The OBA Composition Reference Toolkit V2 Installation Guide

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About This Guide

Purpose of This Guide

This guide will walk you through the installation of the OBA Composition Reference Toolkit Version 2.0 (V2).

Who Should Read This Guide

The target audiences for this guide are users who want to install the OBA Composition Reference Toolkit V2 and experiment with its capabilities.

Prerequisite Reading

It is recommended that you read the OBA Composition Reference Toolkit Overview document before you use this document to install the Toolkit.

Installing the OBA Composition Reference Toolkit V2

Note: You must only install the OBA Composition Reference Toolkit V2 (referred in short form as OCRT V2 in the remainder of this document) in a learning/demonstration environment on a computer that is not used for running any production software applications, processes, or services.

You can install OCRT V2 in the client-only mode or the client + server/server-only mode depending on the target operating system on which it is installed. The following table summarizes these installation modes.

Mode	Supported operating systems	Related OCRT V2 components
Server only	Windows Server® 2003 SP2	Microsoft® OBA Composition Server, sample components, and source code
Client only	Windows Vista® (Professional Edition or higher) and Windows Server 2003 SP2	OBA Composer and source code Note: On a computer that is running Windows Vista, only the options to install the OBA Composer and the source code will be available. On a computer that is running Windows Server 2003, the option to install the OBA Composition Server can be unselected to execute a client-only installation.
Client + server	Windows Server 2003 SP2	A logical variation of the server-only mode when the user selects the option to install the OBA Composer on a computer that is running Windows Server 2003.

Note: You must install an instance of the OBA Composition Server on a Windows Server 2003 Service Pack 2 (SP2) instance and make it accessible to client systems from where users will use the OBA Composer to compose and deploy Microsoft Office Business Applications (OBAs). It is also recommended that you select the option to install the sample components when you install the OBA Composition Server, to deploy a catalog of sample components that you can use to experiment with the process of composing and deploying OBAs by using the Toolkit.

System Requirements

Installing in Server-Only/Client + Server Mode

The following are the prerequisite software requirements for installing the OBA Composition Reference Toolkit V2 in a server-only/client + server mode:

- Operating system: Windows Server 2003 SP2
- Internet Information Services (IIS) 6.0

- Microsoft SQL Server® 2005 Developer or Enterprise Edition with SP2:
    - The SQL Server 2005 Express Edition is not supported.
    - A default instance that is accessible as **localhost** is required.
    - You must install SQL Server Reporting Services (SSRS) to deploy or test SSRS report components.
    - You must install SQL Server Analysis Services (SSAS) to deploy or test SSAS OLAP databases and components such as SSRS reports and Excel Services reports that use an SSAS OLAP database.
- The Microsoft .NET Framework version 3.5
- Microsoft Office SharePoint® Server 2007 Enterprise Edition:
    - You must install and activate enterprise features such as the Business Data Catalog, Excel Services, and InfoPath Forms Services to deploy or test related components.
    - You must configure SSRS in the Office SharePoint integrated mode to deploy or test SSRS report components.
- Microsoft Office Professional 2007
- Visual Studio Tools for the 2007 Microsoft Office system 3.0 runtime

You can also download a base Virtual PC (VPC) image, which has the above software installed and preconfigured, from the Microsoft Connect Web site (http://connect.microsoft.com) by registering for the **OBA Reference Architecture Packs** connect program.

Installing in Client-Only Mode

The following are the prerequisite software requirements for installing the OBA Composition Reference Toolkit V2 in client-only mode:

- Operating system: Windows Vista Professional Edition and above or Windows Server 2003 SP2
- Office Professional 2007
- Visual Studio Tools for the Microsoft Office system 3.0 runtime

Installation Walkthrough

The OCRT V2 installation involves two separate installations for installing in the client/client + server mode and for installing a set of sample components to get started. You can download these from the MSDN Architecture Web site, on the Toolkit page from which you downloaded this document:

- *OCRT Installer.* Installs the OCRT V2 client/server components with the option of deploying the source code. (This is a compulsory installation.)
- *OCRT Sample Components Installer.* Deploys the sample components that are provided with this release. (Although this installation is optional, it is recommended because it installs a host of sample components that make it easier to understand the OCRT before you create custom components.)

Installing the OBA Composition Reference Toolkit V2 in Client + Server Mode

Please ensure that the system specifications match the requirements that are specified in the "Installing in Server-Only/Client + Server Mode" section of this document.

Step 1: Uninstalling Earlier Versions (If Any)

Please uninstall earlier versions of the OCRT before you proceed with this installation:

- On the **Start** menu, click **Control Panel**, double-click **Add or Remove Programs**, and then click **Change or Remove Programs**.
- Locate The OBA Composition Reference Toolkit in the programs list.
- Click **Remove** to remove The OBA Composition Reference Toolkit and all of its components.

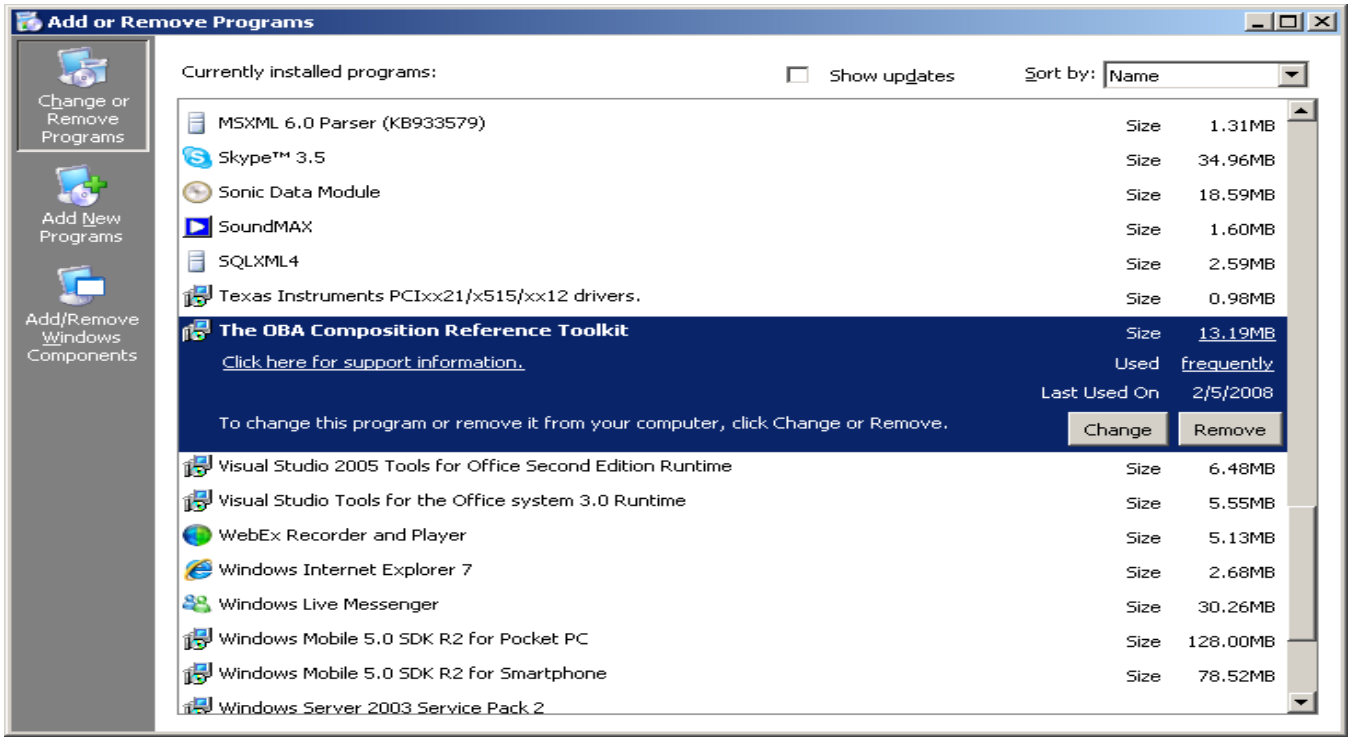

Figure 1: Uninstalling earlier versions

Step 2: Installing the OCRT Client and Server

Run the OCRT Installer and walk through the installation steps as described in this section.

Welcome Screen

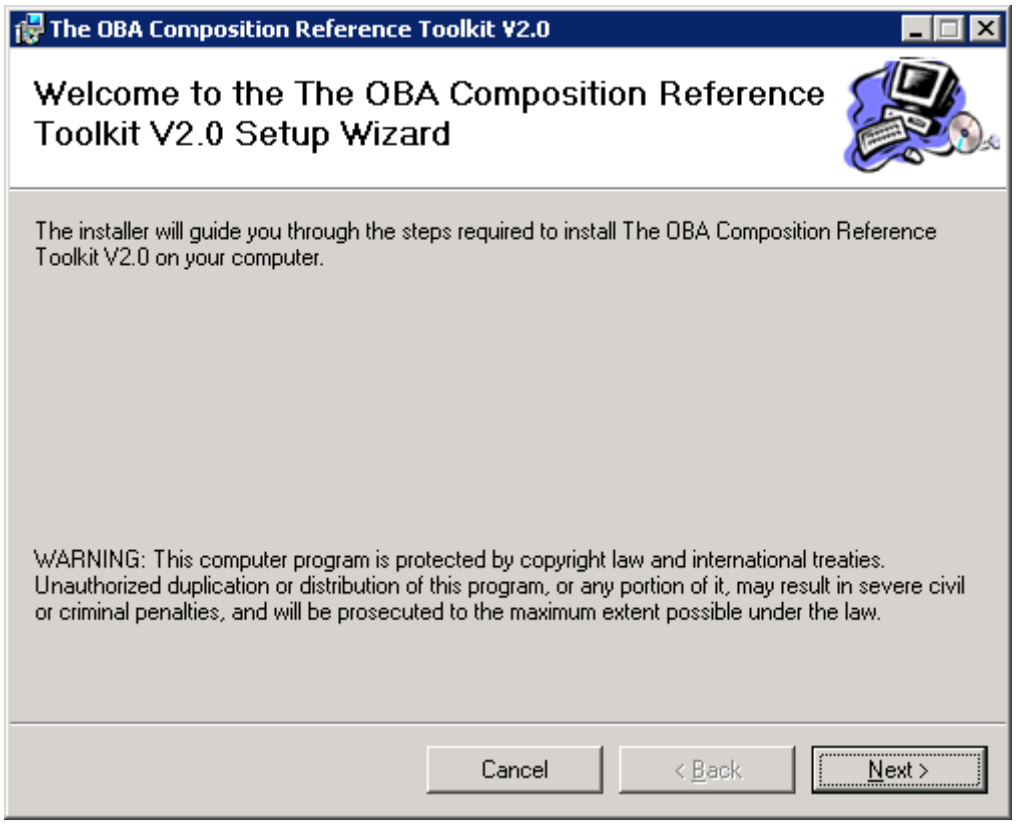

Figure 2: The Installation Wizard

Clicking **Next** on this screen will take you to the License Agreement screen.

License Agreement

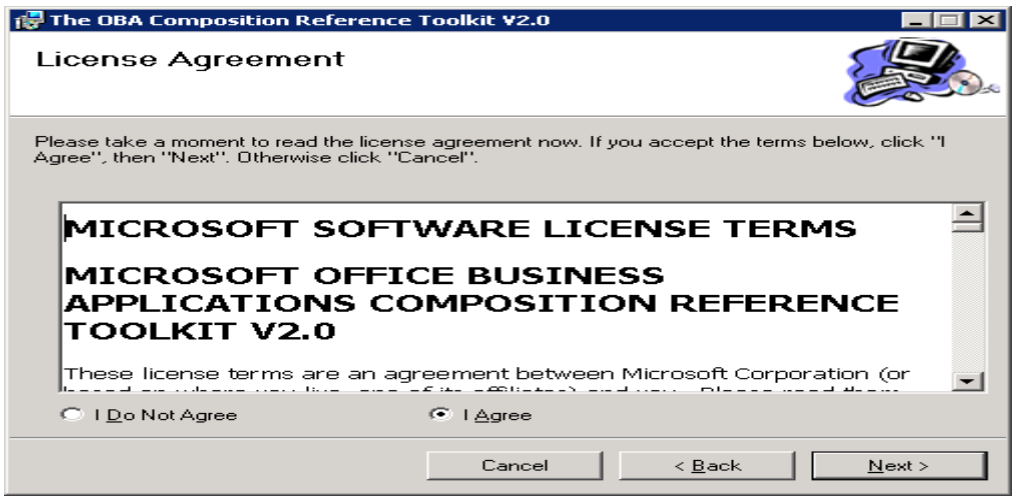

Figure 3: The License Agreement screen

You must review and accept the license agreement to proceed with the installation. Review the license agreement, click **I Agree**, and then click **Next** to proceed with the installation.

