

# **Amphora Wine Log Manual**

*September 23, 2010  
Copyright © 2010, fermsoft*

## Table of Contents

<b>Introduction</b> .....	8
<u>What is Amphora Wine Log?</u> .....	9
<u>Getting Started</u> .....	10
<u>Step 1: Settings and Preferences</u> .....	10
<u>Automatic Preference Setting</u> .....	10
<u>Manual Preference Setting</u> .....	10
<u>Step 2: Containers and Vineyards</u> .....	10
<u>Step 3: Creating a New Batch</u> .....	10
<b>Program Overview</b> .....	12
<u>Program Views</u> .....	13
<u>Selecting a View</u> .....	13
<u>Start Page</u> .....	15
<u>Viewing Data</u> .....	16
<u>Batch Data</u> .....	16
<u>Non-Batch Data</u> .....	17
<u>Varieties</u> .....	17
<u>Yeasts</u> .....	17
<u>Cultures</u> .....	17
<u>Recipes</u> .....	18
<u>Contacts</u> .....	18
<u>Web Resources</u> .....	18
<u>Winery Information</u> .....	18
<u>Table Customization</u> .....	18
<u>Sorting Data</u> .....	18
<u>Resizing Columns</u> .....	18
<u>Hiding Columns</u> .....	18
<u>Incremental Search</u> .....	19
<u>Table Tooltips</u> .....	19
<b>Data Entry</b> .....	20
<u>Creating and Editing Records</u> .....	21
<u>Creating New Records</u> .....	21
<u>Creating New Records from a Record Copy</u> .....	22
<u>Editing Existing Records</u> .....	22
<u>Deleting Records</u> .....	22
<u>Undo Operations</u> .....	22
<u>Refresh Data</u> .....	23
<u>Selecting Containers</u> .....	24
<u>Selecting a Single Container</u> .....	24
<u>Selecting a Container for a Process</u> .....	25
<u>Selecting a Container for an Event</u> .....	25
<u>Linking Containers to a Batch</u> .....	25
<u>Selecting Multiple Containers</u> .....	25
<u>Selecting Multiple Containers for Processes</u> .....	25

<u>Selecting Multiple Containers for Events</u> .....	26
<u>Selecting Container Groups</u> .....	26
<u>Containers in Use</u> .....	27
<u>Container Search</u> .....	28
<u>Additional Container Information</u> .....	29
<u>Entering Events</u> .....	30
<b><u>Batch Data</u></b> .....	<b>32</b>
<u>Batch Information</u> .....	33
<u>Creating a New Batch</u> .....	33
<u>Batch ID</u> .....	34
<u>Other ID</u> .....	34
<u>Size</u> .....	34
<u>Source</u> .....	35
<u>Recipe</u> .....	35
<u>Opening an Existing Batch</u> .....	35
<u>Deleting a Batch</u> .....	36
<u>All Batches and Active Batches</u> .....	36
<u>Batch Information</u> .....	36
<u>Batch Cost</u> .....	37
<u>Batch Tasks</u> .....	37
<u>Notes</u> .....	38
<u>Batch Log Viewer</u> .....	39
<u>Batch Status</u> .....	40
<u>Recipe</u> .....	40
<u>Bottle Label</u> .....	40
<u>Batch Composition</u> .....	41
<u>Crush</u> .....	41
<u>Fruit Composition</u> .....	43
<u>Blend Composition</u> .....	45
<u>Fruit Source Sample History</u> .....	45
<u>Fruit Source Spray History</u> .....	45
<u>Fruit Source Weather History</u> .....	45
<u>Batch Processes</u> .....	46
<u>Starting a Process</u> .....	46
<u>Ending a Process</u> .....	46
<u>Process Summary</u> .....	46
<u>Batch Events</u> .....	47
<u>Additions</u> .....	47
<u>Bottle</u> .....	47
<u>Adding Bottles to Inventory</u> .....	48
<u>Reducing General Inventory Items</u> .....	48
<u>Adding Items to Batch Cost</u> .....	48
<u>Cap Management</u> .....	49
<u>Chaptalization</u> .....	50
<u>Filter</u> .....	51

<a href="#">Measurements</a> .....	52
<a href="#">Custom Measurements</a> .....	53
<a href="#">Press</a> .....	54
<a href="#">Rackings</a> .....	54
<a href="#">Racking Between Single Containers</a> .....	55
<a href="#">Racking From a Single Larger Container to Multiple Smaller Containers</a> .....	56
<a href="#">Racking From Multiple Smaller Containers to a Single Larger Container</a> .....	58
<a href="#">Blending Wine</a> .....	60
<a href="#">Tastings</a> .....	61
<a href="#">Top Ups</a> .....	61
<a href="#">Event Summary</a> .....	62
<a href="#">Measurement Views</a> .....	63
<a href="#">Selecting Data by Container</a> .....	63
<a href="#">Fermentation Detail</a> .....	63
<b><a href="#">Container Management</a></b> .....	<b>64</b>
<a href="#">Container Inventory</a> .....	65
<a href="#">Creating and Editing Containers</a> .....	65
<a href="#">Container Templates</a> .....	66
<a href="#">Creating and Editing Container Templates</a> .....	66
<a href="#">Using Templates to Create New Containers</a> .....	67
<a href="#">Creating a Single Container from a Template</a> .....	68
<a href="#">Creating Multiple Containers from a Template</a> .....	68
<a href="#">Editing Existing Containers Using Templates</a> .....	69
<a href="#">Container Maintenance</a> .....	69
<a href="#">Entering and Editing Container Maintenance Activities</a> .....	69
<a href="#">Entering Maintenance on Multiple Containers</a> .....	70
<a href="#">Selecting Container Groups</a> .....	70
<a href="#">Container Reports</a> .....	71
<a href="#">Container Age</a> .....	71
<a href="#">Container Status</a> .....	71
<a href="#">How Container Status Works</a> .....	71
<a href="#">Container Mapping</a> .....	72
<a href="#">Creating a New Map</a> .....	72
<a href="#">Adding and Deleting Containers</a> .....	72
<a href="#">Moving and Resizing Container Graphics</a> .....	72
<a href="#">Changing Container Graphic Shapes</a> .....	73
<a href="#">Viewing and Editing Container Data</a> .....	73
<a href="#">Resizing the Viewing Area</a> .....	73
<a href="#">Loading Existing Maps</a> .....	73
<a href="#">Deleting Maps</a> .....	73
<a href="#">Printing Maps</a> .....	73
<a href="#">Saving Maps as Images</a> .....	74
<a href="#">Zooming Maps</a> .....	74
<a href="#">Map Preferences</a> .....	74
<b><a href="#">Inventory Management</a></b> .....	<b>75</b>

<u>General Inventory</u> .....	76
<u>Purchases</u> .....	76
<i>Tracking Purchases</i> .....	76
<i>Creating Purchase Orders</i> .....	78
<u>Bottle Inventory</u> .....	79
<u>Sales</u> .....	80
<i>Tracking Sales</i> .....	80
<i>Creating Sales Invoices</i> .....	81
<u>Bottle Transfers</u> .....	82
<b><u>Task Management</u></b> .....	<b>83</b>
<b><u>Vineyard Management</u></b> .....	<b>84</b>
<u>Vineyards and Blocks</u> .....	85
<u>Vineyards</u> .....	85
<i>Creating a New Vineyard</i> .....	85
<u>Vineyard Blocks</u> .....	86
<i>Creating New Vineyard Blocks</i> .....	86
<u>Vineyard Events</u> .....	87
<u>Vineyard Events</u> .....	87
<i>Adding New Vineyard Events</i> .....	87
<i>Adding Events to Multiple Blocks</i> .....	88
<u>Vineyard Samples</u> .....	89
<i>Adding New Vineyard Samples</i> .....	89
<i>Viewing Sample Data</i> .....	90
<u>Vineyard Stages</u> .....	90
<i>Adding New Vineyard Stages</i> .....	91
<u>Spray Diary</u> .....	92
<u>Chemicals</u> .....	92
<u>Vineyard Weather</u> .....	93
<u>Fruit Received</u> .....	94
<i>Adding New Fruit Units</i> .....	94
<i>Viewing Fruit Received Data</i> .....	94
<i>Linking Fruit Units to Wine Batches</i> .....	95
<u>Vineyard Mapping</u> .....	96
<b><u>Winery Reports</u></b> .....	<b>97</b>
<u>Introduction</u> .....	98
<u>Active Processes</u> .....	98
<u>Inventory (Bulk Wine)</u> .....	98
<u>Inventory (Bottled Wine)</u> .....	98
<u>Production (Bottled Wine)</u> .....	98
<u>Costs</u> .....	98
<b><u>Reports</u></b> .....	<b>99</b>
<u>Generating Reports</u> .....	100
<u>Saving and Printing Reports</u> .....	101
<u>Saving Reports</u> .....	101
<u>Printing Reports</u> .....	101

