# Deploying Master Indexes (Repository)



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The topics listed here provide procedures, conceptual information, and reference information for defining a deployment profile for the Sun Master Index (Repository) server and client projects, and then building and deploying the projects.

Note that Java CAPS includes two versions of Sun Master Index. Sun Master Index (Repository) is installed in the Java CAPS repository and provides all the functionality of previous versions in the new Java CAPS environment. Sun Master Index is a service-enabled version of the master index that is installed directly into NetBeans. It includes all of the features of Sun Master Index (Repository) plus several new features, like data analysis, data cleansing, data loading, and an improved Data Manager GUI. Both products are components of the Sun Master Data Management (MDM) Suite. This document relates to Sun Master Index (Repository) only.

#### What You Need to Know

These topics provide information you should know about Master Index (Repository) deployment.

- "Deployment Overview" on page 6
- "Defining Master Index (Repository) Deployment Profiles" on page 6

#### What You Need to Do

These topics provide instructions on how to create deployment profiles for a master index system, and then build and deploy the projects.

- "Creating a Domain" on page 7
- "Deploying the Master Index (Repository) Server Project" on page 7
- "Deploying the Master Index (Repository) Collaboration Client Project" on page 10
- "Deploying the Business Process Client Project for Master Index (Repository)" on page 12

## **Related Topics**

Several topics provide information and instructions for implementing and using a Repository-based master index application. For a complete list of topics related to working with Sun Master Index (Repository), see "Related Topics" in *Developing Sun Master Indexes (Repository)*.

## **Deployment Overview**

Each project in the master index system must include a Deployment Profile that correlates the processing components to the physical components in the Environment. This includes the primary Sun Master Index project and any client projects that connect the master index to an external system.

The Deployment Profile binds the master index project attributes to the Environment that defines where each component runs. For example, the Deployment Profile for the server project defines which application server runs the master index. The Deployment Profiles for the client projects that access the master index application define which message servers host which topics, which external systems are connected to the master index using which Adapters, and so on. Once you create the Deployment Profile and build the project, you can deploy the project to the application server. You need to create a domain through the Sun Java System Application Server Admin Console that you will deploy the projects to.

For deployment instructions, see "Defining Master Index (Repository) Deployment Profiles" on page 6.

# **Defining Master Index (Repository) Deployment Profiles**

A Deployment Profile must be defined for the Sun Master Index application project and for any client projects that connect to the master index. You can use the same Environment components for each Deployment Profile. Once project components are mapped in the Deployment Profile, you can build and deploy the project. You need to deploy the project before you can run any of the components. You can deploy a project from NetBeans, Enterprise Manager, the Sun Java System Application Server Admin Console, or a command line.

The following topics provide instructions for deploying from NetBeans:

- "Creating a Domain" on page 7
- "Deploying the Master Index (Repository) Server Project" on page 7
- "Deploying the Master Index (Repository) Collaboration Client Project" on page 10
- "Deploying the Business Process Client Project for Master Index (Repository)" on page 12

For more information and instructions on deploying a project, see *Deploying Java CAPS Projects*.

**Note** – When deploying from Enterprise Manager, Sun Java System Application Server Admin Console, or a command line, you need to specify the EAR file to deploy. This file is located at .netheans/caps/builds/*DeploymentNameProjectName/logicalhost/ApplicationServer*. The file is named *DeploymentNameProjectName*.ear; for example, DeployProfPersonIndex.ear).

# **Creating a Domain**

Java CAPS projects are deployed into an application server domain. Before you deploy any of your projects, make sure you have created the domain where the projects will be deployed, started the application server, and defined the connection for the master index database. For information about defining the database connection, see "Defining a Database Connection Pool Through the Application Server" in *Developing Sun Master Indexes (Repository)*.

One domain, named *domain1*, is created for the application server by default. You can use this domain for testing purposes, but should create a new domain for production. For complete information on creating domains, see the *Sun Java System Application Server 9.1 Administration Guide*.

# **Deploying the Master Index (Repository) Server Project**

Creating a Deployment Profile for the Sun Master Index server project (which defines the master index application) consists of the following steps.

- "Creating the Master Index (Repository) Deployment Profile" on page 7
- "Mapping Master Index (Repository) Project and Environment Components" on page 8
- "Building and Deploying the Master Index (Repository) Server Project" on page 9

**Note** – Make sure you have created and started a domain before attempting to deploy the project. In order to use the application, you also need to define the database connection and, optionally, define security for the EDM.