Selecting the Installation Mode

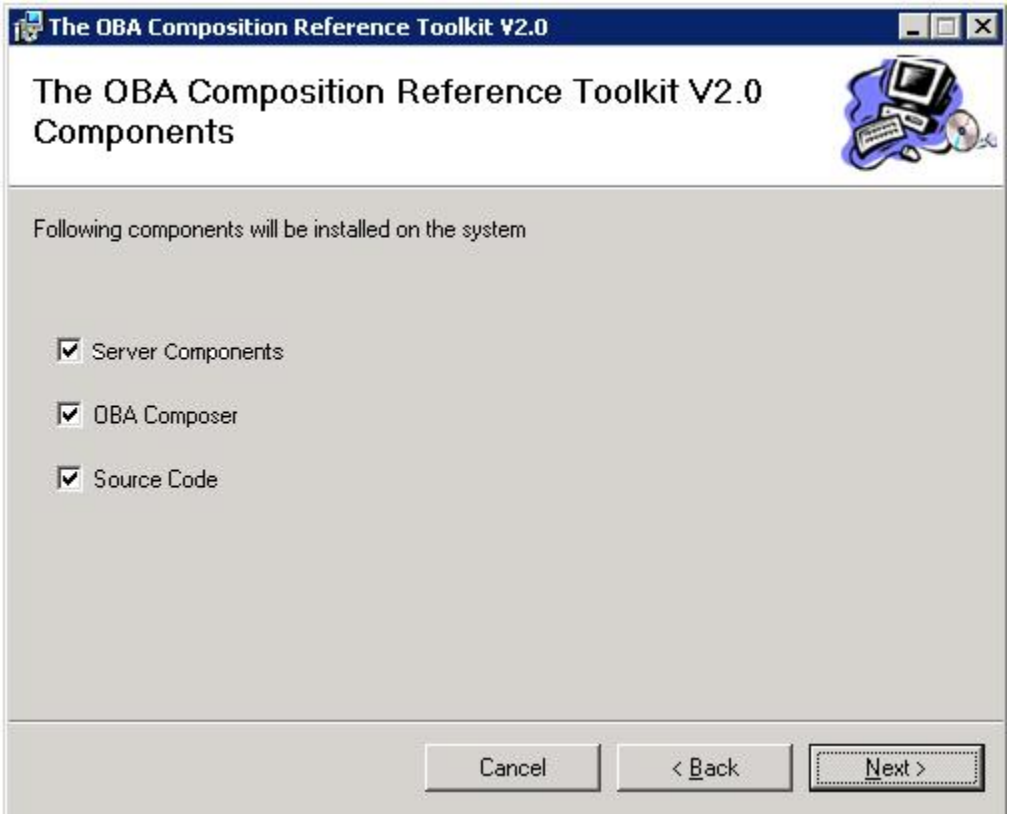

Figure 4: Selecting the installation mode

You are installing the OCRT V2 on a computer that is running Windows Server 2003, which can support both server-only and client + server modes.

Selecting the **OBA Composer** check box also installs the Windows® Presentation Foundation (WPF) client that is used for interacting with the OBA components and creating, provisioning, and deploying OBAs.

Selecting the **Source Code** check box deploys the source code of the OCRT V2 on the system.

Continue with the default selection, and then click **Next** to set the server configuration.

OBA Composition Server Configuration

On this screen, you will specify the parameters that are required to provision and configure a running instance of the OBA Composition Server.

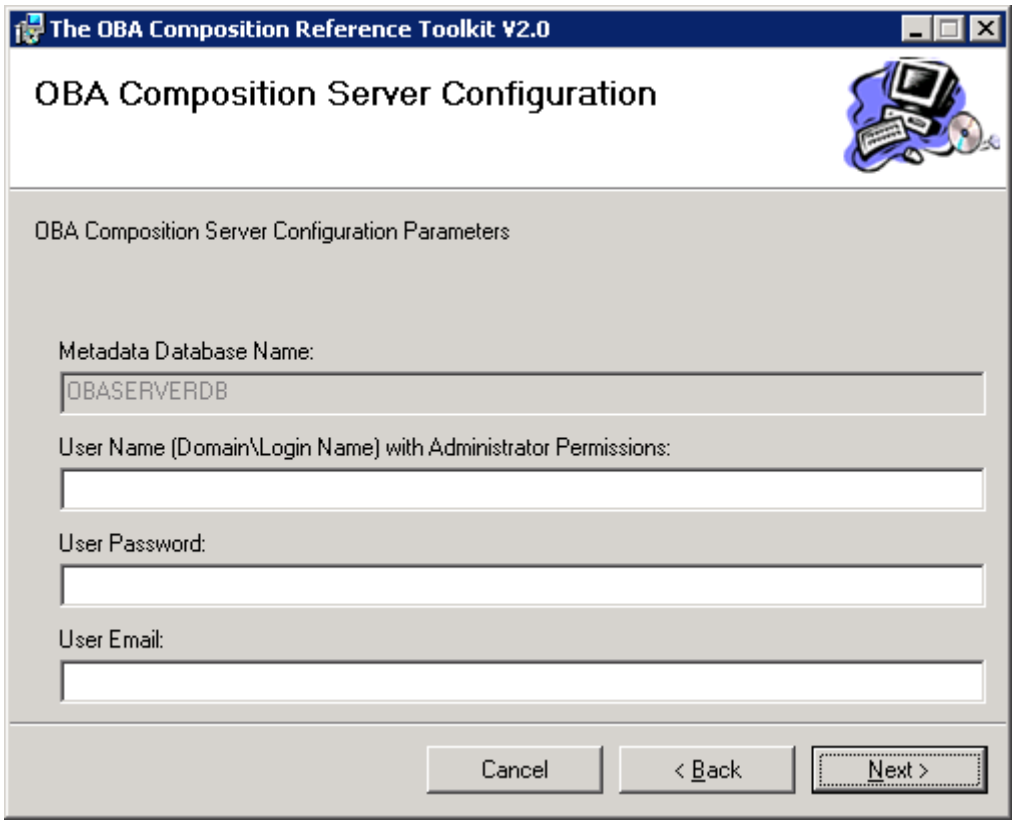

Figure 5: The server configuration details screen

The Metadata Database Name is the name of the SQL Server database that is created for the OBA Composition Server Metadata Catalog. This name is fixed in this version and cannot be changed.

In the following three text boxes, enter the user name, password, and e-mail address for a user who has Administrator privileges, and then click **Next**. This information will be used to configure the connection between the Office SharePoint Web application and the Metadata Catalog in the OBA Composition Server. It will also be utilized for all Administration processes that are related to Office SharePoint that must be executed by the installer and the OBA Composition Reference Toolkit.

Select Installation Folder

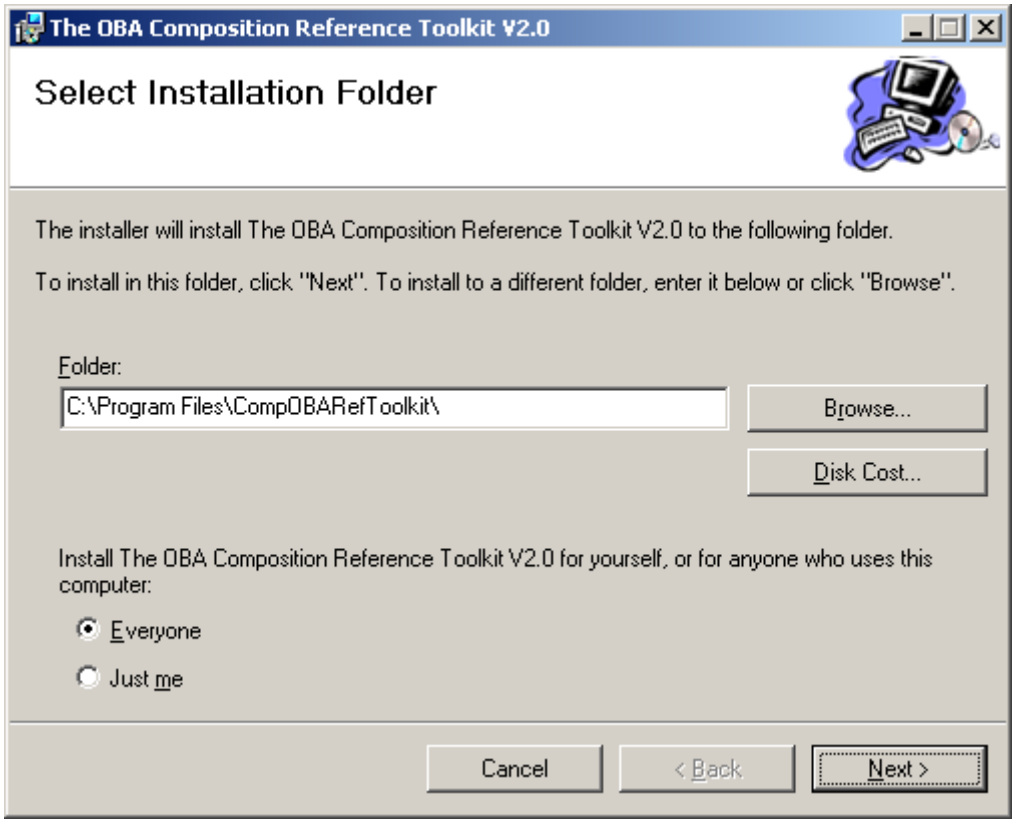

Figure 6: The Select Installation Folder screen

Select the folder where you want to install the OBA Composition Reference Toolkit, and then click **Next**. By default, the Toolkit will be installed in the *drive*:\Program Files\CompOBARefToolkit folder.

Confirm Installation

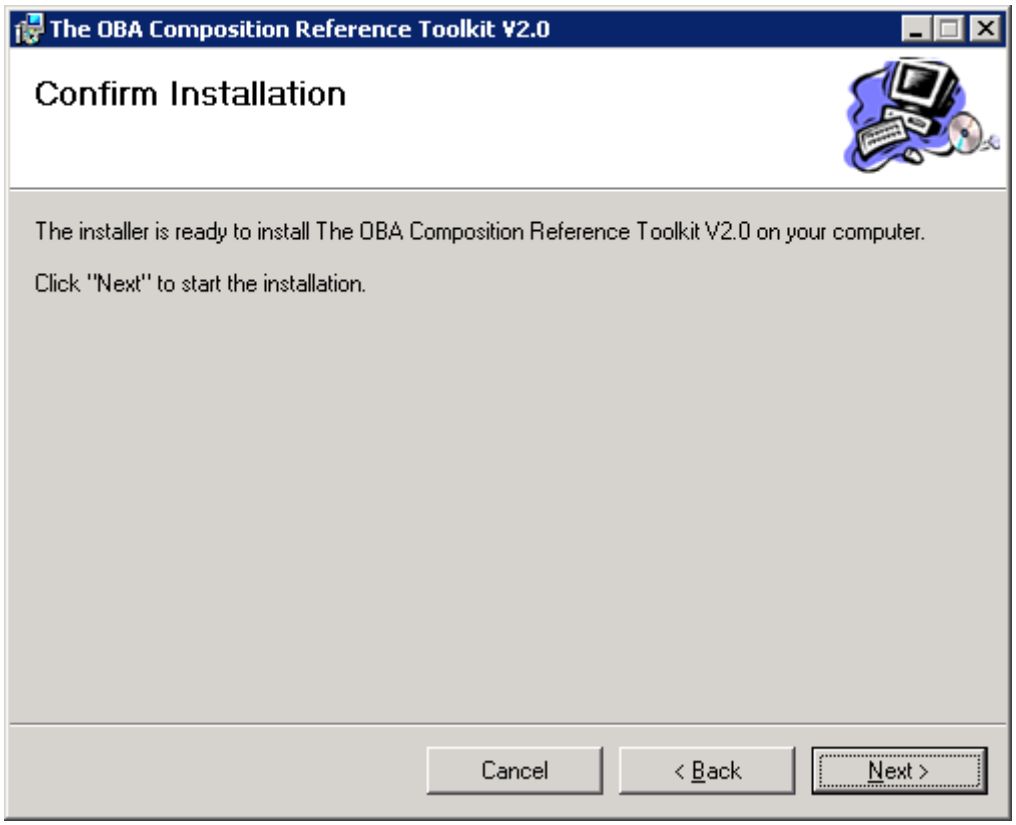

Figure 7: The Confirm Installation screen

Click **Back** to review your settings and make any changes, or click **Next** to start the installation.

Wait for Installation to Complete

The installation will start and you will see a screen that is titled Installing The OBA Composition Reference Toolkit V2.0. There is no visual indication of the status or progress of the installation process in this version. This process will typically take 10–15 minutes to complete.

