

Novell Nsure™ UDDI Server

2.1

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AD MINISTRATION GUIDE

December 19, 2003



Novell®

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Contribution Acknowledgement

Novell Nsure UDDI Server offering includes: customized modules from the open source project UDDI4J available at <http://www-124.ibm.com/developerworks/oss/uddi4j/>, jdom.jar from the open source project JDOM available at <http://www.jdom.org/>, and xerces.jar from the open source project Apache available at <http://apache.org>.

U.S. Patent No. 5,157,663; 5,349,642; 5,455,932; 5,553,139; 5,553,143; 5,572,528; 5,594,863; 5,608,903; 5,633,931; 5,652,854; 5,671,414; 5,677,851; 5,692,129; 5,701,459; 5,717,912; 5,758,069; 5,758,344; 5,781,724; 5,781,733; 5,784,560; 5,787,439; 5,818,936; 5,828,882; 5,832,274; 5,832,275; 5,832,483; 5,832,487; 5,859,978; 5,870,561; 5,870,739; 5,873,079; 5,878,415; 5,884,304; 5,893,118; 5,903,650; 5,903,720; 5,905,860; 5,910,803; 5,913,025; 5,913,209; 5,915,253; 5,925,108; 5,933,503; 5,933,826; 5,946,002; 5,946,467; 5,956,718; 5,956,745; 5,964,872; 5,974,474; 5,983,223; 5,983,234; 5,987,471; 5,991,810; 6,002,398; 6,014,667; 6,016,499; 6,023,586; 6,029,247; 6,052,724; 6,061,726; 6,061,740; 6,061,743; 6,065,017; 6,081,774; 6,081,814; 6,094,672; 6,098,090; 6,105,062; 6,105,069; 6,105,132; 6,115,039; 6,119,122; 6,144,959; 6,151,688; 6,157,925; 6,167,393; 6,173,289; 6,216,123; 6,219,652; 6,233,859; 6,247,149; 6,269,391; 6,286,010; 6,308,181; 6,314,520; 6,324,670; 6,338,112; 6,345,266; 6,353,898; 6,424,976; 6,466,944; 6,477,583; 6,477,648; 6,484,186; 6,496,865; 6,510,450; 6,516,325; 6,519,610; 6,532,451; 6,532,491; 6,539,381; 6,560,615; 6,567,873; 6,578,035; 6,591,397; 6,609,158; 6,615,350; 6,629,105; 6,629,132; 6,647,408; 6,651,242 & RE37,178. Patents Pending.

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About This Guide

This guide describes the concepts of Universal Description, Discovery and Integration (UDDI) and how to use Novell[®] Nsure[™] UDDI Server.

The audience for this document includes network administrators, system integrators, corporate developers, independent software vendors, Novell developers, and end users of browsers.

This guide is divided into the following sections:

- ◆ **Chapter 1, “Understanding,” on page 11**
This section describes and explains the conceptual information for UDDI.
- ◆ **Chapter 2, “About Novell Nsure UDDI Server,” on page 19**
This section describes and explains about Novell Nsure UDDI Server and its security features.
- ◆ **Chapter 3, “Installing Novell Nsure UDDI Server,” on page 27**
This section covers the system requirements, installation and uninstallation tasks.
- ◆ **Chapter 4, “Configuring Novell Nsure UDDI Server,” on page 35**
This section explains how to configure Novell Nsure UDDI Server.
- ◆ **Chapter 5, “Setting Up the UDDI Web-based Utility,” on page 37**
This section explains how to set up and deploy Novell Nsure UDDI Server.
- ◆ **Chapter 6, “Using the UDDI Administration Interface,” on page 43**
This section covers UDDI administration tasks.
- ◆ **Chapter 7, “Using the UDDI User Interface,” on page 75**
This section covers UDDI user interface tasks.
- ◆ **Chapter 8, “Performance Tuning,” on page 155**
This section provides performance tuning tips.
- ◆ **Chapter 9, “Troubleshooting,” on page 157**
This section helps you troubleshoot Novell Nsure UDDI Server.
- ◆ **Appendix A, “UDDI Data Structures,” on page 167**
This section explains about the UDDI terminologies.
- ◆ **Appendix B, “Default TModels,” on page 175**
This section provides the default TModel information.
- ◆ **Appendix C, “References,” on page 181**
This section provides the references for this guide.

Documentation Updates

For the most recent version of the *Novell Nsure UDDI Server Administration Guide*, see the Novell UDDI Documentation Web Site.

Documentation Conventions

In this documentation, a greater-than symbol (>) is used to separate actions within a step and items within a cross-reference path.

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When a single pathname can be written with a backslash for some platforms or a forward slash for other platforms, the pathname is presented with a backslash. Users of platforms that require a forward slash, such as UNIX*, should use forward slashes as required by your software.

1

Understanding

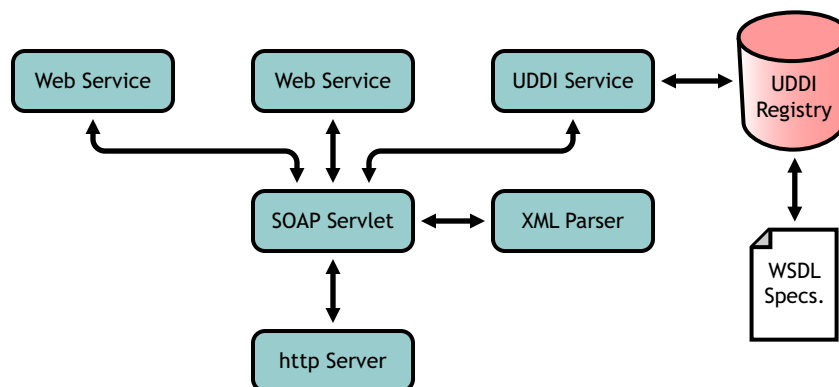
This section describes Universal Description, Discovery, and Integration (UDDI), data structures, and UDDI registries.

- ♦ “Overview of Web Services and UDDI” on page 11
- ♦ “What is UDDI?” on page 12
- ♦ “UDDI APIs” on page 14
- ♦ “UDDI Business Registry” on page 16

Overview of Web Services and UDDI

Web services are self-contained, modular components that can perform a specific business task. They expose standard business processes and enterprise applications for access using Internet technologies. These services can be accessed using the open standards and protocols such as Extensible Markup Language (XML), Hypertext Transfer Protocol (HTTP), Simple Object Access Protocol (SOAP), and Web Services Description Language (WSDL). As illustrated in [Figure 1, “Web Services Components,”](#) on page 11, Web services can communicate directly with other Web services using these open standards. Enterprise applications exposed as Web services can be easily integrated with one another independent of the hardware platform, operating system, or the language in which the application/Web service has been developed because they use open standards. UDDI registries are used to publish and discover these Web services.

Figure 1 Web Services Components

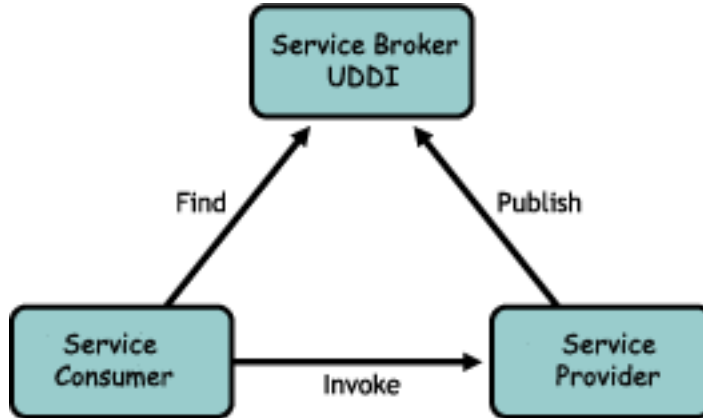


Web services evolved through attempts to manage incompatible business applications and services. They provide easy integration and management of applications and services across heterogeneous platforms. Furthermore, they can collaborate better than Enterprise Application Integration (EAI) and Business to Business (B2B) solutions and are easily accessible by partners, customers, etc., no matter what hardware or software is used.

What is UDDI?

UDDI is a registry for Web services defined by the UDDI consortium. UDDI is a platform-independent framework that enables you to describe, discover, integrate, and publish Web services. This allows you to easily locate, integrate, and manage businesses and services.

Figure 2 UDDI Registry



UDDI provides a secure environment for describing and publishing Web services. Also, UDDI allows you to register in the UDDI business registry to publish business and services. These businesses and services can be discovered and integrated with other applications.

UDDI is the programmatic interface provided for interacting with systems that follow the UDDI specifications. UDDI makes use of the Extensible Markup Language (XML) and Simple Object Access Protocol (SOAP), a specification for using XML in simple message-based exchanges.

The purpose of UDDI-compliant registries is to provide a discovery platform on the World Wide Web. Discovery is related to being able to advertise and locate information about different technical interfaces exposed by different parties.

A UDDI-compliant registry provides an information framework for describing services exposed by any entity or business. In order to promote a cross-platform service description that is suitable to a black-box Web environment, this description is rendered in cross-platform XML. The information that makes up a registration consists of four core data structure types: business entity, business service, binding template, and TModel. The containment relationship of the data structures can be seen in the [Figure 3 on page 13](#).

UUID: Universally Unique ID

The individual facts about a business, its services, technical information, and information about specifications for services are kept separate and are accessed individually by way of unique identifiers, or keys. When information is first saved, a UDDI registry assigns these unique identifiers, which can then be used as keys to access the specific data instances on demand. Each unique identifier generated by a UDDI registry takes the form of a UUID.

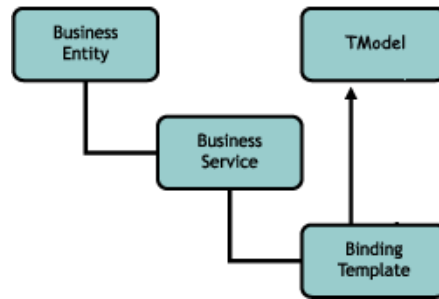
Technically, a UUID is a hexadecimal string that has been generated according to a very exacting algorithm that prevents duplicate UUIDs from being generated.

UDDI Data Structures

UDDI supports the following four core data structures:

- ♦ [“Business Entity” on page 13](#)
- ♦ [“Business Service” on page 13](#)
- ♦ [“Binding Template” on page 13](#)
- ♦ [“TModel” on page 14](#)

Figure 3 UDDI Containment



Business Entity

Business entity is the topmost container in a UDDI data structure that represent a business organization providing Web services. Typically, business entities provide information that describes the business organization and the services they offer. Also, they provide the names of the businesses, its description in various languages, and contact details.

Every business entity has a unique `businessKey` for identification.

For more information, see [“Business Entity” on page 167](#).

Business Service

A business service represents a collection of Web services offered by a business entity. It can be used to group services based on the type of Web services offered, and they also provide information about names and a description. Every business service is a child of a business entity.

Every business service has a unique `serviceKey` for identification.

For more information, see [“Business Service” on page 170](#).

Binding Template

A binding template is used to bind Web services and applications by providing the necessary technical information about Web services. A binding template represents a single Web service that has an access point to that Web service. Every binding template is a child of a business service.

Every binding template has a unique `bindingKey` for identification.

An access point provides routing information such as the URL, e-mail address, or telephone number to locate the service.

For more information, see [“Binding Template” on page 171](#).

TModel

A TModel provides technical information for a Web service. It contains the URL address of the Web service, meta-data for the technical information, and a unique key for identification. They are used as:

- ◆ Identifiers for taxonomy-based classification schemes and identification systems
- ◆ Identifiers for technical specifications

TModels that are commonly used are defined in the UDDI specification. Every TModel has a unique TModelKey for identification.

For more information, see [“TModel” on page 173](#).

NOTE: The technical information about a Web service is not stored in a UDDI registry. A TModel provides the URL address to locate the information.

For more information about UDDI Data Structures, refer to [Appendix A, “UDDI Data Structures,” on page 167](#).

UDDI APIs

UDDI offers the following Application Programming Interfaces (APIs) that can be used to publish and inquire about services in the UDDI registry:

- ◆ [“Publish API” on page 14](#)
- ◆ [“Inquiry API” on page 15](#)

Publish API

The publish API supports the publishing of a Web service in the UDDI registry. The following briefly summarizes the supported publish functions:

- ◆ `get_authToken`: Requests an authentication token from an operator site. These tokens are required when using publish and authenticated inquiry functions that are defined in the publish API.
- ◆ `get_registeredInfo`: Requests a synopsis of all information that is currently managed by a specific individual.
- ◆ `discard_authToken`: Communicates that the previously provided authentication token is no longer valid. The authentication token is considered invalid if used after the discard message is received.
- ◆ `save_business`: Registers a new business entity or updates information for a business entity. This function is an extensively used save function.
- ◆ `save_service`: Registers a new business service or updates information for an existing business service.
- ◆ `save_binding`: Registers a new binding template or updates information for an existing binding template.
- ◆ `save_tModel`: Registers a new tModel or updates information for an existing tModel.
- ◆ `delete_business`: Deletes a business entity that was registered in the UDDI registry.
- ◆ `delete_service`: Deletes an existing business service from the UDDI registry.

- ◆ `delete_binding`: Used to delete an existing binding template from the available group of binding templates.
- ◆ `delete_tModel`: Disables and conceals the registered information about a tModel. The tModel that is disabled can be used for reference purposes and can be accessed by using the `get_tModelDetail` function. However, the disabled TModel is concealed from `find_tModel` result sets.

NOTE: `add_PublisherAssertions`, `delete_PublisherAssertions`, `get_assertionStatusReport`, `get_PublisherAssertions`, and `set_PublisherAssertions` functions are not supported.

Inquiry API

The inquiry API supports inquiring for a Web service in the UDDI registry. The following briefly summarizes the supported inquiry functions:

- ◆ `find_business`: Finds the information about one or more businesses.
- ◆ `find_service`: Finds the services contained within a registered business entity.
- ◆ `find_binding`: Finds the bindings within a registered business service.
- ◆ `find_tModel`: Finds the tModel information.
- ◆ `get_businessDetail`: Gets the complete information for a business entity, businesses or organizations.
- ◆ `get_businessDetailExt`: Gets the extended information for a business entity.
- ◆ `get_serviceDetail`: Gets the complete information for a given set of registered business service.
- ◆ `get_bindingDetail`: Gets the complete information for a binding template.
- ◆ `get_tModelDetail`: Gets the complete information for a given set of registered tModels.

NOTE: The `find_relatedBusinesses` function is not supported.

Qualifiers

The inquiry functions `find_binding`, `find_business`, `find_service`, and `find_tModel` support search modifiers called "find qualifiers". You can use find qualifiers to override the default search behaviors.

The find qualifiers include the following:

- ◆ `exactNameMatch`: Finds entries exactly matching the entry specified. Used by `find_business`, `find_service`, and `find_tModel`.
- ◆ `orLikeKeys`: A logical OR is applied to the keyedReference elements contained in the identifier and category bags. Used by `find_business`, `find_service`, and `find_tModel`.
- ◆ `orAllKeys`: Changes the behavior of `tModelBag` and `categoryBag` to a logical OR rather than a logical AND. This negates any logical AND and also the `orLikekeys` behavior. Used by `find_binding`, `find_business`, `find_service`, and `find_tModel`.
- ◆ `combineCategoryBags`: Combines the categories specified for the business entity and the business service and treats them as a single category bag. This qualifier searches for the `categoryBag` elements within the business entity and the business service. Used by `find_business`.

- ◆ **serviceSubset:** Search the keyedReference element only from the categoryBag of the business service within a business entity. Any entry matching the keyedReference element from the categoryBag of the Business Element is ignored. Used by find_business.
- ◆ **andAllKeys:** Changes the behavior of Identifiers to a logical AND key rather than a logical OR. Used by find_business and find_tModel.
- ◆ **sortByNameAsc:** Signifies that the result returned by a find_xx inquiry function should be sorted on the name field in ascending alphabetic order. This sort is applied before the result sets are truncated.

This qualifier is only applicable on queries that return a name element in the topmost detail level of the result set. If no conflicting sort qualifier is specified, the default is not to sort on the name field. However, if one of the qualifiers (sortByNameAsc or sortByDateAsc) is specified, sorting is done in ascending order for the other qualifier.

- ◆ **sortByNameDesc:** Signifies that the result returned by a find_xx inquiry call should be sorted on the name field in descending alphabetic order. This sort is applied before the result sets are truncated.

This qualifier is only applicable on queries that return a name element in the topmost detail level of the result set.

- ◆ **sortByDateAsc:** Signifies that the result returned by a find_xx inquiry call should be sorted based on the date last updated in ascending chronological sort order. If no conflicting sort qualifier is specified, the default is not to sort on the date field. However, if one of the qualifiers (sortByNameAsc or sortByDateAsc) is specified, sorting is done in ascending order for the other qualifier.
- ◆ **sortByDateDesc:** Signifies that the result returned by a find_xx inquiry call should be sorted based on the date last updated in descending chronological sort order. Sort qualifiers involving date are secondary in precedence to the sortByName qualifiers.

NOTE: The find qualifier caseSensitiveMatch is not supported.

UDDI Business Registry

UDDI business registry (UBR) enables Web service providers to register Web services offered for others to locate and use them. UBR assigns a unique key to each of the services and business that are registered. Users can use the registry to find businesses or services.

UBR can be of two types:

- ◆ “Public Registry” on page 16
- ◆ “Private Registry” on page 16

Public Registry

A public UDDI registry enables you to register Web services that are global and can be used by others. These Web services might not be private and secure. Users can perform an inquiry for business, services, service providers, etc. using this registry.

Private Registry

A private UDDI registry enables you to register Web services that are private and secure and can be used only by a group of users. Typically, a private registry exists within a company’s intranet or extranet and is accessible only to authorized users.

UDDI Business Registry Registrar

A registrar is a company that enables service providers to do a UDDI registration. The registration includes details of the business entity, business service, binding template, and TModel.

2

About Novell Nsure UDDI Server

This section explains about the Novell[®] Nsure[™] UDDI Server and the security concepts of UDDI. It covers the following:

- ◆ “Novell Nsure UDDI Server” on page 19
- ◆ “Dynamic Reconfiguration” on page 20
- ◆ “UDDI Security Specification” on page 20
- ◆ “Novell Nsure UDDI Server Security” on page 20
- ◆ “UDDI Management Utility” on page 23

Novell Nsure UDDI Server

Novell Nsure UDDI Server leverages open standards such as HTTP, XML, and SOAP. It works with any LDAP v3 compliant directory in the backend. If you integrate UDDI server with Novell eDirectory[™], it leverages the eDirectory features such as authentication, authorization, unified account management, replication, synchronization, and transaction support. It also provides centralized management of UDDI services.

Novell UDDI registry includes the following components:

- ◆ UDDI registry service
- ◆ **UDDI user interface**
- ◆ **UDDI administration interface**
- ◆ **UDDI Client Command Beans (http://developer.novell.com/ndk/bns_uddicmd.htm)**

Novell Nsure UDDI Server provides a Web interface that performs UDDI operations. The UDDI administration interface and UDDI user interface are Web-based utilities that run in a browser window and manage the UDDI registry. They share a common interface with other utilities that are based on the iManager framework and use eDirectory services.

Novell Nsure UDDI Server runs on NetWare[®], Windows^{*} NT^{*}/2000, Linux^{*}, Solaris^{*}, and AIX servers.

Novell Nsure UDDI Server provides the following features:

- ◆ UDDI core data structures, including business entity, business service, binding template, and Technical Model (TModel) are supported.
- ◆ Authenticated inquiry and publish operations are supported. It can also be used as a public registry.
- ◆ Integration with eDirectory to leverage the following features:
 - ◆ Creating and managing user accounts
 - ◆ Support for access control

- ◆ Replication and Synchronization
- ◆ Creating customized indexes for the category bag, identifier bag, and TModel bag attributes to speed up search operations
- ◆ Support for eDirectory partition and distribution capabilities
- ◆ Transaction support (eDirectory 8.7 Support Pack 1 or later)
- ◆ Web-based administration and management
- ◆ A Web-based user interface
- ◆ Logging UDDI server messages to the Console or a text file
- ◆ All configurations, registry properties, and access policies are managed through eDirectory
- ◆ Novell Nsure UDDI Server works with all clients compliant with UDDI v2. The following clients have been tested:
 - ◆ [Systinet* UDDI Client Beans \(http://www.systinet.com/products/wasp_uddi/overview\)](http://www.systinet.com/products/wasp_uddi/overview)
 - ◆ [Sun* JAXR Registry Browser \(http://java.sun.com/webservices\)](http://java.sun.com/webservices)
 - ◆ [UDDI 4J Beans \(http://www.uddi4j.org\)](http://www.uddi4j.org)
 - ◆ [Novell UDDI Command Beans \(http://developer.novell.com/ndk/bns_uddicmd.htm\)](http://developer.novell.com/ndk/bns_uddicmd.htm)
 - ◆ [Microsoft* .Net UDDI SDK Client \(http://msdn.microsoft.com/nhp/Default.asp?contentid=28001204\)](http://msdn.microsoft.com/nhp/Default.asp?contentid=28001204)

Dynamic Reconfiguration

Novell Nsure UDDI Server supports dynamic reconfiguration. Any configuration change in the configuration file or server object in the directory at runtime, is automatically detected and reflected in the UDDI server without the server being restarted. For more information, refer “[Configuring Novell Nsure UDDI Server](#)” on page 35.

UDDI Security Specification

UDDI operator sites are responsible for implementing their own authentication and user sign-up mechanisms for it to perform UDDI publish operations. However, there is no authentication required to make use of the inquiry API functions.

UDDI specification has a per-account space limit to enforce the number of UDDI entries that a user can publish. All the UDDI operations happen through SOAP messages over HTTP. The UDDI specification mandates that all publishing APIs should use HTTPS to ensure wire security.

Although the specification assumes a public UDDI registry, security is different when it comes to a private registry.

Novell Nsure UDDI Server Security

Novell Nsure UDDI Server is integrated with eDirectory to provide a tight security leveraging eDirectory security features such as authentication, authorization, and access control. The hierarchical store of UDDI data in eDirectory enforces right access to the right users in an organization.

Novell Nsure UDDI Server supports

- ◆ Simple password-based LDAP authentication.
- ◆ Authorization and access control based on eDirectory.
- ◆ Confidentiality and data integrity relying on SSL/TLS.
- ◆ Denial of service to incorrect logins and non-repudiation of authenticated logins.

For more information, see

- ◆ [“Authentication” on page 21](#)
- ◆ [“Authorization and Access Control” on page 21](#)
- ◆ [“Confidentiality and Integrity” on page 22](#)
- ◆ [“Non-Repudiation” on page 22](#)

Authentication

Authentication is a process of verifying an identity claimed by a user or an entity. It consists of:

- ◆ Assigning an identity for the purpose of recognizing the assigned identity. The same identity is required for authorization and access control purposes.
- ◆ Verifying the assigned identity and establishing a binding between the claimed identity and the authenticator.

Novell Nsure UDDI Server supports a simple password-based LDAP authentication. The identity and authentication services are provided by eDirectory. eDirectory services provides a unified account management solution for storing and managing enterprise identities. The administration and management tasks of creating the identities and assigning proper access rights can be done using the management console associated with eDirectory.

Novell Nsure UDDI Server relies on SSL/TLS for session security. SSL is a protocol that provides confidentiality, reliability, and security for data communication over the network. Authentications happen over a secure channel, thus ensuring that passwords never travel over the wire in clear text format. For more information, see the *Novell eDirectory Administration Guide* (<http://www.novell.com/documentation/lg/edir87/index.html>).

In addition to the extensive security features provided by eDirectory, Novell Nsure UDDI Server provides session management capabilities such as timing out idle connections, time limit for the sessions, and an account locking mechanism.

Authorization and Access Control

Authorization is a process of granting permissions to an entity allowing access to resources. Access control is the process of protecting the resources from unauthorized entities.

Novell Nsure UDDI Server supports authorization and access control. Access control lists (ACLs) enable you to restrict access to UDDI data. This restricts the user privileges to create, modify, and delete any information in eDirectory.

eDirectory uses the identity to control access to eDirectory information and uses ACL to limit a user's rights to create, read, or modify eDirectory information. eDirectory supports user identity and group identity based on access control. By default, access control is provided in eDirectory by the association of an ACL to each object. The ACL is the key component that controls access to

eDirectory information and determines the operation that an entry can perform on another object and its attribute.

UDDI data is stored hierarchically in eDirectory as objects, so granular access control is provided.

Novell Nsure UDDI Server supports:

- ◆ A Web-based UDDI rights management utility. iManager, a Web-based administration and management utility, supports role-and task-based access control for UDDI administration and UDDI inquiry and publish tasks. Thus, eDirectory administrators can define the role to manage the UDDI server assigning UDDI management tasks. Also, the roles as inquirer and publisher for UDDI inquiry and UDDI publish tasks can be defined.
- ◆ Granular access control to business entities and business services in the UDDI data structure. The administrator can enforce rights on who can publish where and who can inquire for what.
- ◆ A limit on the number of entries that can be published by a user. UDDI administrators can define values for them that flow across the entire UDDI registry.
- ◆ UDDI data is organized in a separate UDDI container in eDirectory for which access rights are assigned. This ensures that the rights assigned for UDDI data does not interfere with the other enterprise data stored in eDirectory.

For more information, see the *Novell eDirectory Administration Guide* (<http://www.novell.com/documentation/lg/edir87/index.html>).

Confidentiality and Integrity

Data confidentiality is a service that protects others from viewing sensitive data or allows unauthorized access. It prevents eavesdropping while data is in transit by encrypting the data. However, it allows this data to be viewed by authorized entities.

Data integrity is a similar service that ensures data is not modified, destroyed, or changed by any unauthorized entity.

Novell Nsure UDDI Server provides data confidentiality and integrity relying on SSL/TLS. UDDI is deployed as a Web application in a servlet container integrated with Web servers or on application servers that support SSL/TLS.

For the UDDI user interface and browsers, the respective Web servers or applications servers have to be configured to listen over secure channel. Administrators can choose not to use a secure channel for test environments.

Non-Repudiation

Non-repudiation is a service that provides protection against false denial of involvement in a communication. This is usually ensured by authenticating an entity before performing any operation and keeping a record of the events done thereafter. Digitally signing any operational requests that an entity performs is another way (message authentication). Also, auditing is done for non-repudiation.

Novell Nsure UDDI Server supports non-repudiation to some extent:

- ◆ Every business entity that a user publishes has an authorized name that ensures that only an authorized user can modify or delete that business entity.
- ◆ All eDirectory transactions that a user does are auditable. This helps the administrator to track the transactions on a particular eDirectory object because UDDI objects are stored as

eDirectory objects. Although no auditing is done on direct UDDI operations, auditing the eDirectory data is helpful for analyzing the events because all UDDI operations are directly transferred to eDirectory operations.

Transaction Support

A publish request from a UDDI client might result in multiple update operations on the backend repository. The UDDI server with eDirectory 8.7 Support Pack 1 as the backend ensures that a request must either succeed completely or fail completely, without partially updating any data on failure.

UDDI Management Utility

Novell Nsure UDDI Server supports a Web interface that runs in a browser window. The UDDI Web-based management utility is based on the iManager framework that uses eDirectory to store roles and tasks information. This utility contains the UDDI administration and the UDDI user interface snap-ins.

When you run the UDDI management utility in the browser window, the first screen you see is the login screen. To use the management utility, you must enter the login details. Ensure that you have corresponding objects stored in eDirectory and have enough privileges. You are prompted to enter your username, password, context, and the eDirectory Tree (host name or IP address of the server). You are allowed to configure and manage the objects of the specified eDirectory tree.

Administration authentication in the UDDI management utility is based on the eDirectory authentication mechanism provided by the underlying iManager architecture.

To manage objects in a different eDirectory tree, you must log in to the utility again, specifying the eDirectory tree you want to access. Your login identity is displayed on the top left of the screen.

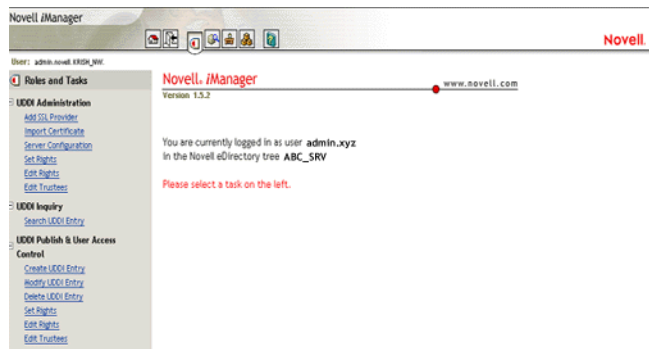
The Novell iManager main screen is displayed after you have successfully logged in. This screen is divided into three parts: a taskbar on the top of the screen that displays icons for top-level management functions and is part of the common iManager-based utilities; a left panel that displays roles and tasks; and a main panel that allows you to manage role-based administrative tasks. For more information on the taskbar, see [“Taskbar” on page 23](#). For more information on roles and tasks, see [“Roles and Tasks” on page 24](#).

Taskbar

The UDDI management utility shares a common taskbar with other products that are based on the Novell iManager framework. [Figure 4, “UDDI Roles and Tasks,” on page 24](#) shows the iManager taskbar, roles, and tasks. The taskbar displays icons for the following:

- ◆ Home: Takes you to the home page of the utility.
- ◆ Exit: Allows you to log out of the utility.
- ◆ Login to a different tree: Enables you to login to another tree.
- ◆ Roles and Tasks: Displays the roles and tasks on the left panel.
- ◆ Configure: Enables you to configure various roles, tasks, modules etc.
- ◆ Developer: Enables you to create roles and tasks by means of a wizard.
- ◆ Help: Launches global help for the utility.

Figure 4 UDDI Roles and Tasks



Each of the buttons on the taskbar has roll-over help associated with it. Position the mouse pointer over the icon to display the icon's name on the task bar to the right of the Help icon.

Roles and Tasks

The UDDI administration interface and the UDDI user interface list the roles and tasks in the left panel. Each role consists of a set of tasks that are logically arranged. Further, each task consists of a set of operations that are displayed on the main panel when you click on the task.

To view the roles and task, click the Roles and Task icon on the taskbar.

Before you perform any UDDI operation, the desired UDDI server must be selected. This server selection remains in effect until the end of the current session. If you start a new iManager session, configure the server again.

Administration Interface

The UDDI administration interface manages the UDDI server object attributes and assigning of rights for the UDDI container and objects. There are two roles for the administration interface:

- ◆ **UDDI Server Management:** The UDDI server object is an eDirectory object that contains the UDDI registry, security, logging, and general information attribute. The attribute value is modified to manage the UDDI server behavior. SSL is also supported for the server.
- ◆ **UDDI Rights management** is based on eDirectory rights management concepts that have been classified into two types:
 - ◆ **Inquiry Rights:** Allow a trustee to view the information for all objects. However, the trustee cannot modify the information of any object.
 - ◆ **Publish Rights:** Allow a trustee to view and modify the information for the object and its child data that the user owns.

Case	Entry Rights [S B C D R]	Attribute Rights [S C R W A]
Allow Inquiry	[_ B _ _ _] [Inh=ON]	[_ C R _ _] [Inh=ON]
	[S _ _ _ _] [Inh=ON]	[S _ _ _ _] [Inh=ON]
Allow Inquiry+Deny Publish	[_ B _ _ _] [Inh=ON]	[_ C R _ _] [Inh=ON]
		[S _ _ _ _] [Inh=ON]
Deny Inquiry, Deny Inquiry+Deny Publish	[_ B _ _ _] [Inh=OFF]	[_ _ _ _ _] [Inh=ON]
Allow Inquiry + Allow Publish	[_ B C _ _] [Inh=ON]	[_ C R _ _] [Inh=ON]
	[S _ _ _ _] [Inh=ON]	[S _ _ _ _] [Inh=ON]
Restricted Inquiry+Allow Publish	[_ B C _ _] [Inh=OFF]	[_ C R _ _] [Inh=OFF]
	[S _ _ _ _] [Inh=OFF]	[S _ _ _ _] [Inh=OFF]

In the above table, rights are indicated as follows:

- ◆ **Entry Rights:** S - Supervisory; B - Browse; C - Create; D - Delete; R - Rename
- ◆ **Attribute Rights:** S - Supervisory; C - Compare; R - Read; W - Write; A - Add self

NOTE: ACL rights other than the ones described above are invalid for UDDI rights management.

Admin access management manages rights for the entire UDDI container objects. User Access Management manages rights for the UDDI entities that are owned by the user.

For more information about eDirectory rights, see developer.novell.com (http://developer.novell.com/ndk/doc/ndslib/index.html?page=/ndk/doc/ndslib/dsov_enu/data/hr8sqtoi.html).

User Interface

The UDDI user interface allows you to perform the UDDI operations on the selected UDDI server. This interface provides the following roles:

- ◆ “UDDI Publish and User Access Control” on page 75
- ◆ “UDDI Inquiry” on page 126

UDDI Publish: Contains the Create, Modify, Delete, and Server Selection tasks.

- ◆ **Create:** Users can create any of the UDDI entities such as business entity, business service, binding template, and TModel in the selected server’s UDDI registry.
- ◆ **Modify:** Users can modify any of the existing UDDI entities such as business entity, business service, binding template, and TModel owned by the user in the selected server’s UDDI registry.
- ◆ **Delete:** Users can delete any of the UDDI entities such as business entity, business service, binding template, and TModel owned by the user in the selected server’s UDDI registry.

UDDI Inquiry: Contains the Search UDDI Entry task.

Users can inquire the selected server's UDDI registry by using this task. A search has to be performed to locate the required UDDI entity. Further, you can view the complete details of the selected entity.

Each UDDI entity is identified by a unique key assigned to it. These are businessKey, serviceKey, bindingKey, and tModelKey for business entity, business service, binding template, and TModel respectively.

Using iManager

Do not use the browser's Back and Forward buttons.

Because iManager is a Web-based application, it is important to navigate through the interface using the buttons inside the application and not the buttons located in the toolbar of your browser.

3

Installing Novell Nsure UDDI Server

Novell® Nsure™ UDDI Server runs on NetWare®, Windows NT/2000, Linux, Solaris, and AIX servers. This section explains how to install the UDDI server and UDDI administration and user interfaces.

- ◆ “Supported Platforms” on page 27
- ◆ “Software Requirements” on page 27
- ◆ “Before You Start” on page 28
- ◆ “Installing UDDI on NetWare” on page 28
- ◆ “Installing UDDI on Windows” on page 29
- ◆ “Installing UDDI on Linux, Solaris, or AIX” on page 29
- ◆ “Completing the Installation” on page 30
- ◆ “Uninstallation” on page 32
- ◆ “Notes” on page 33

Supported Platforms

- ◆ NetWare 6.5 or later
- ◆ Windows NT 4.0 Server with Service Pack 6.x
- ◆ Windows 2000 Server with Service Pack 2
- ◆ Red Hat* Linux 7.2 or later
- ◆ Solaris 8 or later
- ◆ IBM AIX 5.1 or later

Software Requirements

- ◆ JVM* 1.4 and later
- ◆ Novell eDirectory™ 8.7 (preferably eDirectory 8.7 Support Pack 1 or later)
- ◆ Novell iManager 2.0
- ◆ Internet Explorer 6.x, Mozilla 1.4.1, or Galeon
- ◆ Any of the following Application Servers that support Servlet 2.3 specifications:
 - ◆ Apache 1.3.27 or later/Tomcat 4.0.6 or later
 - ◆ Novell exteNd™ Application Server 5.0
 - ◆ BEA* WebLogic* 7

Before You Start

Before you install and configure the Novell Nsure UDDI Server, keep in mind the following:

- ◆ You need write permissions to the installer directory to install the UDDI server, UDDI administration, and UDDI user interfaces and eDirectory rights to configure UDDI.
If you are installing over Apache/Tomcat, also ensure that you have write permissions to the httpd.conf file.
- ◆ Ensure that you have at least 6 MB of free disk space each in the directories where you install the UDDI server and the UDDI administration/user interface components.
- ◆ If you choose to deploy over Tomcat, we strongly recommend that you install Novell Nsure UDDI Server in an Apache/Tomcat integrated environment because a standalone Tomcat setup has security and scalability limitations.
- ◆ If you are using an Apache/Tomcat combination, both components should be integrated before you begin installation. For more information, refer to [“Configuring SSL with Apache” on page 39](#).
- ◆ On Windows, Linux, Solaris, and AIX, set the environment variable PATH to point to the *java_home/bin* where *java_home* is the top-level directory where Java 1.4 is installed.
- ◆ On Windows, Linux, Solaris, and AIX, set the TOMCAT_HOME or CATALINA_HOME environment variable to point to the Tomcat root directory, if you want to install the administrative snap-ins and the UDDI server against Apache/Tomcat.

Installing UDDI on NetWare

Novell Nsure UDDI Server supports three types of installation on NetWare:

- ◆ NetWare integrated installation
- ◆ Standalone installation
- ◆ Upgrade with Support Pack

Installing UDDI Integrated with NetWare

- 1 Select Novell Nsure UDDI Server on the component selection page.

NOTE: The UDDI server files are located at `sys:\uddi`.

Installing a Standalone UDDI

If you have not installed UDDI during a previous NetWare installation:

- 1 Execute the following command at the prompt:

```
path to uddiInstall.ncf\uddiinstall.ncf path to UDDIInstall.jar
```

This invokes the installer that displays the Introduction page.

- 2 Click Next > Next to accept the license agreement and to continue the installation.
- 3 Make note of the selected names on the page that displays so that you can keep track of which installation procedures you need to complete.

Do one of the following:

- ◆ If only UDDI Server is selected, continue with [“Completing the Installation Procedure for the UDDI Server” on page 30](#).

- ◆ If UDDI Admin/User Interface is also selected, finish installing the UDDI server and then continue with [“Completing the Installation Procedure for the UDDI Administration and User Interfaces” on page 32.](#)

NOTE: Uncheck the Admin/User Interface checkbox if you do not want to install the UDDI Admin/User Interface snap-ins.

Upgrading with Support Pack

If you already have a UDDI Server running on NetWare 6.5 and you are now upgrading your server with the Support Pack, note that the UDDI Server does not get upgraded automatically in this case. To upgrade the UDDI Server, you must run the UDDI installer explicitly by executing the following steps

- 1 Stop the Tomcat server.
- 2 At the console, execute the following command:

```
java -cp sys:\\etc\\UDDIInstall.jar install  
-DADMIN_DN=admin.novell -DADMIN_PW=novell -i silent
```

- 3 Restart Tomcat.

Installing UDDI on Windows

Ensure that the Registry.dll file exists in the same directory as the install executable.

- 1 Double-click UDDIInstall.exe from *path*/install.
Replace *path* with the directory where the zip file is extracted.
This invokes the UDDI Installer and displays the Introduction page.
- 2 Click Next > Next to accept the license agreement and to continue the installation.
- 3 Click Next to continue installation.
- 4 Make note of the selected names on the page that displays so that you can keep track of which installation procedures you need to complete.