<a href="#">PDF Reports</a> .....	102
<a href="#">PDF Report Preview</a> .....	102
<a href="#">Creating a PDF Batch Log</a> .....	102
<a href="#">Transferring Data to Spreadsheets</a> .....	102
<b>Charts</b> .....	<b>104</b>
<a href="#">Generating Charts</a> .....	105
<a href="#">Selecting the Chart Data in Measurement Charts</a> .....	105
<a href="#">Chart Types</a> .....	105
<a href="#">Chart Tooltips</a> .....	106
<a href="#">Customizing Charts</a> .....	107
<a href="#">Zooming Charts</a> .....	107
<a href="#">Chart Cross-hairs</a> .....	108
<a href="#">Slicing Pie Charts</a> .....	108
<a href="#">Rotating Pie Charts</a> .....	108
<a href="#">Saving and Printing Charts</a> .....	109
<a href="#">Saving Charts as Images</a> .....	109
<a href="#">Saving Charts as PDF Documents</a> .....	109
<a href="#">Printing Charts</a> .....	109
<b>Database Operations</b> .....	<b>110</b>
<a href="#">Introduction</a> .....	111
<a href="#">Database Modes</a> .....	112
<a href="#">Embedded Databases</a> .....	112
<a href="#">Server Databases</a> .....	112
<a href="#">Using Multiple Databases</a> .....	113
<a href="#">Creating a New Embedded Database</a> .....	113
<a href="#">Creating a New Server Database</a> .....	113
<a href="#">Server Name</a> .....	113
<a href="#">Server Type</a> .....	113
<a href="#">Server Location</a> .....	114
<a href="#">Database Name</a> .....	114
<a href="#">Testing the Server Connection</a> .....	114
<a href="#">Switching Databases</a> .....	115
<a href="#">Backing Up Databases</a> .....	116
<a href="#">Automatic Backup</a> .....	116
<a href="#">Manual Backup</a> .....	116
<a href="#">Backup Compression</a> .....	116
<a href="#">Restoring Databases</a> .....	117
<a href="#">Restoring from Automatic Backup</a> .....	117
<a href="#">Restoring from Manual Backups</a> .....	117
<a href="#">Custom Database Queries</a> .....	118
<a href="#">Creating and Executing Queries</a> .....	118
<a href="#">Executing Queries</a> .....	118
<a href="#">Creating, Editing, and Deleting Queries</a> .....	118
<a href="#">Writing Queries</a> .....	119
<a href="#">Database Structure</a> .....	119

<a href="#"><u>Basic Query Syntax</u></a> .....	119
<a href="#"><u>Query Examples</u></a> .....	119
<a href="#"><u>Database Schema</u></a> .....	119
<a href="#"><u>Database Functions</u></a> .....	119
<b><u>Tools</u></b> .....	<b>120</b>
<a href="#"><u>Acid Calculator</u></a> .....	121
<a href="#"><u>Calculator</u></a> .....	122
<a href="#"><u>Hydrometer Corrector</u></a> .....	123
<a href="#"><u>Sugar Calculator</u></a> .....	124
<a href="#"><u>Sulfite Calculator</u></a> .....	125
<a href="#"><u>Custom Tools</u></a> .....	126
<b><u>Program Preferences</u></b> .....	<b>127</b>
<a href="#"><u>Default Settings</u></a> .....	128
<a href="#"><u>Locale</u></a> .....	129
<a href="#"><u>Setting Locale</u></a> .....	129
<a href="#"><u>Date and Time</u></a> .....	130
<a href="#"><u>Setting Custom Formats</u></a> .....	130
<a href="#"><u>Formatting Codes</u></a> .....	130

# Introduction

## What is Amphora Wine Log?

Amphora Wine Log is a powerful application that is used to track and manage the winemaking process. It is a winemaking log with advanced data storage, management, and presentation capabilities. Amphora Wine Log is very simple to use, yet has features that the most advanced winemaker will appreciate, such as user-defined database queries, reports, and charts.

Amphora Wine Log has been designed to appeal to both the home and professional winemaker. In addition to the many home winemakers, Amphora has been installed in a large number of commercial wineries around the world. Amphora is designed to assist the winemaker in managing the winemaking process. The program focuses on winemaking, rather than the general operation of the winery. Although Amphora can track business related items such as costs, inventory, and production, the primary focus is the winemaking process.

Amphora can be used like a traditional winemaking log where data is entered and can be referred to at a later date. However, Amphora incorporates a complete relational database management system. Amphora can extract information from the data in ways that are not possible with a paper or spreadsheet based record-keeping system.

Amphora has a large number of features. In addition to basic winemaking data such as measurements and additions, Amphora includes other modules such as [Vineyard Management](#), [Container Management](#), [Task Management](#), and [Inventory Management](#). Some winemakers may choose to take advantage of all of these features, while others may choose to use only a subset. Amphora makes it possible to manage the entire winemaking process, from vineyard to bottle. Some users take advantage of this broad scope, while others use a smaller range of features.

Amphora is simple to use, but it helps to understand the basic concepts behind the program. Amphora divides winemaking into 2 main areas: **Process** and **Events**. A **Process** occurs over a span of time. Processes include such items as fermentation and aging. An **Event** occurs during a **Process**, at a moment in time. Events include such items as measurements, additions, or tastings. Some events such as measurements and additions may occur multiple times, while other events such as pressing would normally occur only once.

The winemaking process can be tracked in as much or as little detail as you like. Amphora can track a large number of items, but everything is optional. The software has been designed with flexibility in mind so that the program is useful for everyone from the home winemaker to the winemaking professional.

## Getting Started

### **Step 1: Settings and Preferences**

Before using Amphora, most users will want to adjust some of the default settings. These include such items as weight units, date formats, and chart colors. Some preferences such as measurement units will be an immediate concern, while other preferences such as colors can be set at a later time as needed.

#### *Automatic Preference Setting*

The first time you start the program, your locale will be automatically detected and basic default preferences will be selected based on your locale. For example, if you are in the Australian locale, the program will default to metric units, the currency will be set to the dollar, and sugar measurements will default to Baumé. In addition, time and date formats will be customized for your locale. In the United States, measurement units will default to imperial rather than metric units.

#### *Manual Preference Setting*

If you find that the default preferences are not correct for your use, they can be changed in the **Preferences** dialog. See [Default Settings](#) for details regarding this procedure.

### **Step 2: Containers and Vineyards**

The next step depends on how you wish to use Amphora. If you wish to track vineyard activities, then vineyards can be set up in the [Vineyard Management](#) view. You can set up your own vineyards as well as other vineyards from which you receive fruit or juice. Setting up vineyards and blocks allows the wine to be traced back to its origin in the vineyard. The **Batch Data** and **Vineyard Management** views are linked in such a way that it is possible to link a finished bottle of wine back to the physical conditions of the vineyard (such as weather) as well as human factors such as spray applications and harvest.

Containers such as tanks and barrels can be set up in the [Container Management](#) view. You can set up all containers at once or you can enter them as required.

### **Step 3: Creating a New Batch**

Once the initial setup is complete, the next step is to start tracking winemaking activities. All winemaking processes and events are applied to a **Batch**. Creating a batch involves specifying general information such as variety and color. See [Creating a New Batch](#) for details regarding this initial step. Once the batch is created, processes and events can be entered.

Processes and events are entered by selecting the desired item (such as **Additions** or **Measurements**) from the left side of the screen while in the **Batch Data** view. Previous entries will be shown in the main table. See [Creating and Editing Records](#) for details on entering and editing data.

Amphora is very simple to learn as all information is viewed and entered the same way. All information is shown in the main table and manipulated using the same toolbar and menu items. Once you know how to enter and edit one type of information, you know how to enter and edit everything in the database. Amphora handles the complexities behind the scenes.

The best way to learn Amphora is to use it. You can create a "practice batch" and experiment with the program. After, you can simply delete the practice batch so that the data is not mixed with your "real" data.

# Program Overview

## Program Views

Amphora contains 6 major data views:

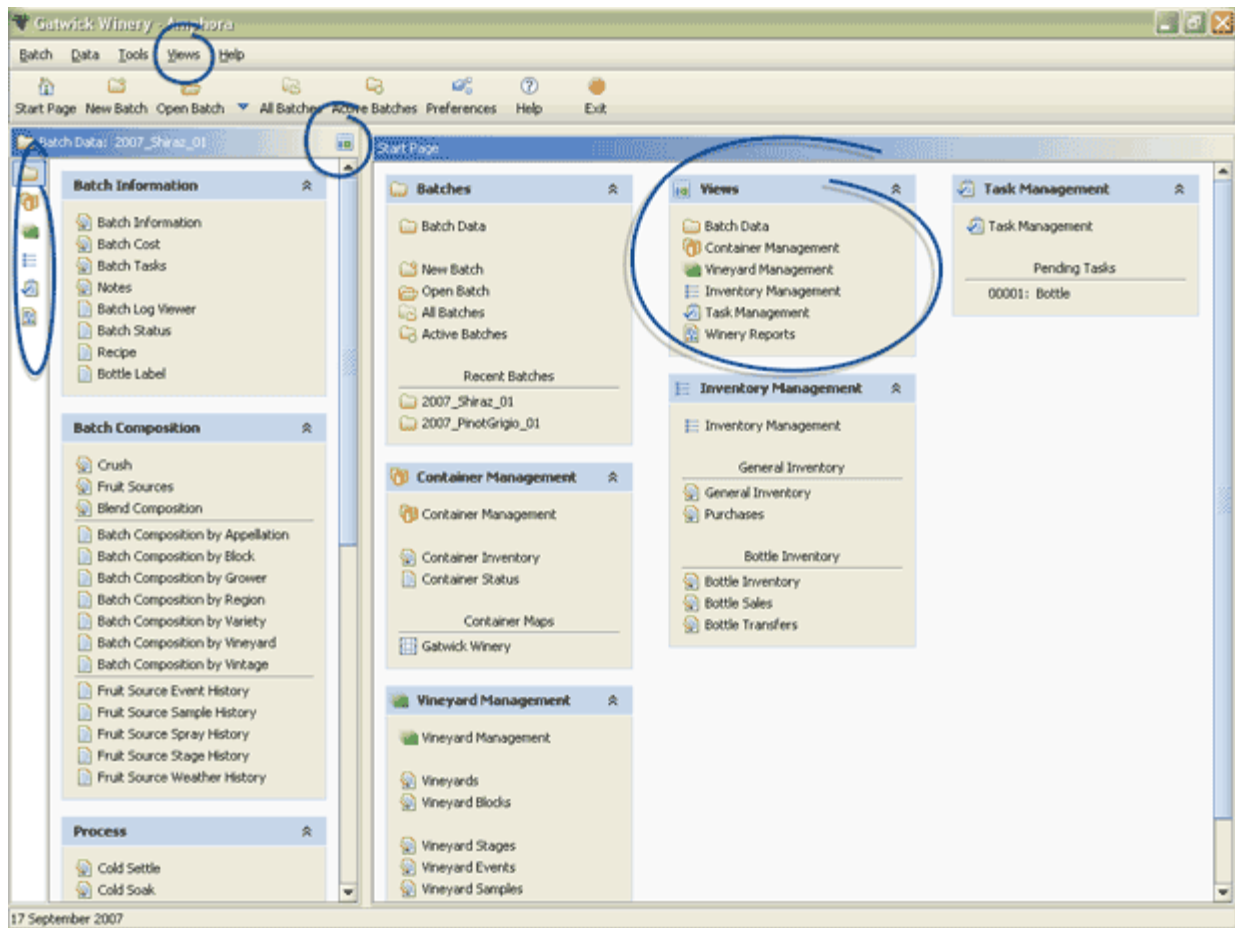
- [Batch Data](#)
- [Container Management](#)
- [Vineyard Management](#)
- [Inventory Management](#)
- [Task Management](#)
- [Winery Reports](#)

The features of each of these views is detailed in the appropriate section of this manual. Most winemaking data is entered in the **Batch Data** view. All winemakers will use this view. The other views are optional. Each view can be used independently, but the program provides linkages between the views. For example, one of the most powerful linkages is between the [Vineyard Management](#) and [Batch Data](#) views. This linkage provides the ability to trace a finished wine back to the vineyard. Many other linkages exist and will be described in this manual. These linkages are one of the primary reasons why Amphora is a much more powerful system than a paper or spreadsheet based system.