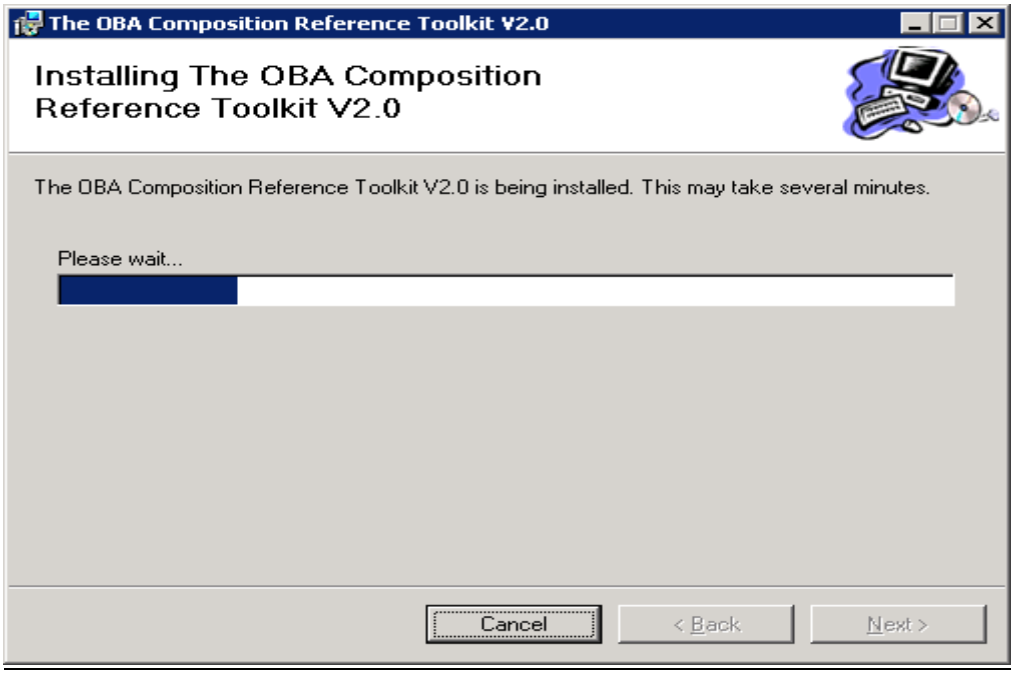

Figure 8: The installation screen

Installation Complete

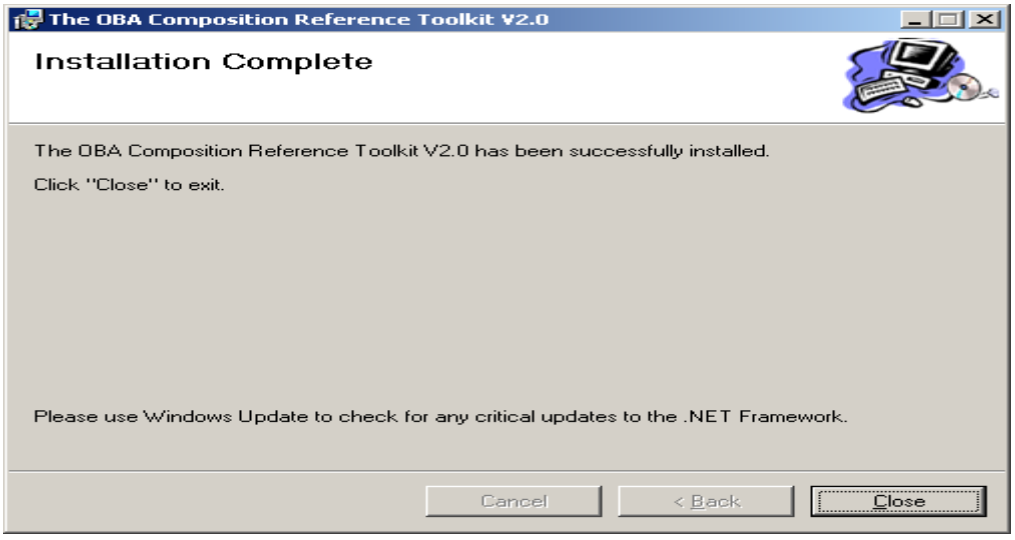

Figure 9: The Installation Complete screen

Click **Close** to complete the installation.

Step 3: Installing the Sample Components

Note: Please ensure that the OCRT Installer has been successfully executed in the server-only/client + server mode before you proceed to install the sample components. (You cannot install the sample components in a pure client-only mode.)

Run the OCRT Sample Components Installer and walk through the installation steps as described in this section.

Welcome Screen

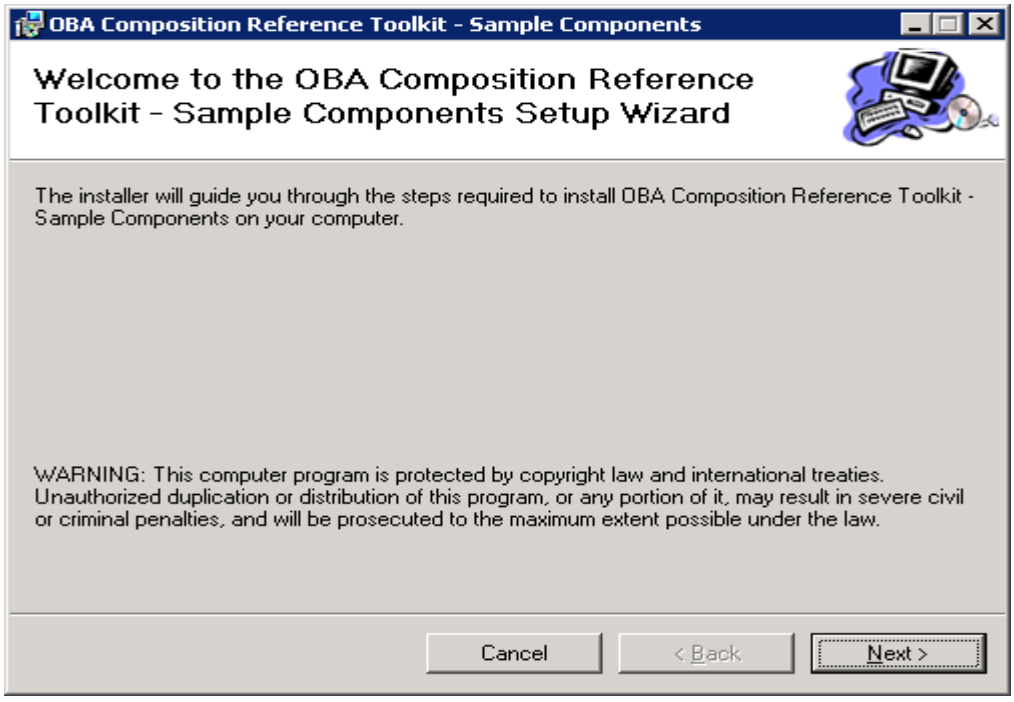

Figure 10: The Installation Wizard

Clicking **Next** on this screen will take you to the License Agreement screen.

License Agreement

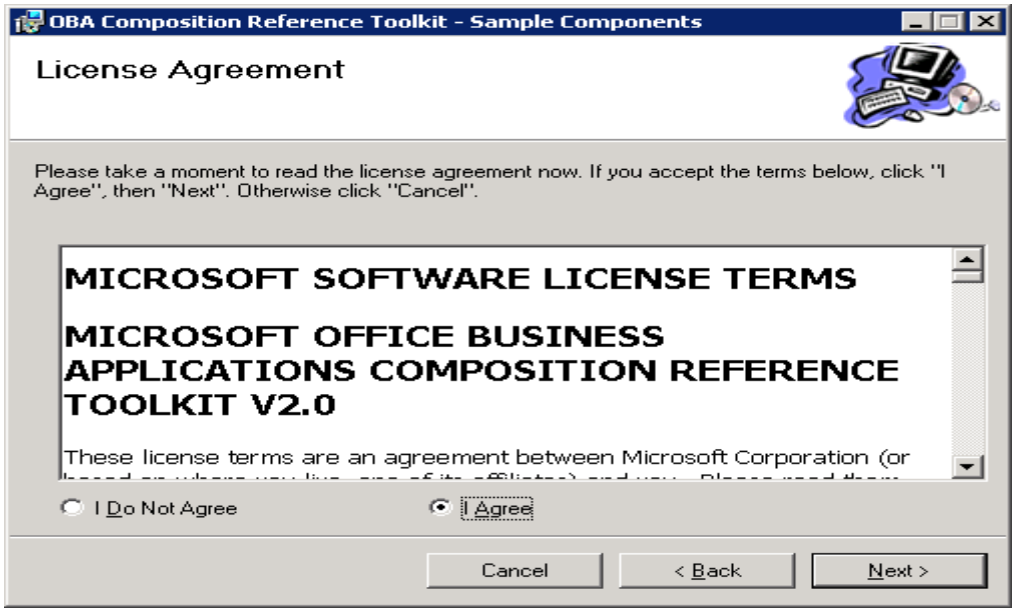

Figure 11: The License Agreement screen

You must review and accept the license agreement to proceed with the installation. Review the license agreement, click **I Agree**, and then click **Next** to proceed with the installation.

Confirm Installation

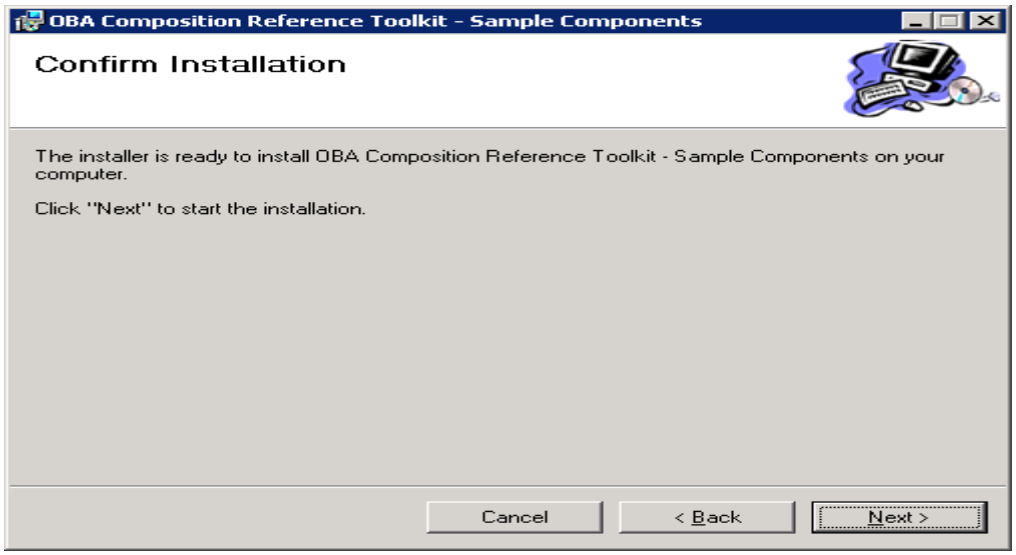

Figure 12: The Confirm Installation screen

Click **Back** to review your settings and make any changes, or click **Next** to start the installation.

Wait for Installation to Complete

The installation will start and you will see a screen that is titled Installing OBA Composition Reference Toolkit – Sample Components. There is no visual indication of the status or progress of the installation process in this version. This process will typically take 10–15 minutes to complete.

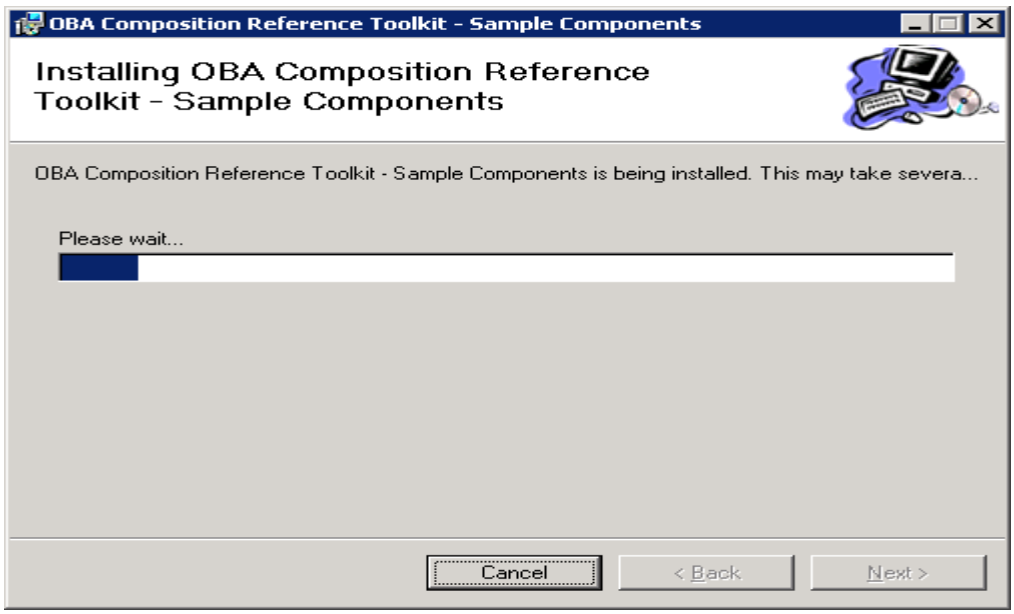

Figure 13: The installation screen

Installation Complete

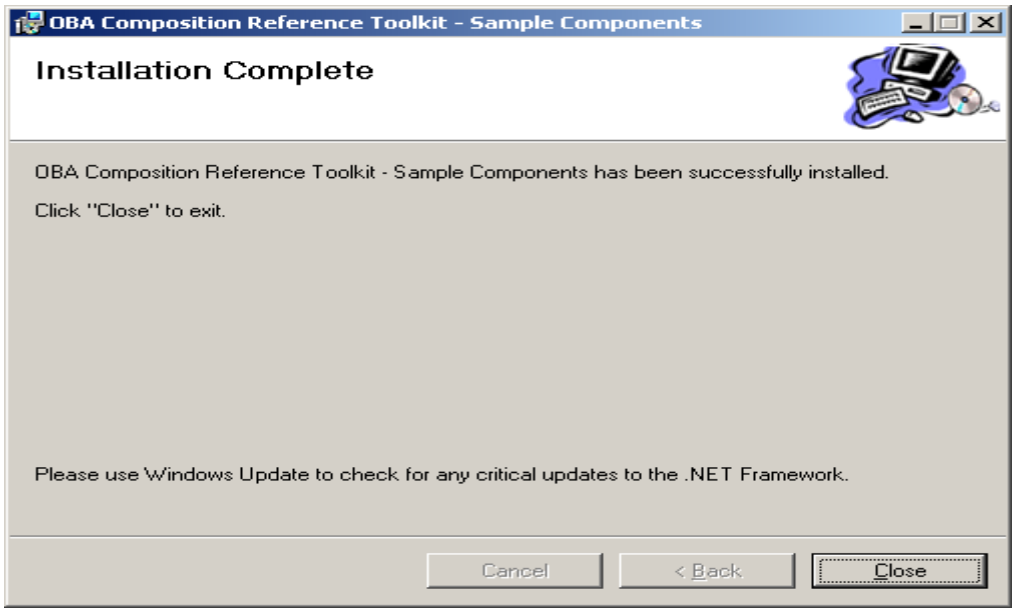

Figure 14: The Installation Complete screen

Click **Close** to complete the installation.

Verifying the Installation

Exploring the OBA Composition Server Metadata Catalog Database

On the **Start** menu, click **All Programs**, click **SQL Server 2005**, and then click **SQL Server Management Studio**.

