


Acme. He also sees that another Manufacturer, Emerald, has been approved as an alternate manufacturer. He closes the Part.

Now Carlos performs a Search for CPU fan Parts. Clicking  to open the Search dialog box (seen in Figure 2-9), he builds a Search using two queries: Part Description Contains fan, and Part Description Contains CPU.

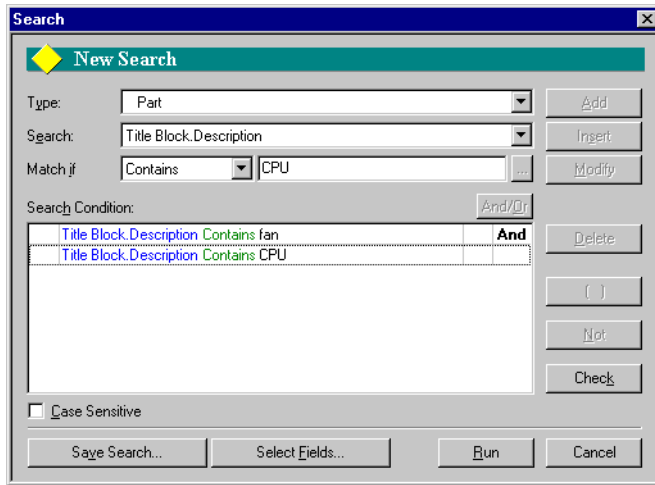


Figure 2-9: The Search dialog box

When he clicks OK, Agile CM searches the database for all Parts that satisfy both conditions of the Search, and displays a list of all parts of CPU fans.



Figure 2-10: The Search Results window for the CPU Fans Search

Carlos reviews the list, and finds a CPU fan that gives the higher airflow he needs. He double-clicks the row identifier for this fan, Part 5646-99, and reviews the Where Used tab. None of these models are experiencing overheating problems. Next he clicks on the Manufacturers tab.

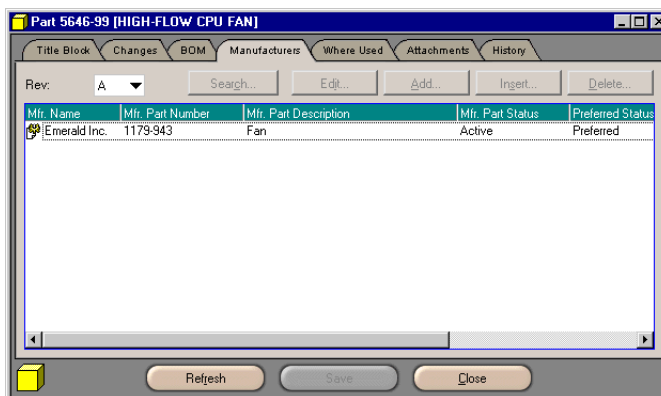



Figure 2-11: The Manufacturers tab for Part 5646-99

Emerald is listed as the current manufacturer for this part.

Carlos could double-click the Item from the BOM tab to open the Part. Or, he can perform a Quick Search for that Part.

## Finding Information

Carlos knows that an object number cannot be duplicated. To find and display the fan Part quickly, he does a Quick Search by Part number, clicking  to open the Quick Search dialog box (as seen in Figure 2-12). He defines the Quick Search to look for Part Number Equal to 5646-99.

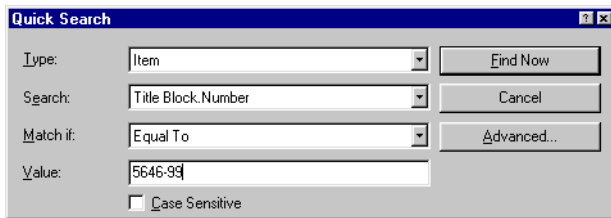


Figure 2-12: The Quick Search dialog box

When he clicks OK, Agile CM searches the database for all Parts that satisfy the definition of the Quick Search. And, because Agile CM finds only one object meeting the Search criteria, Agile CM displays it immediately for Carlos to view.

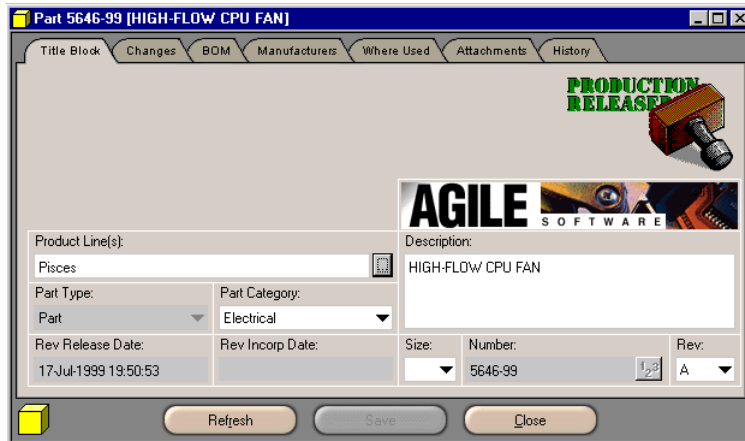


Figure 2-13: The Item window for Part #5646-99, with the Title Block tab displayed

Carlos clicks the BOM tab, which brings the Bill of Materials to the front.

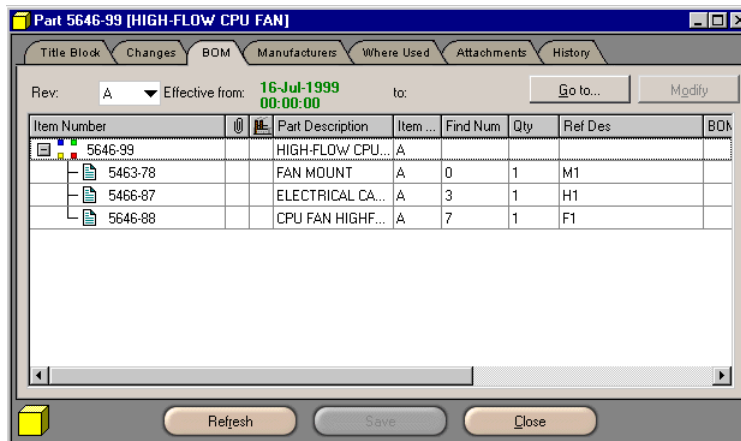


Figure 2-14: The BOM tab for Part #5646-99

Since Carlos is especially interested in the engineering drawings of the fan, he wants to view the attached drawings. He right-clicks the CPU Fan and selects Open from the context menu to open to the fan's Attachments tab (shown in Figure 2-15).

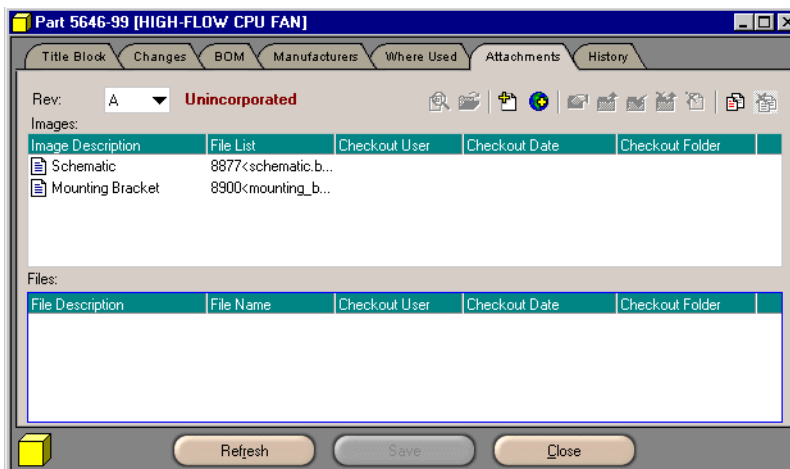



Figure 2-15: The Attachments tab

When Carlos selects “mounting bracket” and clicks View , and the built-in Viewer launches and shows him the selected image.

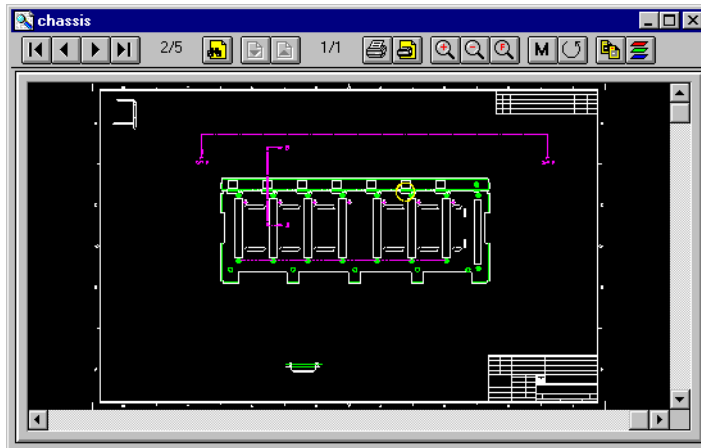




Figure 2-16: The Viewer

Carlos uses the  button to zoom in, and the  button to “turn off” selected layers so that he can more clearly focus on sections of the image.



## The Change Order

Carlos has a solution to the problem: substitute the High Flow fan #5646-99 for the current fan assembly. Furthermore, he thinks that the High Flow assembly should be used in every computer, not just the models that have been identified as overheating thus far.

Now Carlos needs to:

- ☐ Create an ECO proposing his Change
- ☐ Find every computer that uses the current fan assembly
- ☐ Add those computers to the Affected Items tab of the ECO
- ☐ Redline the BOM of the Affected Items

## Creating the ECO

Like Karen did when she created the ECR (on page 2-2), Carlos clicks  to open the New Object dialog box. He selects ECO from the Type drop list, clicks  to give the Change an autonumber, and clicks OK. Agile CM creates the Change and opens the Cover Page tab. He completes the Cover Page tab and brings the Affected Items tab to the front.

## Adding Items to the Affected Items Table

Carlos could enter the affected Items one at a time, but Agile CM lets him drag and drop multiple Items to the Affected Items table. Since he believes the fan should be modified in every computer that uses the current fan, he returns to the Item window for fan 5643-04 and brings the Where Used tab to the front (seen at the top left, in Figure 2-17). The fan is used in the mother board, but where is the mother board used? He double-clicks Part #4343-01, the Mother Board, on the fan's Where Used table to open it, then brings its Where Used tab to the front. (Shown at the bottom right, in Figure 2-17).

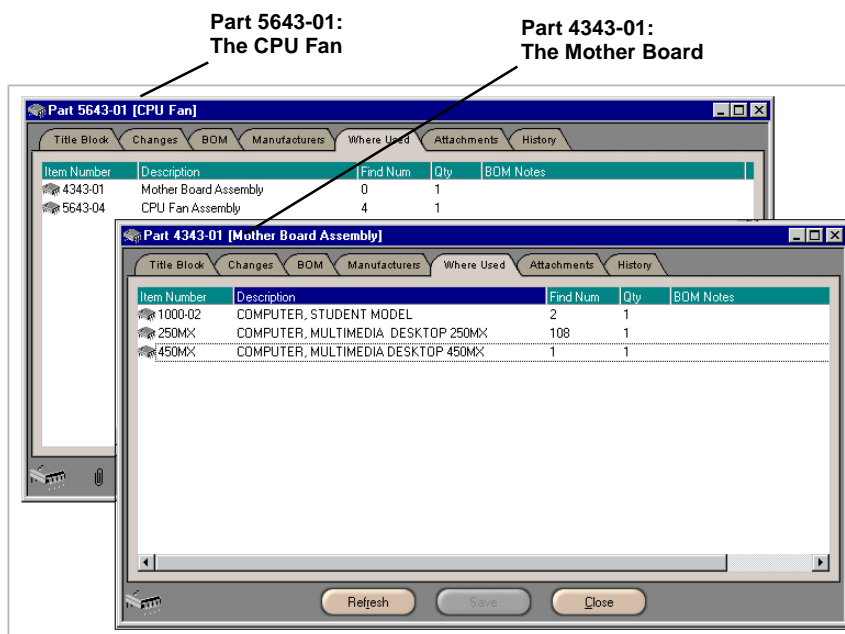


Figure 2-17: Two Where Used tabs

Now he can select all of the computers that use the fan and drag them to the Affected Items tab of his ECO (#C00012), as represented by Figure 2-18.

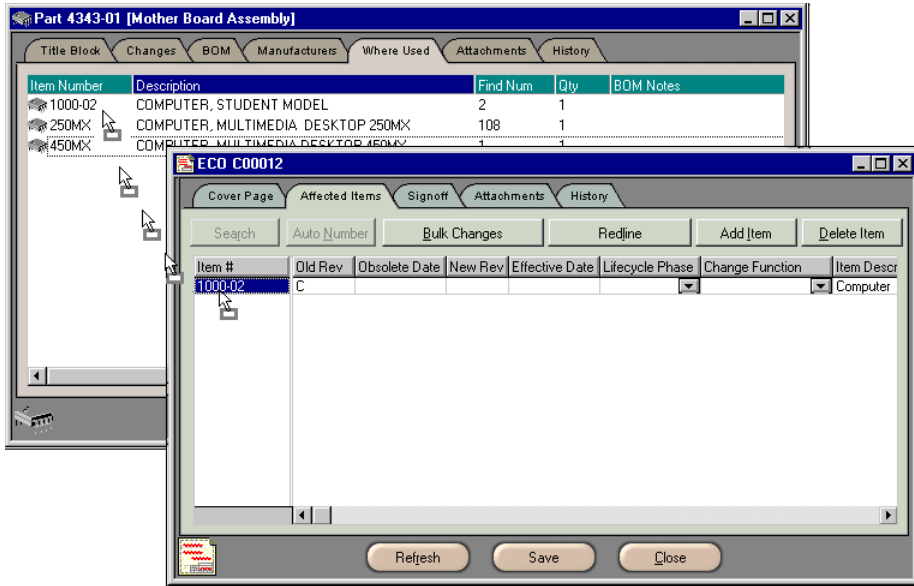
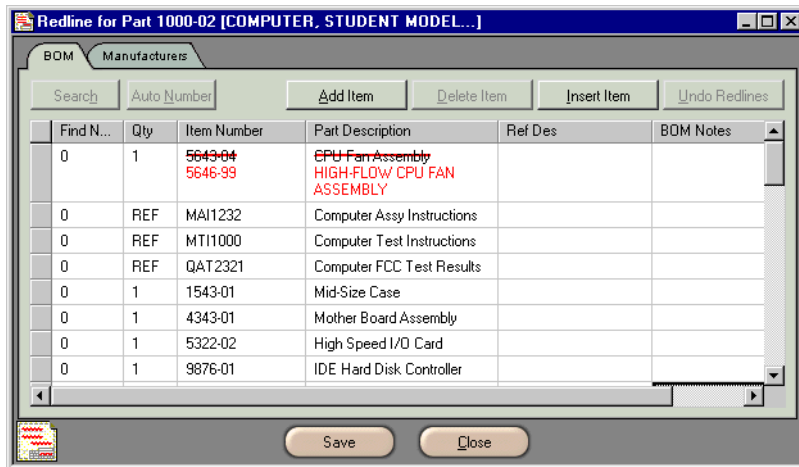


Figure 2-18: Dragging and dropping Items onto the Affected Items tab

### Redlining the BOM of Affected Items

Since Carlos wants to substitute a different fan assembly, he needs to redline the BOM of the affected computers. For each released Item he drags and drops onto the Affected Items tab, Agile CM asks him if he wants to redline its Bill of Materials or Manufacturing data. Carlos clicks yes, and the Redline window is displayed. (Alternatively, this window can be reached by selecting the Item on the Affected Items table, then clicking Redline.)

He selects the Item Number field of the old assembly (#5643-04) and types in the new Number (5646-99). Agile CM shows the new Number in red and automatically enters the new Item's Description, also in red, as shown in Figure 2-19.



Find N...	Qty	Item Number	Part Description	Ref Des	BOM Notes
0	1	<del>5643-04</del> 5646-99	<del>CPU Fan Assembly</del> HIGH-FLOW CPU FAN ASSEMBLY		
0	REF	MAI1232	Computer Assy Instructions		
0	REF	MTI1000	Computer Test Instructions		
0	REF	QAT2321	Computer FCC Test Results		
0	1	1543-01	Mid-Size Case		
0	1	4343-01	Mother Board Assembly		
0	1	5322-02	High Speed I/O Card		
0	1	9876-01	IDE Hard Disk Controller		

Figure 2-19: The Redline BOM table

Carlos does this in the Redline window for each affected Item. Now the change in CPU fan assembly parts will be reflected on the BOM of each computer, once the Change Order is approved and released.

Next, he brings the ECO's Attachments tab to the front, clicks the Add button, and attaches his drawings of the revised part.

The ECO is now complete and ready to be submitted to the CCB (Change Control Board).

**Note** Agile CM also features a Bulk Change wizard that can automatically replace or remove an Item from several assemblies. For more information, see "Bulk Changes to BOM Data" on page 6-19.

## Routing and Approving the Change

Carlos submits his ECO to Dorothy, the Change Analyst. Dorothy examines the information on the various tabs and determines that the ECO is ready to be approved by the Change Control Board. Because Dorothy has an Agile Product Change license, she can "Route" the Change to the Change Control Board approvers and observers as opposed to "Sending" the Change.



**Route ECO C00012**

Please fill in the Approvers and Observers fields below in order to Route this Change.  
The Approvers field should contain a list of names that must approve this Change before it can be released.

Approvers... Bryan Agile;Matthias Agile;Pamela Agile;Kathleen Agile

The Observers field is optional and should contain a list of people that might be interested in the Change but do not need to approve.

Observers... Carlos Agilos;Karen Agilos;Thomas Agilos

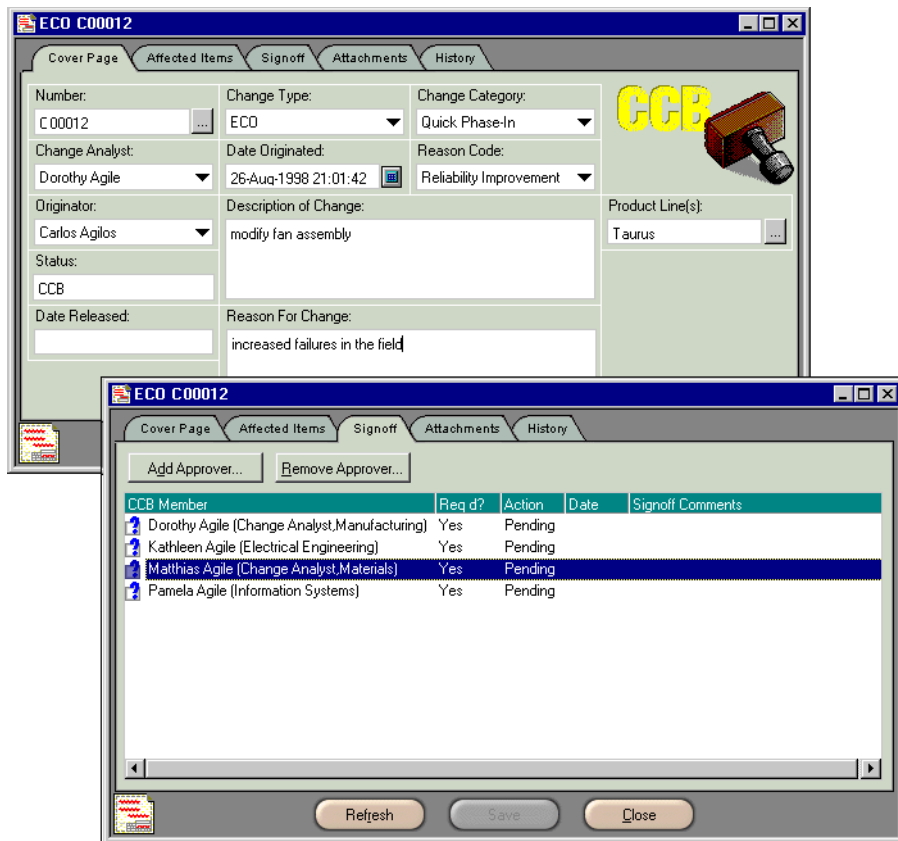
Comments:

We need to take immediate action to prevent this problem from occuring in the future.  
I recommend we replace all CPU fans with this model fan assembly, which has performed very effectively.

Route Cancel ☒ Urgent

Figure 2-20: Routing the ECO to the Change Control Board for review

All the approvers and observers to whom Dorothy routed the ECO receive e-mails notifying them of the pending Change. Matthias (also an Agile CCB user) is one of the approvers. He opens the ECO and examines the information on all of the tabs, including the Cover Page and Signoff tabs, as seen in Figure 2-21.



The screenshot shows two overlapping windows for ECO C00012. The top window displays the 'Cover Page' tab, and the bottom window displays the 'Signoff' tab.

**ECO C00012 - Cover Page Tab:**

- Number: C 00012
- Change Type: ECO
- Change Category: Quick Phase-In
- Change Analyst: Dorothy Agile
- Date Originated: 26-Aug-1998 21:01:42
- Reason Code: Reliability Improvement
- Originator: Carlos Agilos
- Description of Change: modify fan assembly
- Product Line(s): Taurus
- Status: CCB
- Date Released:
- Reason For Change: increased failures in the field


**ECO C00012 - Signoff Tab:**

Buttons: Add Approver..., Remove Approver...

CCB Member	Req d?	Action	Date	Signoff Comments
Dorothy Agile (Change Analyst, Manufacturing)	Yes	Pending		
Kathleen Agile (Electrical Engineering)	Yes	Pending		
Matthias Agile (Change Analyst, Materials)	Yes	Pending		
Pamela Agile (Information Systems)	Yes	Pending		

Buttons: Refresh, Save, Close

Figure 2-21: The Cover Page and Signoff tabs for ECO C00012

Matthias decides to approve the ECO, so he clicks Approve , which opens the Approve dialog box, shown below.

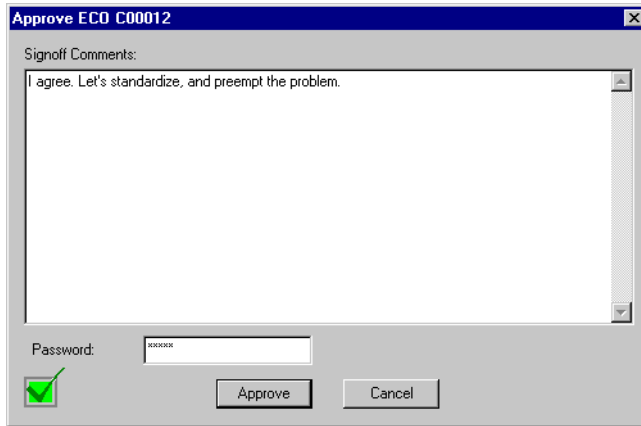


Figure 2-22: The Approve dialog box

Matthias enters his password, types a comment, and clicks Approve. The Signoff tab reflects his approval, as seen in Figure 2-23.

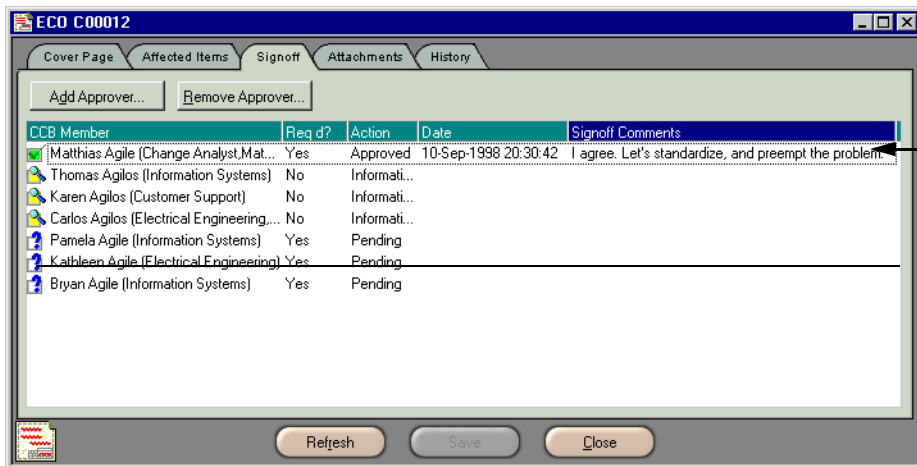



Figure 2-23: An approval on the Signoff tab

When all of the Approvers have approved the ECO, Dorothy releases the Change. She clicks Release , and completes the Release dialog box that appears.

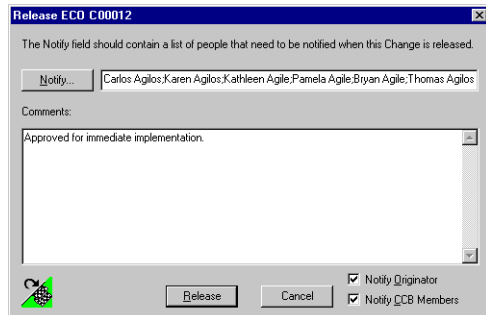


Figure 2-24: The Release ECO dialog box

The Cover Page tab reflects the new status by using the “Released” stamp and graying out all the fields that cannot be modified. Figure 2-25 shows the Cover Page after the Change has been released.

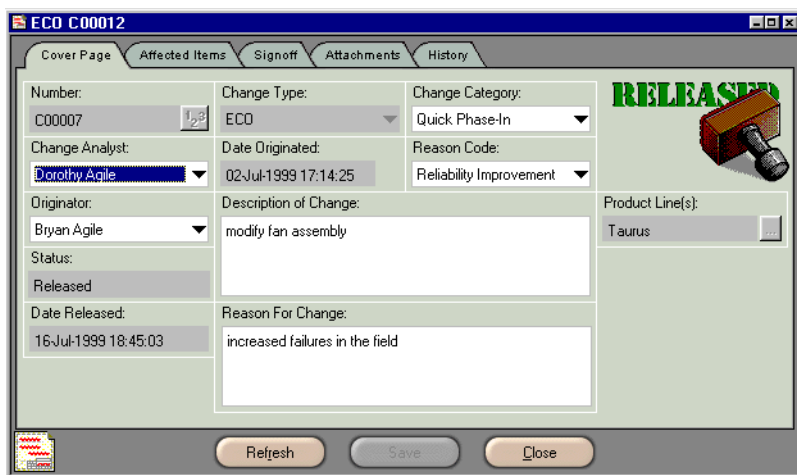


Figure 2-25: A Released ECO

## Using Agile CM with the Agile AML License

Agile AML is designed to help track the Manufacturers who produce parts and those parts themselves (Manufacturer Parts). By creating database objects that represent them, it is possible to track the relationships and activities between manufacturers and the part(s) they provide, and the components in your database. Some examples include: where the part is used, what the manufacturer calls the part, what the part is called in Agile CM, and alternative manufacturers of the part. The first step in using the Agile AML features is to set up the Agile Manufacturer objects in the database. This is explained in detail in Chapter 5, *Working with Manufacturing Objects*.

