

Web TimeSheet Integration Manager for Microsoft Project server

Version 2.6

USER GUIDE



Notices

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CHAPTER 1

Welcome

Welcome to the *Web TimeSheet Integration Manager for Microsoft Project Server User Guide*. Throughout this user guide, the Web TimeSheet Integration Manager for Microsoft Project Server will be referred to as the Integration Manager.

About the Integration Manager

The Integration Manager allows users to update project/task information, project team assignments, and timesheet data between Web TimeSheet and Microsoft Project® Server 2003 easily and efficiently. Once installed, the Integration Manager is accessible from the Web TimeSheet folder in the **Start** menu on the user's local machine.

The Integration Manager allows one-way transfer of timesheet/hours data from Web TimeSheet to Microsoft Project. Bidirectional data transfer is available for project/task information and project team assignments. Bidirectional project/task information includes:

- Project/task structure
- Project manager
- Task estimated cost, with roll-up to the parent level
- Task start and end dates

The project start and end dates can be transferred one way, from Microsoft Project to Web TimeSheet (these dates are automatically determined in Microsoft Project based on the task start and end dates).

Technology

The Web TimeSheet Integration Manager for Microsoft Project uses streaming XML (Extensible Markup Language) technology, Microsoft Project Object Model, PDS (Project Data Service) and PDS extensions to update data between Web TimeSheet and Microsoft Project. The Integration Manager establishes a link with both the Web TimeSheet database and the Microsoft Project database and transfers data depending on the specified criteria.




About this User Guide


This user guide provides information on installing and using the Integration Manager. The information is organized into chapters and a table of contents is provided for quick reference.

Document Conventions

This user guide uses the following conventions:

- References to other areas in the document are shown *in italics and in blue* to indicate they are active links internal to the document. To automatically navigate to the section being referenced, select the link.
- Hyperlinks to websites or e-mail addresses are shown *in blue and underlined* to indicate they are active links external to the document. To open a new browser window to the website or to send an e-mail to the address, select the link.

- Key information is highlighted using a blue background for quick reference. An icon is used to indicate type of information being provided, as follows.
 - The  icon indicates a note, which provides a reminder of an important requirement or further details on how the software operates.
 - The  icon indicates a warning notice. Warnings point out features or actions that can have negative results if used incorrectly.
 - The  icon indicates a tip or hint designed to assist you in using the product more efficiently.

 The online help system uses these same conventions for easy identification of important notes, warnings, and tips.

Contacting Support

If require further assistance configuring or using the Integration Manager, please contact Replicon's Customer Support team using one of the following methods:

Direct Phone:	403-262-6519 ext 3
Toll-Free Phone:	
North America:	1-877-737-5420 ext 3
Europe:	00-800-7375-4266 ext 3
Australia/New Zealand:	0011-800-7375-4266 ext 3
E-mail:	support@replicon.com
Web-Based Form:	www.replicon.com/supportservices/requesthelp.asp
Fax:	403-233-8046

Installing the Integration Manager

System Requirements

Before installing the Integration Manager, ensure your system meets the following requirements:

- One of the following:
 - Windows 2000 Professional with Service Pack 4 or higher
 - Windows 2000 Server with Service Pack 4 or higher
 - Windows 2003 Server with Service Pack 1 or higher
 - Windows XP with Service Pack 1 or higher
- Administrator access for installation
- A compatible version of Web TimeSheet as specified in the product release notes, and a browser that supports it
- Microsoft Project® Server 2003
- All projects saved in a Microsoft Project server installation
- A browser that meets the requirements for Microsoft Project Web Access (see your Microsoft Project documentation for more information)

Installing the Integration Manager

The installation process consists of four main steps:


1. Configure the Microsoft Project server to meet the requirements of the Integration Manager, as detailed in [Configuring Microsoft Project Server](#) below.
2. If more than one user will be using the automatic update feature, create a new Windows user account on the machine the Integration Manager will be installed on. Details are provided in [Creating a User Account for the Automatic Update Service](#) on page 8.
3. Install Microsoft Project Server Extensions on the Microsoft Project Server machine, as described in [Installing Microsoft Project Server Extensions](#) on page 8.
4. Install the Integration Manager following the instructions provided in [Installing the Integration Manager](#) on page 12.

Configuring Microsoft Project Server

Before you will install the Integration Manager, Microsoft Project Server must be configured to ensure the Integration Manager can transfer data. Configuration can be completed through the **Microsoft Project Web Access** interface as follows:

1. Log in to **Microsoft Project Web Access**. For information on accessing the **Web Access** interface, contact your system administrator or see your Microsoft Project documentation.
2. Select **Admin** from the menu at the top of the page.
3. Select **Server configuration**.
4. Select the **Enable enterprise features** radio button.
5. Select **Save Changes**.
6. Select **Customize Project Web Access**.

7. Under **Specify the default method for reporting progress on tasks**, select **Hours of work done per day or per week...**
8. Under **Time period settings**, select **Non Managed Periods**.
9. Lower down in the **Time period settings** section, select **Resources should report their hours worked every day**.
10. If you do not use the **Maximum number of hours that can be entered per day for a single task** field, enter 0 to indicate there is no limit. Note, however, that this change is optional. If you wish to leave the field set to a specific number of hours, the Integration Manager should transfer data without encountering errors under most conditions.
11. Select **Save Changes**.
12. Log off of **Microsoft Project Web Access**.


 Any changes made to the Microsoft Project server configuration will only apply to projects added to the server after the changes.

Creating a User Account for the Automatic Update Service

The Integration Manager can be enabled to automatically transfer data on a regular basis. While configuration of the automatic updates is done using the main Integration Manager interface, the updates are carried out by a Windows service running in the background. The service is installed along with the Integration Manager and requires a user account for the machine it is installed on. To prevent conflicts and security concerns, for some users it is recommended that a new account be created solely for use by the service, rather than using an existing user's account. This new account is recommended if all of the following requirements are met:

1. The automatic update feature will be enabled.
2. More than one user will be using the automatic update feature.
3. You will be configuring the Integration Manager to log in to the Microsoft Project Server using the Windows user account rather than a Microsoft Project Server user account.

If only one user will be using the automatic update feature, you can use their existing user name and password for the service. You will be prompted for this information during installation.

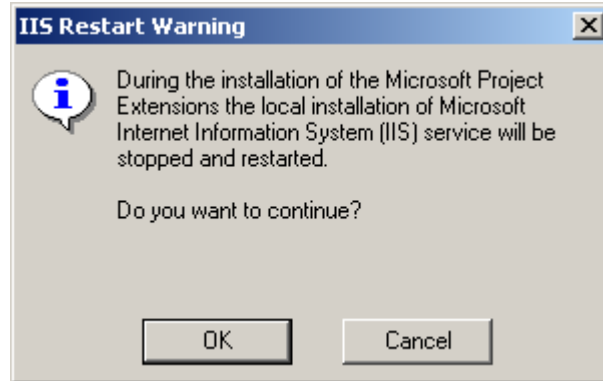
 Administrative privileges are typically required to create new users on a machine and to install software that will be accessible to all users. As such, it is recommended that a system administrator install the Integration Manager.

Installing Microsoft Project Server Extensions

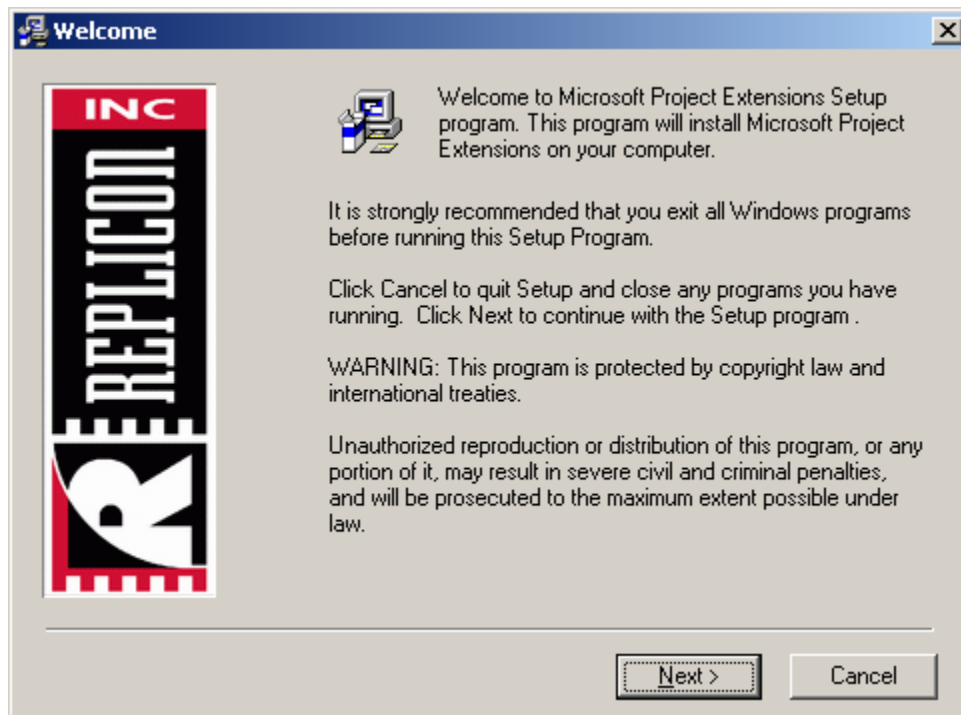
Before you can connect to the Microsoft Project server via the Integration Manager, you will need to install the Microsoft Project Server Extensions on the Microsoft Project Server machine. It is recommended that you install the Microsoft Project Server Extensions first.

You will need to obtain the extensions installation file from Replicon Customer Support (the file should have been included with the Integration Manager for Microsoft Project Server and will include the text `RPDSEx-tension` in the file name). Launch the installation file and complete the steps below.

1. To make the installation effective, the IIS service will need to be stopped (and restarted at the end of the installation). Select **OK** to automatically stop and restart the service.



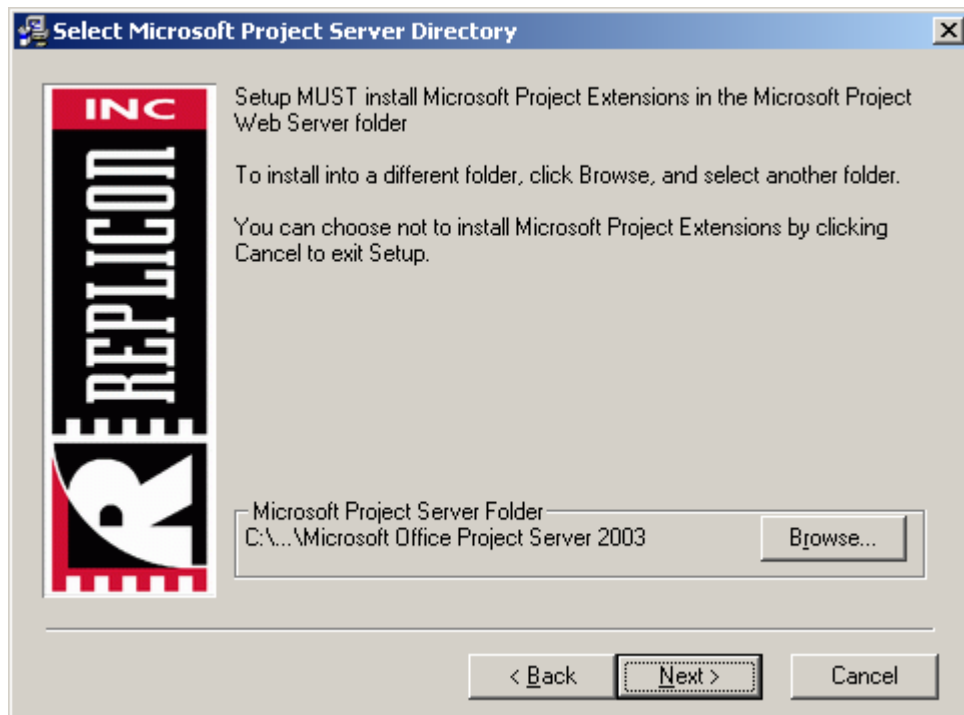
2. The first installation screen is the **Welcome** screen. Read this screen carefully, then select **Next** to continue.



