



Sage Master Builder

Estimating Installation
and Integration Guide

sage

NOTICE

This document and the Sage Timberline Office software may be used only in accordance with the accompanying Sage Timberline Office End User License Agreement. You may not use, copy, modify, or transfer the Sage Timberline Office software or this documentation except as expressly provided in the license agreement.

©2011 Sage Software, Inc. All rights reserved. Sage, the Sage logos and the Sage product and service names mentioned herein are registered trademarks or trademarks of Sage Software, Inc., or its affiliated entities. All other trademarks are the property of their respective owners.

08/2011 Document Number: 205031180301980



Contents

Contents	ii
Chapter 1: Introduction	1
Integration Between Estimating and Sage Master Builder Overview.....	1
Documentation.....	2
Online Help.....	3
Training Information.....	3
Contact Customer Support.....	3
Chapter 2: Install Estimating Products	5
Sage Master Builder and Estimating.....	5
Compatibility.....	5
Chapter 3: Integration Setup	6
Overview.....	6
Sage Master Builder and Estimating terminology.....	8
A. Set Up the Sage Master Builder Company Security to Work With the API.....	8
B. Configure the Sage Master Builder Application Programming Interface (API).....	10
C. Setting Up the Address Book.....	11
D. Setting up the Estimating database to interface with Sage Master Builder.....	12
E. Specify a Sage Master Builder Company.....	13
F. Assigning Sage Master Builder Cost Codes and Cost Types in Estimating.....	15
G. Setting up Buyout.....	18

Chapter 4: Workflow	20
Export Estimating Data to Sage Master Builder.....	20
Using the Estimating interface wizards.....	20
Create Proposals, Budgets, or Change Orders.....	21
Create Purchase Orders and Subcontracts.....	24
Troubleshooting.....	25
Verify Data in Master Builder.....	26

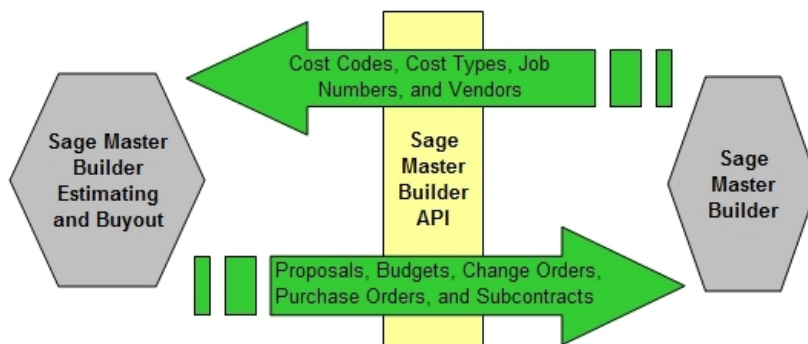


Chapter 1: Introduction

Integration Between Estimating and Sage Master Builder Overview

The estimating integration module allows you to move Sage Master Builder Estimating Standard and Extended data to your Sage Master Builder accounting applications. You can create proposals, budgets, and change orders from estimate data using the Estimating application. In addition, you can create subcontracts and proposals using the Buyout application. Sage Master Builder jobs, cost codes, cost types, and vendors will all be imported into your Estimating system and be available to you when creating estimates. The Sage Master Builder Application Program Interface (API) is used as the bridge to facilitate the flow of data between the two systems. The API is installed automatically with your Sage Master Builder software.

Figure 1: Sage Master Builder and Sage Master Builder Estimating



This booklet is your guide for setting up both systems to share data. In it you will learn how to:

- Install Estimating.
- Set up the Sage Master Builder, the Sage Master Builder API, Estimating, and Buyout to share data.

- Create Sage Master Builder proposals, budgets, change orders, purchase orders, and subcontracts using a simple wizard in Estimating and Buyout.



NOTES:

- You will notice references to Sage Timberline Office Estimating throughout the software, product and support documentation. This is due to the fact that the core functionality of the Sage Master Builder Estimating products was derived from the Sage Timberline Office Estimating applications.
- The term “Estimating” used throughout this book refers to Sage Master Builder Estimating Extended and Standard unless otherwise noted.

Documentation

Be sure to read supporting documentation before you install Estimating:

- Estimating *Release Notes* provide details about new features, database changes, known issues, and fixes. This document is available on your DVD in the **Documents** folder. *Release Notes* for earlier releases are available on your DVD in the Documents\Archives folder. These documents are current at the time of the release.
- The *Technical System Reference* provides detailed information about system and environment considerations to ensure your network is ready to install Estimating. You will also find what you need to prepare before you install. This document is available in the **Documents** folder on your Estimating DVD.
- For information specific to your Sage Master Builder software, refer to your Sage Master Builder *Installation & License Administration Guide* and the Sage Master Builder Help found in the software.
- *Getting Started with Estimating* provides information on setting up a database, creating an estimate, performing takeoff, and working with spreadsheets. This guide is available as a .pdf file in the **Documents** folder of your Estimating DVD.
- *Getting Started with Buyout* provides information on setting up a database, creating an estimate, performing takeoff, and working with spreadsheets. This guide is available as a .pdf file in the **Documents** folder of your Estimating DVD.