Connect to the default instance of SQL Server and browse through the Databases collection. You should see a new database that is called OBASERVERDB or the name of the database that was specified on the configuration page during the installation.

This database is used to store the metadata that powers the OBA Composition Reference Toolkit. The metadata includes component definitions, component relationship definitions, OBA definitions, search tag definitions and search tag associations for components and OBAs, LOB Adapter and LOB Adapter instance definitions, and so on.

Explore the database objects, but do not modify any of the object definitions unless your explicit intention is to customize or extend the OBA Composition Reference Toolkit. Changes to the out-of-the-box object definitions will break the other toolkit components that depend on them.

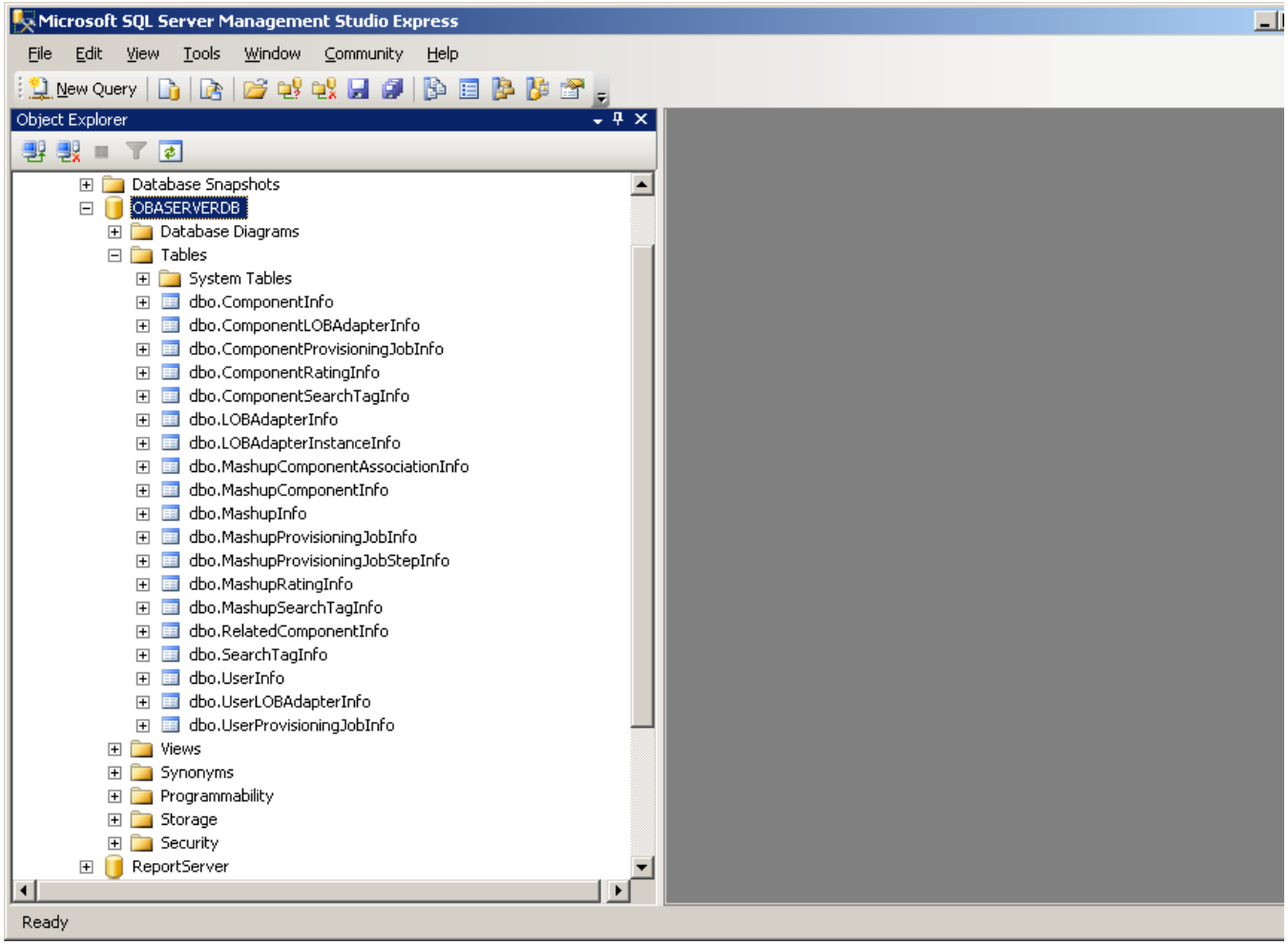

Figure 15: The OBASERVERDB folder

Verifying the Provisioning Service Installation

On the **Start** menu, click **Control Panel**, double-click **Administrative Tools**, and then double-click **Services** to view the Windows Services.

You should see the OBA Provisioning service running with a Status of Started and a Startup Type of Automatic. This service is responsible for provisioning and deploying OBAs that have been composed by using the OBA Composer and the services that are enabled by the OBA Composition Reference Toolkit.

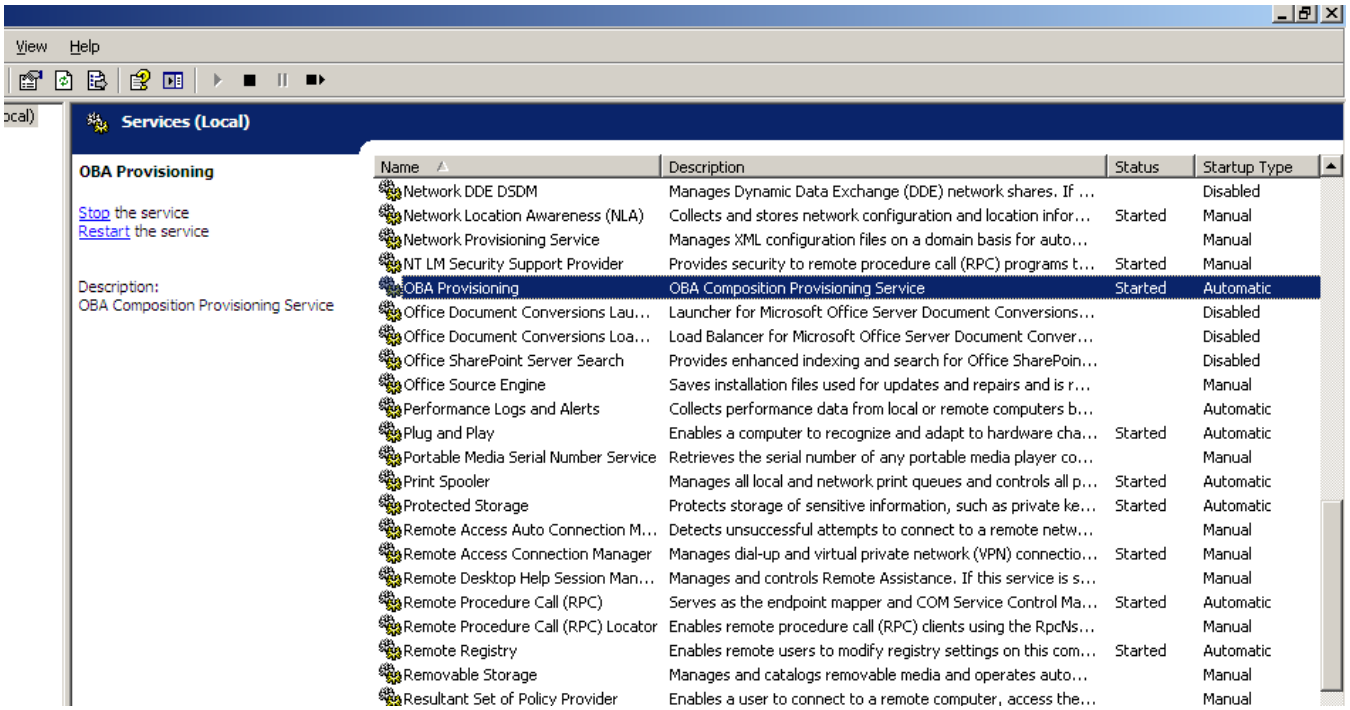

Figure 16: The OBA Provisioning service

Verifying the OBA Composition Server Installation

On the **Start** menu, click **All Programs**, and then click **OBA Composition Reference Toolkit**.

The OBA Composition Reference Toolkit should contain the following components:

- OBA Composer
- Uninstall OBA
- OBA Home
- Composition Web Services
- Administration Web Services
- OBA Administration

Click **Composition Web Services** to view the list of Web service methods that facilitate access to the OBA Composition Reference Toolkit metadata.

The OBA Composer uses the Web service methods extensively to enable the OBA composition and deployment user experiences. The Web service methods include application programming interfaces (APIs) that facilitate searches for OBA components, retrieval of component metadata, navigation of component relationships, identification of line-of-business system bindings for components, saving or retrieval of the definitions of

composite OBAs, and other related capabilities. The Web service, in turn, interacts with the Metadata Catalog and the LOB databases through stored procedures to extract, insert, or update the OBA metadata, component relationships, and so on.

The following screen shot displays a snapshot of the OBA Web services.

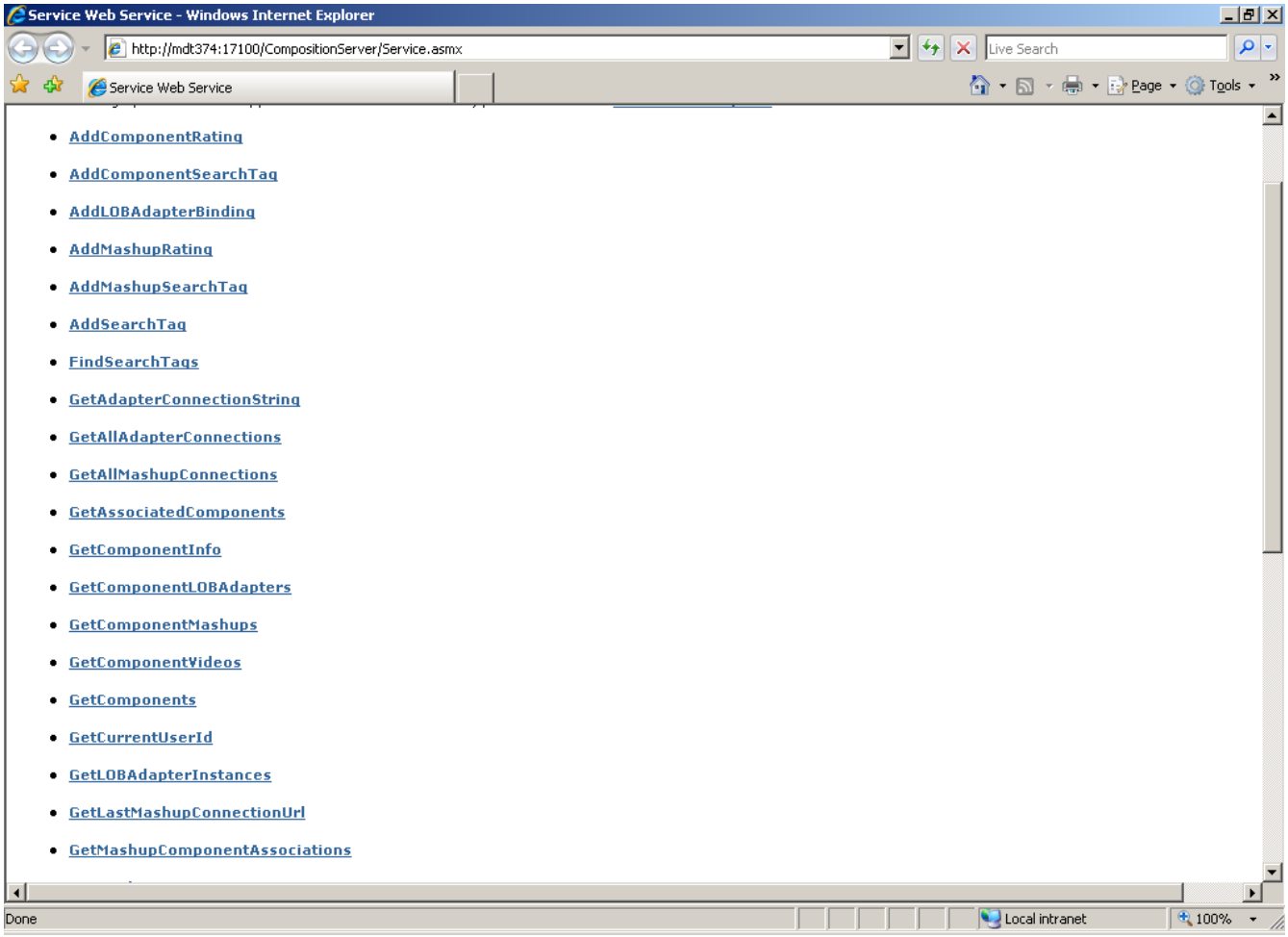

Figure 17: The Web service methods

Click the GetComponents hyperlink to see the Web method interact with the Metadata Catalog to get the seed components.

