IBM Rational Synergy for Microsoft Visual Studio Interface

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| 1 | Front Matter |
|---|--|
| | Before using this information, be sure to read the general information under Appendix (Section 13) . |
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| | This edition applies to VERSION 4.2, IBM Rational Synergy for Microsoft Visual Studio Interface (product number 5724V66) and to all subsequent releases and modifications until otherwise indicated in new editions. |
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2 Introduction

About the Integration

The IBM Rational® Synergy™ for Microsoft® Visual Studio Interface™ gives you change management (CM) support through insulated and build management work areas, provides task-based CM support, and supports source code control operations on project files directly from Microsoft Visual Studio 2008. This integration lets you control and set up your Visual Studio 2008 projects in IBM Rational Synergy. This integration is provided in the form of an install program which can be downloaded from IBM Rational's website.

Assumptions

Before using this document, you should have a basic understanding of how to use the Microsoft Visual Studio 2008 IDE and IBM Rational Synergy. If you are unfamiliar with Visual Studio 2008, IBM Rational recommends that you go through a tutorial and online help for Visual Studio 2008.

For information on Microsoft Visual Studio 2008: refer to the MSDN Library for Visual Studio 2008

You should also have a conceptual and practical understanding of IBM Rational Synergy. You should understand task-based CM and be able to perform developer or build manager operations.

- For information about IBM Rational Synergy: refer to the following documentation, which is available on the IBM Rational Synergy documentation website: http://publib.boulder.ibm.com/infocenter/rsdp/v1r0m0/index.jsp
- For terms, concepts, and methodology: refer to the Introduction to IBM Rational Synergy
- For information about build management-level operations: refer to the Build Manager's Guide
- For a description of IBM Rational Synergy dialog boxes, commands, and default settings: refer to the IBM Rational Synergy Help.

IBM Rational recommends that you read this entire document before using the integration. Knowing all of the features before you integrate your data will help ensure a seamless, efficient integration.

Features

This integration lets you use the source code control and task-based CM operations from the Visual Studio 2008 development IDE. You can configure the integration to use multiple IBM Rational Synergy databases.

How the Integration Works

This integration has been completely rewritten for Microsoft Visual Studio 2008; therefore, it has significant changes from the previous Microsoft Visual Studio 2003 integration (version 2.3).

The integration can connect to multiple IBM Rational Synergy databases using IBM Rational Synergy Connections. An IBM Rational Synergy Connection uniquely represents an IBM Rational Synergy database. When you start an IBM Rational Synergy Connection, a corresponding IBM Rational Synergy session is started. An IBM Rational Synergy Connection is required by the integration to be able to connect to the IBM Rational Synergy database.

You will need to customize your Microsoft Visual Studio 2008 IDE to see the IBM Rational Synergy Task menu and IBM Rational Synergy Task toolbar. You will also need to open the IBM Rational Synergy output Console Window to view the messages returned by the integration.

Audience

The audience for this document is developers. The information in the IBM Rational Synergy for Microsoft Visual Studio Interface Help assumes that you have a basic understanding of how to use Microsoft Visual Studio 2008 and the IBM Rational Synergy client. Information about IBM Rational Synergy in this document is limited to what is essential for you to know to use the integration.

Notices (Section 13)

3 What is New

IBM Rational Synergy for Microsoft Visual Studio Interface offers the following new features:

- This integration is based on Visual Studio Industry Partners program. It is written as a Visual Studio Package.
- This version of the integration will only work with IBM Rational Synergy 7.1. IBM Rational Synergy Classic client or older versions of IBM Rational Synergy are not supported by this integration.
- This version of the integration will only work with Microsoft Visual Studio 2008. However, it can co-exist with the Visual Studio 2003 Integration, Release 2.4 and IBM Rational Synergy for Microsoft Visual Studio Interface, Release 3.5.
- The integration name has been changed from Telelogic Synergy for Microsoft Visual Studio Interface to IBM Rational Synergy for Microsoft Visual Studio Interface

4 Product Requirements

The following products are required to run IBM Rational Synergy for Microsoft Visual Studio Interface:

- Microsoft® Windows Vista® or XP
- Microsoft Visual Studio 2008
- IBM Rational Synergy 7.1 on Windows Vista or XP
- IBM Rational® Change™ 5.2 (Optional)

5 Installation Instructions

5.1 Installation Instructions

Before you install the integration, IBM Rational Synergy Release 7.1 and Microsoft Visual Studio 2008 must be installed. The information below will provide some instructions on how to install IBM Rational Synergy.

Install IBM Rational Synergy

Refer to the installation instructions for IBM Rational Synergy in the IBM Rational Synergy Installation Guide for Windows.

After you have properly installed IBM Rational Synergy and Microsoft Visual Studio 2008, you are ready to install IBM Rational Synergy for Microsoft Visual Studio Interface. To learn how to install the integration, see Install the Integration (Section 5.2).

5.2 Install the Integration

Note Before you install IBM Rational Synergy for Microsoft Visual Studio Interface, please make sure that you have done the following:

- Install IBM Rational Synergy Release 7.1 and Microsoft Visual Studio 2008.
- Uninstall any previous versions of IBM Rational Synergy for Microsoft Visual Studio Interface.
- Uninstall any previous versions of IBM Rational Synergy for Microsoft Visual Studio Interface Help. To do this, go to Control Panel > Add or remove Programs and remove the IBM Rational Synergy for Microsoft Visual Studio Interface Help program.
- · Stop all IBM Rational Synergy sessions.
- Read the Team Development and Source Control Operation documentation provided by Microsoft.
- Set your IBM Rational Synergy database(s) to case=PRESERVE.

Please carefully follow the steps below to install IBM Rational Synergy for Microsoft Visual Studio Interface:

- 1. Download IBM Rational Synergy for Microsoft Visual Studio Interface 4.2 from the IBM Rational Synergy Integrations web site at: http://www.ibm.com/software/awdtools/synergy/
- 2. The integration is in a zip file named <code>VS2008int 42.ZIP</code>. Unzip the zip file to a temporary directory. Navigate to setup.exe and run the setup. The setup wizard will guide you through the installation steps.
- 3. After installing the integration, start Microsoft Visual Studio 2008.

Before Using the Integration

6.1 Before Using the Integration

6

After you have successfully installed the integration, you will need to perform additional set-up and installation activities before you can begin using the integration. You will need to customize Microsoft Visual Studio 2008 to view the IBM Rational Synergy toolbar and menu as well as other views offered by the integration.

Note It is important that you read the latest Readme to view the most current information.

- Setting Up the Database (Section 6.2)
- Setting Up the Work Area (Section 6.3)
- Install Visual Studio File Types and Ignore Rules (Section 6.4)
- Select the Source Control Plug-In (Section 6.5)
- Activate the IBM Rational Synergy Taskbar (Section 6.6)
- Activate the IBM Rational Synergy Output Console Window (Section 6.7)
- Activate the IBM Rational Synergy Task View (Section 6.8)
- Activate the IBM Rational Synergy Change Request View (Section 6.9)

6.2 Setting Up the Database

Before you can properly begin using the integration, it is important that you set up your IBM Rational Synergy database. There are two important set-up activities to perform on your IBM Rational Synergy database.

- Make sure that your IBM Rational Synergy database is set to Preserve case. Follow the steps below to accomplish this.
 - 1. Open up a command prompt on the IBM Rational Synergy server machine and ensure that ccmdb is in your path.
 - 2. Type the following command: ccmdb info <dbpath> /k case /v PRESERVE
 - 3. Exit the command prompt.
 - 4. Restart the machine.
- 2. Make sure that your IBM Rational Synergy database is set to support multiple project instances. This is required to support the creation of Solution projects having the same name as the Solution. Follow the steps below to accomplish this.
 - 1. Start an IBM Rational Synergy session using the IBM Rational Synergy Classic Client.
 - 2. Open up a command prompt on the IBM Rational Synergy server machine and ensure that CCM is in your path.
 - 3. Type the following commands:
 - ccm set role ccm admin
 - ccm query -t model -n base
 - ccm attr -m multiple local proj instances -v TRUE @1
 - 4. Exit the command prompt.

6.3 Setting Up the Work Area

Before you begin using the integration to perform source code control operations, you must set IBM Rational Synergy to use a work area template that does not contain project or database specific information. Please follow the steps provided below to properly set your work area template.

- 1. Start an IBM Rational Synergy session.
- 2. Click Tools and select Options.
- 3. Click the **Actions** tab and select **Copy Project** from the list provided.

- 4. Make sure that the + Database name and the Add project-specific directory options are not selected.
- 5. Click **Apply** to save your changes, then click **OK** to exit the **Options** dialog box.

Note You need this work area template only for project migration. It is not required to have this work area template for the Copy Project operation.

6.4 Install Visual Studio File Types and Ignore Rules

Microsoft Visual Studio file types and ignore rules must be installed into each IBM Rational Synergy database before you can use the integration. To install these types, your group membership must include ccm_admin privileges.

- 1. Start an IBM Rational Synergy session using the IBM Rational Synergy Classic Client.
- 2. Set your role to ccm_admin.
- 3. Load the Visual Studio file types by running the IBM Rational Synergy for Microsoft Visual Studio Interface Install File Types program. This program will install different file types for Microsoft Visual Studio 2008. Please follow the steps below:
 - Find the Microsoft Visual Studio 2008 Install File Types program, which is located in the following location: Start > All Programs > IBM Rational > Integrations > IBM Rational Synergy for Microsoft Visual Studio Interface 4.2
 - 2. Click the **Install Visual Studio file types** option and follow the instructions.
- 4. After the installation is complete, exit and restart your IBM Rational Synergy session.

6.5 Select the Source Control Plug-In

Before you can use any of the task-based and source code control operations that IBM Rational Synergy for Microsoft Visual Studio Interface offers, you must first select IBM Rational Synergy as your source control plug-in selection. Follow the steps below.

- 1. Open the Microsoft Visual Studio 2008 IDE.
- 2. In the Microsoft Visual Studio 2008 main menu, click **Tools**, then select **Options**.
- 3. Select **Source Control**, then select the **Plug-in Selection** option. The **Options** dialog box will appear and will allow you to choose your current source control plug-in. You must select IBM Rational Synergy.
- 4. After you have selected IBM Rational Synergy, click OK.

Note Once you have selected IBM Rational Synergy as your current source control plug-in, the IBM Rational Synergy **Settings** dialog box may appear if you have no IBM Rational Synergy connections available. You must create an IBM Rational Synergy connection in order to perform the source control operations offered by the integration. Please refer to the **Connection Management (Section 9.6.2)** section to learn how to create a connection.

6.6 Activate the IBM Rational Synergy Taskbar

In order to use the IBM Rational Synergy Taskbar that is made available to you by the integration, you must first activate it. Follow the steps below.

- 1. In the Microsoft Visual Studio 2008 IDE, click **Tools**, then select **Customize**.
- 2. Select the IBM Rational Synergy Taskbar option, then Close.

There is another way to activate the IBM Rational Synergy Taskbar. The steps below will explain an alternative way to activate the IBM Rational Synergy Taskbar.

- 1. In the Microsoft Visual Studio IDE, right click on any available space around the toolbars. You will see several menu options.
- 2. Select **IBM Rational Synergy Taskbar**. The IBM Rational Synergy Taskbar (see Figure 1) will now be available as an additional toolbar in the Microsoft Visual Studio IDE.



Figure 1. IBM Rational Synergy Taskbar

6.7 Activate the IBM Rational Synergy Output Console Window

In order to view any messages that result from performing any of the version control operations, you must activate the IBM Rational Synergy Output console window. Follow the steps below.

- 1. In the Microsoft Visual Studio 2008 IDE, click View, then select Output.
- 2. The Output console window will appear at the bottom of the Microsoft Visual Studio 2008 IDE. You will now be able to view the messages that result from any source control operations that you perform.