Online Help

Each Sage Master Builder Estimating Extended or Standard application includes Help, which provides many answers and instructions at the click of your mouse. To use Help, select Help Topics from the Help menu. An important feature of the Help system is What's This? Help. For detailed information about each field in an application, press F1 or click the question mark that appears on the toolbar or in the title bar of each window. Position the question mark over the area in question, and click.

Training Information

Learn about the Anytime Learning and Realtime Learning sessions that are available, view schedules of online sessions, or look for classroom training near you.

You can directly access Sage University from the Help menu in applications (**Help > Sage Timberline Office on the Web > Sage University**). This website offers a variety of professional product training options.

Contact Customer Support

Depending on your Sage Service Plan, you may be able to take advantage of the following services:

Sage Customer Portal

You may log on to the Sage Customer Portal at <https://customers.sagenorthamerica.com/irj/portal/anonymous/login> to access any of the following services:

- **Knowledgebase:** Find answers to your questions, access downloads, and subscribe to your favorite articles. This service is available online 24/7.
- **Live Chat:** Chat online with a customer support analyst - a great option for quick questions. Chat hours are Monday through Friday from 6 a.m. to 3 p.m. Pacific time, with the same exceptions as telephone support (see below).
- **Online Support Request:** Submit an online support ticket when you have a non-urgent question. One of our call center support analysts will assist you. Online support hours are the same as our customer support call center hours (see below).

Sage Customer Support Call Center

Telephone Support: When you have a more urgent question or would prefer to speak to a customer support analyst directly, call us at 800-551-8307. Telephone support is available Monday through Friday from 6 a.m. to 5 p.m. Pacific time with the following exceptions:

- Every Thursday from 2 p.m. to 3 p.m. Pacific time (closed for customer support staff meetings)
- Standard United States holidays
- Quarterly company meetings

Upgrading Your Service Plan

If your service plan does not provide online or telephone customer support and you would like to add or upgrade a service plan, please call 800-858-7098.



Chapter 2: Install Estimating Products

Sage Master Builder and Estimating

In order for the integration to be successful, you must install Sage Master Builder and Sage Master Builder Estimating Standard or Extended on the same computer.

Refer to the Sage Master Builder *Installation and License Administration Guide* for supported operating systems and instructions on installing Sage Master Builder.

Refer to the Sage Timberline Office *Get Started Guide* for supported operating systems and instructions on installing Sage Master Builder Estimating.

Compatibility

Sage Master Builder v17.1 is compatible with Sage Master Builder Estimating Standard and Extended 9.8.



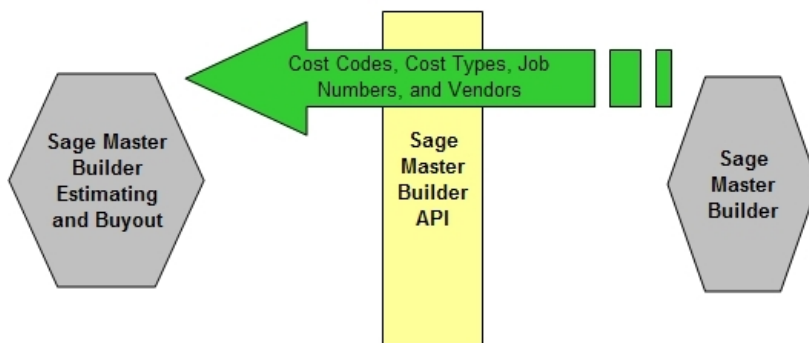
Chapter 3: Integration Setup

Overview

After installing Estimating and Sage Master Builder on the same computer, you must perform a few setup steps which will allow data to be sent between the two modules. As described earlier, the API (Application Program Interface) is the bridge between Estimating and Sage Master Builder. Before you set up Estimating to interface with Sage Master Builder, you need to modify the Sage Master Builder security settings to work properly with the API. Also, you need to ensure that the API is properly configured to create and modify data in Sage Master Builder. When you have completed these steps, set your Estimating database to interface with a Sage Master Builder company. After the connection to the company has been established, the following occurs:

- Sage Master Builder Estimating imports cost codes, cost types, and job numbers, making them available in both Estimating and Buyout.
- Sage Master Builder Estimating imports vendors into the Sage Timberline Office Address Book as Company contacts.