### **Selecting a View**

A view can be selected by choosing the desired view from the **Views** menu, selecting the desired view from the drop-down menu above the task pane, selecting the desired view from the view bar to the left of the task pane, or selecting the desired view from the **Start Page**. All of these functions are exactly the same. You may choose whatever method is most convenient. The name of the current view is displayed above the selection pane.

# Amphora Manual - Program Overview

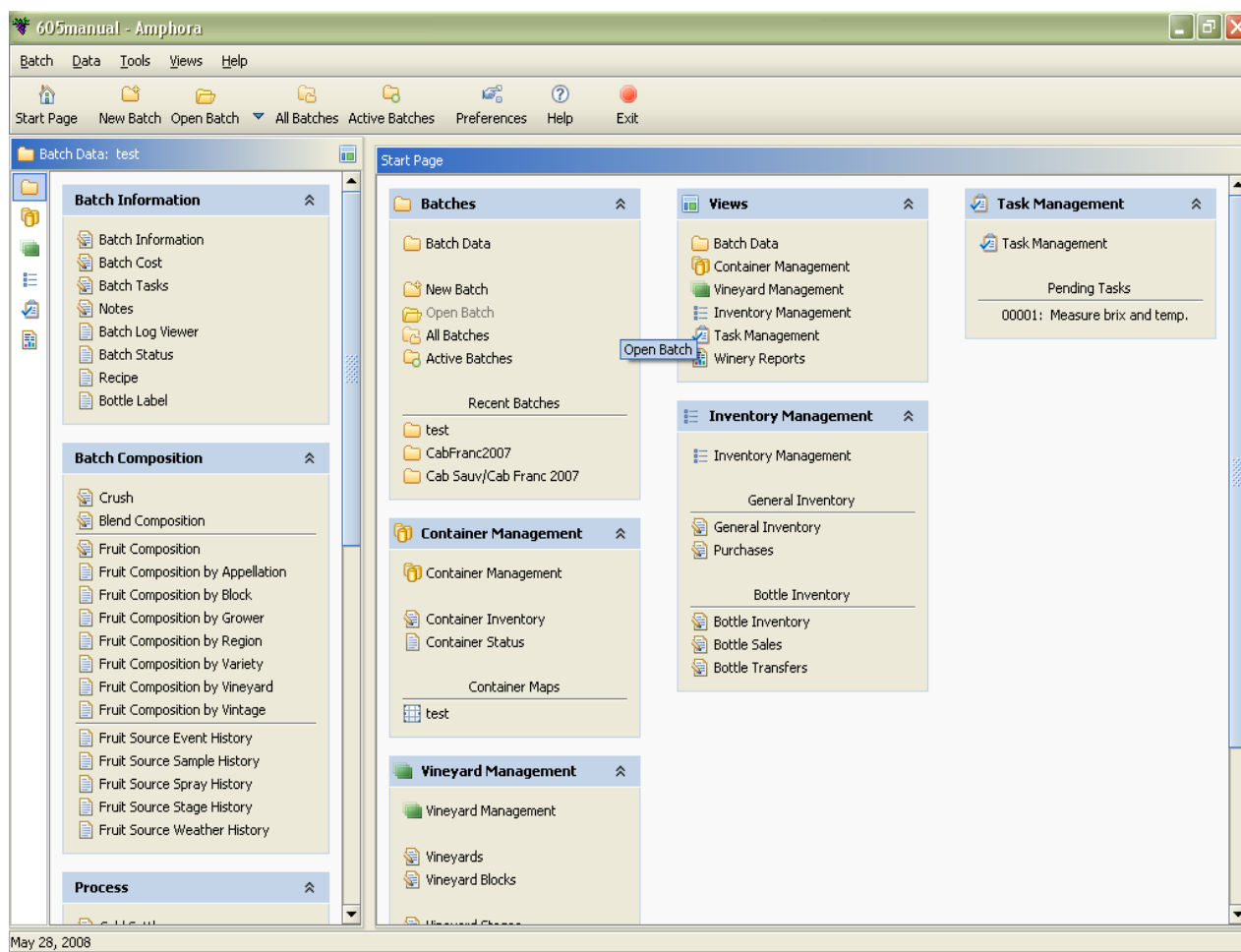


*There are many ways to select a view.*

## Start Page

The **Start Page** is displayed automatically when the program is launched. It may also be invoked manually by selecting the **Start Page** button from the toolbar or selecting the **Start Page** menu item from the **Views** menu.

The Start Page provides a central navigation area to the program. The Start Page is not required to use the program but it can make navigation easier by collecting frequently used features in a single page. The Start Page is mostly comprised of hard-coded links to various areas of the program. It also provides dynamic links that will change as you use the program. For example, the Start Page will provide access to recent batches and tasks that have been entered into the program.



*The start page.*

## Viewing Data

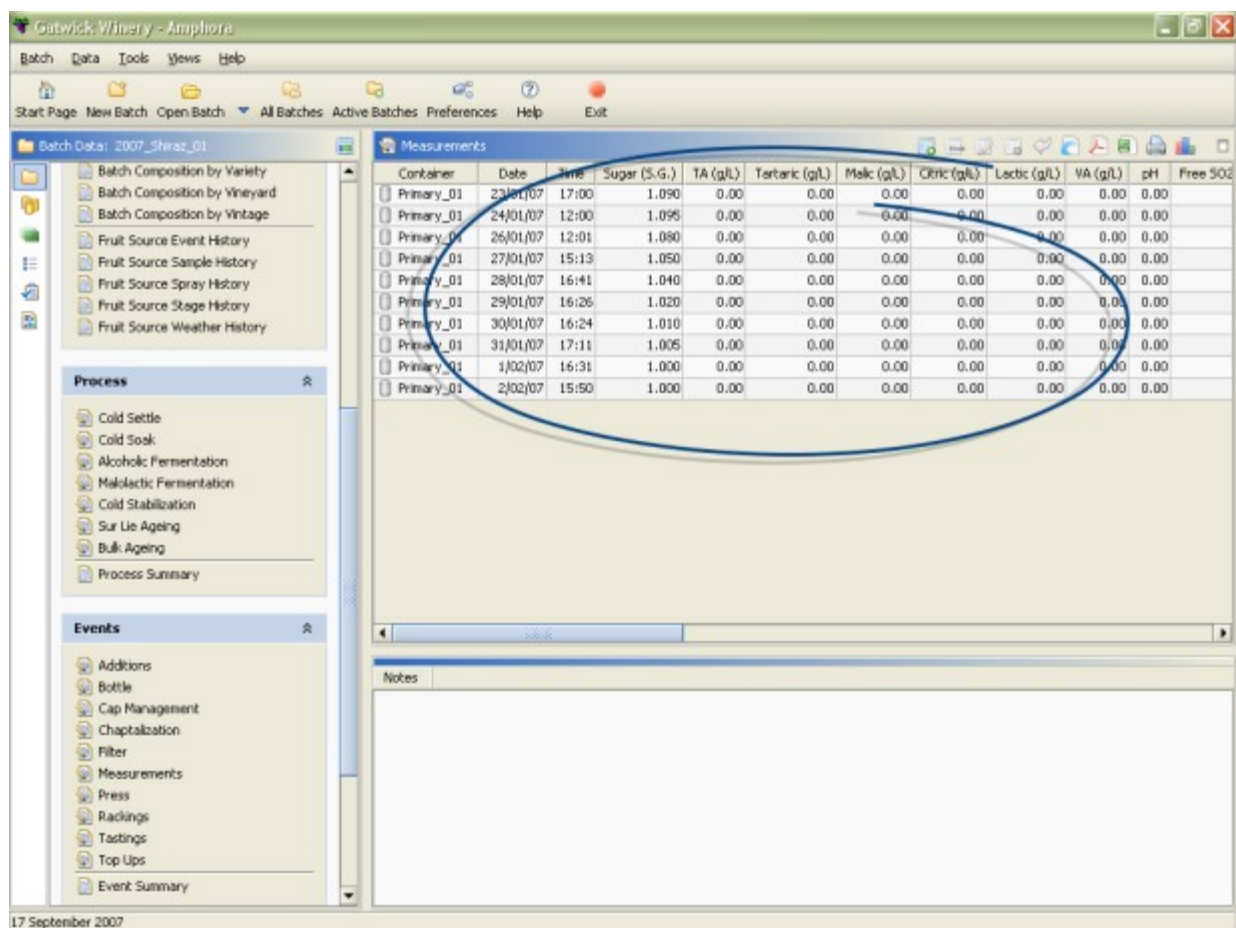
Amphora contains 2 major types of data:

- Batch Data
- Non-Batch Data

### Batch Data

Batch data is directly related to a particular batch and includes such items as additions or measurements. Non-batch data is not directly related to a particular batch. This includes such items as the yeast database, the varieties database, or the wine inventory.