6.8 Activate the IBM Rational Synergy Task View

The IBM Rational Synergy Task View will be activated automatically and added to the Microsoft Visual Studio 2008 IDE once you select IBM Rational Synergy as your source control plug-in. Please refer to Select the Source Control Plug-In (Section 6.5) section for more information on how to select IBM Rational Synergy as your source control plug-in.

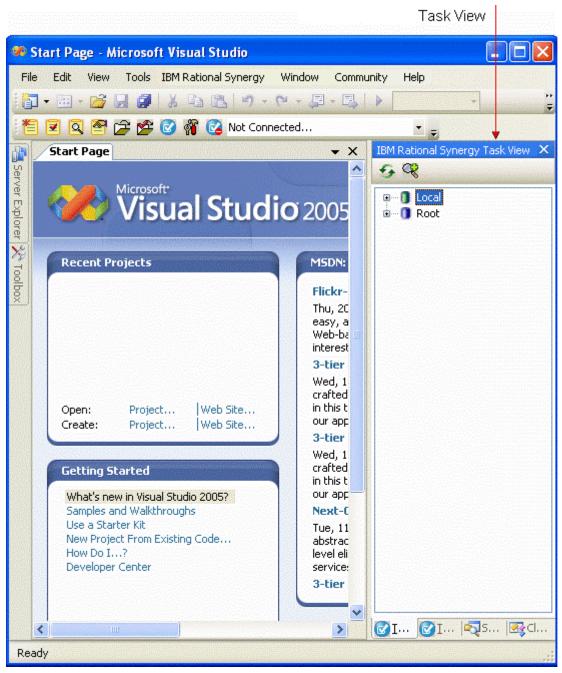


Figure 2. IBM Rational Synergy Task View

If you want to close the **IBM Rational Synergy Task View** while you are using the integration, simply close the view just as you would if you were closing any of Microsoft Visual Studio's views/windows.

To activate the IBM Rational Synergy Task View again, follow the steps below.

• In the Microsoft Visual Studio 2008 main menu, click on View > IBM Rational Synergy, then select IBM Rational Synergy Task View.

The IBM Rational Synergy Task View will again be added to the Microsoft Visual Studio IDE.

Note The **IBM Rational Synergy Task View** will automatically be removed from the Microsoft Visual Studio 2008 IDE once you disable IBM Rational Synergy as your source control plug-in selection.

6.9 Activate the IBM Rational Synergy Change Request View

The **IBM Rational Synergy Change Request View** will be activated automatically and added to the Microsoft Visual Studio IDE once you select IBM Rational Synergy as your source control plug-in. Please refer to **Select the Source Control Plug-In (Section 6.5)** section for more information on how to select IBM Rational Synergy as your source control plug-in.

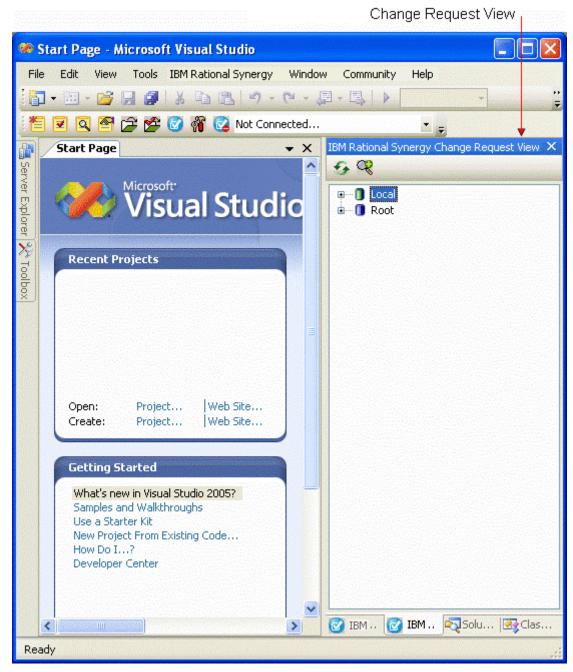


Figure 3. IBM Rational Synergy Change Request View

If you want to close the IBM Rational Synergy Change Request View while you are using the integration, simply close the view just as you would if you were closing any of Microsoft Visual Studio's views/windows.

To activate the IBM Rational Synergy Change Request View again, follow the steps below.

• In the Microsoft Visual Studio 2008 main menu, click on View > IBM Rational Synergy, then select IBM Rational Synergy Change Request View.

The IBM Rational Synergy Change Request View will again be added to the Microsoft Visual

Note The IBM Rational Synergy Change Request View will automatically be removed from the Microsoft Visual Studio 2008 IDE once you disable IBM Rational Synergy as your source control plugin selection.

7 Project Setup and Migration

7.1 Project Setup and Migration

Project setup and data migration is the process of starting a project in Microsoft Visual Studio 2008 and controlling the same project under IBM Rational Synergy configuration management. The following sections will describe this process.

- Project Mapping (Section 7.2)
- How to Migrate (Section 7.3.1)
- Migrate using Migrate Tools (Section 7.3.2)
- Migrate from within Microsoft Visual Studio (Section 7.3.3)
- Rebuild and Baseline Your Project (Section 7.3.4)

7.2 Project Mapping

A Visual Studio Solution consists of many projects. These projects may be located anywhere in the file system. Project mapping is the process of defining how a Visual Studio project corresponds to a project in IBM Rational Synergy. This integration maps a Visual Studio Solution and its projects to IBM Rational Synergy projects according to the following rules.

- 1. A Solution is mapped to a project in IBM Rational Synergy with an absolute work area. In IBM Rational Synergy, the Solution will be the top-level project.
- 2. A project that is located inside the Solution directory in the file system may be migrated as a project or a directory in IBM Rational Synergy.
 - If a project is migrated as a project, it must have a relative work area and will be defined as a subproject of the Solution project (top-level project) in IBM Rational Synergy.
 - If a project is migrated as a directory, it must have a relative work area and will be defined as a directory of the Solution project (top-level project) in IBM Rational Synergy.
- 3. A project that is located outside the Solution directory in the file system may only be migrated as a project. These types of projects must have an absolute work area and will be defined as a subproject of the Solution project (top-level project) in IBM Rational Synergy.

Other Recommendations:

If the option **Show Miscellaneous Files in Solution Explorer** is enabled in **Tools** > **Options** > **Environment** > **Documents**, the files that are placed in the **Miscellaneous Files** folder will not be migrated to IBM Rational Synergy when the Solution or Project is migrated. Also, you will not be able to migrate the **Miscellaneous Files** folder and all its files to IBM Rational Synergy separately. (To learn more about the **Miscellaneous Files** folder, go to Microsoft Help)

If you feel that the files contained in the **Miscellaneous Files** folder are important and you would like to control the files under IBM Rational Synergy, you may do one of the following:

- Create a Solution folder and place the files in the Solution folder. Files contained in a Solution folder will be migrated to IBM Rational Synergy when the Solution is migrated.
- Create a Project folder and place the files in the Project folder. Files contained in a Project folder will be migrated to IBM Rational Synergy when the Solution or Project is migrated.

Note You may also migrate files in a Solution or Project folder by performing the **Add Uncontrolled Files** operation (To read more about the **Add Uncontrolled Files** operation, go to **How to add new files and folders to database (Section 10.5)**).

7.3 How to Migrate

7.3.1 How to Migrate

Note In order for your Solutions/Projects to work effectively in a team environment, it is important that they are structured properly. When you structure your Solutions and Projects, make sure that your Solutions and Projects have a relative work area.

You can accomplish this in two ways.

- When creating your Solutions and Projects, make sure that all of the Projects contained in your Solutions have a relative work area instead of an absolute work area
- Modify your Solution files so that the Project paths are relative rather than absolute.

Build your Application in Visual Studio

Before you can migrate Solutions and Projects to IBM Rational Synergy, you must first prepare and build your Solutions and Projects in Visual Studio. Ensure that you have done the following before you migrate your projects to IBM Rational Synergy.

- 1. Prepare the Solutions and Projects that you want to migrate to IBM Rational Synergy by creating/opening the Solutions and Projects in Visual Studio.
- 2. Make sure that the application builds properly in Visual Studio and that all the files/folders that you want to control under IBM Rational Synergy are in your work area.

Your project is now ready for migration.

Migrate to IBM Rational Synergy

Caution Before you migrate your Solutions/Projects to IBM Rational Synergy, make sure that you have installed the Microsoft Visual Studio file types into your IBM Rational Synergy database. To read more about how you can install the Microsoft Visual Studio file types into your IBM Rational Synergy database, refer to the **Install Visual Studio File Types and Ignore Rules (Section 6.4)** section.

There are two ways to migrate projects to IBM Rational Synergy, one from IBM Rational Synergy directly, and the other from the Microsoft Visual Studio IDE by using the integration. Both process are described below:

- Migrate using Migrate Tools (Section 7.3.2)
- Migrate from within Microsoft Visual Studio (Section 7.3.3)

Rebuild and Baseline your Project

Once you have properly migrated your Solutions and Projects to IBM Rational Synergy, you must now rebuild and baseline your projects. The following section will explain the process of baselining the projects that you migrated to IBM Rational Synergy.

• Rebuild and Baseline Your Project (Section 7.3.4)

7.3.2 Migrate using Migrate Tools

Refer to IBM Rational Synergy Classic Client help for project migration.

Notes

- If you use IBM Rational Synergy Classic Client to migrate a Solution/Project, it is your responsibility to specify the files that you want to ignore during migration. For example, *.suo and *.user files should be ignored when migrating Solutions/Projects.
- If you are migrating Projects using the IBM Rational Synergy Classic Client, you must follow the steps provided below.
 - 1. Exit Microsoft Visual Studio IDE.
 - 2. Make sure that you have installed all Microsoft Visual Studio File Types and Ignore Rules.
 - 3. Migrate the Solution project first. All Projects located inside the Solution directory will be migrated only as directories.
 - 4. Migrate all the Projects located outside the Solution directory separately (one at a time).
 - 5. After you have migrated the Solution and all of the Projects, you may associate all of the outside Projects to the Solution project by adding all of the outside Projects as subprojects to the Solution project using IBM Rational Synergy Classic Client.
 - 6. Edit the *.sln file in order to ensure that the references to all of the Projects are still correct.
 - 7. If the Solution contained Web Projects, you may need to modify the Virtual Directory properties (located within **Internet Information Services**) to ensure that the Local Path points to the current location.
 - 8. Open Microsoft Visual Studio IDE and open the Solution from the new work area location.

7.3.3 Migrate from within Microsoft Visual Studio

The following information will explain the process of migrating Solutions and Projects from within the Microsoft Visual Studio IDE by using the integration.

- Before you migrate your Solutions/Projects to IBM Rational Synergy, make sure that all of the project path/files are not locked. The integration needs to move/rename the project files during the process of migration and if any of the project path/files are locked, the integration will not be able to migrate the Solutions/Projects properly.
- If your Solution contains a project which has the same name as the Solution, make sure that your IBM Rational Synergy database is set to support multiple project instances. If you decide not to set your IBM Rational Synergy database to support multiple project instances, you must do one of the following in order for the project migration to work properly.
 - O Rename the Solution. In order to rename the Solution properly, you must rename the following:
 - sin file
 - the directory containing the .sln file
 - O Rename the Project. In order to rename the Project properly, you must rename the following:
 - project file
 - the directory containing the project file

Caution When you rename the directory containing the project file, you must also update the Solution file so that it will still point to the renamed project.

In order for the integration to perform the migration, you must have a defined connection to an IBM Rational Synergy database to which you want to migrate the project. Refer to the **Connection** Management (Section 9.6.2) section to learn how to create a connection.

Carefully follow the steps below to migrate your Solutions and Projects to IBM Rational Synergy.

- 1. Ensure that you have an IBM Rational Synergy connection.
- 2. Right click the Solution in the Solution Explorer. Select the IBM Rational Synergy option, then select Create Project in IBM Rational Synergy, or in the Microsoft Visual Studio 2008 main menu, click on File > IBM Rational Synergy, then select Create Project in IBM Rational Synergy.