Do one of the following:

- ◆ If only UDDI Server is selected, continue with [“Completing the Installation Procedure for the UDDI Server” on page 30.](#)
- ◆ If UDDI Admin/User Interface is also selected, finish installing the UDDI server and then continue with [“Completing the Installation Procedure for the UDDI Administration and User Interfaces” on page 32.](#)

Installing UDDI on Linux, Solaris, or AIX

- 1 Execute the following command at the prompt:

```
path/install/UDDIInstall.bin
```

where *path* is the directory where the tar file is extracted.

This invokes the UDDI Installer and displays the Introduction page.

- 2 Click Next > Next to accept the license agreement and to continue the installation.

- 3** Make note of the selected names on the page that displays so that you can keep track of which installation procedures you need to complete.

Do one of the following:

- ◆ If only UDDI Server is selected, continue with “[Completing the Installation Procedure for the UDDI Server](#)” on page 30.
- ◆ If UDDI Admin/User Interface is also selected, finish installing the UDDI server and then continue with “[Completing the Installation Procedure for the UDDI Administration and User Interfaces](#)” on page 32.

Completing the Installation

This section contains the following information:

- ◆ “[Completing the Installation Procedure for the UDDI Server](#)” on page 30
- ◆ “[Completing the Installation Procedure for the UDDI Administration and User Interfaces](#)” on page 32

Completing the Installation Procedure for the UDDI Server

If you are installing the UDDI server for the first time, perform both Step 1 and Step 2. For any subsequent installation, you can choose either of them based on your needs. For example, you should select Install UDDI server if you want to install the required files, or you should select Configure UDDI Server if you want to configure the UDDI server on different eDirectory containers.

- 1** Select Install UDDI Server to install all the required files for the UDDI server.

The UDDI server installation does the following:

- ◆ Installs the file `novelluddi.war`
- ◆ Installs the sample scripts for deploying and undeploying the Application Server that is selected.

- 2** Select Configure UDDI Server to configure the UDDI server. The UDDI server configuration does the following:

- ◆ Extends the eDirectory schema with UDDI specific classes and attributes.
- ◆ Creates user, server and base containers/contexts.
- ◆ Creates 25 canonical tModel objects and the UDDI Server object under the server context with the name `server name-UDDI` and enables public Read rights to it.

- 3** If the install has detected a previous installation of Novell Nsure UDDI Server, you are prompted to confirm the uninstallation before proceeding.

If you select Yes, the previous version of the UDDI Server is uninstalled.

- 4** If you started this procedure with [Step 1](#), you will see the UDDI Server Input screen.

- 4a** Select the Application Server where you want to deploy the UDDI Server and specify the path where you want to install the files, then skip to [Step 6](#).

The following directories are created under the specified path:

- ◆ UDDIUninstall: Contains the uninstaller.
- ◆ conf: Contains the uddi_v2.xsd (created if the Install UDDI server option is selected) and uddi.conf (created if the Configure UDDI server option is selected) files.
- ◆ logs: Contains files that has log information of the UDDI server. Typically, the log file is named as uddi-log-*timestamp*.log where *timestamp* is the time when the log file was generated.

4b Click Next.

If you started this procedure with **Step 2**, you will see the Application Server Port Number screen. This is the port where your application server is listening.

5 If you started this procedure with **Step 2**, you will see the UDDI Administrator Credentials screen. Complete the server configuration by supplying the following information:

5a Choose Yes if you want to enable SSL communication between the UDDI server and the LDAP Server. By default, it is set to No.

NOTE: Choosing SSL will slow down the performance.

5b Specify the eDirectory administrator's DN, password, and the UDDI operator's e-mail ID.

The DN must be specified in LDAP format.

5c Specify the LDAP hostname.

5d Specify the LDAP Port number if it is other than 389. You might need to change this to 636 if you chose Yes in **Step 5a on page 31**.

5e If you choose yes for SSL setup, a certificate is displayed that needs to be imported in order to establish an SSL connection with the LDAP server.

Click Yes, if you want to trust this certificate and import it.

Click No, if you do not trust this certificate. This would mean that you cannot have an SSL setup with the LDAP server.

5f Click Next.

5g Specify the eDirectory containers where UDDI objects will be created.

These objects will house UDDI data. You can use the default values or change them based on your eDirectory configuration.

IMPORTANT: If you specify a server context where a UDDI Server object already exists, the object will be retained.

The server context, base context, and the user context must be specified in LDAP format. The base context must be different from the user context and must not exceed 28 characters.

5h Specify the operator's name for the UDDI registry.

NOTE: The UDDI operator's name and e-mail id will not be updated on reinstallation into the same server context.

5i Click Next.

6 Review the Pre-installation Summary screen and click Next to start installation.

If the installation is successful, a Congratulations! message is displayed.

The Novell_Nsure_UDDI_Server_InstallLog.log file contains installation log messages that can be used to verify any errors that occurred during installation.

- 7** Modify the deployment script and the deployment plan (for exteNd App Server) as per your settings and execute it to deploy the novelluddi.war file in the selected Application Server. Restart the servlet engine to start the UDDI service.
- 8** Open a browser window from any desktop and enter the following URL:

```
http://hostname:portnumber/novelluddi/servlet/rpcrouter
```

where *hostname* is the server name or the IP address of the server where the UDDI service is running and *portnumber* is the port at which the Application Server is listening.
The following message is displayed in your browser window if the UDDI service is running:

```
UDDI Server Status  
  
Server Initialized Successfully.
```
- 9** If you are installing only the UDDI Server, your installation is complete. If you are also installing the UDDI Administration and User Interfaces, continue with [“Completing the Installation Procedure for the UDDI Administration and User Interfaces”](#) on page 32.

Completing the Installation Procedure for the UDDI Administration and User Interfaces

To install UDDI Admin and User Interfaces:

- 1** Select UDDI Admin/User Interface in the Install Set page.
UDDI Install tries to detect the directory where Novell iManager 1.5 is installed and displays the directory name in the Admin Utility Install Folder Detected field.
- 2** Click Next if it is already detected
or
Click Choose to select the directory where iManager 1.5 is installed. This is the webapps directory of Tomcat.

Uninstallation

The required files for undeployment and uninstallation are also copied when Novell Nsure UDDI Server is installed. The undeployment script is located at *serverdir* and the uninstallation files are located at *serverdir*\UDDIUninstall where *serverdir* is the directory that has the UDDI Server installed.

To uninstall Novell Nsure UDDI Server on NetWare:

- 1** At the system console, enter:

```
UDDIUninstall.ncf
```

To uninstall Novell Nsure UDDI Server on Linux, Solaris, and AIX:

- 1** Execute the following command:

```
cd path of the UDDIUninstall Directory  
./UDDIUninstall
```

To uninstall Novell Nsure UDDI Server on Windows:

- 1** Double-click the UDDIUninstall.exe file.

Notes

- ◆ During installation, the uddi-apache.conf file is copied to the serverdir directory.
This file is used if the Apache/Tomcat combination is selected as the desired Application Server. To enable the user to integrate and use the Apache/Tomcat combination, this file is copied whether or not Apache is detected.
- ◆ Ensure that the hostname and the domainname are set properly before you begin installation. The hostname is used in forming the UDDI server URLs that are stored as part of the server configuration.

On UNIX

Ensure that the file /etc/hosts contains an entry for the hostname along with the domain name.

On NetWare

Ensure that the file sys:\etc\hosts contains an entry for the hostname along with the domain name.

On Windows

Ensure that the nameserver is correctly configured and it contains an entry for the host along with the domain name.

- ◆ If you are using UDDI Services on exteNd™ Application Server and want to upgrade it to Nsure UDDI Server, reinstall the Nsure UDDI Server as specified in [Chapter 3, “Installing Novell Nsure UDDI Server,”](#) on page 27.

4

Configuring Novell Nsure UDDI Server

This section describes how to configure Novell® Nsure™ UDDI Server. Configuration can be directory-based or file-based.

The basic configuration information for UDDI server is set in the `uddi.conf` (bootstrap) file located in the `config_dir/conf` directory, where `config_dir` is the directory that you specify during installation.

The `uddi.conf` file contains the following parameters:

- ♦ **LDAPHost:** Specifies the server name or the IP address of the LDAP server. The default value is 127.0.0.1.
- ♦ **LDAPPort:** Specifies the port where the LDAP server is listening. The default value is 389.
- ♦ **BackendRepository:** Specifies the LDAP repository where UDDI data is stored.
For example, if the BackendRepository is Novell eDirectory™, this should be specified as `edir`.
- ♦ **ConfigRepository:** Specifies the repository where UDDI configuration is stored. By default, this is `dir`, which means that the UDDI configuration is read from the LDAP back end.
If you want to use a file-based configuration, change this value to `file`.
- ♦ **ServerContext:** Specifies the object in the directory where the configuration is stored. This is required to be set only if the ConfigRepository is `dir`.
- ♦ **EnforceSSLForPublish:** Allows the publish operations over SSL. The default is `no`.
- ♦ **UseSSLForLDAP:** Specifies the mode of communication between the UDDI Server and LDAP Server. The default is `No`.

NOTE: The server must be restarted after changes are made to the `uddi.conf` file.

If you choose to do an eDirectory-based configuration, we recommend you to use iManager. For more information on setting up and using iManager, refer [Chapter 5, “Setting Up the UDDI Web-based Utility,” on page 37](#).

If you choose to do a file-based configuration, you must edit the `uddi-file.conf` file located in the `config_dir/conf` directory. For more information, see the following section.

File-based Configuration

The `uddi-file.conf` file contains the following parameters that can be edited:

- ♦ **uddiUserContext:** Specifies the LDAP context where the UDDI user objects are stored. This is a mandatory attribute.
- ♦ **uddiBaseContext:** Specifies the LDAP context where the UDDI data is stored. This is a mandatory attribute.

- ◆ **uddiEnableLogging:** Specifies whether logging is to be enabled. Values can be either True or False. The default value is False.
- ◆ **uddiLogFileSize:** Specifies the maximum size (in MB) of the log file. The valid range is 1 KB to 500 MB. The default value is 1 MB.
For example, specify 0.5 to set the log file size to 500 KB or specify 2 to set the size to 2 MB.
- ◆ **uddiLogLevel:** Specifies the level below which messages are not logged. The valid range is 0 to 7. A higher number indicates that more detailed messages are logged. The default level is 2.
- ◆ **uddiLogCategory:** Specifies the category for which the messages are logged. The valid range is 0 to 63. The default level is 63, which allows all categories to log messages.
- ◆ **uddiReconfigInterval:** Specifies the interval (in minutes) between two consecutive configuration reads. The valid range is 5 to 1440 minutes. The default is 5 minutes.
- ◆ **uddiMaxBusinessEntities:** Specifies the maximum number of business entities per user that can be published in the registry. The valid range is 0 to 1000. The default value is 10.
- ◆ **uddiMaxBusinessServices:** Specifies the maximum number of business services that can be published under a business entity. The valid range is 0 to 10000. The default value is 100.
- ◆ **uddiMaxBindingTemplates:** Specifies the maximum number of binding templates that can be published under a business service. The valid range is 0 to 1000. The default value is 100.
- ◆ **uddiMaxTModels:** Specifies the maximum number of TModels per user that can be published in the registry. The valid range is 0 to 10000. The default value is 100.
- ◆ **uddiMaxNames:** Specifies the maximum number of names that can be provided for a UDDI entity. The valid range is 0 to 10. The default value is 5.
- ◆ **uddiIdleTimeout:** Specifies the time during which the sessions can be idle and after which the session expires. The valid range is 10 to 1440 minutes. The default value is 30 minutes.
- ◆ **uddiMaxBackendConnections:** Specifies the maximum number of authenticated connections or sessions that can be established to the UDDI registry. The valid range is 0 to 500. The default value is 5.
- ◆ **uddiDefaultLanguage:** Specifies the default language used by the UDDI server.
- ◆ **uddiSessionTimeLimit:** Specifies the period for which the session is valid. After the time expires, the session is timed out. The valid range is 30 to 1440 minutes. The default is 0, which means there is no time out.
- ◆ **uddiOperatorsName:** Specifies the UDDI operator name who manages the UDDI registry data. The default value is UDDI Operator.
- ◆ **uddiMaxSearchResults:** Specifies the maximum number of search results per user request. The valid range is from 0 to 1000. The default is 0, which means there is no limit.
- ◆ **uddiMaxAuthAttempts:** Specifies the maximum number of authentication attempts. The valid range is 0 to 10. The default is 0, which means you can authenticate indefinitely.
- ◆ **uddiAllowAuthInqNonSecure:** Allows authenticated inquiry operations over non-secure channel. The default value is true.
- ◆ **uddiReAuthPeriod:** Specifies the period for reauthentication. The valid range is 15 to 1440 minutes. The default value is 0, which means you can reauthenticate to the server immediately.

NOTE: All the above parameters are case-sensitive.

5

Setting Up the UDDI Web-based Utility

This section explains how to set up and deploy Novell® Nsure™ UDDI Server using UDDI Web-based utility. It covers the following:

- ♦ “[Launching the UDDI Web-Based Utility](#)” on page 37
- ♦ “[Installing or Upgrading UDDI Plug-Ins](#)” on page 38
- ♦ “[Assigning the Roles](#)” on page 38
- ♦ “[Configuring UDDI for Better Security](#)” on page 38

Launching the UDDI Web-Based Utility

To launch the UDDI Web-based utility:

- 1** Open Internet Explorer, Mozilla, or Galeon.
- 2** Type the following URL in the address bar of the browser window:

```
http://xxx.xxx.xxx.xxx:port/nps/iManager.html
```

- ♦ For Tomcat Standalone: `http://hostname:8080/nps/iManager.html`
- ♦ For Apache/Tomcat: `http://hostname/nps/iManager.html`
- ♦ For Apache/Tomcat with SSL: `https://hostname/nps/iManager.html`
- ♦ On NetWare 6.5 for Apache/Tomcat with SSL: `https://hostname/nps/iManager.html`
- ♦ On NetWare 6.5 for Apache/Tomcat without SSL: `http://hostname/nps/iManager.html`

where *hostname* is the server name or IP address of the server where the UDDI service is running.

- 3** To log in to the Web-based utility, enter the username and password.
- 4** Click the Roles and Tasks icon in the taskbar.

The Web-based utility roles appear in the left pane.

- ♦ To manage access to the UDDI registry and to manage the UDDI server configuration, click “[Using the UDDI Administration Interface](#)” on page 43 and choose from the available options.
- ♦ To perform publish operations and to manage user access control to the UDDI registry, click “[UDDI Publish and User Access Control](#)” on page 75 and choose from the available options.
- ♦ To perform inquiry operations to the UDDI registry, click “[UDDI Inquiry](#)” on page 126 and choose from the available options.


Installing or Upgrading UDDI Plug-Ins

Roles and tasks should be set up by a network administrator using the iManager Configuration Wizard.

The wizard launches the first time you run iManager. You must be logged in as a user with admin-equivalent rights because the schema is extended at this time. This wizard takes you through the creation of the role-based services objects and lets you assign roles and tasks to the user that is currently logged in. You must select Uddi for administrator and uddiUA for User interface plug-in from the list.

NOTE: Uddi or uddiUA is not displayed in the list, if the Uddi plug-in file Uddisnapintasks.xml is not available in the WEB-INF\plug-ins\uddi directory and the uddiUA plug-in file uddiUATasks.xml is not available in the WEB-INF\plug-ins\uddiUA directory.

To install or upgrade the UDDI plug-ins:

- 1 Click Configure  on the iManager toolbar.
- 2 Click the Module Configuration role.
- 3 Click the Install Module Package task.
- 4 Click Browse to select the path of the uddi.npm.
- 5 Click Install to install or upgrade the UDDI plug-ins.

Assigning the Roles

Each RBS role has a set of available tasks associated with it. You can choose the user that is assigned to a particular role.

- 1 Click the Configure button in iManager.
- 2 Click Role Configuration > Modify iManager Roles.
- 3 Click the Modify Members icon in the role you want to modify.
- 4 Enter the user, group, organization unit, or organization or use the Object Selector icon to browse and select it to assign the role.
- 5 Specify the scope for the assigned role.
- 6 Click Add to associate the roles that are assigned.

The underlying tasks of the role are also assigned.

- 7 Click OK.
- 8 Log out and log in with the user ID for which the UDDI roles and tasks are assigned.

Roles are displayed in the left pane of iManager.

If roles and tasks are not displayed, refer to [“Roles and Tasks are not displayed” on page 158](#).

Configuring UDDI for Better Security

You can configure and deploy Novell Nsure UDDI Server for better security. This section covers:

- ♦ [“Transport Security” on page 39](#)
- ♦ [“Configuring SSL with Apache” on page 39](#)

- ◆ “Locking Accounts” on page 40
- ◆ “Configuring UDDI/LDAP on a Single Host” on page 40
- ◆ “Allowing Clear-Text Passwords” on page 40
- ◆ “Replication and Synchronization” on page 40
- ◆ “Administering UDDI over Non-Secure Channels” on page 40
- ◆ “UDDI Logger File Permissions” on page 40
- ◆ “Contextless Login” on page 41

Transport Security

- ◆ All authenticated inquiry and publish operations should happen over a secure channel, unless Novell Nsure UDDI Server is deployed in a test environment.
- ◆ Based on the deployment considerations, administrators can choose to allow:
 - ◆ Unauthenticated UDDI inquiry operations to happen over a non-secure channel
 - ◆ Authenticated UDDI inquiry operations to happen over a non-secure channel
 - ◆ Authenticated UDDI inquiry publish operations to happen over a non-secure channel

To configure transport security, do the following:

- ◆ Modify Authenticated Inquiry Over Non-SSL to True or False by using the UDDI Administration utility to enable or disable all UDDI inquiry operations over a secure channel.
- ◆ Edit the `uddi.conf` file to change the value of attribute `EnforceSSLForPublish` to Yes or No to enable or disable the UDDI publish operations over a secure channel. This ensures that the UDDI server checks whether the request has come over a secure channel and allows or disallows the request based on the parameter set.

NOTE: The server must be restarted after changes are made to the `uddi.conf` file.
- ◆ Modify inquiry and publish URLs based on the above settings to either `http` or `https` using the UDDI administration interface.
- ◆ You can configure SSL between the UDDI user interface and the UDDI server using the **Add Provider** and **Import Certificate** tasks in the UDDI administration interface.
- ◆ To have UDDI client applications to communicate over SSL, configure UDDI clients by adding the SSL provider and importing the UDDI server certificate programmatically through security command beans. For more information, see *Security Command Beans* (http://developer.novell.com/ndk/bns_seccmd.htm).

Configuring SSL with Apache

If you are deploying Novell Nsure UDDI Server in an Apache/Tomcat environment, ensure that you have already integrated Apache and Tomcat, and have Apache configured to communicate over SSL. This requires `mod_ssl` (an SSL module for Apache) to be configured with Apache. For more information, see www.modssl.org (<http://www.modssl.org>).

Locking Accounts

The account lock feature enables administrators to control someone trying to guess a user password and use it for false authentication attempts. Based on the defined values, the user account is locked for a defined period of time.

This feature has the disadvantage of allowing X to try false authentication attempts and lock Y's account if they know Y's identity. This can cause denial of service to Y for the duration of lockout period. For this reason, this feature remains disabled by default setting 0 for Maximum Unsuccessful Authentication Attempts and Account Lock Out Period. Administrators can enable this by setting appropriate values for these parameters using UDDI administration interface.

Configuring UDDI/LDAP on a Single Host

Novell Nsure UDDI Server is integrated with Novell eDirectory™ services using LDAP for communication. For performance reasons, UDDI server and eDirectory should be deployed on the same host and communicate in clear text form.

Because there is no session or transport layer security provided between the UDDI server and eDirectory, data should not be allowed to travel over the wire in clear text form. To ensure that packets do not go over the wire, use only 127.0.0.1 as the IP address in the uddi.conf file (bootstrap file required for UDDI server to come up) instead of the actual IP address or the DNS name. Communicating makes requests to loop back to the network layer rather than travel over the wire.

Allowing Clear-Text Passwords

Enabling Allow Clear Text Passwords or Require TLS is a prerequisite because all UDDI-LDAP operations happen in clear text and not over SSL. Doing so does not cause any problems because the UDDI server and eDirectory run on a single host. However, when there are multiple applications running in the same eDirectory environment as UDDI, other eDirectory applications or users try LDAP operations in clear text. We strongly recommend that administrators discourage others from using LDAP over clear text based solely on the application or user requirements.

Replication and Synchronization

eDirectory uses NDAP for replication and synchronization operations. Because NDAP does not provide transport security, UDDI data replication or synchronization with other partition's data happens in clear text form. Administrators should ensure that replication or synchronization occurs only in trustworthy network environments.

Administering UDDI over Non-Secure Channels

All UDDI administration operations happen over non-secure channels because iManager (Management Framework) uses NDAP to communicate with eDirectory and therefore there is no transport security support. Administrators should ensure that administrative tasks are performed in trustworthy network environments only.

UDDI Logger File Permissions

The log file `uddi-log-timestamp.log`, created by the Novell UDDI server must be set for proper file permissions. This might have sensitive information that should not be read or modified by users other than the UDDI administrators.

You can explicitly set file permissions after the Novell Nsure UDDI Server is set up and configured through the operating system.

Contextless Login

Novell Nsure UDDI supports LDAP authentication with contextless login. This requires an FDN (Fully Qualified Distinguished Name) to be provided as user identity while logging in.

In contextless log in, only CNs are required to be provided as user identity. This feature of Nsure UDDI mandates that multiple instances of CNs (same CN) must not exist in different containers in the directory.

You must ensure that identities with common CN do not exist or are not being created. This can introduce multiple loopholes such as denial of service to the user with proper credentials or allowing improper access while accessing the UDDI registry.

6

Using the UDDI Administration Interface

This section provides information about using the UDDI administration interface.

NOTE: If the UDDI server is SSL-enabled and user snap-ins are not working properly, execute the Add SSL Provider and Import Certificate tasks.

If there are problems executing these tasks, ensure that the `ecb.jar` and `UDDISecurity.jar` is available under the `webapps\lib` directory.

This section explains the following:

- ◆ [“Server Selection” on page 43](#)
- ◆ [“Adding an SSL Provider” on page 44](#)
- ◆ [“Importing a Certificate” on page 45](#)
- ◆ [“Server Configuration” on page 46](#)
- ◆ [“Set Rights” on page 51](#)
- ◆ [“Edit Rights” on page 61](#)
- ◆ [“Edit Trustees” on page 67](#)
- ◆ [“Ownership Transfer” on page 72](#)

Server Selection

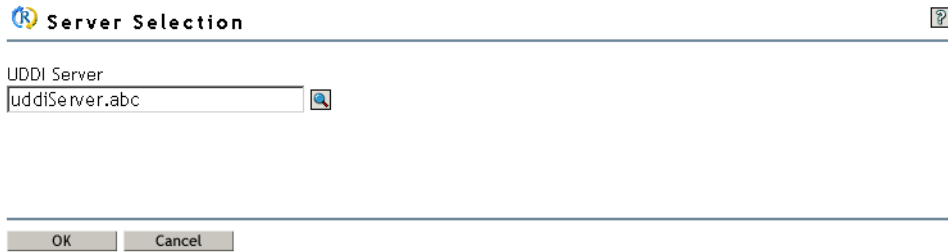
The UDDI Server object is a Novell® eDirectory™ object. This attribute contains UDDI registry, security, logging, and general information.

The UDDI base context, the administrator's e-mail ID, and the attribute values for the inquiry and publish URL are required to execute any Admin and User interface task. After the Server object is selected, the Server object and these attribute values are cached for the session.

The server selection remains in effect until the end of the current session or until another server selection is made for the current session. The administrator's e-mail ID and the inquiry and publish URL value can be changed for the Server object for the session using the Server Configuration Management task.

For more information, see [“Server Selection not succeeded” on page 163](#).

Figure 5 Server Selection



To configure or select the UDDI server:

- 1** Click any task on the left panel of iManager to open the Server Selection window in the main panel.

You should do a Server Selection before using any other tasks in iManager.

- 2** Specify the Server object's FDN or use the Object Selector icon to browse and select the UDDI server name.
- 3** Click OK.

A message indicates that the server selection request has succeeded.

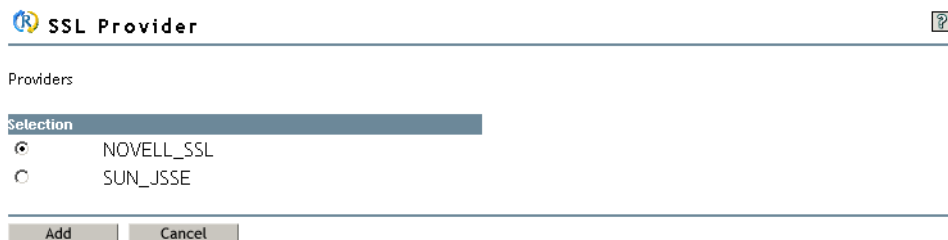
NOTE: If the server selection has not succeeded, it might be due to the browser caching. In Internet Explorer, Click Tools > Internet Options > Settings. Change the default settings from Never to Every visit to the page under the Check for newer versions of stored pages tab. In Mozilla or Galeon, Click Edit > Preferences > Advanced > Cache. Change the default settings for Compare the page in the cache to the page on the network option from When the page is out of date to Every time I view the page. Restart Navigator for the changes to take effect.

Adding an SSL Provider

Secure Socket Layer (SSL) is a protocol that provides confidentiality, reliability, and security for data over the Internet.

An SSL provider library is added for communicating securely with the UDDI server.

Figure 6 Adding an SSL Provider



To add an SSL provider:

- 1** Click UDDI Administration > Add SSL Provider to open the SSL Provider window in the main panel.
- 2** Select the SSL provider.
- 3** Click Add.

A message indicates that the SSL provider has been added.

- 4 Click Repeat Task to add another SSL provider.

Importing a Certificate

The UDDI server certificate is imported into the Java* keystore as a trusted certificate for SSL communication. For more information, see [Chapter 2, “About Novell Nsure UDDI Server,” on page 19](#).

The default port is 443.

Figure 7 Importing a Certificate

Import Certificate

UDDI Server IP Address Secure Port

127 0 0 1 443

Add Cancel

To import a certificate:

- 1 Click UDDI Administration > Import Certificate to open the Import Certificate window in the main panel.
- 2 Specify the UDDI server IP address and port number.
- 3 Click Add.

Figure 8 Import Certificate Details

Import Certificate

Certificate
Version: 3
Serial No.: 62535835924503789231007689046809296691064220858478349324521704958587166867456273
Issued To: O=ABC_LNX-73, CN=127.0.0.1
Issued From: O=ABC_LNX-73, OU=Organizational CA
From: Fri Nov 22 23:35:22 IST 2002 To: Sun Nov 21 23:35:22 IST 2004
Valid for: This certificate is valid for the Web Server running on host 127.0.0.1: port number 443

Add Cancel

The details of the imported certificate are provided in the window that is displayed.

- ◆ **Certificate Version:** Specifies the version of the certificate.
- ◆ **Serial No.:** Specifies the serial number of the certificate.
- ◆ **Issued To:** Specifies the entity to which the certificate has been issued.
- ◆ **Issued From:** Specifies the entity from which the certificate has been issued.
- ◆ **From:** Specifies the validity date for the certificate.

- 4 Click Add to import the certificate into your Java keystore.

Server Configuration

The Server Configuration role enables you to manage the UDDI user accounts, access policies, and the server configuration.

You use four different tabs for server configuration settings:

- ◆ “Registry” on page 46
- ◆ “Security” on page 47
- ◆ “Logging” on page 49
- ◆ “General” on page 50

Registry

Registering means that a business has publicly listed at least a definition of itself. UDDI then programmatically assigns a unique identifier to each service description and business registration and stores them in the registry.

Registering to the UDDI business registry enables the business to be discovered by other organizations with which they are not currently doing business.

The UDDI registry attribute value specifies the maximum number of each of the attributes that can be used for publishing or inquiring the UDDI data.

Figure 9 Managing the Server Configuration: Registry Tab

UDDI Server Configuration Management: UDDI.uddiserver.uddi

required=*
[Change UDDI Server Selection](#)

Registry Security Logging General

UDDI Base Context	uddidata.uddi
UDDI Operator Name	UDDI Operator
E-mail id*	abjanteam1@lycos.com
Maximum number of:	
business entities per user	100
business services per business entity	1000
binding templates per business service	101
tModels per user	100
publisher assertions per user	100
search results per request	100
names per UDDI entity	10
Default Language	English

OK Apply Cancel

The UDDI base context is the Novell eDirectory context where all the UDDI data exists in the tree. This value cannot be edited.

The UDDI operator name is the operator who manages the UDDI registry data. This value cannot be edited.

The e-mail ID is the e-mail address used by the UDDI user to communicate with the UDDI data operator or administrator.

To set the UDDI registry configurations:

- 1** Click UDDI Administration > Server Configuration to open the UDDI Server Configuration Management window in the main panel.
- 2** Select the Registry tab.
- 3** Specify the maximum number of business entities that a user can publish in the UDDI registry.
The valid range is 0 to 1000. The default is 100.
- 4** Specify the maximum number of business services that a user can publish under an existing business entity.
The valid range is 0 to 10000. The default is 1000.
- 5** Specify the maximum number of binding templates that a user can publish under a business service.
The valid range is 0 to 1000. The default is 100.
- 6** Specify the maximum number of TModels that a user can publish in the UDDI registry.
The valid range is 0 to 10000. The default is 100.
- 7** Specify the maximum number of Publisher Assertions that a user can publish in the UDDI registry.
The valid range is 0 to 100. The default is 50.
- 8** Specify the maximum number of search results per user request.
The valid range is 0 to 1000. The default is 100.
- 9** Specify the maximum number of names per entity.
The valid range is 0 to 10. The default is 5.
- 10** Specify the UDDI server language.
The default is English.
- 11** Click Apply to save changes.
- 12** Click OK to complete the task.

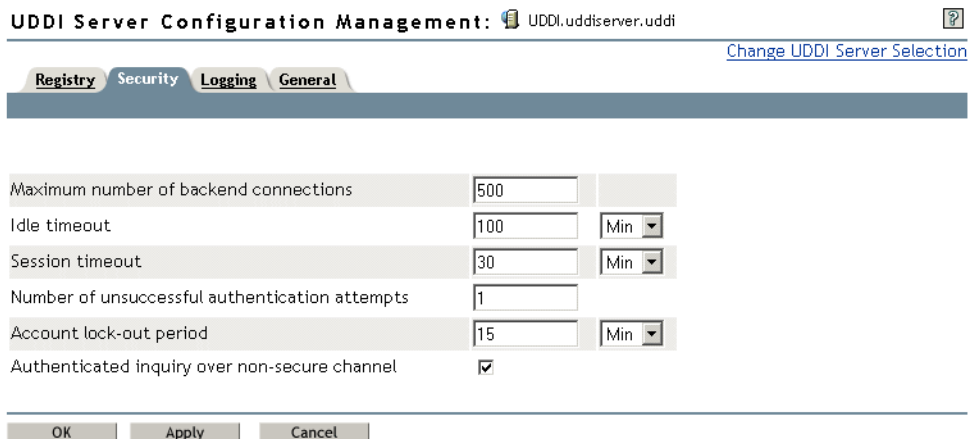
If no value has been specified for non-mandatory fields, the default value is used.

An attribute value set to 0 removes the limit restriction and an asterisk indicates the field is mandatory.

Security

This task helps you configure the security features for the UDDI registry based on your deployment considerations, which helps you provide data for session management functionality.

Figure 10 Managing the Security Configuration: Security Tab



- 1 Click UDDI Administration > Server Configuration to open the UDDI Server Configuration Management window in the main panel.
- 2 Click the Security tab.
- 3 Specify the maximum number of back-end connections.

This is the maximum number of authenticated connections or sessions that can be established to the UDDI registry.

The valid range is 0 to 500. The default is 500.

An attribute value set to 0 removes the limit restrictions.
- 4 Specify the time for which the sessions can be idle and after which the session expires.

Select Min, Hr, or Day from the drop-down list.

The valid range is 10 minutes to 1 day. The default is 10 min.
- 5 Specify the period for which the session is valid. After the time expires, the session is timed out.

The valid range is 30 minutes to 1 day. The default is 0.
- 6 Specify the number of unsuccessful authentication attempts that can be made.

Specifying a value enables the account lock feature. The user account will be automatically locked after the specified number of unsuccessful attempts.

The valid range is 0 to 10. The default is 0.

If the value is set to 0, the account lock functionality is disabled and the account lock-out period is set to 0.
- 7 Specify the time after which the account should be unlocked.

Select Min, Hr, or Day from the drop-down list.

The valid range is 15 minutes to 1 day. The default is 0.

Specifying this value unlocks the account that was locked after the specified number of unsuccessful authentication attempts as in [Step 6](#).

If the value is set to 0, the account lock functionality is disabled and the number of unsuccessful authentication attempts is set to 0.

- 8 Select Allow authenticated inquiry over non-secure channel to allow authenticated inquiry operations over non-SSL.

If this option is checked and the inquiry URL option is set to https in the **General** page, then both secure and non-secure inquiry requests are allowed.

Unchecking this option forces inquiry over a secure channel.

- 9 Click Apply to save changes.

- 10 Click OK.

If no value has been specified for the non-mandatory fields, the default value is used.

Logging

UDDI Server log messages are routed to the Application Server Console by default. The Enable UDDI File log option on this page enables you to log the UDDI server events into a separate log file.

The logger category, severity level of the events, and the log file size can be specified using the options provided.

Figure 11 Managing the Server Configuration: Logging Tab

The screenshot shows the 'UDDI Server Configuration Management' window for the instance 'blr-sruthi-UDDI.uddiserver.uddi'. The 'Logging' tab is selected. The 'Enable UDDI File log' checkbox is checked. Under 'Select the Logger categories', the checkboxes for SOAP, Backend, Configuration, and Connections Manager are checked, while Processor and Authentication Manager are unchecked. The 'Logger Levels' dropdown is set to 'Info'. The 'Server Log File Size' is set to '234 MB'. At the bottom, there are 'OK', 'Apply', and 'Cancel' buttons.

To log server events:

- 1 Click UDDI Administration > Server Configuration to open the UDDI Server Configuration Management window in the main panel.
- 2 Click the Logging tab.
- 3 Check Enable UDDI File Log to log the events into a server log file.

You can specify the logger categories for the server components, such as SOAP, Backend, Processor, Configuration, Connections Manager, and Authentication Manager.

- 4 Select the Logger level from the drop-down list.

Logger levels describe the level of importance and urgency of log messages that are permitted to be logged. When the Logger is configured at a particular level, only messages of the same

or higher priority are logged and other messages are discarded. The default logger level is Warning.

You can set the following logger levels:

Off: Enables you to turn off logging both at the system console and the log file.

Severe: Enables only notification of critical system failures and messages that demand immediate attention.

Warning: Enables the Severe logging level and also enables logging for messages of exceptional conditions of lesser importance than Severe.

Info: Enables logging of routine messages of selected server operations that are used for collecting statistics.

Debug: Enables logging messages with detailed information for debugging.

5 Specify the size (in MB) of the server log file.

The valid range is 1 to 500 MB. The default is 1 MB.

6 Click Apply to save changes.

7 Click OK.

If no value has been specified for the non-mandatory fields, the default value is used.

General

This tab enables you to provide general information about configuring and managing the UDDI registry.

Figure 12 Managing the Server Configuration: General Tab

The screenshot shows the 'UDDI Server Configuration Management' window with the 'General' tab selected. The window title is 'UDDI Server Configuration Management: UDDI.uddiserver.uddi'. There are four tabs: 'Registry', 'Security', 'Logging', and 'General'. The 'General' tab is active. The form contains the following fields:

- UDDI User Context***: A text area containing 'users' and 'novell'. There are '+' and '-' buttons to the right.
- Inquiry URL***: A dropdown menu set to 'http://' and a text field containing 'abc-srvr:8080/novelluddi/s'. A tooltip says 'Specify the URL that will be used to handle inquiries to the registry.'
- Publish URL***: A dropdown menu set to 'http://' and a text field containing 'abc-srvr:8080/novelluddi/s'. A tooltip says 'Specify the URL that will be used to publish services to the registry.'
- Maximum size of a SOAP message**: A text field containing '2' and a dropdown menu set to 'MB'.
- Re-configuration interval**: A text field containing '30' and a dropdown menu set to 'Min'.

At the bottom of the window are three buttons: 'OK', 'Apply', and 'Cancel'.

1 Click UDDI Administration > Server Configuration to open the UDDI Server Configuration Management window in the main panel.

2 Click the General tab.

3 Click Add to add the UDDI User Context.

This is the Novell eDirectory context that contains Users and Groups that are allowed to access the UDDI registry for inquiry and publish operation.

This is a mandatory field.

Click Delete to delete the UDDI User context.

- 4 Specify the URL that is used to inquire in the UDDI registry.

Inquiry URL

For any inquiry (read operation) from a UDDI registry that uses this URL.

This is a mandatory field. You can select http or https. The default protocol is http.

To send request through https, uncheck the Authenticated inquiry over non-secure channel field defined in the Security page. Change the attribute *EnableSSLForPublish* from No to Yes in the *config_dir*\conf\uddi.conf file where *config_dir* is the directory where UDDI is installed and deployed.

Checking Inquiry over non-secure channel in the Security page enables the URL type selection.

- 5 Specify the URL that is used to publish to the UDDI registry.

Publish URL

The publish URL is used to publish (create, store, or update) information into a UDDI registry.

To send a publish request through http, update the attribute *EnableSSLForPublish* from Yes to No in the CONFIG_DIR\conf\uddi.conf where CONFIG_DIR is the directory where UDDI is installed and deployed. The default protocol is http://.

This is a mandatory field. You can select http:// or https://

- 6 Specify the maximum size of the SOAP message. This is the maximum size of the SOAP request that can be sent to the UDDI server.

Select KB or MB from the drop-down list.

The valid range is 1 KB to 2 MB. The default is 2 MB.

- 7 Specify the time for the server to reconfigure.

This is the reconfiguring (polling) interval after which the server seeks for configuration updates.

Select Min, Hr, or Day from the drop-down list.

The valid range is between 5 minutes to 1 day. The default is 15 min.

- 8 Click Apply to save changes.

- 9 Click OK.

An asterisk indicates the field is mandatory.

If no value has been specified for the non-mandatory fields, the default value is used.

Set Rights

The Set Rights role is based on Novell eDirectory rights management. It enables the administrator to set new trustees with inquiry rights to UDDI entities such as business entity, business service, and TModel. You can also set inquiry and publish rights for the base context.

The Set Rights role consists of the following tasks:

- ◆ “Set Rights for Business Entity” on page 54
- ◆ “Set Rights for Business Service” on page 55
- ◆ “Set Rights for TModel” on page 58
- ◆ “Set Rights for UDDI Base Context” on page 59

NOTE: If a trustee has implicit supervisory rights (through security equivalence or rights set at container level), explicit rights will not be set.

Figure 13 Setting Rights

Set Rights ⓘ

Select the UDDI entity that you want to set trustees with assigned rights.

UDDI Entity

UDDI Base Context [Change UDDI Server Selection](#)

UDDI Base Context
Business Entity
Business Service
TModel

OK Cancel

To set a trustee for a UDDI entity:

- 1 Select the UDDI entity from the drop-down list.

Selecting UDDI Base Context allows you to set trustees for the UDDI data container.