Figure 2: Bridging Sage Master Builder and Estimating





NOTES:

- The term “Estimating” used throughout this guide refers to Sage Master Builder Estimating Standard and Extended unless otherwise noted.
- This section assumes you are familiar with Sage Master Builder Estimating Standard or Extended. Please refer to the *Getting Started with Estimating* and *Getting Started with Buyout* guides found in the **Documents** folder of your Estimating DVD. Contact your business partner for information about training.

In this section you will set up your Estimating and Sage Master Builder systems to integrate with each other by performing the following steps:

- 1 Configure the Sage Master Builder Company Security to include the API security group and include any users into this group.
- 2 Configure the Sage Master Builder API security settings to allow the API to create and modify data.
- 3 Create a new Address Book for the Sage Master Builder vendors and link to it from your Estimating database.
- 4 Configure your Estimating database to interface with Sage Master Builder.
- 5 Apply Sage Master Builder cost codes and cost types to the database Items in Estimating.
- 6 Configure and setup the Buyout application to interface with Sage Master Builder.

Before you Begin:

- Sage Master Builder, Sage Master Builder application programming interface (API), and Estimating must be installed on the same computer.
- Sage recommends that you back up your data.
- Become familiar with the differences in terminology found in the two programs.

Sage Master Builder and Estimating terminology

Table 1: Comparison of Master Builder and Estimating Terminology

Master Builder	Estimating
Cost Code	Job Cost Phase
Cost Type	Job Cost Category
Phase	Sort Level A sort level can be any of the following: <ul style="list-style-type: none"> ▪ Work Breakdown Structure Codes ▪ Location ▪ Group Phase ▪ Phase
Bid Item	<ul style="list-style-type: none"> ▪ Assembly ▪ Model ▪ Material Class ▪ Subcontractor ▪ Price Code

A. Set Up the Sage Master Builder Company Security to Work With the API

In order for the integration between Estimating and Sage Master Builder to work, an API security group needs to be created. Any user intending to use the integration needs to have the API group assigned to their profile.

Create the API Security Group

The API security group is created under Company Security in Sage Master Builder. Any company intending to have data created from Estimating will be required to create the API security group.

- 1 Start Sage Master Builder and select the company you intend to integrate with.
- 2 Log in using the **Supervisor** account.
- 3 Open 7-3-1 **Security Groups**.
- 4 In the **Group#** cell, type a group number, such as 51.
- 5 In the **Group Name** cell, type *API*.
- 6 In the **Save** cell, type Y.
- 7 In the **Delete** cell, type Y.
- 8 To store information that may be relevant or important to that specific group, type a note in the **Notes** cell.
- 9 On the **File** menu, click **Save**.

Setting up an API User And Password

You must be a member of the API security group if you will use the integration between Estimating and Sage Master Builder. Security groups are assigned under **Company Security** in Sage Master Builder.



NOTES:

- Only the Supervisor can access and modify user security settings.
- You must be set up as a user on at least one other security group in order to be a member of the API security group.

For Existing Users

- 1 Open 7-3-2 **User List**.
- 2 In the next available **Group** cell, click once in the cell, and from the drop-down list, select the API group for the user(s) who will be using the integration.

Creating New Users

- 1 Open 7-3-2 **User List**.

- 2 Select the **Display Passwords** check box.
- 3 In the **User Name** cell, enter a user name, such as *APIUser*.
- 4 In the **Password** cell, enter a password.
- 5 In the **License Group** cell, enter the license group, as required.
- 6 In each numbered **Group** cell, click once in the cell, and from the drop-down list, select the API group.
- 7 Repeat step 6 for each new API user.
- 8 Click **File > Save**.

B. Configure the Sage Master Builder Application Programming Interface (API)

The Sage Master Builder application program interface (API) is used as the bridge to import Master Builder data such as cost codes, cost types, and vendors and to export Estimating data for proposals, budgets, change orders, purchase orders, and subcontracts. In order for data to flow between Estimating and Sage Master Builder, you must start the API and configure it properly.

Starting the API

The API must be launched and started everytime you are attempting to either pull data in from Master Builder or push data out from Estimating. The Sage Master Builder API will employ a license use during operation. To minimize the need for an additional license, you should start the API only when interfacing with Estimating and stop the API when you are finished.



NOTE: If you are attempting to perform a task where the API is needed but not running, it will be automatically launched. You will then need to configure and start the API manually.