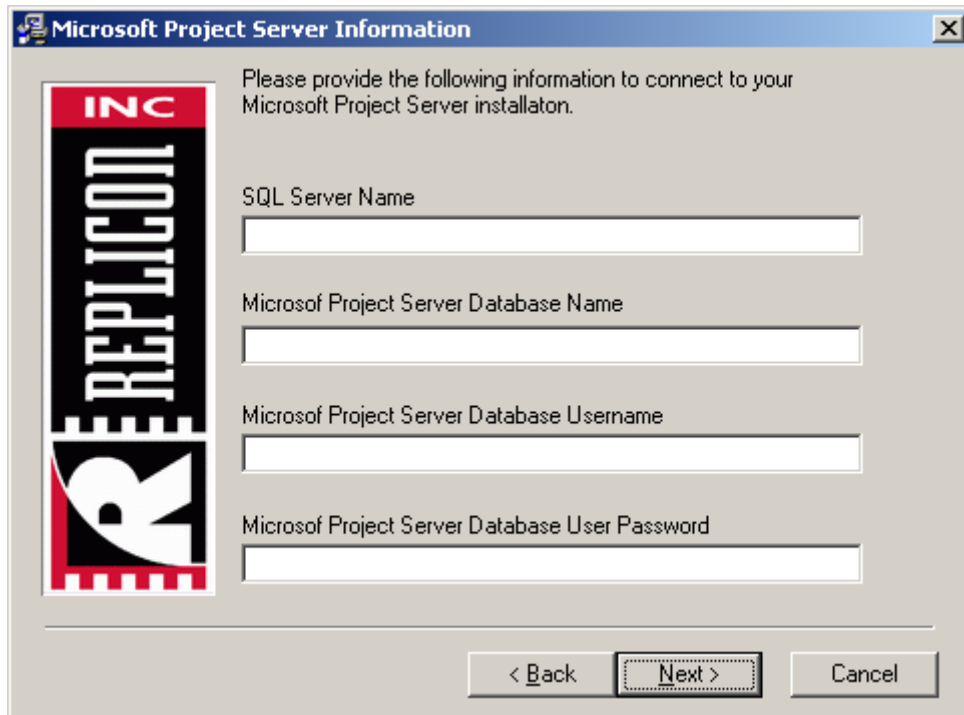
3. Review the license agreement and select **Accept** if you agree to the terms.



4. Next you will need to specify folder in which Microsoft Project Server is installed, which is where Microsoft Project Server Extensions must be installed. Use the **Browse** button to locate the folder (it may be provided by default).



5. Now enter the SQL Server name, Microsoft Project Server database name, Microsoft Project Server database user name, and Microsoft Project Server database password. This information is vital to connect to your Microsoft Project Server installation. Contact your system administrator if you are unsure of this information. Once the information has been entered, select the **Next** button.



The screenshot shows a dialog box titled "Microsoft Project Server Information". On the left side, there is a vertical logo for "REPLICON INC" with a large stylized "R" at the bottom. The main area of the dialog contains the following text and input fields:

Please provide the following information to connect to your Microsoft Project Server installation.

SQL Server Name

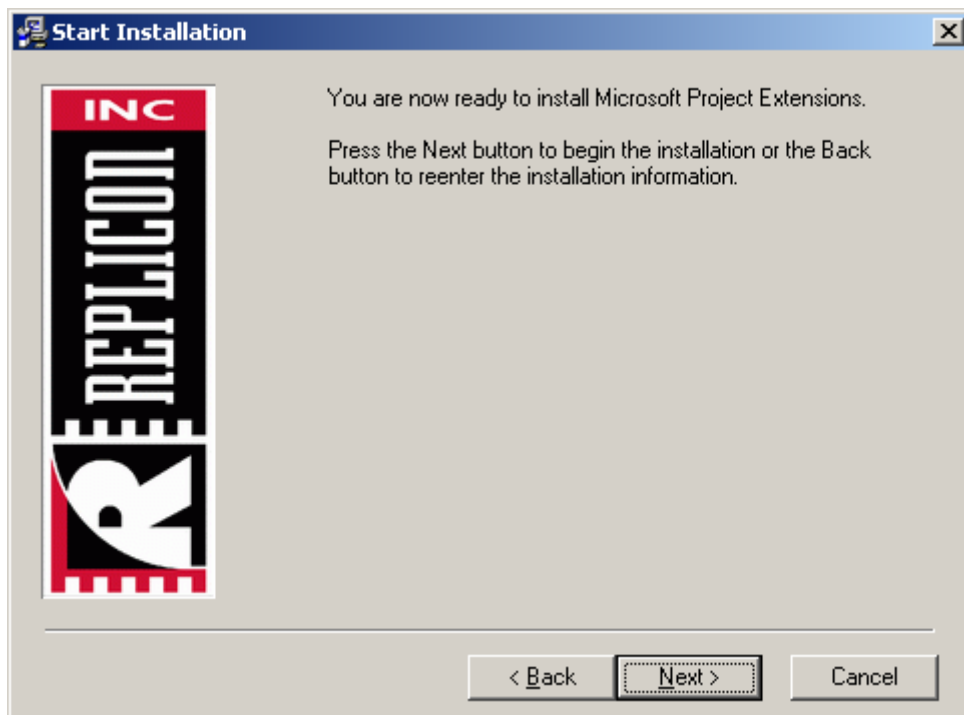
Microsoft Project Server Database Name

Microsoft Project Server Database Username

Microsoft Project Server Database User Password

At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a dotted border), and "Cancel".

6. Now you are ready to install the Microsoft Project Server Extensions. Select the **Next** button to start the installation.



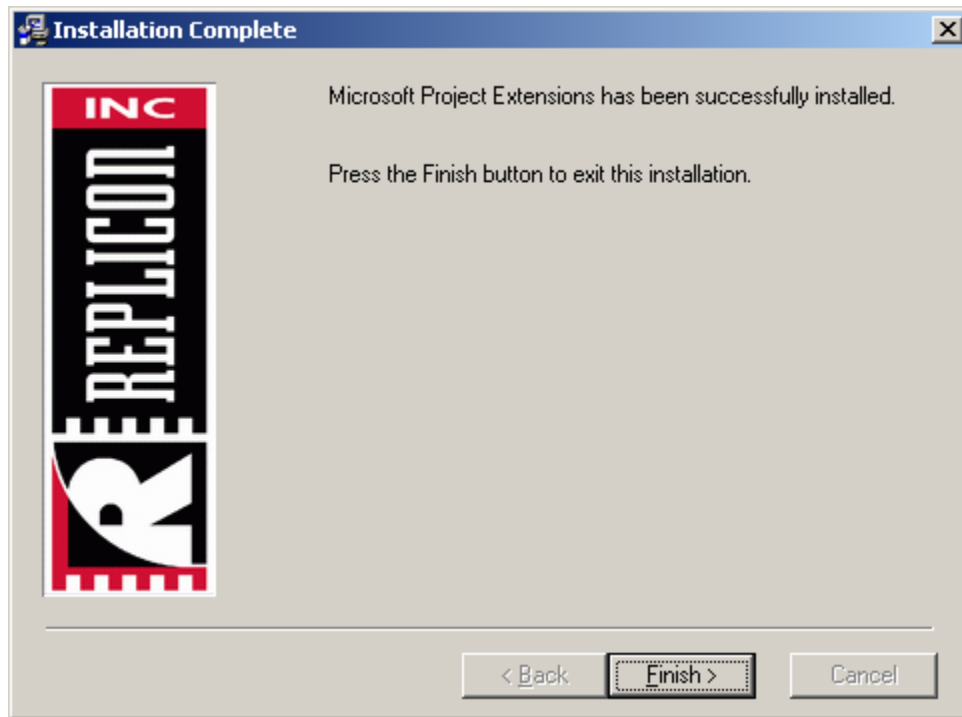
The screenshot shows a dialog box titled "Start Installation". On the left side, there is a vertical logo for "REPLICON INC" with a large stylized "R" at the bottom. The main area of the dialog contains the following text:

You are now ready to install Microsoft Project Extensions.

Press the Next button to begin the installation or the Back button to reenter the installation information.

At the bottom of the dialog, there are three buttons: "< Back", "Next >" (which is highlighted with a dotted border), and "Cancel".

7. When the installation is complete, select the **Finish** button to close the installation wizard.



Installing the Integration Manager

You will need to purchase the Web TimeSheet Integration Manager for Microsoft Project Server and obtain the installation file from a Replicon representative.

- Before attempting to install the Integration Manager, ensure the Microsoft Project Server Extensions are installed, as detailed in [Installing Microsoft Project Server Extensions](#) on page 8. Also verify that the Microsoft Project Server has been configured following the steps given in [Configuring Microsoft Project Server](#) on page 7 and that, if required, a user account has been created as discussed in [Creating a User Account for the Automatic Update Service](#) on page 8.

Installing on the Web TimeSheet Server

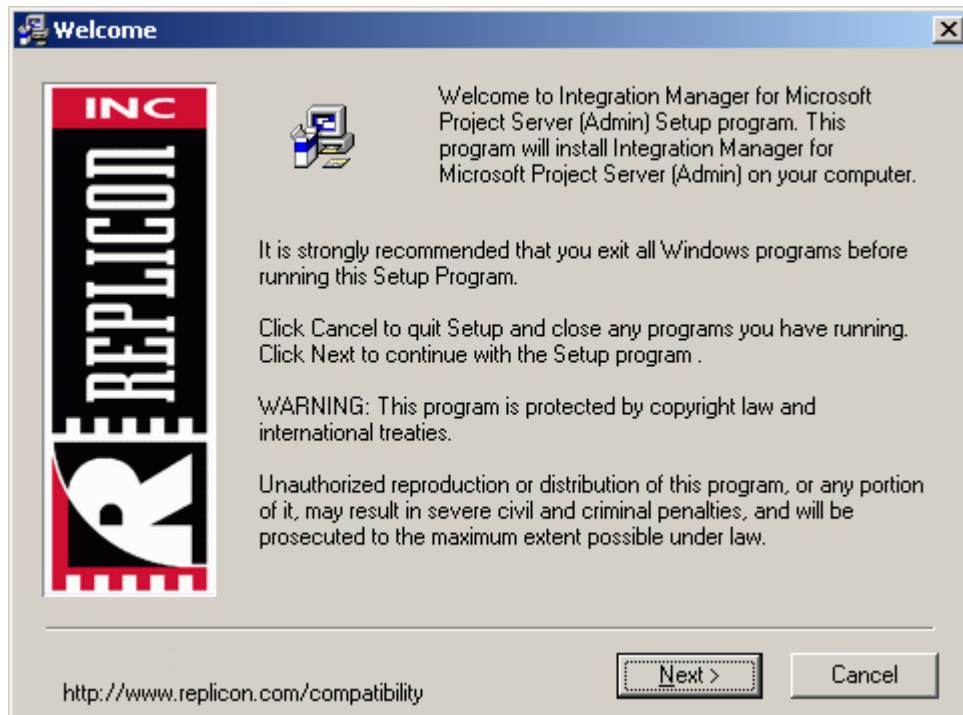
The Web TimeSheet Integration Manager for Microsoft Project Server is an external application (accessed outside of Web TimeSheet) that is installed on a local machine and accessed from within Microsoft Project. To facilitate installation on all necessary local machines, the administrator may choose to install the Integration Manager on the Web TimeSheet server. Installing on the Web TimeSheet server creates a link in the Web Timesheet **Integration** menu, which users then click on to install the application on their own machines.

Before installing on the Web TimeSheet server, make sure you have already installed Web TimeSheet. The Integration Manager will need to be installed in the Web TimeSheet directory.

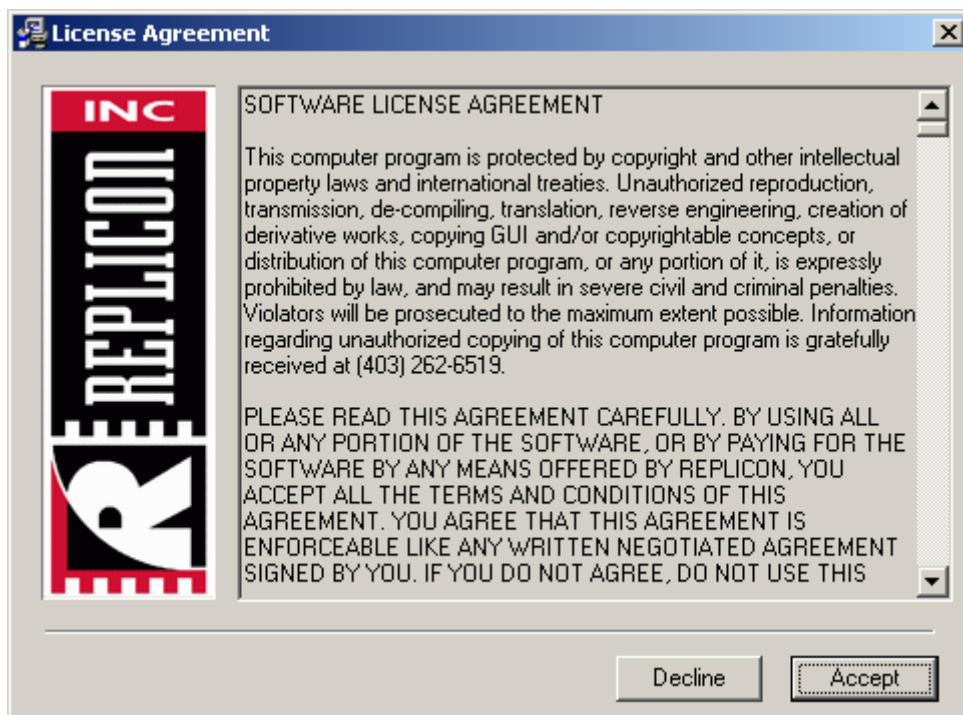
The installation wizard will guide you through the installation process as follows.