Notes

- Make sure to specify whether you want the projects created as a project or as a directory. Remember that projects located outside the Solution directory in the file system may only be migrated as a project, and projects located inside the Solution directory in the file system may be migrated as a project or a directory.
- Remember ASP.Net Web Application projects whose location in the file system is inside the directory of another Project or Solution directory may only be migrated to IBM Rational Synergy as a directory when using the integration.
- 3. By using the Create Project in IBM Rational Synergy dialog box, you can choose not to migrate some of the projects in your Solution.

Caution If you choose not to migrate the Solution, you will not be allowed to migrate any of the projects that are located inside the Solution directory in the file system. The only way to migrate projects located inside the Solution directory is by also choosing to migrate the Solution.

- 4. Select the appropriate Connection Name, Release, Purpose, Platform, Default Task, and write an appropriate **Description**.
- 5. Click **Create**. You will see a progress dialog box.

Note If the database currently selected for project migration is not set to PRESERVE case, the integration will warn users before migrating the Solutions/Projects.

6. When project creation is finished, Microsoft Visual Studio will display a warning dialog box stating that the Solution has been modified outside the environment (see Figure 4). Before you respond to the Conflicting File Modification Detected (Figure 4) dialog box, make sure that the progress dialog box above has disappeared.



Figure 4. Conflicting File Modification Detected dialog box

7. Click Overwrite. Microsoft Visual Studio will prompt you to save the Solutions by displaying the dialog box shown below. You must click Yes to save the current state of your Solutions and Projects.

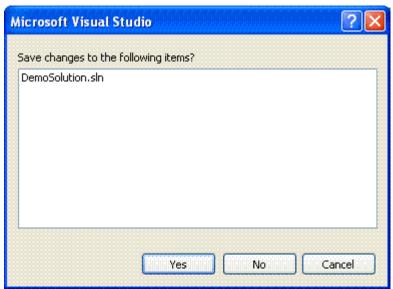


Figure 5. Save Solutions Prompt dialog box

8. The Solutions and Projects files are now properly decorated in the Solution Explorer.

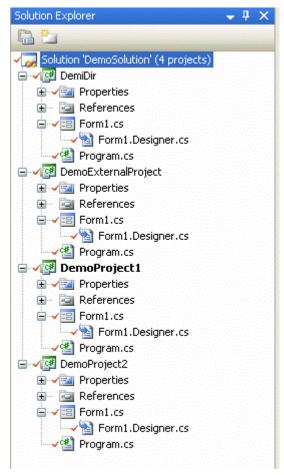


Figure 6. Solution Explorer containing the decorated Solutions and Projects files

Note Web projects will not display glyphs even if they are controlled.

9. Click File > Save All in the Microsoft Visual Studio 2008 main menu.

Your Solutions and Projects are now controlled under IBM Rational Synergy.

7.3.4 Rebuild and Baseline Your Project

Your Solutions and Projects are now in IBM Rational Synergy. Perform the following steps to baseline the Projects.

IBM Rational recommends that you rename the directory containing the Solution in the file system. This allows you to check if all the necessary files have been migrated when the Solution is re-built after performing the **Open Project** operation.

- 1. Open the Microsoft Visual Studio IDE.
- 2. Open the projects that you just migrated to IBM Rational Synergy by using the integration. You may do this by clicking on the Open Project button located in the IBM Rational Synergy Taskbar (see figure 7) or by selecting the option Open Project from the IBM Rational Synergy menu (see figure 8).



Figure 7. IBM Rational Synergy Taskbar Open Project Option

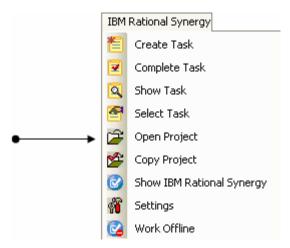


Figure 8. IBM Rational Synergy menu Open Project Option

- 3. The Open IBM Rational Synergy Project dialog box will appear. It will display all the working projects, including prep projects. The Open IBM Rational Synergy Project dialog box will also display the available project versions for each project.
- 4. Select the appropriate project and version that you want to open.
- 5. Click Open. When you open a project,
 - The project and version that you selected will be opened as a Visual Studio Solution/Project in the Microsoft Visual Studio 2008 IDE.
 - The Solution and Project files will be displayed in the Solution Explorer with appropriate decorators that indicate their current source control status.
- 6. Rebuild the Solutions and/or Projects that you just opened.
- 7. To baseline the Projects, you may be required to use the IBM Rational Synergy Classic Client. You must have the build_mgr or ccm_admin role.
 - If you don't have either role, make sure all the tasks are checked in and that no files in your IBM Rational Synergy project are checked out. Now you can ask your build manager or administrator to baseline your project. Baseline projects are in a non-modifiable state, such as released, integrate, etc.

Note For additional information on project baselines, refer to the IBM Rational Synergy documentation.

8 Setting Up a Development Project

8.1 Setting Up a Development Project

Once you have baselined your projects, delete your work area. Your work area will not be valid anymore. You should now copy the project and open that project in Microsoft Visual Studio to carry on with the development process. When you copy the project, you will get a new working copy of the project. It is important that you have a working copy of the project in order to make any changes.

In order to get a working copy of a project, you must perform the **Copy Project** operation.

• Copy a Project (Section 8.2)

After you have successfully copied the project, you may open the project by using one of the options listed below.

- Open Project from IBM Rational Synergy Taskbar (Section 9.2.6)
- Open a Project from the File System (Section 8.3)
- Open Visual Studio .NET 2003 Projects (Section 8.4)

8.2 Copy a Project

Before you can continue on with the development process, you must first get a new working copy of the project. You can do this by using the Copy Project operation provided to you by the integration. The following information will explain the process of copying a project.

Notes

- The Copy Project operation requires that the .sln file and all project files be non-modifiable (integrate state). After executing the Copy Project operation, you may be prompted by the integration to check out the .sln file and all project files, always select Yes.
- Before performing the Copy Project operation, make sure that the new work area location is empty.
- IBM Rational recommends that when copying projects, make sure your work area template includes project specific information that includes the project version and project instance.
- 1. Open the Microsoft Visual Studio IDE.
- 2. Copy the project that you have controlled under IBM Rational Synergy. You may do this by clicking Copy Project located in the IBM Rational Synergy Taskbar (see figure 9) or by selecting Copy Project from the IBM Rational Synergy menu (see figure 10).



Figure 9. IBM Rational Synergy Taskbar Copy Project Option

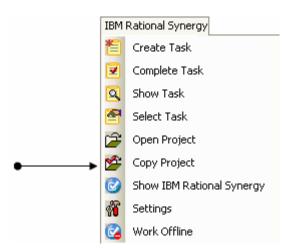


Figure 10. IBM Rational Synergy menu Copy Project Option

- 3. The Copy IBM Rational Synergy Project dialog box will appear. The value in the New Version box will be the next version recommended by the integration. The Copy IBM Rational Synergy **Project** dialog box will display all of the available projects and project versions.
- 4. Select the project and project version that you want to copy. Also, make sure that the appropriate Connection Name, Current Task, Scope, New Version, Release, Purpose, and Work Area for the project that you are copying are set properly. If you need further help understanding and setting the available options, go to the IBM Rational Synergy Help to read more about copying projects.
- 5. Copy the project by clicking Copy. The project and project version that you selected will be copied and added to the Solution Explorer.

Note If you want to also copy the subprojects, make sure to select the checkbox next to the Also Copy Subprojects option.

8.3 Open a Project from the File System

If you have a working project and you know its location in the file system, you can also open the project by using the Microsoft Visual Studio IDE's Open Project/Solution menu.

Follow the steps below.

- 1. Open the Microsoft Visual Studio 2008 IDE.
- 2. On Visual Studio's main menu, click File > Open, then select Project/Solution.
- 3. Locate the Project/Solution that you want to open and then open it. Microsoft Visual Studio will now open the Project/Solution that you selected. The Project/Solution will be added to the Solution Explorer.
- 4. To connect the Project/Solution to IBM Rational Synergy, select the Solution or Project in the Solution Explorer, then select the Connect option from the IBM Rational Synergy menu. The integration will display the Select Connection dialog box. This dialog box will allow you to select a connection.

Note If you connect the Solution, the Solution and all the Projects contained in the Solution will be connected to IBM Rational Synergy. If you connect only the Project, just the Project that you selected will be connected to IBM Rational Synergy.

- 5. Select the appropriate connection by highlighting it, then clicking **Select**.
- 6. The Project/Solution that you opened will now be connected to IBM Rational Synergy.
- 7. Once you are connected, save all the files by clicking File > Save All in the Microsoft Visual Studio IDE's main menu. The next time you open this Project/Solution, the Project/Solution will open up as connected.

8.4 Open Visual Studio .NET 2003 Projects

9 Getting Familiar with the Integration

9.1 Getting Familiar with the Integration

This section outlines some of the new options and features that are provided in the integration.

IBM Rational recommends that you read the following sections in order to use the integration to its full potential.

- IBM Rational Synergy Taskbar (Section 9.2.1)
- IBM Rational Synergy Output Console Window (Section 9.3)
- IBM Rational Synergy Task View (Section 9.4.2)
- IBM Rational Synergy Change Request View (Section 9.4.3)
- Symbols and Tooltips (Section 9.5)
- Settings (Section 9.6.1)
- IBM Rational Synergy 'smart-card' login feature (IBM Rational Synergy 'smart-card' login feature.html)

9.2 IBM Rational Synergy Taskbar

9.2.1 IBM Rational Synergy Taskbar

The IBM Rational Synergy Taskbar and menu offer a quick way to perform task, project, and settings operations.

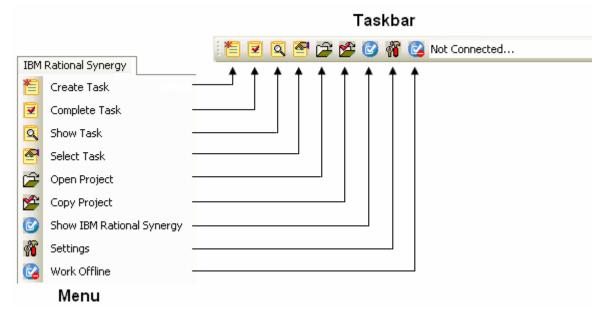


Figure 11. IBM Rational Synergy Taskbar and Menu

These operations are further described in the following sections.

9.2.2 Create a Task

Use the Create Task menu option or click the E Create Task icon to bring up the Create Task dialog box.

Fill in all of the available options (Task Synopsis, Resolver, Release, Priority, Platform, Subsystem, Estimated Effort, Estimated Date, and Description), then click Create to create a new task. The newly created task will become your current task.

9.2.3 Complete a Task

Use the Complete Task menu option or click the Complete Task icon to bring up the Complete Task dialog box.

When the **Complete Task** dialog box appears, the current task will automatically be selected.

- 1. Select the task that you want to complete.
- 2. Select or fill in the following options (Connection Name, Actual Effort, and Description), then click Complete to complete the selected task.

Note You must refresh the status of your Solution in order to see the updated version control status symbols. Refer to How to Refresh the Version Control Status (Section 10.16).

9.2.4 Show Task Properties

Use the **Show Task** menu option or click the Show Task icon to bring up the Task Properties dialog box.

You can view and/or make any changes to the task properties. When you are done, click **OK** to save the changes to the task properties.

9.2.5 Select a Task

Use the Select Task menu option or click the Select Task icon to bring up the IBM Rational Synergy Select Task dialog box.

The IBM Rational Synergy Select Task dialog box will display the current task in the color purple. Select the task that you want to set as your new current task by highlighting the task row, then click **Select** to set the task that you selected as the current task.

If the task that you want to set as the current task is not available, you can create a new task by clicking Create Task. This will allow you to create a new task, which will be set as the new current task.

