Web TimeSheet Integration Manager for Microsoft Project Standard/Professional

Version 4.4

USER GUIDE

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Revision 05/12/09

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CHAPTER 1
Welcome

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

About the Integration Manager

The Integration Manager allows users to transfer project and task information, project team assignments, and timesheet data between Web TimeSheet and Microsoft® Project® Standard/Professional easily and efficiently. Once installed, the Integration Manager is accessible from the **Tools** menu within Microsoft Project.

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
- Resources/users

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 Integration Manager uses streaming XML (Extensible Markup Language) technology and Microsoft Project Object Model 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 using the Integration Manager. The information is organized into chapters and a table of contents is provided for quick reference.

Document Conventions

This manual 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 the 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:	1-877-862-2519
Europe/New Zealand:	00-800-8622-5192
Australia	0011-800-8622-5192
E-mail:	support@replicon.com
Web-Based Form:	www.replicon.com/Support/RequestHelp.aspx
Fax:	403-233-8046

CHAPTER 2

Getting Started

This chapter provides information on where to download the Integration Manager, starting the module once it is installed, troubleshooting connection issues, understanding log files, and accessing the online help.

Downloading and Installing the Integration Manager

The Web TimeSheet Integration Manager for Microsoft Project can be downloaded from within the **Integrations** section of Web TimeSheet. Refer to the **Integrations** chapter in Web TimeSheet's online help for information on installing the integration module.

> ***Automatic Updates...***
> As of Version 4.4, the first time you launch the integration module after an upgrade becomes available, your version will be automatically upgraded.

Starting the Integration Manager

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. Launch Microsoft Project and open a project file.
2. In the **Tools** menu, select **Web TimeSheet Integration...**

   > ⚠ Ensure only one version of Project is open before opening the Integration Manager.

   > If the Integration Manager is not available from the **Tools** menu, use the standalone version which can be accessed from the Windows **Start** menu.

   A **Setup for Web TimeSheet Integration Manager** window displays.
3. In the **Microsoft Project Configuration** section, if you are using:
   - **Project 2003/2002**, specify the **Microsoft Project .MPD File** that contains the projects you want to update.

     Projects to be transferred from Microsoft Project 2003/2002 to Web TimeSheet must be saved to a Microsoft Project database file (.MPD file).
   - **Project 2007**, specify the **Folder for Microsoft Project Files** that contains the projects you want to update.

     Microsoft Project 2007 saves projects using the .MPP file format only, therefore you must select the folder where project's .MPP files will be transferred to or from (not an .MPD file).

   > To automatically use the same folder (2007) or .MPD file (2003/2002) each time, within the Integration Manager's **Configuration** tab, save your settings to a configuration file, then select that file as the default **Load Configuration File**. For information on how to save your settings, refer to *Saving Transfer Settings* on page 16.
4. In the **Web TimeSheet Connection** section, enter:
   - 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.

- The **Login Name** and **Password** you normally use to log into Web TimeSheet.
- If you wish to bypass the setup window in the future, enable the **Remember this information** check box.

5. Select the **OK** button to connect to Web TimeSheet. If the connection is successful, the Integration Manager will open in a new window. If the connection fails, refer to *Possible Reasons for Connection Failure* on page 8 below for more information.

You can change your setup information later, if necessary, from the Integration Manager's **Configuration** tab. For more information on how to do this, refer to *Chapter 5, Modifying Configuration Settings Information* on page 23.

When you launch the Integration Manager on subsequent occasions – depending on what versions of Microsoft Project you have installed and open – you may be prompted to:

- Select which version of Project to use
- Open the selected version
- Close the version you are not using.

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 Standard/Professional, 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.