All data (both batch and non-batch) is displayed in the table in the main window:



Data is displayed in the main table.

Data relating to a specific batch is accessed from the pick list on the left side of the main window by choosing the **Batch Data** view. Editable and non-editable items in the list are differentiated by their icon:



Indicates an editable data table



Indicates a read-only data table

For example, [Measurements](#) is an editable item. Measurements can be added, edited, or deleted when this item is active. On the other hand, [Measurement Views](#) are non-editable. These provide more concise views of the measurement data. The actual measurements contained in these views are edited in the [Measurements](#) section.

Selecting an item from the pick list will display the associated data in the table. For example, clicking on [Measurements](#) in the pick list will display the measurement data for the currently opened batch. If the data contains a note field, the note is also displayed in the text area below the table, so that long notes can be easily read.

### **Non-Batch Data**

**Non-Batch** data is not related to a particular batch, such as the varieties and yeast databases. This data is common and may be used by any batches. This data can be added, edited, and deleted just like any other data. Most Non-Batch data is accessed via the **Data - Program Data** menu. This data may be used throughout the program. For example, it may be used to populate drop-down boxes in various dialogs. Amphora also contains other non-batch information such as that found in the task management, container management, and vineyard management modules.

#### *Varities*

The varieties database contains a list of grape and fruit varieties. This list is used to populate the **Varities** drop-down box in the **Batch dialog**. Amphora includes an extensive varieties database. However, this is completely editable. You can add, edit, or delete any of the entries.

#### *Yeasts*

The yeast database contains a list of yeast strains. This list is used to populate the **Yeast** drop-down box in the **Alcoholic Fermentation dialog**. Amphora includes a listing of the more common yeast strains. However, this is completely editable. You can add, edit, or delete any of the entries.

#### *Cultures*

The cultures database contains a list of malolactic cultures. This list is used to populate the **Culture** drop-down box in the **Malolactic Fermentation dialog**. Like the yeast database, the culture database is completely editable.

### *Recipes*

Many winemakers, especially home winemakers follow recipes in the preparation of their wine. All of your recipes can be entered into the recipes database. The recipe names will be automatically populated in the **Recipe** field in the **Batch dialog**. If your original recipe is in electronic form, you can simply copy and paste the recipe into the database.

### *Contacts*

The contacts database is intended to track supplier or customer information. Address and contact information is integrated throughout the program such as in the [Inventory Management](#) and [Vineyard Management](#) views. The contacts database is found in the **Data** menu.

### *Web Resources*

The web resources database is intended to store web sites that may be referred to during the winemaking process. The Web Resource dialog has a **GO** button that will launch a web browser and open the selected resource.

### *Winery Information*

Winery information contains the name and address of your winery. This information can optionally appear on reports. A winery logo can also be specified in this dialog. This logo can optionally appear on purchase orders and sales invoices. Winery Information is accessed via the **Data** menu.

## **Table Customization**

### *Sorting Data*

Data displayed in the main table can be sorted by any column. Clicking the column headers will cycle the sorting order through ascending, descending, and the default sort order.

The table can be sorted by more than one column. After selecting the sort order of one column, a secondary sort order can be selected by holding down the **Ctrl** key while selecting a second column for sorting.

The program will save the sort order and will automatically sort the columns when the data is viewed again.

### *Resizing Columns*

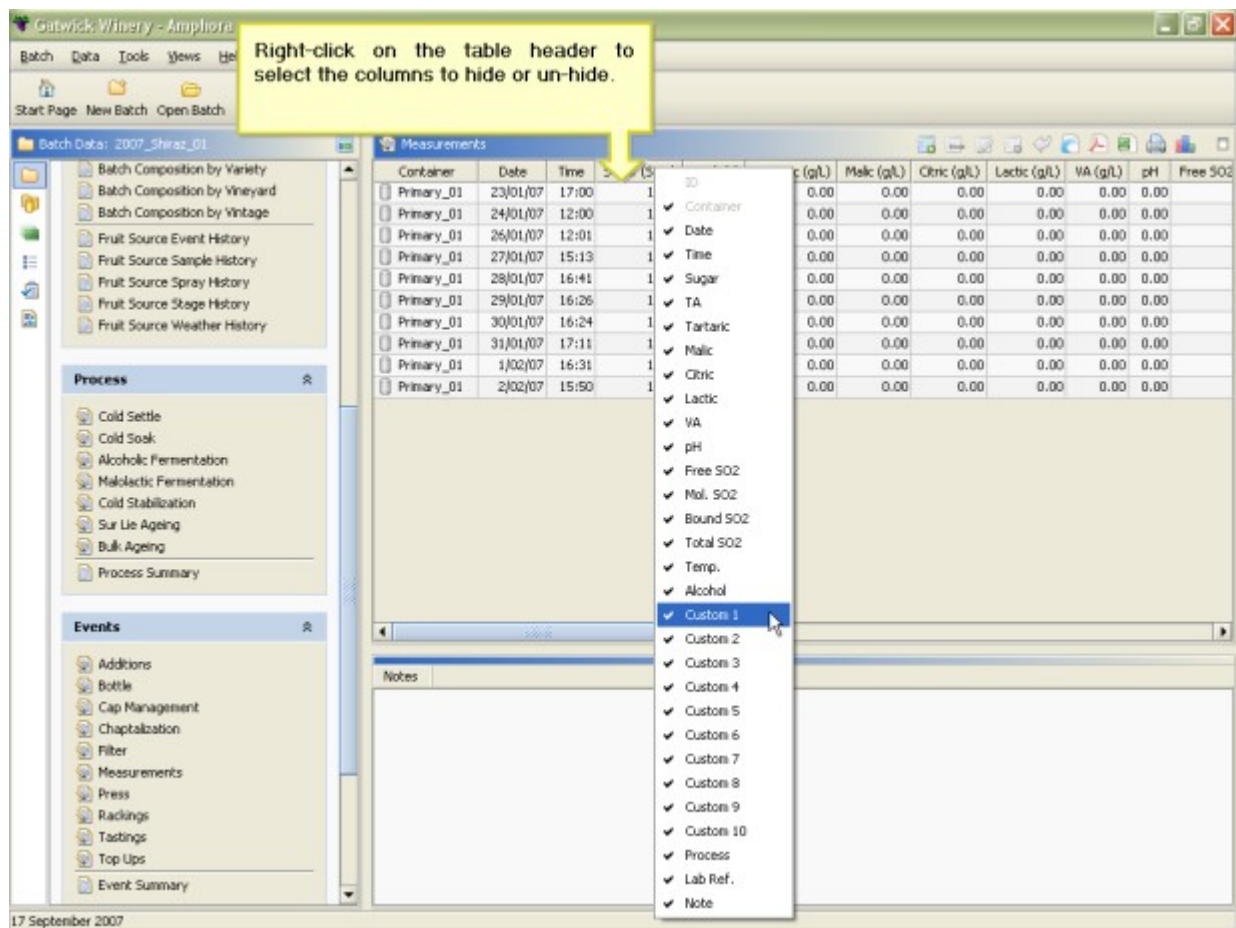
Amphora will automatically adjust the widths of the table columns in order to create a "best fit". However, the columns can be manually adjusted by moving the column headers. The program will save these settings and will automatically apply the settings the next time the table is viewed.

### *Hiding Columns*

By default, the table will display all columns. However, some users may not need or want all columns.

## Amphora Manual - Program Overview

It is possible to hide these columns from view. Right-click on the table header and deselect the column(s) that you wish to hide. Columns can be added back by re-checking the column name in the list.



17 September 2007  
Choosing columns to display.

### Incremental Search

The table has built-in search capabilities. Press **Ctrl S** to activate the search feature. Then type the search string. The first occurrence of the search string will then be highlighted in the table. The up-arrow and down-arrow keys can be used to advance to the next occurrence of the search string or go back to the previous occurrence.