If you selected Business Entity, the following window for search criteria selection is displayed:

Figure 14 Assigning Rights for a Business Entity

Set Rights ⓘ

Select the UDDI entity that you want to set trustees with assigned rights.

UDDI Entity

Business Entity [Change UDDI Server Selection](#)

Business Entity Search criteria

*

(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

- 2 Specify the criteria for searching.

The default search criterion is * (see “Search Criteria” on page 123).

If you selected Business Service, the following window for search criteria selection is displayed.

Figure 15 Assigning Rights for a Business Service

Set Rights ?

Select the UDDI entity that you want to set trustees with assigned rights.

UDDI Entity
Business Service [Change UDDI Server Selection](#)

Search filters for:

Business Entity
 Business Service

Business Entity Search criteria
*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

3 Select the UDDI entity to which you want to apply the search filter.

◆ **Business Entity**

Enables you to search for a business entity that can be further used for searching business services belonging to that entity.

◆ **Business Service**

Enables you to search for business services from the UDDI data container (base context) regardless of its business entity.

Specify the criteria for searching the service or entity.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected TModel, the following window for search criteria selection is displayed.

Figure 16 Assigning Rights for TModel

Set Rights ?

Select the UDDI entity that you want to set trustees with assigned rights.

UDDI Entity
TModel [Change UDDI Server Selection](#)

TModel Search criteria
thomas*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

4 Specify the criteria for searching.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

5 Click OK.

Set Rights for Business Entity

This task enables you to set trustees with inquiry rights for a business entity.

Figure 17 Setting Rights for a Business Entity

Set Rights for Business Entity ?

required=*

Set inquiry rights to the trustees for the selected Business Entities.

<input type="checkbox"/>	Entity Name and Key
<input type="checkbox"/>	New BE:12a9edf3-c1c3-4d3f-a273-fd957c778c76
<input type="checkbox"/>	New BE:3635090a-f3ea-4fa1-94ac-1dfcc048c1d7
<input type="checkbox"/>	New BE:9857a21e-a940-4442-b4d0-d8d76874094b
<input type="checkbox"/>	New BE:99e187ba-5eb2-42b9-98ca-cf35f538aedd
<input type="checkbox"/>	New BE:d45d2e1a-ba0d-4fc8-a21e-4af24281ea96
<input type="checkbox"/>	New BE:e8609c1a-6e92-4922-adb1-774d022e975b

Trustee*

Public

Trustee Name

Inquiry

Allow Inquiry

Deny Inquiry

<< Previous Apply Finish Cancel

1 Select the entity name and key from the list.

2 Select Public to set all users as trustees to the selected business entity for the selected option.

Selecting this disables the Object Selector icon for the Trustee Name.

3 Specify a trustee's FDN or use the Object Selector icon to browse and select the Trustee Name.

Trustee Name can be Organization Unit (OU), Group, Users, or a combination of these. Public and Trustee Names are mutually exclusive.

The Trustee Name should only be specified in NDAP typeless format; that is, user1.users is valid, but cn=user1, o=users is invalid.

4 Select an Inquiry method:

◆ **Allow Inquiry**

Enables the trustees to view the business entity and its attributes. This is the default inquiry method.

◆ **Deny Inquiry**

Denies inquiry rights to the trustees to view the business entity.

If the trustee rights are acquired through security equivalence, then the Deny Inquiry trustee setting operation will not succeed.

Figure 18 Selecting Trustees

Set Rights for Business Entity ?

required*

Set inquiry rights to the trustees for the selected Business Entities.

<input type="checkbox"/>	Entity Name and Key
<input type="checkbox"/>	New BE:12a9edf3-c1c3-4d3f-a273-fd957c778c76
<input type="checkbox"/>	New BE:3635090a-f3ea-4fa1-94ac-1dfcc048c1d7
<input type="checkbox"/>	New BE:9857a21e-a940-4442-b4d0-d8d76874094b
<input type="checkbox"/>	New BE:99e187ba-5eb2-42b9-98ca-cf35f538aedd
<input type="checkbox"/>	New BE:d45d2e1a-ba0d-4fc8-a21e-4af24281ea96
<input type="checkbox"/>	New BE:e8609c1a-6e92-4922-adb1-774d022e975b

Trustee*

Public

Trustee Name

?

Inquiry

Allow Inquiry

Deny Inquiry


<< Previous Apply Finish Cancel

- 5** Click Apply to save changes.
- 6** Click Finish to save changes and complete the task.

Set Rights for Business Service

You can set trustees with inquiry rights for a business service.

Figure 19 Setting Rights for a Business Service

Set Rights for Business Service 

Set inquiry rights to the trustees for the selected Business Services.


Business Entity
BE Name 1:053aa7f8-d2fa-4f76-a52f-511f53b8d203

Business Service Search criteria
*

Service Name and Key
 Service 1:51c1a4e2-c6e8-469f-b8bb-d97647e2bb4a
 Service 2:437717de-847d-4906-b9f9-4494aed3d8ac

Trustee*

Public

Trustee Name
a2.users 

- 1** From the drop-down list, select a business entity that contains the service.
- 2** Click OK.
- 3** Specify the search criteria.
The default search criterion is * (see [“Search Criteria”](#) on page 123).
- 4** Select the service name from the list.

Figure 20 Selecting Trustees

Set Rights for Business Service ?

required=*

Set inquiry rights to the trustees for the selected Business Services.

<input type="checkbox"/>	Service Name and Key
<input checked="" type="checkbox"/>	Serv1:5448f3f2-3af8-4276-8269-afc834bde379
<input type="checkbox"/>	Serv1:aa40e557-e265-43cb-9e79-a3cf22e520a7
<input checked="" type="checkbox"/>	Service 1:51c1a4e2-c6e8-469f-b8bb-d97647e2bb4a
<input type="checkbox"/>	Service 2:437717de-847d-4906-b9f9-4494aed3d8ac
<input checked="" type="checkbox"/>	Service0:9f1b970c-f760-4bec-a529-bd563327s0

Trustee*

Public

Trustee Name

Inquiry

Allow Inquiry

Deny Inquiry

<< Previous Apply Finish Cancel

- 5 Specify the Trustee Name or use the Object Selector icon to browse for and select the Trustee Name.

Trustee Names can be Organization Unit (OU), Group, Users, or a combination of these. Public and Trustee Names are mutually exclusive.

The Trustee Name should only be specified in NDAPtypeless format; that is, user1.users is valid, but cn=user1, o=users is invalid.

- 6 Select Public to allow all users as trustees to the business service for the selected options. Selecting this disables the Object Selector icon for the Trustee Name.

- 7 Select an Inquiry method.

- ♦ **Allow Inquiry**

Enables the trustees to inquire for the business services. This is the default inquiry method.

- ♦ **Deny Inquiry**

Denies inquiry rights to the trustees to view the business services.

If the trustee rights are acquired through security equivalence, the Deny Inquiry trustee setting operation will not succeed.

- 8 Click Apply to save changes.

- 9 Click Finish to complete the task.

Set Rights for TModel

This task enables you to set trustees with inquiry rights for TModel.

Figure 21 Setting Rights for TModel

TM Set Rights for TModel ?

required=*

Set inquiry rights to the trustees for the selected TModels.

<input type="checkbox"/>	TModel Name and Key
<input type="checkbox"/>	TM1:uuid:3ca391d3-86d7-4b26-b50a-072835e310c6
<input type="checkbox"/>	TM1:uuid:9b2d7735-ec8d-4673-a46a-428f173f210a
<input type="checkbox"/>	TM1:uuid:baef3946-d52c-4823-9a63-196d4c3c6179
<input type="checkbox"/>	TM1:uuid:f70e184c-36ea-4497-a380-ecd34c3698f1

Trustee*

Public

Trustee Name

Inquiry

Allow Inquiry

Deny Inquiry

<< Previous Apply Finish Cancel

To set rights for TModel:

- 1** Select the TModel name from the list.
- 2** Select Public to set all users as trustees to the TModel.
Selecting this disables the Object Selector icon for the Trustee Name.
- 3** Specify the trustee FDN or use the Object Selector icon to browse and select the Trustee Name.
Trustee Names can be Organization Unit (OU), Group, Users, or a combination of these. Public and Trustee Names are mutually exclusive.
- 4** Select an Inquiry method:
 - ♦ **Allow Inquiry**
Enables the trustees to view the TModel and its attributes (default).
 - ♦ **Deny Inquiry**
Denies the trustees rights to view the TModel.
- 5** Click Apply to save changes.
- 6** Click Finish to complete the task.

Set Rights for UDDI Base Context

This task helps you to set trustees with inquiry or publish rights for the UDDI base context (the UDDI data container). The UDDI base context contains business entity, business service, and TModel.

The inquiry rights are applicable to all UDDI entities within the base context, but the publish rights are only at the base context level.

You can set the following rights for UDDI base context:

- ◆ Allow Inquiry and Deny Publish
- ◆ Allow Inquiry and Allow Publish
- ◆ Restricted Inquiry and Allow Publish
- ◆ Deny Inquiry and Deny Publish

After you revoke the publish rights for a user, the ownership of the entities owned by the user is transferred to the administrator. To transfer ownership to any other publisher, refer to [“Ownership Transfer” on page 72](#).

Figure 22 Setting Rights for the UDDI Base Context

Set Rights for UDDI Base Context ?

required=*

Set inquiry and publish rights to the trustees for the UDDI Base Context.

UDDI Base Context: **uddidata.uddi**

Trustee*

Public

Trustee Name

a2.users

Inquiry

Allow Inquiry

Deny Inquiry

Publish

Allow Publish

Deny Publish

Configure Implicit Rights to the UDDI Container

Enable inherited rights

Disable inherited rights

<< Previous Apply Finish Cancel

To set rights for the UDDI base context:

- 1** Select Public to set all users as trustees to the base context with one of the following combinations:

- ◆ Allow Inquiry and Deny Publish
- ◆ Deny Inquiry and Deny Publish

Selecting this disables the Object Selector icon for the Trustee Name.

- 2** Specify the trustee FDN or use the Object Selector icon to browse and select the Trustee Name.

Trustee Names can be Organization Unit (OU), Group, Users, or a combination of these. Public and Trustee Names are mutually exclusive.

Trustee Name should only be specified in NDAPtypeless format; that is, 'user1.users is valid, but cn=user1, o=users is invalid.

- 3** Select an Inquiry method.

- ◆ **Allow Inquiry**

Enables the trustees to view all UDDI entities (default).

- ◆ **Deny Inquiry**

Denies the trustees inquiry rights to view any of the UDDI entities.

If the trustee rights are acquired through security equivalence, then the Deny Inquiry trustee setting operation will not succeed.

Restricted Inquiry allows inquiry only at the base context level.

NOTE: This option is available only with Allow Publish.

- 4** Select a Publish method:

- ◆ **Allow Publish**

Enables the trustees to publish all UDDI entities at the base context level.

- ◆ **Deny Publish**

Denies the trustees rights to publish any UDDI entities (default).

- 5** Select the implicit rights for the UDDI container:

- ◆ **Enable inherited rights**

All implicit and explicit trustees configured on the UDDI data affect a trustee's rights to a UDDI entity. This option is enabled when no inherited rights are set at the UDDI container level or used to remove the UDDI-compliant inherited rights that are already set.

- ◆ **Disable inherited rights**

Only trustees explicitly configured on UDDI data will affect a trustee's rights to a UDDI entity. This option is disabled when the UDDI-compliant inherited rights are already set or can be used to set UDDI-compliant inherited rights.

- 6** Click Apply to save changes.

- 7** Click Finish to save changes and complete the task.

Edit Rights

This role is based on Novell eDirectory rights management. It enables the entity owner to view and modify the rights of the existing trustees for the UDDI Base Context and the UDDI entities such as business entity, business service, and TModel.

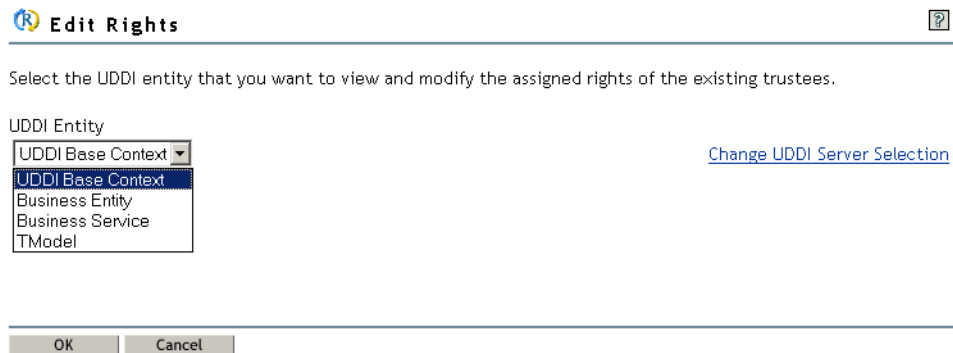
The Edit Rights role consists of the following tasks:

- ◆ “Edit Rights for Business Entity” on page 63
- ◆ “Edit Rights for Business Service” on page 64
- ◆ “Edit Rights for TModel” on page 65
- ◆ “Edit Rights for UDDI Base Context” on page 66

NOTE: Trustees having rights that are not compliant with the UDDI rights definition are marked as invalid rights. These trustees can be deleted.

If the trustees are disabled, then the trustees are the owners of the entity or will have supervisory rights.

Figure 23 Editing Rights for UDDI Entities



To edit rights for a UDDI entity:

- 1 Select a UDDI entity from the drop-down list.

Selecting UDDI Base Context allows you to view or modify existing trustees for the UDDI data container.

If you selected Business Entity, the following window for search criteria selection is displayed:

Figure 24 Searching for a Business Entity to Edit Rights for

The screenshot shows a dialog box titled "Edit Rights" with a help icon in the top right corner. Below the title bar, there is a text instruction: "Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees." Below this, there is a dropdown menu labeled "UDDI Entity" with "Business Entity" selected. To the right of the dropdown is a link: "Change UDDI Server Selection". Below the dropdown is a text input field labeled "Business Entity Search criteria" containing an asterisk (*). Below the input field is a hint: "(Example - *, abcd, ab*, *ab, *ab*)". At the bottom of the dialog are two buttons: "OK" and "Cancel".

2 Specify the criteria for searching.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

If you selected Business Service, the following window for search criteria selection is displayed:

Figure 25 Searching for a Business Service to Edit Rights for

The screenshot shows a dialog box titled "Edit Rights" with a help icon in the top right corner. Below the title bar, there is a text instruction: "Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees." Below this, there is a dropdown menu labeled "UDDI Entity" with "Business Service" selected. To the right of the dropdown is a link: "Change UDDI Server Selection". Below the dropdown is a text input field labeled "Business Entity Search criteria" containing an asterisk (*). Below the input field is a hint: "(Example - *, abcd, ab*, *ab, *ab*)". Below the input field is a section titled "Search filters for:" with two radio buttons: "Business Entity" (which is selected) and "Business Service". At the bottom of the dialog are two buttons: "OK" and "Cancel".

3 Select the UDDI entity to which you want to apply the search filter.

◆ **Business Entity**

Enables you to search for a business entity, which can further be used for searching business services belonging to that entity.

◆ **Business Service**

Enables you to search for business services from the UDDI data container (base context) regardless of their business entity.

4 Specify the criteria for searching the service or entity.

The default search criterion is * (see “Search Criteria” on page 123).

If you selected TModel, the following window for search criteria selection is displayed:

Figure 26 Searching for a TModel to Edit Rights for

Edit Rights ?

Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees.

UDDI Entity
TModel [Change UDDI Server Selection](#)

TModel Search criteria
thomas*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

5 Specify the criteria for searching.

The default search criterion is * (see “Search Criteria” on page 123).

6 Click OK.

Edit Rights for Business Entity

This task enables you to edit rights for a business entity.

When you select this task, a list of business entity names and keys is displayed.

Figure 27 Editing Rights for Business Entity

Edit Rights for Business Entity ?

Select the Business Entities whose trustees you want to modify.

<input type="checkbox"/>	Entity Name and Key
<input checked="" type="checkbox"/>	BE Name 1:053aa7f8-d2fa-4f76-a52f-511f53b8d203
<input type="checkbox"/>	BE Name 3:5b4f646d-1c71-4d50-8dbd-71331e3eec94
<input checked="" type="checkbox"/>	BE Name 4:91284435-23d4-4c72-9f4d-78ba58b05f9c
<input type="checkbox"/>	BE Name 5:edd7336f-86d1-4b64-8905-a3c63c89d66d
<input type="checkbox"/>	BE Name 6:d00ebfe-17d5-42c5-a740-beb67cd97a3a
<input checked="" type="checkbox"/>	BE Name2:d4ceaf3e-f1fa-4f23-a736-9c3c2dd13967

<< Previous Select Cancel

1 Select a business entity to display its trustees with their rights.

2 Click Select.

After you select the Business Entity, its trustees and their inquiry rights are displayed.

Figure 28 Edit Rights for Business Entities

Entity Name and Key	Trustee Name	Inquiry	Warning
BE Name 1:053aa7f8-d2fa-4f76-a52f-511f53b8d203	[Public]	<input checked="" type="checkbox"/>	
	ou.users	<input checked="" type="checkbox"/>	
	ou1.users	<input checked="" type="checkbox"/>	
BE Name 4:91284435-23d4-4c72-9f4d-78ba58b05f9c	[Public]	<input type="checkbox"/>	
	ou.users	<input checked="" type="checkbox"/>	
	ou1.users	<input type="checkbox"/>	
BE Name2:d4ceaf3e-f1fa-4f23-a736-9c3c2dd13967	[Public]	<input checked="" type="checkbox"/>	
	ou.users	<input type="checkbox"/>	
	ou1.users	<input checked="" type="checkbox"/>	

- 3 Select an Inquiry Remarks check box following a trustee name.
- 4 Click Finish.

Edit Rights for Business Service

You can edit rights for a business service.

- 1 Select a business service to display its trustees and rights.

Figure 29 Editing Rights for a Business Service

Business Entity

BE Name 1:053aa7f8-d2fa-4f76-a52f-511f53b8d203

Business Service Search criteria

*

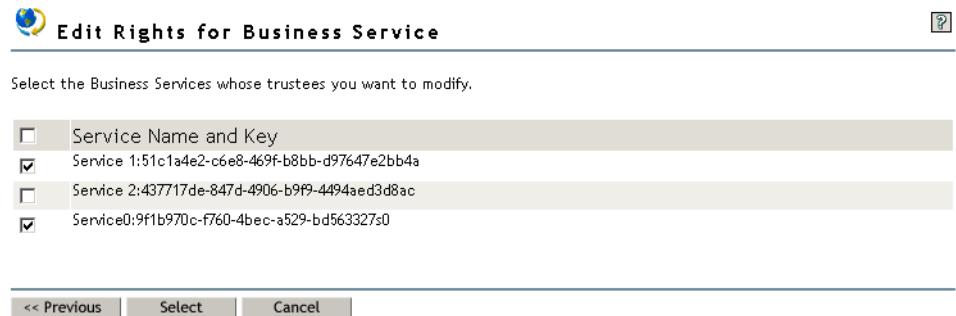
<input checked="" type="checkbox"/>	Service Name and Key
<input checked="" type="checkbox"/>	Service 1:51c1a4e2-c6e8-469f-b8bb-d97647e2bb4a
<input checked="" type="checkbox"/>	Service 2:437717de-847d-4906-b9f9-4494aed3d8ac

- 2 From the drop-down list, select the business entity that contains the business service.
- 3 Click OK.
- 4 Specify the search criteria.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

- 5 Select the Service Name from the list.
- 6 Click Select to display the Service name, Service key, trustee name, and inquiry rights.

Figure 30 Editing Rights for Services

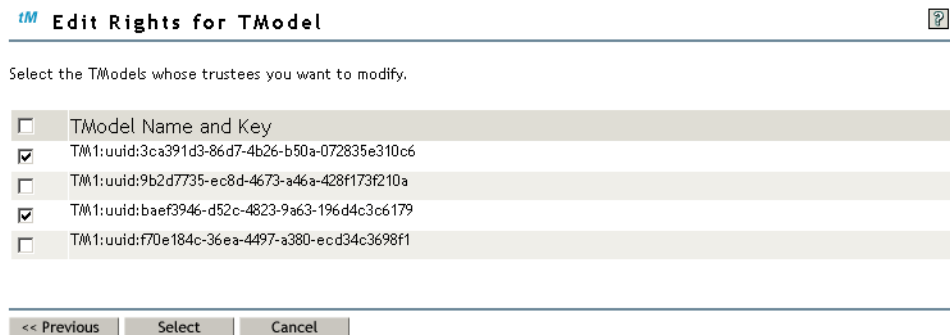


- 7 Select a Trustee name.
- 8 Click Finish.

Edit Rights for TModel

This task enables you to edit rights for existing trustees of TModels.

Figure 31 Editing Rights for TModel

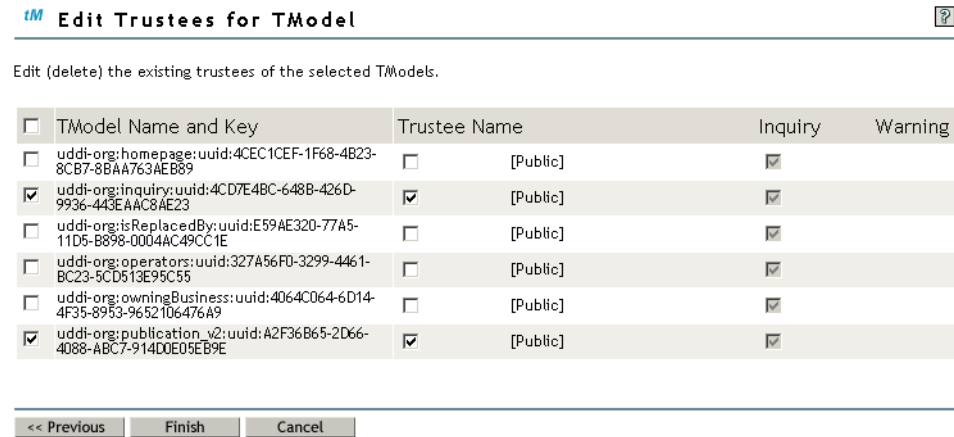


When you select this task, a list of TModel names and keys are displayed.

- 1 Select a TModel to display its trustees and their rights.
- 2 Select the TModel name and key from the list.
- 3 Click Select.

A list of TModel names, TModel keys, trustees, and their respective inquiry rights are displayed.

Figure 32 Editing Rights for a TModel

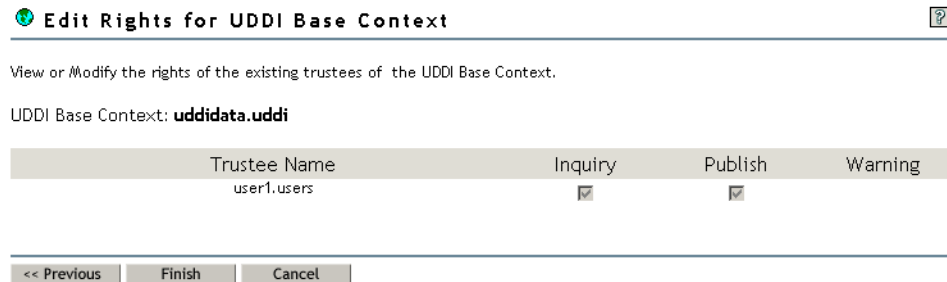


- 4 Select an Inquiry Remarks check box following a trustee name.
- 5 Click Finish.

Edit Rights for UDDI Base Context

This task enables you to edit inquiry or publish rights for the UDDI base context. The UDDI base context contains business entity, business service, and TModel. These rights are applicable to all UDDI entities within the base context.

Figure 33 Editing Rights for the UDDI Base Context



When you select this task, a list of trustees and their respective inquiry and publish rights to the base context is displayed.

To edit rights for the UDDI base context:

- 1 Select the Inquiry or Publish rights for a trustee.
- 2 Click Finish.

NOTE: If a trustee is denied publish rights, no new entities can be published to the UDDI registry. However, the entities that are already owned by the user can be modified.

Edit Trustees

The Edit Trustees role is based on Novell eDirectory rights management. It enables the entity owner to delete the existing trustees for the UDDI Base Context and the UDDI entities such as business entity, business service, and TModel.

The Edit Trustees role consists of the following tasks:

- ◆ “Edit Trustees for Business Entity” on page 69
- ◆ “Edit Trustees for Business Service” on page 70
- ◆ “Edit Trustees for TModel” on page 71
- ◆ “Edit Trustees for UDDI Base Context” on page 72

NOTE: Trustees having rights that are not compliant with the UDDI rights definition are marked as invalid rights. These trustees can be deleted.

If the trustees are disabled, then the trustees are the owners of the entity or will have supervisory rights.

Figure 34 Editing Trustees

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity

UDDI Base Context [Change UDDI Server Selection](#)

Business Entity

Business Service

TModel

OK Cancel

To edit trustees for a UDDI entity:

- 1 Select a UDDI entity from the drop-down list.

If you selected Business Entity, the following window for search criteria selection is displayed:

Figure 35 Deleting Trustees for a Business Entity

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity [Change UDDI Server Selection](#)

Business Entity

Business Entity Search criteria

BE*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

2 Specify the criteria for searching.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

If you selected Business Service, the following window for search criteria selection is displayed:

Figure 36 Deleting Trustees for a Business Service

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity
Business Service [Change UDDI Server Selection](#)

Search filters for:

Business Entity
 Business Service

Business Entity Search criteria

(Example - *, abcd, ab*, *ab, *ab*)

3 Select the UDDI entity to which you want to apply the search filter.

◆ **Business Entity**

Enables you to search for a business entity, which can further be used for searching business services belonging to that entity.

◆ **Business Service**

Enables you to search for business services from the UDDI data container (base context) regardless of their business entity.

4 Specify the criteria for searching the service or entity.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

If you selected TModel, the following window for search criteria selection is displayed:

Figure 37 Deleting Trustees for a TModel

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity
TModel [Change UDDI Server Selection](#)

TModel Search criteria
TM1*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

5 Specify the criteria for searching.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

6 Click OK.

Edit Trustees for Business Entity

This task enables you to edit trustees (delete existing trustees) for a business entity.

When you select this task, a list of business entity names and keys is displayed.

Figure 38 Listing of Business Entities

Edit Trustees for Business Entity ?

Select the Business Entities whose trustees you want to delete.

<input type="checkbox"/>	Entity Name and Key
<input checked="" type="checkbox"/>	New BE:12a9edf3-c1c3-4d3f-a273-fd957c778c76
<input type="checkbox"/>	New BE:3635090a-f3ea-4fa1-94ac-1dfcc048c1d7
<input type="checkbox"/>	New BE:9857a21e-a940-4442-b4d0-d8d76874094b
<input checked="" type="checkbox"/>	New BE:99e187ba-5eb2-42b9-98ca-cf35f538aedd
<input type="checkbox"/>	New BE:d45d2e1a-ba0d-4fc8-a21e-4af24281ea96
<input checked="" type="checkbox"/>	New BE:e8609c1a-6e92-4922-adb1-774d022e975b

<< Previous Select Cancel

To edit trustees for a business entity:

1 Select a business entity to display its trustees.

2 Select the entity name from the list.

3 Click Select.

After you select the business entity, its trustees and their inquiry rights are displayed.

Figure 39 Listing Business Entities and their Trustees

<input type="checkbox"/> Entity Name and Key	Trustee Name	Inquiry	Warning
<input checked="" type="checkbox"/> New BE:12a9edf3-c1c3-4d3f-a273-fd957c778c76	<input checked="" type="checkbox"/> [Public]	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> a2.users	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> ou.users	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> ou1.users	<input checked="" type="checkbox"/>	
<input type="checkbox"/> New BE:99e187ba-5eb2-42b9-98ca-cf35f538aedd	<input type="checkbox"/> [Public]	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> ou.users	<input checked="" type="checkbox"/>	
	<input type="checkbox"/> ou1.users	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> New BE:e8609c1a-6e92-4922-adb1-774d022e975b	<input checked="" type="checkbox"/> [Public]	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/> ou.users	<input checked="" type="checkbox"/>	
	<input checked="" type="checkbox"/> ou1.users	<input checked="" type="checkbox"/>	

4 Select the Trustee Name.

5 Click Finish.

Edit Trustees for Business Service

You can edit trustees (delete existing trustees) for a business service.

To edit trustees for business service:

1 Select the business service for which to display trustees.

Figure 40 Editing Trustees for a Business Service

Business Entity
BE for popup test:2bc8431a-388e-4b99-8391-8b00c7f28cb4

Business Service Search criteria
*

2 From the drop-down list, select the business entity that contains the business service.

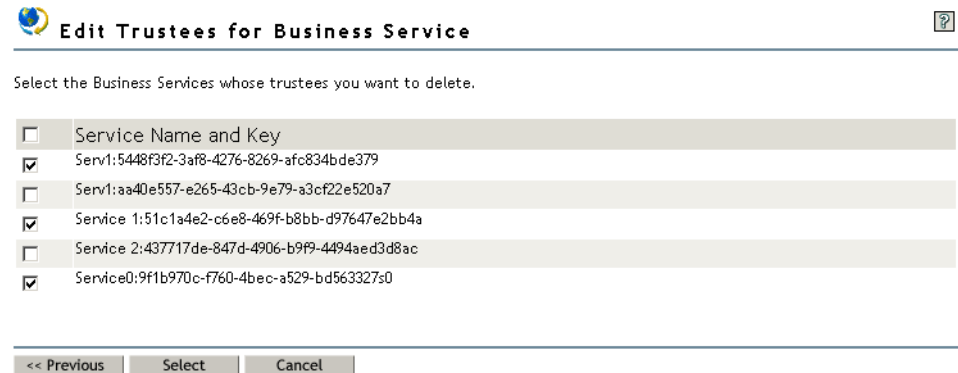
3 Click OK.

4 Specify the search criteria.

The default search criterion is * (see “Search Criteria” on page 123).

- 5 Select the Service name from the list.
- 6 Click Select.

Figure 41 Service Keys and Inquiry Rights



The business service name, Service key, trustee name, and inquiry rights are displayed.

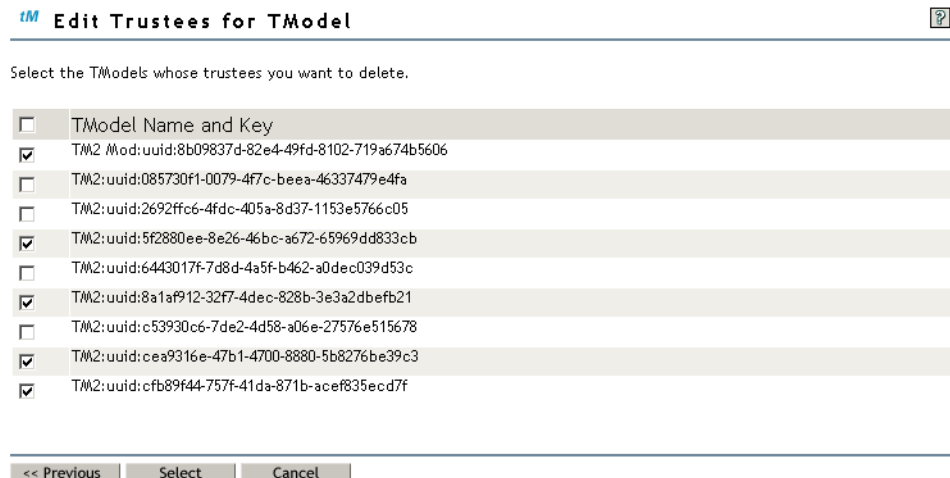
- 7 Select one or more trustee names.
- 8 Click Finish.

Edit Trustees for TModel

This task enables you to edit trustees (delete existing trustees) for TModel.

When you select this task, a list of TModel names and keys is displayed.

Figure 42 Listing of Trustees for TModel

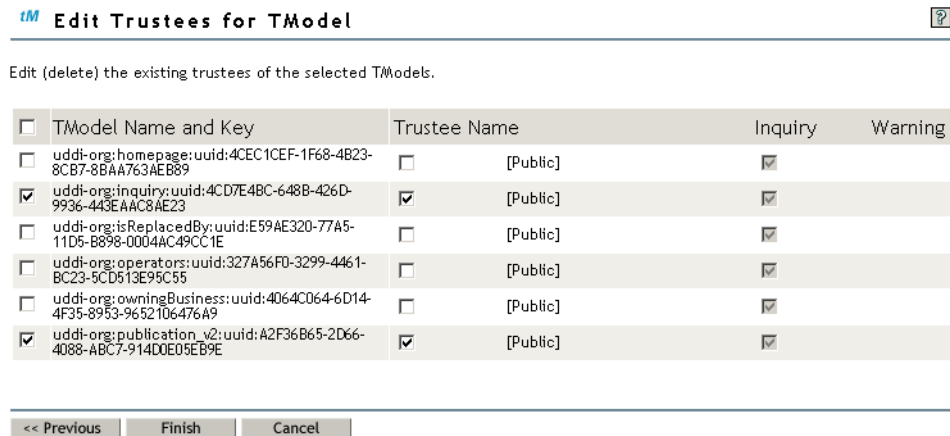


To edit trustees for TModel:

- 1 Select a TModel to display its trustees.
- 2 Select the TModel name and key from the list.

3 Click Select.

Figure 43 Listing of TModels with Trustees



The TModel name, TModel key, trustee name, and inquiry rights are displayed.

4 Select one or more trustee names.

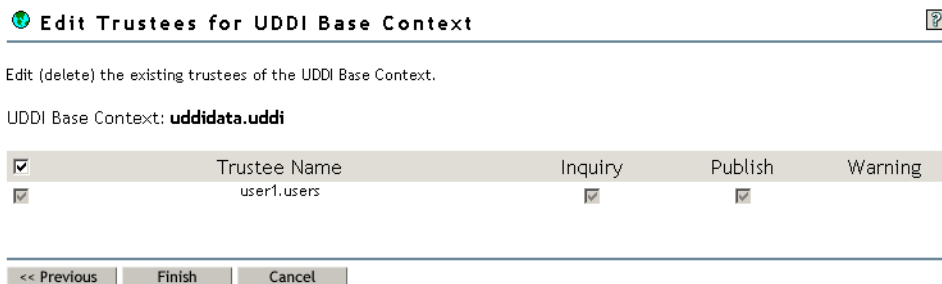
5 Click Finish.

Edit Trustees for UDDI Base Context

This task enables you to edit (delete) existing trustees for the UDDI base context. The UDDI base context contains business entity, business service, and TModel.

When you select this task, a list of trustees and their respective inquiry and publish rights for the base context is displayed. (inquiry and publish rights are disabled).

Figure 44 Editing Trustees for the UDDI Base Context



To edit trustees for the UDDI Base Context:

1 To delete a single trustee, select its check box, then click Finish.

2 To delete all the trustees, select the check box in the table header, then click Finish.

Ownership Transfer

This role enables you to transfer the ownership of a UDDI entity (business entity and TModel) in a single UDDI registry to any other target publisher within the same registry. As part of this

ownership transfer, all business services existing under a particular business entity are also transferred to the target publisher along with the business entity.

To transfer ownership of a UDDI entity:

- 1 (Optional) Type or browse the Object Selector icon to select the source publisher of the business entity or TModel.

If you do not specify the source publisher, it is assumed to be the administrator.

- 2 (Optional) Type or browse the Object Selector icon to choose the target publisher of the UDDI entities that the ownership of the business entities or TModels is to be transferred to.

This field is optional. If you do not specify the target publisher, it is assumed to be the administrator.

- 3 From the drop-down menu, select the UDDI entities whose ownership is to be transferred.

You have the option to select Business Entities and TModels, Business Entities only, or TModels only.

- 4 Specify the search criteria for selecting business entities.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

Figure 45 Transferring the Ownership of Business Entities and TModels

The screenshot shows a dialog box titled "Ownership Transfer" with a question mark icon in the top right corner. Below the title bar, there is a line of text: "Select the source and target publishers and the types of UDDI entities for which ownership is to be transferred from the source to the target publisher." To the right of this text is a link: "Change UDDI Server Selection".

The dialog contains five input fields:

- Source publisher: (current owner of Business Entities or TModels)
- Target publisher: (user to whom ownership is to be transferred, the default is Administrator)
- UDDI Entities: (dropdown menu)
- Business Entity Search criteria: (Example - *, abcd, ab*, *ab, *ab*)
- TModel Search criteria: (Example - *, abcd, ab*, *ab, *ab*)

At the bottom of the dialog are two buttons: "Next >>" and "Cancel".

- 5 Click Next.

The business entities and TModels that match the given search criteria are displayed.

- 6 Check the business entities or TModels whose ownership you want to transfer from the source publisher to the target publisher.

To select all business entities or TModels, check the Business Entity Name or TModel Name check box.

Figure 46 Selecting the Business Entity and TModel For Which Ownership Has To Be Transferred



7 Click OK to transfer the ownership of the selected entities to the target publisher.

7

Using the UDDI User Interface

This section explains how to use the UDDI user interface. It covers the following:

- ◆ [“UDDI Publish and User Access Control” on page 75](#)
- ◆ [“UDDI Inquiry” on page 126](#)

UDDI Publish and User Access Control

The UDDI user interface can be used to perform publish operations on the selected server’s UDDI registry.

- ◆ [“Create UDDI Entry” on page 75](#)
- ◆ [“Modify UDDI Entry” on page 109](#)
- ◆ [“Delete UDDI Entry” on page 114](#)
- ◆ [“Set Rights” on page 118](#)
- ◆ [“Edit Rights” on page 120](#)
- ◆ [“Edit Trustees” on page 123](#)

Server Selection

See [“Server Selection” on page 43](#).

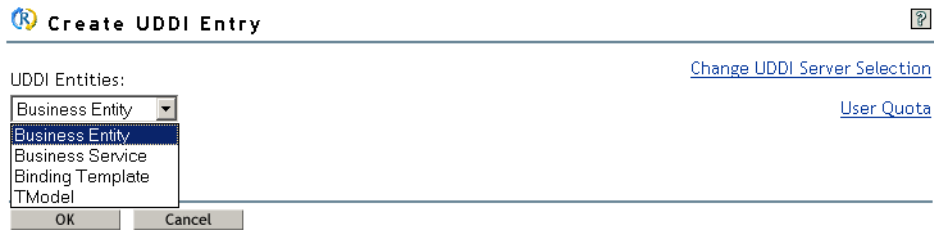
Create UDDI Entry

There are four core UDDI data structures that can be created in the UDDI registry: business entity, business service, binding template, and TModel.

To create a UDDI entry:

- 1** Select UDDI Publish and User Access Control, then click Create UDDI Entry to open the Create UDDI Entry page.
- 2** From the drop-down list, select the UDDI entry to be created.
- 3** Click OK.

Figure 47 Selecting a UDDI Entity to Be Created in the Registry



For technical support, assistance, or any further information, click Contact admin.

Click Change UDDI Server Selection to perform operations with a different UDDI server.

