

Setup

Microsoft Dynamics® AX 2009

Team Foundation Server Version Control Setup

White Paper

This document describes how to set up the Version Control System (VCS) for Microsoft Dynamics AX 2009 by using Microsoft® Visual Studio® Team Foundation Server as the version control system.

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<http://www.microsoft.com/dynamics/ax>



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Introduction

You can use Microsoft Visual SourceSafe (VSS), Microsoft Visual Studio Team Foundation Server (TFS), or MorphX VCS for version control in Microsoft Dynamics AX 2009. This document describes how to set up the Version Control System (VCS) for Microsoft Dynamics AX 2009 by using TFS as your VCS. The steps involved in setting up version control by using TFS are:

- Set up Microsoft Visual Studio Team Foundation Server on the version control server.
- Set up Team Server (the ID server) on the Team Server computer.
- Set up Microsoft Dynamics AX 2009 and Microsoft Visual Studio Team Explorer on the administrator computer.
- Configure version control settings in Microsoft Dynamics AX 2009.

Version Control System Considerations

Before you configure Microsoft Dynamics AX 2009 to use TFS for version control, review the requirements and features of each of the VCS options. For more information about VCS options, see the version control documentation in Microsoft Dynamics AX 2009.

Setup Overview

	Source Control Server	Team Server computer	Administrator and developer computer
Computer configuration	<ul style="list-style-type: none"> • Visual Studio Team Foundation Server and prerequisites 	<ul style="list-style-type: none"> • Supported Operating System (See Set up the Developer and Administrator Computers later in this document) • Team Server database on Microsoft SQL Server or Oracle 	<ul style="list-style-type: none"> • Supported Operating System (See Set up the Developer and Administrator Computers later in this document) • Microsoft SQL Server or Oracle • Microsoft Dynamics AX 2009 application, Application Object Server (AOS), and client • Visual Studio Team Explorer
Tasks	<ul style="list-style-type: none"> • Install and set up (Admin) 	<ul style="list-style-type: none"> • Install and set up (Admin) 	<ul style="list-style-type: none"> • Install on each computer (Admin and developers)

Install Microsoft Visual Studio Team Foundation Server

Install Microsoft Visual Studio Team Foundation Server on the source control server by following the installation instructions in the Visual Studio Team Foundation Installation Guide. If the message, "Navigation to the webpage was canceled", appears when you try to access the installation guide, then

the .chm documentation file might be blocked by your computer. To unblock the documentation file, right-click the file, and then click **Properties**. On the **General** tab, click **Unblock**.

The documentation for Visual Studio Team System 2008 is located at <http://go.microsoft.com/fwlink/?LinkId=116810>.

The documentation for Visual Studio Team System 2005 is located at <http://go.microsoft.com/fwlink/?LinkId=113137>.

Install Microsoft Visual Studio Team Explorer

The client portion of TFS is called Team Explorer. Install Team Explorer on the source control server, on the administrator computer, and optionally on developer computers.

The documentation for Visual Studio Team System 2008 is located at <http://go.microsoft.com/fwlink/?LinkId=116810>.

The documentation for Visual Studio Team System 2005 is located at <http://go.microsoft.com/fwlink/?LinkId=113137>.

Configure Microsoft Visual Studio Team Foundation Server

Connect Team Explorer to the Team Foundation Server.

1. Open Team Explorer. Click **Tools > Connect to Team Foundation Server**.
2. Type the name of the Team Foundation Server if it does not appear, and then click **OK**.

Create a project.

1. Click **File > New Team Project**.
2. Follow the instructions in the New Team Project Wizard to create a project.

Add all of the developers to the project as members.

1. Click **View > Team Explorer** to display the Team Explorer.
2. Right-click the project, point to **Team Project Settings**, and then click **Group Membership**.

Restrict developer access to the system settings.

We recommend that you restrict access to the VCSdef.xml file to prevent developers from modifying global version control system settings.

1. Click **View > Source Control Explorer**.
2. Expand the project, and then double-click **Definition**.
3. Right-click VCSdef.xml, and then click **Properties**.
4. Click the **Security** tab.
5. Modify the permissions of the group that contains the developers so that developers cannot modify the VCSdef.xml file.