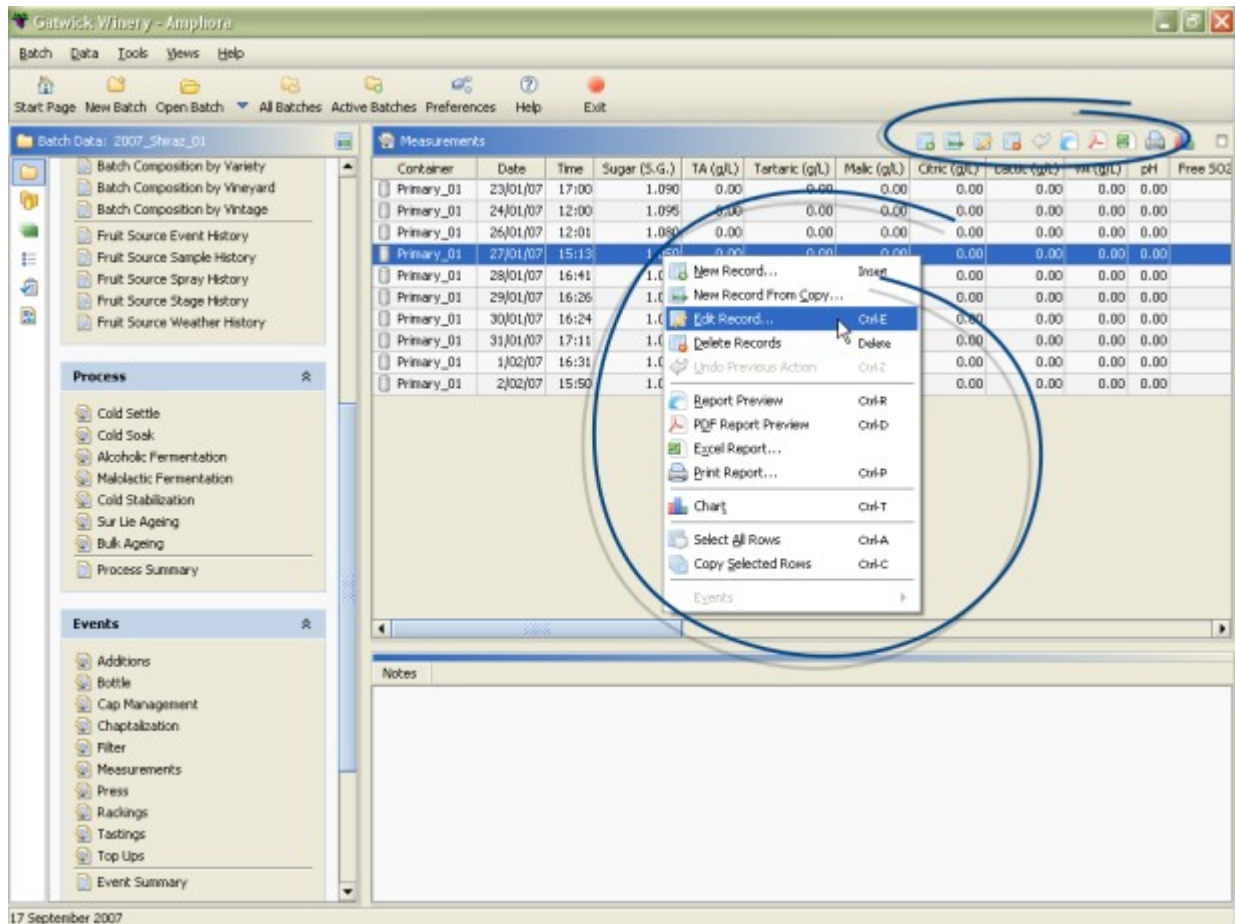
### Table Tooltips

If the data displayed in the table includes an icon (such as the **Container** field), a tooltip is normally available that displays additional information about the data. For example, if the mouse is hovered over a **Container** item in the table, a tooltip will appear that shows additional information about that container. These tooltips are available for data as well, such as vineyards, blocks, and contacts.

# Data Entry

## Creating and Editing Records

Data records that appear in the main table can be edited or deleted. In addition, new records can be added to the table. This is done by clicking the buttons in the toolbar above the table. Alternately, a right mouse click in the table will cause a context menu to appear that provides selections for inserting, editing, and deleting data.



*The table toolbar or context menu can be used to edit data.*

### Creating New Records

New records are inserted into the table by clicking the **New Record** button above the main table or by selecting **New Record** from the context menu after right mouse clicking. This triggers a dialog in which new data can be entered. The type of dialog displayed is dependent on the data that is currently contained in the main table. For example, if the table currently contains fermentation data, a fermentation dialog will appear when the **New Record** button is clicked. After entering data into the dialog, click **OK** to save the data, or **Cancel** to close the dialog without saving.

## **Creating New Records from a Record Copy**

New records can also be created as copies of existing records. For example, you may wish to create a new record that will be nearly identical to an existing record. To do this, highlight the row to copy and click the **New Record From Copy** button above the table, or select **New Record From Copy** from the context menu after right-clicking. The resulting dialog will be automatically populated with the data from the selected table row. You can then make any necessary changes in the dialog and click **OK** to save it as a new record. A new record will be inserted into the table. Creating new records from copies can save time when new records are similar to existing records.

## **Editing Existing Records**

Existing records can be edited by clicking the **Edit Record** button above the main table, by selecting **Edit Record** from the context menu after right mouse clicking, or by double-clicking a table row. This triggers a dialog in which existing data can be edited or viewed in a dialog. The dialog will be populated with the data contained in the selected table row. It is necessary to select a table row before the dialog will be displayed. After editing the data, click **OK** to save the changes, or **Cancel** to close the dialog without saving.

## **Deleting Records**

Records can be deleted by clicking the **Delete Records** button above the main table or by selecting **Delete Records** from the context menu after right mouse clicking. Clicking this button will permanently delete the selected table row(s). It is necessary to select one or more table rows before clicking **Delete Records**. Any number of rows can be deleted in a single operation. Multiple rows can be selected by holding down the **Ctrl** key while clicking each row that you wish to delete. A range of rows can be selected by clicking a row and then holding the **Shift** key down while clicking a second row. All rows between the two selections will be highlighted and become eligible for deletion. A confirmation dialog will be displayed in order to prevent accidental deletion of data. After confirming the delete operation, the data will be permanently removed from the database.

## **Undo Operations**

Any changes made to the the data can be undone. Any insert, edit, or delete operation can be undone by clicking the **Undo** button above the main table or by selecting **Undo** from the context menu after right clicking in the table. This will undo all operations since the table was selected. For example, if you click on **Additions** and begin editing the table and then click **Undo**, all changes to the additions table will be reverted to their previous state. When you begin editing a different table such as **Measurements**, the changes to the additions table are committed to the database and cannot be automatically undone. After data has been committed to the database, data entry errors can be fixed using the [Edit Record](#) and [Delete Records](#) functions as required. The **Undo** button is useful if you enter data and immediately realize that a mistake was made.

Using **Undo** to fix errors is preferable to editing or deleting the affected records. This is because any database side effects are also undone. For example, when entering a bottling record, the program may make several changes to the database. The bottles can be automatically added to your [Bottle Inventory](#)

and [Batch Cost](#). The program will also decrement the used bottles, closures, capsules, and labels from the [General Inventory](#) and add these items to the [Batch Cost](#). In addition, the program will adjust the wine quantity in the containers that were bottled. When you click **Undo** after entering a bottling record, not only is the bottling record restored to its original state, the bottle inventory, general inventory, batch cost, and wine quantities are all restored.

### **Refresh Data**

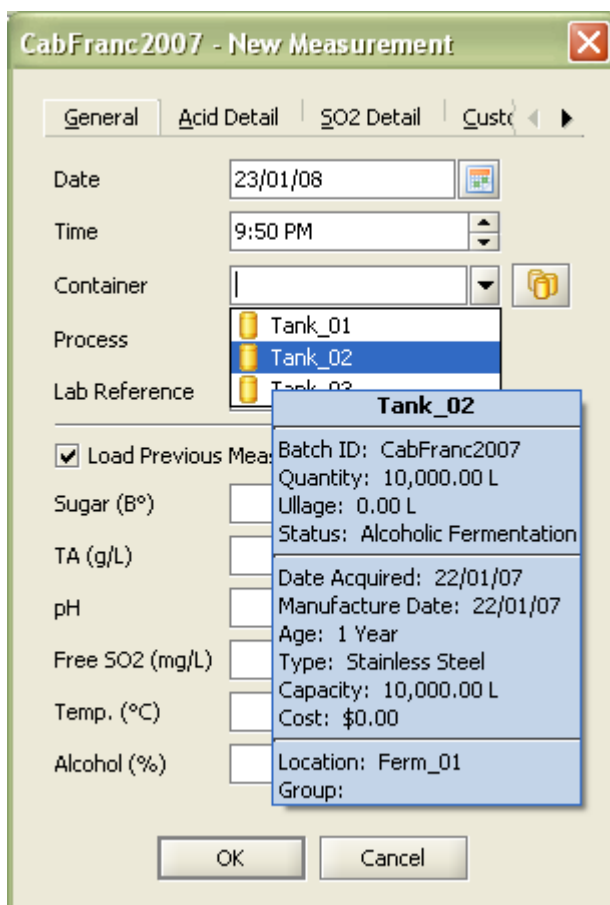
Clicking the **Refresh Data** button will cause the program to retrieve the data from the database again. This button is useful in a networked environment where Amphora is being used on multiple computers. For example, you may be viewing some data and another user at a different computer may edit that data. When you click **Refresh Data** your table will be updated with the new changes. This button is only available when the program is connected to a database server, such as **Amphora Database Server**. When the program is not connected to a server, this function is not needed as the data is always current.

## Selecting Containers

When entering processes and events, containers (such as tanks or barrels) can be specified. A process or event can be linked to a single container or to multiple containers. Specifying containers in the various process and event dialogs provides the linkage between the **Batch Data** view and the **Container Management** view.

### Selecting a Single Container

Events such as measurements or additions are linked to containers by selecting the container from the drop-down box in the various dialogs. The name of the container can also be manually typed into the text field portion of the drop-down box. However, it is recommended to select the container from the drop-down list. If the container is manually typed in, and a typographical error is made, the process or event will be applied to the incorrect container. If you wish to apply a process or event to a single container, select it from the drop-down box:



Selecting a single container.

### *Selecting a Container for a Process*

When entering processes such as fermentation or aging, all containers in the [Container Inventory](#) are included in the drop-down. Once a container is specified in a process, that container is linked to the batch. Each batch can be composed of any number of containers. If you select a container that is already being used, a warning dialog will appear asking for confirmation that the container choice is correct. A container must be linked to a **Process** before events can be linked to the container.


### *Selecting a Container for an Event*

When entering events such as additions or measurements, the container drop-down is automatically filtered so that it only shows the containers that have been linked to the batch via a process record (see above). For example, if your batch includes a single fermentation tank, then the container drop-down in the various event dialogs will include that tank only. If your batch includes multiple containers, then all those containers will be added to the drop-down. This makes it easy to select the desired container.

### *Linking Containers to a Batch*

Containers are linked to a batch as described in the *Selecting Containers for a Process* section above. Containers are linked to a batch by creating a process record that specifies that container. For example, if you create a fermentation record and specify *Tank\_01* in that record, then *Tank\_01* is linked to that batch. This linkage is dynamic. If the process record is deleted, the container is no longer linked to that batch. Also, if the container becomes empty, it is longer linked to that batch and becomes available for another batch. The linkages between containers and batches can be seen in [Container Status](#).