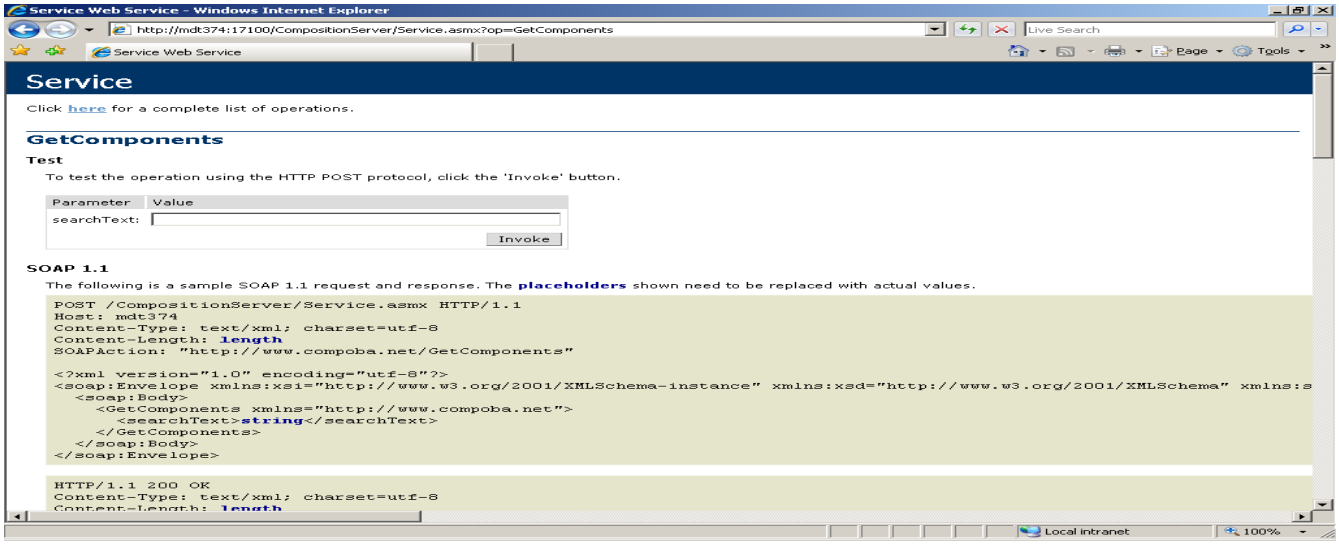

Figure 18: The GetComponents Web method

Clicking **Invoke** would list all of the seed components that have been installed by the OBA Composition Reference Toolkit and registered in the OBA Composition Server.

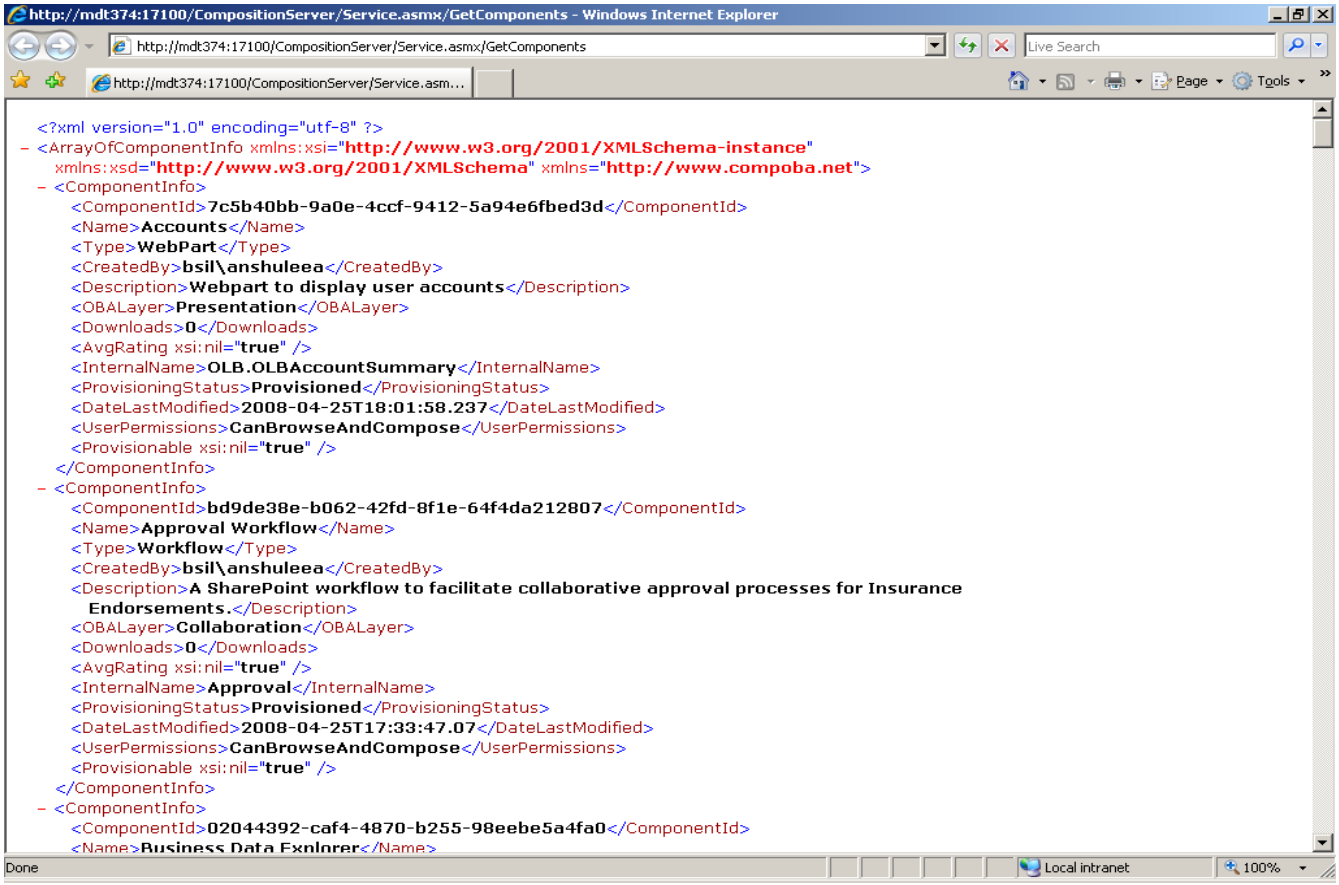

Figure 19: A list of seed components that are present in the Metadata Catalog

Similarly, click **Administration Web Services** to view the Web services that enable interaction with the OCRT to upload and administer new components and adapters, define relationships between them, add users, and assign permissions.

Clicking **OBA Administration** takes you to the Application Management page in Central Administration. The Application Management page now contains a new section that is called OBA Composition Services. These use the Administration Web services to enable the user to upload and administer new components and adapters. These components are provisioned into the OBASERVERDB metadata and will be available to be made into OBAs by using the OBA Composer.

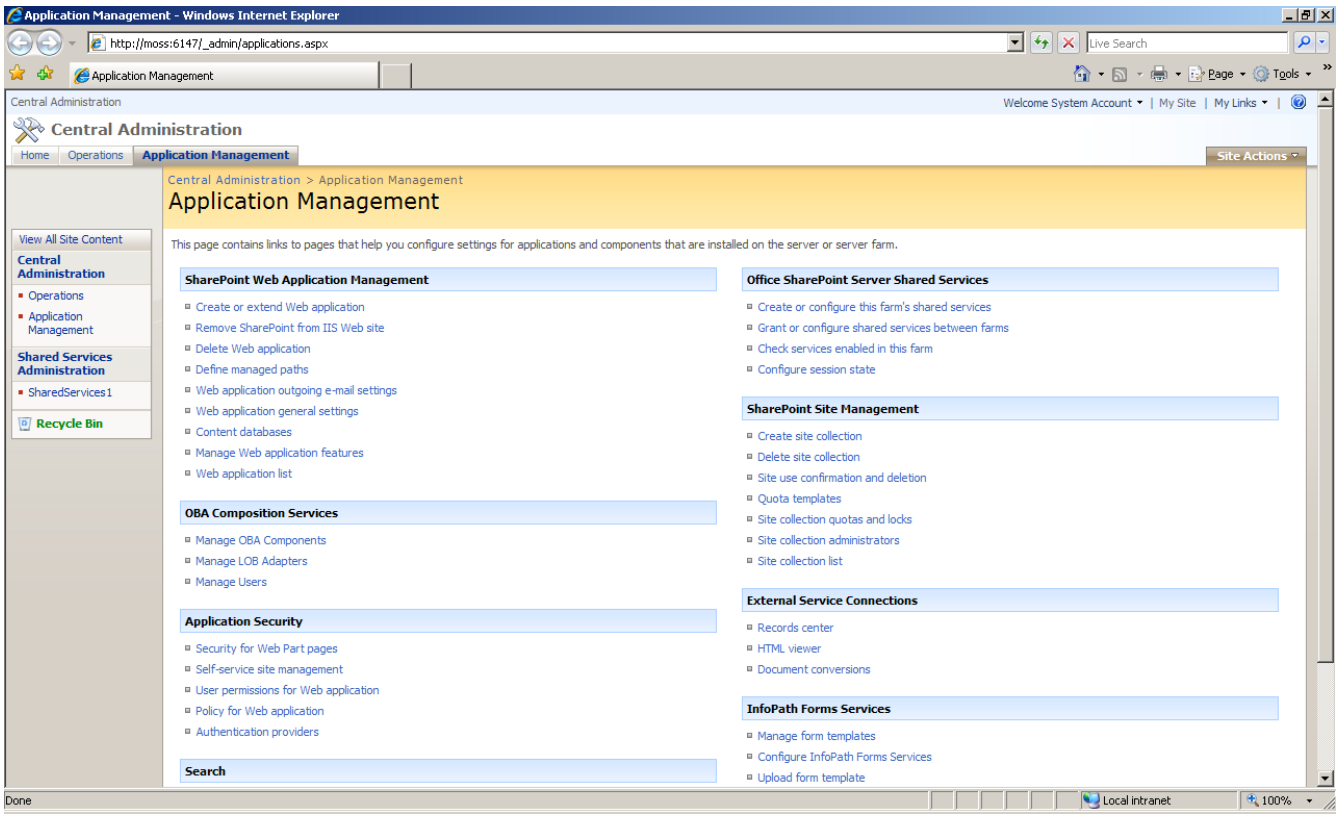

Figure 20: The Application Management page, which shows OBA Composition Services

Viewing the OBA Home Page

Click the **OBA Home** menu to view the OBA home page. OBAs that you compose and deploy by using the OBA Composition Reference Toolkit will be provisioned to this site.

Verifying the OBA Composer Installation

Click the **OBA Composer** menu to launch the OBA Composer. The OBA Composer is a WPF application that consumes and uses the services that are exposed by the OBA Composition Server to enable a rich client experience for composing OBAs by using OBA components.

Click the **Connect** button on the **OBA Server** tab to connect to the server.

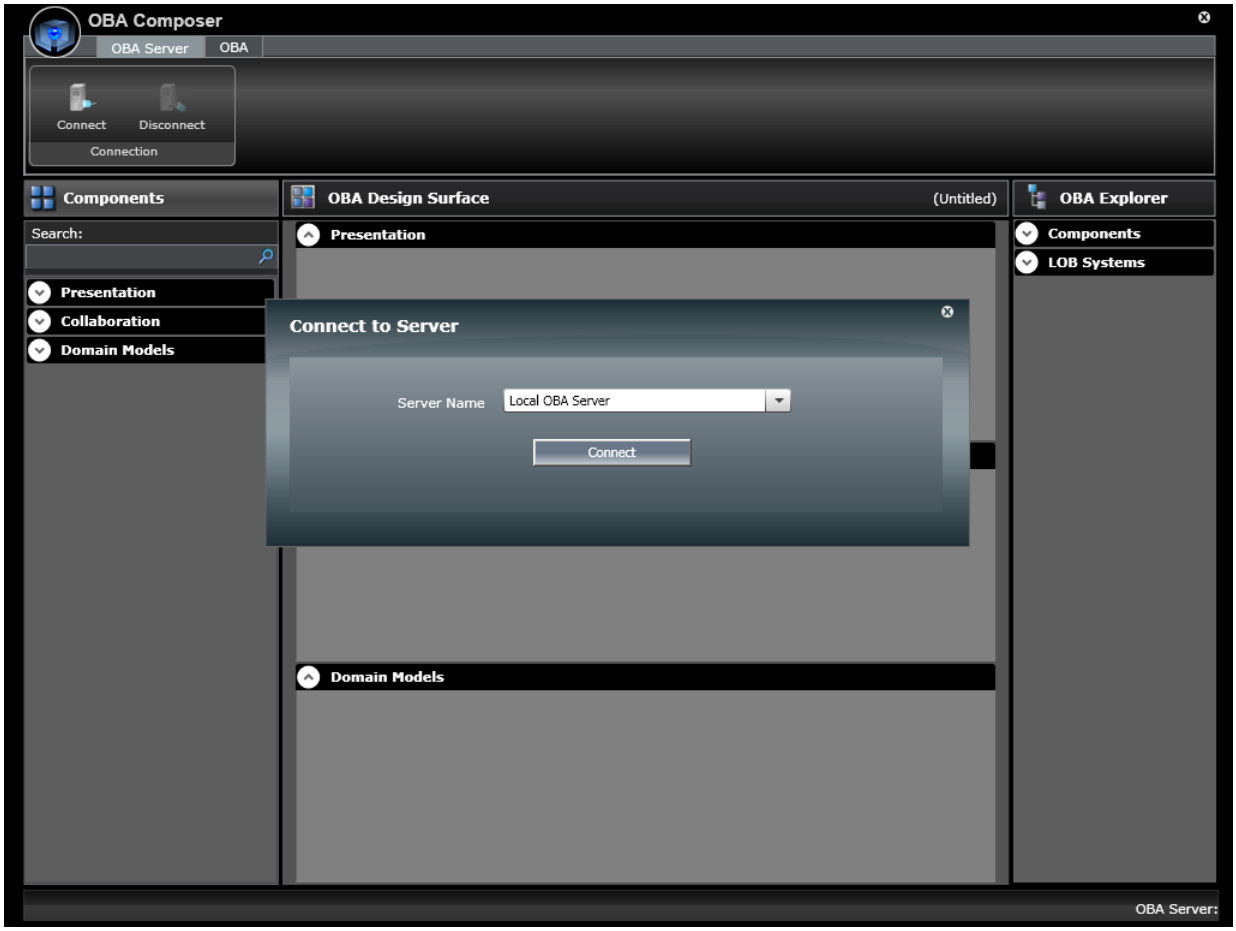

Figure 21: The OBA Composer

1. Click the **Connect** icon to connect to the default server that was configured by the OCRT Installer.
2. On the **Components** panel, click the magnifying glass (🔍) icon to list all of the seed components that were installed by the OBA Composition Reference Toolkit installation file.