Understanding the Integration Manager Log Files

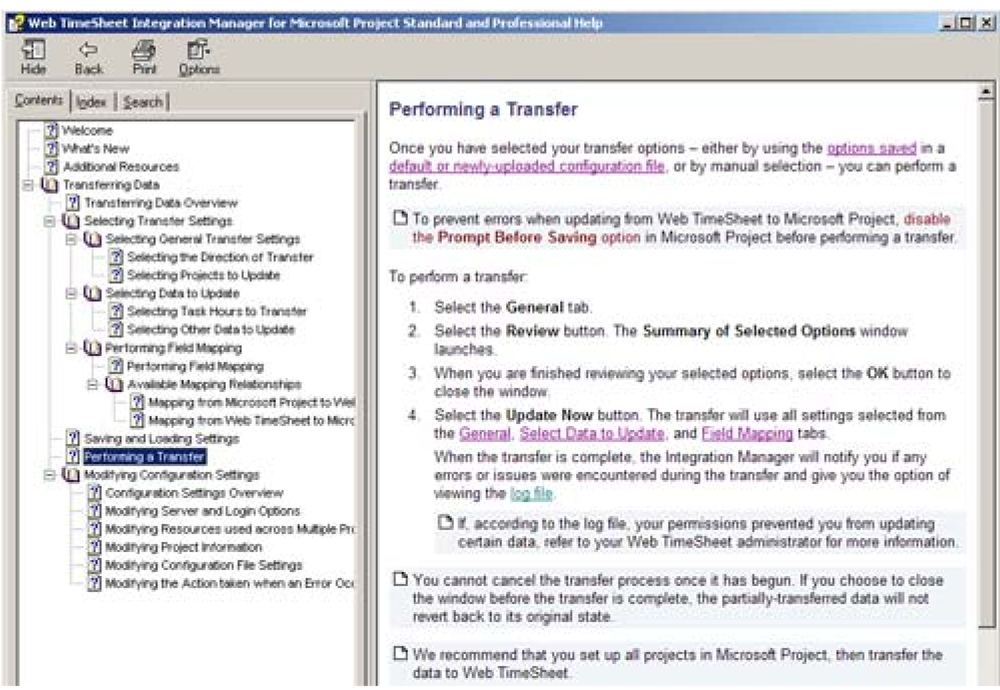
The Integration Manager generates a log file that are available for viewing at any time:

Log File Name	This file is typically located at...	Contains all information logged...
`MSPIlog.txt`	**In XP or earlier:** `C:\Documents and Settings\`<*logged-in user's name*>`\Local Settings\Application Data`[a]`\Replicon\Integration Manager for Microsoft Project` **In Vista:** `C:\Users\`<*logged-in user's name*>`\AppData`[a]`\Local\Replicon\Integration Manager for Microsoft Project`	... before the Integration Manager logs in to Web TimeSheet (for example, information regarding login failures) AND all information logged after the Integration Manager connects to Web TimeSheet (for example, information on all events that occurred during the transfer process, including errors encountered and items that were not updated due to problems with Web TimeSheet editing permissions)

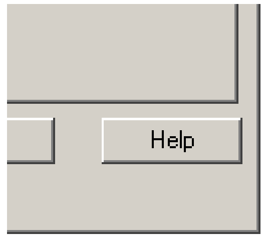
a. **Application Data** and **AppData** are by default hidden folders, so you will have to enable the **Show hidden files and folders** option in your operating system to view them. To find this option in Windows XP or earlier, select **Tools** > **Folder Options...** > **View**. To see this option in Vista, select **Organize** > **Folder and Search Options** > **View**.

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.



CHAPTER 3

Transferring Data

The Web TimeSheet Integration Manager for Microsoft Project Standard/Professional allows you to transfer data between Web TimeSheet and Microsoft Project Standard/Professional.

This chapter provides information on:

- Setting up the Integration Manager before performing a transfer. For more information on this topic, refer to *Setting Up the Integration Manager* on page 11.
- Saving transfer settings. For more information on this topic, refer to *Saving Transfer Settings* on page 16.
- Performing a transfer. For more information on this topic, refer to *Performing a Transfer* on page 17.

Setting Up the Integration Manager

Before you can transfer data (using the procedure described under *Performing a Transfer* on page 17), you first need to specify some setup options to ensure that the proper data is updated and the field mappings are appropriate.

Once you have set up a data transfer, you can save your settings and use them for future transfers, or as a starting point for making modifications to the settings. You can save multiple data transfer configurations.

- For information on saving your settings, refer to *Saving Transfer Settings* on page 16.
- For information on loading a previously-saved configuration file, refer to *Chapter 5, Modifying Configuration Settings Information* on page 23.

To set up the Integration Manager, you must:

1. Select the direction of transfer, and the projects you would like to update. For information on doing this, refer to *Selecting General Update Settings* on page 11.
2. Select the data you would like to update. For information on doing this, refer to *Selecting Data to Update* on page 12.
3. Perform resource mapping, if required. For information on doing this, refer to *Performing Resource Mapping* on page 15.
4. Perform field mapping. For information on doing this, refer to *Performing Resource Mapping* on page 15.

To prevent data conflicts, when transferring from Web TimeSheet to Microsoft Project, start and end dates, task duration and type, and time entries are **NOT** updated for projects and tasks that have subtasks ("child" tasks).

Selecting General Update Settings

Select the direction of transfer and which projects you would like to update using the **General** tab.