- 1 Click Windows [Start] > **Programs > Sage Master Builder**, and then click **Sage Master Builder API**. The **Sage Master Builder API Administration** window appears.
The initial status of the API is “not accepting requests.” This is normal.
- 2 Specify the location of your Sage Master Builder data under the **Configuration** section. The C drive is the default drive.
- 3 If the company databases are on another hard drive or mapped network drive, click the drop-down list button for the MB Data Drive text box and select the appropriate drive.

Sage Master Builder Enterprise Edition: If the company databases reside at a networked location on a server:

- a Select the Access Sage Master Builder Enterprise option box.
- b Specify the Sage Master Builder server's IP address, server port, user ID, and password supplied to you by your Sage Master Builder server administrator.

4 Click [**Start**] to start the API.

5 If you have not already set up the API security settings, do so now.

Setting API Security

API access to Sage Master Builder data is disabled until you set up the security.

- 1 On the Sage Master Builder API Administration window, click **Edit > Security**.
- 2 Click [**Select All**].
- 3 Click [**Save Settings**].



NOTE: You can limit the access of the API to just those objects you are working with when setting the API security.

C. Setting Up the Address Book

Address Book is an application that stores a company-wide database of contacts that can be shared by applications such as Estimating and Buyout. You can open Address Book everywhere you need to access contact information for subcontractors, vendors, and customers in Estimating and Buyout.

The Address Book is used to store and access all of your Sage Master Builder Vendors from Estimating and Buyout. When you specify a Sage Master Builder Company to interface with, all of the vendors will be imported into your newly created Address Book and be available to you.

Before you connect to a Master Builder Company, you will need to first create an Address Book to store your vendor information, and second, link it to your Estimating database.

Create a New Address Book

Creating a new Address Book requires that you create a new Company Folder from an application called TSMmain. In this instance the Address Book and Company Folder are synonymous - when you create a new Company Folder, you are creating a new Address Book.

- 1 Open TS Main. **Start > Programs > Sage > Sage Timberline Office > Estimating > TS Main.**
- 2 On the **Select Data Folder** window, click [**Specify Folders**].
- 3 Under the **Data Folder Path**, enter or browse to the location where you want to store the Address Book. This is where the new Address Book will be located and stored on your computer. We recommend you use the same location as your Estimating database.
- 4 Enter pertinent information for the Address Book, verify the Data Folder Path name is correct, select the **Use Current Setup** checkbox, and click [**OK**].
The **Use Current Setup** checkbox is not available for the first company you set up.
- 5 You will notice the new company now appears in the **Specified Folder** list. Click [**OK**] on the **Specify Data Folders Paths** window.
- 6 Highlight the newly created **Company Folder** in the **Select Data Folder** window and click [**OK**].
- 7 TS-Main opens. You can open Address Book by clicking on the AB icon in the toolbar, or by clicking **Applications > Address Book** from the menu.

Linking to the Address Book from the Estimating Database

In order to use the Address Book, you must link the Estimating database to the Address Book company folder. This is done from **Database Settings**.

- 1 In Estimating, click **Database > Database Settings > Company** tab.
- 2 Click [**Select**] in the **Company Folder** area.
- 3 Select the company folder you created in the steps above.

For more information about using Address Book with Estimating, refer to Estimating Help.

D. Setting up the Estimating database to interface with Sage Master Builder

Before you can exchange data between Estimating and Sage Master Builder you must specify Sage Master Builder as the job cost interface type for the Estimating database. The job cost interface type is specified using the Sage Timberline Office Estimating Tools program.

Specify the Job Cost Interface Type

To specify the job cost interface type for your Estimating database:

- 1 Open Sage Timberline Office Estimating Tools. (**Start > Programs > Sage > Sage Timberline Office > Estimating > Estimating Tools**).
- 2 Click **Setup > Change Job Cost Information**.
- 3 Browse to the location of your Estimating database and select the database file. The primary file for the an Estimating database is the PEI.DAT file. To select a database, highlight the pei.dat and click **Open**.
- 4 In the **Change Job Cost Information** window, from the Job cost interface type list, select **Sage Master Builder**.
- 5 Select **Add JC cost categories to items**. This assigns the cost types you just entered to all items in your database.

Under the **Job Cost Categories** section, enter the Sage Master Builder cost types as follows:

Table 2: Sage Master Builder Cost Types

Job Cost Category	Cost Type
Labor	2-L
Material	1-M
Sub	4-S
Equipment	3-E
Other	5-O

After you have set the job cost interface type, you can see it listed in the database in Estimating: **Database > Database Settings > Job Cost** tab.

E. Specify a Sage Master Builder Company

When you have specified Sage Master Builder as your job cost interface type, you can then choose a specific Sage Master Builder company to integrate the Estimating database with. Along with selecting the Company you will be required to enter your user name and password.