1. Stop the service associated with Web TimeSheet and back up the Web TimeSheet database.

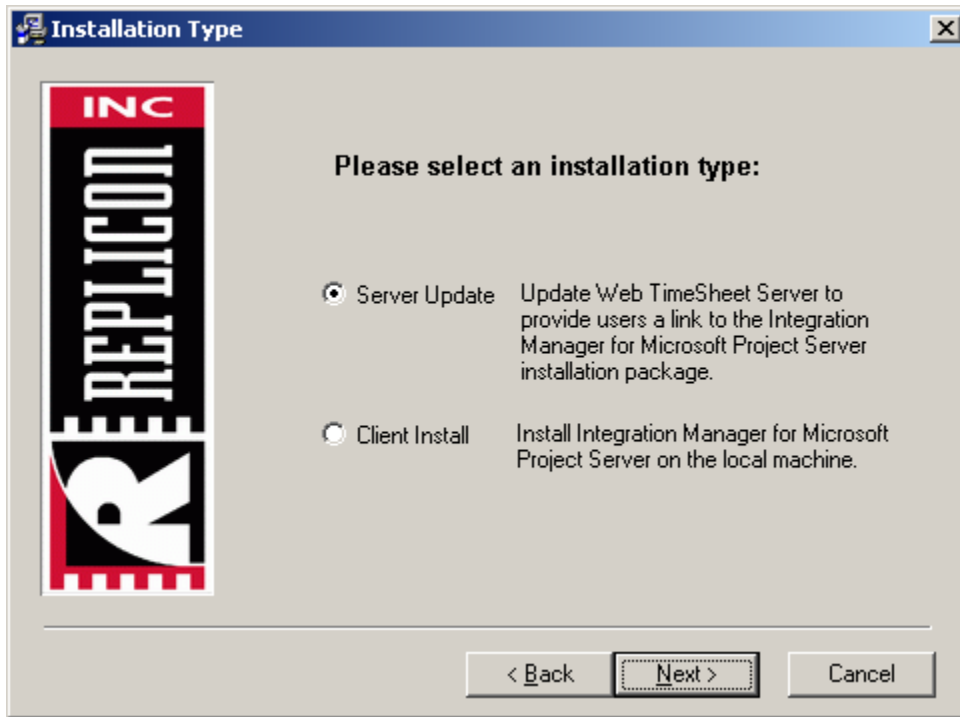
2. Launch the installation file. The **Welcome** screen is displayed. Select **Next** to continue.



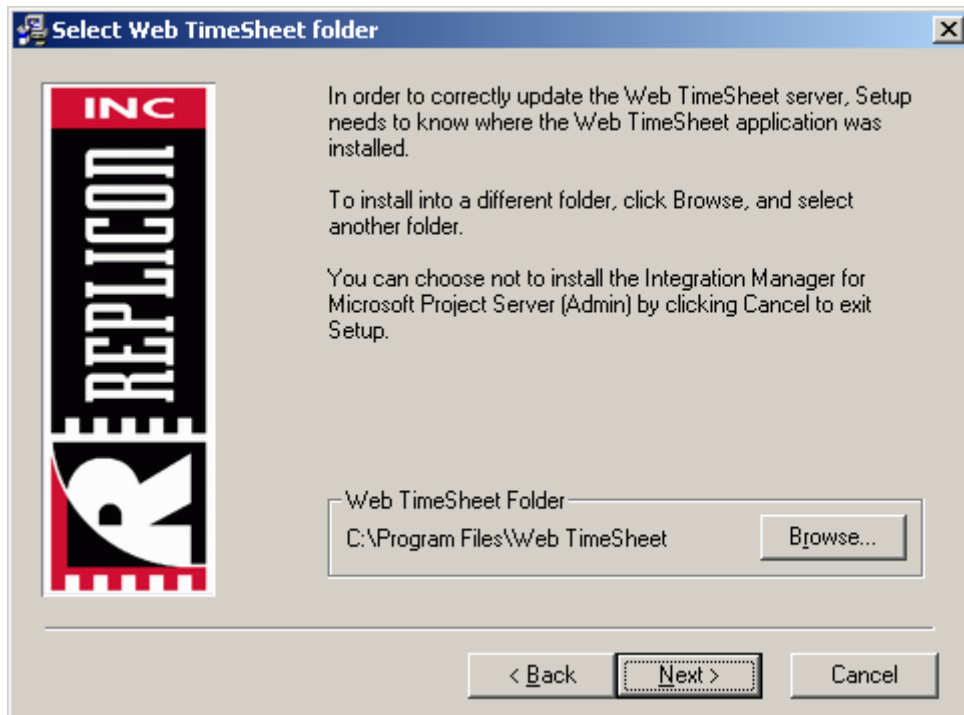
3. Review the license agreement and select **Accept** if you agree to the terms.



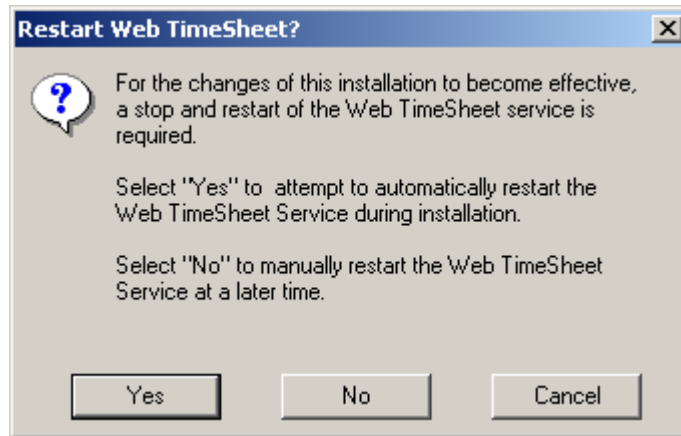
- Specify that you would like to install the Integration Manager on the Web TimeSheet server. Installing on the Web TimeSheet server will create a link within Web TimeSheet that will allow individual users to install the application on their local machines. Select **Next** to continue.



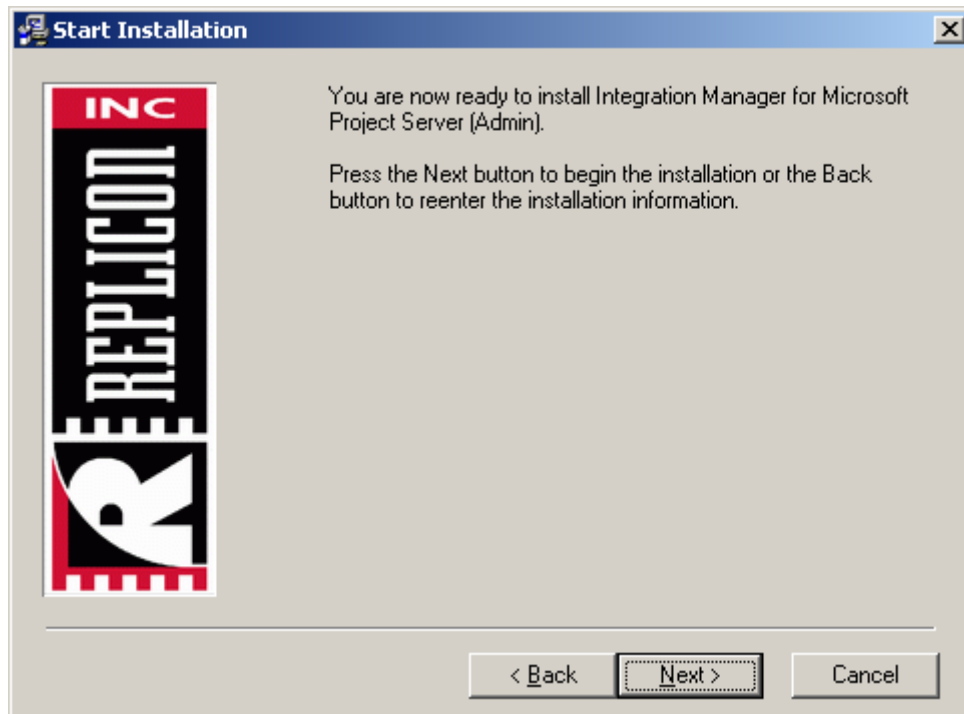
- Next you will need to specify the folder in which TimeSheet is installed, which is where the Integration Manager must be installed. Use the **Browse** button to locate the Web TimeSheet folder. Then, select **Next** to continue.



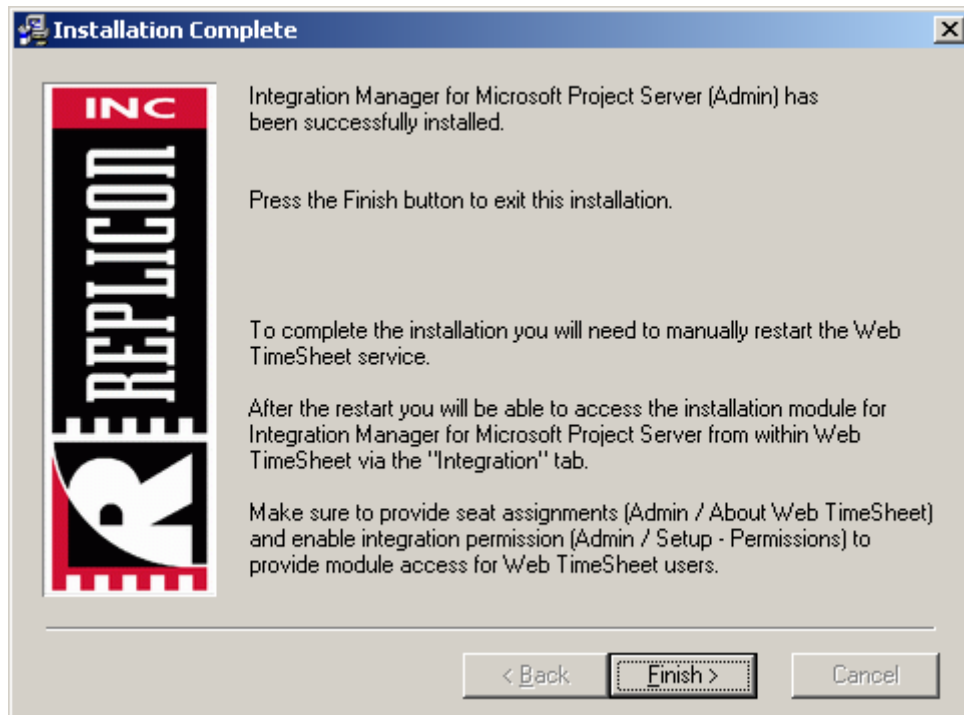
- To make the installation effective, you will need to restart the Web TimeSheet service. Select **Yes** to automatically restart the service, or **No** to restart the service manually. If you choose to restart the service manually, you will need to do so at the end of the installation to ensure the features are available in Web TimeSheet.



- Now you are ready to install the Integration Manager. Select the **Next** button to start the installation.



- When the installation is complete, select the **Finish** button to exit the installation program.



- If you did not already do so in [Step 6](#), restart the Web TimeSheet service.
- Enter a valid license key and seat assignments for the Integration Manager in Web TimeSheet, as detailed in [Entering a License Key](#) on page 25.

Users can now install the Integration Manager from within Web TimeSheet.

Installing on a Local Machine

You may install the Integration Manager on a local machine either by downloading/installing from within Web TimeSheet, or by launching the installation file directly on the machine (via CD, network location, etc.). You must have permission to install applications on the local computer.

Installing from Within Web TimeSheet

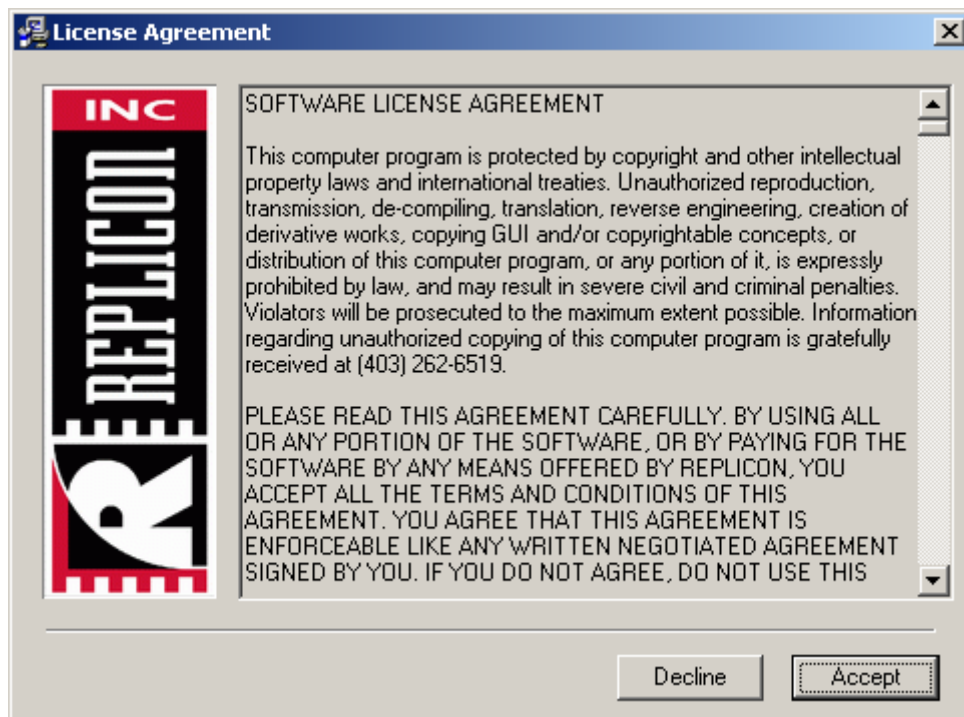
If you are installing from within Web TimeSheet, follow the steps below. Otherwise, follow the steps provided in [Installing via a Local or Network Drive](#) on page 21 instead.