9.2.6 Open Project

Use the Open Project menu option or click the Open Project icon to bring up the Open IBM Rational Synergy Project dialog box.

The Open IBM Rational Synergy Project dialog box will show all the projects that match the Project **Scope** that you selected. Select the project and project version that you want to open, the click **Open**. The selected project version will now be added to your workspace.

9.2.7 Show IBM Rational Synergy Interface

Use the Show IBM Rational Synergy menu option or click the Show IBM Rational Synergy icon to launch IBM Rational Synergy.

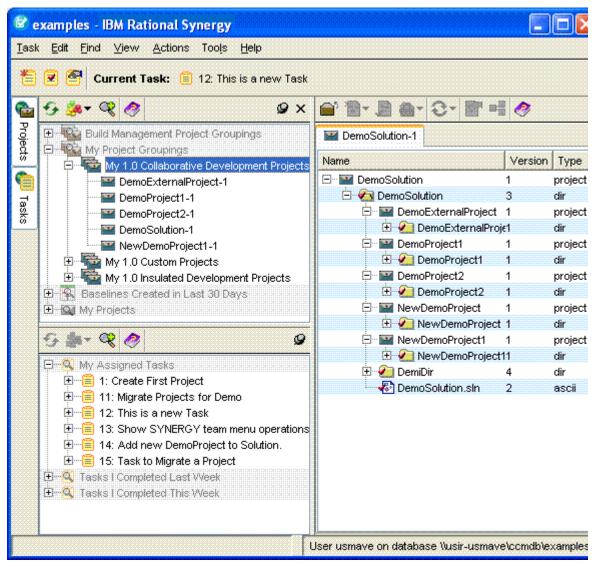


Figure 12. IBM Rational Synergy Interface

9.2.8 Work Offline

9.2.8.1 Work Offline

Use the Work Offline menu option or click the Work Offline icon to operate the integration offline. Once you select the Work Offline menu option or icon, the integration will automatically switch to Offline Mode. The integration will not provide any of its normal capabilities while operating offline and any attempt to connect to an IBM Rational Synergy database will not be allowed.

When the integration is in Offline Mode, the following conditions will apply:

- The integration will exit all running IBM Rational Synergy sessions.
- The integration will disable the IBM Rational Synergy Taskbar and Menu with the exception of the Work Offline icon and menu option.
- The integration will disable the IBM Rational Synergy Team Menu.
- The integration will disable the IBM Rational Synergy Task and Change Request Views.
- The integration will not allow users to rename Solutions, Solution files, Projects, and Project files within the Visual Studio IDE.
- The integration will not allow users to move Solutions, Solution files, Projects, and Project files around within the Visual Studio IDE.

• The move and rename operations are prevented while offline in order to prevent irreconcilable conflicts with the IBM Rational Synergy database.

Restrictions

 Although the Save as, Rename, and Move operations are restricted while offline, certain restrictions do apply and are listed below:

- Solutions When performing a Save as operation on Solutions, a new instance of the object will not be created and no objects will be changed.
- Projects When performing a Save as operation on Projects, a new instance of the object will not be created, but if the read-only attribute of the Solution(.sln) file is enabled, the integration will automatically disable it.
- Solution files When performing a Save as operation on Solution files, the integration will create a new instance of the object having the new name in the file system, but the original object will remain in the Solution Explorer and in the file system. If the read-only attribute of the Solution(.sln) file is enabled, the integration will automatically disable it.

Caution If you perform the Save as operation on Solution files while offline and the readonly attribute of the Solution(.sln) file is currently disabled, the Solution project will not be stored as a modified project even-though a new object was added in the file system.

Project files - When performing a Save as operation on Project files, the integration will create a new instance of the object having the new name in the file system and replace the original object in the Solution Explorer. The original object will remain in the file system. If the read-only attribute of the Project(.proj) file is enabled, the integration will automatically disable it.

b. Rename

- Solutions The integration does not allow renaming of Solutions while offline.
- Projects The integration does not allow renaming of Projects while offline; however, if you attempt to rename a Project and the read-only attribute of the Solution(.sln) file is enabled, the integration will automatically disable it.
- Solution files The integration does not allow renaming of Solution files while offline; however, if you attempt to rename Solution files and the read-only attribute of the Solution(.sln) file is enabled, the integration will automatically disable it.
- Project files The integration does not allow renaming of Project files while offline; however, if you attempt to rename Project files and the read-only attribute of the Project (.proj) file is enabled, the integration will automatically disable it.

c. Move into, Drag and Drop, and Copy and Paste

- Solutions Solutions are restricted from being moved.
- Projects Projects are restricted from being moved.
- Solution files The integration will not allow you to perform the Move into operation on Solution files while offline; however, if you attempt to perform the Move into operation on Solution files and the read-only attribute of the destination Project(.proj) file is enabled, the integration will automatically disable it. The integration does allow you to Drag and Drop and Copy and Paste Solution files to Projects.
- Project files The integration will not allow you to Drag and Drop or Copy and Paste Project files to a Solution while offline; however, if you attempt to perform these operations and the read-only attribute of the Solution(.sln) file is enabled, the integration will automatically disable it. The integration does allow you to Drag and **Drop** and **Copy and Paste** Project files between Projects.

How to go back to Online Mode?

If you feel that you are finished working offline, you may easily notify the integration to reconnect to IBM Rational Synergy. To do this, select the **Work Offline** menu option or click the **Work Offline** icon again and the integration will automatically switch back to Online Mode.

To read more about what happens when the integration returns to Online Mode, refer to the Going Back Online (Section 9.2.8.2) section.

9.2.8.2 Going Back Online

- The integration will start all the IBM Rational Synergy connections saved.
- The integration will enable the IBM Rational Synergy Taskbar and Menu.
- The integration will enable the IBM Rational Synergy Team Menu.
- The integration will enable the IBM Rational Synergy Task and Change Request Views.
- The integration will again allow move and rename operations to be performed on Solutions, Solution files, Projects, and Project files from within the Visual Studio IDE.
- The integration will notify the user of any Solutions and Projects that were modified while the integration was offline. This will be accomplished in the following ways:
- a. When returning online, the integration will display a list of Solutions and Projects that were modified while working offline by using the IBM Rational Synergy Synchronize Projects dialog box.

The IBM Rational Synergy Synchronize Projects dialog box will allow you to synchronize projects one at a time from the list. Once a project has been synced, it will automatically be removed from the list. If you choose not to synchronize the projects upon returning online, simply select **Cancel**. Remember that choosing not to sync projects may result in work area conflicts.

Note Once you have chosen a project from the list and selected Sync, make sure to finish synchronizing that project first before selecting another project from the list. This means that keeping all the work area changes that you want from the IBM Rational Synergy Work Area Conflicts dialog box and then exiting.

b. Once you are back online, you will be able to use the IBM Rational Synergy Team Menu options again. If you attempt to perform a Team operation on a Solution or Project on the list that has not been synchronized, the integration will warn you that the project is out of synced by displaying a dialog box.

The Out of Synced Project Warning dialog box will also ask whether you would like to sync the project now.

- If you choose to sync the project now, the Team operation you are trying to perform will not continue for the selected Solution or Project. Instead the IBM Rational Synergy Work Area Conflicts dialog box will appear. After you have finished synchronizing the project, you must re-select the Team operation to continue.
- If you choose to sync the project later, the Team operation you are trying to perform will continue as normal.

9.2.9 Task Box

The Task box is available with the IBM Rational Synergy Taskbar. This box is used to select/view the task for the current default IBM Rational Synergy connection.

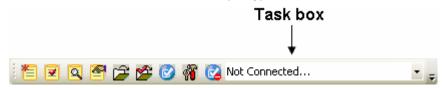


Figure 13. Task box

The Task box will always display the current task for the default connection. If there is no task set as current, the box will display **NONE**. If there is no default IBM Rational Synergy connection or the current default connection is not connected, the box will display **Not Connected**.

You can use the Task box to connect to IBM Rational Synergy. To connect to IBM Rational Synergy through the Task box, perform the following steps:

- 1. Make sure that you have a default IBM Rational Synergy connection set. Refer to the Connection Management (Section 9.6.2) section for more information.
- 2. On the Task box, select Connect to IBM Rational Synergy.
- 3. The integration will attempt to connect to IBM Rational Synergy and the Connecting to IBM Rational Synergy progress dialog box will appear.

Result: A session will be started for the default connection. The box will be populated with all of the assigned tasks for the corresponding session.

You can also use the Task box to disconnect the default connection from IBM Rational Synergy. To disconnect the default connection from IBM Rational Synergy through the Task box, perform the

following steps:

1. On the Task box, select Disconnect From IBM Rational Synergy.

Result: The session corresponding to the default connection will be disconnected and the **Task box** will display **Not Connected**.

Notes

- If there is no default connection set and you try to perform an action related to the Task box, you will be prompted to select a default connection.
- If no connections are available and you try to perform an action related to the Task box, you
 will be prompted to create a default connection.

9.3 IBM Rational Synergy Output Console Window

The integration uses Microsoft Visual Studio 2008 IDE's output window to show results of various source control operations.

You should use this view to check for any error or warning messages when performing version control operations.

9.4 IBM Rational Synergy Views

9.4.1 IBM Rational Synergy Views

IBM Rational Synergy for Microsoft Visual Studio Interface provides the following views:

- IBM Rational Synergy Task View (Section 9.4.2)
- IBM Rational Synergy Change Request View (Section 9.4.3)

Notes

• If you rename or delete a saved task or change request query by using **IBM Rational Synergy** and that query is currently being displayed in the view.

In order to update the information being shown on the IBM Rational Synergy View(s), you must:

- 1. Perform the **Refresh** operation on the view.
- 2. Re-expand the connection element that contained that saved task or change request query.
- If you rename a saved task or change request query by using **IBM Rational Synergy** and that query is currently being displayed in the view. After you have perform the steps provided above, you must add the renamed query to the view again by performing the **Add Saved Query** operation.

Refer to one of the following sections to read more about the **Add Saved Query** operation.

- 1. Add Saved Task Query (Section 9.4.4.3)
- 2. Add Saved Change Request Query (Section 9.4.4.4)

9.4.2 IBM Rational Synergy Task View

The integration provides a view designed to work with IBM Rational Synergy tasks.

Note If you open the **IBM Rational Synergy Task View** without creating any connections, the view will be empty.

- 1. The **IBM Rational Synergy Task View** will display an element for each connection defined in the integration.
 - Each connection element will be decorated with the connection name.
 - The default connection will be represented by a green connection icon.
 - All other connections will be represented by a blue connection icon.
 - If there is no default connection defined, all connection elements will be represented by a blue connection icon.

- 2. Each connection element can be expanded to display the task queries saved for that connection.
 - Each task query will be decorated with the query name.
 - All task gueries will be represented by a task guery icon.
 - Initially, the integration will display three standard saved task queries for each connection: "My Assigned Tasks", "Tasks I Completed This Week", and "Tasks I Completed Last Week".
- 3. Each task query displayed in the view can be expanded to display all the tasks that match the given query.
 - Each task will be decorated with the task number and the task synopsis.
 - All tasks will be represented by a task icon.
- 4. Each task displayed in the view can be expanded to show all the objects associated to that task.
 - Each object will be decorated with the file/folder name and its version.
 - All objects will be represented by either a file or folder icon. If the object is a file, it will be represented by a file icon, and if the object is a folder, it will be represented by a folder icon.
 - The objects' icons will reflect their status. Objects that are currently in working (checked out) state will be represented by a file/folder icon that is checked and objects that are currently in static (checked in) state will be represented by a file/folder icon that is unchecked.
- 5. You can drag and drop objects between assigned tasks.
 - The integration will not allow you to drag and drop objects between completed tasks.
 - The integration will not allow you to drag and drop objects between different connections.

Note The drag and drop feature in the IBM Rational Synergy Task View is only available for objects.