### *Selecting Multiple Containers*

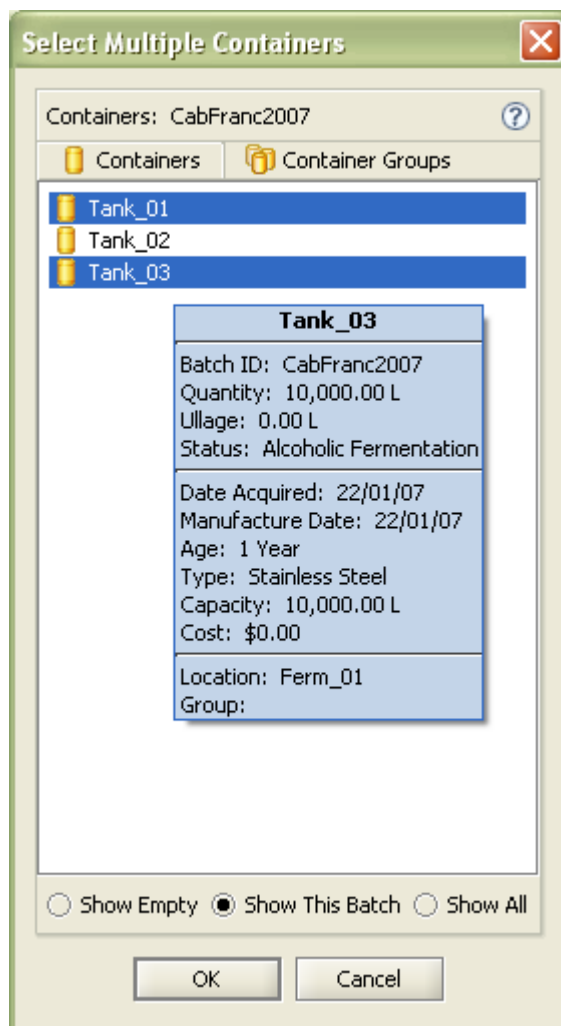
Multiple containers can be specified in processes and events by clicking the multiple container button  in the various dialogs. To select more than one container, hold the **Ctrl** key down while clicking each container. A continuous range of containers can be selected by clicking the first container, then holding down **Shift** while clicking the last container in the range. All containers between the first and last will then be selected. Amphora will then generate a record for each selected container. This makes it easy to quickly generate identical records for several containers.

### *Selecting Multiple Containers for Processes*

A process such as aging can be linked to multiple containers at the same time. For example, you may want to start an aging process for 10 barrels that are in the same batch. To do this, click the multiple containers button beside the container drop-down. A dialog will be displayed that shows a list of available containers. By default, the list shows empty containers since a process would normally be started in an empty container. However, you can see all containers in the inventory by selecting **Show All**. Selecting **Show This Batch** shows all containers that are currently linked to the batch

### Selecting Multiple Containers for Events

It is possible to apply an event to multiple containers at the same time. For example, you may wish to make an addition such as a fining agent to several containers at the same time. To do this, click the multiple containers button beside the container drop-down. A dialog will be displayed that shows a list of available containers. By default, the list shows those containers that have been linked to the batch via a process dialog. However, you can see all containers in the inventory by selecting **Show All**.

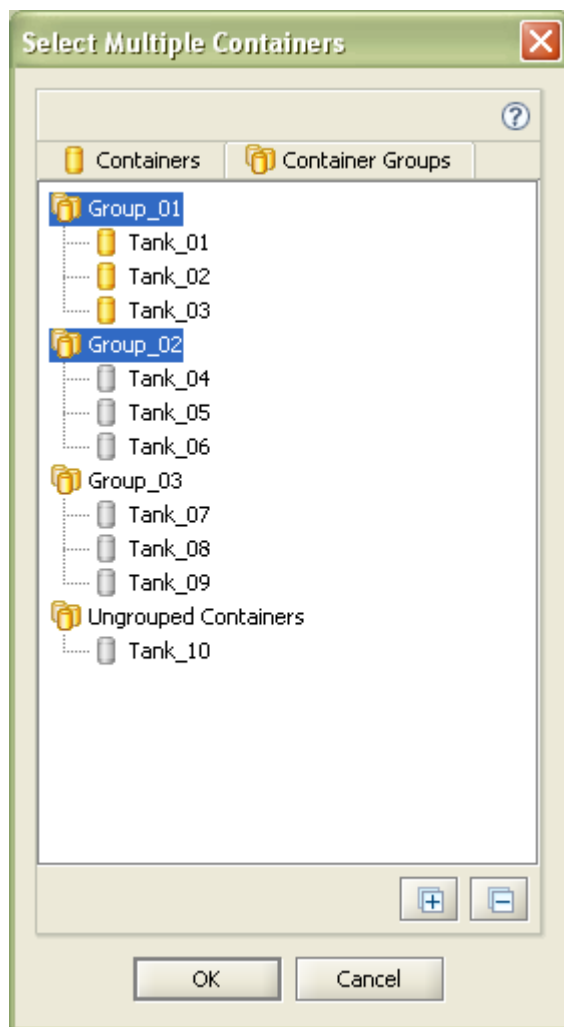


Selecting multiple containers.

### Selecting Container Groups

It is also possible to select multiple containers by choosing container groups (containers can be assigned to groups in [Container Inventory](#)). For example, you may wish to make an addition such as a fining agent to all containers in one or more groups, or start a process for an entire container group. To do this, click the button beside the container field and choose the **Container Groups** tab. Groups

are selected in the same manner as containers (see above). After clicking **OK**, the software will generate a record for every container in the selected group(s). Groups can be expanded to show the containers that belong to that group. You can expand all groups to show individual containers by clicking the "+" button. All groups are collapsed by clicking the "-" button. The groups feature makes it easy to create records for large numbers of containers with a single entry. Containers that are listed under the **Ungrouped Containers** node, have not been assigned to any group in the container inventory.

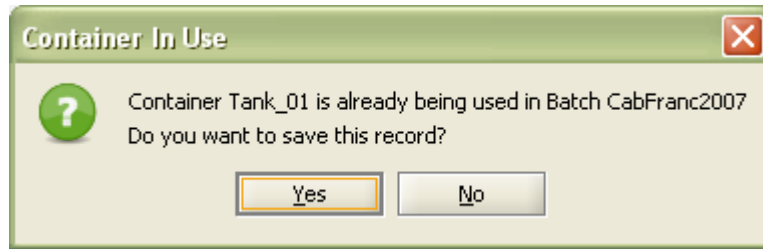


Selecting container groups.

## Containers in Use

The program will display a warning message if the selected container is already in use. For example, you might enter a fermentation record and choose *Tank\_01*. After clicking **OK**, the program will search the database to check if *Tank\_01* is already in use. If *Tank\_01* is currently in use, a warning message will be displayed. The message will also indicate the batch of wine that is already in the

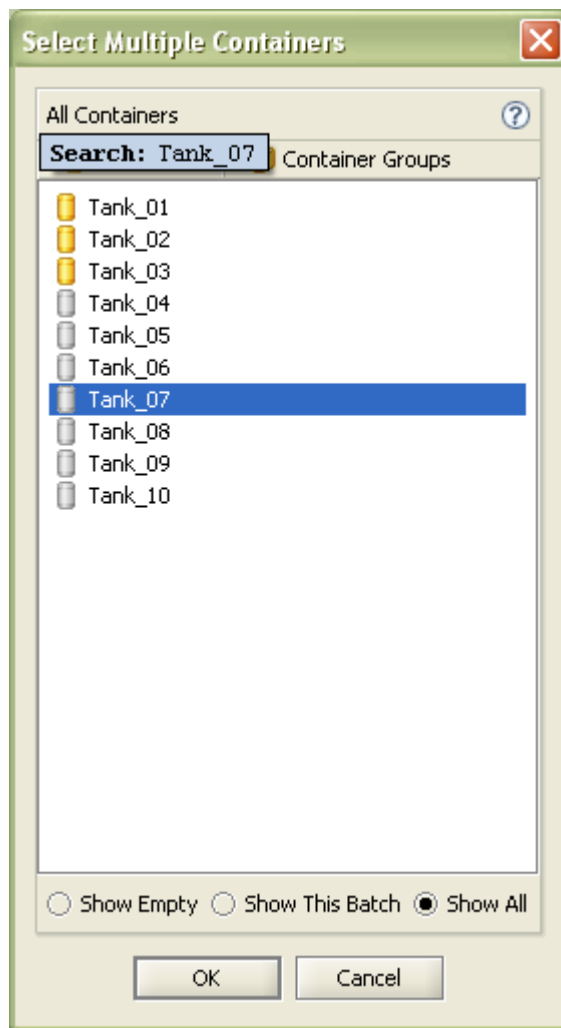
container. This warning helps to prevent data entry errors.



*The Container in Use Warning.*

## **Container Search**



The container list has built-in search capabilities. Press **Ctrl S** to activate the search feature when the list has the focus. Then type the search string. The first occurrence of the search string will then be highlighted in the list. The up-arrow and down-arrow keys can be used to advance to the next occurrence of the search string or go back to the previous occurrence.



*Searching for a container*

### ***Additional Container Information***

Additional information about the containers can be seen when selecting containers. The container graphics are color-coded so that empty containers can be easily distinguished from containers that contain wine. Yellow graphics indicate containers that contain wine, while gray graphics indicate empty containers.

-  This container contains wine.
-  This container is empty.

Additional information for each container is displayed as a tooltip when the container is selected in the list or in the container drop-down boxes. Container tooltips are also displayed in the main table when the mouse is moved over the container field.