### Example

Emerald Bicycles is using Agile CM with the Agile AML license to manufacture their Mountain Bicycle. The bicycle calls for a wheel, Part #12345, which Emerald purchases from one of two manufacturers: Acme Manufacturing, their preferred manufacturer, and Nadir Manufacturing, an alternate.

The figure on the next page illustrates the relationship between the Mountain Bicycle (internal assembly) and its wheel (internal part), and Acme Manufacturing (the Manufacturer) who produces the part that is used for that wheel (Manufacturer Part). The scenario that follows demonstrates how that information is stored and used in Agile CM with the Agile AML license.

## Example: Emerald Bicycles

Emerald Bicycles produces a mountain bicycle. The BOM tab shows a wheel, Part #12345, is used as part of the bicycle wheel assembly.

Emerald purchases the wheel from two manufacturers: Acme (the preferred manufacturer) and Nadir (an alternate).

This diagram represents the relationships between the objects in Agile CM, as described in the accompanying text.

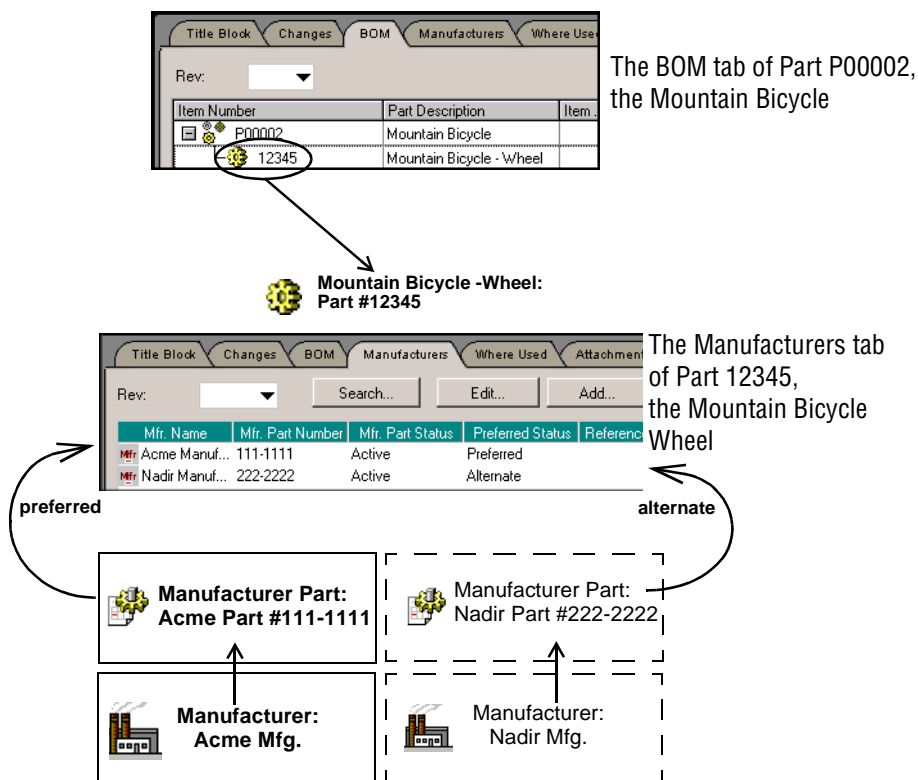


Figure 2-26: Agile AML objects relationships

Figure 2-26 shows the relationships between the different object types in Agile CM with the Agile AML license, and the order in which the data is entered to build those objects. This is explained in step-by-step fashion in the following scenario.

## Scenario Two

Nicholas Emerald is entering the information for the sub-contracted manufacturer of the bicycle wheel. To set up this new relationship in Agile CM, Nicholas first creates a Manufacturer to represent Acme Manufacturing. He enters the company name, address, phone, Web site, e-mail, and other contact information on the General Info tab.

The screenshot shows a web application window titled "Manufacturer Acme Manufacturing". It has four tabs: "General Info", "Where Used", "Attachments", and "History". The "General Info" tab is active. The form contains the following fields and values:

Name:		Mfr Type:
Acme Manufacturing		Manufacturer

Address:		Status:
108 Yatra Place		Approved

City:	State:	Phone:	Fax:
Montreal	Quebec	444/777/9898	444/777/9999

Country:	Postal Code:	Contact:
Canada	H1B 2J6	Pierre Argenot

URL:	Email:
<a href="http://www.acme.com">http://www.acme.com</a>	<a href="mailto:pargenot@acme.com">pargenot@acme.com</a>

At the bottom right, there is a large green stamp that says "APPROVED" with a red brick and a hammer icon. At the bottom of the form, there are three buttons: "Refresh", "Save", and "Close".

Figure 2-27: The General Info tab for Manufacturer Acme Manufacturing

Next he creates a Manufacturer Part to represent the wheel Acme manufactures for Emerald. Acme refers to this wheel as part #111-1111.



**Manufacturer Part 111-1111**

General Info | Where Used | Attachments | History

**ACTIVE**

Description: Wheel

Manufacturer Part Number: 111-1111

Manufacturer Name: Acme Manufacturing

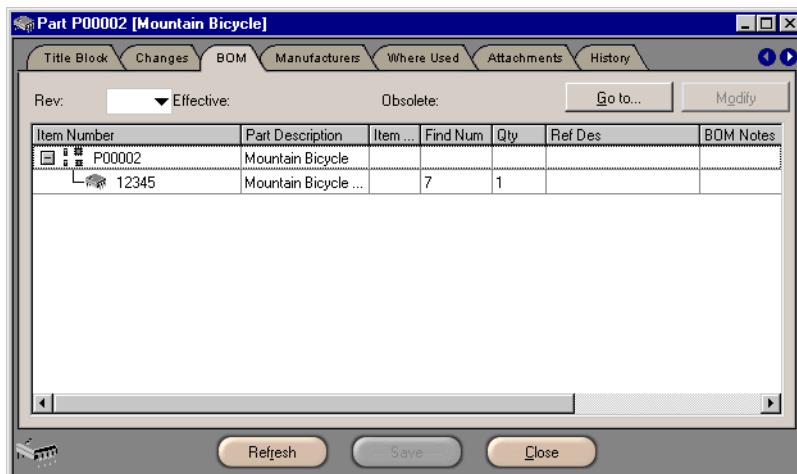
Mfr Part Type: Manufacturer Part

Status: Active

Refresh Save Close

Figure 2-28: The General Info tab for Manufacturer Part #111-1111

Next, Nicholas opens Part #P00002, the internal Part representing the Mountain Bicycle assembly. He selects the BOM tab and locates the bicycle wheel for which Acme's wheel is used.



**Part P00002 [Mountain Bicycle]**

Title Block | Changes | BOM | Manufacturers | Where Used | Attachments | History

Rev: Effective: Obsolete: Go to... Modify

Item Number	Part Description	Item...	Find Num	Qty	Ref Des	BOM Notes
P00002	Mountain Bicycle					
12345	Mountain Bicycle ...		7	1		

Refresh Save Close

Figure 2-29: The BOM tab for Agile Part #P00002, the Mountain Bicycle

Nicholas double-clicks Part #12345, the Mountain Bicycle Wheel, to open it. Then he clicks on its Manufacturers tab to bring that tab forward.



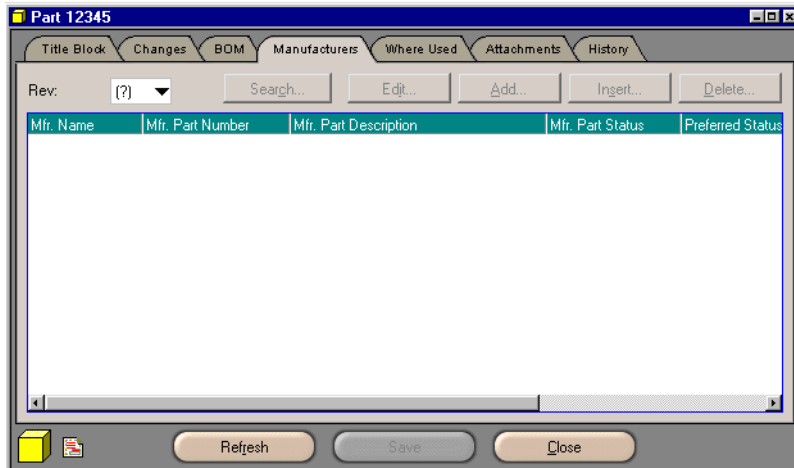


Figure 2-30: The Manufacturers tab for Agile Part #12345, the Mountain Bicycle Wheel

Now Nicholas can set up the relationship between the Emerald Part and Acme Manufacturing's part. He clicks the Add button, selects Acme Manufacturing from the drop list of Manufacturers (where it appears now that Nicholas has created it), and enters the appropriate Manufacturer Part number in the Mfr. Part Number field. He clicks Add to add this to the Manufacturers tab list, then Close to finish the process.

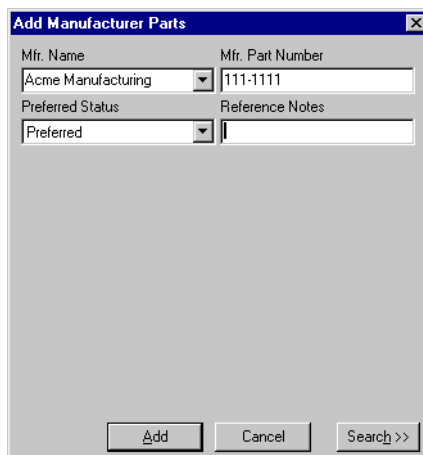


Figure 2-31: The Add Manufacturer Parts dialog box

The changes are reflected on the Manufacturers tab, showing Acme Manufacturing's wheel, Manufacturer Part #111-1111, as the preferred Manufacturer Part.

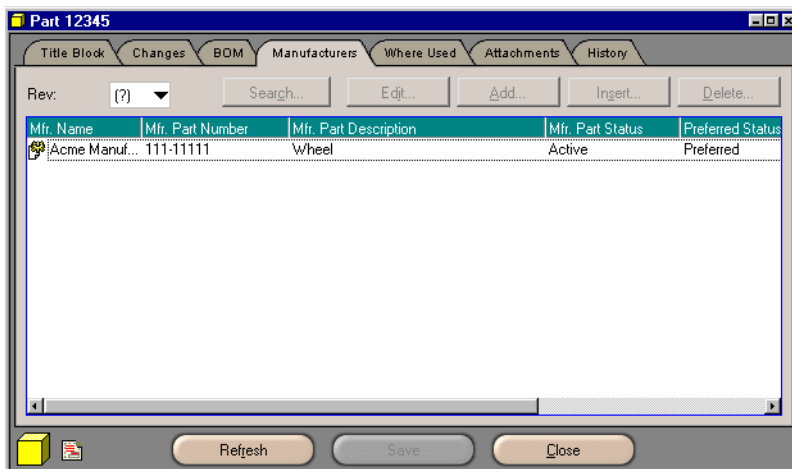


Figure 2-32: The updated Manufacturers tab for Agile Part #12345, the Mountain Bicycle Wheel

To check his work, Nicholas checks the other involved objects. He looks again at Manufacturer Part #111-1111, selecting the Where Used tab, and clicks Refresh to be sure the screen reflects the latest data. There he sees the information for Emerald Bicycle's Part #P00002 listed, telling everyone at Emerald that this Manufacturer Part is the primary part used for the Mountain Bicycle wheel.

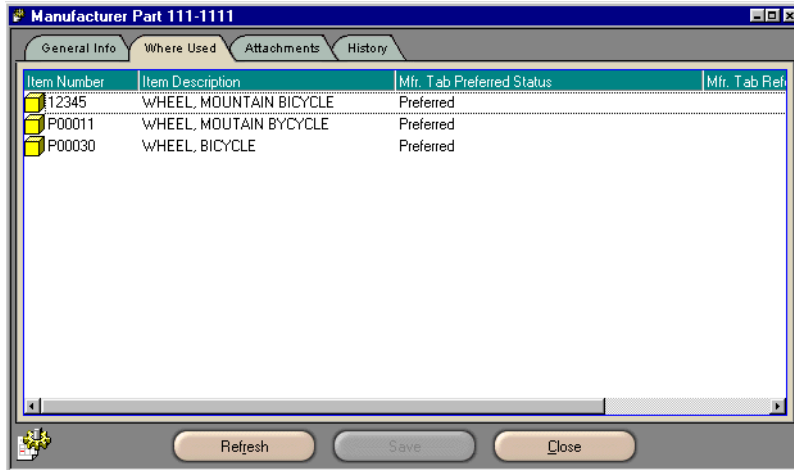


Figure 2-33: The Where Used tab for Manufacturer Part #111-1111

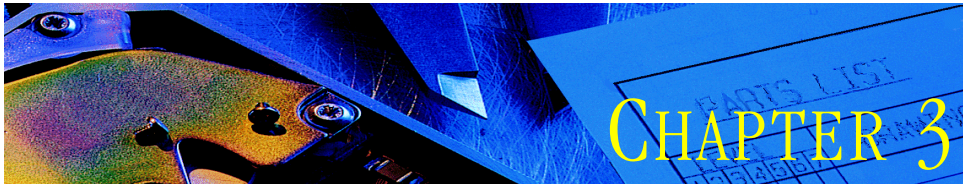
## Review

Nicholas created the Manufacturer first, then the Manufacturer Part. Next, he went to the Part's Manufacturers tab and added the Manufacturer Part there, to represent that this Manufacturer Part is used for the wheel of the mountain bicycle. When he returns to the Manufacturer Part's Where Used tab, he can see this relationship expressed there, as well.

Just as Agile AML license allowed Nicholas to track the manufacturers who produce parts for Emerald Bicycle's manufacturing processes, it gives all users the power to follow the relationships between Parts and the corresponding Manufacturer Parts.

While the scenario described a relatively simple situation of one Manufacturer providing the preferred part, and a second manufacturer providing the alternate part, for the same Mountain Bicycle wheel, you can track complex, many-to-one relationships. (See Figure 5-2 on page 5-5 for a representation of those relationships.)





# Viewing Agile Objects

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*This chapter shows you how to launch Agile CM and work with existing Agile objects.*

*The major sections in this chapter are:*

- ❑ *About Licenses*
- ❑ *Launching Agile CM*
- ❑ *The Agile CM Window*
- ❑ *Locating and Viewing Agile Objects*
- ❑ *Basic Agile CM Tasks*
- ❑ *Where to Go From Here*

**Note** Additional information about Manufacturers and Manufacturer Parts can be found in Chapter 5, *Working with Manufacturing Objects*.

---

## About Licenses

Your access to Agile Product Change and Agile AML is determined by three factors:

- ❑ Which licenses are available at your site,
- ❑ Which licenses are assigned to you, and
- ❑ Which privileges the Agile administrator has granted you.

For instance, if Agile AML licenses are available at your site, you must also have an Agile AML license assigned to you to access Agile AML functions.

There are two Agile Anywhere licensing models available. Only one will be used at your site.

- ❑ Concurrent Licensing — a certain number of licenses are available on the

system. As users log on, a license is allocated to each user. When all the licenses have been allocated, no more users may log on. If all the licenses have been allocated, you will not be able to log on.

- ❑ Subscription Licensing — a certain number of user “seats” are available on the system. Seats are assigned to specific users. If you have a seat assigned to you, you can logon, regardless of how many other users are logged on.

Depending on which licensing model is used at your site, the login process will differ slightly.

## Launching Agile CM

To launch Agile CM:

1. Click **Start** to display the Start menu.
2. Click **Programs**.
3. Click **Agile Anywhere** on the Programs list.
4. Click **Agile CM** on the list of Agile applications.

The Welcome to Agile CM dialog box appears.

## Welcome to Agile CM

The Welcome to Agile CM dialog box prompts you for your Username and Password, as shown in Figure 3-1. The Username field displays the name of the last user to launch Agile CM from that machine.



Figure 3-1: The Welcome to Agile CM dialog box

1. Enter your username. Your username is not case-sensitive.  
Your *username* is assigned by your Agile administrator and is usually an abbreviation of your full name. For example, the name Michael Jones may be abbreviated to MICHAELJ or MJONES.
2. Enter your password. Your password *is* case-sensitive.  
Your *password* is initially assigned by your Agile administrator. You can change your password at any time. The administrator may require you to do so within a set number of sessions. (See “Changing Your Passwords” on page 3-20).
3. If the Check Licenses box appears on the Welcome to Agile CM dialog box, as shown in Figure 3-1 above, then your site uses the Concurrent Licensing model. (See “About Licenses” on page 3-1). Go to Step 4.

If the Check Licenses box does not appear in the Welcome to Agile CM dialog box, then your site uses the Subscription Licensing model.

Click OK now.

The login process is complete. The Agile CM window opens, as seen in Figure 3-3 on page 3-5.

4. For sites with Concurrent Licensing:  
To login with all the licenses assigned to you, click OK, now.  
The login process is complete. The Agile CM window opens, as seen in Figure 3-3 on page 3-5.

Optional: To choose which product Licenses you will use in this Agile CM session, check the Check Licences box. The Check Licenses dialog box appears, as shown in Figure 3-2 below.

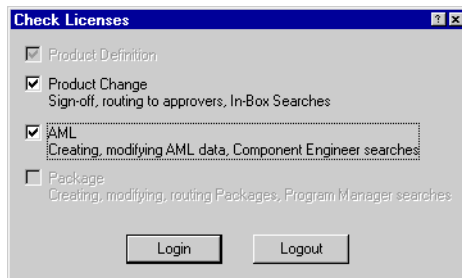


Figure 3-2: The Check Licenses dialog box

All the Agile CM components that you are licensed to access are checked. Click the appropriate check box to deselect a license. When you deselect a

license you will not have access to the functions of that Agile CM component during this Agile CM session. Note that Product Definition is always checked and cannot be deselected. (See *Dropping Licenses in the Concurrent Licensing Model*, on page A-6 for more information.)

Click Login.

The login process is complete. The Agile CM window opens, as seen in Figure 3-3 on page 3-5.

**Note** As a security measure, after five password failures (entering the wrong password), Agile CM will not allow you to log in for thirty seconds. After thirty seconds, Agile CM displays a message in the **Welcome to Agile CM** dialog box, telling you there have been too many login failures. You can then type a new password and continue. Note that another failed login will cause another thirty second time out.

## The Agile CM Window

After you log in, you see the Agile CM window, which has a menu bar, a toolbar, and the Search window.

When you start Agile CM, you might see a smaller window with a button that takes you to the “What’s New” topic in Help. (This window does not appear if an earlier user of this Agile CM installation selected the “Don’t display this screen again” box.)



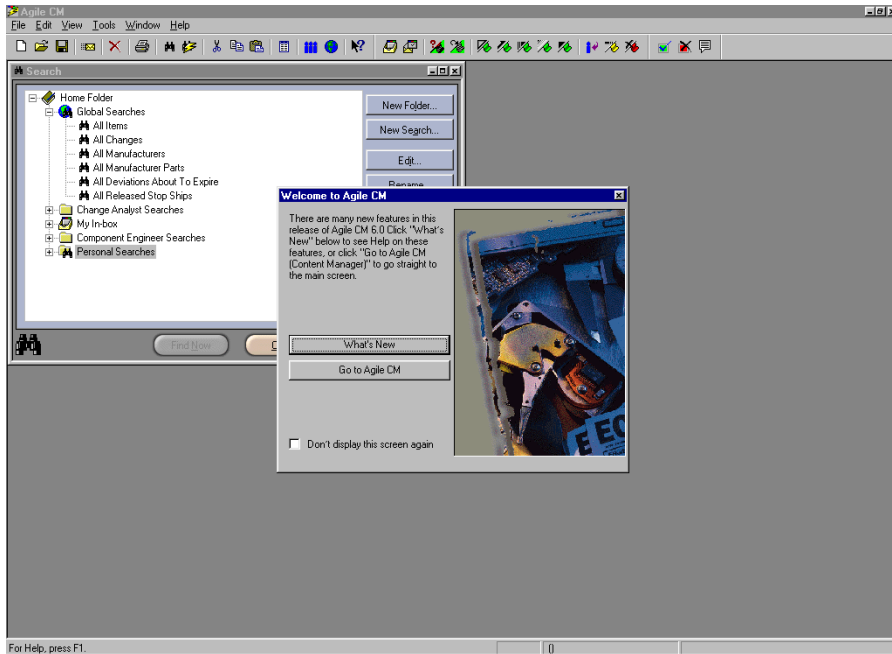


Figure 3-3: The Agile CM Window

## The Agile CM Menu Bar

The Agile CM menu bar contains these menus:

Menu	Actions
File	File handling; creating, opening, closing, saving, deleting, sending, and printing files
Edit	Cutting, copying, pasting, searching
View	Showing or hiding toolbars
Tools	Working with passwords, reports, address books, Internet browsers
Window	Cascading, closing, and selecting windows; arranging icons
Help	Viewing online Help contents and the Agile CM About box

## The Agile CM Toolbars

The following buttons appear on the Agile CM Main and Change toolbars. All toolbar button functions are also available through menu and keyboard commands.

**Note** You might not have access to use all of these buttons, depending on your assigned roles and privileges and whether you have a Product Change license and an AML license.

## Main Toolbar Buttons



The **New Object** button opens the New Object window, where you select which type of object you want to create, and assign a number to the new object.



The **Open Object** button displays the tabbed window for the selected object.



The **Save Object** button saves the modifications you make to the current object.



The **Send** button lets you e-mail an Agile object.



The **Delete Object** button lets you delete the current Agile object.



The **Print Object** button lets you print the information in the current window.



The **Search** button opens the Search window, where you can locate particular types of objects.



The **Quick Search** button opens the Quick Search window, where you can define a narrowly focused search.



The **Cut** button removes highlighted information and places it on the Clipboard.



The **Copy** button copies highlighted information and places it on the Clipboard.



The **Paste** button copies the contents of the Clipboard into editable fields and tables.



The **Reports** button opens the Reports dialog box, where you can view and print Agile reports.



The **Address Book** button opens the Address Book.



The **Internet Browser** button launches the default Web browser and displays the URL specified in the Agile Administrator setup for each user. Agile Software's Web site is the default.



The **Context Sensitive Help** button gives a brief explanation of the selected screen element.

## Change Toolbar Buttons

Toolbar buttons that pertain only to Changes appear when a Change is selected. The buttons appear in the right pane. Which buttons appear depends on

- ❑ The user's privileges
- ❑ The status of the Change

The Change buttons for Agile CM users are shown below.



The **Submit** button switches the status of an Agile Change to "Submitted".



The **Route** button switches the status of an Agile Change to "CCB".



The **Audit** button checks a Change for missing values in required fields and for SmartRules violations. This button is visible only with the required privileges. For information on SmartRules, see the Agile Administrator *User's Guide*. (Note: You can use **Ctrl+C** to copy errors detected with the Audit button, then use **Ctrl+V** to paste them into Notepad or Wordpad for future reference.)



The **Release** button switches the status of an Agile Change to "Released".



The **Implement** button switches the status of an ECO to "Implemented".



The **Close** button switches the status of an ECR to "Closed".



The **Resume** button switches the status of a Stop Ship to "Resumed".



The **Expire** button switches the status of a Deviation to "Expired".



The **First Article Complete** button switches the status of an MCO to "First Article Complete".



The **Return To Originator** button sends the Change back to the originator. If the Change is released, returning it to the originator unreleases the Change.



The **Hold** button switches the status of an Agile Change to “Hold”.



The **Cancel** button switches the status of an Agile Change to “Canceled”.



The Signoff toolbar buttons appear if you have a Product Change license.

### Signoff Toolbar Buttons



The **Approve** button marks your approval of an Agile Change on the Signoff tab.



The **Reject** button marks your rejection of an Agile Change on the Signoff tab.



The **Comments** button lets you enter comments about an Agile Change. The comments appear on the History tab.



Agile Product Change adds automatic e-mail notification to the **Submit**, **Route**, **Release**, **Close**, and **Return To Originator** buttons. This means that when a user clicks one of those buttons, in addition to switching the state of the Change, Agile Product Change also sends an e-mail message to various users. The table below shows which users receive the e-mail.

Button Clicked	E-mail Recipients
Submit	The Change Analyst (most Changes) or Component Engineer (MCOs). If the Change Analyst/Component Engineer field is blank, notification is sent to every user on the Change Analyst/Component Engineer list.
Route	Users listed in the Approvers and Observers fields on the Route dialog box.
Release	Users listed in the Notify field of the Release dialog box.
Hold	Users listed in the Notify field of the Hold dialog box.
Cancel	Users listed in the Notify field of the Cancel dialog box.
Close	Users listed in the Notify field of the Close dialog box.
Resume	Users listed in the Notify field of the Resume dialog box.
Expire	Users listed in the Notify field of the Expire dialog box.

Button Clicked	E-mail Recipients
First Article Complete	Users listed in the Notify field of the First Article Complete dialog box.

The Product Change license also gives users the option to attach comments to the dialog boxes mentioned in the above table. The comments are included in the e-mail notification.

## Customizing the Toolbars

The toolbar buttons are arranged in groups, which are actually separate toolbars. You can detach each toolbar and drag it anywhere in the Agile CM window. If you drag a toolbar all the way to one side it snaps to a vertical position. To drag a toolbar, click a blank area of the toolbar — an area beside a button — and drag to the desired position.

## The Search Window

The Search window helps you find objects in the Agile database. The Search window is explained in “The Search Builder Window” on page 7-14.