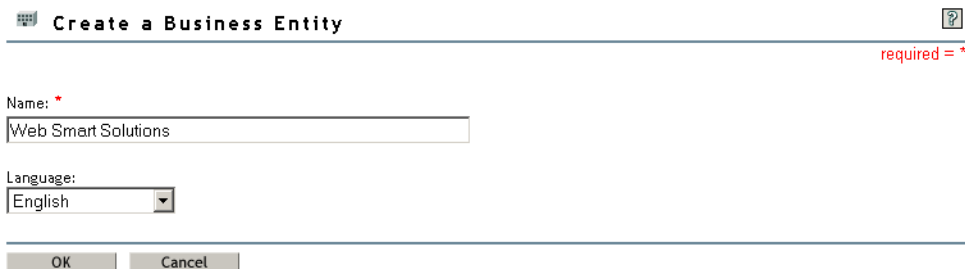
Click User Quota to view the user-related UDDI registry configuration parameters.

Create a Business Entity

This task allows you to create a business entity. A business entity provides information that describes the business organization, the products, and the services it offers.

- 1 Select UDDI Publish and User Access Control, then click Create UDDI Entry to open the Create UDDI Entry page.
- 2 Select a business entity from the drop-down menu.
- 3 Specify the name of the business entity.
- 4 Select the language from the drop-down list.
- 5 Click OK.

Figure 48 Creating a Business Entity



The Business names must be relevant to the entity that is being published for easy identification by others.

For example, if a company xyz is publishing a business entity, the name can be specified as xyz-Business Solutions, xyz-Providers, or xyz-Solutions.

Update the Business Information

This task allows you to update information for a business entity and import or delete its service.

Name

This tab lists the names and languages specified for the business entity. Only one name can be specified per language.

The Business names must be relevant to the entity that is being published so that others can easily identify it.

For example, if a company xyz is publishing a business entity, the name can be specified as xyze-Business Solutions, xyz-Providers, or xyz-Solutions.

At least one name must be provided for a business entity.

To add a name for the business entity:

- 1 Click Add to open the Update Name Details pop-up window.
- 2 Specify the name of the entity.
- 3 Select the language from the drop-down list.
- 4 Click OK.

To modify the business entity name:

- 1 Select the business entity name.
- 2 Click Modify to open the Update Name Details pop-up window.
- 3 Modify the name of the entity.
- 4 Select the language from the drop-down list.
- 5 Click OK.

Figure 49 Updating Business Names

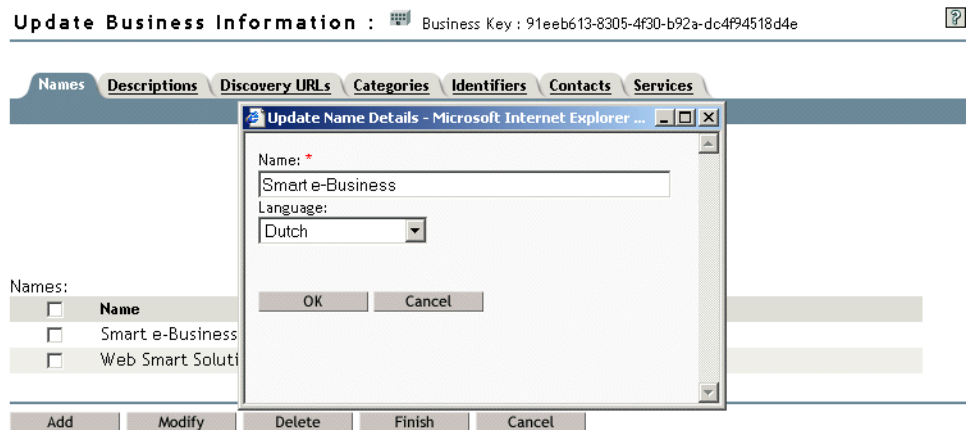




Figure 50 Example Business Entity Names

Update Business Information :  Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e 

Names | **Descriptions** | **Discovery URLs** | **Categories** | **Identifiers** | **Contacts** | **Services**

Names:

<input type="checkbox"/>	Name	Language
<input type="checkbox"/>	Smart e-Business Providers	ne
<input type="checkbox"/>	Web Smart Solutions	en

NOTE: Because name is a mandatory attribute, do not use the Select All option for deletion.

To delete business entity names:

- 1** Select the business entity names to be deleted.
- 2** Click Delete.

Descriptions

This tab is used to provide descriptive information about the business entity. Only one description can be specified per language.

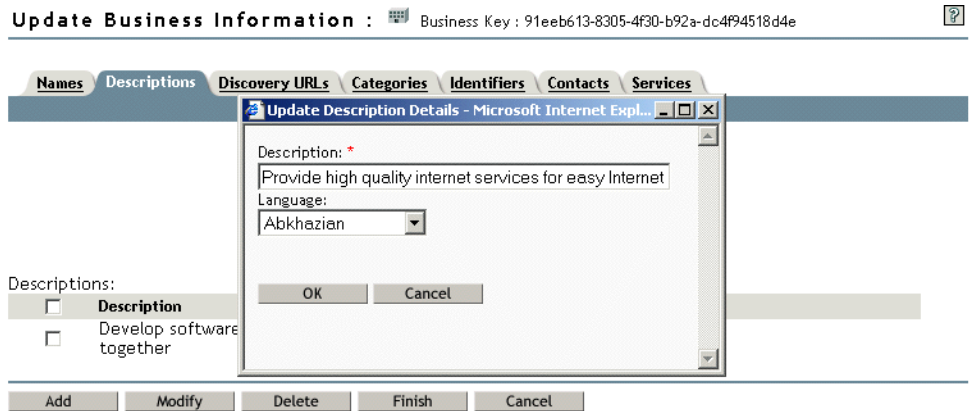
To add a description:

- 1** Click Add to open the Update Description Details pop-up window.
- 2** Specify the description of the business entity.
- 3** Select the language from the drop-down list.
- 4** Click OK.

To modify an existing description:

- 1** Select the description to be modified.
- 2** Click Modify to open the Update Description Details pop-up window.
- 3** Modify the description of the business entity.
- 4** Select the language from the drop-down list.
- 5** Click OK.

Figure 51 Updating the Description for a Business Entity

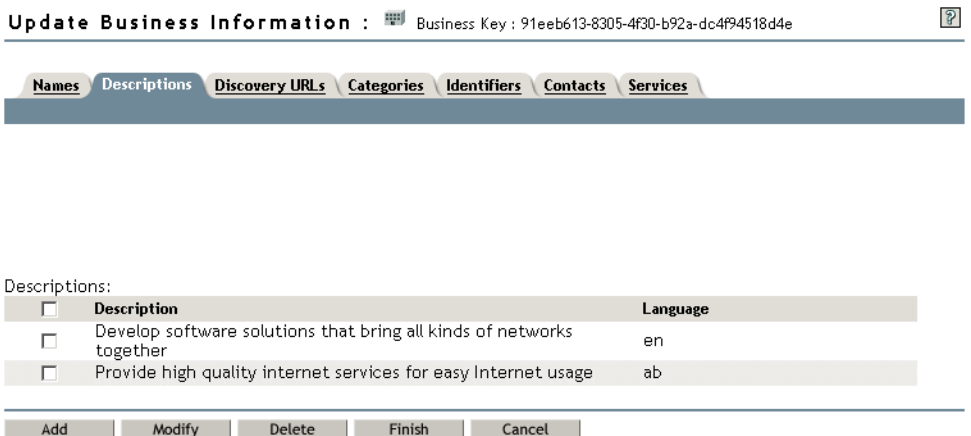


The description for the business entity must communicate the type of services offered by the business entity. This can be a description of the domain the business entity works with or its vision.

For example, if xyz company provides Internet services the description might be "Develop software solutions that bring together all kinds of networks — intranets, extranets, and the Internet; corporate and private; wired to wireless."

If abc company is a consultancy, the description can be something like "We, the Software Cafe provide quality design and consulting services."

Figure 52 Business Entity Descriptions



To delete existing descriptions:

- 1 Select the descriptions to be deleted.
- 2 Click Delete.

Discovery URLs

This tab lists the URLs of discovery documents and their usage. The usage attribute describes the document that is referenced.

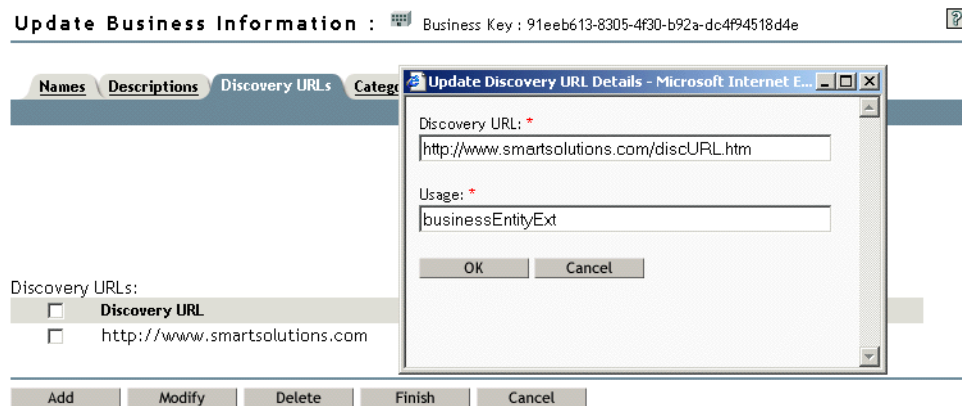
To add a discovery URL:

- 1 Click Add to open the Update Discovery URL Details pop-up window.
- 2 Specify the valid discovery URL of the business entity and the usage for the URL.
- 3 Click OK.

To modify an existing discovery URL:

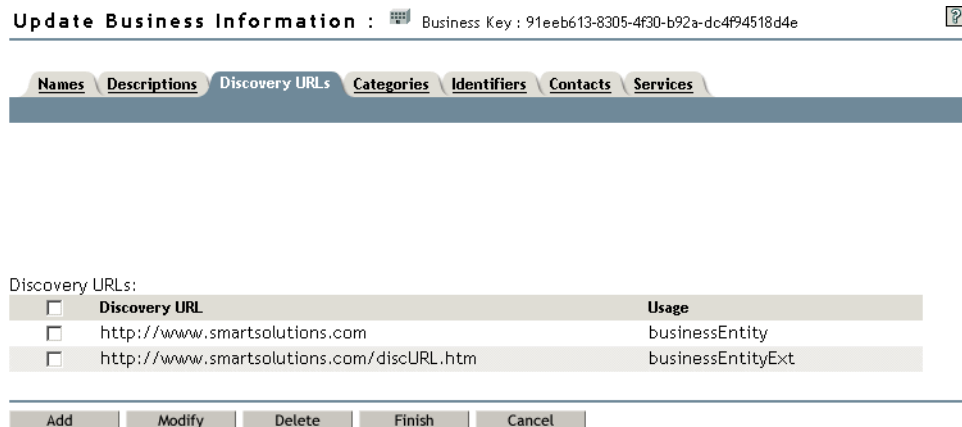
- 1 Select the Discovery URL to be modified.
- 2 Click Modify to open the Update Discovery URL Details pop-up window.
- 3 Update the discovery URL of the business entity and the usage for the URL.
- 4 Click OK.

Figure 53 Updating the Discovery URL for a Business Entity



The discovery URLs specified must reference the location where complete information about the business entity can be found. For example, the business entity Web site URLs www.xyz.com, www.abc.org

Figure 54 Business Entity Discovery URLs That are Added



To delete existing discovery URLs:

- 1 Select the Discovery URLs to be deleted.
- 2 Click Delete.

Categories

Contains a list of category bags that allows you to find business entity, business service, and TModel based on category information. The category bag consists of a unique TModel key, followed by a key name and a key value.

To add a category:

- 1 Click Add to open the [Add a Category](#) page.

To modify an existing category:

- 1 Select the category to be modified.
- 2 Click Modify to open the [Modify a Category](#) page.

Figure 55 Updating Category Bags for a Business Entity

Add a Category ?

required = *

TModel Key: *

(Default: tModelKey: "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Name:

(Required if tModelKey is "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Value: *

The category bag element allows a business entity to be categorized according to any of the available taxonomy-based classification schemes. Select a TModel key that includes the information about the common form of categorizing the business entity, such as categorization, consultancy, identifier, protocol, name space, specification.

For example, if the business entity provides Internet services using http or https protocols, a TModel key related to http or https can be selected. The key name can be transport type and the key value can be http or https.

Figure 56 Business Entity Category Bags

Update Business Information : Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e

Names **Descriptions** **Discovery URLs** **Categories** **Identifiers** **Contacts** **Services**

Categories:

<input type="checkbox"/>	TModel Key	Key Name	Key Value
<input type="checkbox"/>	uuid:0d31f1e6-624b-4f81-8d75-c36f96bf333c	tModelType	ftp
<input type="checkbox"/>	uuid:1E3E9CBC-F8CE-41AB-8F99-88326BAD324A	transportType	Transport

To delete existing categories:

- 1 Select the categories to be deleted.
- 2 Click Delete.

Identifiers

This tab contains a list of identifier bags that allows you to find published business entities, business services, and TModels based on identification information. An identifier bag consists of a unique TModel key, followed by a key name, and a key value.

To add an identifier:

- 1 Click Add to open the [Add an Identifier](#) page.

To modify an existing identifier:

- 1 Select the identifier to be modified.
- 2 Click Modify to open the [Modify an Identifier](#) page.

Figure 57 Updating Identifier Bags for a Business Entity

Add an Identifier

required = *

TModel Key: *

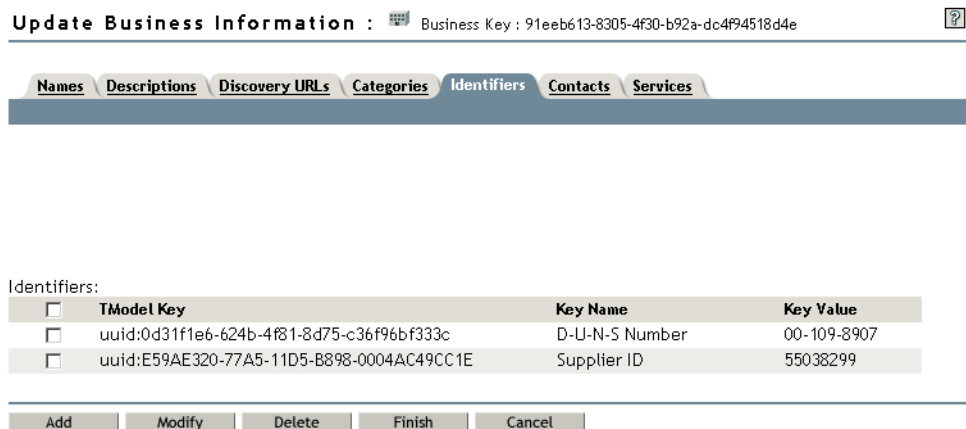
Key Name:

Key Value: *

The identifier bag allows a business entity to include information about common forms of identification such as D-U-N-S numbers, tax identifiers.

For example, if the business entity provides Internet services, a TModel key related to Internet or Web can be selected. The key name can be type or category and the key value can be Internet or Web.

Figure 58 Business Entity Identifier Bags



To delete existing identifiers:

- 1 Select the identifiers to be deleted.
- 2 Click Delete.

Contacts

This tab enables the user to register the contact details for the business entity. There can be multiple contacts for the entity and each contact is associated with a contact person which can be a person or a role. The details consists of the contact person, description, phone number, e-mail address, and contact address (this is not visible on the same window).

To add a contact:

- 1 Click Add to open the [Contact Details](#) page.

To modify an existing contact:

- 1 Select the contact to be modified.
- 2 Click Modify to open the [Contact Details](#) page.

Figure 59 Updating Information for a Business Entity

The screenshot shows a dialog box titled "Update the Business information" with a sub-tab "Contact Detail". A red asterisk indicates required fields. The fields and their values are as follows:

Field	Value	Usage
Contact Person: *	John (Person Name)	Administrator
Description:	Contact for technical problems encounterd only	Language: English >>
Phone No.:	+11 (12) 123-4567/89	Office >>
Email ID:	admin@smartsolutions.com	Office >>
Address:	Business Entity Provider Building NO., Street Name Area Name, Town City State, Country	Office >>

Buttons: OK, Cancel

The contact detail provides information about the concerned person responsible for any further correspondence.

For example, the name of the person is specified in the Contact Person field. The Usage field describes the contact person's role, such as administrator, support, or sales in relation to the business entity.

The description can be provided in multiple languages to communicate the contact type or the reason for using the contact.

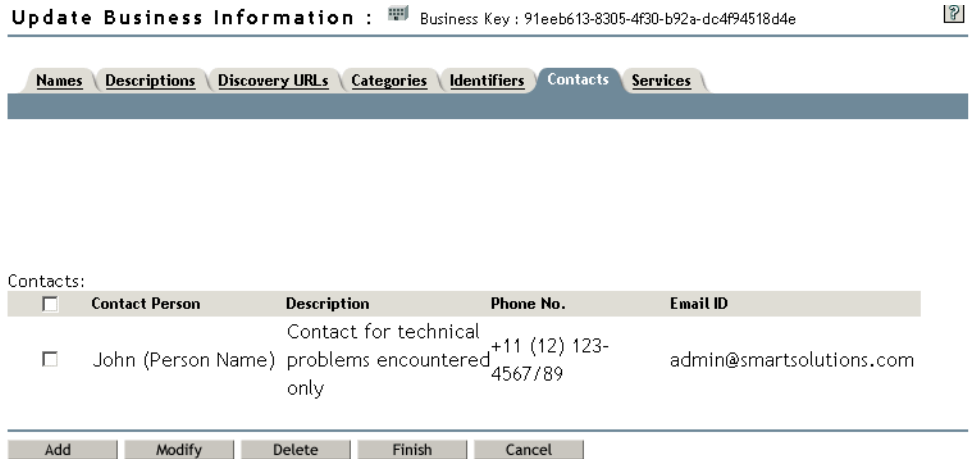
For example, the contact can be used for any technical problems encountered or it can be used for sales enquiry.

The phone numbers of the contact can be provided in the Phone No. field. The Usage field can be Office, Residence, Mobile, etc.

The e-mail address of the contact can be provided in the Email ID field. The Usage field can be Office, Residence, etc.

The complete mailing address of the contact can be provided in the Address fields. The Usage field can be Office, Residence, etc.

Figure 60 Business Entity Contact Information



To delete an existing contact:

- 1 Select the contact to be deleted.
- 2 Click Delete.

Services

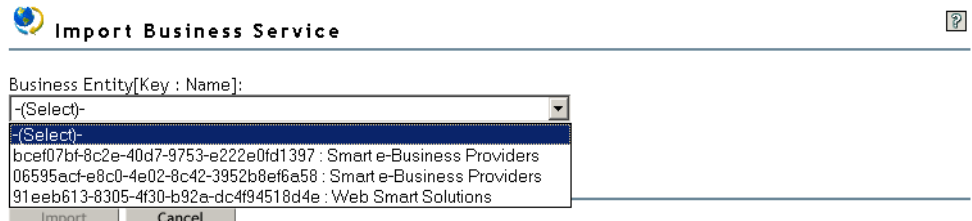
This tab lists the Service keys and names that were published under the business entity.

The services contained in another business entity and is owned by the user can be imported. This results in removing the Service from its earlier business entity.

To import a Service:

- 1 Click Import.
- 2 From the drop-down list, select the business entity from which the service is to be imported.

Figure 61 Selecting a Business Entity



- 3 Select the service to be imported:
 - ♦ To select a Service, click its check box.
 - ♦ To select all the Services displayed, click the check box in the table header.
- 4 Click Import.

Figure 62 Importing a Business Service

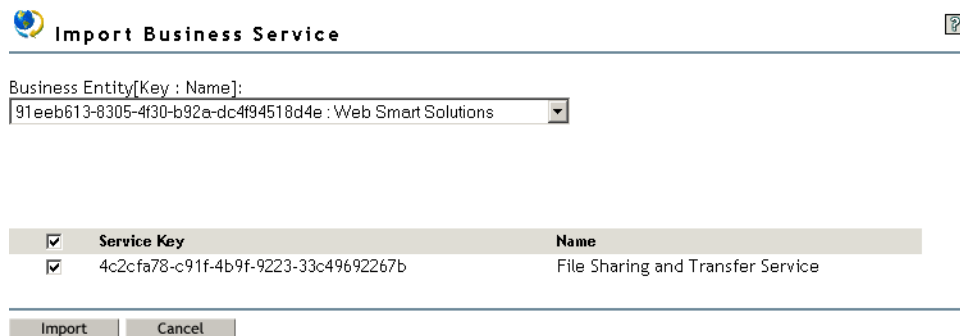
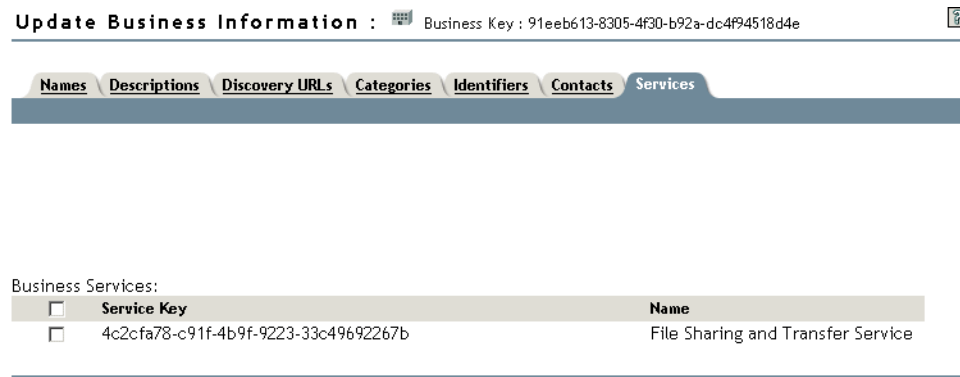


Figure 63 Imported or Published Business Services for a Business Entity



To delete existing services:

- 1** Select the services to be deleted.
- 2** Click Delete.

The services contained in another business entity can be added as a reference to the business entity being updated.

To add service reference:

- 1** Select a search type:
 - Business Entity Name:** Enables to search the services based on the business entity name.
 - Business Service Name:** Enables to search the services based on the business service name.
- 2** If you selected Business Entity Name as the search type,
 - 2a** Specify the search criteria and click Search.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

A list of business entity names along with their keys that match the specified search criteria is displayed in the drop-down menu.

Figure 64 Adding a Service Reference

Add Service Reference ?

Search for the Business Services to be referenced. required = *

Search based on:

Business Entity Name
 Business Service Name

Business Entity Search criteria:*

% Search

Business Entity [Key : Name]:

-(Select)-

Add Reference Cancel

2b From the drop-down menu, select a business entity that contains the service to be referenced.

A list of business services published under the selected business entity is displayed.

2c Select the services to be referenced from the list:

- ◆ To select a service, click the check box before it.
- ◆ To select all the services displayed, click the check box in the table header.

Figure 65 Selecting the Service To Be Referenced

Add Service Reference ?

Search for the Business Services to be referenced. required = *

Search based on:

Business Entity Name
 Business Service Name

Business Entity Search criteria:*

% Search

Business Entity [Key : Name]:

11f48db4-3308-438e-b339-1f5825b5333d : BE2

Select the Service to be Referenced

<input checked="" type="checkbox"/>	Service Key	Name
<input checked="" type="checkbox"/>	15bbb20f-7f4f-4229-9d4c-8d007e9c198d	B521

Add Reference Cancel

3 If you selected Business Service Name as the search type,

3a Specify the search criteria and click Search.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

A list of business services that match the specified search criteria is displayed.

Figure 66 Selecting Business Service Name As The Search Type

Add Service Reference ?

Search for the Business Services to be referenced. required = *

Search based on:

Business Entity Name

Business Service Name

Business Service Search criteria:*

% Search

Add Reference Cancel

3b Select the services to be referenced from the list:

- ◆ To select a service, click the check box before it.
- ◆ To select all the services displayed, click the check box in the table header.

Figure 67 Selecting the Service To Be Referenced

Add Service Reference ?

Search for the Business Services to be referenced. required = *

Search based on:

Business Entity Name

Business Service Name

Business Service Search criteria:*

% Search

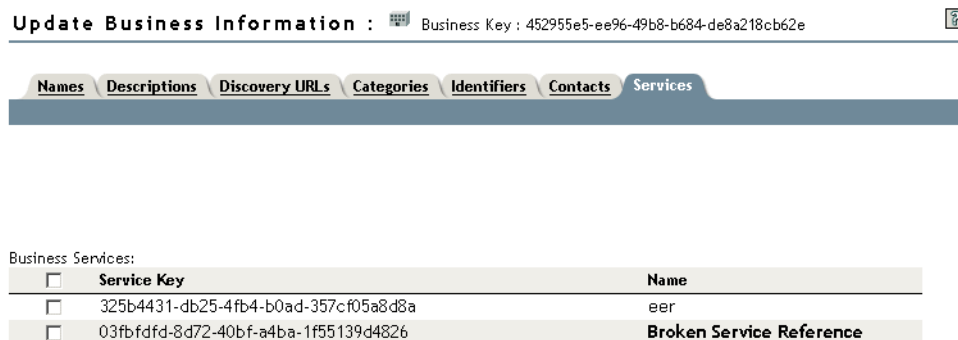
Select the Service to be Referenced

<input checked="" type="checkbox"/>	Service Key	Name
<input checked="" type="checkbox"/>	86ab8d6a-0d07-432b-8e78-fed464abf28f	abc

Add Reference Cancel

4 Click Add Reference to add the selected service references.

Figure 68 Referenced and Broken Services for a Business Entity



If the owner of the referenced business service has removed inquiry rights, the service is displayed with a name as Broken Service Reference.

NOTE: A Business entity containing a broken service reference cannot be saved unless the broken service reference is resolved.

To resolve a broken service reference:

- ◆ Delete the broken service reference.

or

Contact the owner of the referenced service.

Click Finish to update or Cancel to discard the changes made in the business entity and end the task.

NOTE: Service Projections is supported in Novell® eDirectory™ 8.7 Support Pack 1 or later only.

Add a Category

This task allows you to add a category that can be used to find a business entity, business service, or TModel based on category information. A category consists of a unique TModel key, followed by a key name and a key value.

To add a category:

- 1 Specify a unique TModel key or use the Object Selector icon to browse for and select the TModel key from the Category list.

Click the TModel key appearing in red to view a list of predefined checked taxonomies. The three taxonomies cover industry codes (through NAICS) and product and service classifications (through UNSPC version 3.1 and version 7.3). The taxonomy list contain the code and description. If a sub-classification of the code exists, the child field will have a pointer to navigate one level down.

If no such sub-classification exists, the child field is marked as None.

To navigate to the parent of any sub-classification, use the pointer in the parent field.

- 2 Specify the key name.

This is required only if the TModel key is uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4, the default categorization.

- 3 Specify the key value.

- 4 Click OK.

Figure 69 Adding a Category Bag

Add a Category ?

required = *

TModel Key: *

(Default tModelKey: "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Name:

(Required if tModelKey is "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Value: *

The category bag element allows the business entities, business services, and TModels to be categorized according to any of the available taxonomy-based classification schemes. A TModel key includes the information about the common form of categorizing the business entity such as categorization, consultancy, identifier, protocol, name space, specification.

For example, if the TModel has a technical specification related to http or https protocols, the key name can be transport type and the key value can be http or https.

Add an Identifier

This task allows you to add an identifier element that can be used to find any published business entity, business service, or TModel based on identification information. The identifier consists of a unique TModel key, followed by a key name and a key value.

The TModel key refers to an identification. The key value is the identifier within the identification and the key name further describes the key value.

To add an identifier:

- 1** Specify a unique TModel key or use the Object Selector icon to browse for and select a TModel key from the Identifier list.
This is a mandatory field.
- 2** Specify the Key Name.
- 3** Specify the Key Value.
This is a mandatory field.
- 4** Click OK.

Figure 70 Adding an Identifier Bag

Add an Identifier ?

required = *

TModel Key: *
uuid:0d31f1e6-624b-4f81-8d75-c36f96bf333c

Key Name:
D-U-N-S

Key Value: *
00-109-8907

OK Cancel

The identifier bag allows business entities and TModels to include information about common forms of identification such as D-U-N-S numbers, tax identifiers.

For example, if a TModel provides technical specification about Internet services, the key name can be type or category and the key value can be Internet or Web.

Contact Details

This task enables you to register the contact details, such as the contact person or the role, description, phone number, and e-mail address for the business entity that can be viewed and used by others.

To specify the contact details:

- 1** Specify the contact person's name or the role.
- 2** Specify the usage of the contact address.
You can specify the reason for which this contact address can be used.
- 3** Specify the description of the contact detail and select the language from the drop-down list.
If you have more than one description, use the arrow keys to edit or view them.
Languages set for descriptions must be unique.
- 4** Specify the telephone number of the contact person and specify the usage information.
If you have more than one telephone number, use the arrow keys to edit or view them.
- 5** Specify the e-mail address of the contact person and specify the usage information.
If you have more than one e-mail address, use the arrow keys to edit or view them.
- 6** Specify the complete postal address of the contact person and specify the usage information of the full address.
If you have more than one address, use the arrow keys to edit or view them.
- 7** Click OK.

Modify a Category

This task allows you to modify an existing category element that can be used to find a business entity, business service, or TModel based on category information. The category consists of a unique TModel key, followed by a key name and a key value.

To modify a category:

- 1 Specify a unique TModel Key or use the Object Selector icon to browse for and select it.
This is a mandatory field.
- 2 Specify the Key Name.
This is required only if the TModel key is uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4
- 3 Specify the Key Value.
This is a mandatory field.
- 4 Click OK.

Figure 71 Modifying a Category Bag

Modify a Category ?

required = *

TModel Key: *
 
(Default: tModelKey: "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Name:

(Required if tModelKey is "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Value: *

The category bag element allows the business entities, business services, and TModels to be categorized according to any of the available taxonomy-based classification schemes. A TModel key includes information about the common form of categorizing the business entity such as categorization, consultancy, identifier, protocol, name space, specification.

For example, if the TModel has a technical specification related to http or https protocols, then the key name can be transport type and the key value can be http or https.

Modify an Identifier

This task allows you to modify an existing identifier element that can be used to find published business entity, business service, and TModel based on identification information. An identifier consists of a unique TModel key, followed by a key name and a key value.

To modify an identifier:

- 1 Specify the TModel key or use the Object Selector icon to browse for and select it.
This is a mandatory field.
- 2 Specify the Key Name.
- 3 Specify the Key Value.
This is a mandatory field.
- 4 Click OK.

The identifier bag allows business entities and TModels to include information about common forms of identification such as D-U-N-S numbers, tax identifiers.

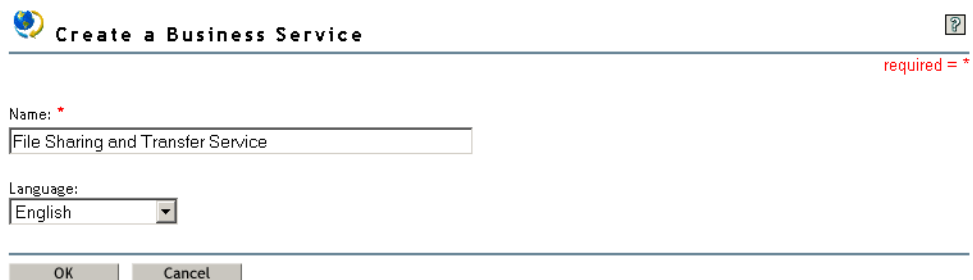
For example, if a TModel provides technical specification about Internet services, the key name can be type or category and the key value can be Internet or Web.

Create a Business Service

This task allows you to create a business service in an existing business entity.

- 1 Select UDDI Publish and User Access Control, then click Create UDDI Entry to open the Create UDDI Entry page.
- 2 Select a business service from the drop-down list.
- 3 Specify the name of the business service.
- 4 Select the language from the drop-down list.
- 5 Click OK.

Figure 72 Creating a Business Service



required = *

Name: *

File Sharing and Transfer Service

Language:

English

OK Cancel

The business service name must be relevant to the service and its functionality so that others can easily identify it.

For example, if a search engine is published as a service, the name can be specified as Web search, search for content, etc.

Update the Service Information

This task allows you to update information for a business service and import or delete the binding template.

The service key of the Service being updated along with its business key is displayed.

Names

This tab lists the names and the language specified for the business Service. Only one name can be specified per language. A minimum of one name should be provided for a business service.

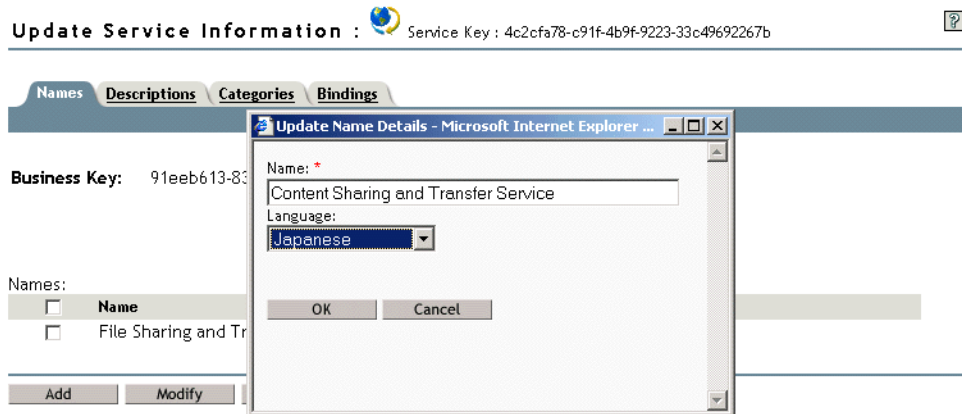
To add a name for the business service:

- 1 Click Add to open the Update Name Details pop-up window.
- 2 Specify the name of the entity.
- 3 Select the language from the drop-down menu.
- 4 Click OK.

To modify the business service name:

- 1 Select the business service name.
- 2 Click Modify to open the Update Name Details pop-up window.
- 3 Modify the name of the entity.
- 4 Select the language from the drop-down list.
- 5 Click OK.

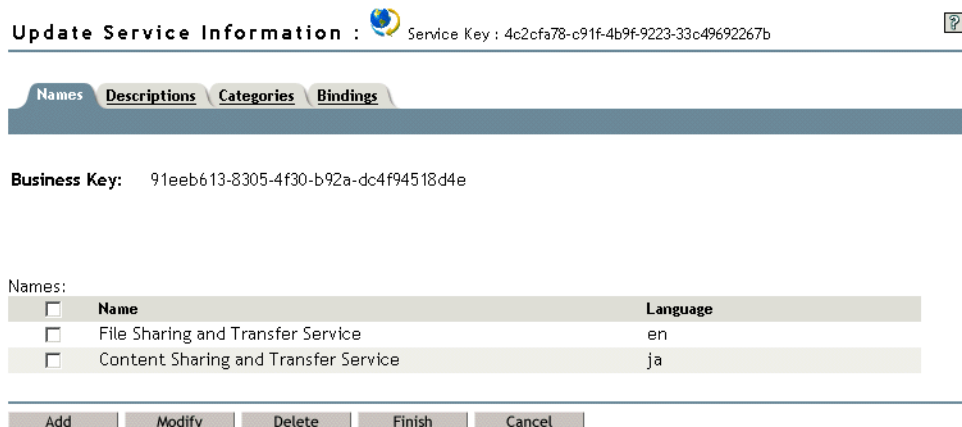
Figure 73 Updating Service Names



The business service name must be relevant to the service and its functionality so that others can identify it.

For example, if a search engine is published as a service, the name can be specified as Web search, search for content, etc.

Figure 74 Business Service Names



To delete business service names:

- 1 Select the business service names to be deleted.
- 2 Click Delete.

Descriptions

This tab provides descriptive information about the business service. Only one description can be specified per language.

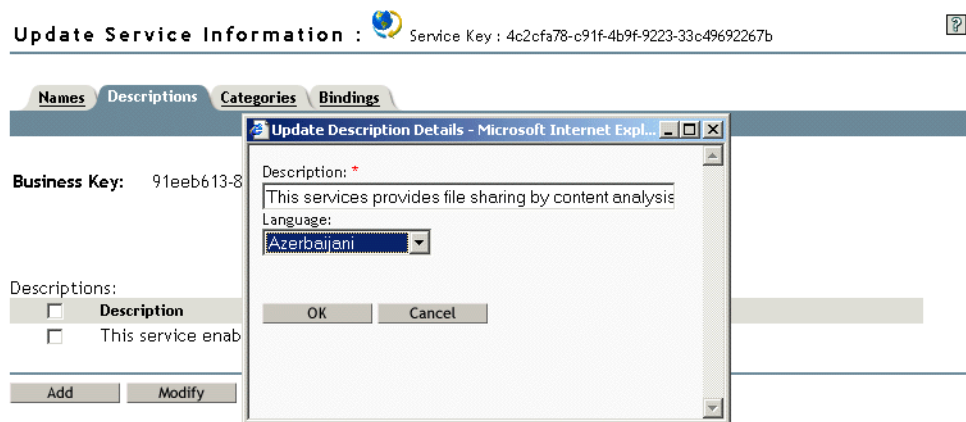
To add a description:

- 1 Click Add to open the Update Description Details pop-up window.
- 2 Specify the description of the business service.
- 3 Select the language from the drop-down list.
- 4 Click OK.

To modify an existing description:

- 1 Select the description to be modified.
- 2 Click Modify to open the Update Description Details pop-up window.
- 3 Modify the description of the business entity.
- 4 Select the language from the drop-down list.
- 5 Click OK.



Figure 75 Updating a Service Description



Descriptive information about the business service must be specified to infer the functionality offered by the service. This can be a brief description of the domain the business service works with.

For example, for a search engine that is enabled as Web service the description can be "This search engine searches the Web by matching the specified search criteria. It also has the capability of performing a content-based search."

Figure 76 Business Service Descriptions

Update Service Information :  Service Key : 4c2cfa78-c91f-4b9f-9223-33c49692267b 

Names | Descriptions | Categories | Bindings

Descriptions:

<input type="checkbox"/>	Description	Language
<input type="checkbox"/>	This services provides file sharing by content analysis	en
<input type="checkbox"/>	This service enables to search shared file contents	az

To delete existing descriptions:

- 1 Select the descriptions to be deleted.
- 2 Click Delete.

Categories

This tab contains a list of category bags that allows you to find business service or business entities based on category information. The category consists of a unique TModel key, followed by a key name and a key value.


To add a category:

- 1 Click Add to open the [Add a Category](#) page.


To modify an existing category:

- 1 Select the category to be modified.
- 2 Click Modify to open the [Modify a Category](#) page.