- Log into Web TimeSheet using your login name and password.
- Click on the **Integration** button at the top of the screen, and select **Microsoft Project** from the side menu. You will be able to access the **Integration** menu only if you have appropriate Web TimeSheet permissions and a seat assignment for the module.
- On the **Integration - Microsoft Project** screen, click on the link labeled **Web TimeSheet Integration Manager for Microsoft Project Server**.
- The **File Download** dialog box will prompt you to either open or save the file. Select the **Open** button to start the installation.

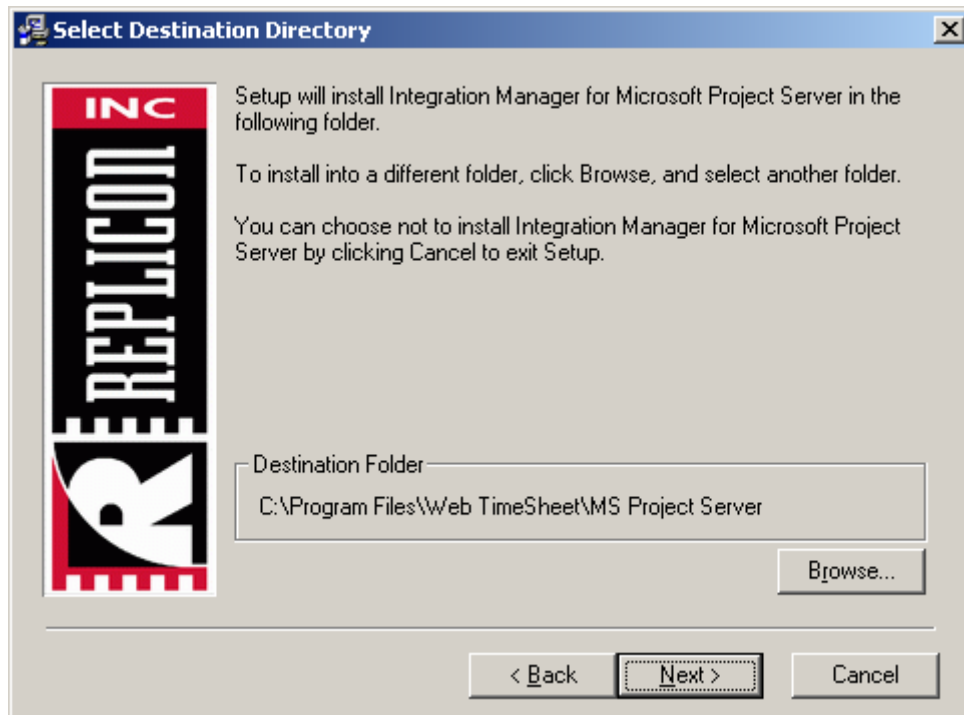
5. The first installation screen is the **Welcome** screen. Read this screen carefully, then select **Next** to continue.



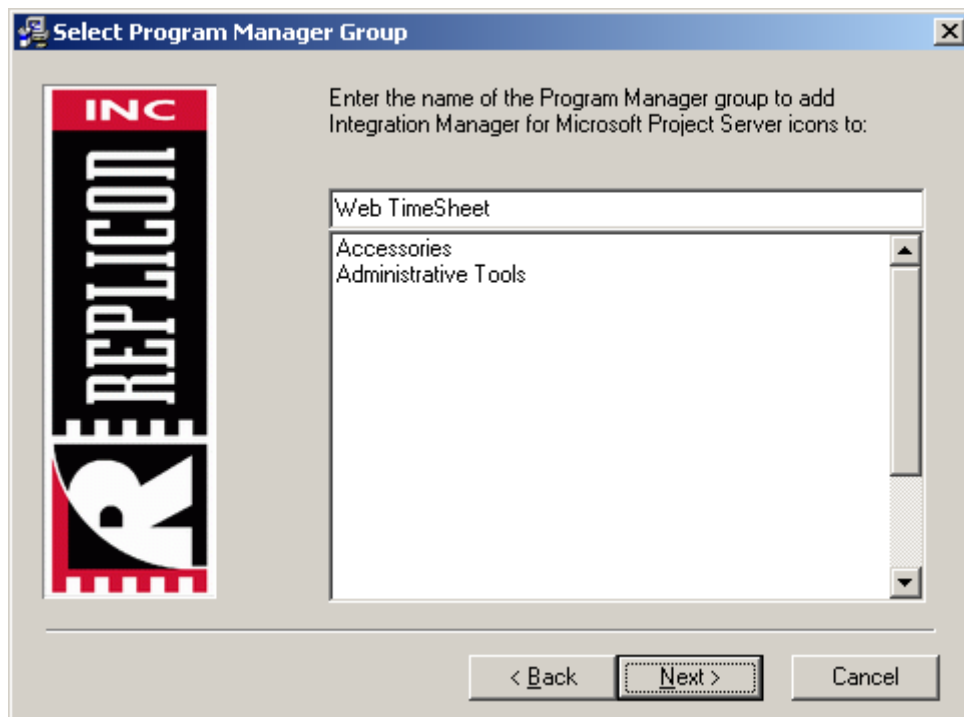
6. Review the license agreement and select **Accept** if you agree to the terms outlined.



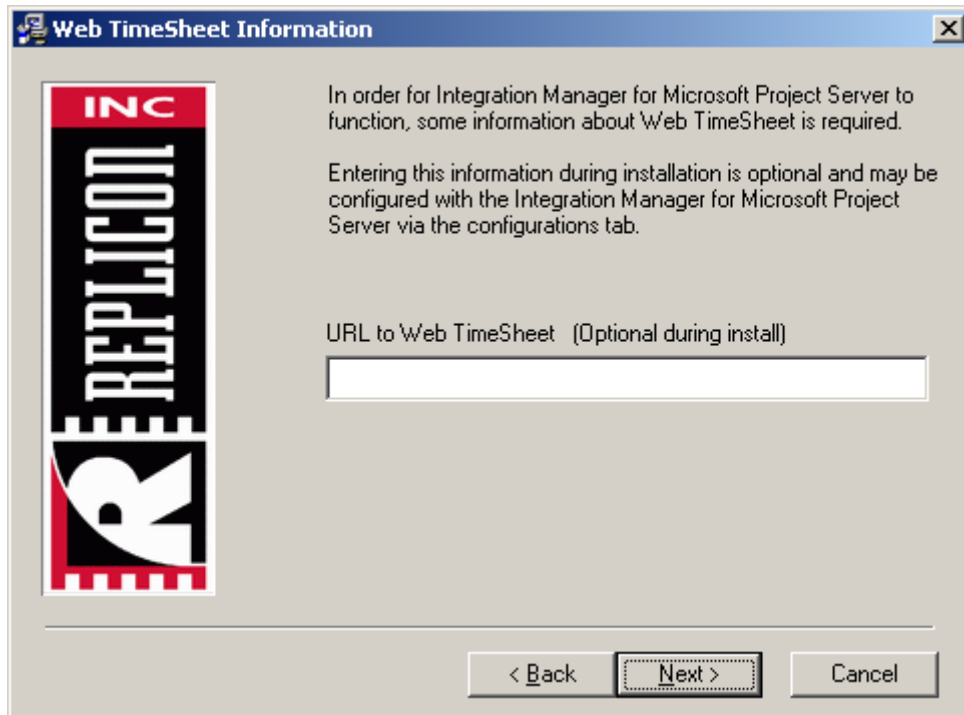
7. Select the folder you wish to install the Integration Manager in and then select **Next** to continue.



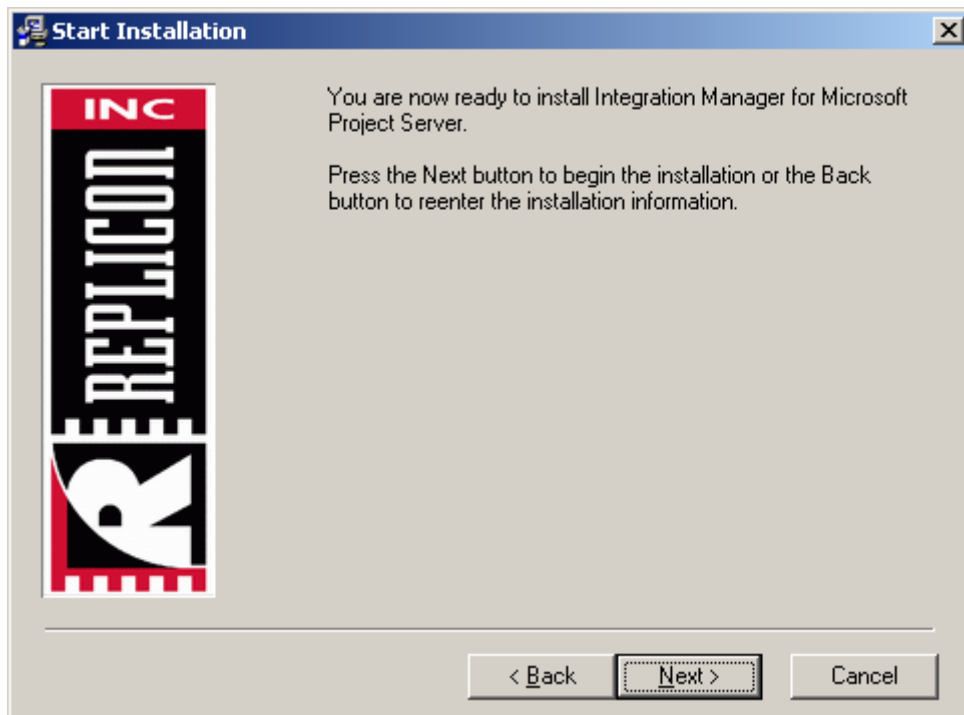
8. Select the program folder in the **Start** menu in which to add a shortcut to the Integration Manager. Select **Next** to continue.



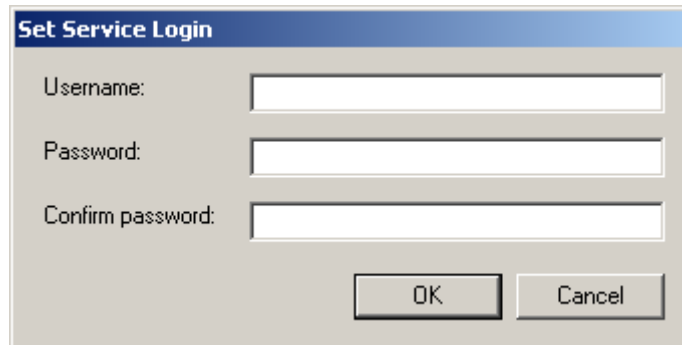
9. If you wish, enter the Web TimeSheet URL, which is the URL used to access Web TimeSheet on the server. The Web TimeSheet URL will be required the first time you log into the Integration Manager; however, you do not have to enter it now. If you are unsure of the URL, check with your system administrator. Select **Next** to continue.




10. Now you are ready to install the Integration Manager. Select the **Next** button to start the installation.



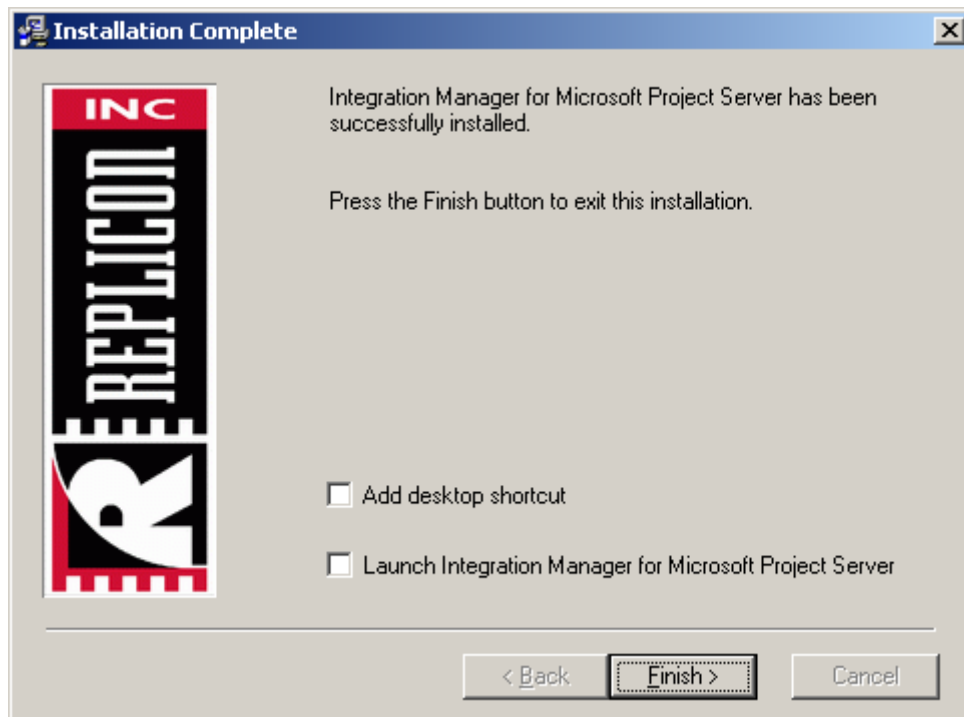
11. When prompted, enter the **User Name** and **Password** to be used by the automatic update service to log in to the computer. Depending on how the automatic update feature will be used, you may be advised to create a new user account for this purpose rather than using an existing user's account. For more information, see [Creating a User Account for the Automatic Update Service](#) on page 8. Once you have entered the account information, select **OK** to continue with the installation.