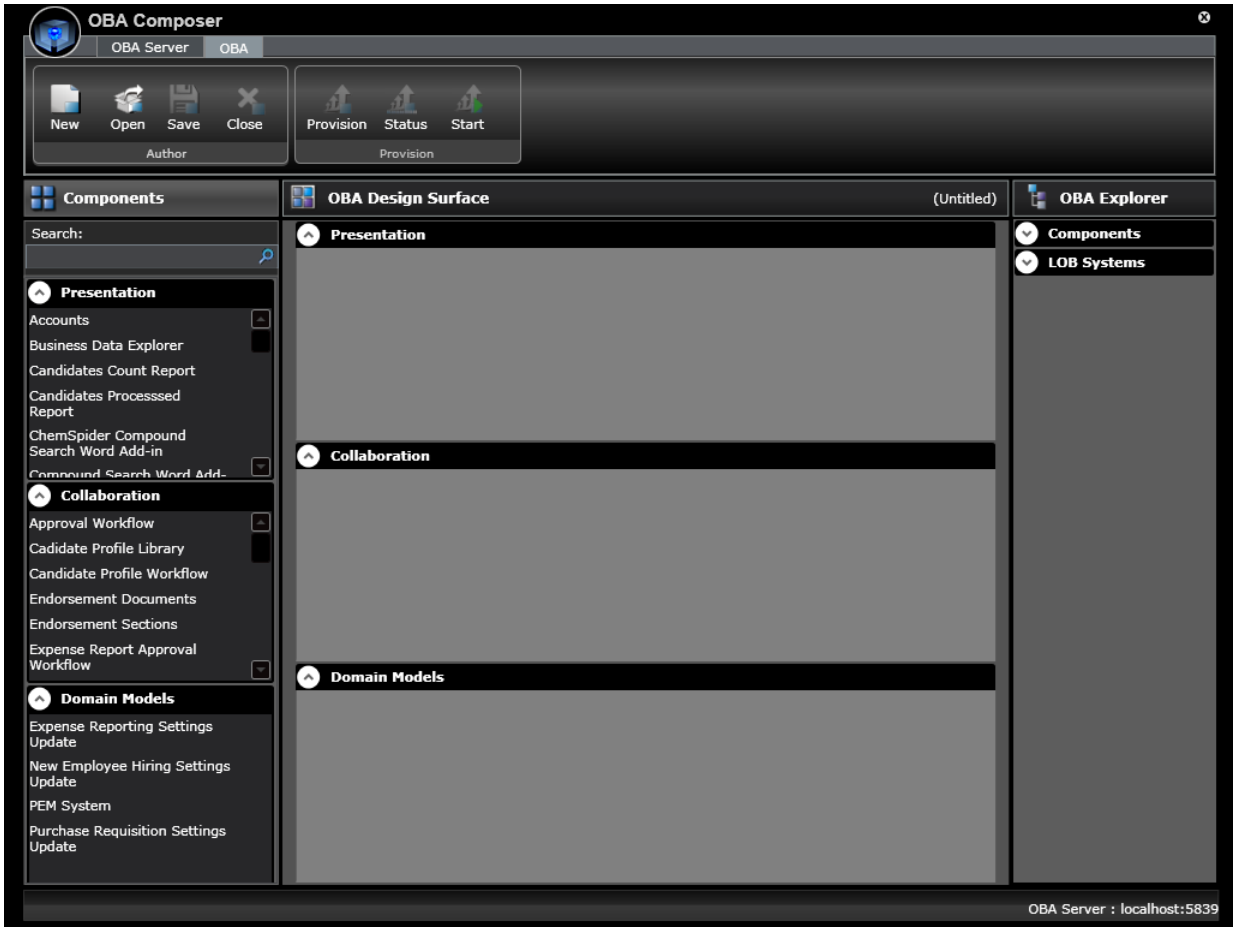

Figure 22: Installed seed components

Verifying the Source Code Deployment

Go to the C:\Program Files\CompOBARefToolkit\Source code folder to view the source code that is deployed by the OCRT Installer.

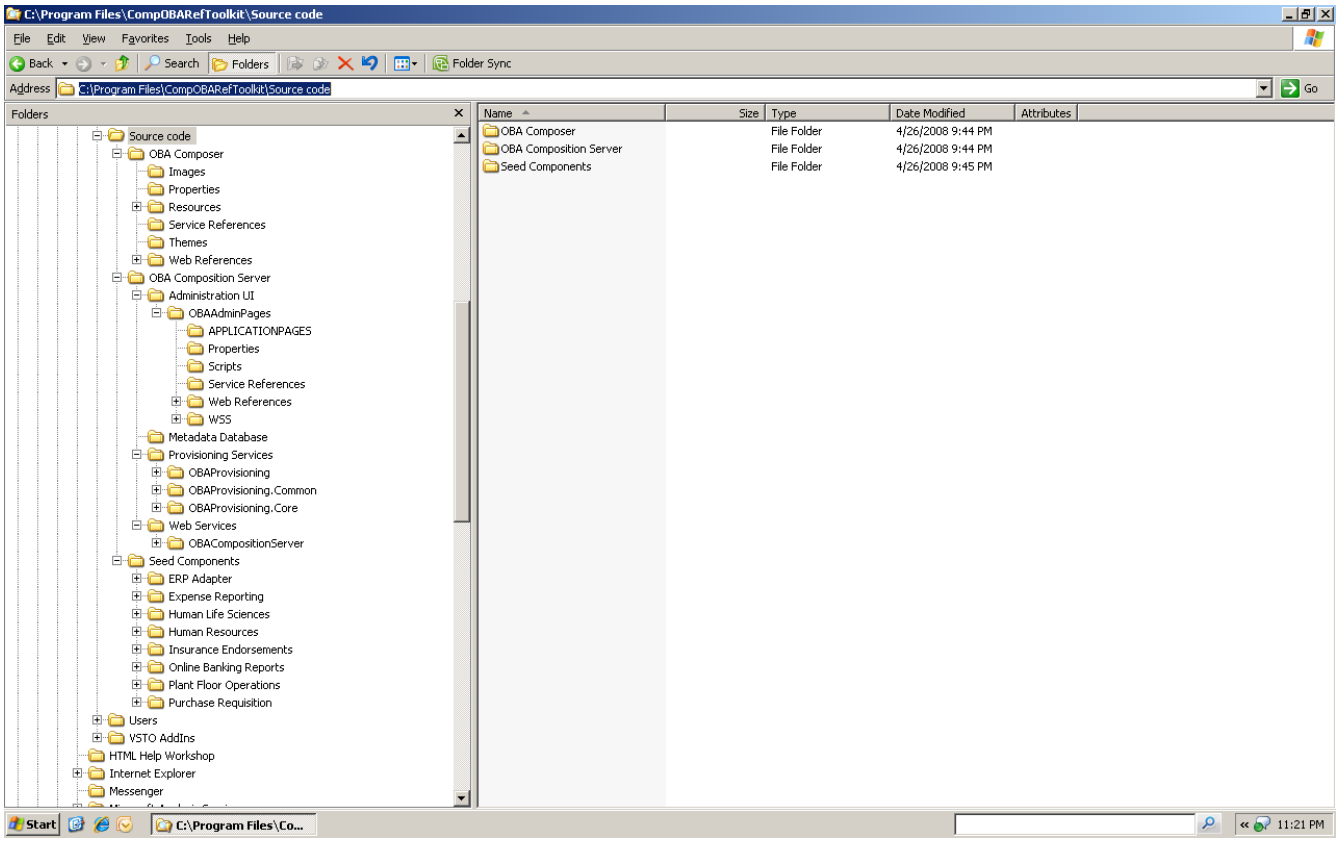

Figure 23: The OCRT Source code folder

The Source code folder contains the following three folders:

- *OBA Composer*. Contains the source code for the WPF client (the OBA Composer).
- *OBA Composition Server.* Contains the source code for the OBA Administration application pages, the OBA Composition Web services, the OBA Administration Web services, and the Provisioning service.
- *Seed Components.* Contains the source code and projects of the sample components that are deployed by the OCRT Sample Components Installer.

Installing the OBA Composition Reference Toolkit in Client-Only Mode

Please ensure that the system specifications match the requirements that are specified in the "Installing in Client-Only Mode" section of this document.

Step 1: Uninstalling Earlier Versions (If Any)

Please uninstall earlier versions of the OCRT before you proceed with this installation as described in the previous "Step 1: Uninstalling Earlier Versions (If Any)" section of this document.

Step 2: Installing the OCRT Client

Run the OCRT Installer and walk through the installation steps as described in this section.

Welcome Screen

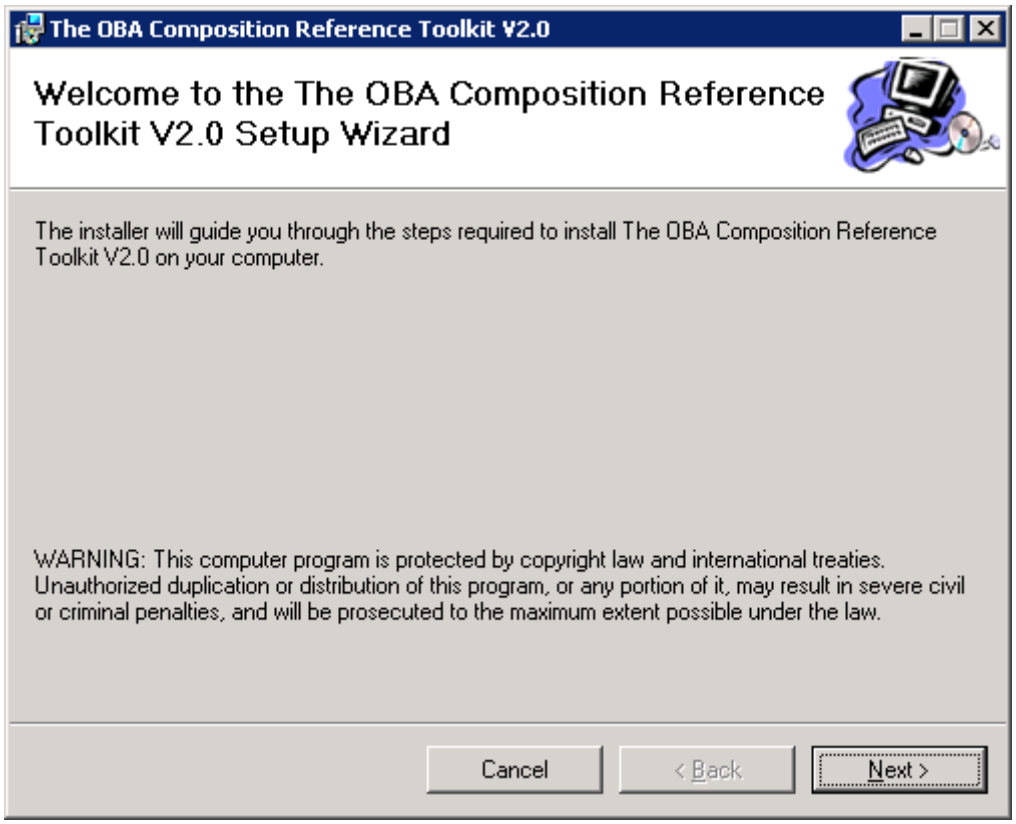

Figure 24: The Installation Wizard

Clicking **Next** on this screen will take you to the License Agreement screen.

License Agreement

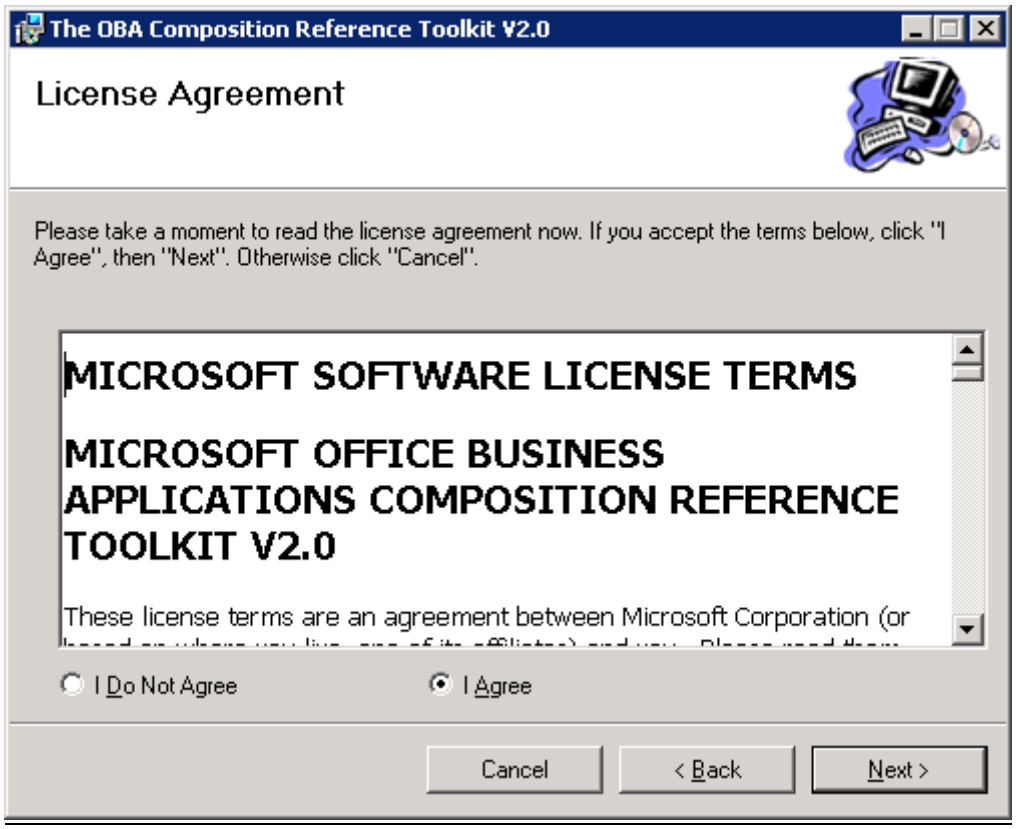

Figure 25: The License Agreement screen

You must review and accept the license agreement to proceed with the installation. Review the license agreement, click **I Agree**, and then click **Next** to proceed with the installation.