Selecting the Direction of Transfer

Use the **Select Direction To Update Data** field (of the **General** tab) to select one of the following options:

- *Transfer data from Microsoft Project to Web TimeSheet*
- *Transfer data from Web TimeSheet to Microsoft Project*

Selecting Projects to Update

Use the **Select Projects To Update** field (of the **General** tab) to select the projects you want to update. If you are transferring data:

- **From Web TimeSheet to Microsoft Project**, you can select any number of the projects available within Web TimeSheet. If you would like only projects with **Open** status in Web TimeSheet to display, enable the **Hide closed projects** check box.

  > If you would like only projects with **Open** status in Web TimeSheet to display, enable the **Hide closed projects** check box. When this option is enabled, all closed projects will disappear from both the **Available** and **Selected** projects lists.

  > Web TimeSheet projects assigned multiple clients using the **Bucket method** or **Project cost allocation** options will not be listed as available for transfer.

- **From Microsoft Project to Web TimeSheet**:
  - Using Microsoft Project version 2007, you can select any number of projects from the **Project Folder** selected on the **Configuration** tab.
  - Using Microsoft Project version 2003/2002, you can either select any number of projects from the .MPD **Project File** selected on the **Configuration** tab.

> The Integration Manager does not support the transfer – in either direction – of projects that have been assigned multiple clients using the Bucket method or Project cost allocation options.

To select projects to update:

1. Select the **Refresh List** button to ensure the list of available projects is up to date.
2. Select a project, or multiple projects, from the **Available Projects** list on the left. To select multiple projects, hold down the `Ctrl` key while selecting the project names.
3. Select the ⇨ button to add the selected projects to the **Selected Projects** list on the right.

Selecting Data to Update

Specify the types of data you would like to transfer using the **Select Data to Update** tab. Depending on the direction of transfer, only certain options outlined in the procedure that follows will be available.

Selecting Task Hours to Transfer

If you are transferring from Web TimeSheet, enable the **Update Task Hours** check box if you want to include task hours in the update. Task hours cannot be transferred from Microsoft Project to Web TimeSheet. Only hours that meet all selected criteria will be updated.

> When updating for the first time, update all hours within the project start and end dates to ensure all the necessary data is available in both applications.

To select task hours to transfer to Project:

1. From the **Approval Status** field, select one of the following:

- **All hours** (regardless of whether the time has been committed/approved)

  Use this option if you have a short project cycle or deadlines that fall outside the usual timesheet due dates
- **Approved hours**

  Use this option if your project has a longer cycle (one for which 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).

  > If you have added resources to your project, you should perform an update for the project structure/resources before attempting to update any time.

2. Select the **Date Range** for the task hours, if applicable. The date range options are:
   - **All**

     Transfers all dates for which hours have been entered into Web TimeSheet for the project. If any of these dates fall outside of the estimated project start and end dates set in Microsoft Project, they will be included in the transfer, and the project start and end dates will be automatically updated to include these dates.
   - **From/To** (date range)
   - **Timesheet Period**
   - **Time Data of**

     Select one of the following options:

Option	Transfers time entered...
Current Week	From the most recent Sunday to the day prior to the transfer date. For example, if you transfer data on Wednesday, data from Sunday to Tuesday will be included.
Previous Week	For the week – spanning Sunday to Saturday – previous to that of the transfer date.

> If the transfer day is a Sunday, select **Previous Week**. If you select **Current Week**, the time period will include zero days and no data will be transferred.
>
> If the Integration Manager cannot read the users' weekly days off from the Project calendar (as occurs when Project 2007 is used), the days off are assumed to be Saturday and Sunday.

> Transfers automatically adjust to use data from the selected relative time period. Therefore, you do not need to adjust the date with each transfer.

> When updating hours from Web TimeSheet to Microsoft Project, the Integration Manager calculates the total actual work for the project. The **Work** field will not be affected by these calculations because this field is automatically calculated by Microsoft Project based on multiple variables.

3. From the **Transfer** field, select to transfer one of the following:
    - Only modified and new time cells
    - All time cells

> For information on how the Integration Manager handles transfers involving duplicate user names in Web TimeSheet, refer to *Understanding how Duplicate Users are Transferred* on page 21.

Selecting Other Data to Update

Under **Advanced Settings**, select any other types of data you would like to update by enabling the appropriate check boxes.

The available options are:

Option Name	When enabled, transfers...	Notes
Update Project/Task Structure	• Project and task names • The task sort order • Additional project/task information secected in the field mapping • Project start and end dates	This data is updated by default during the first transfer in either direction.
Update Project Manager	• The **Manager** field in Project (located on the **File** > **Properties** > **Summary** tab) *to or from...* • The **Project Leader** field in Web TimeSheet	Transfer of this field is successful only if the manager: • Is present in the Web TimeSheet **User** list • Has Manager permissions If you enable this option, you must specify the name format in the Resource Name Mapping field. For information on name formats, refer to *Chapter 4, Mapping Resources* on page 19.