After you have set the **Company**, **User Name**, and **Password** correctly, Estimating will import the cost codes, cost types, job numbers, into the database and import the vendors into the Address Book from the API. This process may take some time depending on the amount of data that needs to flow into your estimating system.

**NOTES:**

- Transferring job costing and vendor information may take several minutes.
- You must start the Sage Master Builder API to complete this task. If the API is not detected, it will be automatically launched and you will be required to configure it to the correct data location and required to click [**Start**].

Specify a Sage Master Builder Company, User Name, And Password

- 1 Open Estimating: **Database > Database Settings > Job Cost** tab.
- 2 Verify that Sage Master Builder is the job cost interface type.
- 3 Under Sage Master Builder, select the company that contains your Sage Master Builder accounting data.
- 4 In the **User Name** box, type the user name you set up in “Setting up an API User And Password,” on page 9. Your user name cannot be “Supervisor.”
- 5 In the **Password** box, type your password for that company. Your password cannot be “Supervisor.”
- 6 Click [**OK**] to begin the transfer of data.

Refresh Data

If you make changes to your Sage Master Builder data after you have established the connection with Estimating described in “Specify a Sage Master Builder Company, User Name, And Password,” on page 14, you must update the data in Estimating as well by refreshing your data.

- 1 Open Estimating: **Database > Database Settings**.
- 2 Click [**Refresh Data**].

**NOTES:**

- Refreshing data may take several minutes.

- You must start the Sage Master Builder API to complete this task. If the API is not detected, it starts automatically and requires you to configure it for the correct data location; it then requires you to click [**Start**].

F. Assigning Sage Master Builder Cost Codes and Cost Types in Estimating

In order to successfully create proposals, budgets, change orders, purchase orders, and subcontracts from Estimating to Sage Master Builder, you must first assign Sage Master Builder cost codes and cost types to the Estimating database items. The Sage Master Builder cost codes and cost types will be entered in the **Job Cost Phase** and **Job Cost Category** fields on each item. As you create estimates and takeoff the database items, the Sage Master Builder cost code and cost type information will be included in the estimate and used during the export process.

The following sections describe how to assign Sage Master Builder job cost data to the items using multiple methods.

- Use the Database Editor application to assign cost codes and cost types to multiple database items in a spreadsheet format.
- Access the job cost information for an individual item in the database.
- Work with the job cost data on an estimate.

Using the Database Editor to Assign Cost Codes and Cost Types

The Database Editor application presents the database phase and item records in a spreadsheet grid format to allow for easy maintenance and modification. It allows you to quickly assign Master Builder cost codes and cost types to multiple items without having to enter the values for each item.

- 1 Open Database Editor (**Start > Programs > Sage > Sage Timberline Office > Estimating > Database Editor**).
- 2 Locate and select the Estimating database folder. Double-click the pei.dat file to open the database.

Assign Cost Codes at the Phase Level

If all of the items in a particular phase are going to be using the same cost code, you can assign the cost code to the phase and have it propagate down to the items underneath. First, assign the cost code to the phases, then on the Items view select Inherit JC Phase for the items. If the items are to be assigned to different cost codes, see the "Assign Cost Codes Directly to Items" section below.

- 1 To access the phases, select **View > Go To > Phases**. Select the **Default** layout from the drop-down list on the toolbar.
- 2 For the selected phase, select the Sage Master Builder cost code from the available list or type the cost code in the JC Phase field. If you need to assign the cost code to more than one phase, you can use the Fill Down feature to rapidly copy data from one cell to cells beneath it. Type the data you want to copy into a cell. Highlight the cell and cells below it. Right-click and select **Fill Down**. To select cells that are not next to each other in the column, press CTRL while you use the mouse to select cells.
- 3 Click the Items icon in the navigation bar or select **View > Go To > Items** to open the Items view.
- 4 To propagate the cost codes from the phase record to the corresponding item records, highlight the row header for all items, right-click and select **Inherit JC Phase**.

Assign Cost Codes Directly to Items

If the items within a phase have different cost codes, you can assign the cost codes directly on the item.

- 1 Select **View > Go To > Items**.
- 2 Select **Job Cost - All Categories** from the **Layout** drop down list. This will show only those columns that pertain to the job cost data. Scroll to the **Job Cost Phase** cell for each category, such as **Labor**, **Material**, **Equipment**, etc.
- 3 Select the Sage Master Builder cost code from the list. You can rapidly copy data from one cell to cells beneath it. Type the data you want to copy into a cell. Select the cell and cells below it. Right-click and select **Fill Down**. To select cells that are not next to each other in the column, press CTRL while you use the mouse to select cells.

Assign Cost Types to the Item Categories

You can modify the cost types assigned to the items using the Database Editor. If you chose not to add the JC cost categories to the items (step 6 under section D), you will need to assign a cost type for each category on the items.