Selecting the Installation Mode

To execute a client only installation on a Windows Server 2003 SP2 machine, the Server Components option must be unselected.

When installing the OCRT V2 on a computer that is running Windows Vista, which can support only the client-only mode, the **Server Components** option will be disabled. Figure 26 illustrates this.

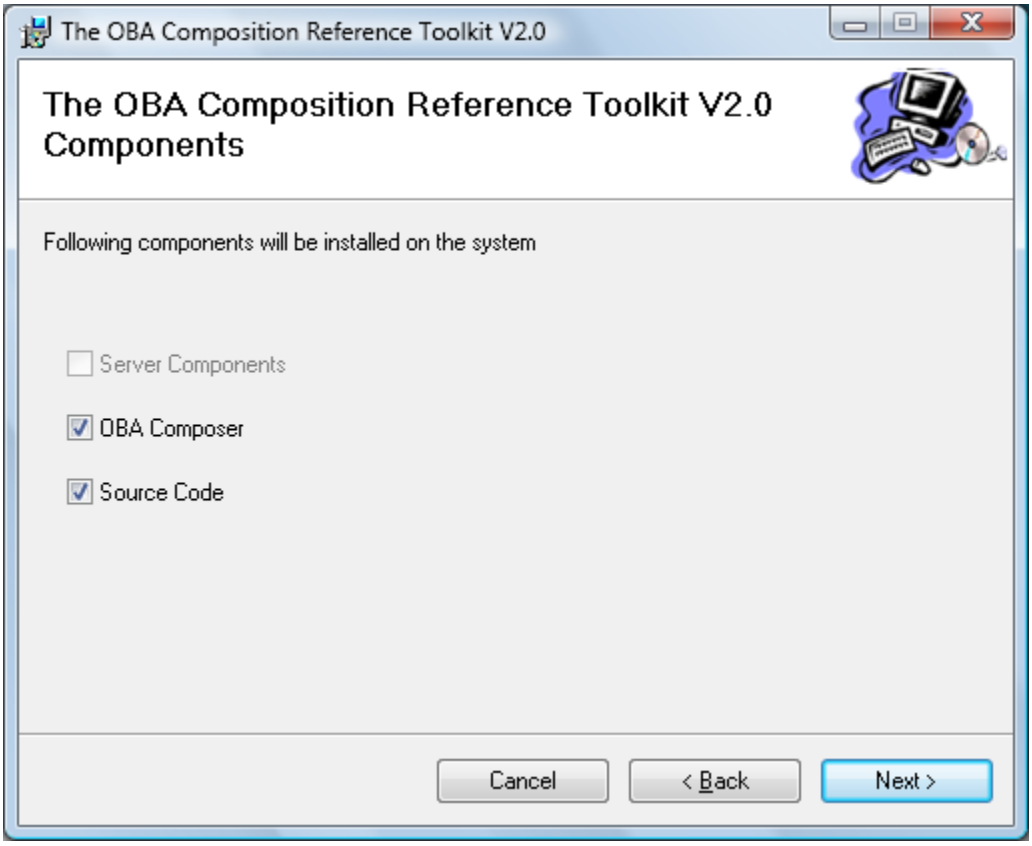

Figure 26: Selecting the installation mode on a Vista machine

Selecting the **Source Code** check box deploys the source code of the OCRT V2 on the system.

Continue with the default selection, and then click **Next** to continue the installation

Select Installation Folder

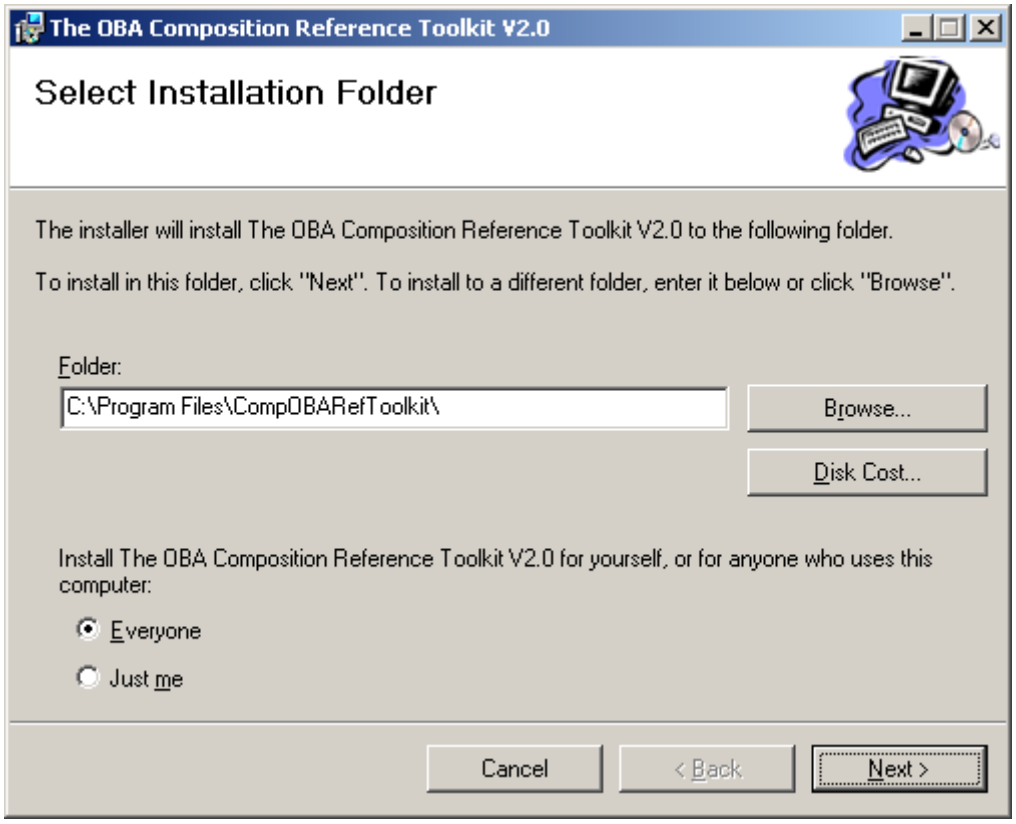

Figure 27: The Select Installation Folder screen

Select the folder where you want to install the OBA Composition Reference Toolkit, and then click **Next**. By default, the Toolkit will be installed in the *drive*:\Program Files\CompOBARefToolkit folder.

Confirm Installation

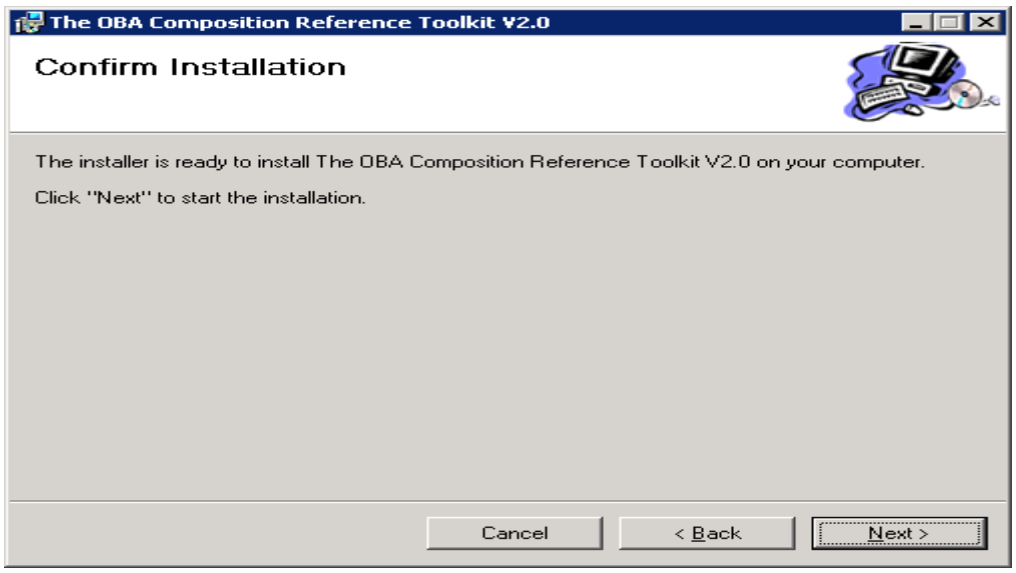

Figure 28: The Confirm Installation screen

Click **Back** to review your settings and make any changes, or click **Next** to start the installation.

Wait for Installation to Complete

The installation will start and you will see a screen that is titled Installing The OBA Composition Reference Toolkit V2.0. There is no visual indication of the status or progress of the installation process in this version. This process will typically take 10–15 minutes to complete.

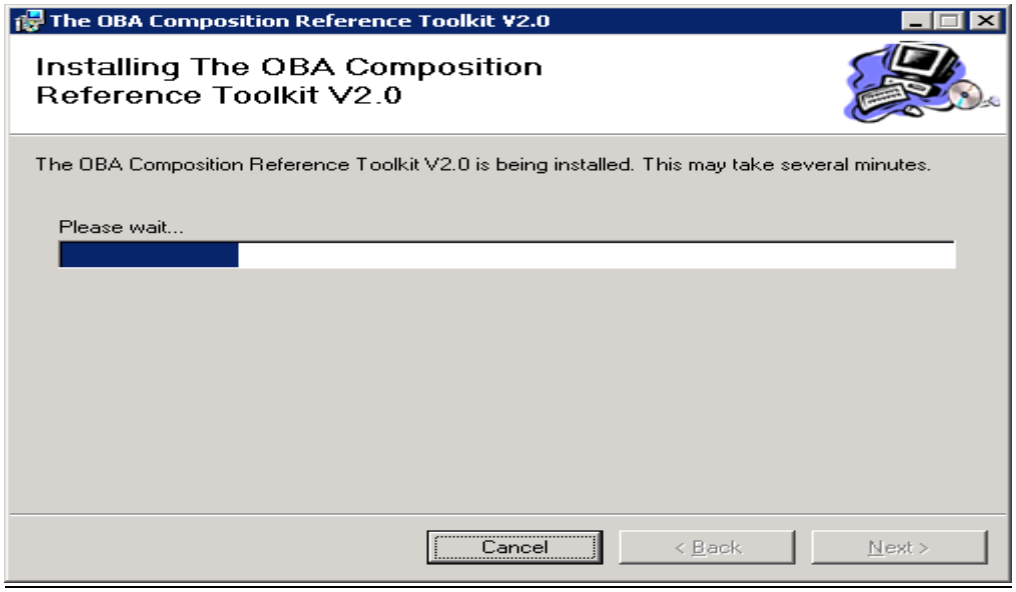

Figure 29: The installation screen

Installation Complete

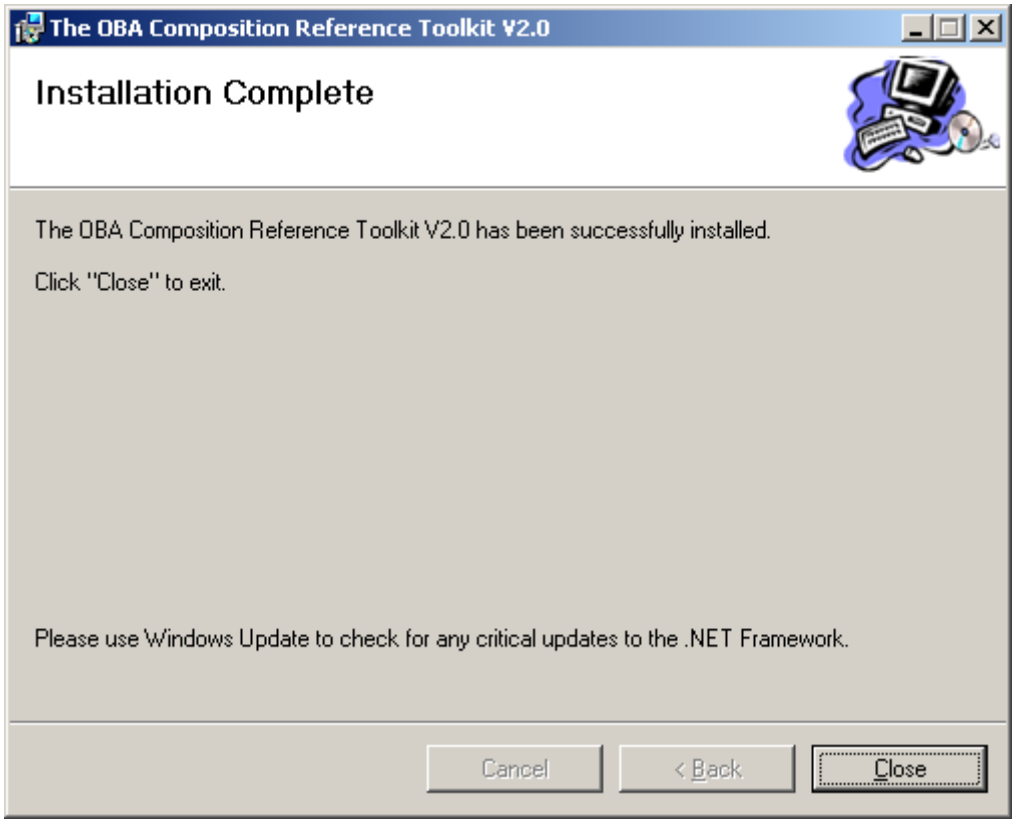

Figure 30: The Installation Complete screen

Click **Close** to complete the installation.