The image shows a dialog box titled "Set Service Login". It contains three text input fields: "Username:", "Password:", and "Confirm password:". Below the fields are two buttons: "OK" and "Cancel".

 If you select **Cancel** during this step, the installation process will continue but the automatic update service will not be created. As a result, automatic updates will not occur.

12. When the installation is complete, if you wish, enable the options to add a shortcut to the Integration Manager to the desktop and to launch the Integration Manager upon exiting the installation program. Then, select the **Finish** button to close the installation wizard.



The image shows a dialog box titled "Installation Complete". On the left is a logo for "INC REPLICON" with a large stylized "R". The main text reads: "Integration Manager for Microsoft Project Server has been successfully installed." and "Press the Finish button to exit this installation." Below this are two checkboxes: "Add desktop shortcut" and "Launch Integration Manager for Microsoft Project Server". At the bottom are three buttons: "< Back", "Finish >", and "Cancel".

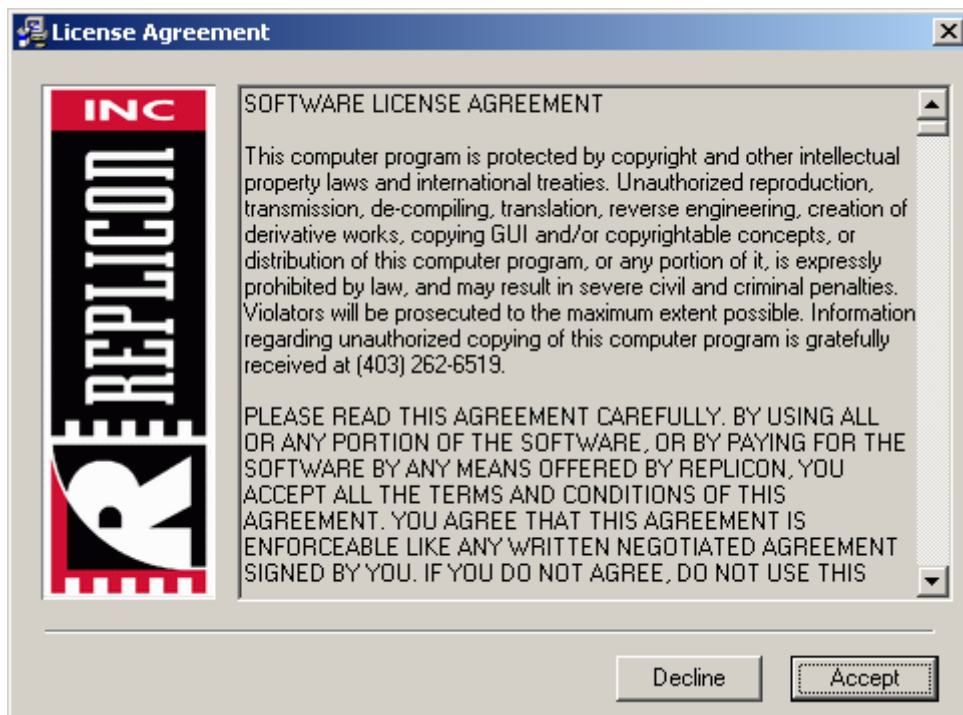
Installing via a Local or Network Drive

If you are installing the Integration Manager on your local machine directly (via local or network drives), you will need to locate the installation file provided by Replicon. Once located, double-click on the file to launch the installation program, which will guide you through the installation process.

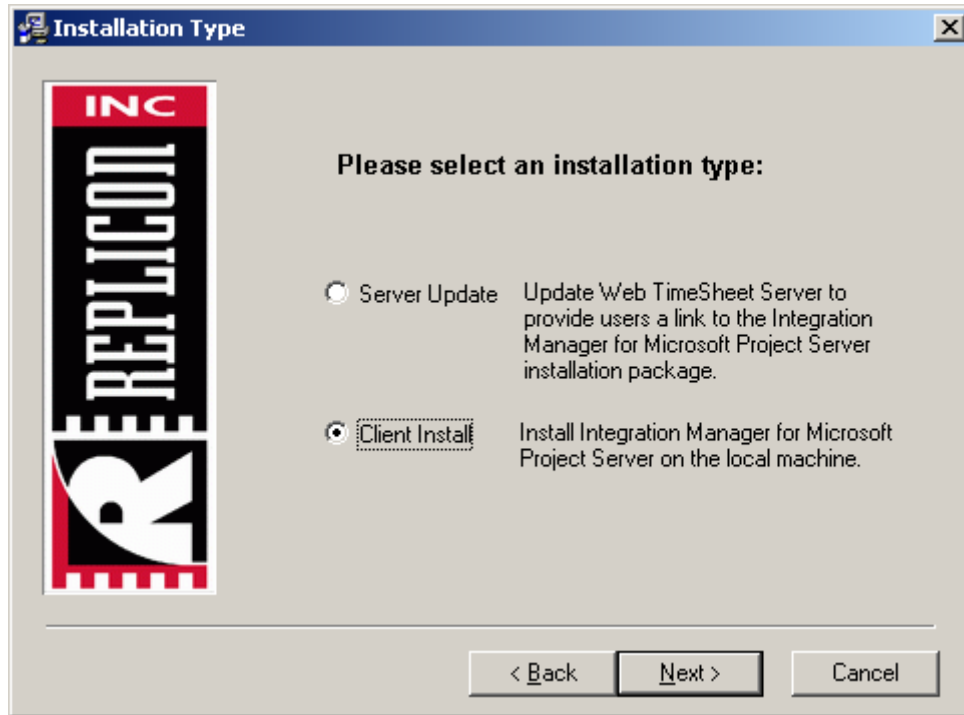
1. The first installation screen is the **Welcome** screen. Read this screen carefully, then select **Next** to continue.



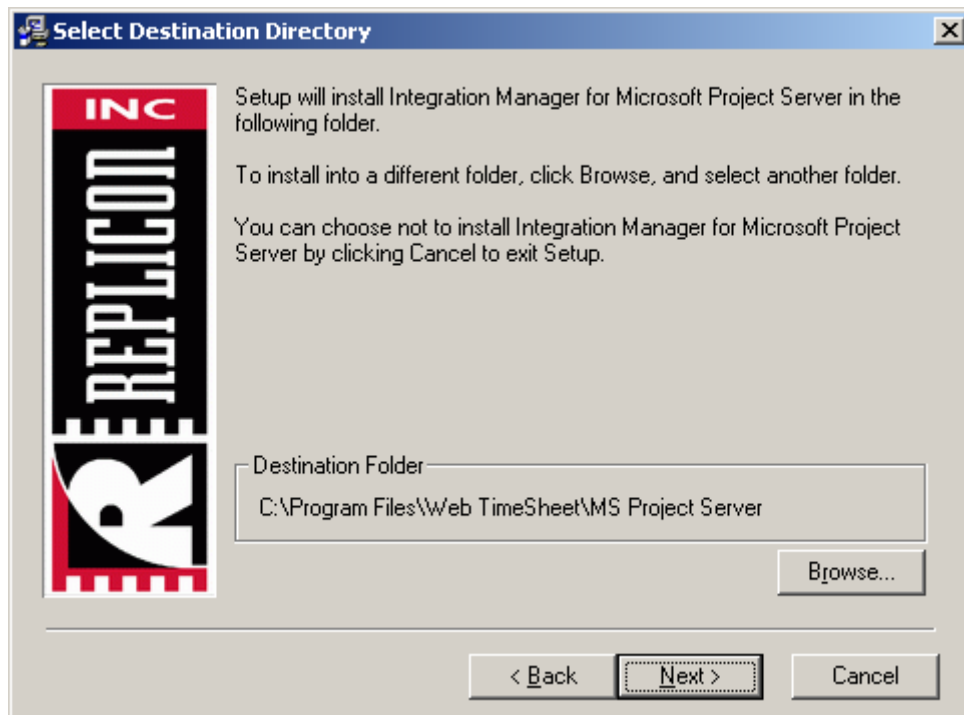
2. Review the license agreement and select **Accept** if you agree to the terms outlined.



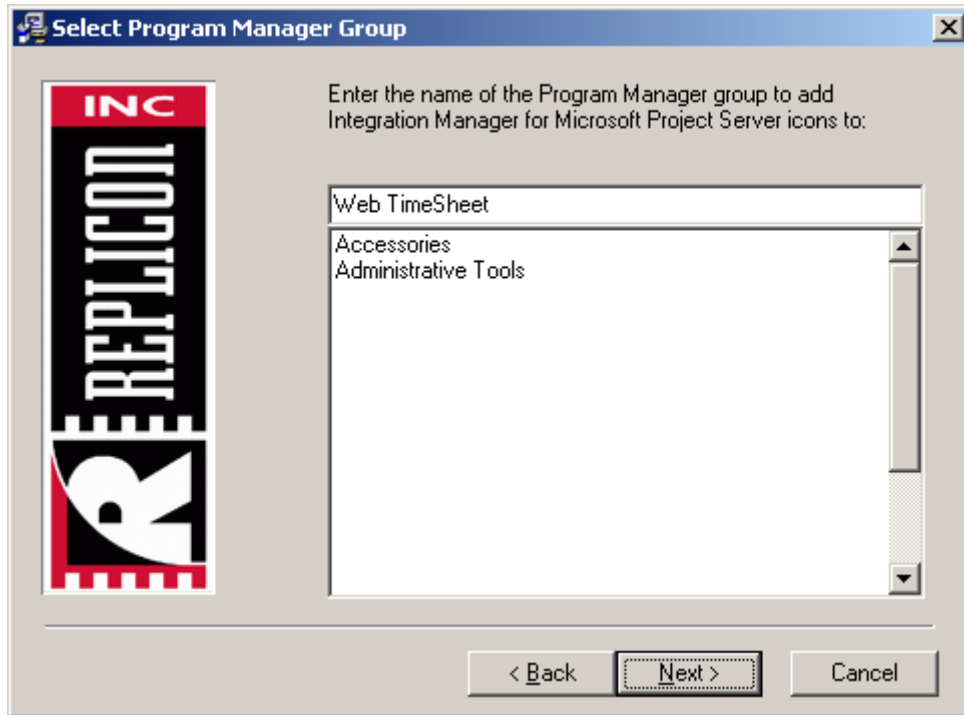
- Now specify that you would like to install the Integration Manager on the client machine (i.e., the local machine). Select **Next** to continue to the next step.



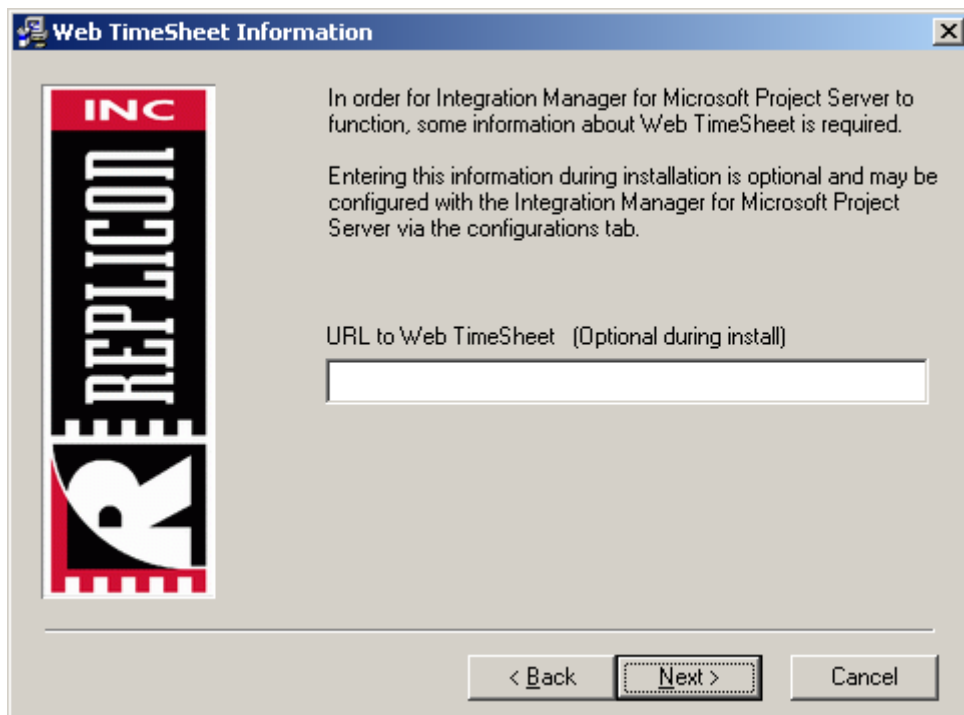
- Select the destination folder to install the Integration Manager in using the **Browse** button. Then, select **Next** to continue.