- 1 Select **View > Go To > Items**.
- 2 Select the **Job Cost-All Categories** layout in the toolbar.
- 3 Scroll over to the **Labor Job Cost Category** column.
- 4 Scroll down to the items to which the labor cost type should be assigned.
- 5 Click in the first white cell and select **2-L** from the drop-down list.
- 6 Repeat steps 3, 4, and 5 for **Equipment, Material, Sub, and Other**. Scroll to the appropriate Job Cost Category column and select the cost types as follows:

Table 3: Job Cost Categories and Corresponding Cost Types

Job Cost Category	Cost Type
Labor	2-L
Material	1-M
Sub	4-S
Equipment	3-E
Other	5-O

Transferring Labor Hours

Both budgets and change orders require the Labor Hours in Master Builder. To properly send over the budget hours, the labor cost category needs to be configured to transfer the **Order Quantity**.

- 1 Select **View > Go To > Items**.
- 2 Select the **Job Cost-All Categories** layout in the toolbar.
- 3 Scroll over to the **Labor Qty to Job Cost** column.
- 4 Scroll down to items to which the labor cost type has been assigned.

5 Click in the first white cell and select **Order Quantity** from the drop-down list.

6 Close the Database Editor.

Modifying Cost Code and Cost Type data in Estimating

Cost codes, and cost types are stored and can be accessed for any item in the database on the **Job Cost** tab of the item record. You can modify the job cost information at any time for the individual item. Access the items by clicking **Database > Items**. Navigate to the item you want to work with. In order to enter or modify the job cost data, click on the **Job Cost** tab.

Making Adjustments to the Estimate

If the estimate was created before you updated the database with Sage Master Builder cost codes, or if you wish to add or change the cost code assignments on items in your estimate you must add the cost codes directly in the estimate.



NOTE: Instructions for creating an estimate are found in *Getting Started with Estimating*, which you can find in the **Documents** folder of your Estimating DVD. Estimating Help contains complete instructions for working with Estimating.

After you perform takeoff for existing estimates, you can make adjustments to the job cost codes that are assigned to the estimate items in the **Detail** window. For example, you may want to perform the adjustments for job-specific cost codes.

1 Open an estimate, and select the item in the **Description** column.

2 Right-click and select **Detail** window. Select the **Unit Costs** tab.

3 Enter the appropriate Sage Master Builder cost code in the **Job Cost Phase** box.

G. Setting up Buyout

Buyout is an application that allows you to take the material and subcontractor items from an estimate, assign the items to quote sheets, create requests for quotes, select the vendor you want to purchase from and create subcontracts or purchase orders. For more information on Buyout functions and workflow see Buyout Help and *Getting Started with Buyout* guide found in the **Documents** folder of your Estimating DVD.

Because the Buyout work file is based on estimate data, if you have set up Estimating correctly to interface with Master Builder, you will have very little to do in Buyout. All of the job cost data from the items will flow into the work file. If necessary, you can modify the job cost data for the items in Buyout. However, you will need to set up your Buyout database to integrate with a Sage Master Builder Company.

Before you can create a subcontract or a purchase order using estimate data in Buyout, you must set the job cost interface type for the Buyout database.

- 1 In Buyout, click **Database > Database Settings > Company Setup** tab > [**Job Cost Setup**].
- 2 Select **Sage Master Builder** as the Job cost interface type.
- 3 In the **Company** box, select a Sage Master Builder company.
- 4 In the **User Name** box, enter your user name for the Sage Master Builder company.
- 5 In the **Password** box, type your password for the Sage Master Builder company.
- 6 Click [**OK**].

After performing these set up steps to integrate Estimating and Buyout with Sage Master Builder, you are ready to create proposals, budgets, change orders, purchase orders, and subcontracts. The next chapter details the workflow and considerations necessary to export the estimate data into Sage Master Builder.



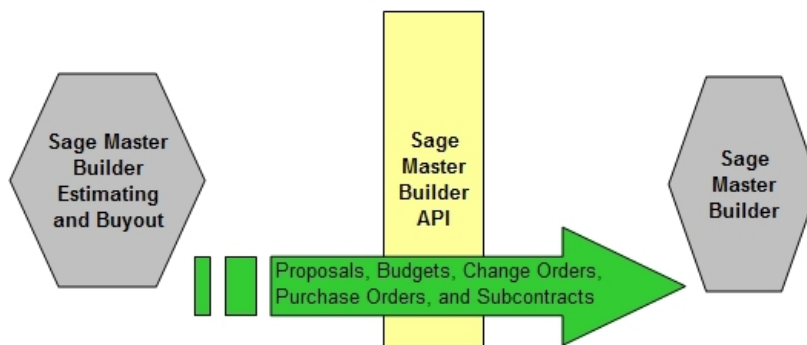
Chapter 4: Workflow

Export Estimating Data to Sage Master Builder

In this section, you will learn how to employ the wizards in:

- Estimating to create proposals, budgets, change orders.
- Buyout to create purchase orders and subcontracts.