Figure 77 Updating Category Bags for a Business Service

 **Add a Category** 

required = *

TModel Key: *
 
(Default: tModelKey: "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Name:

(Required if tModelKey is "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

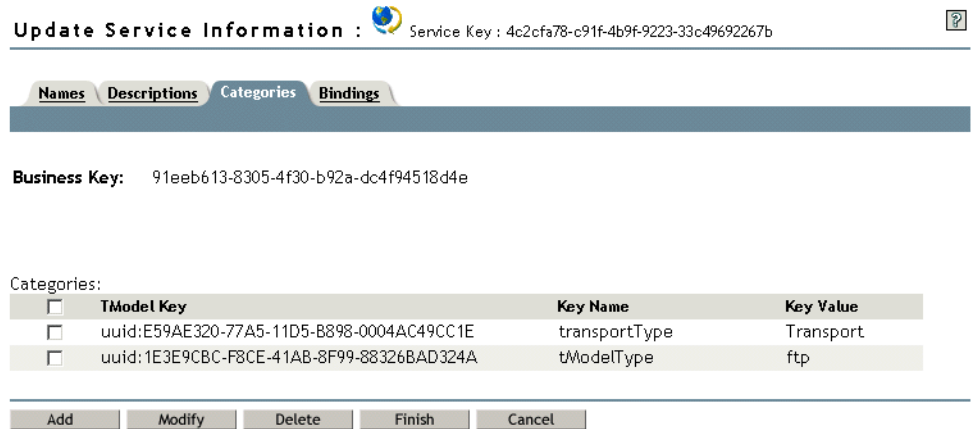
Key Value: *

The category bag element allows the business entity to be categorized according to any of the available taxonomy-based classification schemes. Select a TModel key that includes the

information about the common form of categorizing the business entity such as categorization, consultancy, identifier, protocol, name space, specification.

For example, if the business entity provides Internet services using http or https protocols, a TModel key related to http or https can be selected. The key name can be transport type and the key value can be http or https.

Figure 78 Category Bags for a Business Service



To delete existing categories:

- 1 Select the categories to be deleted.
- 2 Click Delete.

Bindings

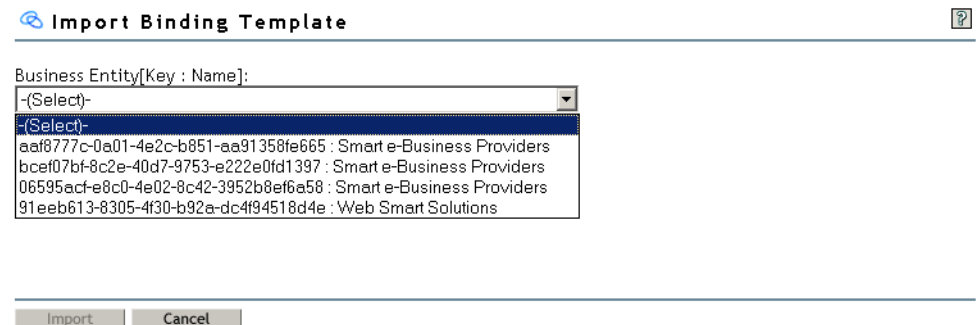
This tab lists the Binding keys and descriptions associated with a binding template.

Bindings contained in another business service owned by the user can be imported. This results in removing the Binding from its earlier business service.

To import a binding:

- 1 Click Import.
- 2 From the drop-down menu, select the business entity related to the binding to be imported.

Figure 79 Selecting a Business Entity



- From the drop-down menu, select the business service from which the Binding is to be imported.

Figure 80 Selecting a Business Service

Import Binding Template ?

Business Entity[Key : Name]:
aaaf8777c-0a01-4e2c-b851-aa91358fe665 : Smart e-Business Providers

Business Service[Key : Name]:
e467849f-6c85-4f7b-8f08-efd318fd47b4 : Smart e-Business Providers
-(Select)-
e467849f-6c85-4f7b-8f08-efd318fd47b4 : Smart e-Business Providers
3b9f815a-7fc8-4b5d-a976-4d08055b83d7 : Web Service

Import Cancel

- From the list, select the Binding to be imported:
 - To select a Binding, click its check box.
 - To select all the Bindings displayed, click the check box in the table header.

Figure 81 Selecting a Binding Templates to Be Imported

Import Binding Template ?

Business Entity[Key : Name]:
91eeb613-8305-4f30-b92a-dc4f94518d4e : Web Smart Solutions

Business Service[Key : Name]:
4c2cfa78-c91f-4b9f-9223-33c49692267b : File Sharing and Transfer Service

Select the Binding to be imported

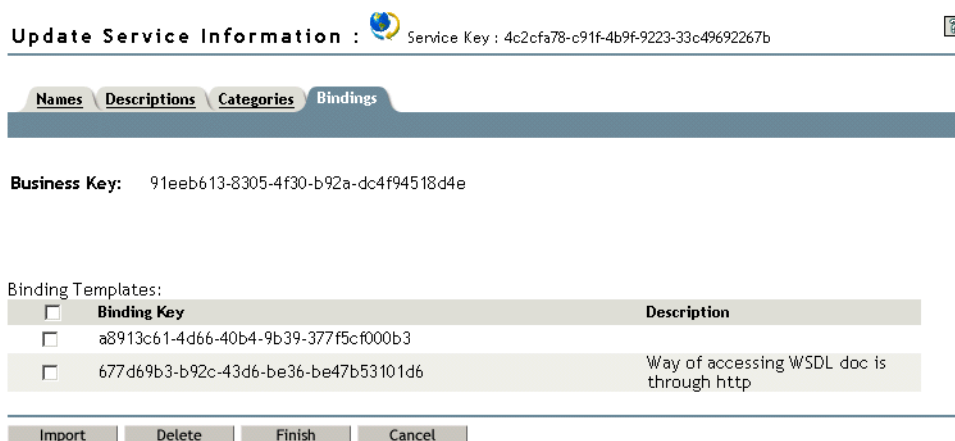
<input checked="" type="checkbox"/>	Binding Key	Description
<input checked="" type="checkbox"/>	a8913c61-4d66-40b4-9b39-377f5cf000b3	

Import Cancel

A binding template refers to the technical description of the Web services, which determines the technical entry point. The selected binding template should match the functionality of the service.

- Click Import.

Figure 82 Imported or Published Binding Templates for a Business Service



To delete existing bindings:

- 1 Select the bindings to be deleted.
- 2 Click Delete.

Click Finish to update the template or click Cancel to discard the changes made in the business entity and end the task.

Create a Binding Template

This task allows you to create a binding template in an existing business service.

- 1 Select UDDI Publish and User Access Control, then click Create UDDI Entry to open the Create UDDI Entry page.
- 2 Select Binding Template from the drop-down list.
- 3 From the drop-down list, select the business entity that contains the business service to which the binding template is to be added.
A list of services belonging to the selected business entity is displayed.
- 4 Select the Service to which the binding template is to be added.
- 5 Click Add.

An access point provides an entry point address suitable for accessing a Service. The hosting redirector gives a redirected reference to a different binding template. Either an access point or a hosting redirector should be provided for the binding template.

To provide an access point:

- 1 Specify the Access URL.
- 2 Select the URL type from the drop-down list. The following are the valid URL types:
 - ♦ **mailto:** Specifies an access URL referring to an e-mail address.
 - ♦ **http:** Specifies an access URL in standard Hypertext Transfer Protocol (HTTP) format.
 - ♦ **https:** Specifies an access URL is in the secure HTTP format.
 - ♦ **ftp:** Specifies that the access URL is in a File Transfer Protocol (FTP) format.

- ◆ **fax:** Specifies that the access URL connects to a facsimile machine.
- ◆ **phone:** Specifies that the access URL connects to a telephone number that supports a human or voice-mail system.
- ◆ **other:** Specifies that the access URL is of another address format.

3 Click OK.

Figure 83 Adding an Access Point to the Binding Template

Create a Binding Template ?

required = *

Access Point

Access URL: * URL Type:

Hosting Redirector

Binding Key: *

To provide a hosting redirector:

- 1** Select Hosting Redirector.
- 2** Specify the Binding key or use the Object Selector icon to browse and select the Binding key.
- 3** Click OK.

Figure 84 Adding a Hosting Redirector to the Binding Template

Create a Binding Template ?

required = *

Access Point

Access URL: * URL Type:

Hosting Redirector

Binding Key: *

If the hosting redirector is provided instead of the access point, it will reference another binding template. The hosting redirector must have an access point and not another hosting redirector.

The Binding Key in the hosting redirector need not be owned by the user.

Update the Binding Information

This task allows you to update information for a binding template.

Descriptions

This tab provides descriptive information about the Binding. Only one description can be specified per language. The descriptive information about the binding template must communicate the unique technical characteristics and application-specific parameters of the implementation.

To add a description:

- 1 Click Add to open the Update Description Details pop-up window.
- 2 Specify the description.
- 3 Select the language from the drop-down list.
- 4 Click OK.

To modify an existing Description:

- 1 Select the description to be modified.
- 2 Click Modify to open the Update Description Details pop-up window.
- 3 Specify the description.
- 4 Select the language from the drop-down list.
- 5 Click OK.

Figure 85 Updating the Description for the Binding Template

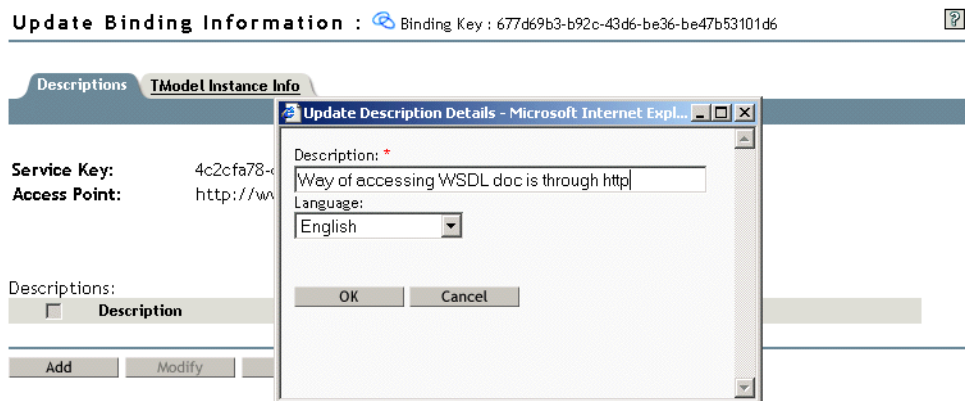
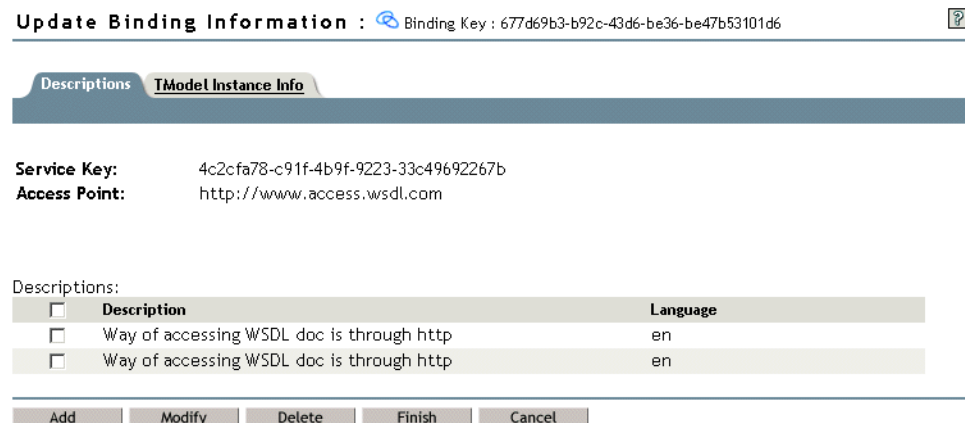


Figure 86 Binding Template Descriptions



To delete existing overview descriptions:

- 1 Select one or more descriptions.
- 2 Click Delete.

TModel Instance Info

This tab contains information that enables you to describe and understand the service information. The TModel instance includes a unique TModel key and its description, instance parameter and its description, and overview URL and its description.

To add a TModel instance information:

- 1 Click Add to open the **TModel Instance Info** page.

To modify an existing TModel instance information:

- 1 Select the TModel instance information to be modified.
- 2 Click Modify to open the **TModel Instance Info** page.

Figure 87 Updating TModel Instance Information

The screenshot shows a dialog box titled "Update Binding Information :". Below the title bar is a tab labeled "TModel Instance Info". A legend on the right indicates "required = *". The dialog contains three sections, each with a text input field, a description field, and a language dropdown menu with a ">>" button.

TModel Key: *	<input type="text" value="uuid:E59AE320-77A5-11D5-B898-0004AC49CC1E"/>	<input type="button" value="..."/>
Description:	<input type="text" value="WSDL spec supported by the interface"/>	Language: <input type="text" value="English"/> >>
Instance Parameter:	<input type="text" value="http://example.com/parameter_setting"/>	
Description:	<input type="text" value="Location holding parameter setting information"/>	Language: <input type="text" value="English"/> >>
Overview URL:	<input type="text" value="http://example.com/overview_of_the_instance"/>	
Description:	<input type="text" value="Location holding brief description of overview document"/>	Language: <input type="text" value="English"/> >>

At the bottom are "OK" and "Cancel" buttons.

TModel instance information contains one or more references to specific and identifiable specifications.

The selected TModel key must confirm that the service described matches the implementation details.

The Description of the TModel key, which can be specified in multiple languages, describes the implementation details.

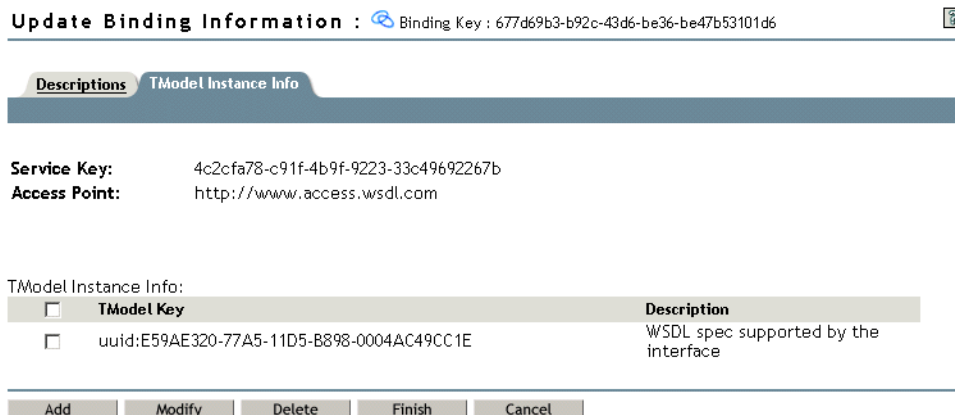
The Instance Parameter refers to the URL of a file containing the settings or parameters required to use the binding template.

The Description of the instance parameter, which can be specified in multiple languages, describes content of the instance parameter URL.

The Overview URL refers to the URL of overview document that describes a particular TModel used within a binding template.

The Description of the overview URL, which can be specified in multiple languages, describes the content of the overview document.

Figure 88 TModel Instance Information for a Binding Template



To delete existing TModel instance information:

- 1 Select the TModel Instance Info to be deleted.
- 2 Click Delete.

Click Finish to update the TModel instance information or click Cancel to discard the changes made to the binding template and end the task.

TModel Instance Info

This task allows you to add the TModel key and its description; instance parameter and its description; and overview URL and its description.

To add a TModel instance information:

- 1 Enter or browse to the Object Selector icon to select the TModel key.
The TModel key refers to a TModel that describes the implementation details of the Service.
- 2 Specify the description for the TModel referenced by the TModel, then select the language in which the description is provided.
Use the arrow keys to add more than one description.
Only one description can be specified per Language.
- 3 Specify the Instance Parameter that contains the parameters or URL reference for the binding template.
It can be the parameter and settings or a URL reference that contain settings or parameters required to use a specific facet of a binding template description.
- 4 Specify the description of the instance parameter, then select the language from the drop-down menu.
Use the arrow keys to add more than one description, and to add the language in which the description is provided.
- 5 Specify the Overview URL that contains the URL reference to locate the Overview doc.
The overview document describes the role of the TModel referred to, with respect to the overall binding template.

- 6 Specify the description of the Overview URL, then select the language in which the description is provided.

Use the arrow keys to add more than one description.

- 7 Click OK.

Create a TModel

This task enables you to create a TModel in the UDDI registry.

A TModel describes the technical information for a Web service. A TModel contains the URL address of the Web services, meta-data about the technical information, and a unique key for identification. The TModel name specified must be relevant to the technical specification you are referencing.

To create a TModel:

- 1 Select UDDI Publish and User Access Control, then click Create UDDI Entry to open the Create UDDI Entry page.
- 2 Select TModel from the drop-down list.
- 3 Specify the Name for the TModel.
This is a mandatory field.
- 4 Click OK.

Figure 89 Creating a TModel

tm Create a TModel ?

required = *

Name: *

FTP Spec

OK Cancel

Update the TModel Information

This task allows you to update information for a TModel. TModels are used as references within business entity and the TModel itself.

Descriptions

This tab is used to provide descriptive information about the TModel. Only one description can be provided per language. The descriptive information for the TModel must convey its compliance with a specification, concept, or a shared design.

To add a description:

- 1 Click Add to open the Update Description Details pop-up window.
- 2 Specify the description.
- 3 Select the language from the drop-down list.
- 4 Click OK.

To modify a description:

- 1 Select the description to be modified.
- 2 Click Modify to open the Update Description Details pop-up window.
- 3 Modify the description.
- 4 Select the language from the drop-down list.
- 5 Click OK.

Figure 90 Updating the TModel Description

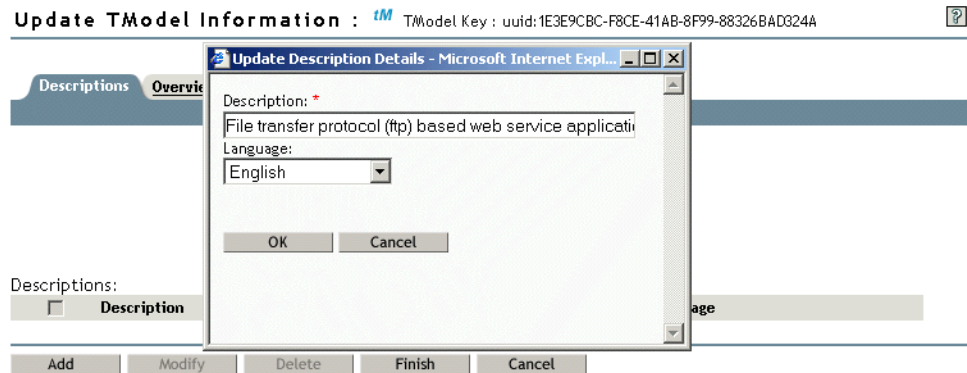
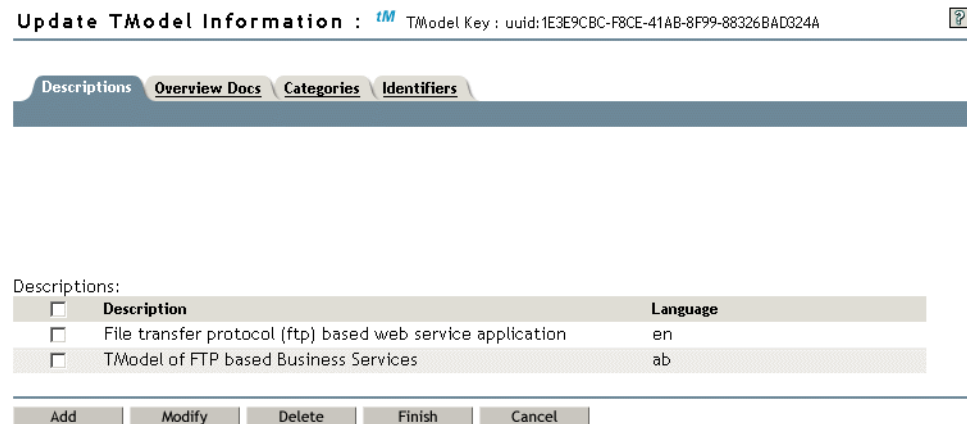


Figure 91 TModel Descriptions



To delete existing descriptions:

- 1 Select the descriptions to be deleted.
- 2 Click Delete.

Overview Docs

This tab lists references to remote descriptive information or instructions related to a TModel. The overview document consists of a remote URL reference and a description of the referenced URL. Only one description can be provided per language.

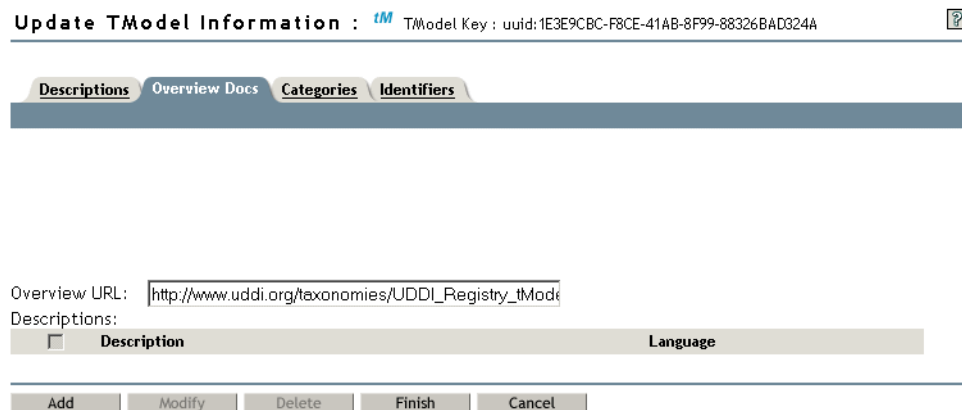
To add an overview description:

- 1 Click Add to open the Update Overview Doc Details pop-up window.
- 2 Specify the description.
- 3 Select the language from the drop-down list.
- 4 Click OK.

To modify an overview description:

- 1 Select a description to modify.
- 2 Click Modify to open the Update Overview Doc Details pop-up window.
- 3 Specify the description.
- 4 Select the language from the drop-down list.
- 5 Click OK.

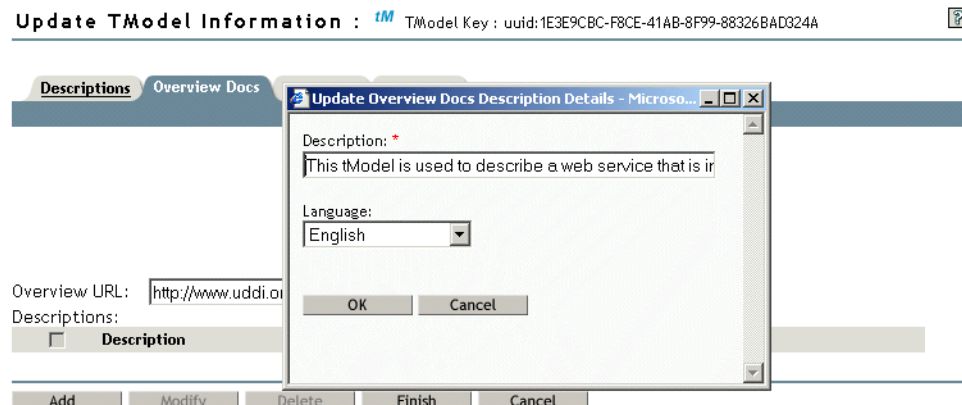
Figure 92 Updating Overview Descriptions for TModel



The Overview URL references the URL of the overview document that describes a particular TModel.

The description of the overview URL, which can be specified in multiple languages, specifies the content of the overview document.

Figure 93 Overview Descriptions for TModel



To delete overview descriptions:

- 1 Select one or more descriptions.
- 2 Click Delete.

Categories

This tab contains a list of category elements that allows you to find the TModel based on category information. A category consists of a unique TModel key, followed by a key name and a key value.

To add a category:

- 1 Click Add to open the [Add a Category](#) page.

To modify an existing category:

- 1 Select the category to be modified.
- 2 Click Modify to open the [Modify a Category](#) page.

Figure 94 Updating Category Bags for TModel

Add a Category ?

required = *

TModel Key: *

(Default: tModelKey: "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Name:



(Required if tModelKey is "uuid:A035A07C-F362-44dd-8F95-E2B134BF43B4")

Key Value: *

The category bag element allows the business entities, business services, and TModels to be categorized according to any of the available taxonomy-based classification schemes. Select a TModel key that includes the information about the common form of categorizing the business entity, such as categorization, consultancy, identifier, protocol, name space, or specification.

For example, if the TModel has a technical specification related to http or https protocols, the key name can be transport type and the key value can be http or https.

Figure 95 Category Bags for a TModel

Update TModel Information :  TModel Key : uuid:1E3E9CBC-F8CE-41AB-8F99-88326BAD324A 

Descriptions **Overview Docs** **Categories** **Identifiers**

Categories:

<input type="checkbox"/>	TModel Key	Key Name	Key Value
<input type="checkbox"/>	uuid:C1ACF26D-9672-4404-9D70-39B756E62AB4	types	specification
<input type="checkbox"/>	uuid:C1ACF26D-9672-4404-9D70-39B756E62AB4	types	xmlSpec
<input type="checkbox"/>	uuid:C1ACF26D-9672-4404-9D70-39B756E62AB4	types	soapSpec

To delete existing categories:

- 1 Select the categories to be deleted.
- 2 Click Delete.

Identifiers

This tab contains a list of identifier elements that allows you to find TModels based on identification information. An identifier consists of a unique TModel key, followed by a key name and a key value.



To add an identifier:

- 1 Click Add to open the **Add an Identifier** page.


To modify an existing identifier:

- 1 Select the identifier to be modified.
- 2 Click Modify to open the **Modify an Identifier** page.

Figure 96 Update Identifier Bags for a TModel

 **Add an Identifier** 

required = *

TModel Key: *
 

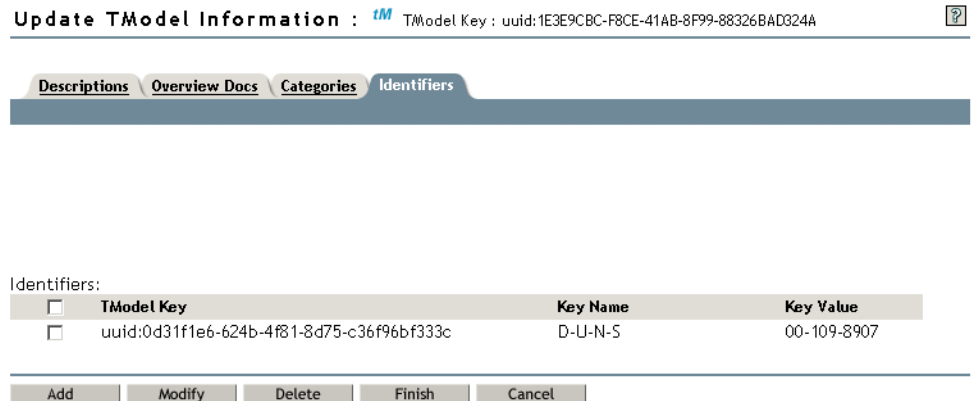
Key Name:

Key Value: *

An identifier bag allows business entities and TModels to include information about common forms of identification such as D-U-N-S numbers, tax identifiers.

For example, if a TModel provides technical specification about Internet services, the key name can be type or category and the key value can be Internet or Web.

Figure 97 Identifier Bags for a TModel



To delete existing identifiers:

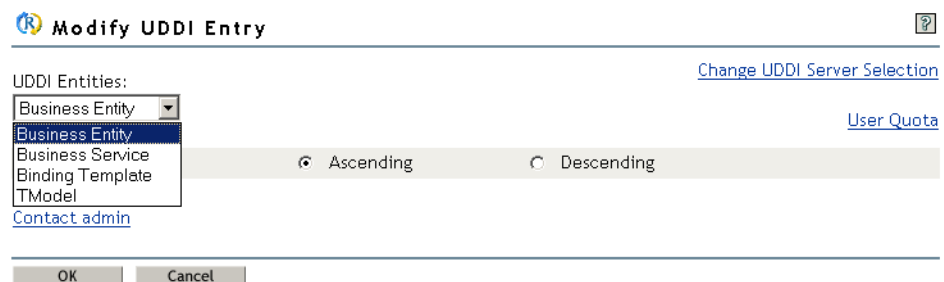
- 1 Select the TModel key to be deleted.
- 2 Click Delete.

Modify UDDI Entry

This task allows you to modify an existing UDDI entity such as business entity, business service, binding template, and TModel.

- 1 Select UDDI Publish and User Access Control, then click Modify UDDI Entry to open the Modify UDDI Entry page.
- 2 Select the type of the entity to be modified from the drop-down list.
- 3 Select the order in which you want the entities to be sorted.
The entities are sorted based on their names or descriptions. The default is ascending.
- 4 Click OK.

Figure 98 Selecting the Type of UDDI Entry to Be Modified



For technical support, assistance, or any further information, click [Contact admin](#).

Click [Change UDDI Server Selection](#) to perform operations with a different UDDI server.

Click [User Quota](#) to view the user related UDDI registry configuration parameters.

Modify a Business Entity

This task allows you to modify an existing business entity.

- 1 Select UDDI Publish and User Access Control, then click Modify UDDI Entry to open the Modify UDDI Entry page.
- 2 Select Business Entity from the drop-down menu.
- 3 Click Modify.

Figure 99 Selecting the Business Entity to Be Modified

Business Key	Name
<input checked="" type="radio"/> aaf8777c-0a01-4e2c-b851-aa91358fe665	Smart e-Business Providers
<input type="radio"/> 91eeb613-8305-4f30-b92a-dc4f94518d4e	Web Smart Solutions

Update the Business Information

For more information, see [“Update the Business Information” on page 76](#).

Modify a Business Service

This task allows you to modify an existing business service. As part of the task a binding template can be imported from another business service. This will delete the business service from where it originated. The interface page provides a list of business entities that you own.

To modify a business service:

- 1 Select UDDI Publish and User Access Control, then click Modify UDDI Entry to open the Modify UDDI Entry page.
- 2 From the drop-down list, select the business entity that contains the business service to be modified.

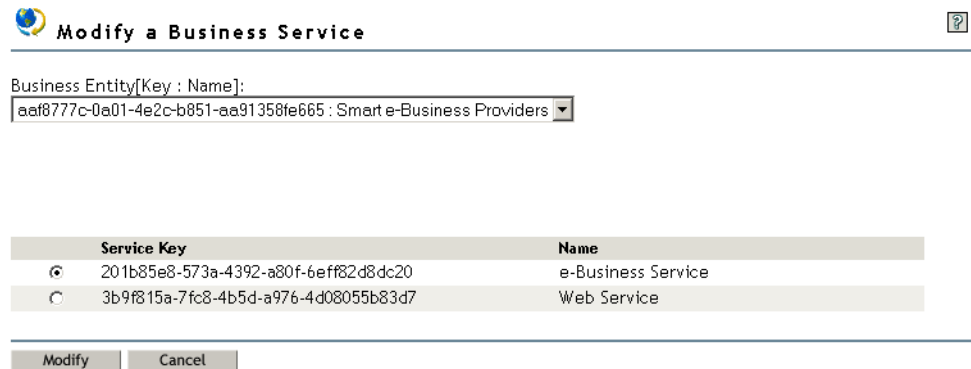
Figure 100 Selecting a Business Entity

Service Key	Name
<input checked="" type="radio"/> 4c2cfa78-c91f-4b9f-9223-33c49692267b	File Sharing and Transfer Service

The services belonging to the business entity is displayed.

- 3 Select the business service to be modified.

Figure 101 Selecting the Business Service to Be Modified



4 Click Modify.

Update the Service Information

For more information, see [“Update the Service Information” on page 93](#).

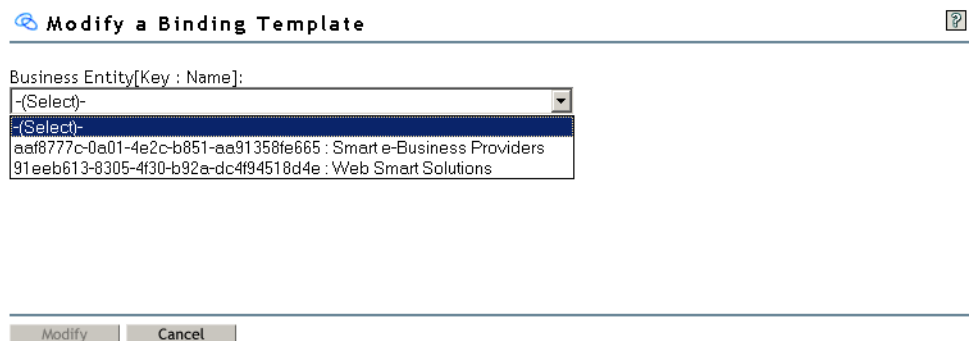
Modify a Binding Template

This task allows you to modify a binding template owned by the user. It provides a list of business entities that are owned by the user.

To modify a binding template:

- 1** Select UDDI Publish and User Access Control, then click Modify UDDI Entry to open the Modify UDDI Entry page.
- 2** From the drop-down list, select the business entity that contains the binding template to be modified.

Figure 102 Selecting the Business Entity



A list of services of the selected business entity is displayed.

- 3** From the drop-down list, select the Service that contains the binding template to be modified.

Figure 103 Selecting the Business Service

Modify a Binding Template ?

Business Entity[Key : Name]:
aaf8777c-0a01-4e2c-b851-aa91358fe665 : Smart e-Business Providers

Business Service[Key : Name]:
-(Select)-
201b85e8-573a-4392-a80f-6eff82d8dc20 : e-Business Service
3b9f815a-7fc8-4b5d-a976-4d08055b83d7 : Web Service

Modify Cancel

A list of Binding keys of the selected business service is displayed.

- 4 From the list, select the binding template to be modified.

Figure 104 Selecting the Binding Template to Be Modified

Modify a Binding Template ?

Business Entity [Key : Name]:
aaf8777c-0a01-4e2c-b851-aa91358fe665 : Smart e-Business Providers

Business Service [Key : Name]:
201b85e8-573a-4392-a80f-6eff82d8dc20 : e-Business Service

Select the Binding to be modified

Binding Key	Description
<input checked="" type="radio"/> b456788d-1075-413a-9c66-4e1c45a16619	Accessing WSDL docs
<input type="radio"/> 5852ac84-47b4-4084-a8bb-1c80756d4cc4	Accessing WSDL docs through https
<input type="radio"/> 374ac42f-c21f-46e3-8ff4-86af6901502d	Use http protocol to get WSDL
<input type="radio"/> 677d69b3-b92c-43d6-be36-be47b53101d6	Way of accessing WSDL doc is through http
<input type="radio"/> deecce80-0d22-494b-af3e-8346e9accb9a	Way of accessing WSDL doc is through http

Modify Cancel

- 5 Click Modify.

An access point provides an entry point address suitable for accessing a Service. The hosting redirector gives a redirected reference to a different binding template. An access point or a hosting redirector should be provided for the binding template.

To provide an access point:

- 1 Specify the Access URL.
- 2 Select the URL type from the drop-down list. The following are the valid URL types:
 - ◆ *mailto*: Specifies that the access URL refers to an e-mail address.
 - ◆ *http*: Specifies an access URL in the standard HTTP format.
 - ◆ *https*: Specifies an access URL is in the secure HTTP format.
 - ◆ *ftp*: Specifies an access URL is in a FTP format.

- ♦ *fax*: Specifies that the access URL connects to a facsimile machine.
- ♦ *phone*: Specifies that the access URL connects to a telephone number that supports a human or voice-mail system.
- ♦ *other*: Specifies that the access URL is of another address format.

Figure 105 Modifying the Access Point to the Binding Template

Modify a Binding Template ?

required = *

Access Point

Access URL: * URL Type:

Hosting Redirector

Binding Key: *

3 Click OK.

To specify the hosting redirector:

- 1** Select the Hosting Redirector.
- 2** Specify the Binding key or use the Object Selector icon to browse for and select it.
- 3** Click OK.

Figure 106 Modifying the Hosting Redirector for the Binding Template

Modify a Binding Template ?

required = *

Access Point

Access URL: * URL Type:

Hosting Redirector

Binding Key: *

If the hosting redirector is provided instead of the access point, it must reference to another binding template that provides an access point.

Update the Binding Information

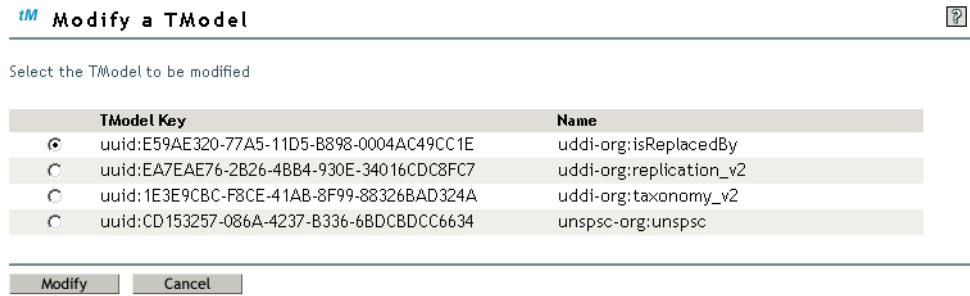
For more information, see [“Update the Binding Information” on page 100](#).

Modify a TModel

This task allows you to modify an existing TModel. All TModels that are owned by the user are displayed.

- 1** Select UDDI Publish and User Access Control, then click Modify UDDI Entry to open the Modify UDDI Entry page.
- 2** From the list, select the TModel to be modified.

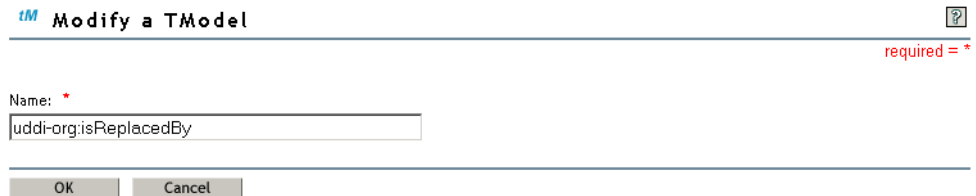
Figure 107 Selecting the TModel to Be Modified



3 Click Modify.

4 Modify the name of the TModel.

Figure 108 Modifying the TModel Name



5 Click OK.

Update the TModel Information

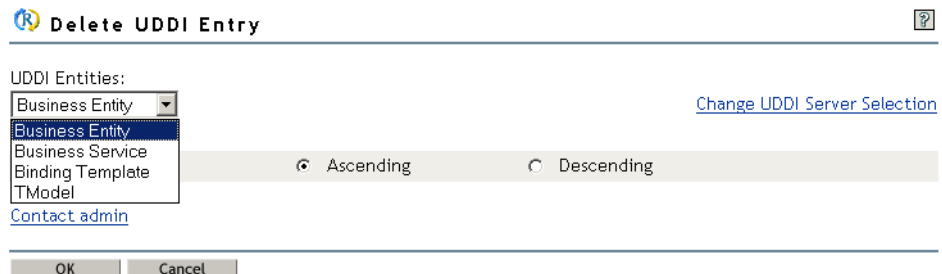
For more information, see [“Update the TModel Information” on page 104](#).

Delete UDDI Entry

To delete the UDDI entries:

- 1** Select UDDI Publish and User Access Control, then click Delete UDDI Entry to open the Delete UDDI Entry page.
- 2** From the drop-down list, select the type of UDDI entry to be deleted.

Figure 109 Selecting the Type of UDDI Entry to Be Deleted from the Registry



3 Select the order in which you want the entities to be sorted.

The entities are sorted based on their names or descriptions. The default is ascending.

4 Click OK.

For technical support, assistance, or any further information, click Contact admin.

Click Change UDDI Server Selection to perform operations with a different UDDI server.