The Search process is essentially the same for any object, including Manufacturing object types (Manufacturers and Manufacturer Parts), available to users with an AML license. For more information on the Manufacturing objects, see Chapter 5, *Working with Manufacturing Objects*.

## Locating and Viewing Agile Objects

Objects can be either Items (Parts or Documents), Changes (ECOs, ECRs, Deviations, Stop Ships, or MCOs) or Manufacturing Objects (Manufacturers or Manufacturer Parts).

When you locate and open an object, you will see that object’s tabbed window. In Agile CM, the object’s window appears, as shown in Figure 3-4.

The tabs and fields that you see depend on the object type. For information about these windows, see “Agile Anywhere Items” on page 4-1, “The Change Window” on page 6-3, or “Manufacturing Objects: Manufacturers and Manufacturer Parts” on page 5-5.

**AML** To learn about the additional functionality of MCOs available to users with an AML license, see “Manufacturer Change Orders (MCOs)” on page 6-35.



Figure 3-4: An object window (Item), Agile CM

To locate and open a particular object in Agile CM:

1. Launch Agile CM as described on page 3-2.
2. Open a folder and double-click the appropriate predefined search.
3. In the search results window, double-click the name of the object you want to open.

**Note** If the search locates only one object, Agile CM opens that object automatically.

Or, perform a search and find the object in the Results window. For information on searches, see Chapter 7, *Searching for Objects*.

## About Discovery Privilege

The Discovery privilege is the privilege that allows users to discover the existence of an object in the Agile database. It is similar to the Read privilege, but it provides greater control over access to database objects for enhanced security.

If you do not have Discovery privilege for an object, you will not be able to view the object, and you will not be able to find, or discover, the object in the Agile database.

The Discovery privilege is especially useful for giving subcontractors limited access to your database.

If you do not have Read privilege for an object, you will not be able to open and view that object. However, you can find the object in a Search, see it listed on a BOM tab, on a Where Used tab, or on the Affected Items tab of a Change.

By comparison, if you do not have Discovery privilege for an object:

- ❑ It will not appear on the Results table of a search, even if it meets the search criteria.
- ❑ It will not be listed in a BOM, even if it is part of the assembly.
- ❑ It will not be listed on the Where Used tab.
- ❑ It will not be listed on the Affected Items tab of a Change.
- ❑ It will not be listed on the Manufacturers tab.
- ❑ It will not be listed on the Changes tab of an Item.

Agile Product Change license functions are limited by the CCB member's Discovery privilege. For example, you cannot submit a Change to a Change Analyst who cannot discover that Change. For more details, see Chapter 6, *Working With Changes*.

The Discovery privilege allows the Agile administrator to limit discovery of objects in the following ways:

- ❑ When running a search, the Agile administrator can prevent a set of users from seeing certain objects. These objects are not displayed on the Results table, even though they meet the search criteria. The Agile administrator can choose whether or not to display a warning message at the bottom of the search window.
- ❑ When viewing objects, you can prevent a set of users from seeing certain objects that are listed on these tables:
  - Affected Items
  - Where Used
  - Manufacturers
  - Changes

You can choose whether or not to display a warning message.

- ❑ When viewing the BOM tab of an Item, the Agile administrator can prevent a set of users from seeing certain Objects on the BOM tab. The Agile administrator chooses whether or not to display a warning message. On the BOM tab, the Agile administrator also has the option of displaying either the Item number only or the Item description only, so the user can see a complete BOM, but does not have access to the undiscovered Items.

Note that while one set of users is prevented from seeing certain objects, other users with different Discovery privilege settings are capable of seeing those same objects.

The creator of an object is able to read and discover the object.

Discovery privileges are assigned by the Agile administrator. If you have questions about your Discovery privileges, see your Agile administrator.

## Basic Agile CM Tasks

The following topics describe general tasks you can perform in an Agile object window.

### Viewing a Different Revision

You can choose to see a different revision of an object from some of the object tabs. The following tabs let you select a different revision to view:

- ☐ Title Block tab
- ☐ BOM tab
- ☐ Manufacturers tab
- ☐ Attachments tab

To view a different revision:

1. On one of the tabs listed above, click the ▼ at the end of the Rev drop-down list.
2. Select a revision.

When you select a different revision, *all* the tabs will display information from the selected revision. For example, if you switch from Rev C to Rev B on the BOM tab, the other tabs will also show Rev B.

The ECO number is displayed next to its corresponding rev in the drop-down Rev list. For example, if ECO E54321 released Rev C of a part, then Rev C on the drop-down list will read “C E54321”. A revision number or letter inside parentheses indicates that the revision is pending, not yet released. (For details, see “Creating a Pending Revision” on page 4-23.)

An MCO does not create a new revision of a part, however, the MCO number is displayed next to the corresponding rev in the drop-down Rev list. For example, if there is a pending MCO M12345 against Rev B of a Part, then on the Rev drop-down list, that Rev will be listed as “(B) M12345”.



## Sorting Columns

To sort the columns of a table, click the column head of the field you want to sort by. The column will be sorted alphanumerically in ascending order. Clicking again will reverse that order.

The following tables can be sorted.

- ☐ Search Results
- ☐ Changes
- ☐ BOM
- ☐ Manufacturers (with AML license)
- ☐ Where Used
- ☐ History
- ☐ Attachments

**Note** To sort the columns of the BOM tree, you must first select the parent Item. The columns of the BOM tree will not sort if a child Item is selected.

## Updating Data in Windows

You can use the **Refresh** button to update the data displayed in an object window.

**Note** When an Item window is not updated, Agile CM may not behave as expected. Consider the example of Part 123 that has the pending Change ECO 345. If you delete ECO 345 while Part 123 is open, the Change still appears on the Changes tab. Since Agile CM does not allow you to delete Items that have released or pending Changes, you won't be able to delete Part 123 until you Refresh the data display so ECO 345 no longer appears on the Changes tab.

## Changing Tab Styles and Form Colors

You can customize the form colors and tab styles that are displayed for each type of object. The customized color and tab choices apply to the copy of the Agile CM client on your computer only.


You have a choice of nine colors and two different tab styles: square multi-colored tabs or rounded tabs the same color as the object form.



Figure 3-5: Tab Styles

You can set a specific color and tab style for each class of object, including Parts, Documents, ECOs, ECRs, MCOs, Deviations, Stop Ships, Manufacturers, Manufacturer Parts. All the objects in a class share the same color scheme; for instance, if you change the color of the subclass Electrical Part, all the subclasses under Parts will be displayed with that color.

To set form colors and tab styles:

1. Select and open an object.
  2. Right-click on any part of a tab that is not a field.
  3. From the Speed Menu, choose **Select Color ...**.
  4. The **Color Selection** dialog box is displayed.
  5. Click  and choose a color from the scrolling list. This will be the main background color of the tabs.
  6. To select square, multi-colored tabs, click the check box next to the **Display Square Shape Tabs** field.  
To select rounded tabs the same color as the background, leave this check box blank.
  7. Click **OK**.
- All the objects of that subclass will be displayed on your computer using the settings you have selected.

## Copying and Pasting Fields and Tables

Agile CM lets you copy data from, and paste data to, editable fields such as the Description of Change field on the Title Block tab, or the Description field of the Cover Page tab.

You can copy the contents of an editable field even if the object has been released, but you can only paste into the editable fields of unreleased objects.

Your Agile administrator can define certain fields as “Editable After Release.” If you have appropriate privileges you can paste information into those fields, even if the Item has been released.


If you can select the contents of a field, you can copy the selection and paste it into other applications. For example, you can copy the content of the Description field and paste it into Microsoft Word. The fields that are selectable will vary depending on your privileges and the status or LifeCycle phase of the object.

Agile CM also lets you copy tables, or parts of tables, and paste them into other applications. For example, you can copy the contents of a Changes tab and paste it into a Microsoft Excel spreadsheet.

You can copy tables from

- ☐ The Changes tab
- ☐ The Where Used tab
- ☐ The Attachments tab
- ☐ The Affected Items tab
- ☐ Search Results window
- ☐ The BOM tab
- ☐ The Manufacturers tab

To copy a table or a portion of a table:

1. On the Affected Items tab, click and drag to select the portion you wish to copy. For other tables, click and hold Shift to select.
2. Click the Copy button .

## Modifying Fields

With sufficient privileges, you can modify editable fields on tabs and tables. You can only modify fields that have specifically been made editable by your Agile administrator.

To edit a field that does not have a drop-down arrow button, select the field and type in the modification.

To edit a field that has a drop-down arrow button, click the button and select from the list that appears.

## Modifying Date Fields

You can modify Date fields manually or by using the calendar widget.

### Manually Modifying Date Fields

To edit the date and time stamp:

1. Click and drag to select the date and time stamp.

2. Enter the new date in the mm/dd/yyyy format
3. Press the Spacebar.
4. Enter the time stamp in the hh:mm:ss format (hour:minute:second). This step is optional; if you do not enter a time, the time stamp defaults to 00:00:00.

**Note** Agile CM will not accept the new date without a space between the date and time stamp.

To edit just the time stamp:

1. Click and drag to select the time stamp.
2. Enter the new time in the hh:mm:ss format.
3. Press the Tab key or the Enter key

### Using the Calendar Widget to Modify Date Fields

To use the Calendar widget:

1. (In a date field) Click  to open the calendar widget.
2. Select a date from the calendar.

Agile CM enters the new date and resets the time stamp to 00:00:00.



Figure 3-6: The Calendar widget, Agile CM

To switch to a different month or year:

- Click the Forward or Reverse buttons to switch to an adjoining month.

**Note** Agile Anywhere Release 6 is certified to be Year 2000 compliant. See Agile's web site (<http://www.agilesoft.com/>) for more information.

## Printing Windows and Tabs

Agile CM lets you print the information in the Search Results window and on the tabs of objects. (For batch printing of image files, see “Batch Printing Images in Agile CM” on page 10-23.)

When a window is active:

1. Click the Print button .

The Print dialog box appears, as shown below.

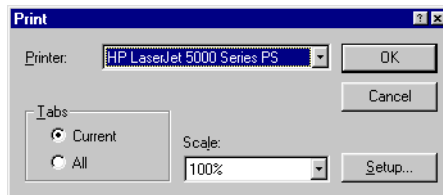


Figure 3-7: The Print dialog box

2. If appropriate, adjust the default settings.

If you are printing a tabbed window, the Tabs box is enabled. Click **Current** to print the information from the tab which is on top or click **All** to print the information from every tab in the active window.

3. Click **OK**.


The **Setup** button opens the Properties window of the selected printer.

## E-mailing Objects

You can e-mail any Agile object. The mail message will contain an icon that represents the mailed object. If the recipient has the Agile software, the recipient can double-click the icon to view the object.

**Note** Your Agile administrator determines what types of e-mail attachments you are configured to receive.

To e-mail an Agile object:

1. Select the object.
2. Click the Send  button.

Agile CM opens the Send <object> dialog box, as shown in Figure 3-8.

3. Type the recipients' names in the Notify field (names must be separated by semicolons and are case sensitive).

Or

Click  .

When you click  , the Address Book dialog box appears, as shown in Figure 3-8. For more on the Address Book, see the next section.

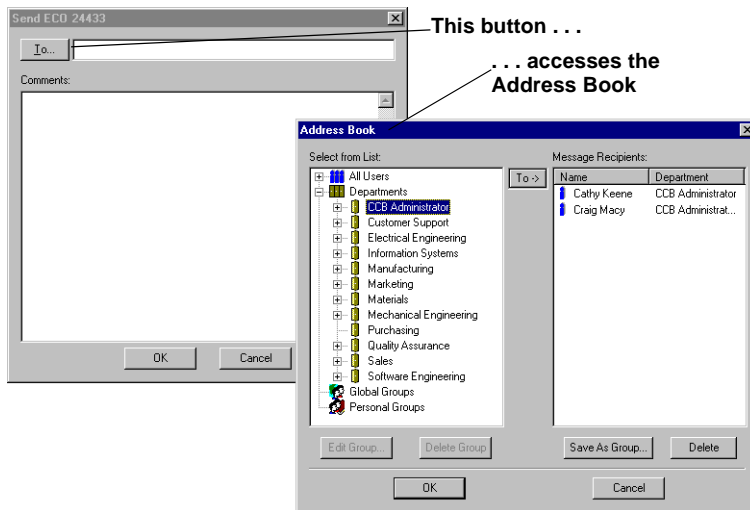


Figure 3-8: The Send dialog box and Address Book, Agile CM


4. Enter any comments in the Comments field.
5. Click OK to mail the object.

## Using the Address Book

The Address Book lists all the individuals who use Agile CM and Agile iCM. Users are grouped into folders. Each user appears in at least one of the folders; most users will appear in more than one folder.


The Address Book contains four top-level folders: All Users, Departments, Global Groups, and Personal Groups. Your Agile administrator determines the contents of the All Users and Departments folders. The Agile administrator and Agile CM users with sufficient privileges determine the contents of the Global Groups folder. The local user determines the contents of the Personal Groups folder.

Use the Address Book to determine which users receive the mail message. You can select users singly or in groups.

You can access the Address Book by clicking the **Address Book** button  in the Agile CM main toolbar, or when you are performing actions that involve sending an object or a notification (e.g. routing a Change).

### Selecting Users From the Address Book


To select a user:

1. (In the Send <object> dialog box) Click .

The Address Book dialog box appears.

2. Expand the appropriate folder down to the individual user level.
3. Double-click the appropriate user.

Or

Select the user and click .

To select all the members in a group, double-click the name of the group.

4. Click OK.

The recipients are placed in the To... field of the Send <object> dialog box.

**Note** If a folder contains other folders, every user in every folder is added to the Message Recipients box.

### Creating Groups

To create a new group in Agile CM:

1. Select the appropriate users, (refer to *Selecting Users...* above).  
They appear in the Message Recipients field.
2. Click the **Save As Group** button.  
The New Group dialog box appears.
3. Select a destination folder from the **Save In** list.
4. Enter a name for the new group in the Group Name field.
5. Click OK.

### Editing Groups

To edit a group in Agile CM:

1. Select the group.
2. Click the Edit Group button.  
The Edit Group multi-select window opens.
3. Add and/or remove group members as appropriate.
4. Click OK.

### Changing Your Passwords

Depending on how your Agile administrator has configured your password settings, you may have two separate passwords for login and approval, or you may have one password for both login and approval. (If you have questions regarding the system settings, consult your Agile administrator.)

If you use both Agile CM and Agile iCM, your username and approval passwords are the same for both applications.

### Changing a Single Password

To change your password if you have a single password:

1. Select Tools | Change Password on the menu bar.  
The Change Password dialog box appears.
2. Type your old password in the Old Password field.
3. Type your new password in the New Password and Verify Password fields.  
**Passwords are case sensitive**, so you must enter your password exactly the same way every time.
4. Click OK.

### Changing Separate Login and Approval Passwords

To change your password if you have separate login and approval passwords:

1. Select Tools | Change Password on the menu bar.  
The Change Password dialog box appears.
2. Select to change one or both passwords, then click OK.
3. Type your old password or passwords in the Old Password field or fields.
4. Type your new password or passwords in the New Password and Verify Password fields. **Passwords are case sensitive**, so you must enter your password exactly the same way every time.



5. Click OK.

**Note** If you have separate login and approval passwords, you must choose different passwords for login and approval. Agile CM does not allow you to choose the same password for both login and approval.

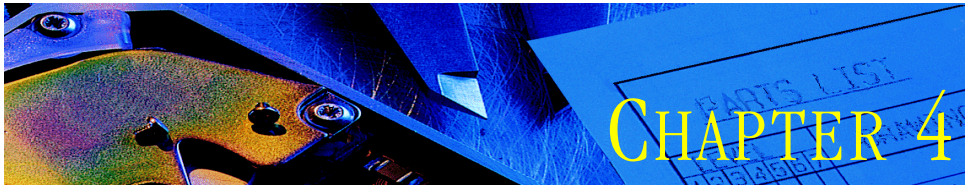
## Where to Go From Here

For specific information on Agile Items, see Chapter 4, *Working With Items*.

For questions regarding Manufacturing objects (Manufacturers and Manufacturer Parts), see Chapter 5, *Working with Manufacturing Objects*.

Specific information on Changes is in Chapter 6, *Working With Changes*.





## CHAPTER 4

# Working With Items

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*This chapter describes the Item window and its tabs. It also shows you how to create, copy, delete, and edit Agile Items.*

*The major sections in this chapter are:*

- ❑ *Agile Anywhere Items*
- ❑ *Item Window Tabs*
- ❑ *Creating Agile Items — The Basic Process*
- ❑ *Other Ways to Create Items*
- ❑ *Working With Agile Items*
- ❑ *Working with Released Items*
- ❑ *Incorporating and Unincorporating Items*

---

## Agile Anywhere Items

Agile Anywhere Items can be Parts or Documents. The Agile AML license introduces two additional object types, the Manufacturer and the Manufacturer Part. While these look like Items, they are different, and so are addressed separately in Chapter 5, *Working with Manufacturing Objects*.

## The Item Window

To locate and open an Item, follow the instructions in “Locating and Viewing Agile Objects” on page 3-9.







A typical Item window is shown in the next figure. Remember, your Agile administrator might have changed the Agile CM interface in such a way that the window may look different in some ways.



Figure 4-1: An Item Window, Agile CM

## Item Window Icons and Buttons

Agile CM Item windows can have up to three icons in the lower left corner.

The first icon	indicates whether an object is either a Part  (Your Agile administrator chooses which one of these three available icons will be displayed to indicate a Part.)	 Part
		 Part
		 Part
	or a Document.	
The second icon	is visible if the Item has any pending Changes. You can click this icon to bring the Changes tab to the front.	
The third icon	is visible if the Item has any attached images or files. You can click this icon to bring the Attachments tab to the front to view it. For more information see “Viewing Images in Agile CM” on page 10-13.	

These buttons are available at the bottom of Agile CM Item windows:

- ❑ The **Refresh** button updates the Item window to show the latest information from the Agile database.
- ❑ The **Save** button saves modifications made to the fields in the Item window. The Save button is active when an object is locked, even though you might not have made a direct edit. For more information, see “Object Locking and Saves” on page A-2.
- ❑ The **Close** button closes the Item window.

## Item Window Tabs

When you view an Item, it appears as a tabbed object in a separate window. The following table shows the tabs and the default fields for Items. The page references given beside the name of each tab indicates where that tab is discussed.

Item Tab Name	Tab Fields include	Tab Information includes
Title Block (page 4-4)	Product Lines, Part Type, Part Category, Rev Release Date, Rev Incorp Date, Description, Size, Number, Rev	General information about the Item
Page Two (optional, page 4-14)	(user-defined)	Unique fields defined by the Agile administrator
Page Three (optional, page 4-15)	(user-defined)	Unique subparts fields defined by the Agile administrator, such as subclasses, unique to each subclass
Changes (page 4-8)	Pending Changes: Type, Number, Proposed Rev, Status, Description Change History: Rev, Lifecycle Phase, Status, Rel Date, Inc Date, Effective Date, Obsolete Date, Type, Number, Description	Any pending or released Changes against the Item
BOM (page 4-9)	Item Number, (Attachment indicator), (Manufacturer Part indicator), Part Description, Item Rev, Find Num, Qty, Ref Des, BOM Notes. Description, Qty, Ref Des, Effective Date, Find Num	The Item's Bill of Materials

Item Tab Name	Tab Fields include	Tab Information includes
Manufacturers (page 4-9)	Mfr. Name, Mfr. Part Number, Mfr. Part Descriptions, Mfr. Part Status, Preferred Status, Reference Notes	Manufacturer and Manufacturer Parts information regarding sources for that Part
Where Used (page 4-11)	Item Number, Description, Find Num, Qty, BOM Notes	Where the Item is used
Attachments (page 4-12)	Image Description, File List, File Description, File Name, Checkout User, Checkout Date, Checkout Folder	Attached drawings and files
History (page 4-13)	Action, Rev, User, Server Date_Time, Details, Comments	Shows actions taken on the Item — for example, when Attachments were added and removed

### Dynamic Web and E-Mail Links from Agile Objects

Text fields on Agile object tabs are dynamically featured to create active links to the Web browser when you enter a URL (<http://...>).

In Agile CM, text fields can also create active links to the e-mail system when you enter an e-mail address ([joeagile@agile.com](mailto:joeagile@agile.com)) into any text box of an Agile object.

Following is a description of the tabs that make up an Item view, and the information you can find on them.

### Title Block Tab

The Title Block tab has fields that contain the information found on a typical paper based title block. A typical Title Block tab is shown in Figure 4-2.

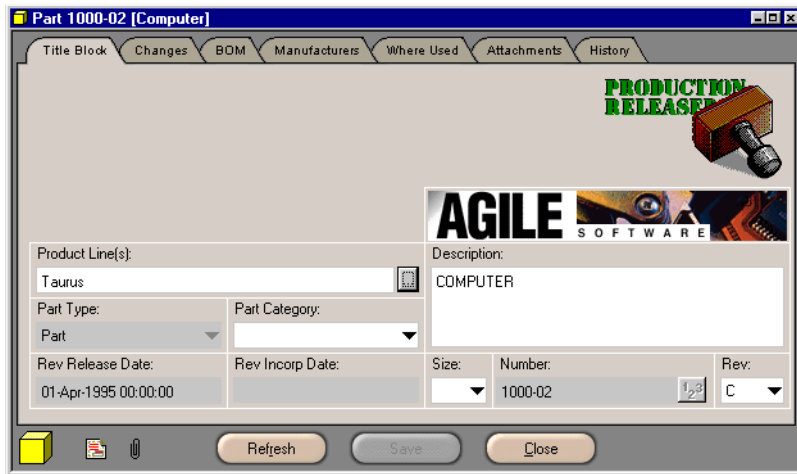



Figure 4-2: A Title Block tab, Agile CM

Some fields are filled in automatically; you complete the rest. You may not be able to edit the contents of some fields.

If the field has a drop-down indicator , and the indicator is grayed, the field cannot be edited.

The contents of a field cannot be edited if:

- ❑ The Item has been released, and you do not have the privilege that allows you to modify released Items
- ❑ Your privileges don't allow you to modify it (except for the Rev field)







For information on editing the Title Block fields, see “Fields on the Title Block Tab” on page 4-6.

**Note** Depending on your privileges, you may modify the Title Block entries of an Item with either no revisions released, or at least one revision released. See your Agile administrator if you have questions about privileges.

### Lifecycle Phase on the Title Block Tab

Agile CM uses a Lifecycle stamp in the upper right corner of the Title Block tab to indicate the production Lifecycle Phase of an Item. (The out-of-the-box Lifecycle stamps are shown next to each phase, below. What you see may differ, however, if your Agile administrator has customized the Lifecycle names and stamps for your workplace.)

The following table shows the defaults (out-of-the-box):

Lifecycle Stamp	Lifecycle Name	Lifecycle Definition
	Preliminary	The Item has not been released.
	Prototype Released	The Item has been released to be built in very limited quantities for testing.
	Pilot Released	The Item has been released to be built in limited initial quantities.
	Production Released	The Item has been released for regular production.
	Inactive	The Item is temporarily not in use and may be reactivated.
	Obsolete	This Item is no longer in use.

## Fields on the Title Block Tab


The Title Block tab contains the following fields:

Field	Definition
Product Line(s)	The product group or groups that include this Item; select from the list.
Description	Text that describes the Item. By default, descriptions can be up to 100 characters, counting spaces and carriage returns (carriage returns count as two spaces). The first 40 characters of the description appear in the title bar of the Item window.








Field	Definition
Part Type	The subclass of this Item; automatically completed when the Item is created. See “Changing an Item’s Subclass” on page 4-27 for more information.
Part Category	The category that includes the Item; select from the list.
Rev Release Date	The date an Item is released; automatically completed when the Item is released.
Rev Incorp Date	The date an Item is incorporated; automatically completed when the Item is incorporated.
Size	Drawing size; select from the list.
Number	The Item’s number; automatically completed when the Item is created.
Rev	The current revision of the Item; automatically completed when the Item is released. Includes a drop-down list of previous and pending revisions.

### Viewing Different Revs of the Same Item

To view a different revision of an Item, click the Rev field arrow  and select the Rev you want to view from the list that appears. The tab fields will update to reflect that revision of the Item.

### Title Block Tab Buttons

The following table shows buttons on the Title Block tab.

Button	Action
 Product Line(s)	Opens a multi-list box. The multi-list box lets you select more than one entry to place in the Product Line(s) field.
 Part Type	Opens the Part Type list. This field is automatically completed when the Item is created. See “Changing an Item’s Subclass” on page 4-27 for more information.
 Part Category	Opens the Part Category list. Click an entry on the list to place that entry in the Part Category field.
 Size	Opens the (drawing) Size list. Click an entry on the list to place that entry in the Size field.
 Auto Number	Assigns the next autonumber to the object, using the schema assigned to that object type.
Refresh	Refresh display with the most current data in the database.

Button	Action
Save	Saves the modifications made to any and all of the tabs in the Item window, even if the modified tab is not on top.
Close	Closes the Item window.

## Changes Tab

The Changes tab displays a list of Changes related to the Item you are viewing, displayed in two panes. The upper pane shows pending and rejected Changes, including Changes on hold, and the lower pane shows released and canceled Changes. (Changes returned to the originator are not displayed. This data is removed from the Changes tab when the Change is returned to the originator, and gets transferred to and stored on the History tab.) Agile CM automatically fills in the information on this tab.

**Note** If you do not have Discovery privilege for a Change, it will not appear on the Changes tab. You may see a message at the bottom of the window telling you how many Changes are not displayed. For more information, see “About Discovery Privilege” on page 3-10. If you have questions about your Discovery privileges, see your Agile administrator.

Double-click the icon to open that Change.