Table 4: Exporting Data from Estimating to Sage Master Builder



Before you begin, you must start the Sage Master Builder API. See “Starting the API,” on page 10.

Using the Estimating interface wizards

Each point of integration - proposal, budget, and change order - has its own four-step wizard that captures information specific for what you are trying to create. The fundamental appearance and operation of each wizard is the same. In some cases, the steps between the three may appear identical. Each wizard also requires different information be collected. The following sections describe the four steps in the wizard required for creating proposals, budgets, and change orders.

Create Proposals, Budgets, or Change Orders

Starting the interface wizards

In Estimating, select **Proposal**, **Budget**, or **Change Order** from the **Interface** menu.

Introduction

Each of the three interface wizards opens with an Introduction tab. The information presented on this tab is specific to what you are creating - a proposal, budget, or change order - and provides an overview of the creation process as well as any specific instructions. Read through this carefully.

Step 1: Company Settings and Job Number

The first step in all three interface wizards is identical. In this window, the company you are integrating with and either confirm or enter your user name and password for that company. (Enter the user name you used in "Setting up an API User And Password," on page 9.) Also in this step, enter a transaction date and specify the job number for which you are creating the proposal, budget, or change order.

If the job does not yet exist in Master Builder, create that job from the interface wizard. If type a job number that does not exist in Master Builder, you are prompted to either create that job or select a different job. If you continue to create the job, you must enter:

- Status
- Short Name
- Job Name

Step 2: Round Quantities and Allocate Addons

The second step gathers information on rounding and allocating addons.

Rounding

The rounding options for an item are set up on that item in the database or on the estimate. Rounding does not show up on the estimate, but can be included in reports.

Allocating Addons

To *allocate an addon* means to spread the addon amount back through the estimate items. Allocate an addon when you don't want the markup to show as a line in the estimate totals, for example. You can allocate an addon in the **Estimate Totals** window. (With an estimate open, press F4 on your keyboard.)

It is important to note that addons can also be sent to Sage Master Builder as their own line item. You can add a cost code and cost type to each addon you insert into an estimate. Any addon with job cost information will always be included in the interface.

Addon allocation and quantity rounding has a different effect on proposals, budgets, and change orders as discussed in the following paragraphs.

- **Proposal:** For the proposal, answer 'Yes' to both rounding quantities and allocating addons if you want to include all costs associated with the project.
- **Budget:** Select to round quantities for the budget to reflect the actual amounts. You may not want to include addons in the budget, as they are not a reflection of the direct cost. However, you can select to allocate some addons and not others, by selecting or clearing the addon allocation box on the **Estimate Totals** window. (With an estimate open, press F4 on your keyboard).
- **Change Order:** Step 2 for the change order does not ask whether or not you want to allocate addons. All addons marked as allocatable will be allocated for the change side of the change order. The budget side of the change order will not include allocated addons. Whether an addon is allocatable or not is controlled on the **Estimate Totals** window. (With an estimate open, press F4 on your keyboard).

Step 3: Interface Options

The third step is unique for each wizard type.

Proposal: You have the option to create the proposal by Cost Code or by Bid Item. If you select to create the proposal by Bid Item, a second selection box becomes available, prompting you to designate the estimate sort level that will be used as the Bid Item in Master Builder.

- **Bid Item considerations:** If you choose to generate the proposal by bid item, you need to specify what estimating element will be used as the bid item in Sage Master Builder. You have a list of available estimate sorts that you can pick from that include all WBS codes, location, group phase, and phase among others. Select an estimate sort level that will make an appropriate bid item.

- **Include a Sage Master Builder Phase:** You also have the option in the proposal to include a Sage Master Builder phase. If you choose to do so, you will need to select an estimate sort level that will appropriately translate into a phase. When the proposal has been created, you will see the estimate sort you selected as a phase on the proposal.

Budget: Step 3 for the budget interface simply asks if you want to include a Sage Master Builder phase. If you select to do so, you will need to make an appropriate selection of an estimate sort level.

Change Order: The Change Order interface requires multiple selections.