# Creating the Master Index (Repository) Deployment Profile

The first step to deploying a project is to create and name the Deployment Profile. Perform the following steps to create a new Deployment Profile for the master index server project.

## ▼ To Create a Master Index Application Deployment Profile

- 1 In the NetBeans Projects window, right-click the master index server project folder.
- 2 Click New, and then point to Deployment Profile. The Create Deployment Profile dialog box appears.
- 3 In the Deployment Profile Name field, type a name for the Deployment Profile.
- 4 In the Environment drop-down list, select the Environment you created for the Sun Master Index project.
- 5 In the Connectivity Map table, deselect the Used check box for any Connectivity Maps you do not want to include in the deployment.
- 6 Click OK. The Deployment Editor window appears.
- 7 Continue to "Mapping Master Index (Repository) Project and Environment Components" on page 8.

# Mapping Master Index (Repository) Project and Environment Components

Once you create a Deployment Profile, you can map the project components to the deployment Environment. When you map the project components to the Environment containers, you are specifying the Logical Host to handle the transactions.

You can map project components manually, or you can use the Automap feature to have the components automatically mapped for you. Use the Automap feature when a one-to-one correspondence exists between the available project components and the containers in the Environment to which you want to deploy them.

Before beginning, complete the steps under "Creating the Master Index (Repository) Deployment Profile" on page 7.

- To Map Project Components Manually
- 1 With the master index server project Deployment Profile open in the Deployment Editor, drag MasterIndex.Web.Application-*application\_name* and MasterIndex.Application-*application\_name* from the left panel onto the application server in the Deployment Editor in the right panel.

Tip – The application server appears in the Logical Host box in the Deployment Editor.

- 2 If you defined a JMS Topic to publish the master index messages, drag the JMS Topic from the left panel to the JMS IQ Manager in the Logical Host in the right panel.
- 3 If the server project contains a database Adapter, drag the database external application from the left panel to the database external system in the right panel.
- 4 Continue to "Building and Deploying the Master Index (Repository) Server Project" on page 9.

To Map Project Components Automatically

1 With the master index server project Deployment Profile open in the Deployment Editor, click Automap.

The Automap Results dialog box appears.

2 Review the results of the mapping on the Automap Results dialog box.

If the appropriate container for the component cannot be found, the component remains unmapped.

- 3 If more than one container was found for a component, click Automap Option to review mapping options and do one of the following:
  - To accept the Automapping option, click OK.
  - To map the components manually, click Cancel.
- 4 To map any components that could not be automatically mapped, follow the manual instructions above.
- 5 Continue to "Building and Deploying the Master Index (Repository) Server Project" on page 9.

# Building and Deploying the Master Index (Repository) Server Project

Once all project components are mapped to the Environment, build the project to create and compile all the files needed to run the project. Building the project places the application file at .netheans/caps/builds/*DeploymentNameProjectName/logicalhost/ApplicationServer*. Deploying the project extracts the files to the domain.



**Caution** – For the deployment to be successful, make sure the application server is started and the domain is created.

### To Build and Deploy the Server Project

- 1 Complete the instructions under "Mapping Master Index (Repository) Project and Environment Components" on page 8.
- 2 With the Deployment Editor still open, click Build to generate the project files.
- 3 After the build process finishes successfully, click Deploy to deploy the project to a server.
- 4 Define EDM users, as described under "Defining Master Index Security (Repository)" in Maintaining Sun Master Indexes (Repository).

# Deploying the Master Index (Repository) Collaboration Client Project

Creating a Deployment Profile for the projects that define external system connections to the master index application through Collaborations consists of the following steps.

- "Creating a Master Index (Repository) Collaboration Client Deployment Profile" on page 10
- "Mapping Master Index (Repository) Collaboration Client Project Components" on page 11
- "Building and Deploying the Master Index (Repository) Collaboration Client Project" on page 12

Before beginning these steps, make sure the master index server project has been deployed. This creates a Master Index External Application in the Environment, which is required for deployment.

# Creating a Master Index (Repository) Collaboration Client Deployment Profile

Before beginning this procedure, you must have created, built, and deployed the Sun Master Index application Deployment Profile, as described in "Deploying the Master Index (Repository) Server Project" on page 7.