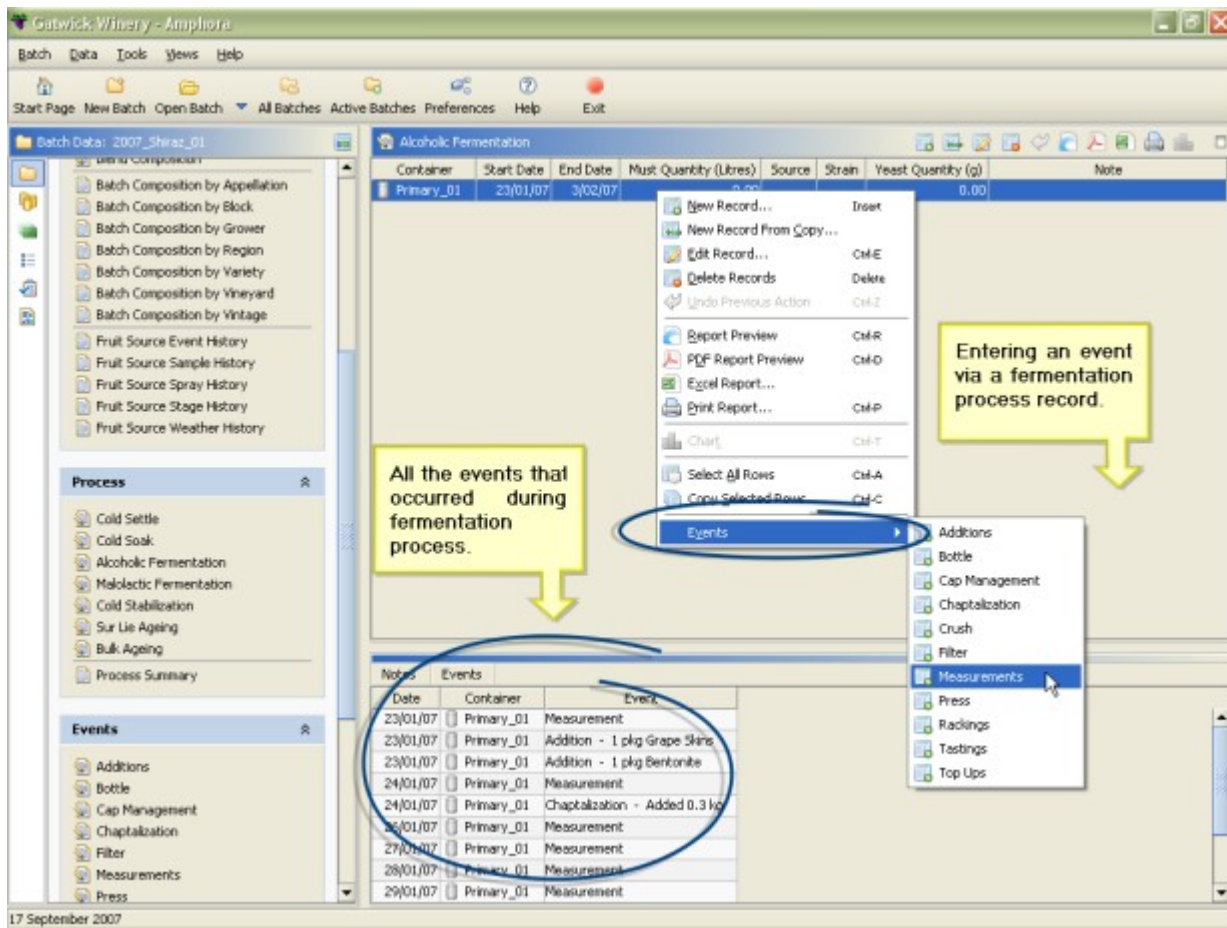
## Entering Events

Events can be entered like any other data by selecting the desired event from the left side of the screen and clicking the **New Record** button. However, events can also be entered via a **Process**. To enter events via a process, select a process such as **Alcoholic Fermentation** from the left side of the screen. Select the desired table row and then select the desired event from the **Events** menu. This menu is available as a context menu when right-clicking on the table while selecting a **Process** record. The selected event dialog will then be launched and will be automatically populated with the container that is associated with the process record.

The **Events** table at the bottom of the screen shows a summary of events for the **Process** that is shown in the top table. In the above example, the table at the bottom of the screen shows all the events (such as measurements and additions) that occurred during fermentation.

Entering events via a process record is simply an alternate way to enter events that some users may prefer because it automatically populates the event dialog with the desired container and assigns it to the proper process. Events can always be entered simply by clicking on the desired event (eg. additions) and entering directly into the associated table. In addition, events can be entered via [Container Maps](#).

# Amphora Manual - Data Entry



Entering an Event via a Process Record.

# Batch Data

## Batch Information

Amphora organizes winemaking operations into batches. Each batch represents some identifiable unit of wine. The program is very flexible as it allows the user to define a batch in any way. For example, a batch can be composed of a single container or it can be composed of multiple containers.

### *Creating a New Batch*

There are several ways to create a new batch:

- Click the **New Batch** item in the **Batch** menu.
- Click the **New Batch** button in the main toolbar.
- Click the **New Batch** item on the **Start Page**.
- Use the keyboard shortcut **Ctrl N**.

All of the above methods accomplish the same task. Each will open a dialog in which general batch information can be entered. The **Batch ID** field is the only required field. Anything can be entered in this field, but each batch must have a unique **Batch ID**. It is recommended that a descriptive name be used so that the batch can be easily identified. For example, *Chardonnay2007* might make be an appropriate ID. All other fields are optional. Click **OK** to save the new batch. Additional batch information can be entered in other specialized dialogs described elsewhere in this manual.

Most of the fields in the Batch Information dialog are self-explanatory. Many are drop-down boxes that provide a list of choices. However, all fields (including the drop-down boxes) are editable. You can enter anything you like, even if it does not appear in the drop-down list. All fields are optional (except for **Batch ID**). However, it is best to enter as much information as possible. For example, if you specify **color**, Amphora will be able to tell you how many bottles of red wine you have in your cellar. Filling in these fields enables Amphora to extract useful information from the database. For example, "*How many bottles of dry, still, white wines made from fresh grapes from the 2001 vintage do I have in the cellar?*". This type of question is nearly impossible to answer if the data is recorded on paper. However, Amphora can provide the answer in a fraction of a second.

**New Batch**

General Note

**Batch Attributes**

Batch ID: Chardonnay2007

Other ID:

Start Date: 01/10/07

Vintage: 2007

Size (L): 0

Source:

Recipe:

**Beverage Attributes**

Beverage Type: Wine

Variety: Chardonnay

Colour: White

Sweetness: Dry

Carbonation: Still

Must Type: Fresh Fruit

Classification:

OK Cancel

Creating a new batch.

While most of the fields are self-explanatory, some notes have been added below:

### **Batch ID**

The **Batch ID** is simply a uniquely identified unit of must, such as a quantity of juice or fruit. Amphora does not impose a strict definition of what constitutes a batch. A batch can be a quantity of harvested fruit, the contents of a fermentation tank, the contents of multiple containers, or any other identifiable unit. This flexibility allows winemakers to define a batch in any way they like. A batch can be contained in a single container or can be spread amongst multiple containers. The only requirement Amphora imposes is that the **Batch ID** must be unique. It is recommended to use descriptive names so that batches can be easily identified. For example, combining variety and vintage such as *Chardonnay2007* might be a suitable **Batch ID**. However, the ID can be anything you like.

### **Other ID**

This is an optional field. Some winemakers wish to supply another secondary identifier to their batches.

### **Size**

If you already know your batch size, it can be entered in the **Size** field. However, if you are making wine from fresh grapes, you may not know the batch size until after press. If this is the case, then leave the size field empty. When you enter a press record (via the [press](#) dialog), Amphora will

automatically update the size field with the quantity of juice that was pressed. Others, such as those making wine from juice or concentrate will know the batch size in advance and can fill in this field right away.

### *Source*

If your batch was purchased from a single source (such as a wine kit purchased from a winemaking shop or grapes purchased from a single vineyard) you can enter the name of the source in the **Source** field. Additional source information such as address and phone number can be entered via the [Contacts](#) dialog (**Data - Program Data - Contacts**) or by clicking the button beside the source field. If your grape source is from multiple vineyards, the source data is better managed in the [Fruit Received](#) section of the **Vineyard Management** view. When your batch is composed of multiple sources, these sources are shown in the **Fruit Sources** table. These sources can be entered via the [Fruit Sources](#) table or via the [Crush](#) dialog.

### *Recipe*

Many home-winemakers, especially those making country wines follow recipes. The recipe name can be specified in the **Recipe** field. This field may not be applicable to many winemakers. This field is used to enter the name of the recipe. The actual recipe is entered via the [Recipe](#) dialog (**Data - Program Data - Recipes**). This field is populated with a list of the names of all recipes that have been entered.

## ***Opening an Existing Batch***

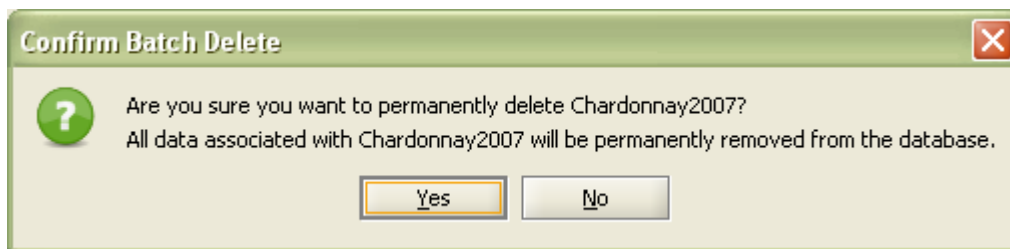
Opening an existing batch makes that data available for viewing or editing. There are many ways to open an existing batch:

- Click the **Open Batch** item in the **Batch** menu.
- Click the **Open Batch** button on the main toolbar.
- Click the **Open Batch** item on the **Start Page**
- Select the **Batch ID** from the Recent Batches list in the **Start Page**. The recent batch list contains the 5 most recently accessed batches.
- Click the **All Batches** button on the toolbar or in the **Batch** menu and right click on the desired batch to get the context menu. Double clicking the table row will also open the selected batch.
- Click the **Active Batches** button on the toolbar or in the **Batch** menu and right click on the desired batch to get the context menu. Double clicking the table row will also open the selected batch.
- Select the **Batch ID** from the **Recent Batches** list in the **Batch** menu. The recent batch list contains the 5 most recently accessed batches.
- Select the **Batch ID** from the **Recent Batches** list in the toolbar. The recent batch list contains the 5 most recently accessed batches.

- Select the **Open Batch** item from the context menu after right-clicking on a container in a container map.
- Use the keyboard shortcut **Ctrl O**.
- By default, the most recent batch is automatically opened when the program starts. This option can be turned off in [Program Preferences](#).