<table>
<tr><th>Option Name</th><th>When enabled, transfers...</th><th>Notes</th></tr>
<tr><td>Update Task Start Date</td><td>The project or task's Start date field in Project (located on the File > Properties > Contents tab)
to or from*...
The Time Entry Start Date field in Web TimeSheet</td><td rowspan="2">* If you are transferring a project from Web TimeSheet to Microsoft Project, start and end dates:
ARE updated, if it is the first transfer of that project. If you do not enable these options, the date of transfer will be transferred to these Project fields instead
ARE NOT updated, if it is the second (or subsequent) transfer of that project. Not updating these fields in this direction prevents data conflicts.</td></tr>
<tr><td>Update Task End Date</td><td>The project or task's Finish date field in Project (located on the File > Properties > Contents tab)
to or from*...
The Time Entry End Date field in Web TimeSheet</td></tr>
<tr><td>Update Project Team</td><td>Employees who are project resources in Microsoft Project
to or from...
Employees who are members of the Web TimeSheet project team</td><td>You may choose to transfer one of the following:
Only the resources for a project team will be created in the Web TimeSheet User list
The resources and their task assignments will be created in the Web TimeSheet User list and they will be assigned to the appropriate project/task
If you enable this option, you must specify the name format in the Resource Name Mapping field. For information on name formats, refer to Chapter 4, Mapping Resources on page 19.</td></tr>
</table>

Performing Resource Mapping

If you are transferring resources or users between Web TimeSheet and Project, the Integration Manager will use a resource name mapping formula to match users with resources.

Resource name mapping is required for all resource or user transfers, whether you are transferring resources or users as part of a project (as outlined in the table above), or from a resource pool file (available for transfers to Web TimeSheet only). Mapping is also required if the Integration Manager is creating new users or resources who do not yet exist in the destination application.

For information on setting the resource name formula, and configuring and understanding other resource transfer options, refer to *Chapter 4, Mapping Resources* on page 19.

Performing Field Mapping

Once you have selected which data you would like to transfer, you must then map applicable fields in Web TimeSheet to their corresponding fields in Microsoft Project, or vice versa. 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 a mapping relationship:

1. Select the **Field Mapping** tab.

2. If you are using Project 2007 and you want to map custom fields, enable the **Allow mapping of Microsoft Project custom fields** check box.

   > This option exists for performance reasons, since each .MPP project file must be opened when mapping custom fields for Project 2007. Mapping of custom fields is always allowed for those using Project 2003/2002 since only one file (the .MPD) must be opened during custom mapping for Project 2003/2002.

3. From the drop-down list on the left, select a source application field name. This list contains all the available fields in the source application.
4. From the drop-down list at the right, select the destination application field to map to the selected source field. Once selected, a field is no longer available for mapping.
5. Select the **Add** button. The selected fields will display in the **Selected Mapping Relationships** list box.

To remove a mapping relationship, select the relationship from the **Selected Mapping Relationships** list box and select the **Remove** button.

For information on the available mapping relationships, refer to *Chapter 6, Field Relationships* on page 25.

Saving Transfer Settings

The data transfer settings you have selected can be saved to a file which can be loaded into the Integration Manager to restore the configuration 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 regularly perform several different types of transfer, create a file for each configuration and load each as required.

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

Tab where data was selected	Data saved in the configuration file
General	The direction of data transfer The projects selected for transfer
Select Data to Update	All options selected
Resource Mapping	All options selected
Field Mapping	All field mappings selected
Configuration	The **Resource Pool Configuration** settings selected If using the standalone version, the **Project File Configuration** specified

To save the current configuration settings:

1. Select the **Save** button. A **Save Settings to File** window displays.
2. Navigate to the location where you want to save the configuration file.

3. In the **File name** field, enter a name for the configuration file.
4. Select **Save**. A message box indicating that the settings have been saved displays.
5. Select **OK** to close the message box.

To load the settings saved in a configuration file into the Integration Manager:

1. Select the **Configuration** tab.
2. In the **Load Configuration File** field, use the **Browse** button to select the file you would like to load.

> Any changes you make to the configuration settings are discarded when you select the **Exit** or the **Reset** button. Changes to the settings are only saved when you select the **Save** button, and save your current settings to a configuration file.
>
> Selecting the **Reset** button refreshes the Integration Manager's connection to Microsoft Project and to Web TimeSheet; if you are using a default configuration file, your settings will revert to those saved in the file.