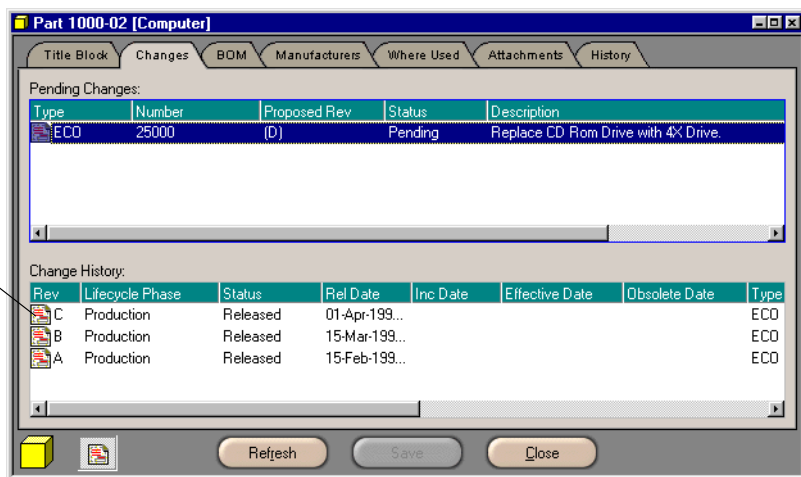


Figure 4-3: The Changes tab of an item, Agile CM

The Changes tab has two tables, Pending Changes and Change History. The Change History table shows Changes that have been completed, while the Pending Changes table shows Changes that are not yet released.

**Note** Although its name is similar, the History tab shows actions made against an Item, while the Change History table on the Changes tab lists released Changes for the Item.

### Viewing a Change on the Changes Tab

To open a Change listed on the Changes tab, double-click its icon (as shown in Figure 4-3). The Change opens with the Cover Page tab on top. Or, you can use the right mouse button to open a change with a different tab on top: right-click the Change's icon and then select from the menu that appears.

### Modifying the View of the Changes Tab

You can change the view of the Pending Changes table or the Change History table (or both) by choosing among Large Icons, Small Icons, and Details (the default view).

To change a table view:

1. Right-click inside a table.
2. Select a view from the list that appears.

### BOM Tab

The BOM tab lists all the Items on an Item's Bill of Materials. For details on the BOM tab, see Chapter 8, *Working with Bills of Materials (BOMs)*.

### Manufacturers Tab

The Manufacturers tab displays information taken from related Manufacturer and Manufacturer Part objects. (See Figure 4-4). If you have an Agile AML license and you have the appropriate privileges, you can use this tab to construct an approved manufacturers list (AML) for the Item.

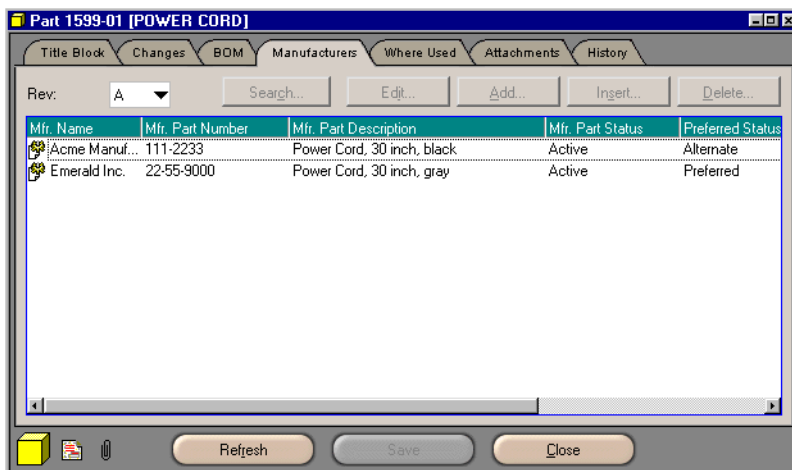


Figure 4-4: The Manufacturers Tab of a Part, Agile CM

**Note** This tab may be hidden in systems not licensed for Agile AML.

The Manufacturers tab is used to display, in a sortable table, information about:

- ❑ the Manufacturers who produce that part and
- ❑ the Manufacturer Part which they supply, including:
  - whether the Manufacturer Part is the preferred or an alternate part
  - whether they are currently an active manufacturer of that part
  - the manufacturer's part number corresponding to the Part in Agile Anywhere.

In the same manner that you can open listed Items directly from other tab views, you can also open listed Manufacturer Parts directly from the Manufacturers tab. Double-clicking the row in this table opens the Manufacturer Part with the General Info tab on top.

You can also use the right mouse button to open a Manufacturer Part with a different tab on top:

1. Right-click the Manufacturer Part's icon in the Manufacturers tab.
2. Click Open Manufacturer Part.
3. Select from the menu that appears.

Note: You can click Open Manufacturer in Step 2 above to open the Manufacturer directly from the Manufacturers tab.

**Note** If you do not have Discovery privilege for a Manufacturer, it will not appear on the Manufacturers tab. You may see a message at the bottom of the window telling you how many Manufacturers are not displayed. For more information, see “About Discovery Privilege” on page 3-10. If you have questions about your Discovery privileges, see your Agile administrator.

As with the BOM tab on Items, the Manufacturers table can be modified through a redline process, if you have a Product Change license and an AML license and you have sufficient privileges. For details on working with the Manufacturers tab, see “Associating a Manufacturer Part with Its Corresponding Item” on page 5-14.

## Where Used Tab

The Where Used tab lists all the assemblies that use the Item. Agile CM automatically completes this tab. Figure 4-5 shows the completed Where Used tab for Part #6598-01, a DC Power Cable.

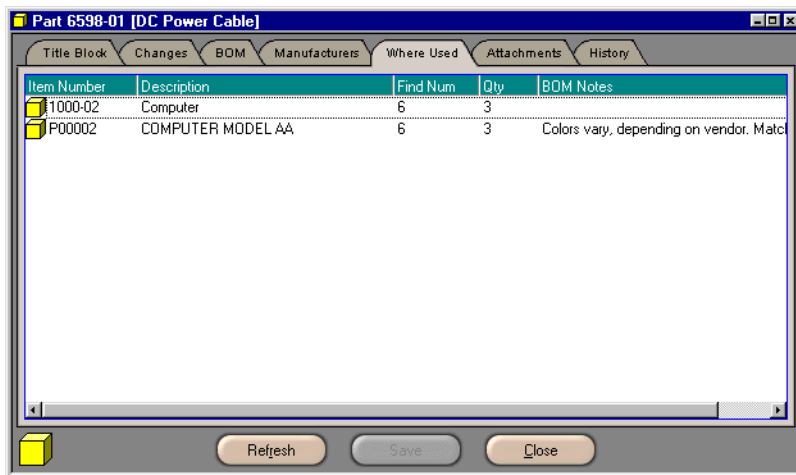


Figure 4-5: A Where Used tab, Agile CM

You can view an Item on the Where Used tab by double-clicking its row.

**Note** If you do not have Discovery privilege for an Item, it will not appear on the Where Used tab. You may see a message at the bottom of the window telling you how many Items are not displayed. For more information, see “About Discovery Privilege” on page 3-10. If you have questions about your Discovery privileges, see your Agile administrator.

You can use the right mouse button to open the Item with a different tab on top:

1. Right-click the Item's icon.
2. Click Open.
3. Select from the menu that appears.

## Attachments Tab

All objects have an Attachments tab. The Attachments tab lists the images and files that have been attached to the Item. (See Figure 4-6).

You can view any image or file attached to an object, provided the Agile CM Viewer supports that image format or you have the appropriate application for opening the selected file. If your computer does not have the application used to create a file, you are prompted to select a program with which to open the file. (A list of the supported formats can be found in “Agile CM Viewer Specifications” on page 10-26.)

Images are typically drawings or scanned images. Files are typically documents, non-viewable files, compressed files, and so on. For more details, see Chapter 10, *Working with Attachments*.

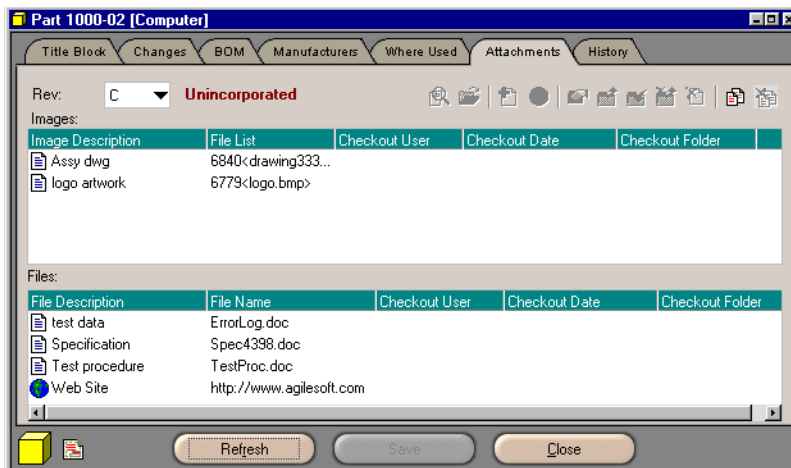


Figure 4-6: An Attachments tab, Agile CM

## History Tab

The History tab shows a summary of actions taken against the Item, including a description of the action, which user took the action, the date of the action, and other details. The Figure 4-7 shows the History tab.

**Note** If you do not have the ReadHistory privilege for Parts, you will not see the History tab. If you have questions about your privileges, see your Agile adminisitrator.



Figure 4-7: The History Tab, Agile CM

## The History Browser

The History Browser makes it easier to view and read the contents of the fields on the History tab. To open the History Browser, double-click a row on the History tab. The contents of the selected row appear in the History Browser, as shown in Figure 4-8.

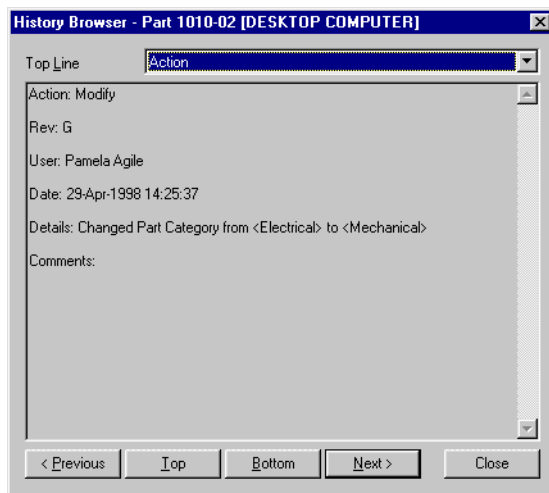



Figure 4-8: The History Browser

## The History Browser Buttons

The following table describes the buttons on the History Browser.

Button	Action
 Top Line	Selects which field appears at the top of the browser.
<Previous	Shows the preceding line of history for that Item.
Top	Shows the first line of history for that Item.
Bottom	Shows the last line of history for that Item.
Next>	Shows the following line of history for that Item.
Close	Closes the History Browser.

## Page Two Tab

Your Agile administrator can add a custom tab to objects. This tab is referred to as the Page Two tab, because it is always inserted directly after the Title Block for Items, the Cover Page for Changes, or the General Info tab for Manufacturing objects.



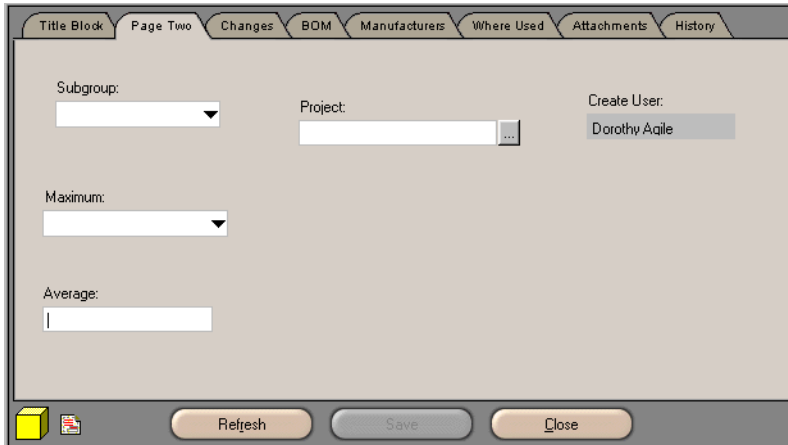


Figure 4-9: Example of a Page Two tab of an Item, Agile CM

The **Page Two** tab contains the customized fields your Agile administrator has defined and named. Its appearance on your system will be different than the example shown here. (The **Page Two** tab may have a different name on your system if your Agile administrator has renamed it.) If you are uncertain about how to use this tab, contact your Agile administrator.

**Note** Certain privileges are required to modify Page Two data for preliminary state objects and for revised objects. See your Agile administrator.

## Page Three Tab

The **Page Three** tab is also a customizable, optional tab, and it always follows the **Page Two** tab. It allows Agile administrators to define and display attributes individual to each subclass (for example, the subclass Resistor could have the attributes Resistance, Package, and so on, while the subclass Capacitor could have the attributes Capacitance, Material, and so on).

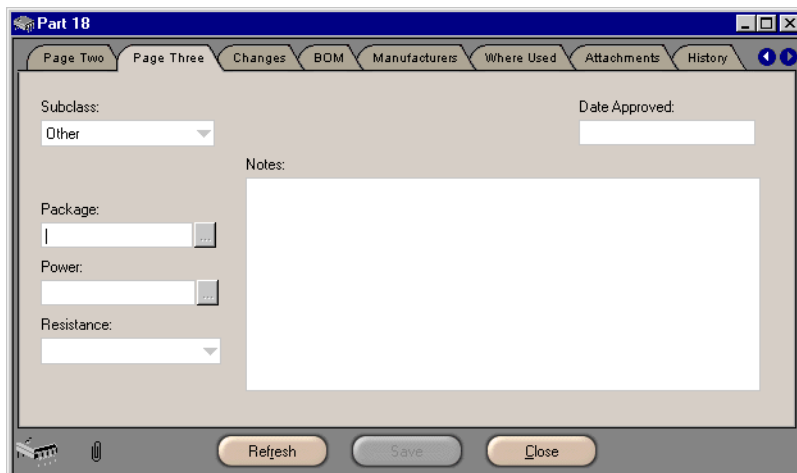


Figure 4-10: The Page Three (Subclasses) Tab of an Item, Agile CM

**Note** The Page Three tab contains the customized fields your Agile administrator has defined and named. Its appearance on your system will be different than the example shown here. (The Page Three tab may have a different name on your system if your Agile administrator has renamed it.) If you are uncertain about how to use this tab, contact your Agile administrator.

The Page Three tab may be used with all object types. It is a flexible feature which can display the subclass fields for each subclass, and may be set to appear on objects in some subclasses (for example, Parts) but not on objects of other subclasses (for example, Documents).

An electronics manufacturer might use subclasses this way:

Superclass	Class	Subclass	Attributes (Fields on the Page Three tab)
Items	Parts	Resistors	Resistance, Package, etc.
		Capacitors	Capacitance, Material, etc.
	Documents	Specifications	Performance Standards
		Data Sheets	System Compatibility, Performance Metrics

If you have any questions regarding the use of the Page Three tab in your system, consult your Agile administrator.

**Note** For more information on subclasses, see the Agile Administrator *User's Guide*.

## Creating Agile Items — The Basic Process


Creating an Item is a two step process:

1. Create the Item — select an Item type and assign a number.
2. Complete the Item — complete the appropriate fields on the Title Block, BOM, and Attachments tabs. Agile CM automatically completes the Changes, Where Used, and History tabs.

### Creating an Agile Item

When you create an Item, you select an Item Type and assign a number.

To create an Item:

1. Click the New Object button .

Agile CM displays the New Object dialog box and remembers what type of object you created last, and displays that type of object in the Type field.

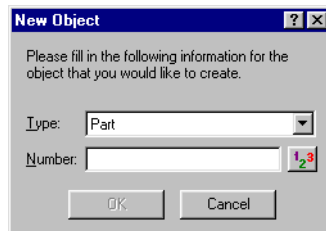



Figure 4-11: The Create New Object dialog box, Agile CM

2. If appropriate, select a different Item type from the Type list.

**Note** Sometimes you may want to create a document as a Part. See “Parts vs. Documents” on page 4-19.

3. Type the number of the proposed Item in the Number field.  
Or, click the Auto Number button  to automatically enter the number.  
(The autonumber format and sequence is determined by your Agile

administrator. Your Agile administrator also determines whether using autonumbers is required or optional.)

**Note** Agile CM will not allow you to create an Item that has the same number as an existing Item. (To reuse a number, see “Hard-Deleting an Item” on page 4-25.)

4. Click OK.

Agile CM creates the Item and displays the Item with the **Title Block** tab on top. The **Title Block** tab has a field that shows the Item’s number and Description as you have entered them.

**Note** Once Agile CM creates an Item, that Item exists until you delete it as described in “Deleting Agile Objects” on page 4-24. If you create a new Item, then decide you do not wish to keep it, be sure to delete the Item, otherwise the new Item will still be in the database and the number cannot be reused.

## Completing an Agile Item

When you complete the New Object dialog box, the Item window opens with the **Title Block** tab in front.

To complete an Item:

1. Complete any appropriate fields on the **Title Block** tab. For details see “Title Block Tab” on page 4-4.
2. If appropriate, fill out the **Page Two** and **Page Three** tabs.
3. Click the **BOM** tab.

The tab moves to the front.

Add all appropriate Items to the **BOM** tab. For details, see Chapter 8, *Working with Bills of Materials (BOMs)*.

4. Click the **Manufacturers** tab.

The tab moves to the front.



If you have an AML license and the appropriate privileges, you can add Manufacturers data to the **Manufacturers** tab.

Add all appropriate Manufacturer Parts to the **Manufacturers** tab. For details see “Associating a Manufacturer Part with Its Corresponding Item” on page 5-14.

5. Click the Attachments tab.

The tab moves to the front.

Add all appropriate images and files to the Attachments tab. For details see Chapter 10, *Working with Attachments*.

You do not enter information on the Changes, Where Used, or History tabs. Agile CM automatically completes those tabs.

## Parts vs. Documents

In certain cases you may want to create a document as a Part.

In general, if the document is shipped as part of a product, or it has costs associated with it, create it as a Part. If the document is an internal document, procedure or reference, create it as a Document.

Following are three examples illustrating when you might choose to create a document as a Part or as a Document.

**Example 1** — If a document is the controlling document for a part (that is, it has the same number as the part), create that document as a Part.

For example, if you have an engineering drawing number 123 that specifies and describes part number 123 (thus the document controls the part), create Part 123 and include the engineering drawing as an attachment.

Use this method if the part number *must* be the same as the document number. Note that the document will not exist as a separate Document in the Agile database.

In contrast to the above example, if it is *not* necessary for the drawing number and part number to be the same, create a Document (for example, Document number 222) and add the engineering drawing to its Attachments tab. Then create a Part (for example, Part 444). Add Document 222 to the BOM tab of Part 444 with a Qty of zero or REF. Enter zero as the Find Number; this forces a Document to appear at the top of the BOM tab for easy reference.

**Example 2** — If the document has costs associated with it, or it is shipped as part of a product, create it as a Part.

An example of a document that is shipped with a product is a manual. A manual might have a Bill of Materials that includes the binder, labels for the binder, binder tabs, and the printed document itself.

If a document goes to your customer with a product, create it as a Part, even if it does not have a Bill of Materials. Examples of such a document might be: a

warranty card, an instruction booklet, assembly instructions, or a printed software licensing agreement.

If the document has costs associated with it, such as printing costs, create it as a Part. When you add the document Part to a BOM tab, and you enter a quantity of 1, the costs of the document Part are included in any reports that compute costs. (See Chapter 11, *Working with Reports*, for information about running reports.)

**Example 3** — If a document

- ☐ does not need to have the same number as a part
- ☐ is not shipped as part of a product
- ☐ does not have costs associated with it

create that document as a Document. Examples of such documents might be a manufacturing process (a Quality Assurance procedure, a test procedure, or manufacturing instructions) or a reference document (a specification or an engineering drawing).

Create any internal company documents as Documents.

**Note** Because Agile CM is so flexible, you are not required or forced to use the approach outlined in the above examples when creating documents. You should, however, always follow your company's policies or guidelines when creating a document as a Part or as a Document. If you have questions, see your Agile administrator.

If you create a Document, and later want to change it to a Part, you can hard-delete the Document, which will remove it from the database and free up the Item number. Then you can create the Item as a Part, using the same Item number. For more information, see “Deleting Agile Objects” on page 4-24.

## **Saving a New Agile Item**

New Items are automatically saved when you click the OK button on the New Object dialog box.

Agile CM prompts you to save any modifications you make to the new Item's tabbed window when you close the window. You can also click **Save** at any time.

If you encounter many locked objects, you'll probably want to click the **Save** button often. For more information, see “Object Locking and Saves” on page A-2.


## Other Ways to Create Items

### Creating an Item Using Save As

Using the Save As feature is a quick way to create an Item that is very similar to an existing Item.

**Caution!** Generally, Parts have a BOM tab. By default, Documents do not. When you save a Part as a Document you will not be able to view the Part's BOM in the resulting Document, unless your Agile administrator has configured your system to permit Documents to have BOMs.

To create an Item using Save As:

1. Select and open an existing Item.
2. To open the Save As dialog box, select File | Save As from the menu bar.  
*or*  
Use the right-click Shortcut menu.
3. (If appropriate) Select a different Item type from the object list.
4. Enter the new Item's Number.  
*or*  
Click  to assign an autonumber.
5. Click OK.  
Agile CM closes the old Item, and displays the tabbed window of the New Item.
6. Make any appropriate modifications to any of the tabs.

**Note** If you do not have Discovery privilege for any of the Items on the BOM list of the existing Item, you will not be able to use Save As to create a new Item.

If the Agile administrator has set the appropriate preferences in Agile Administrator, then Page Two and Page Three fields are copied to the new Item. For information about the behavior of Page Two and Page Three fields in your Agile Anywhere system, see your Agile administrator.

Save As copies data from a field in the existing object to the same field in the new object. If a field or list value in the existing object is not also present in the new object, then that field or list value is not copied to the new object.

**Note** Because Page Three data applies to a specific subclass only, if you use Save As to create an new object of a different subclass, the Page Three data will *not* be copied to the new object.

## Using Quick Item Create

When you add a non-existent Item to certain tabs on Items and Changes, such as the Affected Items tab, Agile CM first displays a prompt telling you the Item does not exist and asking if you would like to create it. Click Yes, and Agile CM then displays Quick Item Create dialog box for you to create it.

Agile CM automatically takes the Item number you entered and places it in the Number field, and fills in the object type based on the last object you created. You can change this information as you choose, and finish filling out the fields to Quick Create the new Item.

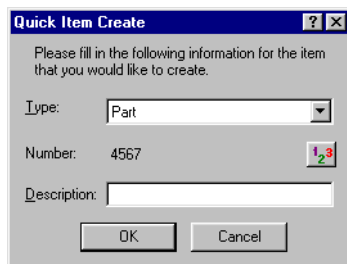


Figure 4-12: The Quick Item Create dialog box, Agile CM

To Quick Create an Item:

1. Select the Item type from the Type list.
2. Enter a description in the Description field.

**Caution!** Because the New Object or Quick Item Create dialog box creates an object without much distinguishing data (only Type, Number and Description), it is important that you enter a description that you can easily search for later. For example, you could add “to be completed” to the end of the description, which would let you easily find the Item when you are ready to complete the remaining fields.

3. Click OK.

Agile CM creates the Item and saves it in the database. It also automatically places the contents of the Description field (from the Quick Item Create dialog box) on the tab.



## Working With Agile Items

### Creating a Pending Revision

You can create a pending (also called preliminary) revision of an Item. Pending revisions let you attach and incorporate images and files to the Item. When the preliminary Change affecting the Item becomes released, the attached images and files are automatically transferred to the new revision of the affected Item (unless your Agile administrator has opted to alter this behavior) and are incorporated.

A pending revision can be identified by the parentheses around the Revision Number in the Rev field, e.g. “(A)”.

To create a pending revision:

1. Create the Item.
2. Create an ECO.
3. Place the Item on the Affected Items tab.
4. Give the affected Item a Revision Number.

For information on creating ECOs, see Chapter 6, *Working With Changes*.

When a default revision number must appear — for example, on the BOM tab — the default is determined by a series of rules. For details, see “Revision Display on BOMs” on page 8-15.

### Attachments on Pending Revisions

By default, when a pending revision is created, it inherits whatever files and images are attached to the current default revision. If any files or images are then either added or removed from the current default revision, those modifications will not be reflected on the Attachments tab of the pending revision.

**Note** The Agile administrator sets your system to either allow or disallow attachments to be copied to a new pending revision. If you have questions about your system settings, see your Agile administrator.

### Modifying Pending Revisions

You can modify pending revisions the same way you modify other objects. Because modifying a pending revision could affect a released revision, you must have the appropriate privileges to modify the Title Block, Page Two, and Page Three tab attributes. If you have the appropriate privileges to modify preliminary Items, you can modify attributes on pending revisions for Items with no released revisions. If

you have the appropriate privileges to modify released Items, you can modify attributes on pending revisions for Items with at least one released revision. If you have questions about your privileges, see your Agile administrator.

## **Pre-incorporating An Item**

An Item can be incorporated before it is released, in which case it is referred to as “pre-incorporated”. Pre-incorporating an Item provides a way to mark a revision as tentatively finalized, and to “freeze” attachments from check out. (It is still possible to “Get” a copy of an attachment, but the files attached to an incorporated Item cannot be modified.)

Pre-incorporation is performed the same way as incorporation, except that it is performed on an unreleased Item. See “Incorporating and Unincorporating Items” on page 4-30.

## **Deleting Agile Objects**

Agile CM supports “soft” and “hard” deletes.

To permanently remove an object from the database, you must first soft-delete it, then hard-delete it.

If you delete an object that has not already been deleted, this is a soft delete. When you soft-delete an object in the database, it is not permanently deleted. A soft-deleted object is marked “Deleted” in the database, and its object number is reserved. You will not be able to create another object of that type with the soft-deleted object’s number, unless you first hard-delete it.

**Note** A soft-deleted item *can* be undeleted.

When you run a Search, soft-deleted objects do not appear in the search results table. To locate soft-deleted objects, you must have the appropriate privileges. If you have the appropriate privileges, you can run the predefined deleted object searches in the Change Analyst Searches folder to locate soft-deleted objects.

If you delete an object that has already been soft-deleted, you will be prompted to remove it from the database permanently, or hard-delete it. Once you hard-delete an object, it is gone and it cannot be restored.

When an object has been hard-deleted, you can re-use its number when you create a new object. This is useful, for instance, if an Item has been created as a Document when it needs to be a Part. After you have hard-deleted the Document, you can create a Part using the same number.