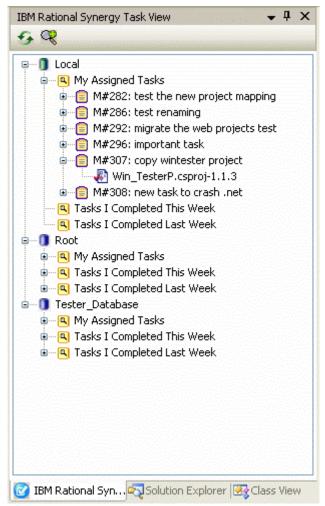


Figure 14. IBM Rational Synergy Task View

The following toolbar operations are available from the IBM Rational Synergy Task View.

1. Refresh View (Section 9.4.4.2)

2. Add Saved Query (Section 9.4.4.3)

The following pop-up menu operations are available from the IBM Rational Synergy Task View.

- Task Queries
- 1. Cut (Section 9.4.5.2)
- 2. Refresh (Section 9.4.5.3)
- Tasks
- 1. View Task Properties (Section 9.4.5.5)
- 2. Complete Task (Section 9.4.5.6)
- 3. View Change Request Properties (Section 9.4.5.4)
- Objects
- 1. View Object Properties (Section 9.4.5.7)

9.4.3 IBM Rational Synergy Change Request View

The integration provides a view designed to work with IBM Rational Synergy change requests.

Note If you open the IBM Rational Synergy Change Request View without creating any connections, the view will be empty.

- 1. The IBM Rational Synergy Change Request View will display an element for each connection defined in the integration.
 - Each connection element will be decorated with the connection name.
 - The default connection will be represented by a green connection icon.
 - All other connections will be represented by a blue connection icon.
 - If there is no default connection defined, all connection elements will be represented by a blue connection icon.
- 2. Each connection element can be expanded to display the change request queries saved for that connection.
 - Each change request query will be decorated with the query name.
 - All change request queries will be represented by a change request query icon.
 - Initially, the integration will display one standard change request query for each connection: "My Assigned Change Requests".
 - If the IBM Rational Synergy to IBM Rational Change integration is not enabled for a connection, the integration will display a message stating: "Change Requests are not enabled on this connection" for that connection. This will be the only element displayed below that connection node and the pop-up menu operations will be disabled for the connection.
- 3. Each change request guery displayed in the view can be expanded to display all the change requests that match the given query.
 - Each change request will be decorated with the change request number and the change request synopsis.
 - All change requests will be represented by a change request icon.
- 4. Each change request displayed in the view can be expanded to display all the tasks associated with that change request.
 - Each task will be decorated with the task number and the task synopsis.
 - All tasks will be represented by a task icon.
- 5. Each task displayed in the view can be expanded to show all the objects associated to that task.
 - Each object will be decorated with the file/folder name and its version.
 - · All objects will be represented by either a file or folder icon. If the object is a file, it will be represented by a file icon, and if the object is a folder, it will be represented by a folder icon.
 - The objects' icons will reflect their status. Objects that are currently in working (checked out) state will be represented by a file/folder icon that is checked and objects that are currently in static (checked in) state will be represented by a file/folder icon that is unchecked.
- 6. You can drag and drop tasks between assigned change requests.
 - The integration will not allow you to drag and drop tasks between change requests that are not assigned.

- The integration will not allow you to drag and drop tasks between different connections.
- 7. You can drag and drop objects between assigned tasks.
 - The integration will not allow you to drag and drop objects between completed tasks.
 - The integration will not allow you to drag and drop objects between different connections.

Note The drag and drop feature in the IBM Rational Synergy Change Request View is only available for tasks and objects.

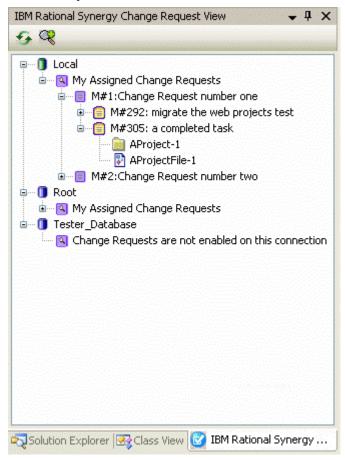


Figure 15. IBM Rational Synergy Change Request View

The following toolbar operations are available from the IBM Rational Synergy Change Request View.

- 1. Refresh View (Section 9.4.4.2)
- 2. Add Saved Query (Section 9.4.4.4)

The following pop-up menu operations are available from the IBM Rational Synergy Change Request View.

- Change Request Queries
- 1. Cut (Section 9.4.5.2)
- 2. Refresh (Section 9.4.5.3)
- Change Requests
- 1. View Change Request Properties (Section 9.4.5.4)
- Tasks
- 1. View Task Properties (Section 9.4.5.5)
- 2. Complete Task (Section 9.4.5.6)
- 3. View Change Request Properties (Section 9.4.5.4)
- 1. View Object Properties (Section 9.4.5.7)

9.4.4 Toolbar Operations

9.4.4.1 Toolbar Operations

The IBM Rational Synergy Views offer a quick way to refresh and add queries to the view through the use of the following toolbar operations:

- 1. Refresh View (Section 9.4.4.2)
- 2. Add Saved Task Query (Section 9.4.4.3) (only available in the IBM Rational Synergy Task
- 3. Add Saved Change Request Query (Section 9.4.4.4) (only available in the IBM Rational Synergy Change Request View)



The IBM Rational Synergy Views' toolbar

9.4.4.2 Refresh View

Use the Refresh icon from the IBM Rational Synergy View's toolbar (task or change request) to update the contents of the view. Simply click the icon and the contents of the view will be updated.

9.4.4.3 Add Saved Task Query

You may display additional saved task queries to the IBM Rational Synergy Task View.

To add a task query to the IBM Rational Synergy Task View, perform the following steps:

- 1. Click the Add Saved Query icon from the IBM Rational Synergy Task View's toolbar.
- 2. The Select Query dialog box will appear on the screen.
 - The **Select Query** dialog box will initially display the saved task gueries for the default connection.
 - The task queries that you created will be displayed in bold font. Other task queries will be displayed in regular font.
 - If there is no default connection set, the Select Query dialog box will display NONE in the **Connection Name** box.
- 3. Select the Connection Name and task query that you want to add to the view.
- 4. Click OK to add the selected task query to the IBM Rational Synergy Task View.

9.4.4.4 Add Saved Change Request Query

You may display additional saved change request queries to the IBM Rational Synergy Change Request View.

To add a change request query to the IBM Rational Synergy Change Request View, perform the following steps:

- 1. Click the Add Saved Query icon from the IBM Rational Synergy Change Request View's
- 2. The **Select Query** dialog box will appear on the screen.
 - The Select Query dialog box will initially display the saved change request queries for the default connection.
 - The change request queries that you created will be displayed in bold font. Other change request queries will be displayed in regular font.
 - If there is no default connection set, the Select Query dialog box will display NONE in the **Connection Name** box.

- If the connection selected does not have the IBM Rational Synergy to IBM Rational Change integration enabled, the Select Query dialog box will display NONE in the change request query list box.
- 3. Select the Connection Name and change request query that you want to add to the view.
- 4. Click OK to add the selected change request query to the IBM Rational Synergy Change Request View

9.4.5 Pop-Up Menu Operations

9.4.5.1 Pop-Up Menu Operations

With the exception of connection elements, the IBM Rational Synergy Views provide the following menu operations:

- Queries
 - 1. Cut (Section 9.4.5.2)
 - 2. Refresh (Section 9.4.5.3)
- Change Requests
 - 1. View Change Request Properties (Section 9.4.5.4)
- Tasks
 - 1. View Task Properties (Section 9.4.5.5)
 - 2. Complete Task (Section 9.4.5.6)
 - 3. View Change Request Properties (Section 9.4.5.4)
- Objects
 - 1. View Object Properties (Section 9.4.5.7)

9.4.5.2 Cut a Query

To cut a query from the view, perform the following steps:

- 1. On the IBM Rational Synergy View, select the query (task or change request) that you want to remove from the view.
- 2. Right-click on the selected query and select Cut from the menu options. The query selected will be removed from the IBM Rational Synergy View.

Note When you perform the Cut operation on a query (task or change request), the query will not be deleted, it will only be removed from the IBM Rational Synergy View.

9.4.5.3 Refresh a Query

To refresh the contents of a query, perform the following steps:

- 1. On the IBM Rational Synergy View, select the query (task or change request) that you want to refresh.
- 2. Right-click the selected query and select Refresh from the menu. The query's contents will now be updated.

9.4.5.4 View Change Request Properties

To view the properties of a change request, perform the following steps:

- 1. On the IBM Rational Synergy View, select the change request that you want to view.
- 2. Right-click on the selected change request and select Properties from the menu.

The IBM Rational Change show form for the selected change request will appear on the screen.

If you want to view the properties for a change request that is associated to a task, perform the following steps:

- 1. On the IBM Rational Synergy View, select the task whose change request properties you want to
- 2. Right-click the selected task and select Change Request Properties from the menu options.

The IBM Rational Change show form for the change request that is associated to the selected task will appear on the screen.

9.4.5.5 View Task Properties

To view the properties of a task, perform the following steps:

- 1. On the IBM Rational Synergy View, select the task that you want to view.
- 2. Right-click the selected task and select **Properties** from the menu.

The **Task Properties** dialog box for the selected task will appear on the screen.

9.4.5.6 Complete Task

To complete a task from the IBM Rational Synergy View(s), perform the following steps:

- 1. On the IBM Rational Synergy View, select the task that you want to complete.
- 2. Right-click the selected task and select Complete from the menu.

The **Complete Task** dialog box will appear on the screen.

- The task that you selected will be shown in the **Complete Task** dialog box.
- If the task that you selected is already completed, the default task will be selected in the Complete Task dialog box. If no default task is set, the first task listed in the Assigned Tasks box will be selected; otherwise, no task will be selected.

9.4.5.7 View Object Properties

To view the properties of an object, perform the following steps:

- 1. On the IBM Rational Synergy View, select the object that you want to view.
- 2. Right-click the selected object and select **Properties** from the menu.

The **IBM Rational Synergy Properties** dialog box for the selected object will appear on the screen.

9.5 Symbols and Tooltips

Symbols

When a Solution and/or Project in Microsoft Visual Studio is connected to IBM Rational Synergy, the Solution and Project files are decorated to give a visual indication that the project is under IBM Rational Synergy. The following information describes what each symbol indicates.

• Checked Out - The object is currently checked out and modifiable.



• Checked Out by Another User - The Solutions and Projects controlling the object are checked out using a **Shared** Purpose and the object is currently checked out by another user.



• Checked In - The object is currently checked in and not modifiable.



Tooltips

The integration displays additional information about a project/file/folder through the use of tooltips. You can invoke the tooltips by performing the following:

- 1. In the Microsoft Visual Studio Solution Explorer, place the mouse tip over the project/file/folder icon.
- 2. You should see source control information about the project/file/folder, such as its name, version,

owner, status, and release.

For example: name-version:owner:status:release

Note Although folders/directories support version control operations, symbols and tooltips will not be visible for folders/directories.

9.6 Settings

9.6.1 Settings

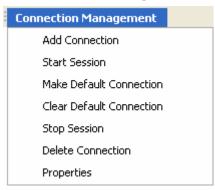
You can manage the IBM Rational Synergy integration settings by using the **Settings** menu option or by clicking the **Settings** icon. This feature specifies how the integration will function and connect to IBM Rational Synergy.

Read the following information to understand more about how to manage the IBM Rational Synergy integration settings.

- 1. Use the **Settings** menu option or click the **Settings** icon to bring up the **IBM Rational Synergy Settings** dialog box.
- 2. The **IBM Rational Synergy Settings** dialog box offers the following settings management options. Click on the links to learn more about each topic.
 - Connection Management (Section 9.6.2)
 - General Settings (Section 9.6.3)
- 3. View/Modify the options offered by the IBM Rational Synergy Settings dialog box.
- 4. When you are finished, click **OK** to save the changes that you have made and exit the **IBM Rational Synergy Settings** dialog box.