Verifying the Installation

Verifying the OBA Composer Installation

Click the **OBA Composer** menu to launch the OBA Composer. The OBA Composer is a WPF application that consumes and uses the services that are exposed by the OBA Composition Server to enable a rich client experience for composing OBAs by using OBA components.

Click the **Connect** button on the **OBA Server** tab to connect to the server.

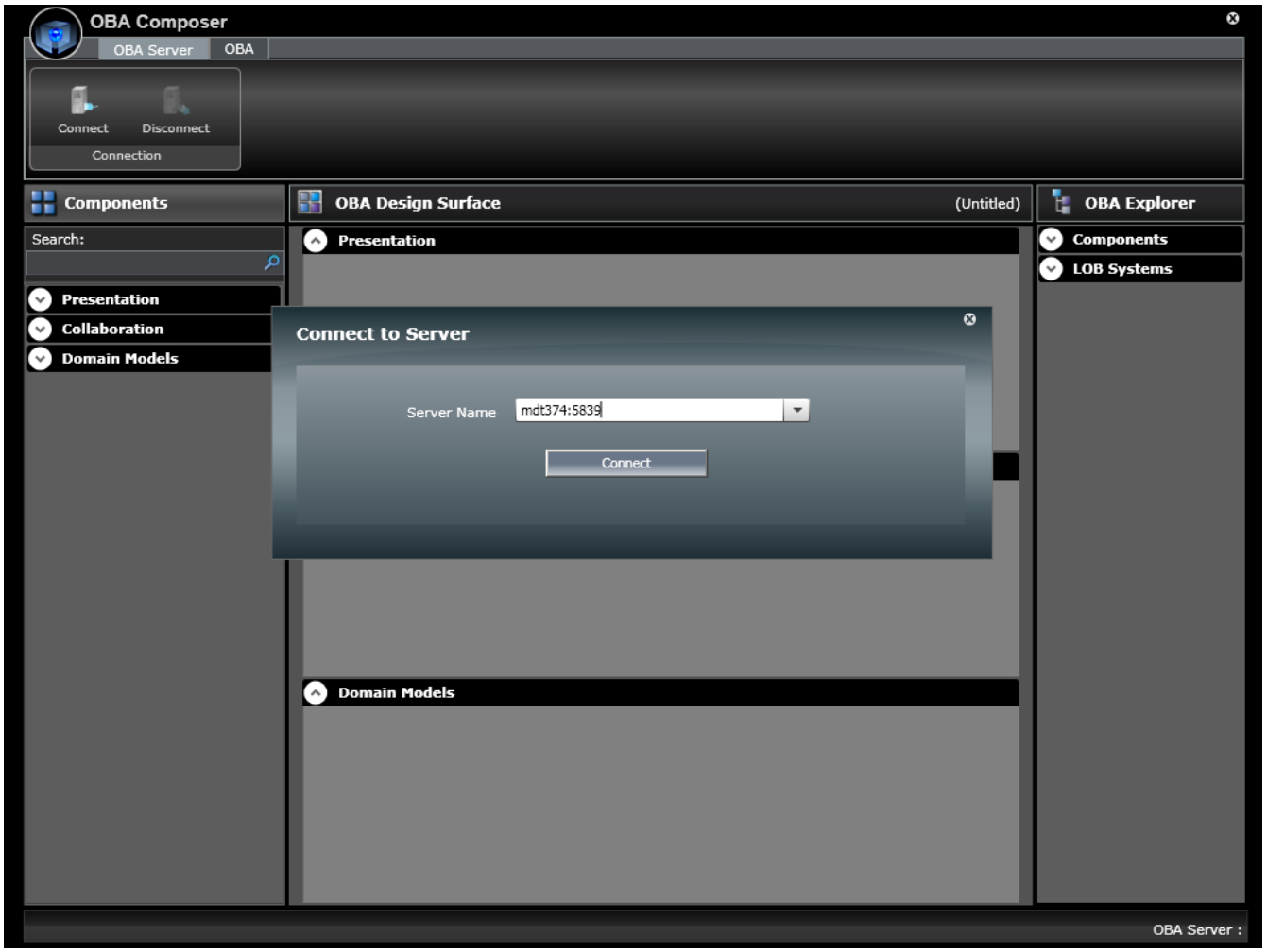

Figure 31: The OBA Composer

1. Enter the name of the server where the server components are installed .The Server name should be in the format <*Computer name: port number*>. The port number is the port on which the installer has deployed the OBA Composition Server.
2. Click the **Connect** icon to connect to the server.
3. On the **Components** panel, click the magnifying glass (🔎) icon to list all of the seed components that were installed by the OBA Composition Reference Toolkit installation file.

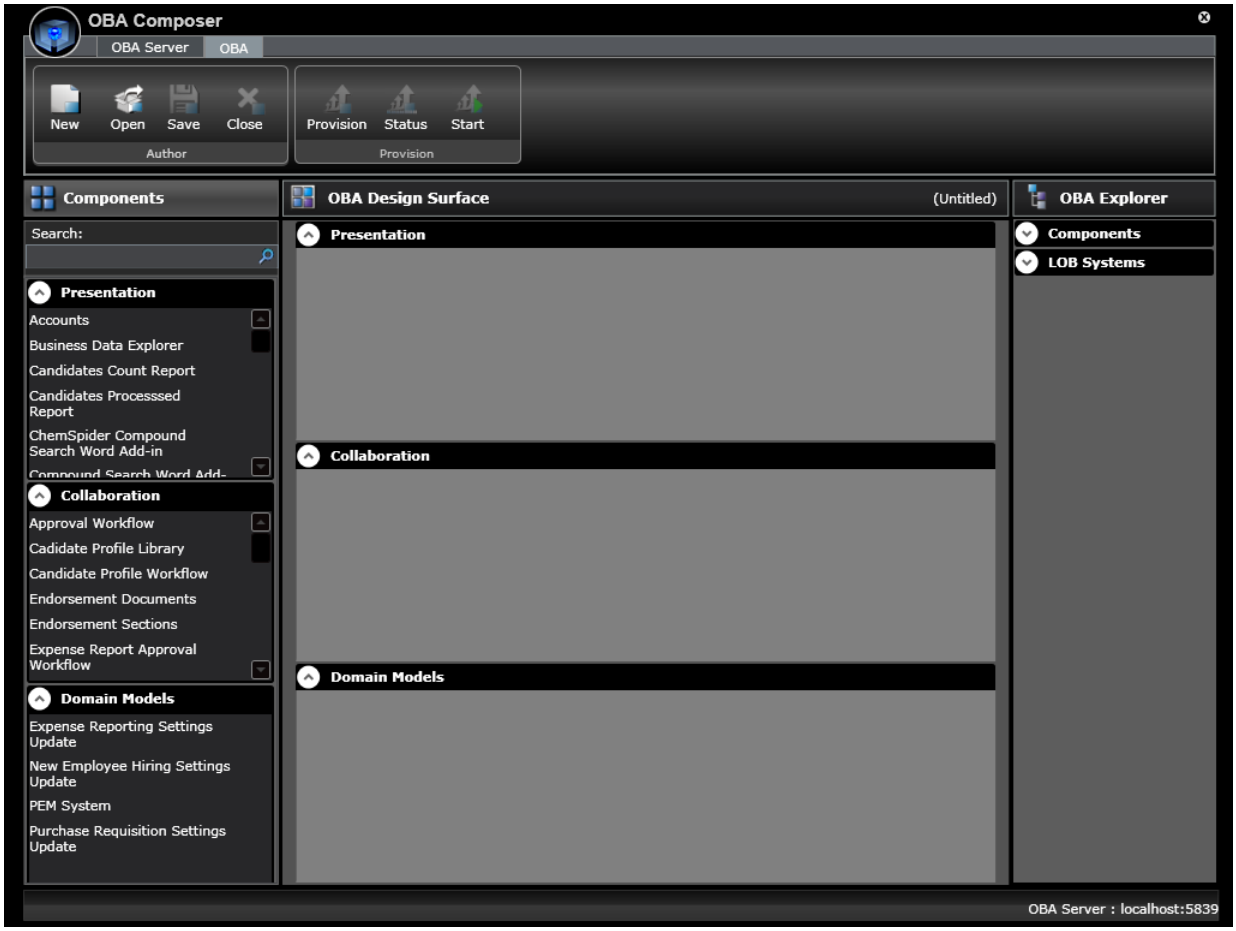

Figure 32: Installed seed components

Verifying the Source Code Deployment

Verify the source code deployment as described in the previous "Verifying the Source Code Deployment" section of this document.

Uninstalling the OBA Composition Reference Toolkit

On the **Start** menu, click **Control Panel**, double-click **Add or Remove Programs**, and then click **Change or Remove Programs**.

Locate OBA Composition Reference Toolkit – Sample Components (if installed) in the programs list.

Click **Remove** to remove OBA Composition Reference Toolkit – Sample Components.

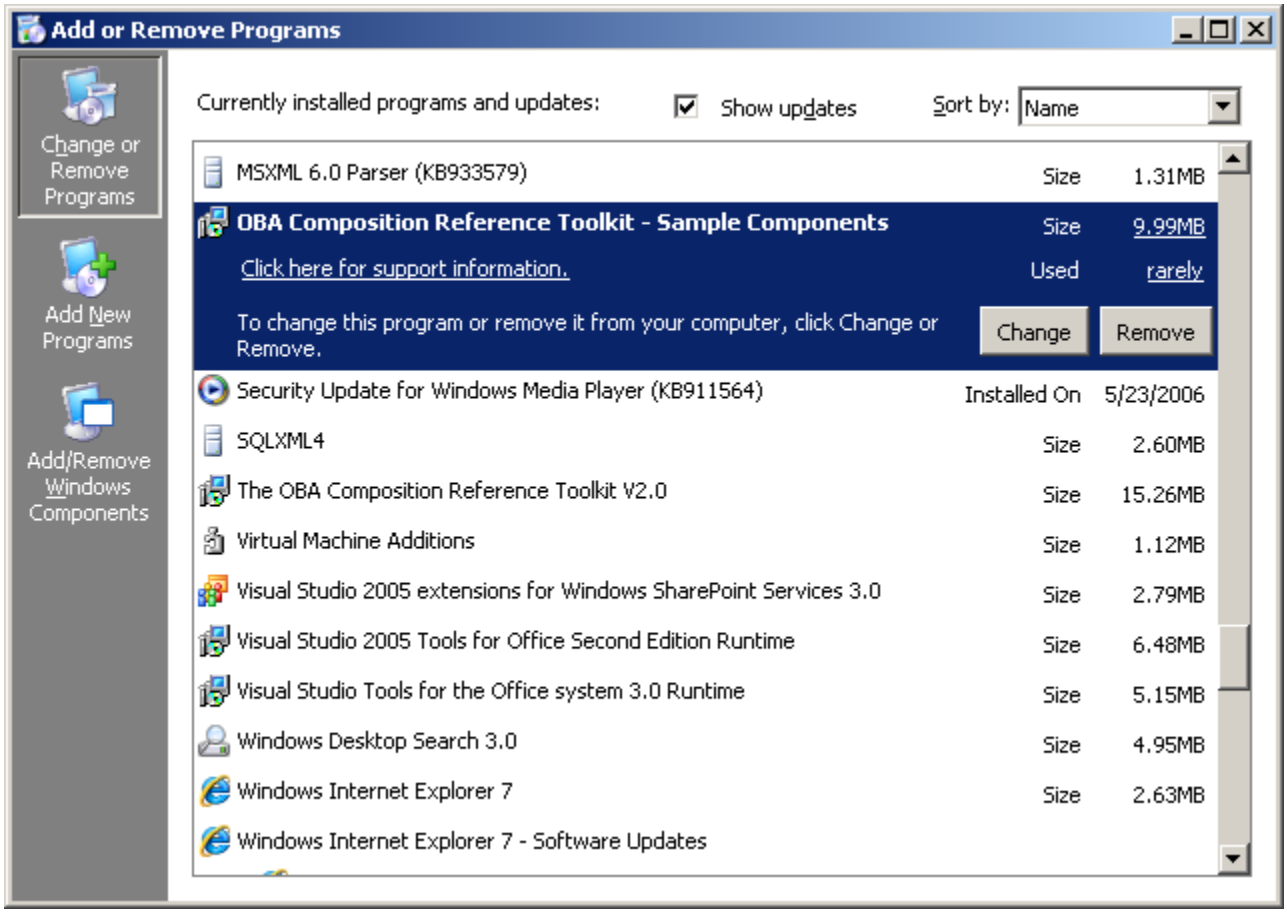

Figure 33: Uninstalling earlier versions

Next, locate The OBA Composition Reference Toolkit V2.0 in the programs list.

Click **Remove** to remove The OBA Composition Reference Toolkit V2.0.