Team Foundation Administrators help is available at <http://go.microsoft.com/fwlink/?LinkId=117754>. Learn about widely used Team Foundation source control tasks at <http://go.microsoft.com/fwlink/?LinkId=113138&clcid=0x409>.

Install and Set Up the Team Server (ID Server)

Note: *Team Server* should not be confused with *Team Foundation Server*. *Team Server* is an ID server that handles the task of issuing unique IDs to objects and labels when they are created.

See the *Team Server (ID Server) Setup* white paper to set up *Team Server* at <http://go.microsoft.com/fwlink/?LinkId=120292>.

Set Up the Developer and Administrator Computers

Install the Operating System

See <http://go.microsoft.com/fwlink/?LinkId=113164&clcid=0x409> for system requirements.

Install MS SQL Server or Oracle

See <http://go.microsoft.com/fwlink/?LinkId=113164&clcid=0x409> for system requirements.

Install Microsoft Dynamics AX 2009

See <http://go.microsoft.com/fwlink/?LinkId=117123> for access to the *Microsoft Dynamics AX 2009 Implementation Guide*.

Install Microsoft Visual Studio Team Explorer

The client portion of TFS is called *Team Explorer*. Installing *Team Explorer* on developer computers is optional. To install *Team Explorer* on developer computers, follow the instructions in the installation documentation at <http://go.microsoft.com/fwlink/?LinkId=113137>.

Connect Team Explorer to the Source Control Server Database

1. Open *Team Explorer*. Click **Tools** > **Connect to Team Foundation Server**.
2. Type the name of the *Team Foundation Server* if it does not appear, select the *Team Project*, and then click **OK**.

Note: Installing *Team Explorer* on developer computers is optional.

Learn about widely used *Team Foundation* source control tasks at <http://go.microsoft.com/fwlink/?LinkId=113138&clcid=0x409>.

Set Up Local Version Control Parameters (Developer and Administrator)

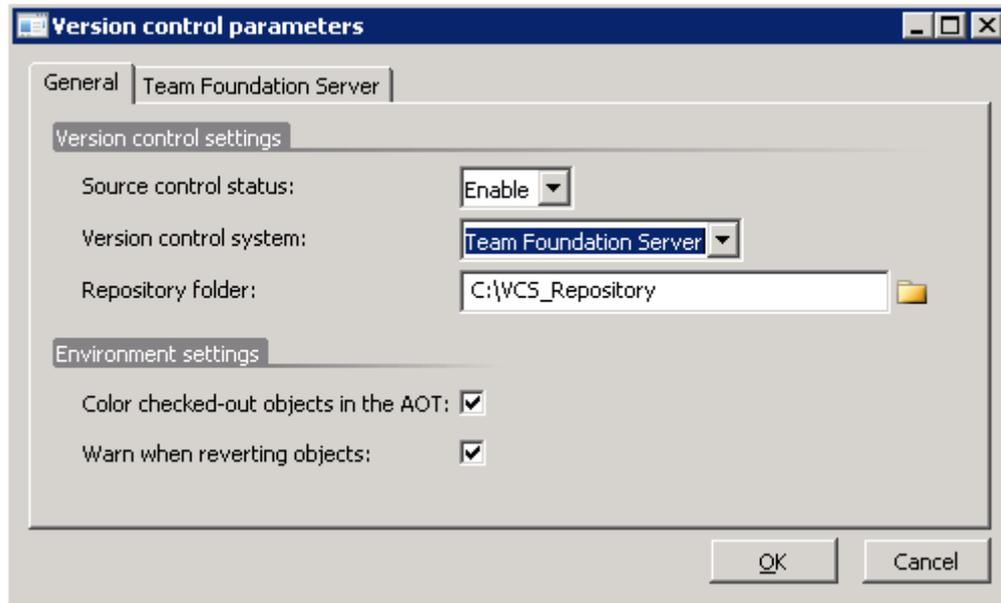
Create a Local Repository Folder

1. Open *Windows Explorer*.
2. Create a new folder to use as the local repository folder. For example, C:\VCS_Repository.