**Caution!** Hard-deleted objects *cannot* be undeleted.

## Soft-Deleting an Item

To soft-delete an Item:

1. Select and open an Item.
2. Click the **Changes** tab.
3. Review the Change history and pending Changes.

If there are any released Changes, you cannot delete the Item. If there are any pending Changes, you must first remove the Item from the **Affected Items** tab of each pending Change before you can delete the Item.

4. (If appropriate) Return to the Item.
5. Click the **Delete** button in the toolbar .

*or*

Choose **File | Delete Object** from the menu bar.


*or*

Right-click in the Item window and select **Delete** from the menu that appears.

6. The Item is soft-deleted. It is no longer available for use. However, until it is hard-deleted, its number is reserved in the Agile database and cannot be reused.

## Hard-Deleting an Item

To hard-delete an Item:

1. From the **Change Analyst Searches** folder in the **Agile CM Searches** window, run the **Deleted Items Search** to locate the soft-deleted Item you want to hard-delete.
2. Select the appropriate deleted Item from the list.
3. Click the **Delete** button in the toolbar .

*or*

Choose **File | Delete Object** from the menu bar.

*or*

Right-click in the Item window and select **Delete** from the menu that appears.

The Item is now hard deleted from the database.

**Note** Hard-deleting an object releases its number to be reused if needed.

**Caution!** You cannot undelete a hard-deleted object.

### Undeleting an Item

Since soft-deleted objects still exist in the database, you can undelete them, if you have the necessary privileges.

1. From the Change Analyst Searches folder (in the left pane of the Agile iCM window or in the Agile CM Searches window), run the **Deleted Items Search**.
2. Select and open the deleted Item you want to restore.  
If Agile CM finds only one Item, it will open that Item.
3. To undelete the Item, select **File | Undelete** from the menu bar.  
*or*  
Right-click in the Item window and select **Undelete** from the menu that appears.


**Caution!** You cannot undelete a hard-deleted object.

### Editing an Agile Item

#### Editing an Item's Number

You can edit the number of an Item that has not been released.

To renumber an unreleased Item:

1. Select and open the Item.
2. Select the number in the Number field:  
Click and drag in the Number field.  
*or*  
Double-click on the number.  
The Item Number is highlighted.
3. Type a new number.  
*or*  
Click  to automatically select a new autonumber.
4. To save the modifications you have made, click **Save** in the object window.


When you renumber a Part that is a child of another Item, all connections between the parent and child are lost. For example, if Part #2 is listed on the BOM of Part #A, Part #A will be listed on Part #2's **Where Used** tab. If you renumber Part #2 to Part #22, the connection to parent Part #A is lost, and Part #A will no longer be listed on the **Where Used** tab of Part #22. Agile iCM or Agile CM warns you when you rename an Item that is a child of another Item.

## Changing an Item's Subclass

If you have the appropriate privileges, you can change the subclass of an Item. For example, you can change the subclass of a particular document from **Specification** to **Data Sheet**.

**Caution!** When you change the subclass of an Item, its data fields will change, and all previous information on the **Page Three** tab will be cleared.

To change the subclass of an Item:

1. On the **Title Block** tab of the Item, click  in the **Part Type** field and select a new subclass from the selection list.
2. If **Page Three** is visible and has data, a warning message appears, alerting you that all **Page Three** data will be cleared.
  - Click **Yes** to continue changing the subclass and to allow **Page Three** to be cleared.
  - Click **No** to cancel the **Change Subclass** process; no changes will be made to the Item.
3. If the new subclass has an autonumber scheme assigned in **Agile Administrator**, **Agile CM** will ask you if you want to select a new autonumber for the new subclass (unless autonumbering is required by your system, in which case you will see a different warning message; see Figure 4-14).
  - Click **Yes** to continue the process of changing the Number.
  - Click **No** to change the subclass but retain the existing number.
  - Click **Cancel** to abort the **Change Subclass** process, with no changes made to the Item.

If the new subclass does not have an autonumber scheme assigned in **Agile Administrator**, the process will complete with the subclass being changed but the Number not being changed.
4. Depending on your system configuration:

- If more than one autonumber source is designated, the **Select Auto Number Source** dialog box appears, asking you to select the autonumbering scheme for the Item. (See Figure 4-13.) Select the new autonumbering scheme for this Item, then click **Select**. Go to Step 5.
- If there is one autonumber source designated for the new subclass, Agile iCM or Agile CM will automatically assign a new Number. You will not see the **Select Auto Number Source** dialog box. Go to Step 5.

**Note** If the Item is in use, you may see a dialog box alerting you that the Item is locked. Click OK; the Change Subclass process will be canceled.

5. Agile CM automatically autonumbers the Item, displays the new number in the Number field, and enters the event on the History tab of the Item.

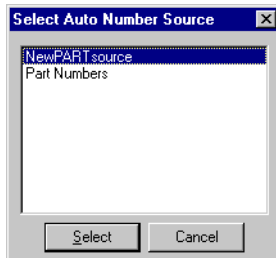


Figure 4-13: The Select Auto Number Source dialog box, Agile CM

If autonumbering is required in your system, a different warning will be displayed, as shown in Figure 4-14.

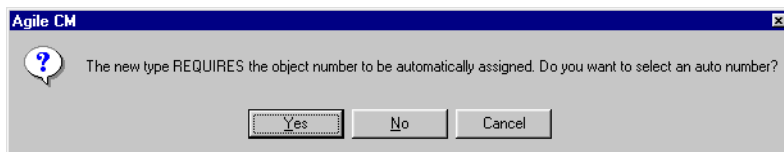



Figure 4-14: Warning dialog box for Agile CM systems requiring autonumbering


## Releasing an Agile Item

Items are not released directly. Rather, Items are released through an ECO process, described in “The Change Control Process” on page 1-8.

To release an Item:

1. Create an ECO that releases the Item.
2. Complete the pertinent fields on the tabs.

3. Submit and route the Change.
4. When the Change has been signed off, click the **Release** button  to release the Change.

If you do not have Release privileges, click the **Submit** button  to submit the ECO to the Change Analyst.

When the Change is released, the Item is also released.

For more information on Changes, see Chapter 6, *Working With Changes*.

## Working with Released Items

### Editing a Released Item

If you have sufficient privileges, you can edit most fields on the **Title Block** tab even after an Item has been released. However, you cannot edit the Item Number field.


With sufficient privileges you can also add or modify attached images and files after an Item has been released.

### Unreleasing an Item

If you have sufficient privileges you can unrelease a released Item.

**Caution!** DO NOT unrelease Items if you use Agile ChangeCAST.

To unrelease an Item:

1. Select and open the Item.
2. Click the **Changes** tab.
3. Double-click the row identifier (Agile iCM) or row (Agile CM) for the Change that released the Item.  
(If there are subsequent Changes to the Item, you must first unrelease those Changes in the reverse order from which they were made.)
4. Click the **Return** button .  
The Return prompt appears.
5. (If appropriate) Select the **Notify CCB** box.
6. Enter any comments in the **Comments** field.
7. Click **OK** on the dialog box.

## Incorporating and Unincorporating Items

If you have sufficient privileges you can incorporate an Item. When you incorporate an Item, you lock its attachments so no unauthorized changes can be made. If you incorporate an Item with no attachments then none can be added to it.

Once an Item is incorporated, its attachments cannot be checked out. Copies can be taken of attachments for the purpose of viewing and working with them, but the attachments cannot be amended without an ECO.

To add or edit attachments on an incorporated Item, the Item must first be unincorporated. Once the changes are made, the Item can be incorporated again. Appropriate privileges are required to either incorporate or unincorporate Items.


The Incorporated/Unincorporated status refers to *all* the files and images attached to the Item for a specific revision. When you incorporate an Item, just that revision with its attachments is incorporated. For example, if you have three unincorporated revisions of an Item (Revs C, D, and E), when you incorporate Rev D, Revs C and E remain *unincorporated*.

A Preliminary Item that has never been released can not be incorporated because it has no revision level. Once an ECO is written against the Preliminary Item, and a pending revision number is specified, that pending revision can be incorporated. See “Pre-incorporating An Item” on page 4-24.

### Incorporating an Item

You cannot incorporate an Item that has any files or images checked out.

To incorporate an Item:

1. Select and open the Item.
2. Bring the Attachments tab to the front.
3. Click the Incorporate button .
4. If an Item is incorporated before it has been released, the incorporation process is performed the same way, but it is known as pre-incorporation. For a description, see “Pre-incorporating An Item” on page 4-24.


### Unincorporating an Item

When you unincorporate an Item, just that particular revision is unincorporated.

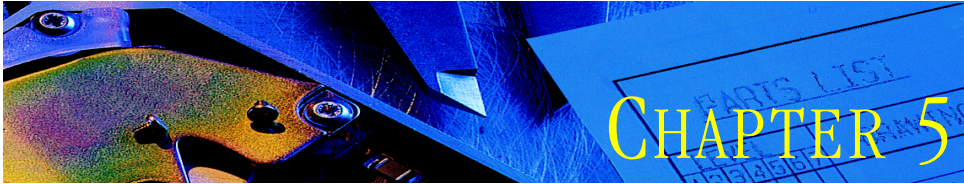
To unincorporate an Item:

1. Open the Item.



2. Bring the Attachments tab to the front.
3. Click the Unincorporate button .





# Working with Manufacturing Objects

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*This chapter gives an overview of Agile AML (Approved Manufacturer List) license features and concepts, which are available if you have an Agile AML license and the Agile administrator has granted you the appropriate privileges.*

*It discusses these topics:*

- ❑ *What Is Agile AML?*
- ❑ *Manufacturing Objects: Manufacturers and Manufacturer Parts*
- ❑ *Creating and Managing Manufacturers*
- ❑ *Creating and Managing Manufacturer Parts*
- ❑ *Associating a Manufacturer Part with Its Corresponding Item*
- ❑ *Important Considerations When Working with Manufacturing Objects*
- ❑ *Working with Manufacturers Data on Preliminary Items*
- ❑ *Maintaining Manufacturers Data on Post-Preliminary Items*
- ❑ *Searching for Manufacturing Objects*
- ❑ *An Example — Using the Agile AML License*

---

## **What Is Agile AML?**

Agile AML is an optional license in Agile Anywhere, which allows you to manage information related to manufacturers and the parts they produce.

If you have an Agile AML license and have been granted the necessary privileges, then you will be able to perform the processes described in this chapter. There are no extra steps involved in accessing Agile AML; it works seamlessly with Agile Product Definition functionality.

If you are not granted an AML license and appropriate privileges, you may be able to see AML features (if the database contains manufacturers data) when you work in Agile CM, but you will not be able to create or edit the Agile AML data.

**Note** Users at sites not licensed for Agile AML may not see the features described here.

“Using Agile CM with the Agile AML License” on page 2-19 shows an example of the Agile AML license in use.

### What Does Agile AML Do?

Agile CM with the Agile AML license provides a way to track the relationships between Items and their Manufacturers and to create an approved manufacturer list (AML). This means you can quickly find, for instance, which manufacturers are producing a particular Part, their identification information for that Part, where that Part is used, and contact information for the Manufacturer.

Additionally, the Manufacturer Change Order, or MCO, has added functionality for users with an Agile AML license, including redlining Manufacturers data. A very similar change control process to the ECO is used in amending Manufacturers data through a Manufacturing Change Order (MCO).

**Note** The MCO (Manufacturer Change Order) is available to all users of Agile CM. However, some users with an Agile AML license will be able to perform additional functions with the MCO and the ECO, which are described in this chapter. For information regarding the basic features of the MCO available to users without an Agile AML license, see “Manufacturer Change Orders (MCOs)” on page 6-35.

This chapter explains Manufacturing objects in detail, and how to use them.

**Note** For your reference, Figure 1-2 on page 1-4 represents the relationships between all object types available in Agile CM for users with an Agile AML license.

## About Manufacturing Objects

Agile CM works with *objects*, which include *Items*, *Changes*, and *Manufacturing objects*. The Agile AML license introduces Manufacturing objects:

- ❑ The Manufacturer — this object holds data about the manufacturer, including contact information and where their parts are used; and
- ❑ The Manufacturer Part — this object describes the part from the Manufacturer's point of view, with information such as their part number and their name for that part, as well as information on where this part is used in your assemblies.

## Working with Manufacturing Objects

To use Agile AML features to track manufacturing data, you must first set up the Manufacturers in your database, and the Manufacturer Parts which they produce for use in your assemblies. This process is explained here.

It is important to enter the data for Manufacturers and Manufacturer Parts in a specific order. (For example, you cannot create a Manufacturer Part until you have created the corresponding Manufacturer.)

To set up Manufacturer data in the database:

1. Create the Manufacturer. This represents the manufacturer of the purchased part. (See “Creating and Managing Manufacturers” on page 5-11.)
2. Create the Manufacturer Part. This represents the part which that Manufacturer produces. (See “Creating and Managing Manufacturer Parts” on page 5-14.)
3. Match the Manufacturer Part to the corresponding Item by adding it to the Item's Manufacturers tab. (See “Associating a Manufacturer Part with Its Corresponding Item” on page 5-14.)

This process is illustrated in Figure 5-1, using examples from Chapter 2 (Figure 2-26 on page 2-20).

**Step 1:**  
Create the  
Manufacturer  
object

**Step 2:**  
Create the  
Manufacturer  
Part object

**Step 3:**  
Add the  
Manufacturer Part  
to the internal Part's  
Manufacturers tab

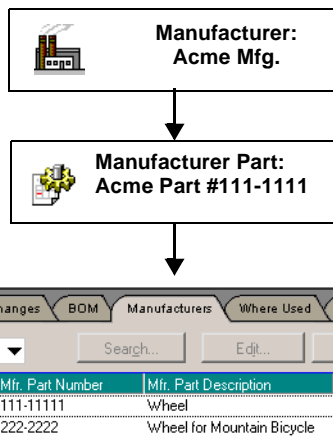


Figure 5-1: Setting up Manufacturing data in Agile CM with an Agile AML license

Once the relationships have been established, it is easy to track manufacturing data activity.

From this point on, Manufacturing data can be managed through the redlining process and through the Bulk Change processes. This is discussed in “Maintaining Manufacturers Data on Post-Preliminary Items” on page 5-20.

**Note** Manufacturers and Manufacturer Parts are not subject to the change control process, and can be created, edited, and deleted by any user granted the necessary privileges. Those changes will go into effect immediately.

## Many-To-One Relationships in Agile AML

The Agile AML license allows you to track complex, many-to-one relationships. Figure 5-2 shows an example of a more complex situation such as those commonly found in real life manufacturing.

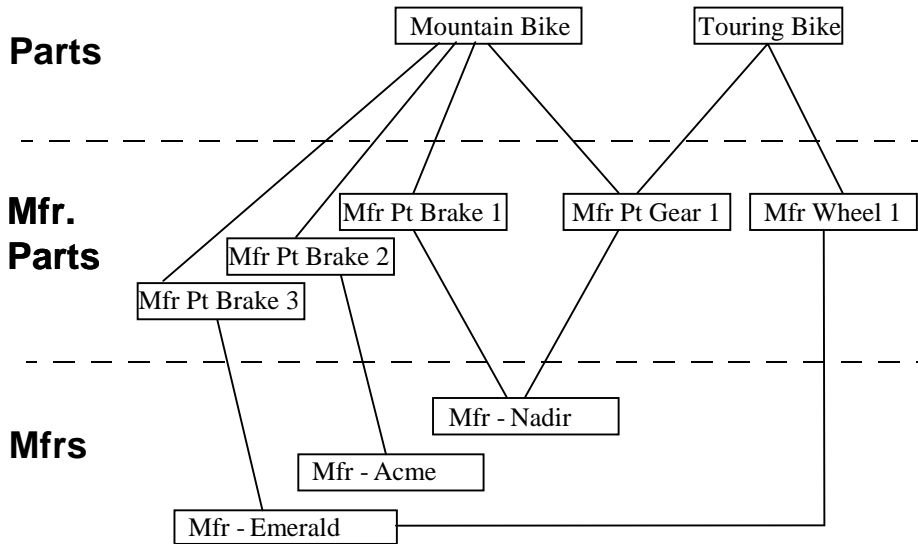


Figure 5-2: An example of a more complex, many-to-one parts scenario

In this example, some Manufacturer Parts are used in more than one Part and some Manufacturers provide more than one Manufacturer Part.

## Manufacturing Objects: Manufacturers and Manufacturer Parts

The Manufacturer and the Manufacturer Part have several of the same tabs as Items do (Where Used, Attachments, and History), but also have differences; for example, they have a new tab, General Info, in place of the Title Block tab, and they do not have a Changes or BOM tab. Also, because their role is different from that of Items, these two new objects have data fields that are quite different from Items.

This section describes the Manufacturing objects and their tabs.

### Manufacturing Object Tabs

The table below lists the fields found on the tabs of these two Manufacturing objects. (Compare with the table in “Item Window Tabs” on page 4-3.) The page references given beside the name of each tab indicates where that tab is discussed.

MANUFACTURER		MANUFACTURER PARTS	
Tab Name	Fields include	Tab Name	Fields include
<b>General Info</b> (page 5-8)	Name, Address, Status, Phone, Contact, Email, URL	<b>General Info</b> (page 5-10)	Manufacturer Part Number, Description, Manufacturer Name, Status
<b>Page Two</b> (optional, page 4-14)	Unique fields defined by the Agile administrator (user-defined)	<b>Page Two</b> (optional, page 4-14)	Unique fields defined by the Agile administrator (user-defined)
<b>Page Three</b> (optional, page 4-15)	Unique subclass fields defined by the Agile administrator, unique to subclass. (user-defined)	<b>Page Three</b> (optional, page 4-15)	Unique subclass fields defined by the Agile administrator, unique to subclass. (user-defined)
<b>Where Used</b> (page 4-11)	Description, Number, Manufacturer Part Number, Manufacturer Part Status	<b>Where Used</b> (page 4-11)	Description, Number, Manufacturer Tab Preferred Status, Manufacturer Tab Reference Notes
<b>Attachments</b> (page 4-12)	Image Description or File Description, File List or File Name, Checkout User, Checkout Date, Checkout Folder	<b>Attachments</b> (page 4-12)	Image Description or File Description, File List or File Name, Checkout User, Checkout Date, Checkout Folder
<b>History</b> (page 4-13)	Action, User, Date, Details	<b>History</b> (page 4-13)	Action, User, Date, Details

## The Where Used Tab and the Discovery Privilege

If you do not have Discovery privilege for an Item, Manufacturer, or Manufacturer Part, it will not appear on the Where Used tab. You may see a message at the bottom of the window telling you how many objects are not displayed. For more information, see “About Discovery Privilege” on page 3-10. If you have questions about your Discovery privileges, see your Agile administrator.

## The History Tab and the ReadHistory Privilege

If you do not have the ReadHistory privilege for Manufacturers, you will not see the History tab on Manufacturers. If you do not have the ReadHistory privilege for Manufacturer Parts, you will not see the History tab on Manufacturer Parts. If you have questions about your privileges, see your Agile administrator.



## Dynamic Web and E-Mail Links from Agile Objects

Text fields on Agile object tabs are dynamically featured to create active links to the Web browser when you enter a URL (<http://...>).

In Agile CM, text fields create active links to the e-mail system when you enter an e-mail address ([joeagile@agile.com](mailto:joeagile@agile.com)) into any text box of an Agile object.

The following sections present information specific to each Manufacturing object.

### About the Manufacturer Object

The Manufacturer object stores data about the Manufacturer, including contact information, and parts from that manufacturer.

Manufacturers can be created similarly to, and behave much as, other objects. Creating a Manufacturer is the first step in adding a new Manufacturer Part, if that Manufacturer has not previously been a part manufacturer in your database. Once the Manufacturer has been created, the Manufacturer Part can be created in association with that Manufacturer, and will be referenced on the Manufacturer's Where Used tab.

Manufacturers can be found using the same Quick Search and Search processes as any other object. For more information, see Chapter 7, *Searching for Objects*.

**Manufacturer Acme Manufacturing**

General Info | Where Used | Attachments | History

Name:

Address:

City:  State:

Country:  Postal Code:

URL:

Mfr Type:

Status:

Phone:  Fax:

Contact:

Email:

**APPROVED**

Refresh Save Close

Figure 5-3: A Manufacturer, Agile CM

## General Info Tab of the Manufacturer Window

The Agile CM Manufacturer window can have up to two icons in the lower left corner.



The icon furthest to the left indicates the object type is a Manufacturer






The second icon is visible if the object has any attached images or files. You can click this icon to bring the Attachments tab to the front to view it. For more information see “Viewing Images in Agile CM” on page 10-13.

In Agile CM, these buttons are available at the bottom of the Manufacturer window:

- ☐ The Refresh button updates the window to show the latest information from the Agile database.
- ☐ The Save button saves modifications made to the fields in the active window. The Save button is active when an object is locked, even though you might not have made a direct edit. For more information, see “Object Locking and Saves” on page A-2.
- ☐ The Close button closes the active window.

## Lifecycle Status on the General Info Tab of a Manufacturer

Agile CM uses a Lifecycle stamp in the top right corner of the General Info tab to indicate the status of a Manufacturer:

Lifecycle Stamp	Lifecycle Name	Lifecycle Definition
	Approved	This Manufacturer has been approved as a manufacturer.
	Disqualified	This Manufacturer is no longer qualified for use.
	Obsolete	This Manufacturer is no longer available for use.

The other tabs of the Manufacturer object are similar to those of Items. See “Manufacturing Object Tabs” on page 5-5 to find where each tab is described.

## About the Manufacturer Part Object

The Manufacturer Part object represents information about a part produced by a specific manufacturer, including the manufacturer’s part number, status, where it’s used, and a history of actions affecting that Manufacturer Part. Manufacturer Parts can be found using the same Quick Search and Search processes as any other object. For more details, see “Performing Searches with an Agile AML License” on page 7-31.

Manufacturer Parts are created like any new object, using the New Object button or the File | New command.

Once created, a Manufacturer Part can be added to the Manufacturers tab of the Part to which it corresponds. Manufacturer Parts are discussed in “Creating and Managing Manufacturer Parts” on page 5-14.

The combination of the Manufacturer Name and Manufacturer Part Number must be unique to that Manufacturer Part. In other words, you cannot create another Manufacturer Part for the same Manufacturer using the same Manufacturer Part Number. Agile CM does support the situation where different manufacturers are using an identical part number, however.

Manufacturer Part 111-2233

General Info | Where Used | Attachments | History

**ACTIVE**

Description:  
Power Cord, 30 inch, black

Manufacturer Part Number:  
111-2233

Manufacturer Name:  
Acme Manufacturing

Mfr Part Type:  
Manufacturer Part

Status:  
Active



Refresh Save Close

Figure 5-4: A Manufacturer Part, Agile CM

## General Info Tab of the Manufacturer Part Window

### Lifecycle Status on the General Info Tab of the Manufacturer Part

Agile CM uses a Lifecycle stamp in the top right corner of the General Info tab to indicate the status of a Manufacturer Part:

Lifecycle Stamp	Lifecycle Name	Lifecycle Definition
	Active	This Manufacturer Part is available for use.
	Obsolete	This Manufacturer Part should no longer be used.

The other tabs of the Manufacturer Part object are similar to those of Items. To find where each tab is described, see “Manufacturing Object Tabs” on page 5-5.

### General Info Tab of the Manufacturer Part Window, Agile CM

The Agile CM Manufacturer Part window can have up to two icons in the lower left corner.



The icon furthest to the left indicates the object type is a Manufacturer Part.



The second icon is visible if the Item has any attached images or files. You can click this icon to bring the Attachments tab to the front to view it. For more information see “Viewing Images in Agile CM” on page 10-13.

In Agile CM, these buttons are available at the bottom of the Manufacturer Part window:

- ☐ The Refresh button updates the window to show the latest information from the Agile database.
- ☐ The Save button saves modifications made to the fields in the active window. The Save button is active when an object is locked, even though you might not have made a direct edit. For more information, see “Object Locking and Saves” on page A-2.
- ☐ The Close button closes the active window.

## Creating and Managing Manufacturers

### Creating a Manufacturer

A Manufacturer is created in the same way as a new Item, but doing so requires the Create Manufacturer privilege. To learn about creating new Items, see “Creating Agile Items — The Basic Process” on page 4-17.

You can also add a Manufacturer Part to the Manufacturers tab, even if you have not yet created the Manufacturer or Manufacturer Part. (This process is similar to creating Items on-the-fly.) When adding a Manufacturer to the Manufacturers tab, if you enter the name of a Manufacturer does not yet exist, Agile CM prompts you to create the new Manufacturer. (See “Using Quick Item Create” on page 4-22.)

Unlike Items, Manufacturers do not need to go through the release process. They are immediately available for use.

**Note** The Manufacturer Name must be unique to one Manufacturer, just as an Item Number must be unique to an Item.

While different Manufacturers can use the same Manufacturer Part Number, the combination of Manufacturer plus Manufacturer Part Number must be unique to one Manufacturer Part.

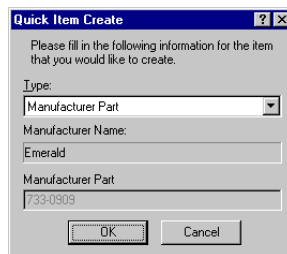


Figure 5-5: The Agile CM Quick Item Create dialog box for creating a Manufacturer Part “on-the-fly”

### Deleting a Manufacturer Object

Agile CM supports “soft” and “hard” deletes.

See “Deleting Agile Objects” on page 4-24 for detailed information about


- ❑ Soft-deleted objects
- ❑ Hard-deleted objects
- ❑ Which deleted objects can be undeleted

- ❑ Searching for soft-deleted objects

**Note** A Manufacturer cannot be deleted if it is listed on a Part's Manufacturers tab, or if a Manufacturer Part exists for this Manufacturer.

## Soft-Deleting a Manufacturer Object

To soft-delete a Manufacturer or Manufacturer Part:

1. Open the Manufacturer or Manufacturer Part you want to delete.
2. Click the Where Used tab.  
If the Manufacturer or Manufacturer Part is used on any Item's Manufacturers tab, you cannot delete the it.
3. (If appropriate) Return to the Manufacturer or Manufacturer Part.
4. Click the Delete button in the toolbar .