## To Create a Collaboration Client Deployment Profile

- 1 In the NetBeans Projects window, right-click the Collaboration client project.
- 2 Point to New, and then click Deployment Profile. The Create Deployment Profile dialog box appears.
- 3 In the Deployment Profile Name field, type a name for the Deployment Profile.
- 4 In the Environment drop-down list, select the Environment you created for the master index server project.
- 5 Click OK.

The Deployment Editor appears.

6 Continue to "Mapping Master Index (Repository) Collaboration Client Project Components" on page 11.

# Mapping Master Index (Repository) Collaboration Client Project Components

Once you create a Deployment Profile, you need to configure the project components in the deployment Environment. When you map the project components to the Environment, you are specifying the Logical Host to handle the transactions.

**Note** – Project components can also be automatically mapped. For more information, see "Mapping Master Index (Repository) Project and Environment Components" on page 8.

## To Map Collaboration Client Project Components

1 With the Collaboration client project Deployment Profile open in the Deployment Editor, drag the Services from the left panel onto the application server in the Deployment Editor in the right panel.

Tip – The application server appears in the Logical Host in the Environment.

2 Drag the master index application from the left panel onto the Master Index External System in the right panel.

Both the application and External System are named after the master index application.

- 3 Drag the external system Adapters from the left panel to the appropriate external systems in the Environment.
- 4 If you implemented a JMS Topic, drag the Topic from the left panel to the JMS IQ Manager in the Logical Host.
- 5 Continue to "Building and Deploying the Master Index (Repository) Collaboration Client Project" on page 12.

# Building and Deploying the Master Index (Repository) Collaboration Client Project

Once all project components are mapped to the Environment, you can build the project to create and compile all the files needed to run the project. Deploying the project places the files on the server.

Note – For this to be successful, the application server must be started.

To Build and Deploy the Collaboration Client Project

- 1 Click Build to generate the project files.
- 2 After the build competes successfully, click Deploy to deploy the project to a server.

# Deploying the Business Process Client Project for Master Index (Repository)

Creating a Deployment Profile for the projects that incorporate Sun Master Index methods into a Business Process consists of the following steps:

- "Creating a Business Process Client Deployment Profile for Master Index (Repository)" on page 13
- "Mapping Business Process Client Project Components for Master Index (Repository)" on page 13
- "Building and Deploying the Business Process Client Project for Master Index (Repository)" on page 14

# Creating a Business Process Client Deployment Profile for Master Index (Repository)

Before beginning this procedure, make sure the master index server project has been built and deployed, as described in "Deploying the Master Index (Repository) Server Project" on page 7. Doing this creates the Master Index External System in the Environment, which is required for the client deployment.

## To Create a Business Process Client Project Deployment Profile

- 1 In the NetBeans Projects window, right-click the Business Process client project.
- 2 Point to New, and then click Deployment Profile. The Create Deployment Profile dialog box appears.
- 3 In the Deployment Profile Name field, type a name for the Deployment Profile.
- 4 In the Environment drop-down list, select the Environment you created for the master index server project.
- 5 Click OK.

The Deployment Editor window appears.

6 Continue to "Mapping Business Process Client Project Components for Master Index (Repository)" on page 13.

# Mapping Business Process Client Project Components for Master Index (Repository)

Once you create a Deployment Profile, you can map the project components to the deployment Environment. When you map the project components to the Environment containers, you are specifying the Logical Host to handle the transactions.

**Note** – Project components can also be automatically mapped. For more information, see "Mapping Master Index (Repository) Project and Environment Components" on page 8.

## ▼ To Map Business Process Client Project Components

1 With the Business Process client project Deployment Profile open in the Deployment Editor, drag the Service/Business Process from the left panel to the application server in the Deployment Editor

Tip – The application server appears in the Logical Host in the Environment.

2 Drag the master index application from the left panel onto the Master Index External System in the right panel.

Both the application and the External System are named after the master index application).

- 3 Drag the external system Adapters from the left panel to the appropriate external systems in the Environment.
- 4 If you implemented a JMS Topic, drag the Topic from the left panel to the JMS IQ Manager in the Logical Host.
- 5 Continue to "Building and Deploying the Business Process Client Project for Master Index (Repository)" on page 14.

# Building and Deploying the Business Process Client Project for Master Index (Repository)

Once all project components are mapped to the Environment, you can build the project to create and compile all the files needed to run the project. Deploying the project places the files on the server.

Note – For this to be successful, the domain must be started.

## To Build and Deploy the Business Process Client Project

- 1 Click Build to generate the project files.
- 2 After the build completes successfully, click Deploy to deploy the project to a server.