9.6.2 Connection Management

This feature specifies how the integration will connect to IBM Rational Synergy. The following Connection Management operations are available in the **IBM Rational Synergy Settings** dialog box through a menu option called **Connection Management**.



Connection Management menu

Connection Management offers the following capabilities:

• Add Connection - This operation will bring up a **New IBM Rational Synergy Connection** dialog box. If the connection being added is the first connection or if there is currently no default connection set, the connection will be set as the default connection; otherwise, it will be set as a regular connection.

Fill in the connection information (Connection Name, User Name, Password, Database Path, Engine Host, Client Home, and Client Database). Make sure that all the fields are filled in, then click Connect to save the connection and start an IBM Rational Synergy session.

 Start Session - You can explicitly start an IBM Rational Synergy session for a certain connection by selecting the connection in the IBM Rational Synergy Settings dialog box and clicking Start. If you perform a source control or task operation and a session is not already started, the integration will automatically start the default connection.

Note Clicking twice on Start will not start another session. If a session is explicitly (by clicking Start) or implicitly (performing a team operation) started from the integration, it will reuse a session already started by the integration.

- **Delete Connection** This operation will delete the selected connection. If the selected connection has a session running, the session will be terminated before deleting the connection. If you want to delete a connection that is being used by a Solution in Visual Studio, you must **Disconnect** the Solution first.
- Stop Session This operation will stop the IBM Rational Synergy session for the selected connection.
- Make Default The connection that you select will become the default connection. The default connection is the connection that will automatically be used in all Task dialog boxes and project wizards.
- Clear Default This operation will clear the default connection. This means that no default connection is set. If there is no default connection, NONE will appear in the Connection Name field wherever applicable. The Show Task and Show IBM Rational Synergy taskbar and menu options and the Task box option will not be available when no default connection is set.
- Properties You are allowed to view the connection properties by simply double-clicking a
 connection or selecting the Properties option from the Connection Management menu. When the
 connection is currently in Connected status, you may not modify the connection properties. You may
 only modify the connection properties when the connection is in Disconnected status.

9.6.3 General Settings

This feature of the integration specifies how the integration will function with IBM Rational Synergy. You may configure your IBM Rational Synergy integration settings by setting the following options according to your preference.

The following information will describe the functionalities of each **General Settings** option. Set the following preferences by checking the check box next to the option.

- 1. Check Out file(s) automatically when edited
 - When the Check Out file(s) automatically when edited option is selected, the following will occur:
 - $\bullet\,$ The integration will automatically check out files when you modify them.
 - The integration will update the symbols to represent the updated source control status of the files.
 - When the Check Out file(s) automatically when edited option is cleared, the following will occur:
 - When you attempt to modify any file, the integration will display the following dialog
 hox

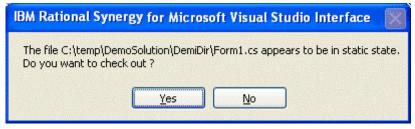


Figure 16. IBM Rational Synergy Check Out File prompt dialog box

- You must select **Yes** to check out the file. If you select **No**, you can continue to modify the file; however, when you try to save the file at a later time, the integration will once again prompt you to check out the file in order to keep your changes.
- Once the file is properly checked out, the integration will update the symbol to represent the updated source control status of the file.

- 2. Prompt to add new project files to IBM Rational Synergy This option is used when new files are added to the connected Project/Solution.
 - When the Prompt to add new project files to IBM Rational Synergy option is selected, the following will occur:
 - When you add new project files to a Project/Solution, the integration will prompt you to add the files to IBM Rational Synergy by displaying the IBM Rational Synergy Add Files dialog box
 - Click Add to add the files to IBM Rational Synergy. You should see the Add Uncontrolled Files progress dialog box appear.
 - The files will now be controlled under IBM Rational Synergy.
 - When the Prompt to add new project files to IBM Rational Synergy option is cleared, the following will occur:
 - When you add new project files to a Project/Solution, those files will not be controlled under IBM Rational Synergy. You must add the uncontrolled files to IBM Rational Synergy in order to perform source control operations on them.
 - Refer to the section How to add new files and folders to database (Section 10.5) to read more about adding uncontrolled files/folders to IBM Rational Synergy.
- 3. Notify for parallel versions on check out
- 4. Notify for parallel versions on check in
- 5. Prompt for the DB case mode information This option will be selected by default.
 - When the **Prompt for the DB case mode information** option is selected, the following will occur:
 - When you perform any of the operations listed below, the integration will prompt you to select the proper database case mode that was used when the Solutions or Projects were migrated to IBM Rational Synergy. The integration will display the Select Database Mode dialog box, which will allow you to select the proper database case
 - 1. Connecting Solutions/Projects to IBM Rational Synergy by using the Connect option from the IBM Rational Synergy team menu.
 - 2. Opening Solutions/Projects by using the Open Project option from the IBM Rational Synergy taskbar.
 - Copying Solutions/Projects by using the Copy Project option from the IBM Rational Synergy taskbar.
 - When the Prompt for the DB case mode information option is cleared, the following will occur:
 - o The integration will not display the Select Database Mode dialog box when you perform any of the same three operations listed above: Connect, Open Project, and Copy Project. By default, the integration will use the database case mode PRESERVE to perform all operations, including the Connect, Open Project, and Copy Project operations.
 - If you set all of your database(s) to PRESERVE case after installing the integration and you never set it back to LOWER or UPPER case, it is recommended that you turn off the Prompt for the DB case mode information option.

9.7 IBM Rational Synergy 'smart-card' login feature

The Synergy "smart-card" login feature that is included in IBM Rational Synergy is also available in IBM Rational Synergy for Microsoft Visual Studio Interface. The "smart-card" feature will allow users of the integration to create a connection without the need to enter a username and password.

Note For more information on how to enable/disable the Synergy "smart-card" login feature in IBM Rational Synergy, refer to the IBM Rational Synergy Help.

• If the Synergy "smart-card" feature in IBM Rational Synergy is enabled and you try to create a new Synergy Connection, the User Name and Password text field will be disabled in the New IBM Rational Synergy Connection dialog box. The User Name text field will automatically be filled in with the user's operating system username. You will still need to fill in the remaining information: Connection Name, Database Path, Engine Host, Client Home, and Client Database.

• If the Synergy "smart-card" feature in IBM Rational Synergy is disabled and you try to create a new Synergy Connection, the **User Name**, **Password**, and all of the remaining Connection information text fields will be enabled in the **New IBM Rational Synergy Connection** dialog box. You must fill in all of the text fields in order to create a new Connection and start a Synergy session.

10 Daily Development

10.1 Daily Development

Daily development refers to the activities performed by the team members during everyday development. Once a development or a build management project is set up, daily development primarily involves the activities of modifying files. IBM Rational Synergy is a task-based configuration management. In order to keep track of daily development activities effectively, you should associate them with an IBM Rational Synergy task. This section also describes many other operations that can be performed by using the integration.

Most of these operations are available from the IBM Rational Synergy team menu. Below is a picture of the IBM Rational Synergy team menu.

| Connect | Connects to Synergy |
|--|---|
| Create Project in IBM Rational Synergy | Migrates Solutions/Projects to Synergy |
| Add Uncontrolled Files | Adds uncontrolled files/folders to Synergy |
| Remove From IBM Rational Synergy | Removes controlled files/folders from Synergy |
| Sync | Synchronizes work area and database |
| Check Out | Checks out selected files/folders |
| Undo Checkout | Undoes the check out of selected files/folders |
| Check In | Checks in selected files/folders |
| Check Out Recursive | Checks out selected folder and its contents |
| Undo Checkout Recursive | Undoes the check out of a selected folder and its contents |
| Check In Recursive | Checks in selected folder and its contents |
| Compare With Predecessor | Compares the selected files/folders with its predecessor |
| History | Shows History of selected files/folders using Synergy |
| Properties | Shows Properties of selected files/folders using Synergy |
| Use Version | Changes the version currently being used by selected file/folde |
| Update Members | Updates project members or gets the recommended version $\boldsymbol{\sigma}$ |
| Refresh Status | Refreshes the version control status of selected projects/files/ |
| Disconnect | Disconnects from Synergy |

Figure 17. IBM Rational Synergy team menu

The IBM Rational Synergy team menu can be invoked by using Microsoft Visual Studio's main menu. Simply click File, then select IBM Rational Synergy. You can also invoke the IBM Rational Synergy team menu by right clicking on a Solution, Project, folder, or file in Visual Studio's Solution Explorer.

How to Use Task-Based CM 10.2

Whenever you check out a file, the check-out operation is tracked with your current task. You should select a current task before you check out or modify any file. When you are done, you should check in your current task instead of checking in the individual files. To complete a task or to create a task, use the IBM Rational Synergy taskbar and/or menu.

- You can set a current task for each IBM Rational Synergy Connection. To do this, you can use the IBM Rational Synergy taskbar or menu by choosing the Select Task (Section 9.2.5) option.
- You can use the **Task box** from the IBM Rational Synergy taskbar to find out what current task is set for the default connection. Or you can use the Select Task (Section 9.2.5) option from the IBM Rational Synergy taskbar or menu to view the current task for each connection. Simply choose the Connection Name and its corresponding current task will be displayed in the

Current Task box. If there is no current task set for the connection, you will see **NONE** in the Current Task box.

The integration will at times prompt you to select a current task if you perform an operation which requires a task.

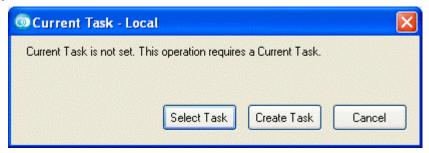


Figure 18. Set Default Task prompt dialog box

You can either select an existing task as your current task or create a new task.

10.3 How to Connect a Solution or Project

To connect a Solution/Project to IBM Rational Synergy, perform the following steps. After performing this operation, the Solution/Project opened in Microsoft Visual Studio will be connected to IBM Rational Synergy.

- 1. Open the Solution/Project by clicking Microsoft Visual Studio's File > Open > Project/Solution.
- 2. Select the Solution/Project that you want to connect.
- 3. On the **IBM Rational Synergy** team menu, select the **Connect** option. The **Select Connection** dialog box will appear. You must select the connection that you want to use to connect the Solution/Project.
- 4. Select a connection from the list and click **Select** to connect the Solution/Project.

The selected Solution/Project will now be connected to IBM Rational Synergy. The integration will add the appropriate symbols to the Solution/Project and its files and directories.

Note If at a later time, you decide to disconnect the Solution/Project, you may do so by executing the **Disconnect** operation. Refer to the **How to Disconnect a Solution or Project (Section 10.17)** section to learn more about the **Disconnect** operation.

10.4 How to Migrate Projects

When you create a new project in Microsoft Visual Studio and you add that project to a Solution that is already controlled under IBM Rational Synergy, you will need to migrate your newly created project to IBM Rational Synergy in order to perform source control operations on the project and its files.

To migrate a project to IBM Rational Synergy, perform the following steps:

- 1. On the Solution Explorer, select your newly added/created project.
- 2. On the **IBM Rational Synergy** team menu, select **Create Project in IBM Rational Synergy**. The **Create Project in IBM Rational Synergy** dialog box will appear.

Note: The **Create Project in IBM Rational Synergy** dialog box will not allow you to create the Solution in IBM Rational Synergy. You will not need to migrate the Solution to IBM Rational Synergy again because the Solution is already controlled as a project in IBM Rational Synergy.

There are important cases that you need to be aware of when migrating projects to IBM Rational Synergy.