*or*

Choose File | Delete Object from the menu bar.


*or*

Right-click in the object window and select Delete from the menu that appears.

The Manufacturer or Manufacturer Part is soft-deleted. It is no longer available for use. However, until it is hard-deleted, its number is reserved and cannot be reused.

## Hard-Deleting a Manufacturer Object

To hard-delete a Manufacturer or Manufacturer Part:

1. Find the soft-deleted Manufacturer or Manufacturer Part you want to hard-delete:  
From the Component Engineer Searches folder, run the Deleted Manufacturer Search or the Deleted Manufacturer Parts Search.  
In Agile CM, if only one deleted object is found, Agile CM will open it.
2. Open the appropriate deleted Manufacturer or Manufacturer Part.
3. Click the Delete button .

*or*

Choose File | Delete Object from the menu bar.

*or*

Right-click in the object window and select **Delete** from the menu that appears.

The Manufacturer or Manufacturer Part is now hard-deleted from the database.

**Caution!** You cannot undelete a hard-deleted object.

**Note** Hard-deleting an object releases its number to be reused if needed.

### Undeleting a Manufacturer Object

Since soft-deleted objects still exist in the database, you can undelete them, if you have the necessary privileges.

To undelete an Manufacturer or Manufacturer Part:

1. Find the soft-deleted Manufacturer or Manufacturer Part you want to undelete:

From the Component Engineer Searches folder, run the **Deleted Manufacturer Search** or the **Deleted Manufacturer Parts Search**.

In Agile CM, if only one deleted object is found, Agile CM will open it.

2. Open the appropriate deleted Manufacturer or Manufacturer Part.
3. Choose **File | Undelete** from the menu bar

*or*

Right-click in the object window and select **Undelete** from the menu that appears.

The previously soft-deleted Manufacturer or Manufacturer Parts undeleted and is once more available to users.

**Caution!** You cannot undelete a hard-deleted object.

### Modifying a Manufacturer

Any user with the necessary privileges can modify values entered on the Manufacturer object. As Manufacturer Parts are not required to go through the Change Control process, all modifications that are made go into effect immediately.

**Caution!** If you change a Manufacturer Part Number or Manufacturer Name, these changes automatically are made to the Manufacturers tab or tabs where the Manufacturer or Manufacturer Part is listed.

## **Working with a Manufacturer**

Once you have created the Manufacturer object, you can create Manufacturer Parts corresponding to that Manufacturer, and build a record of data about those Manufacturer Parts. This is explained in the following sections.

## **Creating and Managing Manufacturer Parts**

### **Creating a Manufacturer Part**

A Manufacturer Part is created in the same way as a new Item, but doing so requires the Create Manufacturer Part privilege. To learn about creating new Items, see “Creating Agile Items — The Basic Process” on page 4-17.

You can also add a Manufacturer Part to the Manufacturers tab of an Item even if you have not previously created that Manufacturer Part. (This process is similar to creating Items on-the-fly.) See “Adding a Manufacturer Part to the Manufacturers Tab” on page 5-15.

Unlike other Items, Manufacturer Parts do not need to go through the release process. They are immediately available for use.

**Note** Different Manufacturers can use the same Manufacturer Part Number, however the combination of Manufacturer plus Manufacturer Part Number must be unique to one Manufacturer Part.

### **Associating a Manufacturer Part with Its Corresponding Item**

Now you can go to the Manufacturers tab of the Part to which that Manufacturer Part corresponds, and add the Manufacturer Part. This establishes the link between “your” Part and “their” part, which makes it possible to track their part’s use throughout the system. This process is described in the following sections.

You can list more than one Manufacturer Part from the same Manufacturer, or from more than one Manufacturer. For example, if a Manufacturer makes two parts you sometimes use for that assembly, you can mark one as Preferred and the other as Alternate. (The same thing can be done if you have two different Manufacturers supplying a Part.)



Depending on the state of an Item (and your licenses and privileges), you can modify Manufacturers tab data by one of these methods:

- ❑ Add or modify directly on the Manufacturers tab of Items
- ❑ Use an ECO or MCO to modify Manufacturing data on the Manufacturers tab of the Redline window
- ❑ Use an ECO or MCO to modify Manufacturers data from the Manufacturer Part Bulk Change wizard

If an Item has never been released and is in the Preliminary stage with no Changes pending against it, and you have the necessary privileges, you can add, delete, or modify Manufacturers tab data. The following sections describe how to modify data directly on the Manufacturers tab before an Item is released.

If the Item does not meet these criteria, you must create a Change against the Item and use the Manufacturers Redline process to modify its Manufacturers tab data. See “Modifying Manufacturers Data from the Redline Window” on page 5-20.

To use the Bulk Change Wizard see “Launching the Manufacturer Part Bulk Change Wizard” on page 5-29.

## **Important Considerations When Working with Manufacturing Objects**

Once a Manufacturer or Manufacturer Part has been used on an Item’s Manufacturers tab, any alterations you make to the Manufacturing object will also be made on that Item’s Manufacturers tab. As Manufacturers and Manufacturer Parts are not required to go through the Change Control process, all modifications that are made go into effect immediately. Because these alterations are not made by means of a Change, they won’t be passed to the ERP system by ChangeCAST. It is important to bear this in mind when making changes to any Manufacturing object which is in use on an Item’s Manufacturers tab, in order to avoid potential problems between the two systems.

## **Working with Manufacturers Data on Preliminary Items**

The following sections describe how to modify data directly on the Manufacturers tab before an Item has been released.

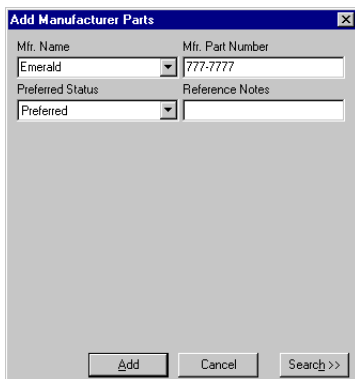
### **Adding a Manufacturer Part to the Manufacturers Tab**

You can add Manufacturer Parts to the Manufacturers tab of an Item by using the Add button on the Manufacturers tab.

To Add a Manufacturer Part to the Manufacturers tab:

1. Click the Add button on the Manufacturers tab.

The Add Manufacturer Parts dialog box appears, as shown in Figure 5-6.




The dialog box titled "Add Manufacturer Parts" contains the following fields and controls:

- Mfr. Name:** A dropdown menu with "Emerald" selected.
- Mfr. Part Number:** A text field containing "777-7777".
- Preferred Status:** A dropdown menu with "Preferred" selected.
- Reference Notes:** An empty text field.
- Buttons:** "Add", "Cancel", and "Search >>" at the bottom.

Figure 5-6: The Add Manufacturer Parts dialog box, Agile CM

2. Display the list of Manufacturers and select one:

- Click in the Mfr. Name field.
- Click the selection list arrow  to display a selection list of Manufacturers, and select the desired Manufacturer name.

If the Manufacturer object has not yet been created, you can create it on-the-fly by entering the Manufacturer name in this field. (See "Using Quick Item Create" on page 4-22 for details.)

3. Move the cursor to the Mfr. Part Number field by clicking on the field or by using the Tab key.
  - If you know the Manufacturer Part Number, enter it, then skip to Step 7.
  - If you need to locate the correct Manufacturer Part Number, click **Search**. A search dialog box appears (shown in Figure 5-7).

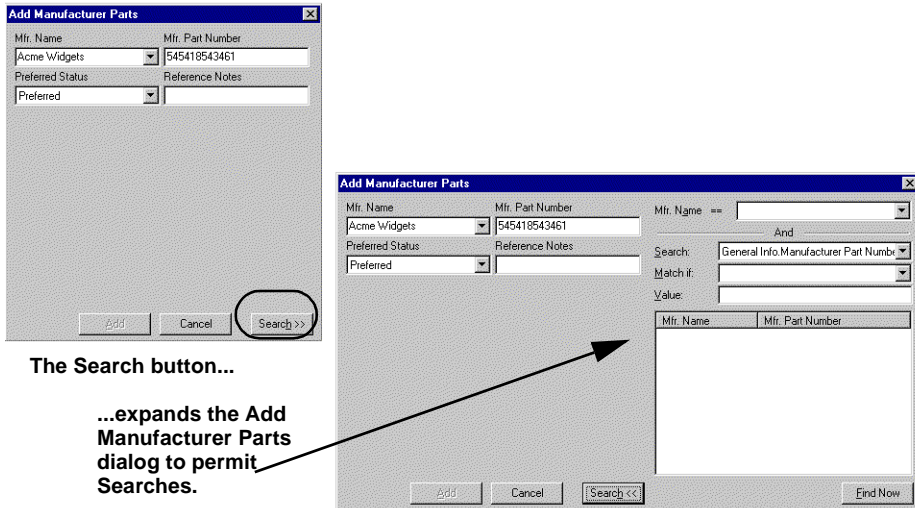


Figure 5-7: The Search functions of the Add Manufacturer Parts dialog box, Agile CM

4. Enter the appropriate values to locate the Manufacturer Part Number:  
(For example, “[Mfr. Name] Acme Widgets[Search] General Info.ManufacturerPart Number [Match if] contains [Value] 777” to find all Manufacturer Parts that are produced by Acme Widgets that contain “777”). Then click Find Now.
5. Click on the appropriate Manufacturer Part Number to select it from the displayed Search results.
6. Click the Select button to add it to the Manufacturer Part Number field.
7. Click in the Preferred Status field and click the selection list arrow . Select a value from the Preferred Status selection list.
8. Enter any desired notes in the Reference Notes field.
9. Click Add to add this Manufacturer Part to the Manufacturers table. If desired, continue to use the Add Manufacturer Parts dialog box to add more Manufacturer Parts. Click Close when you have finished.

You can also drag-and-drop objects directly to the table. To drag Items to the Manufacturers tab:

1. Select a Manufacturer Part from any list table, for example, a Search results table, or a Where Used table. (List tables display icons beside the Manufacturer Part number.)

2. Drag the selected Manufacturer Part (or Parts) to the white area of the Manufacturers table where you want to add it.

The objects are added to the bottom of the table.

**Note** If a Manufacturing Part you have selected to use is already used on another Part's Manufacturers tab, you will see a warning message. This may simply be an alert, however, and you may be able to continue the process, depending on your system settings.

Agile CM automatically completes the Status and Reference Notes fields.

**Note** In Agile iCM, you must complete the current Manufacturers data line before going on to the next or exiting the Item. If you don't, you will see an error message and will not be permitted to exit the process. If you cannot complete the line, you can delete it.

### Deleting a Manufacturer Part from the Manufacturers Tab

To delete a Manufacturer Part from the Manufacturers tab of an Item still in the Preliminary state:

1. In the Manufacturers table, select the Item to be deleted.
2. Click **Delete** on the Manufacturers tab.

### Modifying a Manufacturer Part on the Manufacturers Tab



**Note** As Manufacturer Parts are not required to go through the Change Control process, all modifications that are made go into effect immediately.

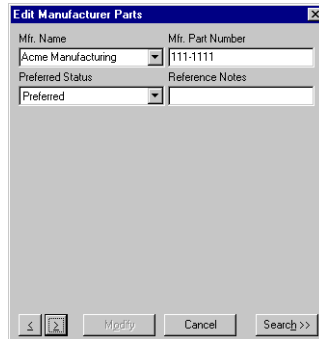
To edit the values for a Manufacturer Part that is listed on the Manufacturers tab of an Item still in the preliminary state:

1. Open the Item to be edited.
2. Click the Manufacturers tab to bring it forward.
3. Select the object to be edited.
4. Click **Edit**.
5. The **Edit Manufacturer Parts** dialog box appears, with the Manufacturer Part data displayed, as shown in Figure 5-8.
6. Edit the data as desired.
7. Click **Modify**.

8. If you are finished editing the Manufacturer Parts on this Item, click Close to close the Edit Manufacturer Parts window.

or

Continue editing Manufacturer Parts on this Manufacturers tab by clicking  to move to the previous Manufacturer Part on the table or  to move to the next Manufacturer Part on the table.

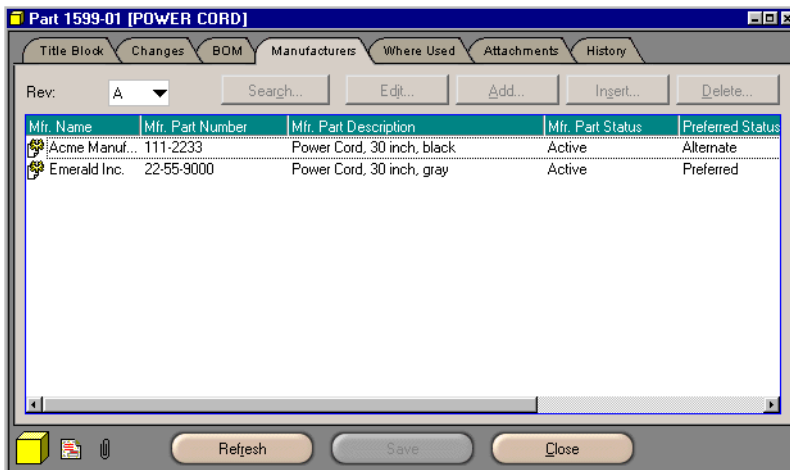


The dialog box titled "Edit Manufacturer Parts" contains the following fields:

- Mfr. Name: Acme Manufacturing (dropdown)
- Mfr. Part Number: 111-1111 (text box)
- Preferred Status: Preferred (dropdown)
- Reference Notes: (empty text box)

At the bottom, there are buttons for navigation and actions: a left arrow, a right arrow, "Modify", "Cancel", and "Search >>".

Figure 5-8: The Edit Manufacturer Parts dialog box, Agile CM



The screenshot shows the "Part 1599-01 [POWER CORD]" window with the "Manufacturers" tab selected. The table below displays the manufacturer data:

Mfr. Name	Mfr. Part Number	Mfr. Part Description	Mfr. Part Status	Preferred Status
Acme Manuf...	111-2233	Power Cord, 30 inch, black	Active	Alternate
Emerald Inc.	22-55-9000	Power Cord, 30 inch, gray	Active	Preferred

Below the table are icons for a folder, a document, and a printer, followed by "Refresh", "Save", and "Close" buttons.

Figure 5-9: The Manufacturers Tab of a Part, Agile CM

## Maintaining Manufacturers Data on Post-Preliminary Items

To make changes to the Manufacturers tab data on any Item that has been released or has a pending Change against it (and so is no longer in the Preliminary state), you must modify it by redlining from an ECO or MCO.

There are two ways to make changes to an Item that is no longer in the Preliminary state. You can:


- ☐ Redline the Manufacturers table on the Manufacturers tab in order to add, modify, or delete data on the table, or
- ☐ Use the Manufacturer Part Bulk Change process to add, modify, or delete data on several Items' Manufacturers tables at once.

The Redline process is described in the following sections.

The Manufacturer Part Bulk Change process is explained in “Modifying Manufacturer Parts from the Bulk Change Wizard” on page 5-28.

### Modifying Manufacturers Data from the Redline Window

When you add a released Item with Manufacturers data to the Affected Items tab of a Change Order, Agile CM asks you if you would like to redline its Manufacturers tab. If you click Yes, you see the Redline Manufacturers window for that Item. An example is shown in Figure 5-12. (If you click No, you can redline its Manufacturers later by selecting the Item from the Affected Items tab and clicking the Redline button and selecting Redline Manufacturers.)

Once a redline has been made to an object in Agile CM, the redline indicator  is displayed in the Affected Items table, adjacent to that object. See Figure 9-1 on page 9-2 for an illustration.

On some systems, depending on how your Agile administrator has configured settings, Redline Changes are available from both ECOs and MCOs (with an Agile jParts or Agile Parts license), but MCOs can only redline Manufacturer Parts data, while ECOs can redline either BOMs or Manufacturer Parts data. MCO Redlines will not advance the Rev of the affected Items, however, while ECO Redlines will.

Since MCOs don't roll Revs, they can be used to redline Manufacturers data without rolling the Rev, and ECOs can be used to redline Manufacturers data when rolling the Rev is desired. Depending on your company policy, use an ECO or an MCO to determine if the Rev of an item advances when you redline Manufacturers data.

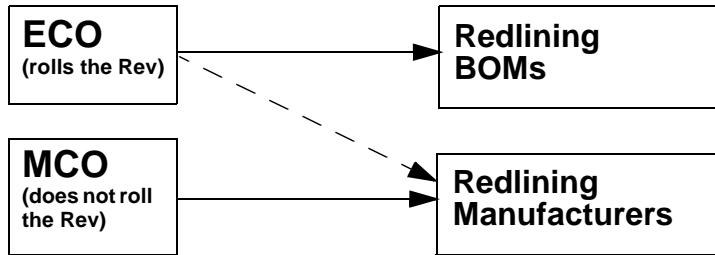


Figure 5-10: Redlining from an ECO vs. an MCO

Redlining Manufacturers data from an ECO is the same as the process from an MCO. However, because of the ECOs' ability to redline both Manufacturers data and BOMs, the ECO redline window has both a BOM tab and a Manufacturers tab. See Figure 5-11.

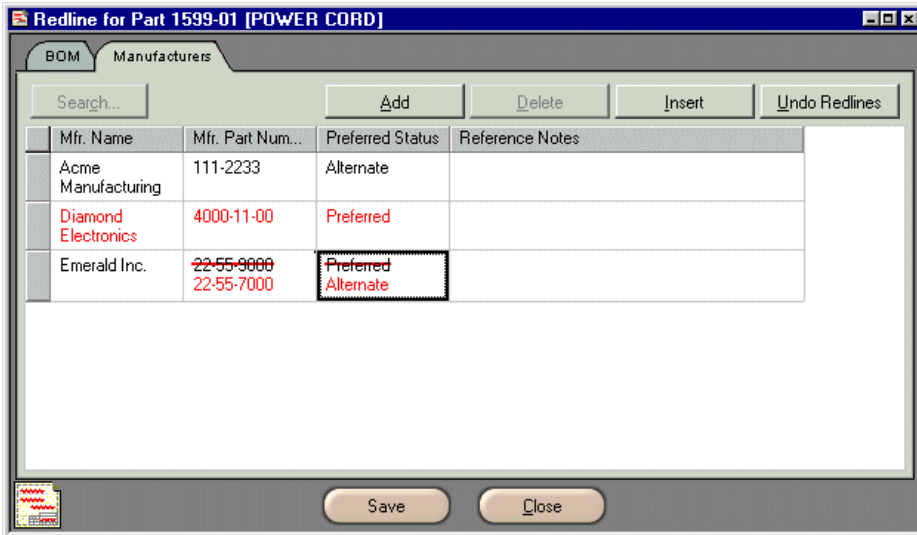


Figure 5-11: A Redline Manufacturers window (from an ECO), Agile CM

When you view the redline window from an Affected Items tab of an MCO, the Redline BOM tab is not displayed.

For more information about Changes, see Chapter 6, *Working With Changes*.

**Note** An Agile AML license is required to perform redlines to Manufacturers data.

## Opening the Redline Window

To view an affected Item's Redline window in Agile CM:

1. Select the Item from the Affected Items table.
2. Click Redline.

The Redline window appears.

(If you are redlining from an ECO, click the Manufacturers tab to bring it forward.)

If a row in the table has a red line through every cell, it means that Manufacturer Part was deleted from the Manufacturers table. If just a few of the cells have a short red line through them, it means the Manufacturer Part was modified. Any cell that was modified has a red line through the old value; the new value appears in red.

Figure 5-12 show the Redline window from an MCO. Figure 5-11 on page 5-21 show the Redline window from an ECO, for comparison.

**Note** The redline window of an ECO and an MCO may look different, depending on your system settings.

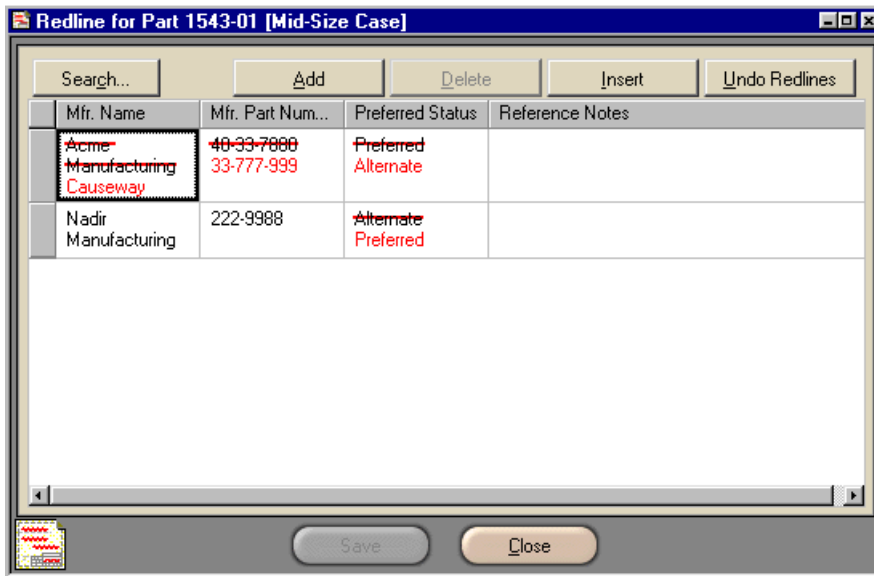


Figure 5-12: A Redline Manufacturers window (from an MCO), Agile CM



## The Redline Manufacturers Window Buttons

The following buttons can be found on the Redline Manufacturers window:

- ☐ The **Search** button opens a Search dialog box. The Search button is enabled when the Manufacturer Name or Manufacturer Part Number field is selected
- ☐ The **Add** button adds a row to the bottom of the Redline Manufacturers window table.
- ☐ The **Delete** button removes the selected row from the Redline Manufacturers window table.
- ☐ The **Insert** button inserts a new row above the row highlighted in the table.
- ☐ The **Undo Redlines** button clears redlines from the selected cell or row.

**Note** The Redline windows from an ECO and from an MCO are slightly different in appearance. The Redline window from an ECO has both a BOM tab and a Manufacturers tab; the Redline window from an MCO does not have tabs.


## Redlining Manufacturers Data

If you have the appropriate privileges you can modify a Redline Manufacturers table in the Redline Manufacturers window by:

- ☐ Editing a Manufacturer Part on the table
- ☐ Adding a Manufacturer Part to the bottom of the table
- ☐ Dragging one or more Manufacturers from a Search Results table or from another Manufacturers tab to the bottom of the Redline Manufacturers table
- ☐ Inserting a Manufacturer Part into the middle of the table
- ☐ Deleting a Manufacturer Part from the table
- ☐ Editing other data on the Redline Manufacturers table; if your Agile administrator has enabled them, there may be other fields on this table that can be redlined.

## Adding a Manufacturer Part in the Redline Manufacturers Window

To add a Manufacturer Part to the Redline Manufacturers table:

1. Click the **Add** button on the Redline Manufacturers tab.  
A new line appears on the Redline Manufacturers table.
2. Click in the **Manufacturers Name** field.  
The selection list arrow  appears.

3. Click the selection list arrow to display a list of Manufacturers. (See Figure 5-13.) If the Manufacturer object has not yet been created, you can create it on-the-fly by entering the Manufacturer name in this field. (See “Using Quick Item Create” on page 4-22 for details.)

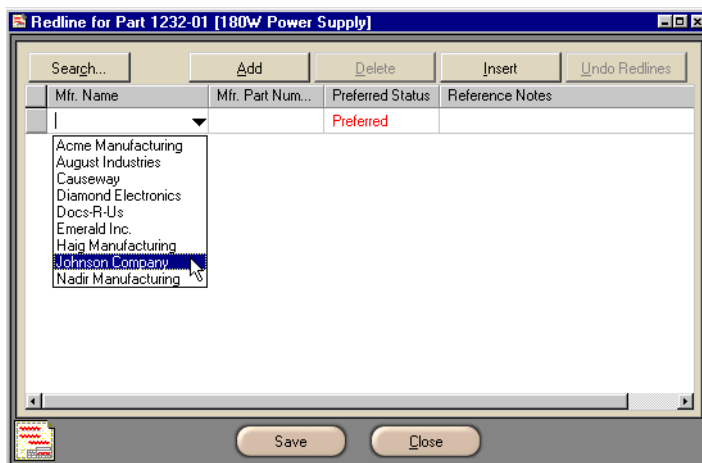


Figure 5-13: Selecting from the drop-down list of Manufacturers, Agile CM

4. Select the desired Manufacturer name.
5. Click in the Mfr. Part Number field.  
If you know the Manufacturer Part Number, enter it, then skip to Step 8.  
If you need to locate the correct Manufacturer Part Number, click Search.  
The Quick Search dialog box appears. (See Figure 5-14.)

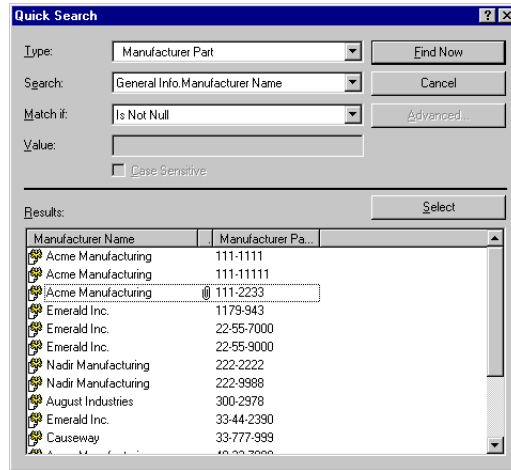


Figure 5-14: The Quick Search dialog box

6. Enter the appropriate values to locate the Manufacturer Part Number.  
(For example, “[Type]Manufacturer Parts [Search] General.Info.MfrName [Match if] contains [Value] Acme Manufacturing” to find all Manufacturer Parts that are produced by Acme Manufacturing). Then click Find Now.
7. The Search results are displayed in the Results list. Click the appropriate Manufacturer Part on the list, then click Select to add it to the Redline Manufacturers table.
8. Double-click in the Preferred Status Field. The selection list arrow ▼ appears.
9. Click the selection list arrow and select a value from the Preferred Status selection list.
10. Enter any desired notes in the Notes field.
11. To save the modifications you have made, click Save. Click Close to exit the Redline window.