Performing a Transfer

After setting up and saving the options, you can perform updates at regular intervals without needing to repeat the setup process.

> To prevent errors when updating from Web TimeSheet to Microsoft Project, ensure the **Prompt Before Saving** option is disabled in Microsoft Project. To disable the **Prompt Before Saving** option, select **Options** from the **Tools** menu. Then, select the **Save** tab in the **Options** dialog box and clear the **Prompt Before Saving** check box in the **Auto Save** section. Close and re-open Microsoft Project.

> When updating for the first time, update all hours within the project start and end dates to ensure all the necessary data is available in both applications.

To perform a transfer:

1. Select the **Review** button. The **Summary of Selected Options** window launches.
2. Review your selected options, then select the **OK** button to close the window.
3. Select the **Update Now** button. The transfer will use all settings selected from the **General**, **Select Data to Update**, **Resource Mapping**, and **Field Mapping** tabs.
    - For information on the **General** tab settings, refer to: *Selecting General Update Settings* on page 11.
    - For information on the **Select Data to Update** tab settings, refer to: *Selecting Data to Update* on page 12.
    - For information on the **Resource Mapping** tab settings, refer to: *Performing Resource Mapping* on page 15.
    - For information on the **Field Mapping** tab settings, refer to: *Performing Resource Mapping* on page 15.

When the transfer is complete, the Integration Manager will notify you if any errors or issues were encountered during the transfer and give you the option of viewing the log file.

> If, according to the `MSPIlog.txt` log file, your permissions prevented you from updating certain data, refer to your Web TimeSheet administrator for more information.
>
> For more information on the Integration Manager log files, refer to *Chapter 2, Understanding the Integration Manager Log Files* on page 9.

> If you are transferring from Project to Web TimeSheet, do not close a project while it is being transferred since this will cause that transfer, and every transfer attempted thereafter, to fail. If this occurs, restart the integration manager to begin transferring again.
>
> You cannot cancel the transfer process once it has begun. If you choose to close the window before the transfer is complete, the partially-transferred data will not revert back to its original state.

> When updating projects, only the first ten levels of the hierarchy will be updated.
>
> The first time you update a project from Microsoft Project to Web TimeSheet, a new project with the same name used in Microsoft Project will be created in Web TimeSheet, and vice versa.
>
> For information on how the Integration Manager handles transfers involving duplicate user names in Web TimeSheet, refer to *Understanding how Duplicate Users are Transferred* on page 21.

CHAPTER 4

Mapping Resources

A resource name formula must be defined in the Integration Manager so that:

- When you transfer users and resources between Project and Web TimeSheet, the Integration Manager can match each resource with the correct user.
- If the Integration Manager is creating a new user in the destination application, it can determine what format to use when creating the new user's details.

You can set the resource name formula and other resource transfer settings via the **Resource Mapping** tab, using the fields outlined below.

Setting the Resources Options

Resource Name Formula

Use this field to specify the resource name formula. This formula determines the name format the Integration Manager will use to match resources and their corresponding users. You can create a custom name formula, or retain the default (`$FirstName $LastName`). The format options are:

Allowed Formula Tag...	Web TimeSheet field mapped to...
$FirstName	First Name
$LastName	Last Name
$LoginName	Login Name
*$Other***	Does not map.

At minimum, the formula must include either *$LoginName* or both *$FirstName* and *$LastName*.

**Use the *$Other* tag to represent any other text in the resource name that does not correspond to anything in Web TimeSheet. You may also include non-text special characters (such as *. , ( ) { } [ ] **) that do not map to anything in Web TimeSheet.

When transferring from Microsoft Project to Web TimeSheet, ensure that you use the same resource name mapping formula. If a resource who was previously transferred to Web TimeSheet is transferred again using a different resource name mapping formula, the user will be duplicated in Web TimeSheet using the new name format.

Create a new user in Web TimeSheet if user does not exist

If a resource you are transferring from Project does not yet exist in Web TimeSheet, you can choose to create that user in Web TimeSheet. You must have permission to add new users in Web TimeSheet to carry out this transfer.

We recommend selecting this option:

- To ensure that all necessary information is transferred during the update process
- To prevent update delays while you wait for the necessary information to be added.

If you enable this option, you must supply the default authentication type and domain (if applicable) that you would like assigned to the new user. Only authentication types enabled in Web TimeSheet will be available for selection.

Understanding Settings Assigned to Newly-Created Users

The following settings are automatically assigned to new users created in Web TimeSheet.