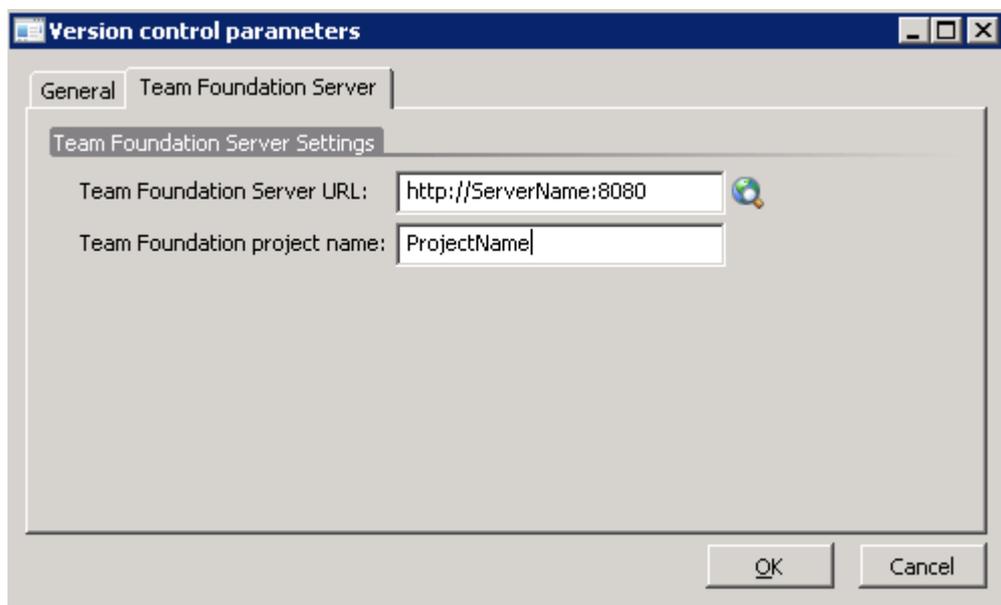
Note: Consider the folder you choose for the local repository folder. *If a Team Explorer instance that runs against the source control server shares a local repository folder with a Microsoft Dynamics AX 2009 client and a change is checked in by using Team Explorer, the Microsoft Dynamics AX 2009 client will not reflect those changes when you synchronize the Microsoft Dynamics AX client unless you select **Force** when you synchronize. Installing Team Explorer on developer computers is optional.*

Set Up the Version Control Parameters

1. Click **Microsoft Dynamics AX > Tools > Development tools > Version control > Setup > Parameters.**



2. In **Source control status**, select **Enable**.
3. In **Version control system**, select **Team Foundation Server**.
4. In **Repository folder**, type the path of the repository folder.
5. Choose environment settings.
6. Click the **Team Foundation Server** tab.



7. In the **Team Foundation Server URL** field, type the URL of the server that has the TFS project.
8. In the **Team Foundation project name** field, type the name of the TFS project.

Configure Global Version Control System Settings (Administrator)

1. Click **Microsoft Dynamics AX > Tools > Development tools > Version control > Setup > System settings**.

2. In **Microsoft SQL Server or Oracle**, select the kind of database that the Team Server uses.
3. If you selected **Microsoft SQL Server** in step 2, type the name of the Team Server in **Team Server name**. If you selected **Oracle** in step 2, type or select the TNS Service name in **Team Server TNS Service Name**.
4. If you selected **Microsoft SQL Server** in step 2, type or select the name of the Team Server database, such as AXTS, in **Team Server Database name**. If you selected **Oracle** in step 2, type or select the Team Server schema, such as AXTS, in **Team Server Schema**.
5. Specify best practice settings.

Create Repository

You must add all objects from your master copy of Microsoft Dynamics AX 2009 to the VCS server. When you add the objects to the server that runs the VCS, they are automatically registered in the Team Server so that IDs are assigned to them. Assigning IDs to all existing objects ensures that the Team Server can issue unique IDs for new objects when they are created.