Delete Business Entity

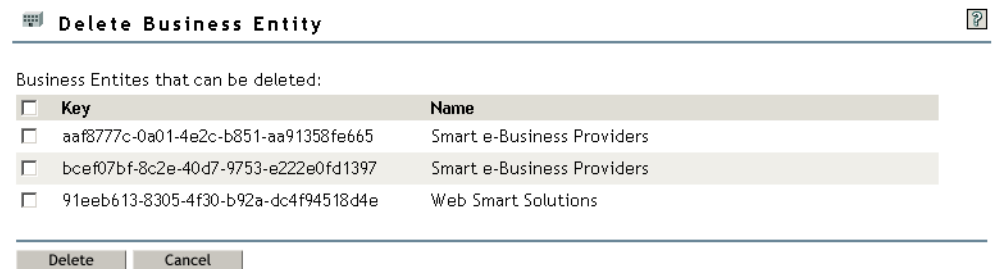
This task allows you to delete business entities that are you own.

- 1** Select UDDI Publish and User Access Control, then click Delete UDDI Entry to open the Delete UDDI Entry page.
- 2** Select Business Entity from the drop-down list.
- 3** To delete a single business entity, select its check box, then click Delete.

or

To delete all the business entities, select the check box in the table header, then click Delete.

Figure 110 Deleting Business Entities



4 Click Cancel to cancel the delete operation.

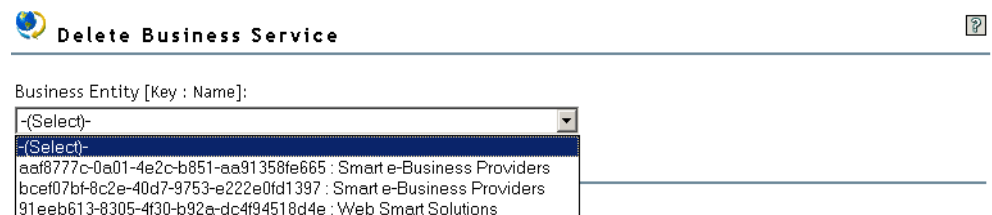
The Delete operation cannot be performed without selecting a business entity.

Delete Business Service

This task allows you to delete business services that you own.

- 1** Select UDDI Publish and User Access Control, then click Delete UDDI Entry to open the Delete UDDI Entry page.
- 2** From the drop-down list, select the business entity that contains the business service to be deleted.

Figure 111 Selecting a Business Entity



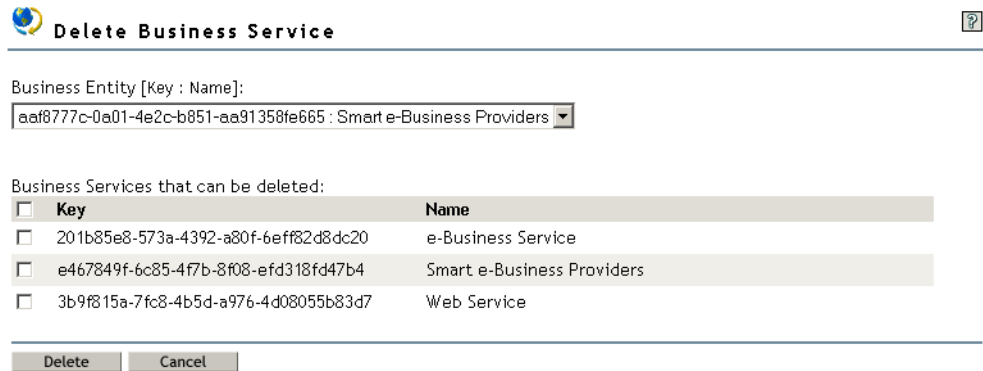
The business services for the selected business entity are displayed.

3 To delete a single business service, select the check box before it, then click Delete.

or

To delete all the business services, select the check box in the table header, then click Delete.

Figure 112 Deleting Business Services



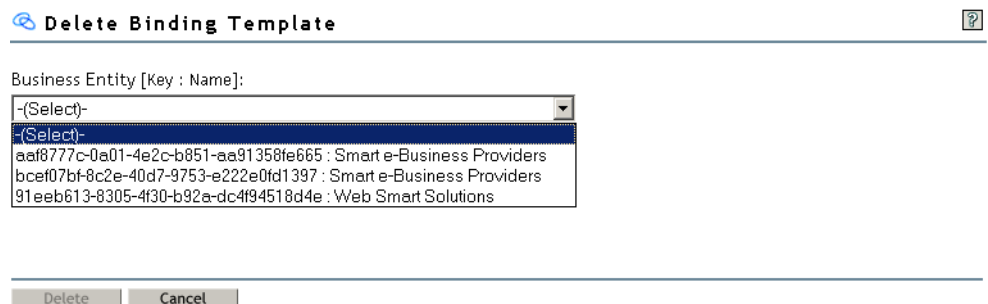
4 Click Cancel to cancel the delete operation.

Delete Binding Template

This task allows you to delete binding templates that you own.

- 1** Select UDDI Publish and User Access Control, then click Delete UDDI Entry to open the Delete UDDI Entry page.
- 2** From the drop-down list, select the business entity that contains the binding template to be deleted.

Figure 113 Selecting a Business Entity



The business services that were published under the selected business entity are displayed.

- 3** From the drop-down list, select the business service that contains the binding template to be deleted.

Figure 114 Selecting a Business Service

Delete Binding Template

Business Entity [Key : Name]:
aaf8777c-0a01-4e2c-b851-aa91358fe665 : Smart e-Business Providers

Business Service [Key : Name]:
-(Select)-
201b85e8-573a-4392-a80f-6eff82d8dc20 : e-Business Service
e467849f-6c85-4f7b-8f08-efd318fd47b4 : Smart e-Business Providers
3b9f815a-7fc8-4b5d-a976-4d08055b83d7 : Web Service

The binding templates of the selected business service are displayed.

- 4 To delete a single binding template, select its check box, then click Delete.

or

To delete all the binding templates, select the check box in the table header, then click Delete.

Figure 115 Deleting Binding Templates

Delete Binding Template

Business Entity [Key : Name]:
aaf8777c-0a01-4e2c-b851-aa91358fe665 : Smart e-Business Providers

Business Service [Key : Name]:
201b85e8-573a-4392-a80f-6eff82d8dc20 : e-Business Service

Binding Templates that can be deleted:

<input type="checkbox"/> Key	Description
<input type="checkbox"/> b456788d-1075-413a-9c66-4e1c45a16619	Accessing WSDL docs
<input type="checkbox"/> 5852ac84-47b4-4084-a8bb-1c80756d4cc4	Accessing WSDL docs through https
<input type="checkbox"/> 374ac42f-c21f-46e3-8ff4-86af6901502d	Use http protocol to get WSDL

Delete Cancel

or

If you decide you do not want to delete the information, click Cancel to cancel the delete operation.

Delete TModel

This task allows you to delete Models that you own.

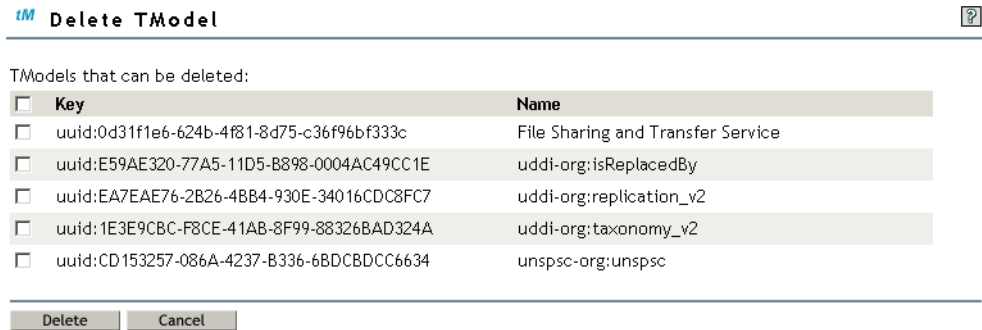
The TModel that is deleted is not physically removed from the registry, but hidden. It is not returned in a search result even when the search criteria match it, but can be retrieved by providing the TModel key, and can be made visible through a modify request.

- 1 Select UDDI Publish and User Access Control, then click Delete UDDI Entry to open the Delete UDDI Entry page.
- 2 To delete a single TModel, select its check box, then click Delete.

or

To delete all the TModels, select the check box in the table header, then click Delete.

Figure 116 Deleting TModels



or

If you decide you do not want to delete the information, click Cancel to cancel the delete operation.

- 3 Click Cancel to cancel the delete operation.

Set Rights

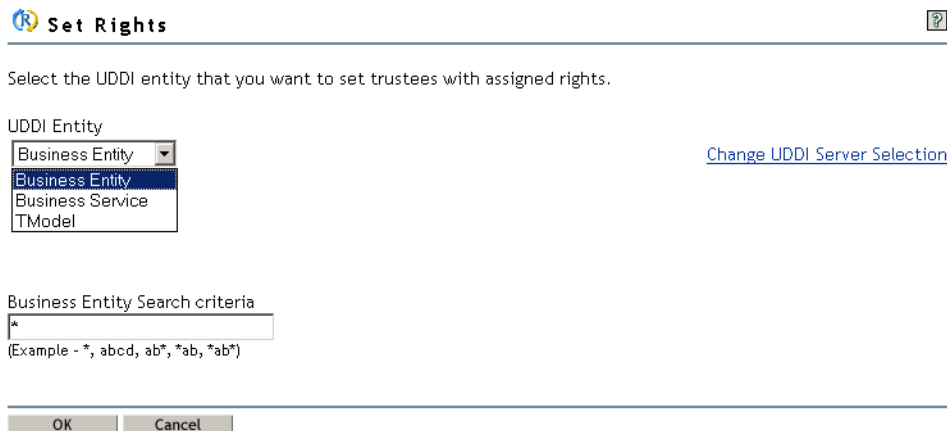
The Set Rights role is based on Novell® eDirectory™ rights management. It enables the entity owner to set new trustees with inquiry rights to UDDI entities such as business entity, business service, and TModel.

The Set Rights role consists of the following tasks:

- ◆ “Set Rights for Business Entity” on page 54
- ◆ “Set Rights for Business Service” on page 55
- ◆ “Set Rights for TModel” on page 58

NOTE: If a trustee has implicit supervisory rights (through security equivalence or rights set at container level), explicit rights are not set.

Figure 117 Setting Rights



To set a trustee for a UDDI entity:

- 1 Select the UDDI entity from the drop-down list.

If you selected Business Entity, the following window for search criteria selection is displayed:

Figure 118 Assigning Rights for a Business Entity

The screenshot shows a dialog box titled "Set Rights" with a help icon in the top right corner. Below the title bar, there is a text label "Select the UDDI entity that you want to set trustees with assigned rights." followed by a "UDDI Entity" dropdown menu currently set to "Business Entity". To the right of the dropdown is a blue hyperlink "Change UDDI Server Selection". Below this is a "Business Entity Search criteria" text input field containing an asterisk (*). Below the input field is a small text example: "(Example - *, abcd, ab*, *ab, *ab*)". At the bottom of the dialog are "OK" and "Cancel" buttons.

- 2 Specify the criteria for searching.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected Business Service, the following window for search criteria selection is displayed:

Figure 119 Assigning Rights for a Business Service

The screenshot shows a dialog box titled "Set Rights" with a help icon in the top right corner. Below the title bar, there is a text label "Select the UDDI entity that you want to set trustees with assigned rights." followed by a "UDDI Entity" dropdown menu currently set to "Business Service". To the right of the dropdown is a blue hyperlink "Change UDDI Server Selection". Below this is a "Search filters for:" section with two radio button options: "Business Entity" (which is selected) and "Business Service". Below the radio buttons is a "Business Entity Search criteria" text input field containing an asterisk (*). Below the input field is a small text example: "(Example - *, abcd, ab*, *ab, *ab*)". At the bottom of the dialog are "OK" and "Cancel" buttons.

- 3 Select the UDDI entity to which you want to apply the search filter.

- ♦ **Business Entity**

Enables you to search for a business entity, which can be further used for searching business services belonging to that entity.

- ◆ **Business Service**

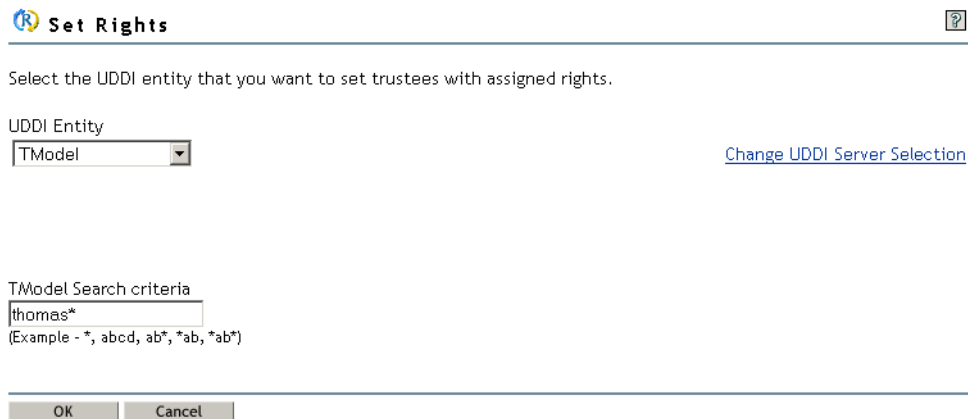
Enables you to search for business services from the UDDI data container (base context) regardless of the business entity.

4 Specify the criteria for searching the service or entity.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

If you selected TModel, the following window for search criteria selection is displayed:

Figure 120 Assigning Rights for TModel



5 Specify the criteria for searching.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

6 Click OK.

Edit Rights

This role is based on Novell eDirectory rights management. It enables the entity owner to view and modify the rights of the existing trustees under the UDDI data container that contains UDDI entities. The UDDI entities are business entity, business service, and TModel.

The Edit Rights role consists of the following tasks:

- ◆ “[Edit Rights for Business Entity](#)” on page 63
- ◆ “[Edit Rights for Business Service](#)” on page 64
- ◆ “[Edit Rights for TModel](#)” on page 65

NOTE: Trustees having rights not compliant with the UDDI rights definition are marked as invalid. These trustees can be deleted.

If the trustees are disabled, the trustees are the owners of the entity or will have supervisory rights.

Figure 121 Editing Rights for UDDI Entities

Edit Rights ?

Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees.

UDDI Entity
Business Entity [Change UDDI Server Selection](#)

Business Entity
Business Service
TModel

Business Entity Search criteria
*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

To edit rights for a UDDI entity:

- 1 Select a UDDI entity from the drop-down list.

If you selected Business Entity, the following window for search criterion selection is displayed:

Figure 122 Searching for a Business Entity to Edit Rights for

Edit Rights ?

Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees.

UDDI Entity
Business Entity [Change UDDI Server Selection](#)

Business Entity Search criteria
*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

- 2 Specify the criteria for searching

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected Business Service, the following window for search criterion selection is displayed:

Figure 123 Searching for a Business Service to Edit Rights for

The screenshot shows a dialog box titled "Edit Rights" with a help icon in the top right corner. Below the title bar, there is a text instruction: "Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees." Below this, there is a "UDDI Entity" dropdown menu with "Business Service" selected. To the right of the dropdown is a blue link: "Change UDDI Server Selection". Below the dropdown is a search filter section with the label "Search filters for:" and two radio buttons: "Business Entity" (selected) and "Business Service". Below the radio buttons is a "Business Entity Search criteria" text input field containing an asterisk (*). Below the input field is the text "(Example - *, abcd, ab*, *ab, *ab*)". At the bottom of the dialog are "OK" and "Cancel" buttons.

3 Select the UDDI entity to which you want to apply the search filter:

◆ **Business Entity**

Enables you to search for a business entity, which can further be used for searching business services belonging to that entity.

◆ **Business Service**

Enables you to search for business services from the UDDI data container (base context) regardless of the business entity.

4 Specify the criteria for searching the service or entity.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected TModel, the following window for search criterion selection is displayed:

Figure 124 Searching for a TModel to Edit Rights for

The screenshot shows a dialog box titled "Edit Rights" with a help icon in the top right corner. Below the title bar, there is a text instruction: "Select the UDDI entity that you want to view and modify the assigned rights of the existing trustees." Below this, there is a "UDDI Entity" dropdown menu with "TModel" selected. To the right of the dropdown is a blue link: "Change UDDI Server Selection". Below the dropdown is a "TModel Search criteria" text input field containing "thomas*". Below the input field is the text "(Example - *, abcd, ab*, *ab, *ab*)". At the bottom of the dialog are "OK" and "Cancel" buttons.

5 Specify the criteria for searching.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

6 Click OK.

Search Criteria

The search criteria enable you to search UDDI entities such as business entity, business service, and TModel.

The supported search criteria are:

Example	Searches
*	All the entities
abcd	Entities matching abcd only
ab*	Entities starting with ab and ending with any character string
*ab	Entities starting with any character string and ending with ab
ab*:	Entities that contain ab, but start and end with any other character string

A search is case sensitive.

Edit Trustees

The Edit Trustees role is based on Novell eDirectory rights management. It enables the entity owner to delete the existing trustees for UDDI entities such as business entity, business service, and TModel.

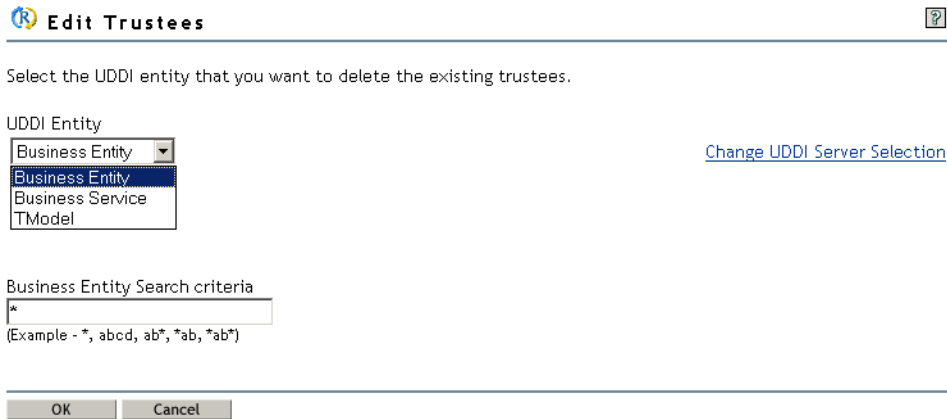
The Edit Trustees role consists of the following tasks:

- ◆ [“Edit Trustees for Business Entity” on page 69](#)
- ◆ [“Edit Trustees for Business Service” on page 70](#)
- ◆ [“Edit Trustees for TModel” on page 71](#)

NOTE: Trustees having rights not compliant with the UDDI rights definition are marked as invalid. These trustees can be deleted.

If the trustees are disabled, the trustees are the owners of the entity or will have supervisory rights.

Figure 125 Editing Trustees

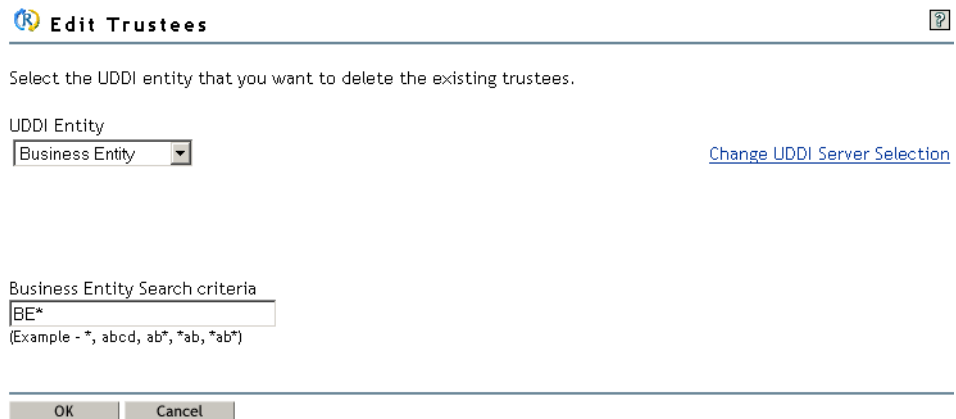


To edit trustees for a UDDI entity:

- 1 Select a UDDI entity from the drop-down list.

If you selected Business Entity, the following window for search criteria selection is displayed:

Figure 126 Deleting Trustees for a Business Entity



- 2 Specify the criteria for searching.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected Business Service, the following window for search criteria selection is displayed:

Figure 127 Deleting Trustees for a Business Service

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity
Business Service [Change UDDI Server Selection](#)

Search filters for:

Business Entity
 Business Service

Business Entity Search criteria
*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

3 Select the UDDI entity to which you want to apply the search filter:

◆ **Business Entity**

Enables you to search for a business entity, which can further be used for searching business services belonging to that entity.

◆ **Business Service**

Enables you to search for business services from the UDDI data container (base context) regardless of the business entity.

4 Specify the criteria for searching the service or entity.

The default search criterion is * (see [“Search Criteria” on page 123](#)).

If you selected TModel, the following window for search criteria selection is displayed:

Figure 128 Deleting Trustees for a TModel

Edit Trustees ?

Select the UDDI entity that you want to delete the existing trustees.

UDDI Entity
TModel [Change UDDI Server Selection](#)

TModel Search criteria
TM1*
(Example - *, abcd, ab*, *ab, *ab*)

OK Cancel

5 Specify the criteria for searching.

The default search criterion is * (see “[Search Criteria](#)” on page 123).

6 Click OK.

UDDI Inquiry

The UDDI user interface can be used to perform inquiry operations to the selected server’s UDDI registry.

- ◆ “[Search UDDI Entry](#)” on page 126
- ◆ “[View Details of UDDI Entities](#)” on page 139

Search UDDI Entry

You can search for four core UDDI data structures within the UDDI registry: business entity, business service, binding template, and TModel.

Search provides five types of search filters and six qualifiers. The search filters include name, discovery URLs, identifier bag, category bag, and TModel bag and the qualifiers are exact Name Match, orLikeKeys, orAllKeys, andAllKeys, combineCategories, serviceSubset, and Default. The qualifiers can be used to modify the default search behavior.

The search operation for different UDDI entities uses different subsets of filters and qualifiers. Search is further classified into basic and advanced search for all types of UDDI entities except for binding template.

Search UDDI Entry task can be used to [view the complete details](#) of the UDDI entities.

To search for a UDDI entity:

- 1** Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.
- 2** From the drop-down menu, select the type of UDDI entity to be searched.

Figure 129 Selecting the type of UDDI Entity to Be Searched



3 Click OK.

For technical support, assistance, or any further information, click Contact admin.

Click Change UDDI Server Selection to perform operations with a different UDDI server.

Basic Search for Business Entity

This task allows you to perform a basic search for a business entity.

A basic search searches the business entity based on a single business name. An advanced search enables you to perform a complex search using one or more filters.

To find a business entity using basic search:

1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.

2 Specify the name of the business entity you want to search for.

Wildcard searching can be accomplished by using the % character. By default, UDDI searches for a trailing wildcard unless the Exact Match qualifier is specified.

3 Specify the maximum number of results to be returned.

0 can be specified to provide no limit for the result. The number of results are also limited by the limit specified in the configured registry.

4 From the drop-down menu, select the number of results to be displayed per page.

5 Select the search qualifier from the drop-down list.

- ◆ **Exact Match**

Searches for the exact match of the specified name. The default is No.

- ◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results in ascending alphabetical order.

- ◆ **Descending**

Sorts the search results in descending alphabetical order.

- ◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

- ◆ **Descending**

Sorts the search results based on the date last updated in descending order.

6 Click Search.

Figure 130 Basic Search for a Business Entity

Basic Search for Business Entity ?

Business Name: * required = *

Maximum No. of Results: 100

Results per Page: 10

Search Qualifiers

Exact Name Match:	<input checked="" type="radio"/> No	<input type="radio"/> Yes
Sort By Name:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending <input type="radio"/> Descending
Sort By Date:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending <input type="radio"/> Descending

Advanced Mode Search Cancel

Advanced Search for Business Entity

This task allows you to perform an advanced search for a business entity by providing one or more business names, discovery URLs, TModel bags, identifiers, and categories. The results are the business names with their corresponding keys.

To perform an advanced search for a business entity:

- 1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.
- 2 Select the type of filter from the drop-down list and provide the corresponding values.

At least one filter should be provided to perform the search. A logical AND is applied to the filters.

Choose from the following filters:

- ◆ **Business Name**

Specify the business name to search for. By default, UDDI searches for a trailing wildcard. If there is more than one Name filter specified, a logical OR is applied.

Specify the language of the business name that you want to search for. If a language is not specified, the search returns business names available in all languages.

- ◆ **Discovery URL**

Specify the discovery URL of the business entity to search for. A logical OR is applied if there is more than one discovery URL specified.

Specify the usage of the document that is referenced.

- ◆ **TModel Bag**

This filter is used to search business entities that contain binding templates that have TModel references that are available in the TModel instance information. A logical AND is applied when more than one TModel is specified.

- ◆ **Identifier**

Use the Object Selector icon and select a TModel key from the Identifier list. Specify the identifier of the business entity to search for.

If you specify more than one Identifier, a logical OR is applied by default. The key Name specified is not used for searching.

- ◆ **Category**

Use the Object Selector icon and select a TModel key from the Category list. If you select the TModel key appearing in red, a list of predefined checked taxonomies corresponding to the specified TModel key is displayed. The three taxonomies cover industry codes (through NAICS) and product and service classifications (through UNSPC version 3.1 and version 7.3). The taxonomy list contain code and description. If a sub-classification of the code exists, the Child field will have a pointer to navigate one level down. If no such sub-classification exists, the child field is marked as None.

To navigate to the parent of any sub-classification, use the pointer in the Parent field.

If you specify more than one Category, a logical AND is applied by default. The key Name specified is used for search only when the TModel Key is not provided or is "uuid:AC104DCC-D623-452F-88A7-F8ACD94D9B2B".

Use the Object Selector icon to locate a TModel key for identifier, category, and TModel bag.

An asterisk next to the field name indicates a mandatory attribute.

A maximum of twenty filters can be specified.

- 3** Specify the maximum number of results to be returned.

0 indicates there is no limit on the results. However, the number of results is restricted by the limit configured for the registry.

- 4** From the drop-down menu, select the number of results to be displayed per page

- 5** Specify the search qualifier to modify the default behavior of the search filters.

If the qualifiers are not applicable to any of the specified filters, then they are ignored.

- ◆ **Exact Name Match**

Applicable when a name filter is specified. Only entries that exactly match the name will be returned.

- ◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results in ascending alphabetical order.

- ◆ **Descending**

Sorts the search results in descending alphabetical order.

- ◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

- ◆ **Descending**

Sorts the search results based on the date last updated in descending order.

- ◆ **Category**

- ◆ **Default**

Causes the search to use only the categories for the Business Entity.

◆ **Service Subsets**

Applicable when there is at least one category specified as filter. This causes the search to use only the categories from contained or referenced Business Services within the registered data, and ignores any entries found in the categories of Business Entities. The services returned as part of the search are those that matched one of the category filters specified.

◆ **Combine Categories**

This causes the search to combine all the category entries for the Business Entity and in all contained Business Service elements.

◆ **Key**

◆ **Default**

The category and tModel keys use AND, and the identifiers use OR.

◆ **Or All Keys**

Applicable when multiple categories and TModel bags are specified. This changes the behavior for tModel Bag and categories to OR keys rather than AND.

◆ **And All Keys**

Applicable when one or more identifiers are specified. This changes the behavior for identifiers to AND keys rather than OR them.

◆ **Or Like Keys**

Applicable when multiple categories and identifiers are specified. Any identifier or category filters that have the same tModelKey (the same namespace) use OR rather than AND.

6 Click Search to perform the advanced search.

or

Click Basic Mode to perform a basic search.

Figure 131 Advanced Search for a Business Entity

Advanced Search for Business Entity ?

required = *

Business Name %

Maximum No. of Results: Results per Page:

Search Qualifiers

Exact Name Match: No Yes

Sort By Name: Unsorted Ascending Descending

Sort By Date: Unsorted Ascending Descending

Category: Default Service Subsets Combine Categories

Keys: Default Or All Keys And All Keys Or Like Keys

Basic Mode Search Cancel

Basic Search for Business Service

This task allows you to perform a basic search for a business service.

A basic search searches the business service based on a single Service name. An advanced search enables you to perform a complex search using one or more filters.

To find a business service using basic search:

1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.

2 Specify the name of the business service.

Wildcard searching can be accomplished by using the % character. By default, UDDI searches for a trailing wildcard unless Exact Match qualifier is specified.

3 Specify the maximum number of results to be returned.

0 can be specified to provide no limit for the result. The number of results is also limited by the limit specified in the configured registry.

4 From the drop-down menu, select the number of results to be displayed per page.

5 Select the search qualifiers:

- ◆ **Exact Name Match**

Searches for an exact match of the specified name. The default is No.

- ◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results in ascending alphabetical order.

- ◆ **Descending**

Sorts the search results in descending alphabetical order.

- ◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

- ◆ **Descending**

Sorts the search results based on the date last updated in descending order.

6 Click Search.

Figure 132 Basic Search for a Business Service

Basic Search for Business Service ?

Service Name: * required = *

%

Maximum No. of Results:

100

Results per Page:

10

Search Qualifiers

Exact Name Match:	<input checked="" type="radio"/> No	<input type="radio"/> Yes	
Sort By Name:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending	<input type="radio"/> Descending
Sort By Date:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending	<input type="radio"/> Descending

Advanced Mode Search Cancel

Advanced Search for Business Service

This task allows you to perform an advanced search for a business service by providing one or more service names, TModel bags, categories, or business keys. The results are the service names with their corresponding keys.

To perform an advanced search for a business service:

- 1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.
- 2 Select the type of filter from the drop-down list and provide the corresponding values.

At least one filter should be provided to perform the search. The different types of filters use AND.

Select from the following filters:

- ◆ **Service Name**

Specify the service name to search for. A wildcard search can be accomplished by using the % character. By default, UDDI searches for a trailing wildcard. If more than one Service name filter is specified, they use OR.

Specify the language of the service name that you want to search for. If a language is not specified, the search returns business names available in all languages.

- ◆ **TModel Bag**

Use this filter to search business services that contain binding templates with specific TModel references in TModel instance information. If more than one TModel is specified it uses AND by default.

- ◆ **Category**

Use the Object Selector icon and select a TModel key from the Category list.

If you select the TModel key appearing in red, a list of predefined checked taxonomies corresponding to the specified TModel key is displayed. The three taxonomies cover industry codes (through NAICS) and product and service classifications (through UNSPC version 3.1 and version 7.3). The taxonomy list contain the code and description. If a sub-classification of the code exists, the Child field will have a pointer to navigate one level down. If no such sub-classification exists, the child field is marked as None.

To navigate to the parent of any sub-classification, use the pointer in the Parent field.

If you specify more than one Category, a logical AND is applied by default. The key Name specified is used for search only when the TModel Key is not provided or is "uuid:AC104DCC-D623-452F-88A7-F8ACD94D9B2B".

- ◆ **Business Key**

Specify the business key of the business entity that contains the business services to search for.

Use the Object Selector icon to locate a TModel key for the category and TModel bag. An asterisk next to a field name indicates a mandatory attribute.

A maximum of twenty filters can be specified.

- 3** Specify the maximum number of results to be returned.

0 indicates there is no limit on the results. However, the number of results is restricted by the limit configured for the registry.

- 4** From the drop-down menu, select the number of results to be displayed per page.

- 5** Specify the search qualifier to modify the default behavior of the search filters.

If the qualifiers are not applicable to any of the specified filters, they are ignored.

- ◆ **Exact Name Match**

Applicable when a name filter is specified. Only entries that exactly match the name will be returned. The default is No.

- ◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results in ascending alphabetical order.

- ◆ **Descending**

Sorts the search results in descending alphabetical order.

- ◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

- ◆ **Descending**

Sorts the search results based on the date last updated in descending order.

- ◆ **Keys**

- ◆ **Default**

The category and tModel keys use AND, and the identifiers use OR.

- ◆ **Or All Keys**

Applicable when multiple categories are specified. This changes the behavior for tModelBag and categories to OR keys rather than AND.

◆ **Or Like Keys**

Applicable when multiple categories are specified. Any category filters that have the same tModelKey (the same namespace) use OR rather than AND.

6 Click Search to perform the advanced search.

or

Click Basic Mode to perform a basic search.

Figure 133 Advanced Search for a Business Service

Advanced Search for Business Service ?

required = *

Service Name	Name *	%
	Language	

Maximum No. of Results: Results per Page:

Exact Name Match: No Yes

Sort By Name: Unsorted Ascending Descending

Sort By Date: Unsorted Ascending Descending

Keys: Default Or All Keys Or Like Keys

Search for Binding Template

This task allows you to perform a basic search for a binding template.

A basic search searches the binding template based on one or more TModel bags, and one service key.

To search for a binding template:

1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.

2 Select from the following filters:

◆ **TModel Bag**

Specify a unique TModel key related to the binding template.

◆ **Service Key**

Specify a unique business service key related to the binding template.

Use the Object Selector icon to locate TModel keys and the service key. An asterisk next to a field name indicates a mandatory attribute.

A maximum of twenty filters can be specified.

3 Specify the maximum number of results to be returned.

0 indicates there is no limit on the results. However, the number of results is restricted by the limit configured for the registry.

- 4 From the drop-down menu, select the number of results to be displayed per page.
- 5 Select the search qualifiers:
 - ♦ **Exact Name Match**
Searches for the exact match of the specified name. The default is No.
 - ♦ **Keys**
 - ♦ **Default**
Searches using a logical AND on all the TModel keys.
 - ♦ **Or All Keys**
Searches using a logical OR on all the TModel keys.
 - ♦ **Sort By Date**
Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.
 - ♦ **Ascending**
Sorts the search results based on the date last updated in ascending order.
 - ♦ **Descending**
Sorts the search results based on the date last updated in descending order.
- 6 Click Search.

Figure 134 Searching for a Binding Template

Search for Binding Template ?

% in the TModelKey field indicates that all the Bindings under the specified Service Key will be displayed required = *

<input type="checkbox"/>	TModel Bag	TModel Key *	%	<input type="button" value="Search"/>	<input type="button" value="[-]"/>
<input type="checkbox"/>	Service Key	Key *		<input type="button" value="Search"/>	<input type="button" value="+"/>

Maximum No. of Results: Results per Page:

Search Qualifiers

Keys: Default Or All Keys

Sort By Date: Unsorted Ascending Descending

Basic Search for TModel

This task allows you to perform a basic search for a TModel.

A basic search searches the TModel based on a single service name. An advanced search enables you to perform a complex search using one or more filters.

To find a TModel using a basic search:

1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.

2 Specify the name of the TModel.

Wildcard searching can be accomplished by using the % character. By default, UDDI searches for a trailing wildcard unless the Exact Match qualifier is specified.

3 Specify the maximum number of results to be returned.

0 indicates there is no limit on the results. However, the number of results is restricted by the limit configured for the registry.

4 From the drop-down menu, select the number of results to be displayed per page.

5 Select the search qualifiers:

◆ **Exact Name Match**

Searches for the exact match of the specified name. The default is No.

◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

◆ **Ascending**

Sorts the search results in ascending alphabetical order.

◆ **Descending**

Sorts the search results in descending alphabetical order.

◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

◆ **Descending**

Sorts the search results based on the date last updated in descending order.

6 Click Search.

Figure 135 Basic Search for a TModel

tm Basic Search for TModel ?

required = *

TModel Name: *

%

Maximum No. of Results:

100

Results per Page:

10

Search Qualifiers

Exact Name Match:	<input checked="" type="radio"/> No	<input type="radio"/> Yes	
Sort By Name:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending	<input type="radio"/> Descending
Sort By Date:	<input checked="" type="radio"/> Unsorted	<input type="radio"/> Ascending	<input type="radio"/> Descending

Advanced Mode Search Cancel

Advanced Search for TModel

This task allows you to perform an advanced search for a TModel by providing a TModel name, identifiers, and categories. The result is the TModel Name with its corresponding key.

To perform an advanced search for a TModel:

- 1 Select UDDI Inquiry, then click Search UDDI Entry to open the Search UDDI Entry page.
- 2 Select the type of filter from the drop-down list and provide the corresponding values.

At least one filter should be provided to perform the search. The different types of filters use AND.

Choose from the following filters:

- ◆ **TModel Name**

Specify the TModel name to be searched for. A wildcard search can be accomplished by using the % character. By default, UDDI searches for a trailing wildcard. Only one filter can be specified.

- ◆ **Identifier**

Specify the Identifier of the TModel to be searched for by clicking the TModel key in the Identifier list. A logical OR is applied by default. The key Name specified is not used for searching.

- ◆ **Category**

Use the Object Selector icon and select a TModel key from the Category list.

If you select the TModel key appearing in red, a list of predefined checked taxonomies corresponding to the specified TModel key is displayed. The three taxonomies cover industry codes (through NAICS) and product and service classifications (through UNSPC version 3.1 and version 7.3). The taxonomy list contain the code and description. If a sub-classification of the code exists, the Child field will have a pointer to navigate one level down. If no such sub-classification exists, the child field is marked as None.

To navigate to the parent of any sub-classification, use the pointer in the Parent field.

If you specify more than one Category, a logical AND is applied by default. The key Name specified is used for search only when the TModel Key is not provided or is "uuid:AC104DCC-D623-452F-88A7-F8ACD94D9B2B".

Use the Object Selector icon to locate a TModel key for identifier and category. An asterisk next to a field indicates a mandatory attribute.

A maximum of twenty filters can be specified.

3 Specify the maximum number of results to be returned.

0 indicates there is no limit on the results. However, the number of results is restricted by the limit configured for the registry.

4 From the drop-down menu, select the number of results to be displayed per page.

5 Specify the search qualifier to modify the default behavior of the search filters.

If the qualifiers are not applicable to any of the specified filters, then they are ignored.

Select from the following search qualifiers:

- ◆ **Exact Name Match**

Applicable when a name filter is specified. Only entries that exactly match the name will be returned. The default is No.

- ◆ **Sort By Name**

Sorts the search results by name. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results in ascending alphabetical order.

- ◆ **Descending**

Sorts the search results in descending alphabetical order.

- ◆ **Sort By Date**

Sorts the search results by date. The entities are sorted based on their names or descriptions. The default is Unsorted.

- ◆ **Ascending**

Sorts the search results based on the date last updated in ascending order.

- ◆ **Descending**

Sorts the search results based on the date last updated in descending order.

- ◆ **Keys**

- ◆ **Default**

The category and tModel keys use AND, and the identifiers use OR.

- ◆ **Or All Keys**

Applicable when multiple categories and identifiers are specified. This changes the behavior for categories to OR keys rather than AND.

- ◆ **Or Like Keys**

Applicable when multiple categories and identifiers are specified. Any identifier or category filters that have the same TModel Key (the same namespace) use OR rather than AND.

- 6 Click Search to perform the advanced search.

Figure 136 Advanced Search for a TModel

tM Advanced Search for TModel ?

required = *

<input type="text" value="Identifier"/>	TModel Key	<input type="text"/>	<input type="text"/>
	Key Name	<input type="text"/>	<input type="text"/>
	Key Value *	<input type="text"/>	<input type="text"/>

Maximum No. of Results: Results per Page:

Exact Name Match: No Yes

Sort By Name: Unsorted Ascending Descending

Sort By Date: Unsorted Ascending Descending

Keys: Default Or All Keys Or Like Keys

View Details of UDDI Entities

From the UDDI registry, you can obtain complete information about the four core UDDI data structures: business entity, business service, binding template, and TModel.