- When migrating a project that is located inside the Solution directory in the file system, the
 project must be migrated to the same IBM Rational Synergy database as the Solution. This
 means that you will not be able to change the **Connection Name** when creating the project
 in IBM Rational Synergy.
- When migrating a project that is located outside the Solution directory in the file system, you
 can migrate the project to any IBM Rational Synergy database. This means that you will be
 allowed to change the **Connection Name** selected in order for the project to be migrated
 to the proper IBM Rational Synergy database that you desire.
- 3. Click Create to migrate the project to IBM Rational Synergy. The Create Projects progress dialog

box will appear.

4. Once the project is migrated to IBM Rational Synergy, Microsoft Visual Studio will display a File Modification Detected dialog box.

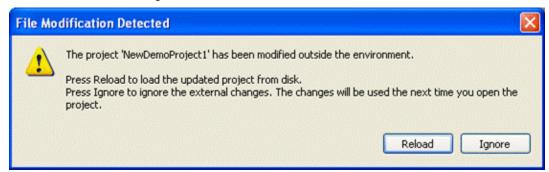


Figure 19. File Modification Detected dialog box

- 5. Click Reload on the File Modification Detected dialog box to see the project and its files properly decorated with symbols in the Solution Explorer.
- 6. Click File > Save All in the Microsoft Visual Studio 2008 main menu.
- 7. When you exit the Microsoft Visual Studio 2008 IDE, Visual Studio will prompt you to save the Solution by displaying a dialog box. Click Yes to save the current state of your Solutions and projects. Your project is now controlled under IBM Rational Synergy.

How to add new files and folders to database 10.5

If you add new files or folders to your workspace, you should add them to IBM Rational Synergy as soon as possible.

Notes

- If the IBM Rational Synergy Settings option, Prompt to add new project files to IBM Rational Synergy is selected, the integration will automatically prompt you to add new files to IBM Rational Synergy. The Prompt to add new project files to IBM Rational Synergy option only applies to uncontrolled files. In order to add uncontrolled folders to IBM Rational Synergy, you must use the Add Uncontrolled Files IBM Rational Synergy team menu option.
- It is important that if you add files/folders to your Solutions/Projects, you should also add them to IBM Rational Synergy as soon as possible. You must have a current task set in order to perform the Add Uncontrolled Files operation.
- The integration will find the ignored files/folders and those files/folders will not be added to IBM Rational Synergy.
- The Add Uncontrolled Files operation will leave the added files in the checked-out state.

To add uncontrolled files/folders to IBM Rational Synergy, perform the following steps:

- 1. Select the uncontrolled files/folders that you want to add to IBM Rational Synergy.
- 2. On the IBM Rational Synergy team menu, click Add Uncontrolled Files. The IBM Rational Synergy Add Files dialog box will appear.
- 3. Click Add to add the selected files/folders to IBM Rational Synergy.

A progress dialog box that depicts the status of the Add Uncontrolled Files operation will appear. The files/folders that you selected are now controlled by IBM Rational Synergy.

10.6 How to remove files from database

If you no longer want to control certain files in IBM Rational Synergy, you may remove them.

- The Remove From IBM Rational Synergy operation will remove the files from your Solutions/Projects and from IBM Rational Synergy. In case you want to keep these files on your local drive, you should save a copy before performing this operation.
- Microsoft Visual Studio offers two additional operations called Exclude From Project and Delete. Exclude From Project will remove the Solution and Project files from your Solutions/Projects. Delete will remove the Solution and Project files from your Solutions/Projects

and from the file system.

 When you perform the Exclude From Project or Delete operations on Solution and Project files that are controlled by IBM Rational Synergy, the integration will display the Delete files prompt dialog box. If you respond Yes to the dialog box, the Solution and Project files will be removed from your Solutions/Projects and from IBM Rational Synergy. If you respond No to the dialog box, the Solution and Project files will only be removed from your Solutions/Projects and not from IBM Rational Synergy.

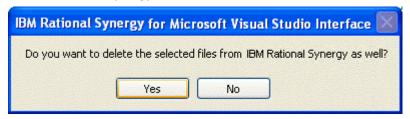


Figure 20. Delete files prompt dialog box

• When you perform the Exclude From Project or Delete operations on Solution and Project folders/directories that are controlled by IBM Rational Synergy, the integration will display the Delete files prompt dialog box twice. You must then respond twice to the dialog box. This limitation is one of the known issues of IBM Rational Synergy for Microsoft Visual Studio Interface.

To remove controlled files from IBM Rational Synergy, perform the following steps:

- 1. Select the files that you want to remove from IBM Rational Synergy.
- 2. On the IBM Rational Synergy team menu, click Remove From IBM Rational Synergy. The IBM Rational Synergy Remove Files dialog box will appear.
- 3. Click **Remove** to remove the selected files from IBM Rational Synergy.

A progress dialog box that depicts the status of the Remove From IBM Rational Synergy operation will appear. The files that you selected are now removed from IBM Rational Synergy.

10.7 How to Synchronize a Work Area

Occasionally, your work area may not be in sync with IBM Rational Synergy. This might happen if you modify files outside of Microsoft Visual Studio without performing a check-out operation.

To synchronize your work area, perform the following steps:

- 1. Select the Solution or Project that you need to sync.
- 2. On the IBM Rational Synergy team menu, click Sync.
- 3. If there are work area conflicts, the IBM Rational Synergy Work Area Conflicts dialog box will appear.
- 4. A list of work area conflicts will be listed in the dialog box.
 - Keep the work area changes that you want by selecting the files and clicking the Keep Work Area Changes icon at the top of the dialog box or by right clicking on the files and selecting the Keep Work Area Changes option.
 - Discard the work area changes that you don't want by following the same procedure but choose the Discard Work Area Changes icon or Discard Work Area Changes option instead.

By performing the above operation, the working files/folders may automatically be checked out. In order for the objects to reflect their updated version control status symbols, you must refresh the status of the objects by performing the Refresh Status operation available from the IBM Rational Synergy team menu. To read more about the Refresh Status operation, refer to the How to Refresh the Version Control Status (Section 10.16) section.

Note If you need further help understanding the Sync operation or the IBM Rational Synergy Work Area Conflicts dialog box, go to the IBM Rational Synergy Help.

10.8 How to Check Out

You must check out files before you can start modifying them.

Notes

The Check Out and Check Out Recursive operations are only valid for controlled Solutions/Projects/files/folders.

- Only the selected files will be checked out. To check out a Solution/Project/folder's contents all at one time, use the Check Out Recursive operation.
- If you perform the **Check Out** operation on a file that is located inside a folder, the file and its folder will automatically be checked out.
- This operation requires a task. If you choose not to specify a current task, the integration will prompt you to select a task.
- The following behavior is preference based and can be set by choosing the Settings option in the IBM Rational Synergy taskbar or menu. If after executing the Check Out or Check Out Recursive operation, the selected files results in parallel versions, you will receive a warning. (To read more about IBM Rational Synergy General Settings, go to General Settings (Section 9.6.3)).

To check out files, perform the following steps:

- 1. On the Solution Explorer, select the files that you want to check out. If you want to perform the Check Out Recursive operation, select only the top most level Solution/Project/file/folder.
- 2. On the IBM Rational Synergy team menu, click Check Out or click Check Out Recursive to check out the selected Solution/Project/folder contents.
- 3. If you selected the Check Out Recursive option, the IBM Rational Synergy CheckOut Operation dialog box will appear.
- 4. Select/Change your current task and write an appropriate check out comment, then click CheckOut to check out the files.

The symbol representing **Checked Out** will be displayed next to the file names.

10.9 How to Undo Check Out

Notes

- The current version of the file/folder will be replaced with the previous version. If the file/folder has only one version, you will be notified.
- If you perform the **Undo Checkout** operation on a file that is located inside a folder, the integration will automatically undo check out of the file and its folder.
- The integration will not allow the **Undo Checkout** operation to be performed on files and directories that have been checked out as a result of a **Rename** operation. You may perform the Undo Checkout operation on these types of files by using one of the following methods:
 - You can rename the files and/or directories back to their previous names by using Microsoft Visual Studio IDE's Rename option.
 - 2. You may Save then Close the Solution containing the files and/or directories, perform the Undo Checkout operation on the Project file and the files and/or directories by using IBM Rational Synergy's **Delete** option, then re-open the Solution in the Microsoft Visual Studio

To undo the check out of files, perform the following steps:

- 1. On the Solution Explorer, select the files that you do not want checked out. If you want to perform the Undo Checkout Recursive operation, select only the top most level Solution/Project/file/folder.
- 2. On the IBM Rational Synergy team menu, click Undo Checkout or click Undo Checkout **Recursive** to undo check out of the selected Solution/Project/folder contents.
- 3. If you selected the Undo Checkout Recursive option, the IBM Rational Synergy Undo CheckOut Operation dialog box will appear.
- 4. Click Undo to undo check out of the files.

The symbol representing the current source control status of the files will be displayed next to the file names.

10.10 How to Check In

Notes

• The following behavior is preference based and can be set by choosing the Settings option in the IBM Rational Synergy taskbar or menu. When performing the Check In operation on files that have parallel versions, you will receive a notification. (To read more about IBM Rational

Synergy General Settings, go to General Settings (Section 9.6.3)).

- IBM Rational recommends that you complete your task rather than checking in individual files.
- The **Check In** and **Check In Recursive** operations should only be used when it is absolutely necessary to check in files/folders before the task is complete.

To check in files, perform the following steps:

- 1. On the Solution Explorer, select the files that you want to check in. If you want to perform the **Check In Recursive** operation, select only the top most level Solution/Project/file/folder.
- 2. On the **IBM Rational Synergy** team menu, click **Check In** or click **Check In Recursive** to check in the selected Solution/Project/folder contents.
- 3. If you selected the **Check In Recursive** option, the **IBM Rational Synergy CheckIn Operation** dialog box will appear.
- 4. Click CheckIn to check in the files.

The symbol representing **Checked In** will be displayed next to the file names.

10.11 How to Compare a File or Folder with its Predecessor

Notes

- The **Compare with Predecessor** operation is only available for files and folders.
- If a file or folder has more than one predecessor, the **IBM Rational Synergy Compare** dialog box will appear for each predecessor.
- If you need further help understanding the Compare with Predecessor operation, the IBM Rational Synergy Compare dialog box, or the IBM Rational Synergy Directory Compare dialog box, go to the IBM Rational Synergy Help.

To compare a version of a file or folder with its predecessor, perform the following steps:

- 1. On the Solution Explorer, select the the files/folders on which you want to perform the **Compare with Predecessor** operation.
- 2. On the IBM Rational Synergy team menu, click Compare with Predecessor.

10.12 How to see History of Objects

To view the history of objects, perform the following steps:

- 1. On the Solution Explorer, select the object of which you want to view the history.
- 2. On the IBM Rational Synergy team menu, click History.
- 3. The IBM Rational Synergy History dialog box will appear for the selected object.

10.13 How to view or modify properties of objects

(File-Folder Properties.html)

To view or modify the properties of an object, perform the following steps:

- 1. On the Solution Explorer, select the object on which you want to view the properties.
- 2. On the IBM Rational Synergy team menu, click Properties.
- 3. The **IBM Rational Synergy Properties** dialog box will appear.
- 4. View and/or modify the available properties. If you need further help understanding the **IBM Rational Synergy Properties** dialog box, go to the **IBM Rational Synergy Help**.

Note If you modify the **Version**, it is important that you refresh the status of the object (Solution, Project, folder, or file) in order to see the updated version control status symbols. To learn how to refresh the status of objects, refer to the **How to Refresh the Version Control Status (Section 10.16) section.**

10.14 How to Use a Version of a File or Folder

There are times when you might want to change the version being used for a file or folder.

To use a different version of a file or folder, perform the following steps:

- 1. Select the file or folder on which you want to perform the **Use Version** operation. You may only select one file/folder at a time.
- 2. On the IBM Rational Synergy team menu, select Use Version.
- 3. The **Use Version** dialog box will appear for the selected file or folder. The version that is currently being used by the file/folder will have a checkbox that is selected.
- 4. Select the version that you want to use. You can click **Recommend** to see the recommended/latest version of the file/folder. When the **Recommend** button is clicked, the recommended version will be highlighted.
- 5. Click **Use** to change the version of the file/folder to the one that you selected. The integration will then update the corresponding symbols to reflect the file/folder's new source control status.