Create a Local Repository Folder

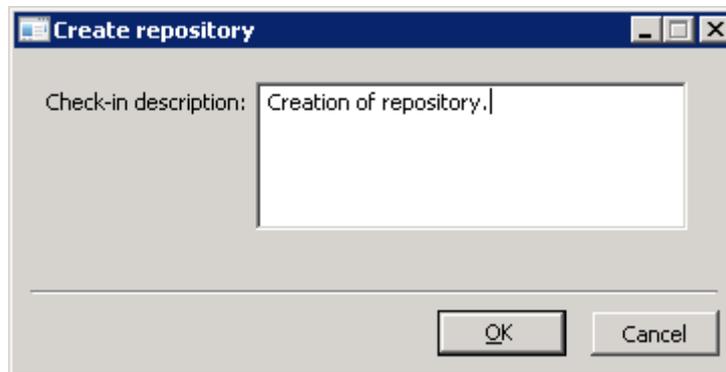
Create a repository folder on your computer. When you add the Application Object Tree (AOT) objects to the server, a copy of each object is also added to your repository folder.

Note: Consider the folder you choose for the local repository folder. *If a VSS client that runs against the VSS server shares a local repository folder with a Microsoft Dynamics AX 2009 client and a change is checked in by using the VSS client, the Microsoft Dynamics AX 2009 client will not reflect those changes when you synchronize the Microsoft Dynamics AX 2009 client unless you select **Force** when you synchronize.*

1. Open Windows Explorer.
2. Create a new folder to use as your local repository folder, such as C:\VCS_Repository.

Create Repository

1. Click **Microsoft Dynamics AX > Tools > Development tools > Version control > Create repository**.

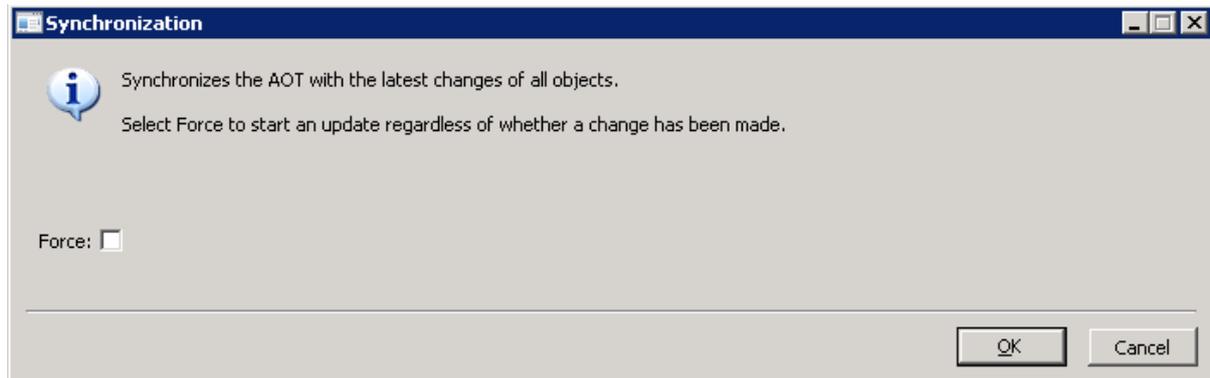


2. In **Check-in description**, type a description of the check-in, such as "Creation of repository."
3. Click **OK**.

Synchronize Objects

At first, the local version of Microsoft Dynamics AX 2009 may not be synchronized with the master version that is deployed by the version control administrator. To access the latest version of all AOT objects, synchronize the local version with the version that is on the server that is running the version control system.

1. Click **Microsoft Dynamics AX > Tools > Development tools > Version control > Synchronize.**



2. Indicate whether you want to force the synchronization (optional).
3. Click **OK** to start synchronization.

Optional Task

Add Ax32Serv.exe as an exception on the Win2K3 Database Server Firewall

1. Click **Start > Control panel > Windows Firewall.**
2. Select **On** to turn on the firewall.
3. On the **Exceptions** tab, click the **Add program** button.
4. In the **Add a program** dialog box, browse to locate the **Ax32Serv.exe** file on your computer, and then click **OK** to add it to the list of exceptions.

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