- **Change Order Id:** Select the estimate sort level that will be used as the change order ID. For each change order ID, a change order is created in Sage Master Builder. The best implementation practice is to dedicate a WBS code to use as the change order ID.
- **Include Master Builder Phase:** Like the proposal and budget wizards, you have the option to include a Sage Master Builder phase during the change order interface. If you choose to include a Phase, select the estimate sort level.
- **Select from the available change orders:** After designating the change order ID, the list of available change orders becomes available. Select the change orders you would like to create in Sage Master Builder.
- **Addon considerations:** If you have addons assigned with a non-allocatable cost code and cost type, additional fields become available. Enter the change order and phase to which the addon amount should be included.

Step 4: Create Proposal, Budget, Change Order

For all three wizards, the final step is identical. A transaction report prints out cost codes, amounts and any warnings that may come up during the interface. To initiate the export, click **[Create]**. You will receive a confirmation message when the proposal, budget, and change order is created.

Stop the Sage Master Builder API.



NOTES:

- **Proposal:** You can create only one proposal per job. If you have already created a proposal for the specified job, you will be given a warning if you want to overwrite it.
- **Budget:** You can only create one budget per job. If you have already created a budget for the specified job, you will be given a warning if you attempt to overwrite it.

- **Change Orders:** Sage Master Builder allows you to create the same change order more than once. This is to minimize the risk of potentially overwriting an open and active change order. When creating change orders, be aware of what you have already created.

Create Purchase Orders and Subcontracts

Purchase orders and subcontracts are created in Buyout using the Sage Master Builder vendor information you sent over to the Address Book.

Each point of integration—purchase order and subcontract—has its own two-step wizard that captures information specific for what you are trying to create. Each wizard has the same fundamental appearance and operation. The following sections describe each of the two steps in the wizards.

Starting the interface wizards

In Buyout, select **Purchase Order** or **Subcontract** from the **Interface** menu.

Introduction

Each of the two interface wizards opens with an Introduction tab. The information presented on this tab is specific to what you are creating - a purchase order or subcontract - and provides an overview of the creation process as well as any specific instructions. Read through this carefully.

Step 1: Company Settings and Transaction Date

In Step 1 you will confirm the company you are integrating with and either confirm or enter your user name and password for that company. Also in this step, you enter a transaction date.



NOTE: Buyout allows you to import multiple estimate files into the same work file. As the estimate files are imported, the job number that is assigned to that estimate follows the items into the work file. If however, the estimate does not have a job number assigned, you will be given a message alerting you to the estimate missing a job or containing an invalid job number. You will need to go to **Actions > Work File Information > General** tab and enter a **JC Job Number** for that estimate before you can create a purchase order or subcontract.

Step 2: Select Purchase Orders or Subcontracts

In step 2 for both the purchase order and subcontract interface wizards, you select the purchase orders or subcontracts you want to create from the available list. Optionally, you can choose to include a Sage Master Builder Phase with the purchase order or subcontract.

If you have already exported the purchase order or subcontract to Master Builder, the interface wizard will indicate to you which of the quotes have been exported.

When you have finished creating the purchase order or subcontract, stop the Sage Master Builder API.



NOTE: If you have added or created a new company to the Address Book that you have selected to create a purchase order or subcontract for, the interface wizard will prompt you to create that vendor in Master Builder.

Troubleshooting

As you use the interface wizards to create the different data elements in Master Builder, a series of validation checks is performed on the estimate and work file data. When the interface wizard encounters data that is invalid it will alert you with a message that indicates which item is invalid and exactly what on that item is invalid. You will also be given an explanation as to what you could do to fix the issue.

In order to complete the interface wizard, you will need to exit the wizard (click [**Cancel**]), fix the issue, and restart the interface wizard. You have the ability to print the error list right from the error window. We recommend that you use the print-out to address the invalid items.

The following errors may appear:

"Invalid Cost Code"

For each cost category that is included on the estimate item, the validation check will verify that the assigned cost code exists in Master Builder. If the cost code on an item is invalid, you can:

- Select a different cost code for that category. In Estimating, select the item on the spreadsheet. Click **View > Detail** window > **Unit Costs** tab. Select the correct Job Cost phase.
- If the cost code doesn't exist in Master Builder and you want that item to go the specified cost code, you will need to create the cost code in Master Builder.

"Invalid Cost Type"

For each cost category that is included on the estimate item, the validation check will verify that the assigned cost type exists in Master Builder. If the cost type on an item is invalid, you will need to assign a valid cost type for the specified category. In Estimating, select the item on the spreadsheet. Click **View > Detail window > Unit Costs tab > [Job Cost Phase]**. Select the correct cost type in the **Job Cost Category** column.

Verify Data in Master Builder

The last step in the integration process is to verify that the data has been created in Sage Master Builder. With each interface wizard, you receive a confirmation message that the data has been successfully created in Sage Master Builder. You can then open Sage Master Builder Proposals, Budgets, Change Orders, Purchase Orders, and Subcontracts to verify the data.