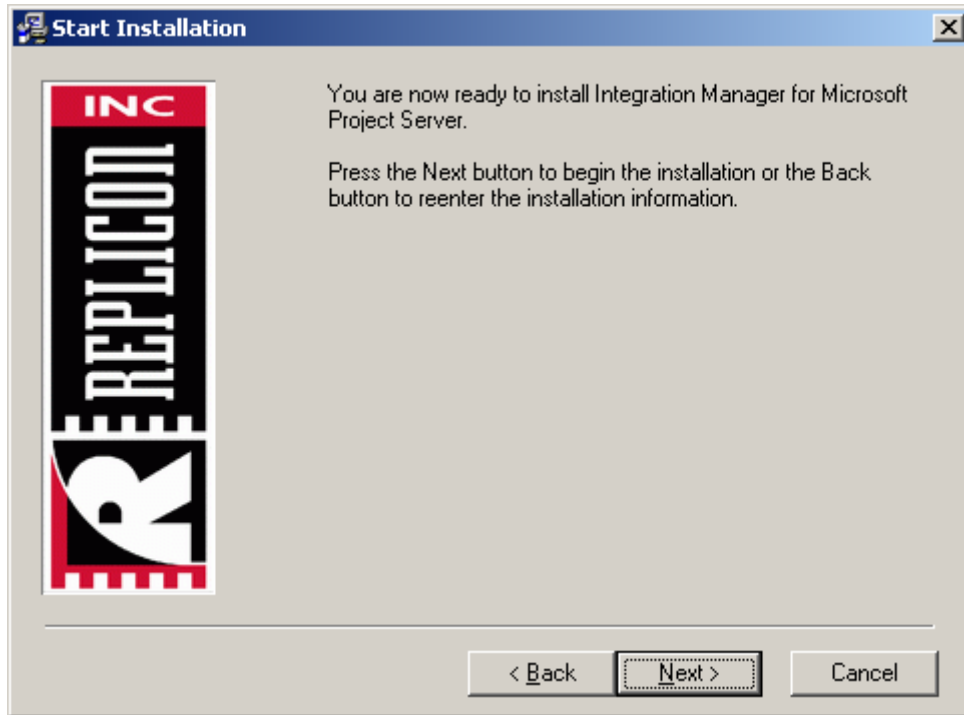
5. Select the program folder in the **Start** menu in which to add a shortcut to the Integration Manager and select **Next**.



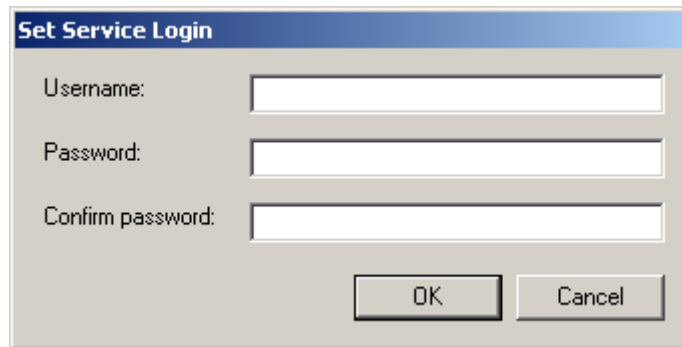
6. Now, if you wish, type in the Web TimeSheet URL, which is the URL used to access Web TimeSheet on the server. The Web TimeSheet URL will be required the first time you log into the Integration Manager; however, you do not have to enter it now. If you are unsure of the URL, check with your system administrator. Select **Next** to continue.




7. You are now ready to begin the installation. Select **Next** to start installing the Integration Manager.

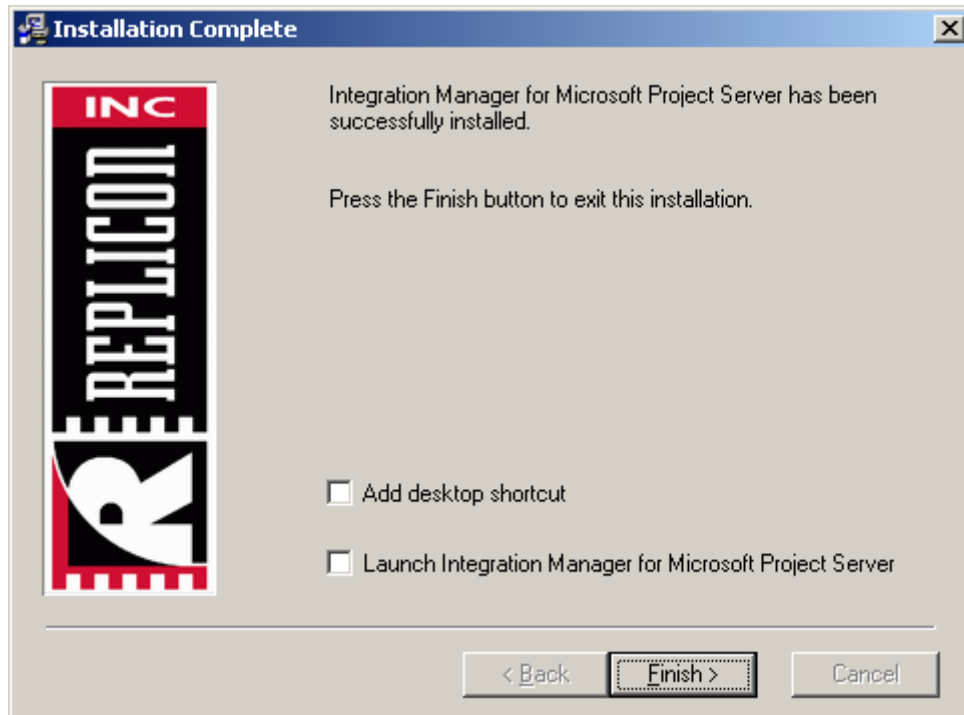


8. When prompted, enter the **User Name** and **Password** to be used by the automatic update service to log in to the computer. Depending on how the automatic update feature will be used, you may be advised to create a new user account for this purpose rather than using an existing user's account. For more information, see [Creating a User Account for the Automatic Update Service](#) on page 8. Once you have entered the account information, select **OK** to continue with the installation.



 If you select **Cancel** during this step, the installation process will continue but the automatic update service will not be created. As a result, automatic updates will not occur.

- When the installation is complete, if you wish, enable the options to add a shortcut to the Integration Manager to the desktop and to launch the Integration Manager upon exiting the installation program. Then, select the **Finish** button to close the installation program.



- Enter a valid license key and seat assignments for the Integration Manager in Web TimeSheet, as detailed in [Entering a License Key](#) on page 25. Consult your Web TimeSheet system administrator for assistance with this step.

Entering a License Key

Once the Integration Manager is installed, a license key for the Integration Manager must be entered in Web TimeSheet. The license key is provided by Replicon when you purchase the Integration Manager. Additionally, seats must be assigned to the Integration Manager users.

To enter a license key and assign seats:

- Log in to Web TimeSheet. You must log in as a user assigned a permission that includes the **System/License info** item. If you do not have this permission level, consult your Web TimeSheet system administrator for assistance.
- Select **Admin** from the top menu bar.
- Select **About Web TimeSheet** from the side menu bar.
- Select the **License Keys** tab.
- Select **Add**.
- Enter the license key provided with the Integration Manager in the **License Key** field.
- Select **Save**.
- Select the **Seat Assignments** tab.
- Select the entry for **Microsoft Project Std/Pro**.
- Select the users who will be using the Integration Manager from the **Available Users** list.

11. Select the  button.

The users who will be assigned a seat under the license agreement are listed in the **Assigned Users** list box.

12. Select **Save**.

CHAPTER 3

Getting Started

Starting the Integration Manager

- ☐ Before launching the Integration Manager, ensure Microsoft Project Server is configured correctly, as detailed in [Configuring Microsoft Project Server](#) on page 7.

The Integration Manager must be installed on your local computer in order to transfer data. Once installed, you can access the Integration Manager following the steps below:

1. Click on the **Start** menu in your Windows task bar and select **Program Files**.
2. Locate the **Web TimeSheet** folder and select **Integration Manager for Microsoft Project Server**. If you cannot find the Web TimeSheet folder or the Integration Manager, check with your system administrator as the file may have been installed in a different location.
3. In the **Web TimeSheet Security Login** dialog box, type the **Web TimeSheet URL**, which is the URL used to access Web TimeSheet on the server (required the first time you log in). If you are unsure of the URL, check with your system administrator.
4. Enter the login name and password you normally use to log into Web TimeSheet.
5. If you wish to bypass the login screen in the future, check the box at the bottom of the login screen labeled **Automatically login to Web TimeSheet next time**. You will still be able to change your login information, if necessary, from the **Configuration** tab within the Integration Manager.
6. When you are ready, click the **Connect** button to connect to Web TimeSheet. If the connection is successful, the Integration Manager will open in a new window.

- ☐ To install and use the Integration Manager, you must have a valid license key and each user must have a seat assignment for the module, as detailed in [Entering a License Key](#) on page 25.

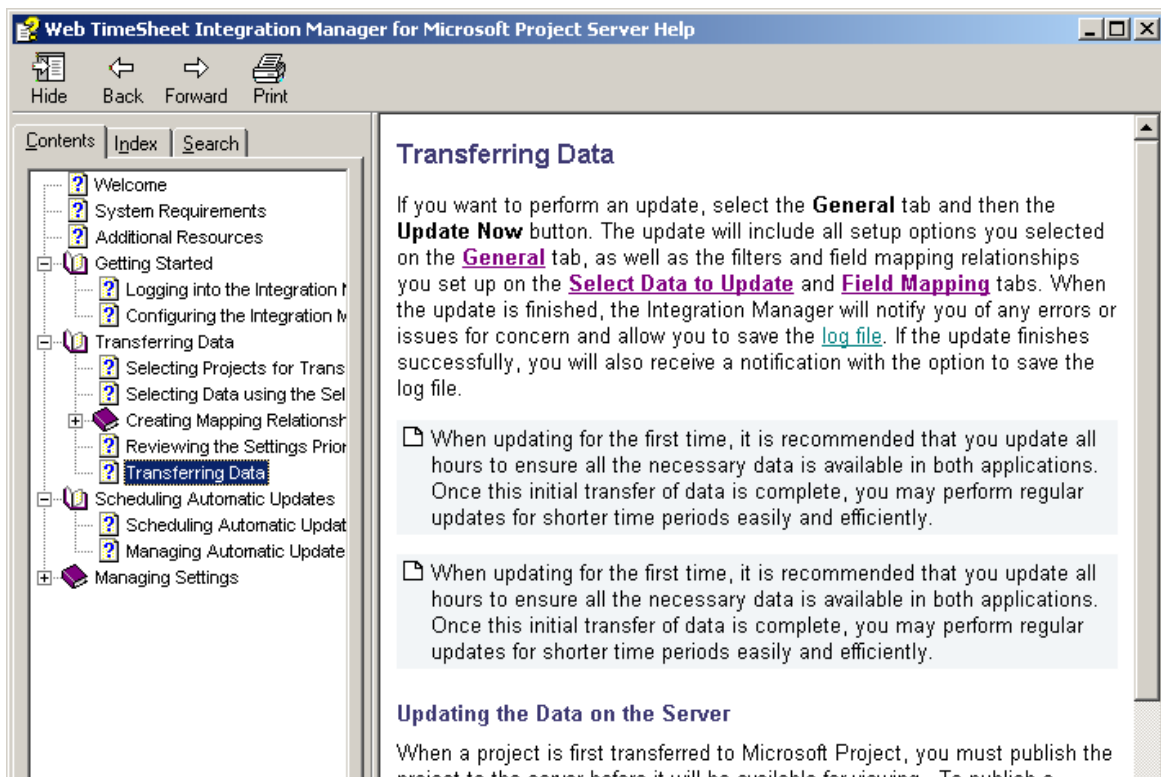
Possible Reasons for Connection Failure

If you are unable to connect to Web TimeSheet, the Integration Manager will display an error message indicating the reason why the connection failed. Possible reasons for a failed connection include:

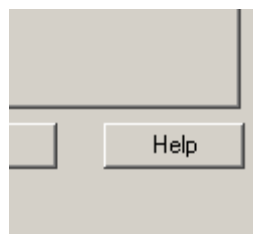
- **User Name/Password Error**
Your user name does not exist, your user profile has been disabled, or your password is invalid. If you cannot resolve the issue on your own, please contact your Web TimeSheet administrator.
- **License Error**
You do not have a valid license key and/or seat assignment for the Web TimeSheet Integration Manager for Microsoft Project Server, or your license key has expired. Please contact your Web TimeSheet administrator for further information.
- **Server Connection Error**
The server location is invalid, or there is a problem connecting to the Web TimeSheet server. Please contact your system administrator for further information.
- **Interrupted Connection**
The connection to the Web TimeSheet server has been interrupted. The Integration Manager will automatically try to reconnect before requiring feedback. If you receive this error, you may choose to retry, or cancel the connection and try again later.

Accessing the Online Help

The Integration Manager includes an online help system that provides comprehensive information on using the software to complete key tasks, as shown below.



To access the online help, select the **Help** button in the bottom, right hand corner of the main Integration Manager window.



Using the Integration Manager


The Web TimeSheet Integration Manager for Microsoft Project Server is designed to allow you to update data between Web TimeSheet and Microsoft Project Server 2003.

Initially, you will need to specify some setup options to ensure that the proper data is updated and the field mapping meets your needs. Later, you can perform regular updates based on the setup options you selected (or you can redefine your setup, if necessary).