Type of Setting	Each new user created in Web TimeSheet will be assigned...
Permissions	*Non Exempt - Time and Time Off* permission *Project & Billing* seat assignment (and *Time & Attendance*, if available)
Password (if applicable)	The password *password*
First Name	A first name based on the *$FirstName* from the resource name formula, if available. If not available, the first name will be set to the *$LoginName* included in the formula.
Last Name	A last name based on the *$LastName* from the resource name formula, if available. If not available, the first name will be set to the *$LoginName* included in the formula.
Authentication type	The authentication type selected in the Integration Manager.
Login name	If Windows NT, Active Directory, or SAML authentication are selected, the Windows Account login name value as their Web TimeSheet login name. If Windows Account is not available, or Web TimeSheet Internal authentication is selected, the Web TimeSheet login name will be set to the *$LoginName* included in the formula. If *$LoginName* is not included in the formula, the login name will be set to *$FirstName$LastName*.
Domain (if applicable)	The domain from the user's Windows Account, if available. If not available, the user will be assigned the domain selected in the Integration Manager. ***This value can be reset manually after transfer if different domains are required in Web TimeSheet and Project.*

Setting the Resource Pool Updates Options

The Microsoft Project resource pool is a set of resources that can be shared by several projects, saved in a **Local resource data file**.

Transferring Resource Pool members to Web TimeSheet

To transfer resources from the Microsoft Project resource pool to Web TimeSheet, select the **Update Now** button.

Using Custom Fields when transferring Resources from the Resource Pool

You can set up custom fields in Microsoft Project for use when transferring new users' from the resource pool to Web TimeSheet. You can create and select custom fields for the users' **login name** or **password**.

If you do not set up the custom fields, the Integration Manager will assign the login name and password as outlined on *Understanding Settings Assigned to Newly-Created Users* on page 20.

⚠ If Windows NT, Active Directory, or SAML authentication are selected in the Integration Manager, the login name will be based on the Windows Account value, if available, and not the custom field value.

Understanding how Duplicate Users are Transferred

It is possible to create two or more users with the same user name in Web TimeSheet; however, the duplicate users' login names must be unique.

Microsoft Project does not allow users with the same user name to be created.

Refer to the table below for information on how the Integration Manager handles transfers involving duplicated users.

If you attempt to transfer...	The Integration Manager will...
... users that are duplicated in Web TimeSheet to Microsoft Project, when none of the duplicated users exist in Project	... automatically append, in brackets, the user's login name to their last name in Project. This will happen even if only one of the duplicated employees is transferred.
... users that are duplicated in Web TimeSheet (or their data) in either direction, when that employee's user name exists – but has not been appended with their login name – in Project ***Note:*** *This situation may arise if, for example, you transferred a user to Project before creating a duplicate in Web TimeSheet, or if you created a user who was duplicated in Web TimeSheet independently in Project (this is not recommended).*	... not transfer the duplicated users/data, and an error will be logged, since the user's data in Project may correspond to any of the duplicated users in Web TimeSheet. In this case, you may manually append the user's login name to their last name in Project, and then transfer the user/data.

CHAPTER 5

Modifying Configuration Settings

Use the **Configuration** tab to modify your configuration settings, as required:

- **Your server and login options**

  For information on this, refer to *Modifying your Server and Login Options* on page 22.
- **Data regarding common resources shared across projects**

  For information on this, refer to *Modifying Resources used across Multiple Projects* on page 22.
- **Project information,** such as which version of Project you are using, and which file or folder contains project data

  For information on this, refer to *Modifying Project Information* on page 23.
- **Configuration settings information,** such as which previously-saved settings to use, or what settings file should be assigned as default

  For information on this, refer to *Modifying Configuration Settings Information* on page 23.
- **What action the Integration Manager should take when an error occurs**

  For information on this, refer to *Modifying the Action the Integration Manager takes when an error Occurs* on page 24.

Modifying your Server and Login Options

To modify your server and login options, in the **Web TimeSheet Server Configuration** section:

- Enter (or modify, if desired) the **Web TimeSheet URL**, which is used to access Web TimeSheet on the server.
- Modify your Web TimeSheet **Login name** or **Password**, if desired.
- If you want to connect to Web TimeSheet to begin updating data or to test the new connection, select the **Connect** button.
- If you want the Integration Manager to save your Web TimeSheet connection information so you do not have to re-enter it next time you log in, enable the **Remember this information** check box.