View Details allows you to view the complete details of the selected UDDI entity.

The View Details task can be invoked only from the search results page for UDDI entities.

Figure 137 Business Entity Search Results

Business Key	Name
<input checked="" type="radio"/> 4f57a291-9a0c-4e6a-a3cb-113ffd8ff5a7	Service 2
<input type="radio"/> 89e4d954-b726-4a59-b279-a3553540b35c	Web Smart Solutions
<input type="radio"/> 4584b511-3be3-4587-80c1-3c0dfe64fd0f	File Sharing and Transfer Service

To perform another search:

- 1 Click Repeat Search.

To view the complete information for a business entity:

- 1 Click the business key to open the **View Business Details** page.
- 2 Click Finish to complete the search.

To view the list of services returned as part of the business entity search:

- 1 Select the business key whose Service is to be viewed.
- 2 Click View Service List to view the services contained in the business.
- 3 Click the service key to view the complete details of the business service.

Figure 138 Service List

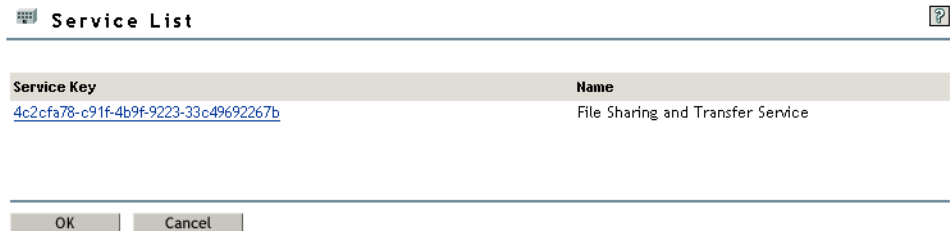
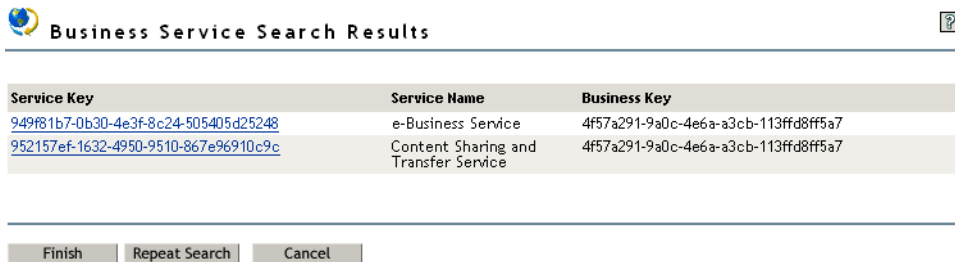


Figure 139 Business Service Search Results



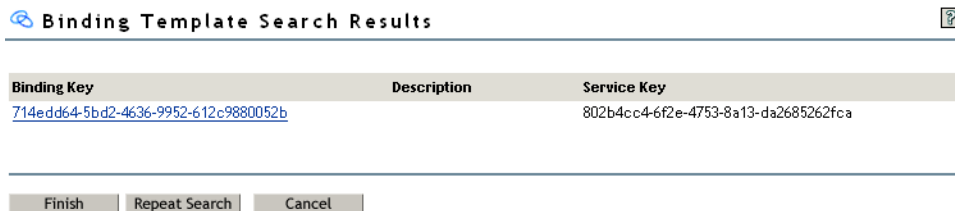
To perform another search:

- 1 Click Repeat Search.

To view the complete information for a business service:

- 1 Click the service key to open the [View Service Details](#) page.
- 2 Click Finish to complete the search.

Figure 140 Binding Template Search Results



To perform another search:

- 1 Click Repeat Search.

To view the complete information of a binding template:

- 1 Click the binding key to open the [View Binding Details](#) page.
- 2 Click Finish to complete the search.

Figure 141 TModel Search Results

TModel Key	Name
uuid:4CD7E4BC-648B-426D-9936-443E AAC8AE23	uddi-org:inquiry
uuid:AC104DCC-D623-452F-88A7-F8ACD94D9B2B	uddi-org:inquiry_v2
uuid:64C756D1-3374-4E00-AE83-EE12E38FAE63	uddi-org:publication
uuid:A2F36B65-2D66-4088-ABC7-914D0E05EB9E	uddi-org:publication_v2
uuid:3FB66FB7-5FC3-462F-A351-C140D9BD8304	uddi-org:taxonomy
uuid:1E3E9CBC-F8CE-41AB-8F99-88326BAD324A	uddi-org:taxonomy_v2
uuid:C1ACF26D-9672-4404-9D70-39B756E62AB4	uddi-org:types
uuid:C0B9FE13-179F-413D-8A5B-5004DB8E5BB2	ntis-gov:naics:1997
uuid:DB77450D-9FA8-45D4-A7BC-04411D14E384	unspsc-org:unspsc:3-1
uuid:4E49A8D6-D5A2-4FC2-93A0-0411D8D19E88	uddi-org:iso-ch:3166:1999

Pages: [1](#) [2](#) [3](#)

To perform another search:

- 1 Click Repeat Search.

To view the complete information for a TModel:

- 1 Click the TModel key to open the [View TModel Details](#) page.
- 2 Click Finish to complete the search.

View Business Details

This task provides complete information for a selected business entity.

Details

The Details tab (the default view) displays the following information:

- ◆ **Business Key**

The business entity key whose complete details are displayed.

- ◆ **Default Name**

The name given to the business entity when the business entity was first saved.

- ◆ **Authorized Name**

The name of the publisher of the business entity.

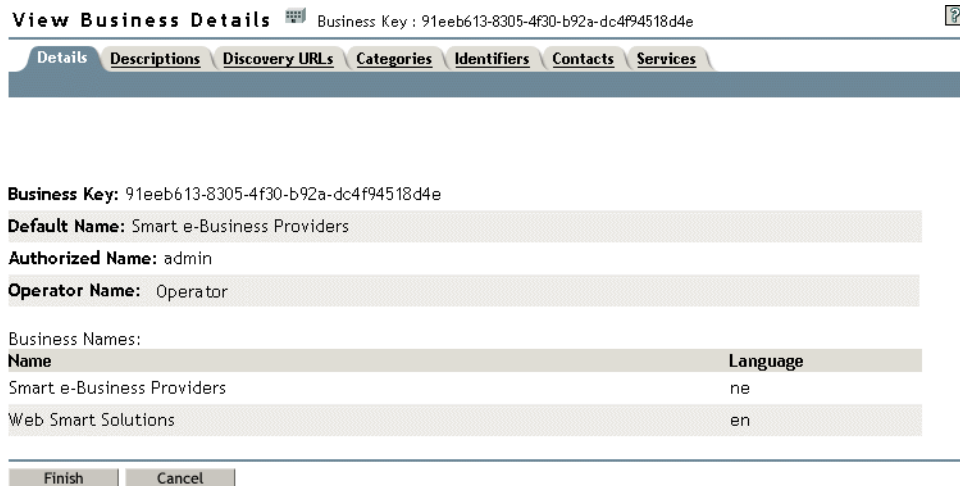
- ◆ **Operator Name**

The name of the operator who owns or operates the UDDI server being accessed.

- ◆ **Business Names**

A list of multiple names of the business entity in tabular format with their associated languages.

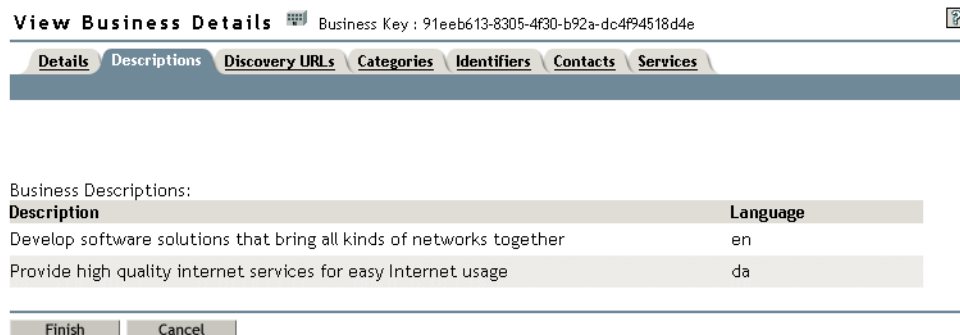
Figure 142 Details Tab under View Business Details



Descriptions

This tab lists the business entity descriptions with their associated languages in a table format. No Business descriptions are displayed if no descriptions have been provided for the business. Click the Descriptions tab to view the descriptions that were saved for the business entity.

Figure 143 Descriptions Tab under View Business Details



Discovery URLs

This tab lists the discovery URLs for business entity with their associated usages in a table format. Click the Discovery URLs tab to view the discovery URLs that were saved for the business entity. The URL appears as a link that opens the URL in a new browser window.

No Business discovery URLs available is displayed if there are no discovery URLs provided for the business.

Figure 144 Discovery URLs Tab under View Business Details

View Business Details Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e

Details Descriptions **Discovery URLs** Categories Identifiers Contacts Services

Discovery URLs:

Discovery URL	Usage
http://www.smartsolutions.com	businessEntity
http://www.smartsolutions.com/discURL.htm	businessEntityExt

Finish Cancel

Categories

This tab lists the category bags related to the business entity in a table format.

Click the Categories tab to view the category bags that are associated with the business entity. The TModel keys appear as links that open pop-up windows that display the complete details including the TModel names, descriptions, language, category bags, identifier bags and overview URLs and descriptions of the TModel.

No Categories available is displayed if there are no category bags provided for the business.

Figure 145 Categories Tab under View Business Details

View Business Details Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e

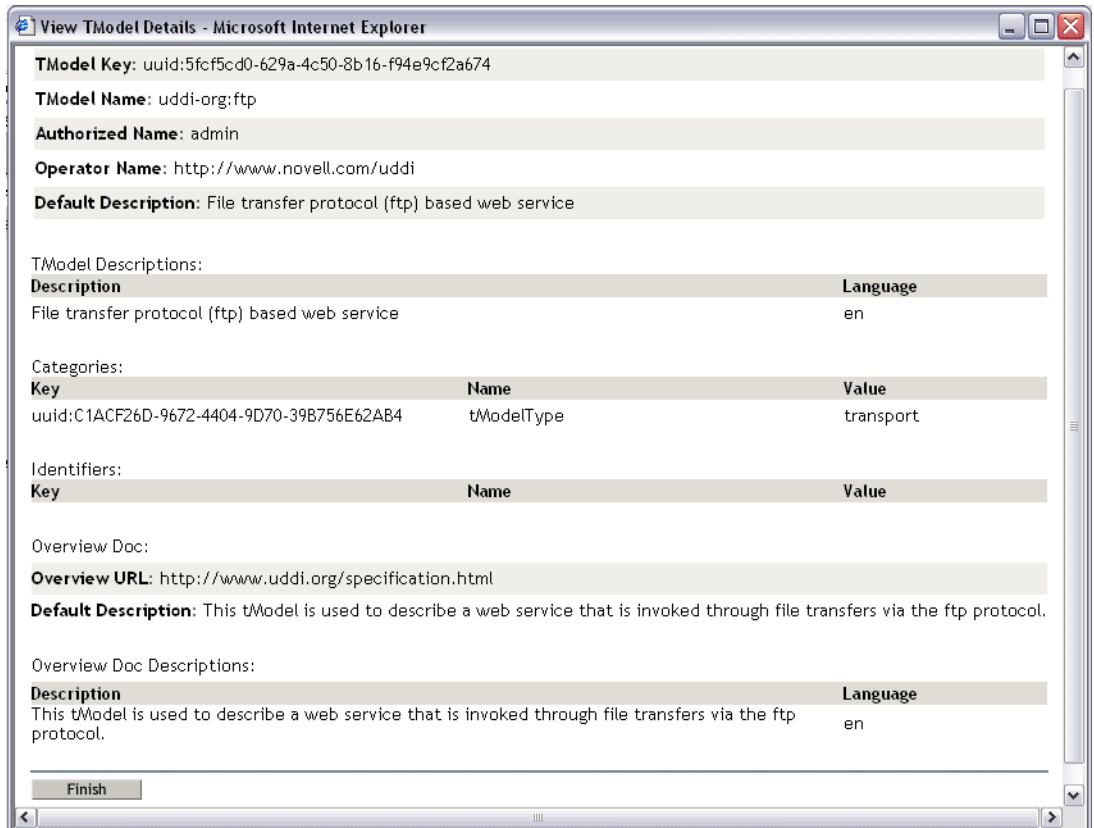
Details Descriptions Discovery URLs **Categories** Identifiers Contacts Services

Categories:

TModel Key	Key Name	Key Value
uuid:0d31f1e6-624b-4f81-8d75-c36f96bf333c	tModelType	ftp
uuid:1E3E9CBC-F8CE-41AB-8F99-88326BAD324A	transportType	Transport

Finish Cancel

Figure 146 View TModel Details



Identifiers

Click the Identifiers tab to view the identifier bags associated with the business entity.

The Identifiers tab displays the identifier bags related to the business entity in a table format.

The TModel keys appear as links that open pop-up windows that display the complete details including the TModel names and descriptions, language, category bags, identifier bags and overview URLs, and descriptions of the TModel.

No Identifiers available is displayed if no identifier bags have been provided for the business entity.

Figure 147 Identifiers Tab under View Business Details

View Business Details Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e

Details **Descriptions** **Discovery URLs** **Categories** **Identifiers** **Contacts** **Services**

Identifiers:

TModel Key	Key Name	Key Value
uuid:0d31f1e6-624b-4f81-8d75-c36f96bf333c	D-U-N-S Number	00-109-8907
uuid:E59AE320-77A5-11D5-B898-0004AC49CC1E	Supplier ID	55038299

Contacts

Click the Contacts tab to view the complete contact information provided for the business entity.

The Contacts tab provides the complete contact details of a business entity including the contact person, usage, descriptions, phone numbers, e-mail address, and address.

No Business Contacts available is displayed if no contacts have been provided for the business entity.

Figure 148 Contacts Tab under View Business Details

View Business Details : Business Key : 91eeb613-8305-4f30-b92a-dc4f94518d4e

Names **Descriptions** **Discovery URLs** **Categories** **Identifiers** **Contacts** **Services**

Contact: 1

Contact Person: John (Person Name)
Usage: Administrator

Descriptions:

Description	Language
Contact for technical problems encountered only	en

Phone Nos:

Phone No.	Usage
+11 (12) 123-4567/89	Office

Email IDs:

Email ID	Usage
admin@smartsolutions.com	Office

Addresses:

Address: 1

Usage: Office
 Business Entity Provider
 Building No. Street Name
 Area Name, Town
 City
 State, Country

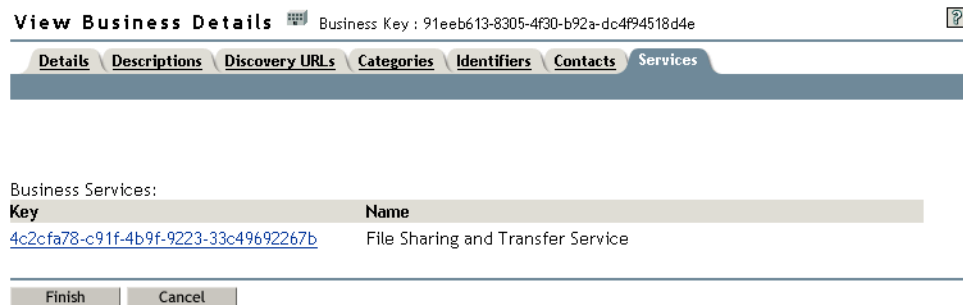
Services

Click the Services tab to view the business services published for the business entity.

The Services tab provides a list of business services along with their default names. The business service keys appear as links that displays the complete details of the selected business service.

No Business Services available is displayed if no business services have been published under the business.

Figure 149 Services Tab under View Business Details



View Service Details

This task provides complete information for a selected business service.

Details

The Details tab (the default view) displays the following information:

- ◆ **Business Key**

The business key under which the service has been published.

The business key is provided as a link to the complete details of the business entity.

- ◆ **Service Key**

The service key whose complete details are displayed.

- ◆ **Default Name**

The name given to the business service when it was first saved.

- ◆ **Service Names**

A list of names of the business service with their associated language in a table format.

Figure 150 Details Tab under View Service Details

View Service Details Service Key : 4c2cfa78-c91f-4b9f-9223-33c49692267b

Details | Descriptions | Categories | Bindings

Business Key: [91eeb613-8305-4f30-b92a-dc4f94518d4e](#)

Service Key: 4c2cfa78-c91f-4b9f-9223-33c49692267b

Default Name: Content Sharing and Transfer Service

Service Names:

Name	Language
Content Sharing and Transfer Service	ab
File Sharing and Transfer Service	en

Finish Cancel

Descriptions

Click the Descriptions tab to view the descriptions that were saved for the business service.

The Descriptions tab lists the business service descriptions with their associated languages in a table format.

No Service descriptions available is displayed if no descriptions have been provided for the business service.

Figure 151 Descriptions Tab under View Service Details

View Service Details Service Key : 4c2cfa78-c91f-4b9f-9223-33c49692267b

Details | **Descriptions** | Categories | Bindings

Service Descriptions:

Description	Language
This services provides file sharing by content analysis	yo
This service enables to search shared file contents	en

Finish Cancel

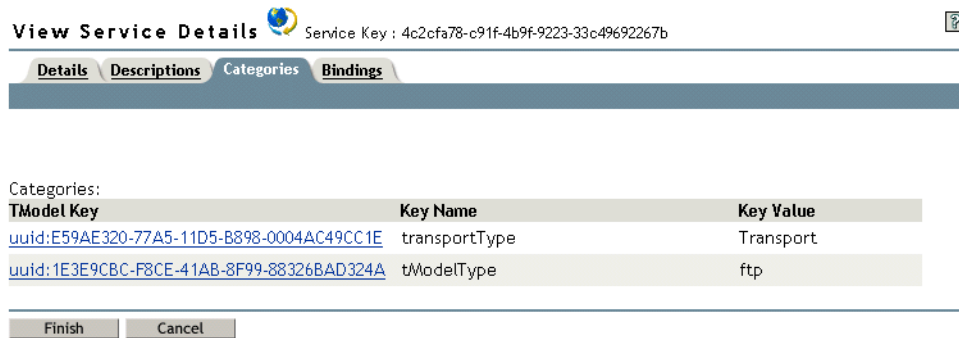
Categories

Click the Categories tab to view the category bags associated with the business service that were saved for the business service.

The Categories tab lists the category bags that are related to the business service in a table format. The TModel keys appear as links that open pop-up windows that display complete details including the TModel names and descriptions, language, category bags, identifier bags and overview URLs and descriptions of the TModel.

No Categories available is displayed if no category bags have been provided for the business service.

Figure 152 Categories Tab under View Service Details



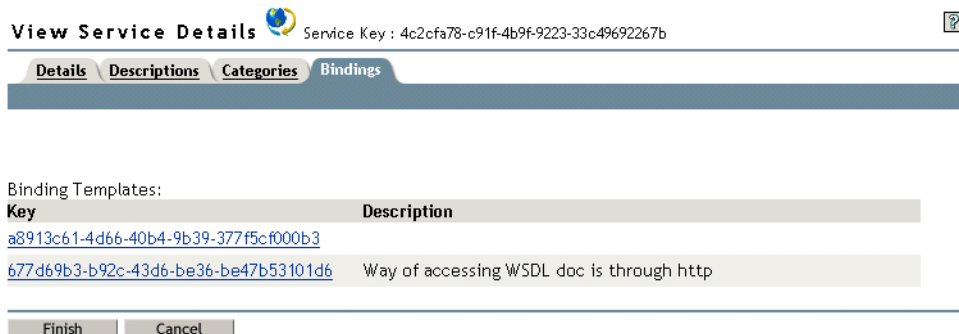
Bindings

Click the Bindings tab to view the binding templates published for the business service.

The Bindings tab provides a list of binding templates with their default descriptions. The binding template keys appear as links to the complete details of the selected binding template.

No binding templates available is displayed if no binding templates have been published for the business service.

Figure 153 Bindings Tab under View Service Details



View Binding Details

This task provides complete information for a selected binding template.

Descriptions

This is the default tab that displays the following information:

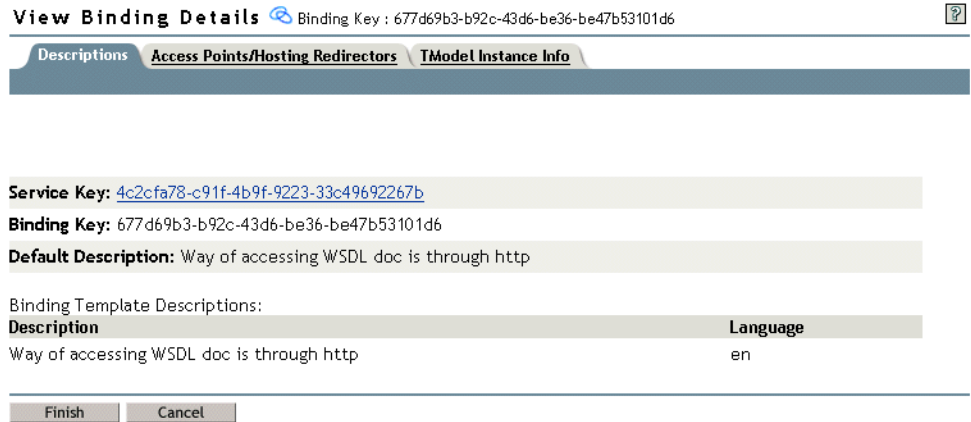
- ◆ **Service Key**
The business service key under which the binding template was published.
- ◆ **Binding Key**
The key of the binding template whose complete details are displayed.
- ◆ **Default Description**
The description given to a binding template when it was first saved.

◆ Binding Template Descriptions

A list of descriptions of the binding template with their associated languages in a table format.

No binding template descriptions available is displayed no descriptions are provided for the binding template.

Figure 154 Description Tab under View Binding Details

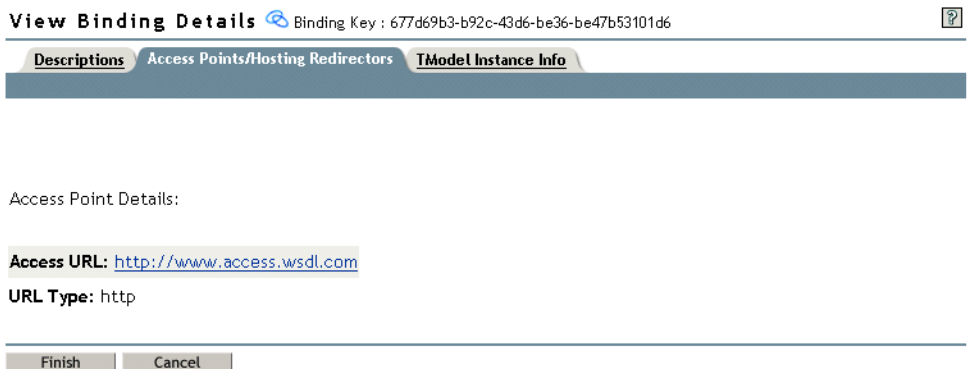


Access Points/Hosting Redirector

Click the Access Point/Hosting Redirectors tab to view the access point or the hosting redirectors saved for the binding template.

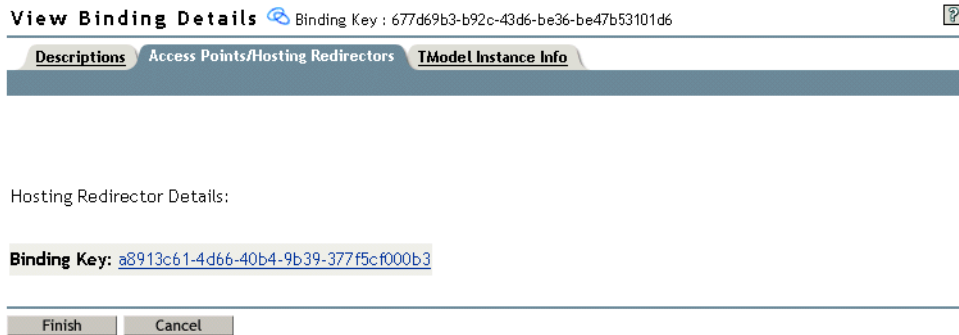
The access points and hosting redirectors are mutually exclusive. The access point URLs appear as links that open in new browser windows.

Figure 155 Access Points/Hosting Redirectors Tab under View Binding Details



The View Binding Details page provides the details of the hosting redirector, which is the Binding key of another published binding template. The binding key appears as a link that opens up a pop-up window that displays the complete details, including the descriptions, access points/hosting redirectors, and TModel instance information of the binding template.

Figure 156 Hosting Redirector Tab under View Binding Details



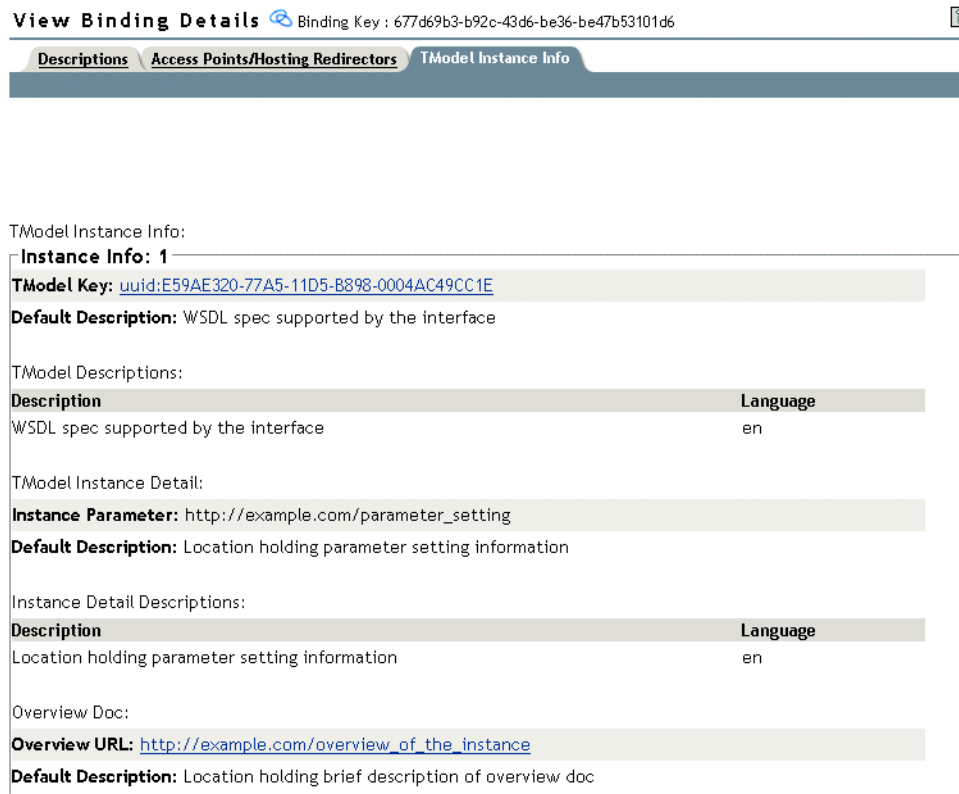
TModel Instance Info

Click the TModel Instance Info tab to view the TModel instance information for the binding template.

The TModel Instance Info tab provides the complete information about the TModel, including the TModel key, descriptions, TModel instance details, and details of the overview document. The TModel key appears as a link that opens up a pop-up window that provides complete details of the TModel, including the TModel names, descriptions, categories, identifiers, and overview document. The overview URLs also appear as links that open in new browser windows.

No TModel Instance Info available is displayed if no TModel instance information has been provided for the binding.

Figure 157 TModel Instance Info Tab under View Binding Details



View TModel Details

This task provides complete information for a selected TModel.

Descriptions

The Descriptions tab (the default view) displays the following information:

- ◆ **TModel Key**

The key of the TModel whose complete details are displayed.

- ◆ **TModel Name**

The name provided for the TModel during publishing.

- ◆ **Authorized Name**

The name of the publisher of the TModel.

- ◆ **Operator Name**

The name of the operator who owns or operates the UDDI server being accessed.

- ◆ **Default Description**

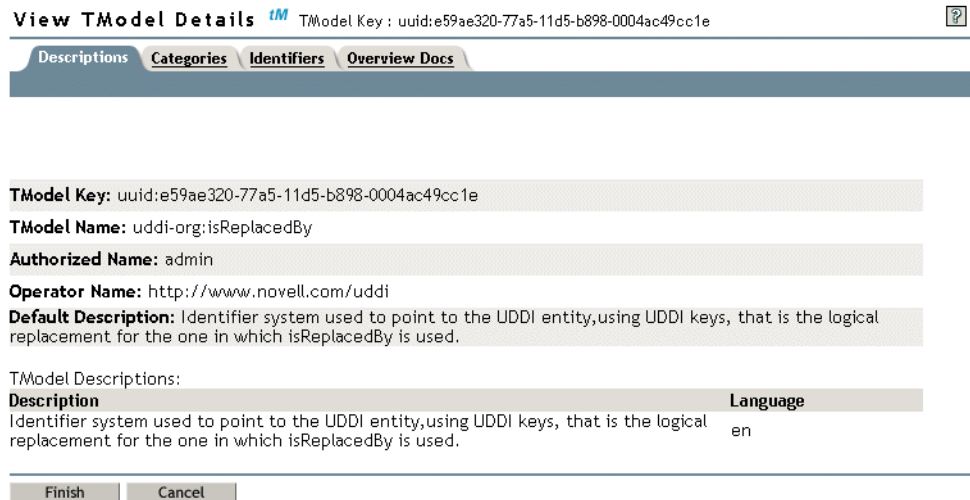
The description given to the TModel when it was first saved.

- ◆ **TModel Descriptions**

A list of descriptions of the TModel with their associated languages in a table format.

No TModel descriptions available is displayed if no descriptions are provided for the TModel.

Figure 158 Descriptions Tab under View TModel Details



Categories

Click the Categories tab to view the associated category bags saved for the TModel.

The Categories tab lists the category bags that are related to the TModel in a table format. The TModel keys appear as links that open pop-up windows that display the complete details, including the TModel names and descriptions, language, category bags, identifier bags, and overview URLs, and descriptions of the TModel.

No Categories available is displayed if no category bags have been provided for the TModel.

Figure 159 Categories Tab under View TModel Details

View TModel Details TM TModel Key : uuid:e59ae320-77a5-11d5-b898-0004ac49cc1e

Descriptions Categories Identifiers Overview Docs

Categories:

TModel Key	Key Name	Key Value
uuid:0d31f1e6-624b-4f81-8d75-c36f96bf333c	D-U-N-S Number	00-109-8907

Finish Cancel

Identifiers

Click the Identifiers tab to view the identifier bags associated with the TModel.

The identifiers tab lists the identifier bags related to the TModel in a table format. The TModel keys appear as links that open pop-up windows that displays the complete details including, the TModel names and descriptions, category bags, identifier bags, overview URLs, and descriptions of the TModel.

No Identifiers available is displayed if no identifier bags have been provided for the TModel.

Figure 160 Identifiers Tab under View TModel Details

View TModel Details TM TModel Key : uuid:e59ae320-77a5-11d5-b898-0004ac49cc1e

Descriptions Categories Identifiers Overview Docs

Identifiers:

TModel Key	Key Name	Key Value
uuid:E59AE320-77A5-11D5-B898-0004AC49CC1E	tModelType	ftp
uuid:CD153257-086A-4237-B336-6BDCBDCC6634	transportType	Transport

Finish Cancel



Overview Doc

Click the Overview Docs tab to view the overview document information associated with the TModel.

The Overview Docs tab provides information about the overview document related to the TModel. The overview URL in a new browser window. The overview document descriptions along with their associated languages are displayed in table format.

No Overview Doc descriptions available is displayed if no overview document descriptions have been provided for the TModel.

Figure 161 Overview Docs Tab under View TModel Details

View TModel Details  TModel Key : uuid:e59ae320-77a5-11d5-b898-0004ac49cc1e 

Descriptions **Categories** **Identifiers** **Overview Docs**

Overview Doc:

Overview URL: http://www.uddi.org/taxonomies/UDDI_Taxonomy_tModels.htm

Default Description: This is a checked value set.

Overview Doc Descriptions:

Description	Language
This is a checked value set.	en

8

Performance Tuning

This section describes the performance tuning tips for improved performance of Novell® Nsure™ UDDI Server.

You can tune UDDI to improve performance in several areas:

General Performance Tips

- ◆ The UDDI Base context container can be a separate Novell eDirectory™ partition under the tree root. You can create indexes for attributes that are used by the UDDI server to perform search operations on eDirectory. The attributes used by the UDDI server are `uddiName`, `uddiDiscoveryURLs`, `uddiIdentifierBag`, `uddiCategoryBag`, `uddiBusinessKey`, `uddiServiceKey`, and `uddiTModelKey`.
- ◆ If a UDDI server is deployed within a secure enterprise environment, it might not be necessary for UDDI inquiry operations to be done over SSL. Administrators can enable Authenticated Inquiry over a non-SSL channel in the UDDI Server Configuration task to allow authenticated inquiries coming over non-SSL connections to be accepted by the UDDI server.
- ◆ Selecting a non-SSL iManager session to the iManager server in the UDDI administrative interface or the user interface improves performance.
- ◆ Provide a specific and accurate filter to narrow down the search results for the **Find** and **Access Management** tasks. A broad filter can potentially return a large number of UDDI entries, which impacts performance.

Increasing JVM Memory

- ◆ Ensure that the JVM has enough memory to handle large requests to the UDDI server. This can be done using options `-Xmx` and `-Xms`.

For example:

- ◆ To set a higher memory for JVM on UNIX* (assuming the user is in the Application Server/bin directory and using bash shell)

```
bash#>export JAVA_OPTS=-Xmx 1024m
```

This sets the upper limit to 1024 MB.

Restart Application Server.

- ◆ To set a higher memory for JVM on Windows (assuming the user is in the Application Server/bin directory)

```
>set JAVA_OPTS=-Xmx 1024m
```

This sets the upper limit to 1024 MB.

Restart Application Server.

An OutofMemoryError error might occur for some requests, depending on the request size.

Scaling Tomcat for Multiple Clients

To scale Novell Nsure UDDI Server to support large number of clients simultaneously, increase the maximum number of requests that can be handled concurrently by the Tomcat server.

If you are using a Tomcat4 Apache Web server, increase the value of the *maxProcessors* attribute under the AJP 1.3 Connector in the TOMCAT_HOME/conf/Server.xml file to increase number of concurrent request processing threads.

Changing File Handles for Scalability

- ◆ If you deploy Novell Nsure UDDI Server for a very high number of user accesses, the scalability is affected by the number of file handles that a process can open. This is common on UNIX variants. On Solaris, the file handles are set to 256 by default.

For higher user access, increase the limit of the file handle by using the following bash shell command:

```
ulimit -n <increased-limit>
```

For example, on Linux, the file handle limits can be increased as follows:

```
bash#> ulimit -a
```

This displays the current settings.

```
core file size (blocks, -c) 0
data seg size (kbytes, -d) unlimited
file size (blocks, -f) unlimited
max locked memory (kbytes, -l) unlimited
max memory size (kbytes, -m) unlimited
open files (-n) 1024 (File Handles settings)
pipe size (512 bytes, -p) 8
stack size (kbytes, -s) 8192
cpu time (seconds, -t) unlimited
max user processes (-u) 4091
virtual memory (kbytes, -v) unlimited
bash#> ulimit -n 2000
```

This increases the setting to 2000.

Restart Tomcat

- ◆ For improved server performance, we strongly recommend that you use the default values provided in the administration interface. The Debug logger level should be used sparingly and in a need-based manner.

9

Troubleshooting

This section explains the troubleshooting information for Novell® Nsure™ UDDI Server.

- ◆ [“Installation” on page 157](#)
- ◆ [“Configuration” on page 159](#)
- ◆ [“Scalability and Performance” on page 160](#)
- ◆ [“Administration Utility” on page 160](#)
- ◆ [“User Interface” on page 161](#)
- ◆ [“Additional Troubleshooting Tips” on page 163](#)
- ◆ [“Unsupported Features” on page 164](#)
- ◆ [“Known Issues” on page 164](#)

Installation

[“Uninstallation” on page 157](#)

[“Post-Installation” on page 157](#)

[“Unable to contact the LDAP server: IP address:port” on page 158](#)

[“Integrated NetWare Install” on page 158](#)

[“E_JVM: Install cannot run on this configuration. Ensure that you have JVM 1.4 in the PATH and try again.” on page 158](#)

[“Roles and Tasks are not displayed” on page 158](#)

Uninstallation

Explanation: On Windows servers, clicking Remove on Novell Nsure UDDI Server from Windows Add/Remove program does not uninstall the UDDI server.

Possible Cause: The UDDI server, UDDI administrator and user interface components might have been installed in different directories. So the Add/Remove program removes only the last UDDI component that was installed.

Action: Click UDDIUninstall.exe from *Tomcat_home*\webapps\UDDIUninstall directory to uninstall the UDDI server.

Post-Installation

Explanation: After installing the UDDI server, the UDDI service is not up and running. Verification from a browser does not connect to the UDDI service.

Possible Cause: You have installed the UDDI server onto a Tomcat container and have not restarted Tomcat.

Action: Restart Tomcat and ensure that the UDDI service is up and running by using a browser.

Unable to contact the LDAP server: *IP address:port*

Possible Cause: UDDI install tries to authenticate to Novell eDirectory™ services using the admin credentials specified during installation and found that eDirectory services are down.

Action: Check the LDAP host IP address and the LDAP port number on which the eDirectory LDAP server is listening.

Check if eDirectory is up and running. If it is not up and running, start eDirectory.

Integrated NetWare Install

Explanation: After installing the NetWare® OS, the UDDI service is not up.

Possible Cause: The user might not have selected Novell Nsure UDDI Server in the components page during NetWare installation.

Action: Perform a post-installation and add Novell Nsure UDDI Server to the list of components to install.

E_JVM: Install cannot run on this configuration. Ensure that you have JVM 1.4 in the PATH and try again.

Action: On UNIX, if JVM 1.4 is available in the path and if this error persists, create a link in the /bin directory for the JVM 1.4 Java executable by executing the following command:

```
ln -s java_home/bin/java /bin/java
```

Roles and Tasks are not displayed

Possible Cause: The iManager version is not compatible for UDDI snap-ins:

- ◆ Installer contains UDDI snap-ins that are not for NPS-supported iManager 1.5
- ◆ Installer contains UDDI snap-ins that are for NPS-supported iManager 2.0

Possible Cause: *If admin roles and tasks are not displayed:* The required jar, htt, and property files for the administrator interface are not in the proper directory.

The jar files must be available in WEB-INF\lib directory. The htt files must be available in the WEB-INF\classes\templates\browser\uddi directory. The UddiResources.properties file must be available in the WEB-INF\classes\templates directory.

If the user roles and tasks are not displayed: The required jar, htt, and properties files for the user interface are not in the proper directory.