- ☐ Once you have performed an update, Microsoft Project Server will require you to accept the changes. Refer to your Microsoft Project Server documentation for further information about accepting changes to projects and tasks.
- ☐ When updating for the first time, it is recommended that you update all hours within the project start and end dates to ensure all the necessary data is available in both applications. Once this initial transfer of data is complete, you may perform regular updates for shorter time periods easily and efficiently.
- ☐ When updating projects, only the first ten levels of the hierarchy will be updated.

General Setup Options

The **General** tab is used to specify the direction of the update and the projects to be updated (when applicable).

1. Select the direction of the data update. The default selection is from Web TimeSheet to Microsoft Project. To change this setting, click the button next to the option for Microsoft Project to Web TimeSheet.
2. Choose the projects you want to update. The box on the left provides a list of all available projects in the source application. Select the projects you wish to update (to select multiple projects, hold down the `Ctrl` key while clicking on the project names). Click on the  button to add the projects to the list of selected projects. To ensure the list of available projects is up to date, it is recommended that you click the **Refresh List** button before selecting projects.

If updating data from Web TimeSheet to Microsoft Project, you can select any number of the projects available within Web TimeSheet. If a project generated in Web TimeSheet has not been previously updated to Microsoft Project, when the update occurs a new project will be created in Microsoft Project under the project name used in Web TimeSheet.

- ☐ Web TimeSheet projects assigned multiple clients using the **Bucket method** option will not be listed as available for transfer.

If updating data from Microsoft Project to Web TimeSheet, you can select any number of the projects available in the Microsoft Project Server installation. If a project generated in Microsoft Project has not been previously updated to Web TimeSheet, when the update occurs a new project will be created in Web TimeSheet under the project name used in Microsoft Project.

3. If you want to perform an update, click the **Update Now** button. The update will include all setup options you selected in the **General** tab, as well as the filters and field mapping relationships you set up in the **Select Data to Update** and **Field Mapping** tabs. When the update is finished, the Integration Manager will notify you of any errors or issues for concern and allow you to view the log file.

Log File

The log file provides a complete log of the events that took place during the update process, including errors and items that were not updated due to problems with Web TimeSheet editing permissions. (If your permissions did not allow you to edit certain information, see your Web TimeSheet administrator for further clarification.)

The log file is made available for viewing after a transfer is completed. The log file is also stored in the directory the Integration Manager was installed in (typically `C:\Program Files\Web TimeSheet\MS Project Server`).

Select Data to Update

You will use the **Select Data to Update** tab to specify the types of data you want to update either in Web TimeSheet or in Microsoft Project (depending on the update direction you selected on the **General** tab). Before selecting the type of data, consider the direction in which data will be updated. Depending on the direction, only certain options will be available in the steps that follow. To specify the types of data to update, use the instructions that follow.

1. If updating from Web TimeSheet, specify whether you want to include task hours in the update. You may choose from all hours (regardless of whether the time has been committed/approved), or from approved hours. Selecting all hours might be beneficial if you have a short project cycle or deadlines that fall outside the usual timesheet due dates. Selecting approved hours might be beneficial if your project has a longer cycle (one where the estimate vs. actual values do not require constant comparison).

Time will be updated only for resources who are set up explicitly as members of the project team in Web TimeSheet (not members who receive their assignments via an <All> or department assignment). It is recommended that if you add resources to your project, you should perform an update for the project structure/resources before attempting to update any time.

2. Now select the date range for the task hours, if applicable. Your options are:

- **All**

If **All** is selected, all dates for which hours have been entered into Web TimeSheet for that project will be included, including those outside of the estimated project start and end dates. If any of the dates do fall outside of the project dates set in Microsoft Project, the project start and end dates will automatically be adjusted to include these dates.

- **From/To** (date range)
- **Timesheet Period**
- **Time Data of**

The **Time Data of** option allows you to configure the updates to use a relative time period, rather than one defined by specific dates. By using this option, you will not need to adjust the date each time you complete a transfer. The transfer will automatically be adjusted to use data from the current or previous week, as applicable.

If you select **Current Week**, the transfer will include all time data entered in Web TimeSheet for the week of the transfer date. Data will be included for the time period spanning the most recent Sunday to the day prior to the transfer date. For example, if you are transferring data on Wednesday, data from Sunday to Tuesday will be transferred.

If **Previous Week** is selected, time entered for the week previous to that of the transfer date will be transferred. The previous week spans from Sunday to Saturday.

 If the transfer day is a Sunday, ensure **Previous Week** is selected. If **Current Week** is selected, the time period will include zero days and no data will be transferred.

Whatever you select here will be dependent on the selection you made in [Step 1](#), meaning that only those hours meeting both criteria will be updated.

3. Select whether to transfer all the applicable time cells or only those that have been modified or added since the last transfer.
4. Under the **Advanced Settings** section, specify whether you want to update project/task information, including any of the items below.

- **Project/Task Structure**

When you choose to update the project/task structure, the Integration Manager updates the information for the project and task names, additional project/task information selected in the field mapping, and the task sort order.

The task sort order is updated only for tasks that remain under the same parent project or task. The Integration Manager will not update (i.e., will return an error) if you attempt to update a task that has been moved from one parent to another. If you need to move a task from one parent to another, it is highly recommended that you close the original task and create a new task (with the same name as the closed task) under the correct parent. Following this practice will ensure that all hours associated with the task are retained accurately.

- **Project Manager**

If you select to update the project manager, you must specify the name format the integration manager should use to identify the project manager using the **Resource Name Mapping** field. The default selection is **FirstName LastName** (e.g., John Smith). Other options include **LastName FirstName** (Smith John) or **Login Name** (jsmith).


- **Task Start Date**

- **Task End Date**

- **Project Team**

Updating the project team information will add/remove employees from the project resources (Microsoft Project) or project team (Web TimeSheet) depending on the direction of the data transfer.

When transferring project team information, using the **Resource Name Mapping** field you must specify the name format the Integration Manager should use to identify the employee in the target application. The default selection is **FirstName LastName** (e.g., John Smith). Other options include **LastName FirstName** (Smith John) or **LoginName** (jsmith). Note that this format will also be used for mapping the Project Manager if **Update Project Manager** is selected.

 If a Web TimeSheet user has previously been transferred to Microsoft Project and is transferred again with a different **Resource Name Mapping** selected, the user will be duplicated in Microsoft Project using the new name mapping.

To choose all of the available options in the **Advanced Settings** section, select **Select All**. To deselect all enabled options, select **Deselect All**.

When transferring the project team, you may choose to transfer only the resources for a project team, or the resources along with their task assignments.

If updating from Microsoft Project to Web TimeSheet, you have the option to create new users for employees who do not already have a user profile in Web TimeSheet. You must have permission to add new users in Web TimeSheet in order to create new users during the update process.

- When you are updating from Microsoft Project to Web TimeSheet, it is recommended that you create new users for employees who do not already have a user profile. Creating new users will ensure that all necessary information is transferred during the update process, and will avoid the need to postpone the update until you or your Web TimeSheet administrator has added the necessary information.

If you choose to add new users, the format the Integration Manager uses to create each new user's login name in Web TimeSheet will be based on the value the **Resource Name Mapping** field is set to. For example, if the resource name is AAA BBB and the **Resource Name Mapping** field is set to **LoginName**, the user's name will be set to AAA BBB and the login name will be AAA BBB. If the mapping field is set to **FirstName LastName**, the user name will be BBB, AAA and the login name will be AAABBB. Finally, if the mapping field is set to **LastName FirstName**, the user name will be set to AAA, BBB and the login name will be set to BBAAA. For all selections, all new users' passwords will default to `password`.

- When a new user is created, the user automatically receives permission to access timesheets.

It is recommended that resources be created in Microsoft Project Server before running any updates. If you choose to update resources from Web TimeSheet to Microsoft Project, the Integration Manager may prompt you to add resources if they do not already exist (only if you have permission to add new resources in Microsoft Project Server).

Field Mapping

Use the **Field Mapping** tab to set up mapping relationships between Web TimeSheet and Microsoft Project. You can set up mapping relationships for only one update direction at a time (the update direction you selected on the **General** tab). To set up mapping relationships, use the instructions that follow.

1. Select a field name from the drop-down list at the left. This drop-down list contains all the available fields in the source application (the starting point of the update).
2. From the drop-down list at the right, select the field to which you want to map the information (this is the field in the target application that will receive the information – the ending point of the update). Once you have selected a field from this list, it will no longer be available for further mapping.
3. Click the **Add** button. Note that the selected fields have been moved to the **Selected Mapping Relationships** list box.
4. To remove mapping relationships, simply highlight the relationship in the list box and click the **Remove** button.

For information on the available mapping relationships, refer to [Chapter 6, Field Relationships](#) on page 40.

Configuration

You will use the **Configuration** tab to change the login information you use to access Web TimeSheet. You will also specify details of the Microsoft Project Server and a default configuration to use. To modify your configuration settings, use the instructions that follow.

1. In the **Web TimeSheet Server Configuration** section, modify the **Web TimeSheet URL**, which is the URL used to access Web TimeSheet on the server (required the first time you log in). If you


wish to test the new connection (or connect so you can begin updating data), click the **Connect** button.

2. You can also modify your Web TimeSheet user name or Web TimeSheet password. If you are unsure about any of the settings, contact your Web TimeSheet administrator.
3. Now specify whether you want to automatically log into Web TimeSheet each time you start the Integration Manager. You can turn this setting on or off any time you wish.
4. You will need to specify the location of the Microsoft Project server, and enter your user name and password before running updates between Microsoft Project and Web TimeSheet. Until this information is entered, you will not be able to select projects or run updates from the **General** tab.

If Microsoft Project Server is set up to use your Windows account information, select **Use Windows user account**. This option will ensure that whenever you change your Windows login information, the Integration Manager will recognize the new information and you will still be able to log in without any problems. When using this option, make sure that Microsoft Project Server is also set up to use your Windows user account information.

If you are using a unique user name and password in Microsoft Project Server (not your Windows account information), you will need to select **Use a Project Server account** and enter the user name and password used to access the server in the provided fields.

5. Select the format the Integration Manager should use to identify the resources within Microsoft Project and match them to users in Web TimeSheet. The default selection is **FirstName LastName** (e.g., John Smith). Other options include **LastName FirstName** (Smith, John) or **Login Name** (jsmith).
6. If you choose to add new users, you may want to set up custom fields in Microsoft Project to collect the login name and password that will be used for each employee. This information is not required; if you do not set up the custom fields, the Integration Manager will use a default login name (`FirstName LastName`) and password (`password`). Once the custom fields are set up, you can select the appropriate login name and password fields under **Resource Pool Configuration**. These fields apply only when updating resource information from Microsoft Project to Web TimeSheet.
7. If you wish to update the resource pool, click the **Update Now** button. The update will begin immediately.

 If a Microsoft Project resource has previously been transferred to Web TimeSheet and is transferred again with a different **Resource Name Mapping** selected, the user will be duplicated in Web TimeSheet using the new name mapping.

8. To load the settings from a previously-saved configuration file, select **Browse** in the **Load Configuration File** section. Locate the configuration settings file (.XML file) and select the **Open** button. The Integration Manager will automatically be updated with the configuration settings stored in the file. For more information on configuration files, see [Saving the Configuration Settings](#).
9. Enable the **Use this file as the default Configuration** check box to have the selected configuration file loaded by default when the Integration Manager is launched. If this check box is not enabled, each time you start the Integration Manager you will need to either select the configuration file again or manually enter the data transfer settings.
10. Select the action the Integration Manager should take when an error occurs using the **When error occurs during data transfer** options. The Integration Manager can either prompt you to choose between continuing and aborting the transfer, automatically continue the transfer, or automatically abort the transfer.

Managing Configuration Settings

Reviewing the Settings Prior to Data Transfer

Before updating, you may want to review the update options you have selected. Click the **Review** button to launch a separate window containing an overview of the update options from the **General**, **Select Data to Update**, and **Field Mapping** tabs. When you are finished reviewing your selected options, click the **OK** button to close the window.

Saving the Configuration Settings

The data transfer settings you have entered can be saved to a file, which can then be selected at any time to restore the settings to the saved values. A configuration file can also be specified as the default and automatically loaded when the Integration Manager starts. If you typically use multiple configurations, you can create a file for each configuration and select them as needed. To save the current configuration settings:

1. Select the **Save** button.
2. In the **Save Settings to File** dialog box, navigate to the location you wish to save the configuration file to.
3. Enter a name for the configuration file in the **File name** field.
4. Select **Save**.
5. Select **OK** to close the message box indicating that the settings have been saved.

Once the settings are saved to a configuration file, you can then load the settings by selecting the file in the **Configuration** tab.

Configuration Settings File

The data transfer settings are saved in a file with the extension .XML. The following settings are saved in the configuration file:

- The direction of data transfer
- The projects selected for transfer
- The options selected in the **Select Data to Update** tab
- The field mappings selected in the **Field Mapping** tab
- The **Microsoft Project Server Information** settings specified in the **Configuration** tab
- The **Resource Pool Configuration** settings selected in the **Configuration** tab

Cancelling Changes Made to the Integration Manager Settings

If you have made changes to the configuration settings, whether to the default values or those loaded from a configuration file, the changes are discarded when you select the **Exit** button. Changes to the configuration settings are only saved when you select the **Save** button.