You can add and insert Manufacturer Parts which you have not yet created to the Redline Manufacturers table. Agile CM lets you create them “on-the-fly”. See “Adding Non-Existent Manufacturer Parts in the Redline Window” on page 5-26.

You can also drag-and-drop objects directly to the table.

When you add a released Item with Manufacturers data to the Affected Items tab, Agile CM asks you if you would like to redline the Items. If you click Yes, you see

the Redline window for that Item. An example is shown in Figure 5-12. (If you click No, you can redline the Item later by the previous method.)

## **Dragging Manufacturer Parts to the Redline Table**

To drag Manufacturer Parts to the Redline Manufacturers table:

1. Select a Manufacturer Part from any list table, for example, a Search results table, or a Where Used table. (List tables display icons beside the Manufacturer Part number.)
2. Drag the Manufacturer Part to the white area of the Redline Manufacturers window.

The Manufacturer Part is added to the bottom of the table.

Agile CM automatically completes the fields.

**Note** You cannot add the same Manufacturer Part more than once to the same Item's Manufacturers tab.

## **Adding Non-Existent Manufacturer Parts in the Redline Window**

When you add or insert a non-existent Manufacturer or Manufacturer Part Number into the Manufacturers Redline window, Agile CM prompts you to create the object. If you click Yes, you see the Quick Item Create dialog box, similar to the one seen in Figure 4-12 on page 4-22.

When you create a Manufacturing object while in the Redline Manufacturers window, Agile iCM or Agile CM does not show you the tabbed object window for the new Manufacturer or Manufacturer Part.

To view that object's window (while leaving the Redline Manufacturers window active), do a Quick Search for it and open it. (For more information on Quick Search, see "Performing a Quick Search" on page 7-11.)

## **Inserting a Manufacturer Part into the Redline Manufacturers Window**

Inserting a Manufacturer Part is similar to adding a Manufacturer Part, except that the Manufacturer Part can be placed on any row in the Redline Manufacturers table.

To insert a Manufacturer Part into the Redline Manufacturers window:

1. Select the row above which you want to insert the new row.
2. Click the **Insert** button.

The new row pushes the old row and those below it down one line.

3. You can now add the new Manufacturer Part on this line. See “Adding a Manufacturer Part in the Redline Manufacturers Window” on page 5-23.

### **Deleting a Manufacturer Part from the Redline Manufacturers Table**

You use the **Delete** button on the Redline Manufacturers tab to remove rows and objects from the Redline Manufacturers window. The **Delete** button has three behaviors:

- ☐ If the selected row is empty, it removes it.
- ☐ If the selected row is red, it removes it.
- ☐ If the selected row is black, it puts a red line through it. Agile CM also places a red X in the left-most box.

To delete a Manufacturer Part or empty row:

1. Select either the entire row or a field in the row.
2. Click the **Delete** button on the Redline Manufacturers tab.

### **Editing a Manufacturer Part in the Redline Manufacturers Window**

Any field related to any of the Manufacturer Parts on the Manufacturers tab can be modified. To edit a field on the Redline window:

1. Select the field.  
Agile CM highlights the field.
2. Type the new information.  
Agile CM draws a red line through the old information and enters the new information, in red, below the old information.

Figure 5-15 shows a Redlined Manufacturer that has one Manufacturer Part being modified.

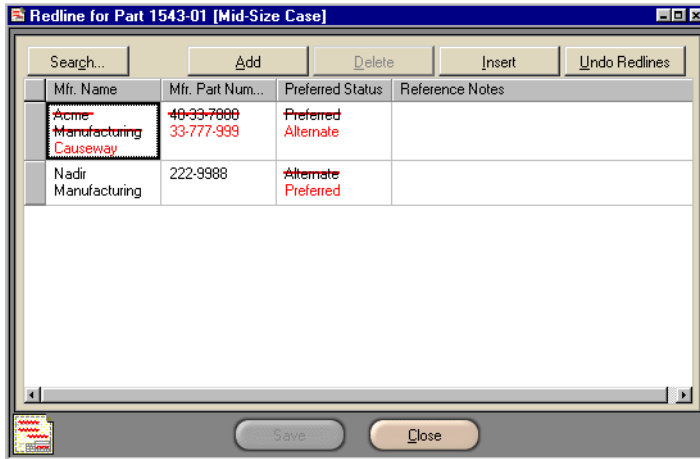


Figure 5-15: The Redline Manufacturers window (from an MCO), Agile CM

## Undoing Changes to the Redline Manufacturers Table

The Undo button lets you undo modifications to the Redline window. The Undo button removes the red elements from the selected field.

To undo a delete (where Agile CM draws a redline through the entire row):

1. Select any field in the deleted row.
2. Click Undo Redlines.

To undo a modification (where Agile CM draws a short red line through the modified value):

1. Select the modified field.
2. Click Undo Redlines.

## Closing the Redline Window

In Agile CM, click the Close button to close the Redline window. You return to the Affected Items tab.

## Modifying Manufacturer Parts from the Bulk Change Wizard

You can perform a Manufacturer Part Bulk Change from an ECO or an MCO, which automatically replaces or removes a Manufacturer Part from the Manufacturers tab of several Items at one time. Manufacturer Part Bulk Changes are created with the Manufacturer Part Bulk Change wizard.

Manufacturer Part Bulk Changes are available from both ECOs and MCOs (with an Agile Parts license), but MCOs can only redline Manufacturer Parts data, while ECOs can redline either BOMs or Manufacturer Parts data. Additionally, MCO Bulk Changes will not advance the Rev of the affected Items, while ECO Bulk Changes will.

Since MCOs don't roll Revs, they can be used to Bulk Change Manufacturers data without rolling the Rev, and ECOs can be used to Bulk Change Manufacturers data when rolling the Rev is desired. Depending on your company policy, use an ECO or an MCO to determine if the Rev of an item advances when you redline Manufacturers data.

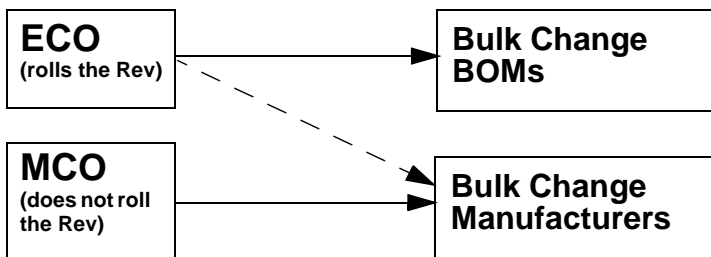


Figure 5-16: Making Bulk Changes from an ECO vs. an MCO

The Manufacturer Part Bulk Change wizard, from an MCO or an ECO, gives you the option to:

- ☐ Remove a Manufacturer Part from all or some of the Parts that use it, and automatically redline the Manufacturers tab of the assemblies affected by the Manufacturer Part Bulk Change
- ☐ Replace a Manufacturer Part in all or some of the Parts that use it, and automatically redline the Manufacturers tab of the assemblies affected by the Manufacturer Part Bulk Change.
- ☐ Just add the selected Manufacturer Part to the Manufacturers tabs, and then go back later to manually redline it.

Remember that you can make these Bulk Changes without changing the Revs of the affected Items by making them from an MCO.

**Note** **AML** An AML license is required to perform Manufacturer Part Bulk Changes.

## Launching the Manufacturer Part Bulk Change Wizard

To launch the Manufacturer Part Bulk Change wizard:

1. From a new or existing Pending Change, click the **Affected Items** tab to bring it forward.
2. Click the **Bulk Changes** button.  
A drop-down menu appears, listing BOM Bulk Change (grayed out if from an MCO) and Manufacturer Part Bulk Change.
3. Select the Manufacturer Part Bulk Change.
4. The Manufacturer Part Bulk Change wizard appears.

Alternatively, you can use the context (right-click) menu:


1. Right-click an area (of any tab) that is not part of a field.  
The context menu appears.
2. Select the Manufacturer Part Bulk Change.
3. The Manufacturer Part Bulk Change wizard appears.

## **Completing the Manufacturer Part Bulk Change Wizard**

The Bulk Change wizard has three steps.

### **Step 1: Selecting the Item to Be Replaced or Removed**

In Step 1, you select which Item is to be replaced or removed.

1. Enter the Manufacturer and Manufacturer Part Number of the Manufacturer Part to be replaced or removed.  
You can click the **Quick Search** button  to launch Quick Search.
2. Press **Next>** to go to Step 2.

### **Step 2: Selecting Where to Change the Item**

In Step 2, you select which of the assemblies that use the object are to be affected by the Change. In the Step 2 window, the Bulk Change wizard lists all the Items that use the object.

1. Select which assemblies are to be affected.
2. Press **Next>** to go to Step 3.

### **Step 3: Choosing a Change Option**

In Step 3, you choose between the “Replace”, “Remove”, or “Just add” options.

1. Select an option. You can:



- **Replace** the specified Manufacturer Part with the new Manufacturer Part and automatically redline the Manufacturers tab of all the affected Items, or
  - **Remove** the specified Manufacturer Part from all the Items you select, and automatically redline the Manufacturers tab of all the affected Items, or
  - **Just add** the Items you select to the Affected Items table, then redline their Manufacturers data later.
2. If you select “Replace with...”, enter the Manufacturer Part Number and the Manufacturer Name of the object you want to replace the object selected in Step 1.
  3. Click Finish.

The modified objects are placed on the Affected Items tab with appropriate redlines based on the action specified in the wizard.

## Searching for Manufacturing Objects

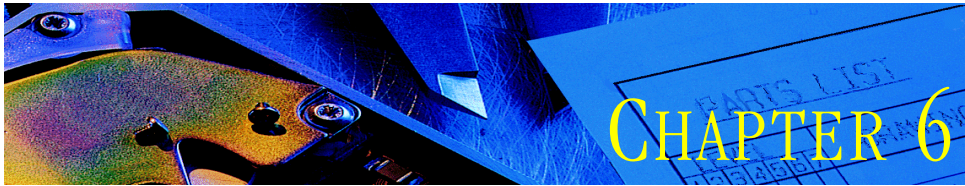
The Search feature can be used to locate Manufacturers and Manufacturer Parts in the same way as other objects.

For details, see “Performing Searches with an Agile AML License” on page 7-31.

## An Example — Using the Agile AML License

“Scenario Two” on page 2-21 portrays an example of how Agile CM with the Agile AML license can be used to solve real-life problems.





# Working With Changes

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*This chapter describes the Change window and its tabs. It also shows you how to create, copy, delete, and edit Agile Changes.*

*This chapter includes these topics:*

- ❑ *Types of Changes*
- ❑ *The Change Window*
- ❑ *Creating Changes*
- ❑ *Bulk Changes to BOM Data*
- ❑ *Working With Changes*
- ❑ *After a Change is Released*
- ❑ *Switching Changes to Their Final Status*
- ❑ *Changes with Redlining Functions: ECOs and MCOs*

*The directions in this chapter assume that you already know how to create an Item. If not, then see “Creating Agile Items — The Basic Process” on page 4-17.*

---

## Types of Changes

There five of types of Changes available in Agile CM:

- ☐ Engineering Change Orders (ECOs)
- ☐ Engineering Change Requests (ECRs)
- ☐ Manufacturer Change Orders (MCOs)
- ☐ Deviations
- ☐ Stop Ships

The purpose of each Change and its final status is listed in the following table:

Change Type	Purpose	Final Status
ECO	An <i>Engineering Change Order</i> tells users that changes need to be made to specific Items, and to go ahead and do the work. ECOs also let you release new Items and redline BOMs and Manufacturer data. See “Engineering Change Orders (ECOs)” on page 6-34.	<b>Implemented</b> An Implemented Change is an ECO for which the work has been completed; the changes have been made to the specified Items.
ECR	An <i>Engineering Change Request</i> is used to request a change to be made to Items. ECRs do not have any redlining functions.	<b>Closed</b> A Closed Change is an ECR that has been accepted and implemented.
Deviation	A <i>Deviation</i> is used to switch from one part to another for a specific amount of time. Deviations do not have any redlining functions.	<b>Expired</b> You can set a Change’s status to Expired to indicate that it has reached its Effective To date.
Stop Ship	A <i>Stop Ship</i> alerts users to stop shipping or using an Item. Stop Ships do not have any redlining functions.	<b>Resumed</b> A Resumed Change is a Stop Ship that has been lifted.

Change Type	Purpose	Final Status
MCO	A <i>Manufacturer Change Order</i> tells users that changes need to be made to the manufacturing data of specific Items. MCOs allow you to redline the Manufacturers tab of an Item. See “Manufacturer Change Orders (MCOs)” on page 6-35.	<b>First Article Complete</b> A First Article Complete MCO is one for which the Manufacturer Part has been received, and has passed incoming inspection or quality assurance. This generally means that the physical part has been validated against design documents or specifications.

Your Agile administrator may decide not to use some or all of these provided change types and may create new types for your company.

The change control process is discussed in “The Change Control Process” on page 1-8.

## The Change Window

For information on locating and opening a Change, see Chapter 7, *Searching for Objects*.

When you open a Change, it appears in the Change window. See Figure 6-1.


The screenshot shows a software window titled "ECO C00012". At the top are tabs: "Cover Page", "Affected Items", "Signoff", "Attachments", and "History". The main area contains several input fields and text boxes. On the left, "Number:" is "C00007", "Change Analyst:" is "Dorothy Agile", "Originator:" is "Bryan Agile", "Status:" is "Released", and "Date Released:" is "16-Jul-1999 18:45:03". In the center, "Change Type:" is "ECO", "Date Originated:" is "02-Jul-1999 17:14:25", "Description of Change:" is "modify fan assembly", and "Reason For Change:" is "increased failures in the field". On the right, "Change Category:" is "Quick Phase-In", "Reason Code:" is "Reliability Improvement", and "Product Line(s):" is "Taurus". A large green "RELEASED" stamp with a hammer icon is on the right side. At the bottom are "Refresh", "Save", and "Close" buttons.

Figure 6-1: A typical Change window, Agile CM

**Note** Remember that your Agile administrator might have changed the Agile CM interface so the window may look different in some ways.

## Change Window Icons and Buttons

Agile CM Change windows may have up to two icons in the lower left corner and three buttons:

- ❑ The first icon indicates the type of Change. For more information see “Change Type Icons on the Cover Page Tab” on page 6-6.
- ❑ The second icon  indicates that there are attached images or files.
- ❑ The Refresh button updates the Change window to show the latest information from the Agile database.
- ❑ The Save button saves modifications made to the fields in the Change window.
- ❑ The Close button closes the Change window.

## Change Window Tabs

When you view a Change you are viewing a set of tabs in the Change window. (A typical Change is shown in Figure 6-1 on page 6-3.)

The following table shows the tabs and some of the fields for Changes. It also shows the page where that tab is described.

Tab Name	Tab Fields include	Tab Information includes
Cover Page, (page 6-5)	Type, Change Analyst or Component Engineer, Originator, Status, Date Originated, Number, Description, Reason for Change, Category, Reason Code	General information about the Change
Page Two (optional, page 6-15)	user-defined	Unique fields defined by the Agile administrators
Page Three (optional, page 6-15)	user-defined	Unique subclass fields defined by the Agile administrator
Affected Items, (page 6-10)	Old Rev, New Rev, Obsolete Date, Effective Date, Lifecycle Phase, Change Function, Description	Which Items are affected by the Change. ECOs also include: redlined Bills of Material, redlined Manufacturers

Tab Name	Tab Fields include	Tab Information includes
Attachments, (page 6-11)	Image Description, File List, File Description, File Name, Checkout User, Checkout Date, Checkout Folder	Attached redlined drawings
Signoff, (page 6-11)	CCB Members and their actions, Date, Comment	Change Approvers and Observers and the results of their reviewing the Change
History, (page 6-13)	Action, User, Server Date, Item Number, Find Number, Details, Comments	All actions taken on the Change

### Dynamic Web and E-Mail Links from Agile Objects

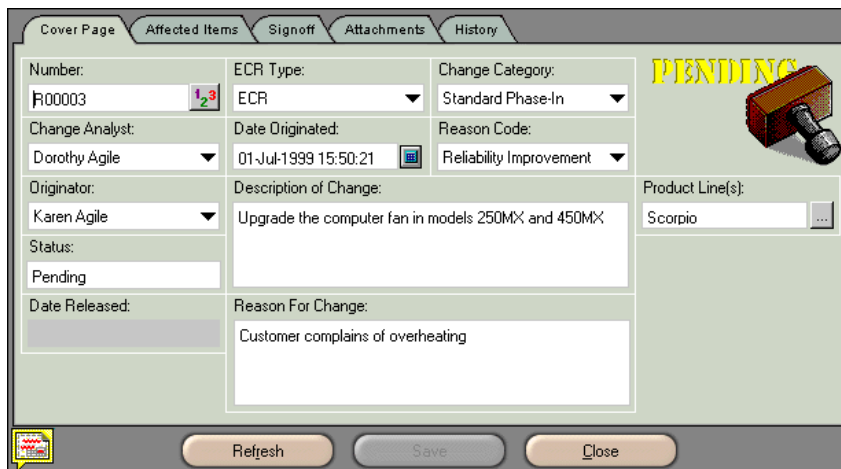
Text fields on Agile object tabs are dynamically featured to create active links to the Web browser when you enter a URL (<http://...>).

Agile CM provides a link to the e-mail system when you enter an e-mail address ([joeagile@agile.com](mailto:joeagile@agile.com)) into any text box of an Agile object.

Following is a description of the tabs that make up an Item view, and the information you can find on them.

### The Cover Page Tab

The Cover Page tab shows the information traditionally shown on a paper ECO form. Figure 6-2 shows a completed Cover Page tab.



The screenshot shows the 'Cover Page' tab of the Agile CM interface. The form contains the following fields:

- Number:** R00003 (with a small icon showing 1, 2, 3)
- ECR Type:** ECR (dropdown menu)
- Change Category:** Standard Phase-In (dropdown menu)
- Change Analyst:** Dorothy Agile (dropdown menu)
- Date Originated:** 01-Jul-1999 15:50:21 (with a small icon)
- Reason Code:** Reliability Improvement (dropdown menu)
- Originator:** Karen Agile (dropdown menu)
- Description of Change:** Upgrade the computer fan in models 250MX and 450MX
- Product Line(s):** Scorpio (with a small icon)
- Status:** Pending
- Date Released:** (empty field)
- Reason For Change:** Customer complains of overheating

At the bottom of the form, there are three buttons: 'Refresh', 'Save', and 'Close'. A large 'PENDING' stamp is visible in the top right corner of the form area.

Figure 6-2: A completed Cover Page tab, Agile CM

When a field has its contents grayed the contents of that field cannot be edited. The field may be uneditable for two reasons:

- ☐ The Change has been released, or
- ☐ The user does not have sufficient privileges or the appropriate license to modify that field.

For information on editing the Cover Page fields see “Completing the Cover Page Tab” on page 6-8.

## Change Type Icons on the Cover Page Tab

Each type of Change has a distinguishing icon. The fields on the Cover Page tab also vary from one Change type to another.

In Agile CM, the icons are displayed in the lower left of the Cover Page tab. These icons are also displayed next to each Change in Search results tables.



The ECO **Cover Page** tab has an ECO Type and a Change Category field. These fields are created automatically.



Except for the icon in the lower left corner of the tab and in the title bar, the ECR **Cover Page** tab looks the same as an ECO Cover Page tab and behaves the same way as an ECO Cover Page tab. An ECR is used to request a Change.





The **Deviation Cover Page** tab has two unique fields: Effective From and Effective To.









The **Stop Ship Cover Page** tab has one unique field, Resume Date.


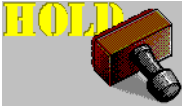





The **MCO Cover Page** tab has a Component Engineer field in place of the Change Analyst field.

### Status on the Cover Page Tab

Agile CM uses a “stamp” in the top right corner of the **Cover Page** tab to indicate the status of a Change. The stamps are shown below. By default, there are eleven status levels:

Status Stamp	Status Name	Status Definition
	Pending	The Originator may still be developing the Change. It has not yet been approved or perhaps even completed.
	Submitted	The Change has been routed to the Change Analyst or Component Engineer for review and analysis.
	CCB	The Change has been routed to the members of the Change Control Board (CCB) for approval.
	Released	The Change has been signed off by the CCB members and released.
	Closed	The Change is an ECR that has been accepted and implemented.
	Expired	The Change is a Deviation where the “Effective To” date has been reached.

Status Stamp	Status Name	Status Definition
	Implemented	The Change is an ECO that has been implemented or incorporated into new drawings.
	Hold	The Change has been placed on hold while information is being gathered by the Component Engineer.
	Resumed	The Change is a Stop Ship that has been lifted. Production of Affected Items can resume.
	Canceled	The Change has been canceled due to a fundamental flaw or rejection by several people.
	First Article Complete	The Manufacturer Part has been received and passed incoming inspection or quality assurance. The physical part has been validated against design documents or specifications (MCO only).

## Switching Changes From Status to Status

ECOs, ECRs and MCOs can also be switched to the status Hold or Canceled.

To switch a Change from one status to another, click the appropriate Toolbar button. For example, to switch a Deviation that is currently in effect to the status “Expired”, click the Expired toolbar button.

## Completing the Cover Page Tab

The Cover Page tab shows the information traditionally shown on a paper form ECO. Agile iCM or Agile CM complete some of the fields; you complete the rest. Figure 6-2 on page 6-6 shows a completed (ECO) Cover Page tab.

Some Cover Page fields are completed automatically when the Change is created or released; others must be entered manually. The following table summarizes the Cover Page fields and what they contain.

Field	Completed...	Contains...
Number	Automatically, when created	The number assigned to the Change when creating it
Change Type	Automatically, when created	The type of Change selected when creating the Change
Status	Automatically, when created; updated when released	Change status, described on page 6-7
Date Released	Automatically, when released	The date the Change was released
Change Category	Usually automatically, when created (with the default set by the Agile administrator)	Drop-down list of categories defined by the Agile administrator
Date Originated	Usually automatically, when created (with the default set by the Agile administrator)	The date the Change was created
Originator	Usually automatically, when created (with the default set by the Agile administrator)	The user who created the Change (can be selected from a drop-down list)
Reason Code	Usually automatically, when created (with the default set by the Agile administrator)	Drop-down list of categories defined by the Agile administrator
Product Line(s)	Usually manually; can contain a default	Drop-down list of categories defined by the Agile administrator
Change Analyst or Component Engineer	Usually manually; can contain a default	The user responsible for releasing the Change (drop-down list). If left blank, the Change will be routed to every Change Analyst or Component Engineer on the list.
Description Of Change	Usually manually; can contain a default	Up to 500 characters, including spaces and carriage returns (which count as 2 characters)
Reason For Change	Usually manually; can contain a default	Up to 500 characters, including spaces and carriage returns (which count as 2 characters)

**Note** Text fields on Agile object tabs are dynamically featured to create active links to the Web browser when you enter a URL (<http://...>)

Agile CM creates a link to the e-mail system when you enter an e-mail address ([joeagile@agile.com](mailto:joeagile@agile.com)) into any text box of an Agile object.

The Deviation Cover Page tab has two unique fields, Effective From and Effective To. The Stop Ship Cover Page tab has one unique field, Resume Date. There are two ways to complete or edit date fields, as explained in “Modifying Date Fields” on page 3-15.

The MCO has a Component Engineer field (in the place of a Change Analyst field), and has the same list of reason codes as all other Changes.

## The Affected Items Tab

The Affected Items tab lists the Items that are affected by a Change. Users with sufficient privileges can complete the Affected Items tab. For details, see Chapter 9, *Working with Affected Items*.

**Note** If you do not have Discovery privilege for an Item, it will not appear on the Affected Items tab. You may see a message at the bottom of the window telling you how many Items are not displayed. For more information, see “About Discovery Privilege” on page 3-10. If you have questions about your Discovery privileges, see your Agile administrator.

## Redlining on the Affected Items Tab

Only an ECO allows you to redline a BOM. You can not redline a BOM from an ECR, Deviation, Stop Ship, or MCO.

Redlining a BOM and redlining Manufacturers are similar, but different, processes. For this reason, each is addressed separately. Additionally, the redlining of Manufacturers from an ECO (if available on your system) versus redlining Manufacturers from an MCO, has some differences, as follows:

- ❑ When you add a released Item that has a Bill of Materials to the Affected Items tab of an ECO, you are prompted to redline the BOM. If you click Yes, you see the Redline BOM window for that Item. For details, see “Redlining the BOM of a Released Item” on page 8-21.
- ❑ When you add a released Item that has Manufacturers tab data to the Affected Items tab of an ECO, you are prompted to redline the Manufacturers data. If you click Yes, you see the Redline Manufacturers window for that Item. For details, see “Modifying Manufacturers Data from the Redline Window” on page 5-20.

**Note** **AML** If you have an AML license and if your Agile administrator sets the appropriate SmartRule, an ECO can also be used to redline Manufacturers data. Ask your Agile administrator.

## Viewing Items Listed on the Affected Items Table

To view an Item listed on the Affected Items table, double-click its row.

## The Attachments Tab

The Attachments tab lists the files and images that have been attached to an object. Changes, Items, and Manufacturing objects all have an Attachments tab. Images are typically drawings or scanned images. Files are typically documents, non-viewable files, compressed files, and so on.

The Attachments tab for a Change lacks the Rev field and the Incorporate and Unincorporate buttons that appear on the Attachments tab for a Part or Document. (See the Item Attachments tab on page 4-12.)

When you are using Agile iCM, you can view files and images in your browser. See Chapter 10, *Working with Attachments*, for details.

## Completing the Change's Attachments Tab

The Attachments tab lets you attach images and files that are important to the newly created Change. Details on completing and working with the Attachments tab can be found in Chapter 10, *Working with Attachments*.

**Note** Attach any pertinent images and files to a pending revision of an affected Item. Then, they will automatically remain with the revised Item when it is released. Creating a pending revision of an Item is described on page 4-23.