The jar files must be available in the WEB-INF\lib\uddiUA.jar directory. The htt files must be available in the WEB-INF\classes\templates\browser\uddiUA directory. The uddiUAResources.properties file must be available in the WEB-INF\classes\templates directory.

Possible Cause: The user might not have rights to use the roles and tasks.

Certificate could not be imported

Explanation: The installation program is unable to import the certificate that the user has trusted.

Possible Cause: The user might not have write permissions to the JVM keystore.

Action: Ensure that user has write permissions to the file *JAVA_HOME/jre/lib/security/cocerts*.

Configuration

- ◆ We strongly recommend that you do not attempt publish operations against a UDDI server that is configured with eDirectory hosting a read-only replica of UDDI data. Some operations might fail because of the synchronization latencies between the master/read-write replica and the host server with the read-only replica.

The inquiry and publish URLs must refer to the same UDDI server.

- ◆ If you encounter an `Unable to reach UDDI server` error in the user interface, ensure that you have the proper inquiry and publish URLs using the UDDI administration interface. If the URLs are configured to go over https, you must perform the [Add SSL Provider](#) and [Import Certificate](#) tasks.

Ensure that you have administrative rights on the machine where iManager is installed or log out from the workstation and log in again as administrator or the root user.

The communication to the server has failed

Explanation: The UDDI server is unable to start.

Possible Cause: Any of the following might be true:

- ◆ The LDAP Server is not listening on the specified hostname and port.
- ◆ The `UseSSLForLDAP` option is set to `No/False` in the `uddi.conf` file and the LDAP server does not allow a simple bind.
- ◆ The LDAP Server certificate was imported into the keystore of a JVM other than the one used to run the UDDI server.

Action: Do the following:

- 1** Verify the validity of the LDAP server hostname and port number.
- 2** In iManager, change the settings of the LDAP server to allow a simple bind.
 - 2a** Click the LDAP Management role, then click the LDAP Overview task.
 - 2b** Select the View LDAP Groups page, click the Group object, then disable the Require TLS for Simple Binds with Password option.
 - 2c** Select the View LDAP Server page, click the Server object, then click Refresh.
- 3** Use the Java keytool to import the LDAP server certificate into the JVM used to run the UDDI Server.

Scalability and Performance

“[java.Lang.OutOfMemoryError](#)” on page 160

“[Some Requests are rejected by Apache Server](#)” on page 160

java.Lang.OutOfMemoryError

Possible Cause: When a Search operation is performed for a large number of results (such as 5000 business entities), there might be a system error reported because of insufficient memory allocation to JVM. This can be clarified by clicking Details, which indicates 'java.Lang.OutOfMemoryError'.

Action: See “[Increasing JVM Memory](#)” on page 155.

Some Requests are rejected by Apache Server

Possible Cause: When a large number of clients attempt to access the server simultaneously, the maximum number of requests that can be concurrently handled is affected by the settings in the Tomcat4 conf/server.xml file.

Action: See “[Scaling Tomcat for Multiple Clients](#)” on page 156.

Administration Utility

“[Unauthorized user tried to access the server configuration management task](#)” on page 160

“[Unable to get one or more of the server object attributes Inquiry URL, Publish URL, Base Context or e-mail ID](#)” on page 160

“[Invalid Server Object. Enter a valid Server object and try again](#)” on page 160

“[An internal error has occurred. Unable to interact with eDirectory](#)” on page 160

“[Unable to find the UDDI Base Context](#)” on page 161

“[TModel container not found](#)” on page 161

“[One or more Subject entities are invalid](#)” on page 161

“[Unable to connect to the specified server](#)” on page 161

Unauthorized user tried to access the server configuration management task

Possible Cause: The user does not have appropriate rights to view or modify the UDDI server object.

Unable to get one or more of the server object attributes Inquiry URL, Publish URL, Base Context or e-mail ID

Possible Cause: The inquiry and publish URLs, base context, or e-mail ID attribute values are null or the user does not have rights to read these attributes.

Invalid Server Object. Enter a valid Server object and try again

Possible Cause: The UDDI server object does not exist or the FDN specified is incorrect.

An internal error has occurred. Unable to interact with eDirectory

Possible Cause: eDirectory might be down or the attribute values specified are incorrect.

Unable to find the UDDI Base Context

Possible Cause: The retrieved base context value is null. That is, the base context attribute is not available for the server object.

TModel container not found

Possible Cause: The TModel container does not exist in the base context.

One or more Subject entities are invalid

Possible Cause: One or more subject entities (trustees) are invalid. That is, the trustees and the context do not exist, or the trustees are named in typeful format.

Unable to connect to the specified server

Possible Cause: The server might be down or the specified server is not a valid server.

User Interface

“Connection lost (10110 or 10120): Connection has been re-established. Please try again” on page 161

“E_accessDenied (10150): Not authorized to access the selected server” on page 161

“E_messageTooLarge (30110): Request size too large. Please contact admin” on page 161

“E_accountLimitExceeded (10160): Session limit has been reached; no more requests accepted” on page 162

“E_BUSY (10400): Session limit has been reached; no more requests accepted” on page 162

“Unable to contact UDDI Server (81): UDDI Server or network connection may be down. Please try after some time” on page 162

“E_InvalidKeyPassed (10210)” on page 162

“E_unrecognizedVersion (10040): Unsupported version. Only 2.0 requests accepted.” on page 162

“Internal Error: Internal error occurred. Please contact admin” on page 162

“E_fatalError (10500): eDirectory communication failed” on page 163

Connection lost (10110 or 10120): Connection has been re-established. Please try again

Possible Cause: The authentication token has expired.

Action: Repeat the task.

The client has internally re-established the connection with the server.

E_accessDenied (10150): Not authorized to access the selected server

Possible Cause: A user has attempted to modify the data owned by another user.

E_messageTooLarge (30110): Request size too large. Please contact admin

Possible Cause: The SOAP request message size is configured to a lower value than the required value.

Action: The administrator must configure the maximum size of a SOAP message to an appropriate value. The default is 2 MB.

E_accountLimitExceeded (10160): Session limit has been reached; no more requests accepted

Possible Cause: The number of connections established to the server has exceeded the configured value.

Action: If the save or publish request of a particular user exceeds the quantity limits configured for that UDDI entity. The administrator has to configure the business entities per user, business services per business entity, binding templates per business service, and tModels per user parameters to appropriate values.

E_BUSY (10400): Session limit has been reached; no more requests accepted

Possible Cause: The limit set by the administrator for the maximum back-end connections parameter to eDirectory has been exceeded, so the UDDI server refuses new connection requests from clients.

Action: The administrator can allow more clients to access the UDDI server by increasing the value of maximum back-end connections appropriately.

This takes effect after the UDDI server reconfigures itself (depending on the reconfiguration interval) or immediately if the server is restarted.

Unable to contact UDDI Server (81): UDDI Server or network connection may be down. Please try after some time

Possible Cause: The UDDI server might not be running.

Action: Verify whether the UDDI server is running by performing [Step 8 on page 32](#).

Possible Cause: The publish or inquiry URL configuration in the server object might be incorrect.

Action: Use the appropriate publish and inquiry URLs:

- ◆ For Tomcat Standalone:

`http://hostname:8080/novelluddi/servlet/rpcrouter`

- ◆ For Tomcat/Apache:

`http://hostname/novelluddi/servlet/rpcrouter`

- ◆ For Tomcat/Apache with SSL:

`https://hostname/novelluddi/servlet/rpcrouter`

Possible Cause: The server URL might be configured for https, but the necessary certificate might not have been imported to the iManager server.

Action: See [“Importing a Certificate” on page 45](#).

E_InvalidKeyPassed (10210)

Possible Cause: The UUID key of the UDDI entity does not exist or the user does not have rights to access the entity.

E_unrecognizedVersion (10040): Unsupported version. Only 2.0 requests accepted.

Possible Cause: The requests are not version 2.0.

Internal Error: Internal error occurred. Please contact admin

Possible Cause: A serious technical error has occurred while processing the request.

Action: The administrator must refer the UDDI server log file for more specific information. See [“Logging” on page 49](#).

E_fatalError (10500): eDirectory communication failed

Possible Cause: eDirectory service is down.

Action: Bring up the eDirectory server.

Possible Cause: LDAP connection is invalid. This might be because of the following:

- ◆ The eDirectory server was restarted
- ◆ The user has multiple concurrent connections established to the server and discarded any of these connections

Action: If the server has been restarted, re-authenticate after a period of one minute.

If the user has multiple connections established to the server, re-authenticate. If you encounter this error in the user interface, re-authenticate later or contact the administrator.

Additional Troubleshooting Tips

- ◆ If eDirectory is not reachable, the UDDI server stops its activities. After the eDirectory becomes reachable, it automatically resumes normal operation after a maximum period of one minute.
- ◆ The number of search results specified during the Search operations is not returned if the administrator has set the maximum number of search results per request to a lower value.
- ◆ **Server Selection not succeeded**
It might be because of the browser caching. In Internet Explorer, Click Tools > Internet Options > Settings. Change the default settings from Never to Every visit to the page under Check for newer versions of stored pages.
- ◆ If the roles and tasks are properly configured but not displayed in the left pane of iManager, it might be due to the non-availability of the corresponding http or jar files. Reinstall the snap-ins as described in [“Installing or Upgrading UDDI Plug-Ins” on page 38](#).
- ◆ If the UDDI server is SSL-enabled and user snap-ins are not working properly, execute the [Add SSL Provider](#) and [Import Certificate](#) tasks.
If there are problems executing these tasks, ensure that the ecb.jar and ecbsecurity.jar files are available under the webapps\lib directory.
- ◆ If you encounter a FATAL_ERROR, Document Root Null Type response for a UDDI request, remove the later versions of Xerces*.jar that exists in the TOMCAT_HOME/common/endorsed directory and restart Tomcat.
This error occurs because Novell Nsure UDDI Server does not work with this version of the Xerces implementation that is available with Tomcat 4.1.x.
- ◆ On NetWare, if you encounter a FATAL_ERROR, Document Root Null Type error, remove the Xerces*.jar located at TOMCAT_HOME/common/endorsed directory and copy uddi_v2.xsd file located at TOMCAT_HOME/webapps/novelluddi/WEB-INF/conf to TOMCAT_HOME.
- ◆ Changing the context of a user in eDirectory invalidates an existing UDDI session held by the user. Requests with this session ID are rejected stating insufficiency of rights. This can be solved by reauthenticating to the UDDI server.
- ◆ If you encounter a FATAL_ERROR with the message *eDirectory error* while the server processes a large request, configure the idle timeout parameter in the [“Security” on page 47](#) to a higher value and retry.

- ◆ The message `WARNING: javax.naming.SizeLimitExceededException: [LDAP: error code 4 - Sizerlimit Exceeded]` is found in the log file, when the UDDI server is unable to retrieve the complete information from the LDAP server. This is because of the search entry limit parameter configured in the LDAP server. You must modify this parameter suitably for the UDDI server to retrieve all information available in the LDAP server.

An error `E_fatalError` with the message `Internal Server Error` is returned to the UDDI client.

Unsupported Features

The following are the UDDI v2 features that are not currently supported:

- ◆ Publisher assertions and related APIs are not supported.
- ◆ The `caseSensitiveMatch` qualifier is not supported.
- ◆ UDDI v1.0 requests are not accepted.
- ◆ Checked taxonomies for identifiers and categorizations are not supported.
- ◆ No validation is done for the language attribute against RFC 1766 as outlined in the specification.
- ◆ Discovery URLs are not generated for business entities published in the server.

Known Issues

- ◆ Do not use the browser's Back and Forward buttons for navigating through the UDDI administration and user access interface. Instead, use the navigation provided within the application.
- ◆ Do not use the Open in New Window option in Internet Explorer and the Open Link in New Window option in Mozilla and Galeon.
- ◆ If the same user authenticates to the UDDI server from multiple workstations, performing a `discard_authtoken` (logout) on any one of these workstations will log out all the current connections established by that user; the operation that is in progress will not be affected. We recommend that you do not allow using the same user identity from multiple workstations.
- ◆ The basic look-and-feel of the utility differs from one browser to another, including the following:
 - ◆ Fieldsets (for example, the Inquiry and Publish fieldsets on the Set Rights for UDDI Base Context page in the Access Management)
 - ◆ Tabbed options
 - ◆ Width of the list boxes (combo boxes)
 - ◆ Size of the frames and relative separation
 - ◆ Changes in the GUI appearance within a fieldset are not displayed (such as changing the label of a control or enabling/disabling a button). However, the functionality remains in tact.

For instance, this happens when you check the Public check box on the Set Rights for Base Context page in the Admin Access Management. The Object Selector should be disabled. Functionally, this disabling occurs, but it is not visible to the user.

- ◆ On Mozilla and Galeon, only a single object can be selected using the Object Selector icon.
- ◆ To uninstall the NetWare integrated installation, you must manually delete the novelluddi folder in the Tomcat_home\webapps\ directory. Also, delete the sys:\uddi directory.
- ◆ In the Advanced Search pages, the focus is on the address bar when you press Tab for the first time on this page or when you press Tab after the page has been refreshed dynamically.
- ◆ If the owner of the referenced business service has removed inquiry rights, the service is displayed with a name Broken Service Reference. The business entity that has a broken service reference cannot be saved unless the broken service reference is resolved.
- ◆ A blank page is displayed in iManager if the corresponding plug-ins or resource files are missing. For further assistance, please contact the administrator.
- ◆ The UDDI Server does not get upgraded automatically if you are upgrading your NetWare 6.5 Server with the Support Pack. For more information about upgrading the server, refer to [“Installing UDDI on NetWare” on page 28](#).

A

UDDI Data Structures

UDDI supports the following four core data structures:

- ♦ “Business Entity” on page 167
- ♦ “Business Service” on page 170
- ♦ “Binding Template” on page 171
- ♦ “TModel” on page 173

Business Entity

The business entity structure represents all known information about a business or entity. It publishes descriptive information about the entity as well as the services that it offers. From an XML standpoint, the business entity is the top-level data structure that accommodates descriptive information about a business or entity. Service descriptions and technical information are expressed within a business entity through a containment relationship.

Field	Description
businessKey	Attribute. Specifies the UUID for a given instance of a businessEntity structure expressed as a UUID of up to 41 characters.
authorizedName	Attribute. Specifies the name of the individual that published the businessEntity data expressed as a string of up to 255 characters. This data is generated by the controlling operator.
operator	Attribute. Specifies the certified name of the UDDI registry site operator that manages the master copy of the businessEntity data expressed as a string of up to 255 characters. The controlling operator records this data at the time data is saved.
discoveryURLs	Optional element. Lists URLs that point to alternate, file-based service discovery mechanisms as discoveryURL structures. Each recorded businessEntity structure is automatically assigned a URL that returns the individual businessEntity structure.
name	Required repeating element. Specifies the human-readable names recorded for the businessEntity, with unique xml:lang values to signify the language that they are expressed in. Each name is a string of up to 255 characters.
description	Optional repeating element. One or more short business descriptions each expressed as a string of up to 255 characters. One description is allowed per national language code supplied.
contacts	Optional element. Lists contact information as contact structures.
businessServices	Optional element. Lists of one or more logical business services as businessService structures.

Field	Description
identifierBag	Optional element. Lists name-value pairs that can be used to record identifiers for a businessEntity. Its data type is the identifierBag structure.
categoryBag	Optional element. Lists name-value pairs that are used to tag a businessEntity with specific taxonomy information (such as industry, product, or geographic codes). Its data type is the categoryBag structure.

Discovery URLs

The discoveryURLs structure contains pointers to URL addressable discovery documents. Each individual discovery URL consists of an attribute whose value designates the URL use type (usage) convention, and a string. The URL points to an instance of a business entity or businessEntityExt structure, and the useType attribute of the discoveryURL is set to either businessEntity or businessEntityExt according to the data type. The discoveryURLs collection is augmented so that it includes this generated URL. The expected retrieval mechanism for URLs referenced in the data within this structure is HTTP-GET.

Field	Description
discoveryURL	Attribute. Qualified repeating element. Specifies holding strings that represent Web addressable locations (via HTTP-GET) expressed as a string of up to 255 characters w/ attributes.
useType (Usage)	Required attribute. Designates the name of the convention that the referenced document follows as a string of up to 255 characters. Two reserved convention values are businessEntity and businessEntityExt. URLs qualified with these values should point to XML documents of the same type as the useType value.

Contacts

The contacts structure provides a way for information to be registered with a businessEntity record so that someone who finds the information can make human contact for any purpose.

The contacts structure itself is a simple collection of contact structures.

Field	Description
useType (Usage)	Optional attribute. Describes the type of contact in free-form text (a string of up to 255 characters). Suggested examples include technical questions, technical contact, establish account, sales contact, etc.
description	Optional element. Contains language-qualified descriptions why the contact should be used in the form of a string of up to 255 characters.
personName	Required element. Specifies the name of the person or job role to contact, expressed as a string of up to 255 characters. Examples of roles include Administrator or Webmaster.
phone	Optional repeating element. Contains telephone numbers for the contact expressed as a string of up to 50 characters with attributes. This element can have an optional useType (Usage) attribute for descriptive purposes. If more than one phone element is saved, useType attributes are required for each.

Field	Description
email	Optional repeating element. Contains e-mail addresses for the contact expressed as a string of up to 255 characters with attributes. This element can also have an optional useType (usage) attribute for descriptive purposes. If more than one e-mail element is saved, useType attributes are required for each.
address	Optional repeating element. Represents the printable lines suitable for addressing an envelope expressed as address structures.

Address

The address structure is a simple list of addressLine elements within the address container. Each addressLine element is a simple string.

Field	Description
useType (usage)	Optional attribute. Describes the type of address in free-form text expressed as a string of up to 255. Suggested examples include headquarters, sales office, billing department, etc.
addressLine	Optional repeating element. Contains the actual address in free-form text expressed as a string of up to 255 characters with attributes. If the address element contains a tModelKey, these addressLine elements need an optional keyName/keyValue attribute pair.

Address Line: AddressLine elements contain string data with a line length limit of 80 character positions. Each addressLine element can have two optional descriptive attributes, keyName and keyValue.

Identifier Bag

The identifierBag element allows businessEntity or tModel structures to include information about common forms of identification such as D-U-N-S numbers or tax identifiers. This data can be used to signify the identity of the businessEntity, or can be used to signify the identity of the publishing party.

Category Bag

The categoryBag element allows businessEntity, businessService, and tModel structures to be categorized according to any of several available taxonomy-based classification schemes. Operator sites automatically provide validated categorization support for three taxonomies that cover industry codes (through NAICS) and product and service classifications (through UNSPC).

- ◆ For NAICS industry codes, see the [NAICS home page \(http://www.census.gov/epcd/www/naics.html\)](http://www.census.gov/epcd/www/naics.html).
- ◆ For UNSPC industry codes, see the [UNSPC home page \(http://www.un-spsc.net\)](http://www.un-spsc.net).

Business Service

A business service structure represents a logical service classification. The name of the element includes the term "business" in an attempt to describe the purpose of this level in the service description hierarchy. Each businessService structure is the logical child of a single businessEntity structure. The identity of the containing (parent) businessEntity is determined by examining the embedded businessKey value. Each businessService element contains descriptive information in business terms outlining the type of technical services found within each businessService element. In some cases, businesses need to share or reuse services, such as in a large enterprise that publishes separate businessEntity structures. This can be established by using the businessService structure as a projection to an already published businessService. Any businessService projected in this way is not managed as a part of the referencing businessEntity, but centrally as a part of the referenced businessEntity. This means that changes to the businessService by the referenced businessEntity are automatically valid for the service projections done by referencing businessEntity structures.

Field	Description
businessKey	This attribute is optional when the businessService data is contained within a fully expressed parent that already contains a businessKey value. If the businessService data is rendered into XML and has no containing parent that has within its data a businessKey, the value of the businessKey that is the parent of the businessService must be provided. The businessKey can differ from the publishing businessEntity's businessKey to allow service projections. The businessKey is a UUID of up to 41 characters.
serviceKey	Specifies the unique key for a given businessService expressed as a UUID of up to 41 characters.
Name	Optional repeating element. Specifies the human-readable names recorded for the businessService, marked as with unique xml:lang values that signify the languages that they are expressed in. Name search is provided through calls to find_service. Names are strings of up to 255 characters.
description	Optional element. Specifies language-qualified text descriptions of the logical service family expressed as strings of up to 255 characters.
bindingTemplates	Contains the technical service description information related to a given business service family expressed as a bindingTemplate structure.
categoryBag	Optional element. Lists name-value pairs that are used to tag a businessService with specific taxonomy information (for example, industry, product, or geographic codes). Its data type is the categoryBag structure.

Service Projections

Service projections allow a business entity to advertise the business service of another business entity as if it were its own.

A projected business service is made a part of a business entity by reference rather than containment. References to the same service can be made in any number of business entities.

When a business entity references a service from another business entity, the business key of the service that is being referenced continues to be the same. However, the referenced service appears as if it were contained in the business entity that is referencing it.

You must have inquiry rights to the business service that you want to reference. If the owner of the referenced business service has removed inquiry rights or if the service referenced is deleted, the service is displayed with a name as Broken Service Reference. In this case, the business entity containing a broken service reference cannot be saved unless the broken service reference is resolved.

Binding Template

Technical descriptions of Web services are accommodated through individual contained instances of bindingTemplate structures. These structures provide support for determining a technical entry point or optionally supporting remotely hosted services, as well as a lightweight facility for describing unique technical characteristics of a given implementation. Support for technology and application-specific parameters and settings files are also supported. Because UDDI's main purpose is to enable description and discovery of Web service information, it is the bindingTemplate that provides the most valuable technical data. Each bindingTemplate structure has a single logical businessService parent, which in turn has a single logical businessEntity parent.

Field	Description
bindingKey	Specifies the unique key for a given bindingTemplate expressed as a UUID of up to 41 characters.
serviceKey	This attribute is optional when the bindingTemplate data is contained within a fully expressed parent that already contains a serviceKey value. If the bindingTemplate data is rendered into XML and has no containing parent that has within its data a serviceKey, the value of the serviceKey that is the ultimate containing parent of the bindingTemplate must be provided. This behavior supports the ability to browse through the parent-child relationships given any of the core elements as a starting point. The serviceKey is a UUID of up to 41 characters.
description	Optional repeating element. Specifies language-qualified text descriptions of the technical service entry point expressed as strings of up to 255 characters.
accessPoint	Required attribute qualified element. Specifies the entry point address to access a particular Web service. This can be a URL, an e-mail address, or a telephone number. The accessPoint is a string of up to 255 characters w/attributes.
Hosting Redirector	Required element if the accessPoint is not provided. Provides a bindingKey attribute, referencing a different bindingTemplate. Its data type is empty w/attributes.
tModel Instance Details	Lists zero or more tModelInstanceInfo elements expressed as tModelInstanceDetails structures. This data, taken in total, should form a distinct fingerprint that can be used to identify compatible services.

Access Point

The access point element is an attribute-qualified pointer to a service entry point. A service at the meta-data level seen here is fairly abstract and many types of entry points are accommodated. A single attribute is provided (named URLType). The purpose of the URLType attribute is to facilitate searching for entry points associated with a particular type of entry point. The valid values for URLType are:

- ♦ *mailto*: Designates that the accessPoint string is formatted as an e-mail address reference (for example, mailto:purch@fabrikam.com).
- ♦ *http*: Designates that the accessPoint string is formatted as an HTTP-compatible URL (for example, http://www.fabrikam.com/purchasing).

- ◆ *https*: Designates that the accessPoint string is formatted as a secure HTTP compatible URL (for example `https://www.fabrikam.com/purchasing`).
- ◆ *ftp*: Designates that the accessPoint string is formatted as a FTP directory address (for example `ftp://ftp.fabrikam.com/public`).
- ◆ *fax*: Designates that the accessPoint string is formatted as a telephone number that connects to a facsimile machine (for example `1 425 555 5555`).
- ◆ *phone*: designates that the accessPoint string is formatted as a telephone number that connects to a human or to a suitable voice or tone-response-based system (for example `1 425 555 5555`).
- ◆ *other*: Designates that the accessPoint string is formatted in some other address format.

When this value is used, one or more of the tModel signatures found in the tModelInstanceInfo collection must indicate that a particular format or transport type is required.

Hosting Redirector

The hostingRedirector element indicates that a bindingTemplate entry is a pointer to a different bindingTemplate entry. The value in providing this facility is seen when a business or entity wants to expose a service description (that is, advertise that they have a service available that suits a specific purpose) that is actually a service that is described in a separate bindingTemplate record. This might occur when a service is remotely hosted (hence the name of this element), or when many service descriptions could benefit from a single service description. The hostingRedirector element has a single attribute and no element content. The attribute is a bindingKey value that is suitable within the same UDDI registry instance for querying and obtaining the bindingDetail data that is to be used.

TModel Instance Details

This structure is a simple accessor container for one or more tModelInstanceInfo structures. When someone registers a bindingTemplate (within a businessEntity structure), it contains one or more references to specific and identifiable specifications that are implied by the tModelKey values provided with the registration. During an inquiry for a service, an interested party could use this information to look for a specific bindingTemplate that contains a specific tModel reference, or even a set of tModel references.

TModel Instance Info

A tModelInstanceInfo structure represents the bindingTemplate instance-specific details for a single tModel by reference.

Field	Description
tModelKey	Required attribute. Specifies the unique key that indicates that the services implementation details are described by specifications associated with the tModel. The tModelKey is a string of up to 255 characters.
description	Optional repeating element. Specifies language-qualified text descriptions that designate what role a tModel reference plays in the overall service description expressed as strings of up to 255 characters.

Field	Description
instanceDetails	Optional element. This element can be used when tModel reference-specific settings or other descriptive information are required to either describe a tModel-specific component of a service description or support services that require additional technical data support (such as settings or other handshake operations). Its data type is the instanceDetail structure.

InstanceDetails

This structure holds service instance-specific information that is required to either understand the service implementation details relative to a specific tModelKey reference, or to provide further parameter and settings support. If present, this element should not be empty because no single contained element is required in the schema description.

Field	Description
Description	Optional repeating element. This language-qualified text element contains a description of the purpose and use of the particular instanceDetails entry. The description is a string of up to 255 characters
overviewDoc	Optional element. Contains references to remote descriptive information or instructions related to the proper use of a bindingTemplate technical sub element. Its data type is the overviewDoc structure.
instanceParms	Optional element. Contains settings parameters or a URL reference to a file that contains the settings or parameters required to use a specific facet of a bindingTemplate description. If InstanceParms is a URL, the format is a URL that is suitable for retrieving the settings or parameters through HTTP-GET. The instanceParms is a string of up to 255 characters.

Overview Doc

This optional structure is provided as a placeholder for meta-data that describes overview information about the use of a particular tModel within a bindingTemplate.

Field	Description
Description	Optional repeating element. This language-qualified string contains a short descriptive overview of how a particular tModel is to be used. The description is a string of up to 255 characters.
overviewURL	Optional element. Contains a URL reference to a long form of an overview document that covers the way a particular tModel-specific reference is used as a component of an overall Web service description. The format is a URL that is suitable for retrieving an HTML-based description through a Web browser or HTTP-GET operation. The overviewURL is a string of up to 255 characters.

TModel

The TModel structure provides the ability to describe compliance with a specification, concept, or a shared design.

The TModel structure takes the form of keyed meta-data (data about data). In a general sense, the purpose of a TModel within the UDDI registry is to provide a reference system based on

abstraction. Thus, the kind of data that a tModel represents is somewhat nebulous; that is, a TModel registration can define just about anything. However, two conventions have been applied for using TModels as sources for determining compatibility and as keyed name space references.

After a tModel is registered or published, other parties can express the availability of Web services that are compliant with a specification by simply including a reference to the tModel identifier (called a tModelKey) in their technical service description's bindingTemplate data. This approach facilitates searching for registered Web services that are compatible with a particular specification. When the proper tModelKey value is known, you can find out whether a particular business or entity has registered a Web service that references that tModel key. In this way, the tModelKey becomes a technical fingerprint that is unique to a given specification.

Field	Description
tModelKey	Required attribute. Specifies the unique key for a given tModel structure expressed as a UUID of up to 41 characters.
authorizedName	Attribute. Specifies the recorded name of the individual who published the tModel data expressed as a string of up to 255 characters. This data is calculated by the controlling operator.
operator	Attribute. Specifies the certified name of the UDDI registry site operator who manages the master copy of the tModel data expressed as a string of up to 255 characters. The controlling operator records this data at the time data is saved.
name	Required element. Specifies the name recorded for the tModel expressed as a string of up to 255 characters. Names cannot be blank, and should be meaningful to someone who looks at the tModel. The xml:lang attribute of the name element should not be used.
description	Optional repeating element. Specifies short language-qualified descriptions expressed as a string of up to 255 characters. One description is allowed per national language code supplied.
overviewDoc	Optional element. Contains references to remote descriptive information or instructions related to the tModel expressed as a overviewDoc structures.
identifierBag	Optional element. Lists name-value pairs that can be used to record identification numbers for a tModel. Its data type is the identifierBag structure.
categoryBag	Optional element. This is an optional list of name-value pairs that are used to tag a tModel with specific taxonomy information (such as industry, product, or geographic codes). Its data type the categoryBag structure.

B

Default TModels

The UDDI registry defines a number of TModels to define its core services. By default, these TModels are published to the UDDI Registry during installation. Each of the core TModels are displayed:

1. tModel name: uddi-org:inquiry

tModel Description: UDDI Inquiry API - Core Specification

tModel UUID: uuid:4CD7E4BC-648B-426D-9936-443EAAAC8AE23

Categorization: specification, xmlSpec, soapSpec, wsdlSpec

This tModel defines the inquiry functions for interacting with the UDDI registry.

2. tModel name: uddi-org:inquiry_v2

tModel Description: UDDI Inquiry API Version 2 - Core Specification

tModel UUID: uuid:AC104DCC-D623-452f-88A7-F8ACD94D9B2B

Categorization: specification, xmlSpec, soapSpec, wsdlSpec

This tModel defines the inquiry functions for interacting with the UDDI registry.

3. tModel name: uddi-org:publication

tModel Description: UDDI Publication API - Core Specification

tModel UUID: uuid:64C756D1-3374-4E00-AE83-EE12E38FAE63

Categorization: specification, xmlSpec, soapSpec, wsdlSpec

This tModel defines the publication functions for interacting with the UDDI registry.

4. tModel name: uddi-org:publication_v2

tModel Description: UDDI Publication API V2.0 - Core Specification

tModel UUID: uuid:A2F36B65-2D66-4088-ABC7-914D0E05EB9E

Categorization: specification, xmlSpec, soapSpec, wsdlSpec

This tModel defines the publication functions for interacting with the UDDI registry.

5. tModel name: uddi-org:taxonomy

tModel Description: UDDI Taxonomy API - Core Specification

tModel UUID: uuid:3FB66FB7-5FC3-462F-A351-C140D9BD8304

Categorization: specification, xmlSpec, soapSpec

This tModel defines the validate_values function used for checked taxonomy and identifier system validation.

6. tModel name: uddi-org:taxonomy_v2

tModel Description: UDDI Taxonomy API Version 2 - Core Specification

tModel UUID: uuid:1E3E9CBC-F8CE-41ab-8F99-88326BAD324A

Categorization: specification, xmlSpec, soapSpec

This tModel defines the validate_values function called by UDDI registries to validate external checked taxonomies.

An additional set of tModels has been established to assist in identification and categorization, for example within industry taxonomies. These tModels are described below:

1. tModel name: uddi-org:types

tModel Description: UDDI Type Taxonomy

tModel UUID: uuid:C1ACF26D-9672-4404-9D70-39B756E62AB4

Categorization: categorization

2. tModel name: ntis-gov:naics:1997

tModel Description: Business Taxonomy: NAICS (1997 Release)

tModel UUID: uuid:C0B9FE13-179F-413D-8A5B-5004DB8E5BB2

Categorization: categorization

This tModel defines the NAICS industry taxonomy.

3. tModel name: unspsc-org:unspsc

tModel Description: Product Taxonomy: UNSPSC

tModel UUID: uuid:CD153257-086A-4237-B336-6BDCBDCC6634

Categorization: categorization

This tModel is upward compatible with subsequent versions of the UNSPSC code system.

4. tModel name: unspsc-org:unspsc:3-1

tModel Description: Product Taxonomy: UNSPSC (Version 3.1)

tModel UUID: uuid:DB77450D-9FA8-45D4-A7BC-04411D14E384

Categorization: categorization

This tModel defines the UNSPSC goods and services code system, version 3.1.

5. tModel name: uddi-org:iso-ch:3166-1999

tModel Description: ISO 3166-1:1997 and 3166-2:1998. Codes for names of countries and their subdivisions. Part 1: Country codes. Part 2: Country subdivision codes. Update newsletters include ISO 3166-1 V-1 (1998-02-05), V-2 (1999-10-01), ISO 3166-2 I-1 (1998).

tModel UUID: uuid:4E49A8D6-D5A2-4FC2-93A0-0411D8D19E88

Categorization: categorization

This tModel defines the ISO 3166 geographic classification taxonomy name space.

6. tModel name: uddi-org:general_keywords

tModel Description: Special taxonomy consisting of namespace identifiers and the keywords associated with the namespaces

tModel UUID: uuid:A035A07C-F362-44DD-8F95-E2B134BF43B4

Categorization: categorization

This tModel defines generic name/value pairs. In a keyedReference involving this taxonomy, the keyName constitutes the name and the keyValue.

7. tModel name: uddi-org:owningBusiness

tModel Description: A pointer to a businessEntity that owns the tagged data.

tModel UUID: uuid:4064C064-6D14-4F35-8953-9652106476A9

Categorization: categorization

The value set of this taxonomy is the set of businessKeys. It is used to specify that the businessEntity whose businessKey is the keyValue in a keyedReference “owns” the tagged tModel. The entity tagged must be a tModel, the referred-to businessEntity must exist, and it must have been published by the publisher that publishes the tagged information.

8. tModel name: uddi-org:relationships

tModel Description: Starter set classifications of businessEntity relationships

tModel UUID: uuid:807A2C6A-EE22-470D-ADC7-E0424A337C03

Categorization: relationship

This tModel is used to describe business relationships. It is used in the publisher assertion messages.

9. tModel name: uddi-org:operators

tModel Description: Taxonomy for categorizing the businessEntity of an operator of a registry

tModel UUID: uuid:327A56F0-3299-4461-BC23-5CD513E95C55

Categorization: categorization

Each operator of a registry typically publishes a businessEntity, called the operator businessEntity to represent the services the operator offers in connection with the registry. Each such businessEntity should be categorized with the uddi-org:operators taxonomy. The only valid value in this taxonomy is node. An operator site should not allow a businessEntity other than its operator businessEntity to be categorized using this taxonomy.

10. tModel name: uddi-org:isReplacedBy

tModel Description: An identifier system used to point (using UDDI keys) to the tModel (or businessEntity) that is the logical replacement for the one in which isReplacedBy is used.

tModel UUID: uuid:E59AE320-77A5-11D5-B898-0004AC49CC1E

Categorization: identifier

An identifier system used to point (using UDDI keys) to the tModel (or businessEntity) that is the logical replacement for the one in which isReplacedBy is used.

11. tModel name: dnb-com:D-U-N-S

tModel Description: Dun & Bradstreet D-U-N-S Number

tModel UUID: uuid:8609C81E-EE1F-4D5A-B202-3EB13AD01823

Categorization: identifier

This tModel is used for the Dun & Bradstreet D-U-N-S Number identifier.

NOTE: This tModel is initially registered as part of the UDDI core tModels. After the registry is in production, management of this tModel is expected to be transferred

12. tModel name: thomasregister-com:supplierID
tModel Description: Thomas Registry Suppliers
tModel UUID: uuid:B1B1BAF5-2329-43E6-AE13-BA8E97195039
Categorization: identifier

This tModel is used for the Thomas Register supplier identifier codes. Note that this tModel is initially registered as part of the UDDI core tModels. Once the registry is in production, custody of this tModel is expected to be transferred to the Thomas Register publisher account. For more information, see [thomasregister.com](http://www.thomasregister.com) (<http://www.thomasregister.com>).
13. tModel name: uddi-org:replication_v2
tModel Description: UDDI Replication API - Core Specification
tModel UUID: uuid:EA7EAE76-2B26-4BB4-930E-34016CDC8FC7
Categorization: specification, xmlSpec, soapSpec

This tModel is used to describe a Web service that is invoked through SMTP e-mail transmissions. These transmissions can be either between people or applications.
14. tModel name: uddi-org:homepage
tModel Description: HTTP Web Home Page URL
tModel UUID: uuid:4CEC1CEF-1F68-4B23-8CB7-8BAA763AEB89
Categorization: specification

This tModel has been deprecated. It was used as the bindingTemplate fingerprint for a Web home page reference. We recommend that, instead of creating a bindingTemplate using this tModel as the technical fingerprint, publishers use the discoveryURL with a useType of home page.
15. tModel name: uddi-org:http
tModel Description: An http or Web browser based Web service
tModel UUID: uuid:68DE9E80-AD09-469D-8A37-088422BFBC36
Categorization: transport

This tModel is used to describe a Web service that is invoked through a Web browser and the HTTP protocol.
16. tModel name: uddi-org:smtp
tModel Description: E-mail based Web service
tModel UUID: uuid:93335D49-3EFB-48A0-ACEA-EA102B60DDC6
Categorization: transport

This tModel is used to describe a Web service that is invoked through SMTP e-mail transmissions. These transmissions can be either between people or applications.
17. tModel name: uddi-org:ftp
tModel Description: File transfer protocol (ftp) based Web service
tModel UUID: uuid:5FCF5CD0-629A-4C50-8B16-F94E9CF2A674
Categorization: transport

This tModel is used to describe a Web service that is invoked through file transfers through the FTP protocol.

18. tModel name: uddi-org:fax

tModel Description: Fax based Web service

tModel UUID: uuid:1A2B00BE-6E2C-42F5-875B-56F32686E0E7

Categorization: protocol

This tModel is used to describe a Web service that is invoked through fax transmissions. These transmissions can be either between people or applications.

19. tModel name: uddi-org:telephone

tModel Description: Telephone based Web service

tModel UUID: uuid:38E12427-5536-4260-A6F9-B5B530E63A07

Categorization: specification

This tModel is used to describe a Web service that is invoked through a telephone call and interaction by voice and touch-tone.

C

References

The following are the references for this guide:

- ◆ UDDI Version 2.0 API Specification: This specification discusses the programming interfaces exposed by UDDI.

For more information, see www.uddi.org (<http://uddi.org/pubs/ProgrammersAPI-V2.04-Published-20020719.pdf>).

[HTML version \(http://uddi.org/pubs/ProgrammersAPI-V2.04-Published-20020719.htm\)](http://uddi.org/pubs/ProgrammersAPI-V2.04-Published-20020719.htm)

- ◆ UDDI Version 2.0 Data Structure: This document discusses the details of each of the XML structures associated with the UDDI messages.

For more information, see www.uddi.org (<http://uddi.org/pubs/DataStructure-V2.03-Published-20020719.pdf>).

[HTML version \(http://uddi.org/pubs/DataStructure-V2.03-Published-20020719.htm\)](http://uddi.org/pubs/DataStructure-V2.03-Published-20020719.htm).