The Update Process

After setting up and saving the options, you can perform updates at regular intervals without needing to repeat the setup process. To start the update process, simply click the **Update Now** button on the **General** tab of the Integration Manager window. The update will include all setup options selected on the **General** tab, as well as the filters and field mapping relationships set up on the **Select Data to Update** and **Field Mapping** tabs.

When the update is finished, the Integration Manager will notify you of any errors or issues for concern and allow you to save the log file.

Updating the Data on the Server

When a project is first transferred to Microsoft Project, you must publish the project to the server before it will be accepted. To publish a project, select **Collaborate>Publish>All Information** from within Microsoft Project.

After transferring task hours information from Web TimeSheet to Microsoft Project, the changes may not be visible. In this case, update the information in Microsoft Project as follows:

1. From the Microsoft Project menu, select **Collaborate>Update Project Progress**.
2. Set the **Accept** status of the desired task, or select **Accept All**.
3. Click **Update**.


If Microsoft Project is updated with a task for which there is a new assignment in Web TimeSheet, you may need to complete an update, publish the project, and then complete a second update. You will then need to repeat the process listed above to see all the new information in Microsoft Project. Refer to your Microsoft Project Server documentation for further information about publishing to the server and accepting changes to projects and tasks.

Scheduling Automatic Updates

The Integration Manager can be configured to automatically transfer data on a regular basis. The Integration Manager does not have to be running for the updates to occur; you can open and close the application as you normally would. To schedule an automatic update:

1. Enter the data transfer settings you wish to use during the automatic transfer in the **General**, **Select Data to Update**, and **Field Mapping** tabs as you would normally.
2. Save the settings to a configuration file as follows:
 - a. Select the **Save** button.
 - b. In the **Save Settings to File** dialog box, navigate to the location you wish to save the configuration file to.
 - c. Enter a name for the configuration file in the **File name** field.
 - d. Select **Save**.
 - e. Select **OK** to close the message box indicating that the settings have been saved.
6. Select the **Automatic Update** tab.
7. Check the **Enable Automatic Updates** check box.
8. Select **New Action** to begin creating a new automatic update action. You can create multiple actions to, for example, update different projects at different times.
9. Enter a **Name** for the action.
10. Check the **Enabled** check box to enable the action. If you do not enable the action, the specified update will not occur.
11. Select **Browse...**, locate the configuration file that you want to be used for the update, and then select **Open**. The data transfer will be based on the settings contained in this file. To preview the settings contained in the configuration file, select the **Preview** button.

12. Select the time of day the update should take place at from the **Update Time** drop-down list box.

 You can schedule more than one update action to occur at the same time. The order the updates occur in is determined by their order in the **Schedule Actions** list box.

13. Specify whether the update should occur once or on multiple occasions. If you want the update to occur just once, select the **Update once on** option and select the date you want the update to occur on. To schedule the update to occur on a regular basis:

- a. Select the **Update regularly starting on** option.
- b. Select the first date you want the update to occur on from the field provided.
- c. Specify the interval at which the update will occur:
 - To have the update occur on a daily schedule, select the **Every day(s)** option and enter the desired update interval in days.
 - To have the update occur weekly on one or more days, select the **Every week(s) on** option. Then, select the days of the week you want the update to occur on each week. If you want the update to occur only on specific weeks, edit the update as required.



4. Select **Save Action** to save the action to the list.

The action will be shown in the **Scheduled Updates** list box. If the action is enabled and the **Enable Automatic Updates** check box is checked, the updates will begin on the date specified.

Managing Automatic Update Actions

Scheduling Multiple Updates

You can schedule multiple updates, each with its own configuration file and schedule. For example, you may wish to create two different updates for two different sets of projects or you may choose to schedule one update at a different time than another. To schedule multiple updates, simply create an action for each update following the steps provided in [Scheduling Automatic Updates](#) on page 35.

For updates scheduled for the same date and time, the updates will occur in the order they are shown in the **Scheduled Actions** list box. Use the  and  buttons to adjust the order of the actions in the list box.

Disabling an Action

To disable an action so that the specified update does not occur:

1. Select the action from the **Scheduled Actions** list box.
2. Clear the **Enabled** check box.
3. Select **Save Action** to save the changes.
4. When asked if you want to overwrite the existing action, select **Yes**.

The update will not occur until the action is enabled again.

Editing an Action

To edit an action:

1. Select the action from the **Scheduled Actions** list box.
2. Make the necessary changes to the settings in the **Scheduled Action Details** section.

3. Select **Save Action** to save the changes.
4. Select **Yes** to overwrite the existing action with the new settings. Select **No** to create a new action with the settings.

Deleting an Action

To permanently delete an action so the action is no longer available for use or editing:

1. Select the action from the **Scheduled Actions** list box.
2. Select **Delete Action**.

Recommended Practices and Additional Notes

Recommended Practices

You should use the following recommended practices when transferring data between Web TimeSheet and Microsoft Project.

If you are a Microsoft Project user integrating with Web TimeSheet for the first time:

- Use Microsoft Project to create and maintain your project profile/project information
- Transfer the projects to Web TimeSheet from Microsoft Project
- Enter time against the projects in Web TimeSheet
- Only change the project information in Microsoft Project

If you are a Web TimeSheet user integrating with Microsoft Project for the first time:

- Transfer any existing Web TimeSheet project information to Microsoft Project for the first time only
- Following this initial transfer of project information, update the projects in Microsoft Project and transfer the updated projects from Microsoft Project back to Web TimeSheet
- Use Web TimeSheet to enter time and transfer only time to Microsoft Project

Notes on Working with Externally Linked Projects

When working with a project in Microsoft Project that includes tasks that are linked externally, that is to a task within another project, avoid naming the externally linked task with the same name as a task present at the same level in the main project. If the tasks have the same name, data will not be transferred and the Integration Manager will log an error.

Also, note that the Integration Manager does not support the transfer of embedded projects from Microsoft Project Server.

Notes on Transferring Time Data with Web TimeSheet Billing Rates Selected

Within Web TimeSheet, users can select a billing rate when entering time against a task. However, when transferring time entries from Web TimeSheet, Microsoft Project does not support transfer of the associated billing rates. If you are tracking costs for the project in Microsoft Project, it is important to note that the Web TimeSheet billing rates will not be reflected in the cost data. However, the Integration Manager does support mapping of Web TimeSheet values to the Microsoft Project **Resource Standard Rate**, which can be used for cost tracking purposes, if desired.

Additionally, Web TimeSheet allows users to select more than one rate when entering time against a task. When these time entries are transferred, the total of all hours entered for the task, regardless of the billing rate selected, will be transferred to Microsoft Project. For example, if 5 hours are entered against Task 1 using the Project Manager rate and 3 hours are entered against Task 1 using the Administration rate, 8 hours will be transferred to Microsoft Project for Task 1.

Troubleshooting Tips

The following sections are designed to assist you in resolving issues commonly encountered when using the Integration Manager.

Deleted Task Still Exists in Web TimeSheet after Update

If you have deleted a task in Microsoft Project and the corresponding task has not been deleted in Web TimeSheet after an update, verify that the task is not selected on any users' timesheets. If the task has been selected on a user's timesheet, Web TimeSheet prevents the task from being deleted, even if no time has been entered against it. Have the user select another task or delete the timesheet row and then save the timesheet. Update Web TimeSheet using the Integration Manager again and the task should be deleted from Web TimeSheet. If the problem persists, contact Replicon's Customer Support team as detailed in [Contacting Support](#) on page 6.

Task Work Values Change when New Assignment Added using MSP API

If you add an assignment using Web TimeSheet Integration Manager for MS Project Server, MS Project Server's application programming interface, your resulting Task Work field in Web TimeSheet will be different than if you added the assignment manually.

This occurs because manual entry uses this formula:

$$\text{Task Duration} = \text{Task Work} / (8 * \text{Number of resources assigned to task})$$

So, in this case, Task Duration is updated.

Whereas, MSP Server API uses this formula:

$$\text{Task Work} = \text{Task Duration} * 8 * \text{Number of resources assigned to task}$$

So, in this case, Task Work is updated.

CHAPTER 6

Field Relationships

On the following pages, the field mappings available when transferring from Web TimeSheet to Microsoft Project and when transferring from Microsoft Project to Web TimeSheet are provided.

Important Notes on Mapping Fields

Keep the following in mind when selecting field mappings:

- For Microsoft Project Server, mapping is available to project/task specific custom fields at the enterprise level only. Custom fields set up in your local version of Microsoft Project are not available for mapping.
- When you map from Microsoft Project custom fields to Web TimeSheet user defined fields, keep in mind that calculated fields are excluded due to the inability of Web TimeSheet user defined fields to perform calculations.
- Mapping between Web TimeSheet user defined fields and Microsoft Project custom fields is dependent on the field type. This means that data transfer may fail if the data types are not compatible. For example, a number field cannot successfully transfer data to a date field; however, a number field can successfully transfer data to a text field.

Available Mappings from Web TimeSheet to Microsoft Project

Web TimeSheet Field (source)	Microsoft Project Field (target)	Notes
Project Description	Project Category Project Keyword Project Subject Project Title Project Comments Project Author Project Company Enterprise Custom Fields (Project Type)	
Project Code	Project Category Project Keyword Project Subject Project Title Enterprise Custom Fields (Project Type)	
Project Client	Project Company Enterprise Custom Fields (Project Type)	
Task Code	Enterprise Custom Fields (Task Type)	

Web TimeSheet Field (source)	Microsoft Project Field (target)	Notes
Task Estimated Cost	Enterprise Custom Fields (Task Type)	Microsoft Project allows entry of the estimated cost only at the bottom level of the project/task structure, therefore you should not enter estimated cost values for any parent projects/tasks in Web TimeSheet. Values entered for higher level tasks will not be included in the update process. Turn on the Project/Task Roll-up feature in Web TimeSheet before the first update is performed from Microsoft Project to Web TimeSheet.
Task Description	Enterprise Custom Fields (Task Type)	
Currency Symbol	Enterprise Custom Fields (Project Type)	
User Rate	Resource Standard Rate	
User Hourly Payroll	Resource Standard Rate	
User Hourly Cost	Resource Standard Rate	
Task Level User Defined Fields (Proj/Task Category)	Enterprise Custom Fields (Task Type)	When mapping from Web TimeSheet to Microsoft Project, you may choose to create mapping relationships between project/task specific user defined fields and Microsoft Project fields. In the list of available fields from Web TimeSheet, you will note that user defined fields include text that identifies the field as project level or task level. Be aware that you cannot map task level user defined fields to a single project field in Microsoft Project because there are many source values (each task may have a different value for the selected field) to a single target value (the project field can only receive one value). If you attempt to map task level user defined fields to project level fields in Microsoft Project, the field data will not be updated and an error will appear in the update log file.
Project Level User Defined Fields (Proj/Task Category)	Project Category Project Keyword Project Subject Project Title Project Comments Project Author Project Company Enterprise Custom Fields (Project Type)	
User Defined Fields (User Category)	Enterprise Custom Fields (Resource Type)	

Available Mappings from Microsoft Project to Web TimeSheet

Microsoft Project Field (source)	Web TimeSheet Field (target)	Notes
Project Keyword	Project Code Project Description Project Level User Defined Fields (Proj/Task Category)	
Project Title	Project Code Project Description Project Level User Defined Fields (Proj/Task Category)	
Project Subject	Project Code Project Description Project Level User Defined Fields (Proj/Task Category)	
Project Category	Project Code Project Description Project Level User Defined Fields (Proj/Task Category)	
Project Comments	Project Description Project Level User Defined Fields (Proj/Task Category)	
Project Work	Project Estimated Hours Project Level User Defined Fields (Proj/Task Category)	
Project Cost	Project Estimated Cost Project Level User Defined Fields (Proj/Task Category)	
Project Actual Hours	Project Level User Defined Fields (Proj/Task Category)	
Task WBS Code	Task Description Task Code Task Level User Defined Fields (Proj/Task Category)	
Task Duration	Task Estimated Hours Task Level User Defined Fields (Proj/Task Category)	
Task Work	Task Estimated Hours Task Level User Defined Fields (Proj/Task Category)	
Task Cost	Task Estimated Cost Task Level User Defined Fields (Proj/Task Category)	
Task Priority	Task Level User Defined Fields (Proj/Task Category)	
Task Unique ID	Task Code Task Level User Defined Fields (Proj/Task Category)	
% Complete	Project Level User Defined Fields (Proj/Task Category) Task Level User Defined Fields (Proj/Task Category)	
Enterprise Custom Fields (Project Type)	Project Code Project Description Project Estimated Hours Project Estimated Cost Project Level User Defined Fields (Proj/Task Category)	When you map from Microsoft Project custom fields to Web TimeSheet User Defined Fields, calculated fields are excluded.

Microsoft Project Field (source)	Web TimeSheet Field (target)	Notes
Enterprise Custom Fields (Task Type)	Task Description Task Code Task Estimated Cost Task Estimated Hours Task Level User Defined Fields (Proj/Task Category)	When you map from Microsoft Project custom fields to Web TimeSheet User Defined Fields, calculated fields are excluded.
Enterprise Custom Fields (Resource Type)	User Defined Fields (User Category)	When you map from Microsoft Project custom fields to Web TimeSheet User Defined Fields, calculated fields are excluded.