and target code pages
- Verifies connection object permissions
- Runs pre-session shell commands, stored procedures, and SQL
- Sends a request to start worker DTM processes on other nodes when the session is configured to run on a grid
- Creates and runs mapping, reader, writer, and transformation threads to extract, transform, and load data
- Runs post-session stored procedures, SQL, and shell commands
- Sends post-session email

Administration Console

- Can be used to complete the following Integration Service tasks
 - » Create an Integration Service
 - » Enable or disable the Integration Service
 - » Configure normal or safe mode
 - » Configure the Integration Service properties
 - » Configure the associated repository
 - » Configure the Integration Service processes
 - » Configure permissions on the Integration Service
 - » Remove an Integration Service

Creating an Integration Service

- You can create an Integration Service when you install PowerCenter
- You must assign a repository to the Integration Service. You can assign the repository when you create the Integration Service or after you create the Integration Service, but before you can run the Integration Service
- You must assign a code page for each Integration Service process. The code page for each Integration Service process must be a subset of the code page of the associated repository. You must select the associated repository before you can select the code page for an Integration Service process. The Repository Service must be enabled to set up a code page for an Integration Service process

Creating an Integration Service

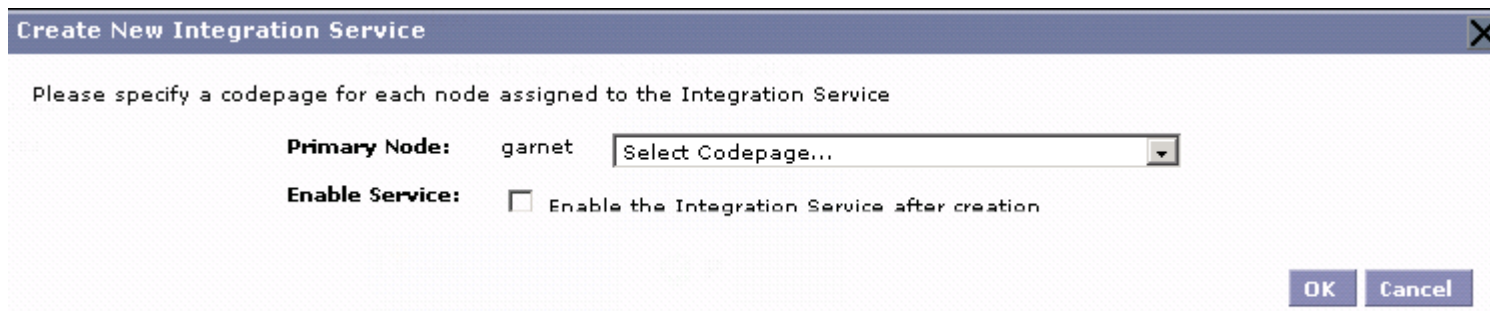
Create New Integration Service [X]

Specify properties for this new Integration Service.

Service Name:	<input type="text"/>	
Location:	StonesDomain	Select Folder
License:	StonesLicense	
Assign:	<input checked="" type="radio"/> Grid <input type="radio"/> Nodes	
Run the service on grid:	Select grid...	
Domain for Associated Repository Service:	Make Selection...	Manage Domain List
Associated Repository Service:	Make Selection...	
Repository User Name:	[repository_user]	
Repository Password:	<input type="password"/>	
Data Movement Mode:	Make Selection...	

Create **Close**

Creating an Integration Service



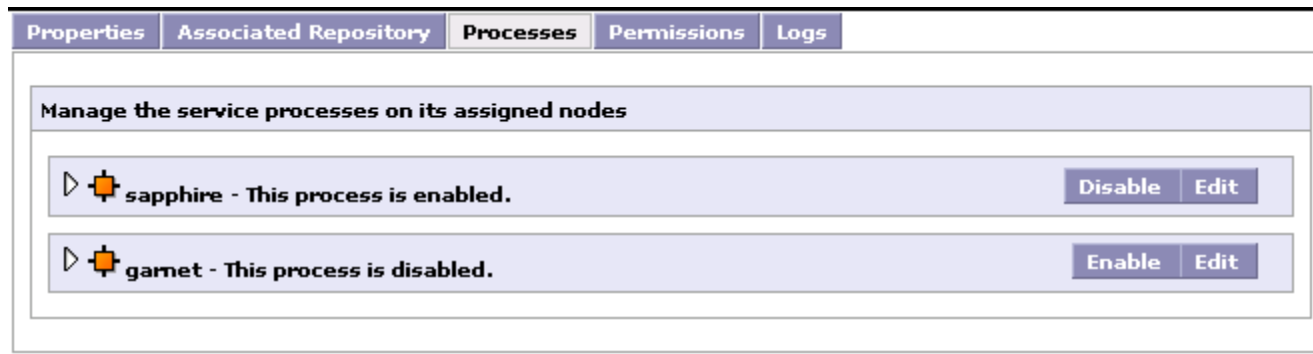
The screenshot shows a dialog box titled "Create New Integration Service" with a close button (X) in the top right corner. The main text inside the dialog reads: "Please specify a codepage for each node assigned to the Integration Service". Below this text, there are two fields:

- Primary Node:** This field contains the text "garnet" and is followed by a dropdown menu showing "Select Codepage...".
- Enable Service:** This section contains a checkbox that is currently unchecked, followed by the text "Enable the Integration Service after creation".

At the bottom right of the dialog, there are two buttons: "OK" and "Cancel".

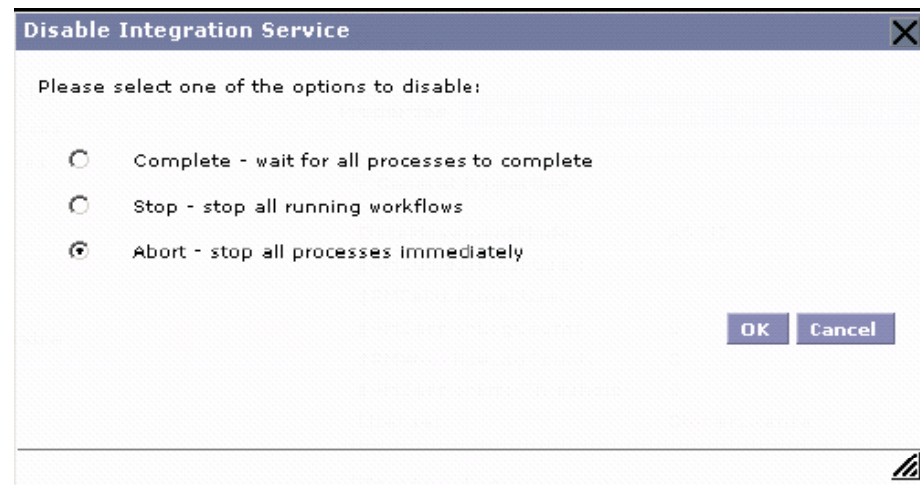
Enabling/Disabling an Integration Service

Enabling or Disabling a Integration service could be done through the following process



If selected to Disable an Integration Service

A similar pattern is followed for Enable too



Configuring an Integration Service

Properties	Associated Repository	Processes	Permissions	Logs
<div>▼ Grid/Node Assignments Edit</div> <div>Primary Node: garnet Codepage: MS Windows Latin 1 (ANSI), superset of Latin1 Backup Nodes: sapphire Codepage: 7-bit ASCII</div>				
<div>▷ General Properties Edit</div>				
<div>▷ Advanced Properties Edit</div>				
<div>▷ Compatibility and Database Properties Edit</div>				
<div>▷ Configuration Properties Edit</div>				
<div>▷ HTTP Proxy Properties Edit</div>				
<div>▷ Custom Properties Edit</div>				

Configuring the Associated Repository

Properties Associated Repository Processes Permissions Logs

Associated Repository Properties OK Cancel

Domain for Associated Repository Service: Development Manage Domain List

Associated Repository Service: HR_811

Repository User Name: Admin_HR80

Repository Password: *****



Test Your Understanding

1. True or False: The Integration Service can start and run multiple workflows concurrently.
2. Name the 3 components of the Integration Service.
3. What is the tool which is used to create/configure/remove an Integration Service?

Integration Service : Summary

- The Integration Service moves data from sources to targets based on workflow and mapping metadata stored in a repository
- The components of Integration Service are
 - » Integration Service Process
 - » Load Manager
 - » Data Transformation Manager (DTM) Process
- The Administration Console Tool is used to create/configure/remove and Integration Service

Integration Service : Source



- The PDF manuals (Informatica Power center 8.1.1 Docs) comes with Informatica Software
- www.informatica.com

Disclaimer: Parts of the content of this course is based on the materials available from the Web sites and books listed above. The materials that can be accessed from linked sites are not maintained by Cognizant Academy and we are not responsible for the contents thereof. All trademarks, service marks, and trade names in this course are the marks of the respective owner(s).

You have completed
the Session
“Integration Service”
of Informatica 9x