When you create a revision of an Item, it automatically inherits the images and files that are attached to the current default revision (provided the relevant SmartRule is set to Allow). For more information, see page 4-23, or ask your Agile administrator.

## The Signoff Tab

The Signoff tab lists the users who have been assigned to either approve or observe the proposed Change, the actions taken by the Approvers, the date and time of the action, and any comments made by the Approvers and Observers. Figure 6-3 shows the Signoff tab of an ECO.



Figure 6-3: The Signoff tab, Agile CM

The Add Approver and Remove Approver buttons are controlled by the Route privilege and Product Change license. If your Agile administrator hasn't assigned that privilege to you, the buttons won't be active.

**Note** If you do not have the ReadSignoff privilege for Changes, you will not see the Signoff tab on Changes. If you do not have the ReadSignoff privilege for MCOs, you will not see the Signoff tab on MCOs. If you have questions about your privileges, see your Agile adminisitrator.

**Note** The Signoff tab shows only the approvals and rejections made during the last approval cycle. For example, suppose a Change is returned to the originator, re-worked, and then resubmitted for a second approval cycle. The Signoff tab will not show the approvals and/or rejections of the Change made during the first approval cycle. This information appears on the History tab.

## Local Date/Time Stamp

Agile Anywhere provides two ways to record the date and time of any action taken against the Change:

- ❑ **Server Date:** this is date as shown on the server where Agile Anywhere is installed and running. For example, if the Agile server is in New York, the Server Date is recorded using the New York time. Server Date is the default.
- ❑ **Local Date:** this is the date shown on the local client machine of the user

taking the action against the Change. For example, if a user approving a Change is in Paris, then the Local Date is recorded using the Paris time. Local Date is optional.

Your Agile administrator may choose to display one or both dates on the Signoff tab. If the Agile administrator chooses, Local Date may also appear on the History tab of any object.

## The History Tab

The History tab shows a summary of actions taken against the Change, including:

- ☐ The current status of the Change
- ☐ A description of the action
- ☐ Which user took the action
- ☐ The date and time of the action
- ☐ Which Item was the subject of the action
- ☐ The Find Number of the Item
- ☐ Details of the action
- ☐ Comments made by users

While the Change status is Pending, no actions are recorded on the History tab. A Change must have a status other than Pending, such as Submitted or CCB, before actions are recorded on the History tab.

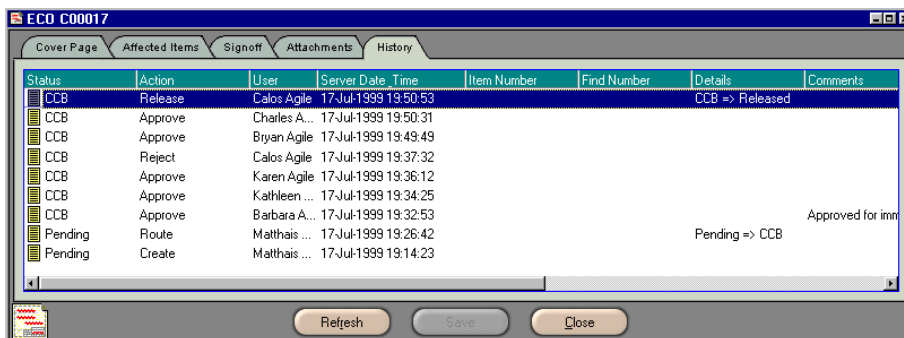
The types of actions recorded are:

- ☐ Add or delete an Item on Affected Items tab
- ☐ Redline an Item on the Affected Items tab
- ☐ Add or delete an attachment on the Attachments tab
- ☐ Add or delete Approvers
- ☐ Approvals and rejections
- ☐ Field change, any tab
- ☐ Status change
- ☐ Subclass change
- ☐ Comments
- ☐ Send
- ☐ Print

**Note** If you do not have the ReadHistory privilege for Changes, you will not see the History tab on Changes. If you do not have the ReadHistory privilege

for MCOs, you will not see the History tab on MCOs. If you have questions about your privileges, see your Agile administrator.

Figure 6-4 shows the History tab of an ECO.



Status	Action	User	Server Date/Time	Item Number	Find Number	Details	Comments
CCB	Release	Calos Agile	17-Jul-1999 19:50:53			CCB => Released	
CCB	Approve	Charles A...	17-Jul-1999 19:50:31				
CCB	Approve	Bryan Agile	17-Jul-1999 19:49:49				
CCB	Reject	Calos Agile	17-Jul-1999 19:37:32				
CCB	Approve	Karen Agile	17-Jul-1999 19:36:12				
CCB	Approve	Kathleen ...	17-Jul-1999 19:34:25				
CCB	Approve	Barbara A...	17-Jul-1999 19:32:53				Approved for imm
Pending	Route	Matthais ...	17-Jul-1999 19:26:42			Pending => CCB	
Pending	Create	Matthais ...	17-Jul-1999 19:14:23				


Figure 6-4: The History tab of an ECO, Agile CM

In Agile CM, double-click a row in the History table to open the History browser, similar to that described for Items on page 4-13.

## Adding a Comment to the History Tab

**Note** Comments on the History tab are different from the Comments on the Signoff tab. Comments on the Signoff tab come from users with Product Change licenses during the on-line approval process. Comments on the History tab can be made by anyone with sufficient privileges, at any point in time.

To add a comment to the History tab:

1. Click the Comment button to display the Comment dialog box, 
- or
- Select Signoff | Comments.



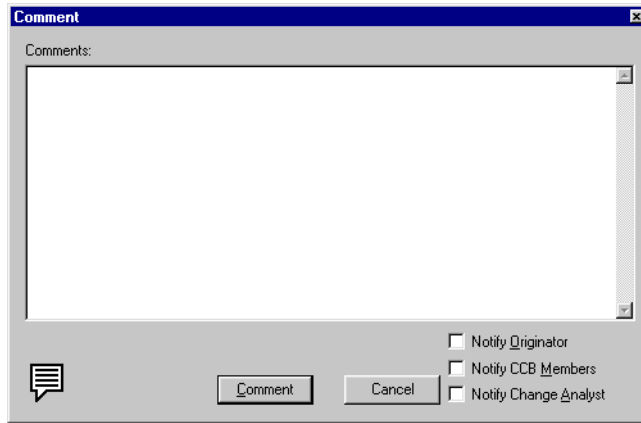


Figure 6-5: The Comment dialog box, Agile CM

2. (If appropriate) Select one, two, or all three Notify... check boxes.
3. Type your comment.
4. Click Comment.

## Custom Tabs: Page Two and Page Three Tabs

Your Agile administrator can add custom tabs to objects. The Page Two tab and the Page Three tab are named such because they are always inserted directly after the Title Block for Items, the Cover Page for Changes, or the General Info tab for Manufacturing objects. Whether or not you see the Page Two and Page Three tabs depends on privileges and settings. For details, see “Page Two Tab” on page 4-14 and “Page Three Tab” on page 4-15.

## Creating Changes

If you have the appropriate privileges you can create or modify a Change. Creating a Change is a two-step process:

1. Create the Change—select a Change type and assign a number.
2. Complete the Change—complete the appropriate fields on the Cover Page, Affected Items, and Attachments tabs.

**Note** Agile CM has a Bulk Change feature which lets you replace or remove a component from several assemblies at the same time. For details see “Bulk Changes to BOM Data” on page 6-19.

*Creating Changes with the New Object Button* (below) explains how to create a Change in Agile CM using the **New Object** button. You can also create Changes from within an Item window, the Results table, the Where Used table, or the BOM tree. For details, see “Creating a Change with the Right Mouse Button” on page 6-17.

## Creating Changes with the New Object Button

When you create a Change, you select a Change Type and assign a number.


To create a Change:

1. Click the **New Object** button .

Agile CM opens the **Create New Object** dialog box. Agile CM remembers what type of object you created last, and displays that type of object in the **Type** field.



Figure 6-6: The Create New Object dialog box, Agile CM

2. If appropriate, select a different object type from the **Type** list.
3. Type the number of the proposed Change in the **Number** field  
or  
Click the **Auto Number** button  to have Agile iCM or Agile CM automatically enter the number. (The autonumber format and sequence is determined by the Agile administrator.)
4. (If appropriate) Enter a description.
5. Click **OK**.

Agile CM creates the proposed Change and displays the Change with the **Cover Page** tab on top. The **Cover Page** displays the Change Number and Description as you have entered them.


**Note** Once Agile CM creates a Change, that Change exists until you delete it as described on “Deleting a Change” on page 6-27. If you create a new

Change, then decide you do not wish to keep it, be sure to delete the Change, otherwise the new Change will still be in the database and the number cannot be reused.

## Creating a Change Using the Save As Button

Using the Save As feature is a quick way to create a new Change that is very similar to an existing Change.

To create a Change using Save As:

1. Select or open an existing Change.
2. Select File | Save on the menu bar.  
Agile CM opens the Save As dialog box.
3. (If appropriate) Select a different Change type from the Type list.
4. Either type the new Change's Number  
*or*  
Click the Auto Number button  to assign an autonumber to the Change.
5. Click OK.  
Agile CM creates the new Change, and displays the Change.
6. Make any necessary modifications to any of the other tabs.
7. To save the modifications you have made click Save.

The new Change has a status of Pending.

If the you do not have Discovery privilege for any of the Items on the Affected Items tab of the existing Change, you will not be able to use Save As to create a new Change.



## Creating a Change with the Right Mouse Button

The right mouse button lets you create a Change from within an Item window, the Results table, the Where Used table, or the BOM tree. The selected Item is automatically entered on the Affected Items tab of the new Change.

To create a Change from within an Item window or table:

1. Right-click an area of the tab that is not part of a field (any tab will work) or right-click an Item in the table.  
A menu appears.
2. Click New.

A sub-menu appears.

3. Select a type of Change.  
The New Object dialog box appears.
4. Type a number.
5. Click OK.

## **Completing Changes**

The Change window opens with the **Cover Page** tab on top. (Each type of Change has a different **Cover Page** tab.)

To complete a Change:

1. Complete the appropriate fields on the **Cover Page** tab. (For details see “Completing the Cover Page Tab” on page 6-8.)
2. Click the **Affected Items** tab to move it to the front and add all appropriate Items to the **Affected Items** tab. (For details see “The Attachments Tab” on page 6-11.)
3. Click the **Attachments** tab to move it to the front. Add all appropriate images and files to the **Attachments** tab. (For details see “The Affected Items Tab” on page 6-10.)
4. If they are displayed, click on the **Page Two** tab and the **Page Three** tab to move each one to the front. Fill in the **Page Two** tab and the **Page Three** tab as appropriate. For details, see your Agile administrator.
5. To save the modifications you have made click **Save**.

You do not enter information on the **Signoff** or **History** tabs; Agile CM automatically completes these.

## **Modifying Fields**

With sufficient privileges, you can modify editable fields. You can only modify fields that have specifically been made editable by the Agile administrator.

To edit a field that does not have a button, select or click in the field and type in the modification.

To edit a field that has a button, click the button and select from the list that appears.

## Saving a New Change

New Changes are automatically saved when you click the OK button on the New Object dialog box.

Agile CM will prompt you to save any modifications you make to the new Change's tabbed window when you close the window. You can also click **Save** at any time.

## Bulk Changes to BOM Data

(For information about Manufacturer Parts and Bulk Changes, see “Modifying Manufacturer Parts from the Bulk Change Wizard” on page 5-28.)

You can create an ECO that automatically replaces or removes an Item from the assemblies on several BOMs at one time. Such Changes are called BOM Bulk Changes, created with the BOM Bulk Change wizard.

BOM Bulk Changes are available only from ECOs. The BOM Bulk Change wizard from an ECO gives you the option to:

- ☐ Remove an Item from all or some of the assemblies that use the Item, and automatically redline the BOM of the assemblies affected by the Bulk Change
- ☐ Replace an Item in all or some of the assemblies that use the Item, and automatically redline the BOM of the assemblies affected by the Bulk Change
- ☐ Just add the selected assemblies to the **Affected Items** tab and manually redline their BOMs

**Note** Manufacturer Bulk Changes are described in “Modifying Manufacturer Parts from the Bulk Change Wizard” on page 5-28.

## Launching the BOM Bulk Change Wizard

To launch the BOM Bulk Change wizard:

1. From a new or existing Pending Change, click the **Affected Items** tab to bring it forward.
2. Click the **Bulk Changes** button.  
A pop-up menu appears.
3. Select **BOM Bulk Change**.
4. The BOM Bulk Change wizard appears.

Alternatively, you can use the shortcut (right-click) menu:


1. Right-click an area (of any tab) that is not part of a field.  
The shortcut menu appears.
2. Select BOM Bulk Change.
3. The BOM Bulk Change wizard appears.

### Completing the BOM Bulk Change Wizard

The BOM Bulk Change wizard has three steps.

#### Step 1: Selecting the Item to Be Replaced or Removed

In Step 1, you select which Item is to be replaced or removed.

1. Enter the number of the Item to be replaced or removed.  
You can click the Quick Search button  to launch Quick Search.
2. Press Next> to go to Step 2.

#### Step 2: Selecting Where to Change the Item

In Step 2, you select which of the assemblies that use the object are to be affected by the Change. In the Step 2 window, the Bulk Change wizard lists all the Items that use the object.

1. Select which assemblies are to be affected.
2. Press Next> to go to Step 3.

#### Step 3: Choosing a Change Option

In Step 3, you choose between the “Replace”, “Remove”, or “Just add” options.

1. Select an option. You can:
  - ☐ **Replace** the specified Item with the new Item and automatically redline the BOMs of all the affected assemblies you selected, or
  - ☐ **Remove** the specified Item from all the assemblies you selected, and automatically redline the BOMs of all the affected assemblies, or
  - ☐ **Add** the assemblies you selected to the Affected Items table, then redline the BOMs later.
2. If you select “Replace with...”, enter the number of the object with which you want to replace the object selected in Step 1.
3. Click Finish.

The modified objects are placed on the **Affected Items** tab with appropriate redlines based on the action specified in the wizard.

## Working With Changes


### Auditing Your Change

The Audit button checks a Change to see that required fields are filled and for SmartRules violations. You can use the Audit feature at any point in the Change's lifecycle. For information on SmartRules, see the Agile Administrator *User's Guide*.

### Submitting a Change

By default, you can only submit a Change for review and approval if you are the Originator, or if you are the Change Analyst or Component Engineer and your Agile administrator has specified that Change Analysts or Component Engineers can submit Changes.

To submit a Change to the Change Analyst or Component Engineer for review and approval:

1. Click the **Submit** button to open the **Submit** dialog box .
2. Enter any comments in the **Comments** field.
3. Click **Submit**.

The status of the Change switches to Submitted.

- Note**
- a) If the Change Analyst field is left blank, the Change will be submitted to every user on the Change Analyst drop-down list.
  - b) Only the Originator and the Change Analyst or Component Engineer can submit a Change.
  - c) You cannot submit a Change to a Change Analyst who does not have Discovery privilege for that Change. See "About Discovery Privilege" on page 3-10.

### Routing a Change

Routing a Change means sending the Change to the CCB.

When a user with a Product Definition license routes a Change, the status of the Change switches to CCB.

When routing a Change, a user with a Product Definition license has the option to select a list of other Product Change users and assign those users as either

Approvers or Observers. Then, when the Change is routed it is attached to an e-mail message and sent to all the Approvers and Observers. The list of Approvers and Observers is created in the *Address Book* and can vary from one Change to another. (For information on the Address Book, see page 3-18.) The mail message contains an icon representing the Change; double-clicking the icon opens the Change.

**Note** You must have a Product Change license and the necessary privileges to add approvers and/or observers to a Change.

To route a Change:

1. Open the Change.

2. Click the Route button .

If you do not have a Product Change license, the status switches to CCB.

**PC** If you do have a Product Change license, the Route dialog box appears.

3. Complete the Approvers field. Either type the names of the Approvers (with semicolons separating the names)

*or*


Click the Approvers button to open the Address Book.

4. Complete the Observers field. Either type the name of the Observers (with semicolons separating the names)

*or*

Click the Observers button to open the Address Book.

5. Enter any comments in the Comments field.

6. (If appropriate) Select the Urgent box to add the  icon to the mail message.

7. Click Route on the dialog box.

The Change is routed to all the Approvers and Observers and their names are placed on the Signoff tab, as shown in Figure 6-7.



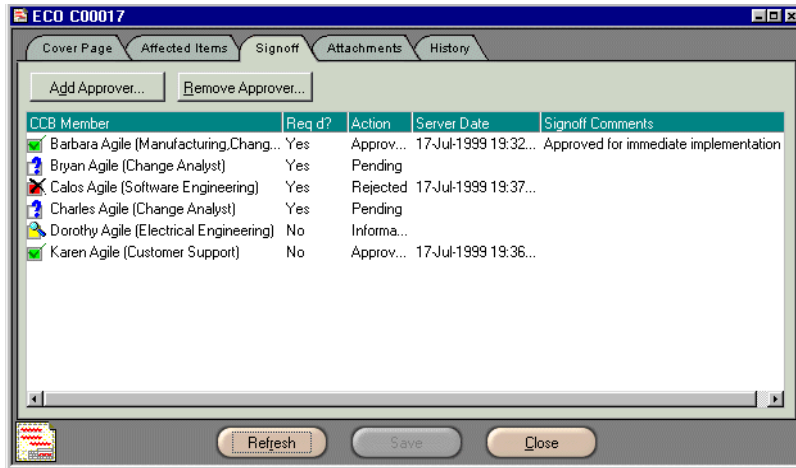



Figure 6-7: The Signoff tab, Agile CM

## Handling Routed Changes with Agile Product Change License

### **PC** Approving a Change

When you approve a Change, Agile Anywhere shows the approval and any comments on the **Signoff** tab and sends an e-mail message to the Change Analyst. The e-mail message notifies the Change Analyst or Component Engineer that you have approved the Change.

To approve a Change:

1. Open the Change.
2. Click the **Approve** button to open the Approve dialog box .
3. Enter your password in the Password field.
4. Enter any comments in the Comments field.
5. Click **Approve** on the dialog box.

**Note** Users without a Product Change license can signoff via e-mail, or else manually, in a CCB meeting. If done by e-mail, their e-mail sign-offs can be attached to the ECO's **Attachments** tab.


When all the Approvers have approved the Change, Agile Anywhere automatically sends a mail message to the Change Analyst or Component Engineer indicating the Change is ready to be released.

**PC Rejecting a Change**

When you reject a Change, Agile Anywhere shows the rejection and any comments on the **Signoff** tab, and sends an e-mail message to the Change Analyst or Component Engineer. The e-mail message notifies the Change Analyst or Component Engineer that you have rejected the Change.

If a Change is first rejected but then later approved, the **Signoff** tab shows only the approval and not the rejection. However, the **History** tab will show both actions.


To reject a Change:

1. Open the Change.
2. Click the **Reject** button to open the Reject dialog box .
3. Enter your password in the Password field.
4. Enter any comments in the Comments field.
5. Click **Reject** on the dialog box.

**Returning a Change to the Originator**

When a Change is returned to the Originator, Agile Anywhere moves the Change back to the status of Pending. When the Originator re-submits the Change to the Change Analyst or Component Engineer, the Routing and Approval processes begin again as if the Change were being submitted for the first time. For example, if an Approver for the second route cycle was part of the first route cycle, the Approver needs to approve the Change again. You need the Return privilege, granted by your Agile administrator, before you can return a Change.

To return a Change to the Originator:

1. Select and open the Change.
2. Click the **Return** button .

If you do not have a Product Change license, the Change is returned to the Originator.

**PC** If you have a Product Change license, the Return dialog box appears.

3. If appropriate, select the **Notify CCB** box.
4. Enter any comments in the Comments box.
5. Click **OK** on the dialog box.

**Note** a) Approvals and rejections from previous route cycles do not appear on the **Signoff** tab. Only the approvals and rejections from the latest route

cycle appear on the Signoff tab. However, the History tab will show the actions of the earlier route cycles.

b) You cannot return a Change to an originator who does not have Discovery privilege for that Change. See “About Discovery Privilege” on page 3-10.

### **PC Adding/Removing Approvers and Observers**

After a Change has been routed, it may be necessary to either add or remove Approvers and/or Observers. You need the Route privilege granted to you before you can add or remove Approvers or Observers.

To add an Approver or Observer:

1. Select and open the Change.
2. Bring the Signoff tab to the front.
3. (On the Signoff tab) Click the Add Approvers button.

The Add Approvers and Observers dialog box opens.

4. Complete the Approvers field. Either type the names of additional Approvers (with semicolons separating the names)

*or*

Click the Approvers button to open the Address Book.

5. Complete the Observers field. Either type the names of additional Observers (with semicolons separating the names)

*or*

Click the Observers button to open the Address Book.

6. (If appropriate) Select the Urgent box.
7. Enter any comments.
8. Click OK on the dialog box.

To remove an Approver or Observer:

1. Select and open the Change.
2. Bring the Signoff tab to the front.
3. Click the name of the user(s) you want to remove.
4. Click the Remove Approvers button on the Signoff tab.

5. When the prompt appears, choose **Yes** to remove the specified users or **No** to keep them on the **Signoff** tab.

**Note**

- a) You can only remove an Approver if that Approver has not yet approved or rejected the Change.
- b) You cannot add an approver or observer if that user does not have Discovery privilege for that Change. See “About Discovery Privilege” on page 3-10.

### **PC** Serial Routing (optional)

To control the order in which Agile Anywhere users approve the Change:

1. Route the Change to only one user, the user who needs to approve the Change first.  
Then, when you receive the e-mail announcing the first user’s approval:
2. Open the Change and bring the **Signoff** tab to the front.
3. Click **Add Approver**.
4. Add the user who needs to approve the Change next.  
Then, when you receive the e-mail announcing the next user’s approval:
5. Repeat steps 2 - 4 as often as required.


**Note** You cannot add an approver if that user does not have Discovery privilege for that Change. See “About Discovery Privilege” on page 3-10.

## Canceling a Change

Canceling a Change is not the same as deleting a Change. A Change can be canceled due to a fundamental flaw or rejection by several Approvers, but it remains in the database. You must have the appropriate privileges to cancel a change.

When a Change is canceled, all Approvers and Observers are removed from the **Signoff** tab.

To cancel a Change:

1. Click the **Cancel** button .

If you do not have a Product Change license, the status switches to **Canceled**.

**PC** If you do have a Product Change license, the **Cancel** dialog box appears.

1. Complete the **Notify** field.

2. (If appropriate) Select the Notify Originator box.
3. (If appropriate) Select the Notify CCB Members box.
4. Enter any comments in the Comments field.
5. Click OK on the dialog box.

The status of the Change switches to Canceled.

## Uncanceling a Change

**Note** You must have the appropriate privilege to uncanceled a Change. See your Agile administrator if you have questions about your privileges.

To uncanceled a Change:

1. Click the Return to Originator button .

If you do not have a Product Change license, the status switches to Pending.

**PC** If you do have a Product Change license, the Return To Originator dialog box appears.

1. (If appropriate) Select the Notify CCB Members check box.
2. Enter any comments in the Comments field.
3. Click OK on the dialog box.

The status of the Change switches to Pending and the comments are placed on the History tab.

## Deleting a Change

Agile CM supports “soft” and “hard” deletes.

See “Deleting Agile Objects” on page 4-24 for more information about

- ☐ Soft-deleted objects.
- ☐ Hard-deleted objects.
- ☐ Which deleted objects can be undeleted.
- ☐ Searching for soft-deleted objects.

**Note** If you think you might want to undelete a soft-deleted Change, be sure to clear its Affected Items tab before you delete it. You can only undelete Changes with no entries on the Affected Items tab. If you want to keep the record of Affected Items but still want to delete the Change, use the Save As command to copy it under another Change number before deleting it.


You can only delete a Change if you created it, or if you are the Change Analyst or Component Engineer and your Agile administrator has given Change Analysts or Component Engineers the appropriate privileges to delete a Change. Then, you can only delete a Change that has not been released; it must have Pending status. If you want to delete a Change that has already been released, you must first unrelease the Change. You need the appropriate privileges to unrelease a Change by returning it to the Originator. See your Agile administrator if you have questions about your privileges.

**Note** If you delete a Change that has items on the Affected Items list, you will not be able to undelete it.

If you do not have Discovery privilege for any Items on the Affected Items list, you will not be able to delete the Change.

### Soft-Deleting a Change

To soft-delete an unreleased Change:

1. Select and open the Change.
2. Click the Delete button in the toolbar .

*or*

Choose File | Delete Object from the menu bar.

*or*

Right-click in the Change window and select Delete from the menu that appears.

3. Click Yes when prompted to confirm that you want to delete the Change.


**Caution!** Using File | Delete deletes the selected Change, *not* the contents of a selected field or tab. For example, if you create an ECO and add an image to the Attachments tab, using File | Delete deletes the ECO from the database, not the image from the Attachments tab.

### Hard-Deleting a Change

Once a Change has been soft-deleted, it can be permanently removed from the database by hard-deleting it, if you have the necessary privileges.

**Caution!** Hard-deleted Changes *cannot* be undeleted.

To hard-delete a Change:

1. Run the Deleted Changes Search in the Change Analyst Searches folder.
2. Select the appropriate deleted Change from the list.
3. Click the Delete button .

*or*

Choose File | Delete Object from the menu bar.

*or*

Right-click in the Change window and select Delete from the menu that appears.

The Change is now hard-deleted from the database.

**Note** Hard-deleting a Change releases its number to be reused if needed.

## Undeleting a Change

Since soft-deleted Changes still exist in the database, you can undelete them if you have the necessary privileges, and if the Change has no Items on the Affected Items tab. (See your Agile administrator if you have questions.).

To undelete a Change:

1. Run the Deleted Changes Search in the Change Analyst Searches folder.
2. Select and open the appropriate deleted Change from the list.
3. Choose File | Undelete from the menu bar.

*or*

Right-click in the Item window and select Undelete from the menu that appears.

## Releasing a Change

Before a Change can be released, all required fields must be completed. Usually these fields are on the Cover Page tab and the Affected Items tab. Your Agile administrator determines which fields are required by adding or omitting fields from the out-of-the-box configuration.

You can use the Audit button to verify that all required fields have been completed. The Release and Audit features are available only if you have the appropriate privileges.