Modifying Resources used across Multiple Projects

To modify the configuration of common resources used across projects, in the **Resource Pool Configuraton** section:

1. Select the **Local resource data file** by using the **Browse** button.

   The resource data file is a Microsoft Project (.MPP) resource pool file that contains information on common resources shared across projects. This file must be accessible from the computer you are using to perform updates.
2. Select the resource name format the Integration Manager should use to match each user in the resource file to the corresponding user in Web TimeSheet. The format options are:

Format Option	Example
FirstName LastName (default)	`Jane Smith`
LastName FirstName	`Smith Jane`

Format Option	Example
Login Name	`jsmith`

3. You may set up custom fields in Microsoft Project for the Integration Manager to use when transferring new users' login names and passwords. Specify the custom fields using these fields:
   - **Select a custom field for login name**
   - **Select a custom field for password**

   If you do not set up the custom fields, the Integration Manager will use the following defaults:
   - login name – `FirstName LastName`
   - password – `password`.
4. If you wish to update the resource pool, select the **Update Now** button in the **Resource Pool Configuration** section. The update will begin immediately.

   > If a resource or user has previously been transferred and is transferred again with a different **Resource Name Mapping** selected, the resource/user will be duplicated in the target application using the new name mapping.

Modifying Project Information

> You can only modify Project information from within the Integration Manager if you are using the standalone version.

Use the **Project Folder Configuration** section to update project information.

- If you want to change the version of Project you are using, from the **Microsoft Project Version** field, select the new version.

  > If you change Project versions, a message will display stating that the Integration Manager must restart. To change Project versions:
  >
  > 1. Select **OK**.
  > 2. Select the **Save** button to save your current configuration.
  > 3. Load the newly-saved configuration file, and set it as the default (by enabling the check box).
  > 4. Close the Integration Manager.
  > 5. Open the new version of Project you want to use, and close the old version.
  > 6. Restart the Integration Manager. The updated version of Project will be used.

- If you want to modify a **Project Folder** (Project version 2007) or **Project File** (Project version 2003/2002), use the **Browse** button to locate and select the new file or folder.

  > The Integration Manager will automatically update the **Available Projects** list on the **General** tab when a new file or folder is selected.

Modifying Configuration Settings Information

In the **Microsoft Project Configuration** section:

- If you want to load the settings from a previously-saved .XML configuration file, use the **Browse** button to locate and select the file.

  The Integration Manager will automatically update its configuration settings using those stored in the file. For more information on saving configuration settings, see *Modifying the Action the Integration Manager takes when an error Occurs* below.
- Enable the **Use this file as the default Configuration** check box if you would like the selected configuration file to load by default when the Integration Manager is launched.

> If you do not enable this check box, each time you start the Integration Manager you will need to select the **Project Folder** (Project version 2007) or **Project File** (Project version 2003/2002) configuration file again.

Modifying the Action the Integration Manager takes when an error Occurs

To modify the action the Integration Manager takes when an error occurs:

In the **Prompt Message Options** section, in the **When error occurs during data transfer** field, select the action the Integration Manager should take when an error occurs. The options are described in the following table:

Option	The Integration Manager...
Prompt	... prompts you to choose between continuing and aborting the transfer
Continue Transfer	... automatically continues the transfer
Abort Transfer	... automatically aborts data transfer

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:

- If you are using:
    - Microsoft Project 2003/2002, only custom fields that are available across all projects in the Microsoft Project database file (.MPD file) are available for mapping.
    - Microsoft Project 2007, only custom fields that are available across all projects (.MPP files) in the Microsoft Project folder are available for mapping.
- Calculated Microsoft Project custom fields cannot be mapped to Web TimeSheet user defined fields because Web TimeSheet user defined fields cannot 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)
Project Description	Project Category Project Keyword Project Subject Project Title Project Comments Project Author Project Company
Project Code	Project Category Project Keyword Project Subject Project Title
Project Client	Project Company
Task Code	Custom Fields (Task Type)
Task Estimated Hours	Task Work
Task Estimated Cost	Task Cost

<table>
<tr><th>Web TimeSheet Field (source)</th><th>Microsoft Project Field (target)</th></tr>
<tr><td colspan="2">Note:

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.
The method Project uses to calculate Task Cost results in an inaccurate Task Cost value in Project if, during the same update, you transfer both:

One or more new resource assignments, AND
Task Estimated Cost to Task Cost

To prevent this inaccuracy, transfer new resources and cost mapping for a task in separate updates.
If you have already transferred cost mapping and new resources for a task in a single update, retransfer the project from Web TimeSheet to Microsoft Project using the same mapping to correct the data inaccuracy.
</td></tr>
<tr><td>Task Description</td><td>Custom Fields (Task Type)</td></tr>
<tr><td>User Rate</td><td>Resource Standard Rate</td></tr>
<tr><td>User Hourly Cost</td><td>Resource Standard Rate</td></tr>
<tr><td>User Default Billing Rate</td><td>Resource Standard Rate</td></tr>
<tr><td>Task Level User Defined Fields (Proj/Task Category)</td><td>Custom Fields (Task Type)</td></tr>
<tr><td colspan="2">Note: If you attempt to map task level user defined fields to a single project level field in Microsoft Project, the field data will not be updated and an error will appear in the update log file. This occurs because tasks may potentially have multiple values for the selected field and can therefore not be mapped to the project field, which can only receive one value.</td></tr>
<tr><td>Project Level User Defined Fields (Proj/Task Category)</td><td>Project Category
Project Keyword
Project Subject
Project Title
Project Comments
Project Author
Project Company</td></tr>
<tr><td>User Defined Fields (User Category)</td><td>Custom Fields (Resource Type)</td></tr>
</table>

Available Mappings from Microsoft Project to Web TimeSheet

Microsoft Project Field (source)	Web TimeSheet Field (target)
Project Keyword	Project Code Project Description Project Level User Defined Fields (Proj/Task Category)

Microsoft Project Field (source)	Web TimeSheet Field (target)
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 Company	Project Client
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)

Microsoft Project Field (source)	Web TimeSheet Field (target)
% Complete	Project Level User Defined Fields (Proj/Task Category) Task Level User Defined Fields (Proj/Task Category)
Microsoft Project File Name	Project Description Project Level User Defined Fields (Proj/Task Category)
Note: *If you map the Microsoft Project file name to a User Defined Field, only the specified User Defined Field for the project (not the task) will be updated.*	
Custom Fields (Task Type)	Task Description Task Code Task Estimated Cost Task Estimated Hours Task Level User Defined Fields (Proj/Task Category)
Note: *When you map from Microsoft Project custom fields to Web TimeSheet User Defined Fields, calculated fields are excluded.*	
Custom Fields (Resource Type)	User Defined Fields (User Category)
Note: *When you map from Microsoft Project custom fields to Web TimeSheet User Defined Fields, calculated fields are excluded.*	

CHAPTER 7

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 from Microsoft Project to Web TimeSheet
- 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 Embedded and Externally Linked Projects

There are special considerations when working with projects created in Microsoft Project Standard/Professional that contain embedded projects or externally linked tasks. When working with a project in which a second project is embedded, keep in the mind the following:

- Avoid changing the structure and resource assignments within the project using Web TimeSheet. If you wish to make changes, do so in Microsoft Project only and then transfer the updated information to Web TimeSheet.
- If there is a resource with the same name both in the main project and the project embedded within it, the Integration Manager considers those resources as identical.
- The currency symbol used by each project affects the operation of the Integration Manager as follows:
    - If the main and embedded projects are set to use different currency symbols, data transfer will not occur and the Integration Manager will log an error.
    - If the main project has no currency symbol associated with it and the embedded project's currency symbol matches that of the regional settings, data will be transferred successfully. If the embedded project's currency symbol does not match the regional settings, data transfer will fail and the Integration Manager will log an error.
    - If the embedded project has no currency symbol associated with it, data will be transferred successfully, regardless of the main project's currency symbol.

When working with a project in Microsoft Project that includes tasks that are linked externally, that is to a task within another project, note the following:

- The task to which the external link has been made can be transferred from Microsoft Project to Web TimeSheet. However, when transferring back to Microsoft Project, data for the externally linked task will not be transferred as Microsoft Project does not allow the embedded task to be edited within the main project. A message will be logged by the Integration Manager in the log file when this occurs.

- Do not name the externally linked task with the same name as a task present at the same level in the main project. If the externally linked task has the same task name as another task, only one of the tasks will be transferred to Web TimeSheet, as Web TimeSheet does not allow two tasks of the same name at the same level. The task which appears first in Microsoft Project is the one that is transferred to Web TimeSheet. As a result, when transferring data back to Microsoft Project:
    - If the externally linked task appears first in Microsoft Project, it is the one that is transferred to Web TimeSheet. When transferring data back to Microsoft Project, both tasks of the same name are deleted from within the project.
    - If the externally linked task appears second in Microsoft Project, the original task is the one that is transferred to Web TimeSheet.When transferring data back to Microsoft Project, the externally linked task will be deleted from Microsoft Project, but the original task will remain intact.

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 that you may encounter 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 within Web TimeSheet. If the problem persists, contact Replicon's Customer Support team as detailed in *Contacting Support* on page 6.