Note You can also use the **IBM Rational Synergy** team menu's **History** option to change the version being used for a file or folder.

10.15 How to Update Members

To get the latest version of project files, perform the following steps:

- 1. Select the objects on which you want to perform the **Update Members** operation.
- 2. On the **IBM Rational Synergy** team menu, select **Update Members**. The **Update Members Progress** dialog box will appear.

The selected objects will be updated. The result of the **Update Members** operation will be displayed in the **IBM Rational Synergy Output Console Window**.

Note If you perform the **Update Members** operation on a project, the project will be updated. You can select multiple projects for this operation. If you need further help understanding the **Update Members** operation, go to the **IBM Rational Synergy Help**.

10.16 How to Refresh the Version Control Status

If a source control operation is performed on the project files outside of the Microsoft Visual Studio 2008 IDE, the integration will not be able to display the correct symbol in the Solution Explorer (Refer to the **Symbols and Tooltips (Section 9.5)** section to read more about symbols). In order for the integration to display the proper symbol representing the most up-to-date status of the project files, you can use the **Refresh Status** operation.

To refresh the version control status of objects, perform the following steps:

- 1. Select the objects (Solutions/Projects, directories, or files) on which you want to refresh the source control status.
- 2. On the IBM Rational Synergy team menu, select Refresh Status.

The selected objects will now show the current source control status.

10.17 How to Disconnect a Solution or Project

In case you want your Solutions and/or Projects to behave as if there was no source control installed, you may disconnect your Solutions and/or Projects.

After performing the **Disconnect** operation, the Solution/Project opened in Microsoft Visual Studio will be disconnected from IBM Rational Synergy. To disconnect a Solution/Project from IBM Rational Synergy, perform the following steps.

- 1. Select the Solution/Project that you want to disconnect.
- 2. On the IBM Rational Synergy team menu, select Disconnect.

The selected Solution/Project will now be disconnected from IBM Rational Synergy. The integration will remove the corresponding symbols for the Solution/Project and its files and directories.

Note You will be able to connect the Solution/Project again by executing the **Connect** operation. Refer to the **How to Connect a Solution or Project (Section 10.3)** section to learn more about the **Connect** operation.

10.18 Debugging Support

10.18.1 Debugging Support

The integration provides support for debugging. Debug support will track your activities while using the integration. You may use the information provided by the Debug support to view or correct any errors or warnings that may occur while using the integration.

A registry entry called the DebugLevel will be created once IBM Rational Synergy for Microsoft Visual Studio Interface is installed. You may view or change the value of the DebugLevel according to your preference by using the Registry Editor.

The registry key DebugLevel will be in the following location:

My Computer\HKEY LOCAL MACHINE\SOFTWARE\Telelogic\CM SYNERGY\Integrations\ccmdc

10.18.2 How to change the value of the Debug Level

To change the value of the debug level, perform the following steps:

- 1. Open the **Registry Editor** dialog box.
- 2. Change to the following location: My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Telelogic\CM SYNERGY\Integrations\ccmdc
- 3. Modify the registry key **DebugLevel** to your desired value (0, 1, or 2).

Use the following to help you determine which DebugLevel you would like to use.

- 0 No debugging support. The log file will remain empty. (You may choose this DebugLevel to make the integration work faster)
- 1 The log file will record all the errors, warnings, and exceptions. The DebugLevel will initially be set to this value after installing the integration.
- 2 The log file will record the function name, file name, input parameters, output, time stamp, errors, warnings, and exceptions.

10.18.3 How to view the Error Log

The integration will automatically generate error log files. You may view the messages written to the error log files by viewing the files (ccmdc.log) generated in the following directories.

- C:\Documents and Settings\<username>\Application Data\Telelogic\vs400\ccmdc.log
- C:\Documents and Settings\<username>\Application Data\Telelogic\ccmdc71\ccmdc.log

or

- <Application Data path>\Telelogic\vs400\ccmdc.log
- <Application Data path>\Telelogic\ccmdc71\ccmdc.log

There are other error files that are generated by the integration. These error files contain the last known error produced by the integration. You may view the messages contained in these error files by viewing the files (ccmdc.err) in the following directories.

- C:\Documents and Settings\<username>\Application Data\Telelogic\vs400\ccmdc.err
- C:\Documents and Settings\<username>\Application Data\Telelogic\ccmdc71\ccmdc.err

or

- <application Data path>\Telelogic\vs400\ccmdc.err
- <application Data path>\Telelogic\ccmdc71\ccmdc.err

11 Issues with this Release

The following is a list of known issues that exist in IBM Rational Synergy for Microsoft Visual Studio Interface 4.2.

- If you create a Solution project that has the same name as the Solution, your IBM Rational Synergy database must be set to support multiple project instances. To do this, start an IBM Rational Synergy session by using the IBM Rational Synergy Classic Client, make sure that CCM is in your path, and type the following commands in the command prompt: 1.) ccm set role ccm admin 2.) ccm query -t model -n base 3.) ccm attr -m multiple local proj instances -v TRUE @1
- Microsoft Visual Studio 2008 IDE may prompt you to: Save As, Discard, Ignore, or Overwrite, after a Solution/Project has been migrated. IBM Rational recommends that you respond to the prompt by selecting Overwrite.
- Microsoft Visual Studio 2008 IDE may prompt you to Reload projects when project files are checked out. IBM Rational recommends that you respond to the prompt by selecting **Reload**.
- The integration will display the **Delete files prompt** dialog box twice when performing the Exclude From Project or Delete operations on folders/directories that are controlled by IBM Rational Synergy. The integration will prompt you once for the folder/directory and once for the files located inside the folder/directory.
- If you have more than one instance of Microsoft Visual Studio 2008 running, all of the instances will share the same IBM Rational Synergy sessions and session data. The possible problems that may occur are: 1.) Changing the current task for an IBM Rational Synergy session in one instance of Visual Studio will overwrite the current task for that same IBM Rational Synergy session in another instance of Visual Studio. 2.) If you migrate projects in one instance of Visual Studio, your migrated projects may be lost if other projects are migrated to IBM Rational Synergy using another instance of Visual Studio. The projects that are overwritten will belong to the instance of Visual Studio that exits the IDE first. 3.) If you modify the integration settings in one instance of Visual Studio, your changes will be overwritten if the integration settings are modified in another instance of Visual Studio. The integration settings that are overwritten will belong to the instance of Visual Studio that exits the IDE first.
- You will not be allowed to migrate Solutions and Projects with the same name if the Visual Studio Solutions and Projects are created in the same location as your work area template.
- When performing a Copy Project operation, your work area template must include project specific information that includes the project version and project instance.
- The integration will not allow the **Undo Checkout** operation to be performed on files that have been checked out as a result of a Rename operation. A warning message box will appear whenever an **Undo Checkout** operation is attempted on such files
- When performing any of the IBM Rational Synergy team or taskbar operations by using a connection without a saved password, a **Login** dialog box will appear. If you choose to **Cancel** the dialog box, the **Login** dialog box will not appear again; however, the integration may not be able to perform any operation properly. You may invoke the Login dialog box again by selecting the Start Session menu option in the IBM Rational Synergy Settings dialog box or restarting the Microsoft Visual Studio 2008 IDE.
- If you want to modify the work area location of your Solution, you must perform the following steps: 1.) Exit the Microsoft Visual Studio IDE. 2.) Modify the work area location of your Solution by using IBM Rational Synergy. 3.) Open the Solution from the new work area location and then proceed adding/migrating new Projects to your Solution.
- ASP.Net Web Application projects whose location in the file system is inside the directory of another Project or Solution directory can only be migrated to IBM Rational Synergy as a **Directory** when using the integration.
- Version control operations are supported by folders/directories; however, folders/directories will not display symbols and tooltips.
- In order to use the integration properly, the <IBM Rational Synergy for Microsoft Visual Studio 2008 Interface Install Directory > directory must be included in your PATH.

Contacting IBM Rational Software Support

If the self-help resources have not provided a resolution to your problem, you can contact IBM® Rational® Software Support for assistance in resolving product issues.

Note: If you are a heritage Telelogic customer, a single reference site for all support resources is located at http://www.ibm.com/software/rational/support/telelogic/

Prerequisites

To submit your problem to IBM Rational Software Support, you must have an active Passport Advantage® software maintenance agreement. Passport Advantage is the IBM comprehensive software licensing and software maintenance (product upgrades and technical support) offering. You can enroll online in Passport Advantage from http://www.ibm.com/software/lotus/passportadvantage/howtoenroll.html

- To learn more about Passport Advantage, visit the Passport Advantage FAQs at http://www.ibm.com/software/lotus/passportadvantage/brochures_faqs_quickguides.html.
- For further assistance, contact your IBM representative.

To submit your problem online (from the IBM Web site) to IBM Rational Software Support, you must additionally:

- Be a registered user on the IBM Rational Software Support Web site. For details about registering, go to http://www.ibm.com/software/support/.
- Be listed as an authorized caller in the service request tool.

Submitting problems

To submit your problem to IBM Rational Software Support:

Determine the business impact of your problem. When you report a problem to IBM, you are asked to supply a
severity level. Therefore, you need to understand and assess the business impact of the problem that you are
reporting.

Use the following table to determine the severity level.

| Severity | Description |
|----------|--|
| 1 | The problem has a <i>critical</i> business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution. |
| 2 | This problem has a <i>significant</i> business impact: The program is usable, but it is severely limited. |
| 3 | The problem has <i>some</i> business impact: The program is usable, but less significant features (not critical to operations) are unavailable. |
| 4 | The problem has <i>minimal</i> business impact: The problem causes little impact on operations or a reasonable circumvention to the problem was implemented. |

- 2. Describe your problem and gather background information. When describing a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Rational Support specialists can help you solve the problem efficiently. To save time, know the answer to these questions:
 - What software versions were you running when the problem occurred?

To determine the exact product name and version, use the option applicable to you:

- Start the IBM Installation Manager and select **File > View Installed Packages**. Expand a package group and select a package to see the package name and version number.
- Start your product, and click **Help > About** to see the offering name and version number.
- What is your operation system and version number (including any service packs or patches)?
- Do you have logs, traces, and messages that are related to the problem symptoms?
- Can you recreated the problem? If so, what steps do you perform to recreate the problem?
- Did you make any changes to the system? For example, did you make changes to the hardware, operating system, networking software, or other system components?
- Area you currently using a workaround for the problem? If so, be prepared to describe the workaround when

you report the problem.

- 3. Submit your problem to IBM Rational Software Support. You can submit your problem to IBM Rational Software Support in the following ways:
 - Online: Go to the IBM Rational Software Support Web site at

https://www.ibm.com/software/rational/support/ and in the Rational support task navigator, click Open Service Request. Select the electronic problem reporting tool, and open a Problem Management Record (PMR), describing the problem accurately in your own words.

For more information about opening a service request, go to

http://www.ibm.com/software/support/help.html

- You can also open an online service request using the IBM Support Assistant. For more information, go to http://www.ibm.com/software/support/isa/faq.html.
- By phone: For the phone number to call in your country or region, go to the IBM directory of worldwide
 contacts at http://www.ibm.com/planetwide/ and click the name of of your country or geographic
 region.
- Through your IBM Representative: If you cannot access IBM Rational Software Support online or by
 phone, contact your IBM Representative. If necessary, your IBM Representative can open a service
 request for you. You can find complete contact information for each country at
 http://www.ibm.com/planetwide/.

Note When sending an error report through e-mail, please be sure to include the following:

- all log files (click on How to view the Error Log (Section 10.18.3) for location of the log files)
- screen shot of the error in question

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Appendix

Notices

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