### Deleting a Batch

A batch can be removed from the database by clicking the **Delete Batch** item from the **Batch** menu. This will delete the currently opened batch. A batch can also be deleted by selecting it from the **All Batches** or **Active Batches** table. Select **Delete Batch** from the context menu after right-clicking on the desired batch. The delete function should only be used if you are certain that the batch data is no longer required. This function will remove all data associated with the batch except for bottle inventory records. Once deleted, a batch can only be restored from a database backup (if it exists). A warning will be displayed asking for confirmation before the batch is deleted.



Confirming the batch delete operation.

### All Batches and Active Batches

Selecting **All Batches** from the **Batch** menu or toolbar will display a list of all batches that have been entered into the software, along with the vintage and variety. This table also contains an **Active** checkbox that indicates whether the batch is active or not. The batch can be set to **Inactive** by removing the check mark from the box. When a batch is set to inactive, it will no longer appear in drop-down lists throughout the program. Once a batch has been bottled and no more work will be done on that batch, it is recommended to set it to *inactive* status. A batch can be set back to active status by checking the box in the **All Batches** table.

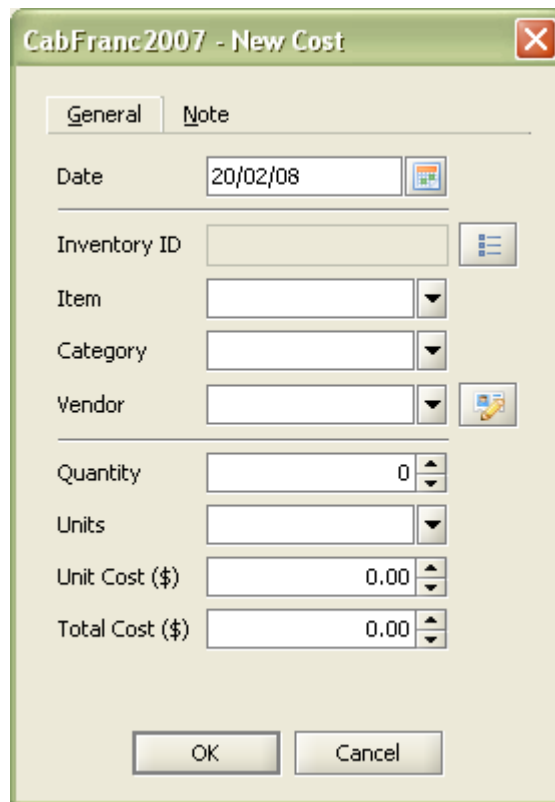
Selecting **Active Batches** from the **Batch** menu or toolbar will display a list of all *Active Batches*. The batch can be set to *inactive* by removing the check mark in the table.

### Batch Information

The **Batch Information** dialog is used to enter basic information about the batch, such as start date, variety, and vintage. See [Creating a New Batch](#) for information regarding this dialog.

## Batch Cost

The **Batch Cost** dialog provides the ability to track ongoing costs associated with the batch. Cost items can be entered directly, or in some cases the software can generate cost records automatically. For example, when linking a [Fruit Source](#) to a batch, the cost record can be automatically generated. The cost dialog is linked with [General Inventory](#) so that items from the inventory can be easily added as cost items. When a cost item is selected from the inventory, the software will automatically populate the cost fields. This allows cost records to be created quickly and accurately. The cost dialog is also linked with [Contacts](#). This allows contact information to be viewed when the source field has been filled.



The screenshot shows a dialog box titled "CabFranc2007 - New Cost". It has two tabs: "General" and "Note". The "General" tab is active and contains the following fields:

- Date: 20/02/08
- Inventory ID: (empty)
- Item: (dropdown menu)
- Category: (dropdown menu)
- Vendor: (dropdown menu)
- Quantity: 0
- Units: (dropdown menu)
- Unit Cost (\$): 0.00
- Total Cost (\$): 0.00

At the bottom of the dialog are "OK" and "Cancel" buttons.

*Batch cost.*

## Batch Tasks

**Batch Tasks** allows tracking of tasks that are associated with the batch. When this item is clicked, active tasks that have been linked to the current batch will be displayed in the table. Tasks can be edited and added to the table. These tasks can also be entered and viewed in the **Task Management** view. See [Task Management](#) for additional details regarding task management.

**New Task**

**General**

Task ID: 00001

Priority: Normal

Status: Active

Due Date: 20/02/08

Due Time: 12:00 PM

**Detail**

Batch: CabFranc2007

Container: Tank\_02

Task Type: Measurements

Assign To: robert

**Description**

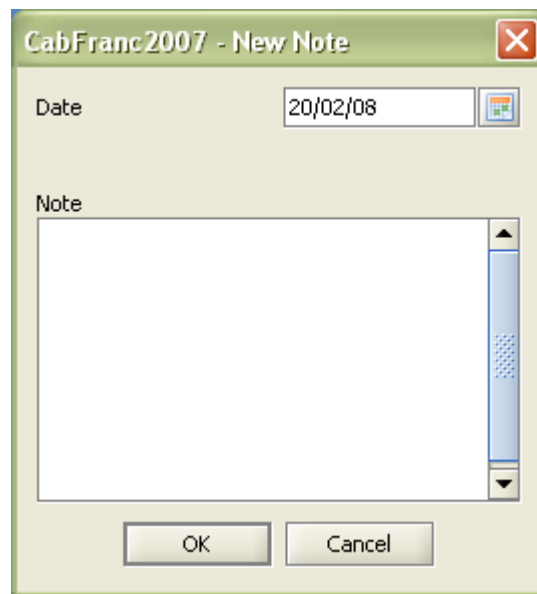
Measure brix and temp.

OK Cancel

*Adding a task for a particular batch.*

## Notes

The **Notes** table is used to record miscellaneous notes about the batch that do not fit into other categories. Most dialogs have a **Note** field that is used to record additional information. For example, fermentation notes are best recorded in the fermentation dialog. However, the **Notes** table can be used to record general information about the batch.



*The notes dialog*

## **Batch Log Viewer**

The **Batch Log Viewer** integrates all of your batch data into a single screen. This provides an overview of the entire batch. The toolbar in the viewer screen provides several options to export the batch log into other useful formats:

- XLS (Excel)

Clicking **Create Excel Batch Log** will generate a single Excel file containing all of your batch data. A separate Excel sheet will be generated for each table in your batch log. Excel can then be used for custom analysis and reports.

- PDF

Clicking **Create PDF Batch Log** will generate a PDF file containing all of your batch data. The PDF file can be viewed with Adobe Reader or other PDF viewer. This export option is useful for creating a permanent, portable record of your batch.

- RTF

Clicking **Create RTF Batch Log** will generate a RTF file containing all of your batch data. RTF files are viewed in word processor programs.

- HTML

Clicking **Create HTML Batch Log** will generate a HTML file containing all of your batch data. HTML files are viewed in web browsers.

The Batch Log can be printed using the print functionality of the export program (ie. Adobe Reader, Excel etc..).

## ***Batch Status***

**Batch Status** shows all of the containers that have been linked with the batch (through a process record), along with the quantity of wine in each container and the current process. This provides a concise overview of each container that has been linked to the batch. **Batch Status** shows the current status of the batch, showing active processes and non-empty containers. Only active processes are shown. For example, the fermentation process will be shown in the Batch Status table when it is active. Once it is complete, it will no longer be shown in the Batch Status table.

## ***Recipe***

When **Recipe** is clicked, the recipe (if any) will be displayed in the main program window. The displayed recipe corresponds to the recipe name that is defined in the [Recipe](#) field in the [Batch Information](#) dialog.

## ***Bottle Label***

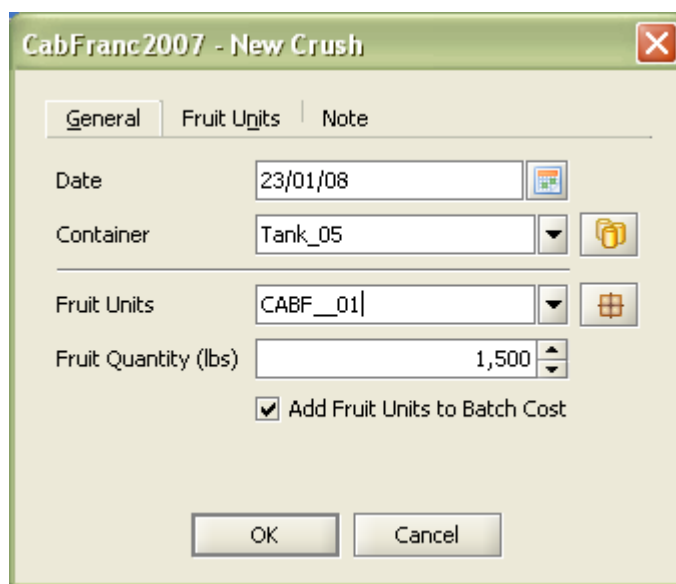
When **Bottle Label** is clicked, the label graphic (if any) will be displayed in the main window. See the [Bottle Dialog](#) entry for details regarding entering the label into the program.

## Batch Composition

The **Batch Composition** section allows tracking of batch components such as fruit sources and blend components. This feature provides a linkage between the [Vineyard Management](#) view and the **Batch Data** view. This feature is extremely powerful as it links the batch to vineyard events, activities, and physical conditions such as weather.

### Crush

After entering the initial batch information in the [Batch Information](#) dialog, the usual next step for wines made from fresh grapes would be to enter a crush record via the **Crush Dialog**. The crush dialog is one of two ways in which [Fruit Received](#) is linked to a batch. The other method is via the [Fruit Composition](#) dialog. Linking a batch to fruit sources enables the wine to be traced back to the vineyard. The batch is then automatically linked to vineyard data such as samples, weather, or spray applications. This linkage is extremely powerful as it makes it possible to link a finished bottle of wine back to the physical and human events that occurred in the vineyard.



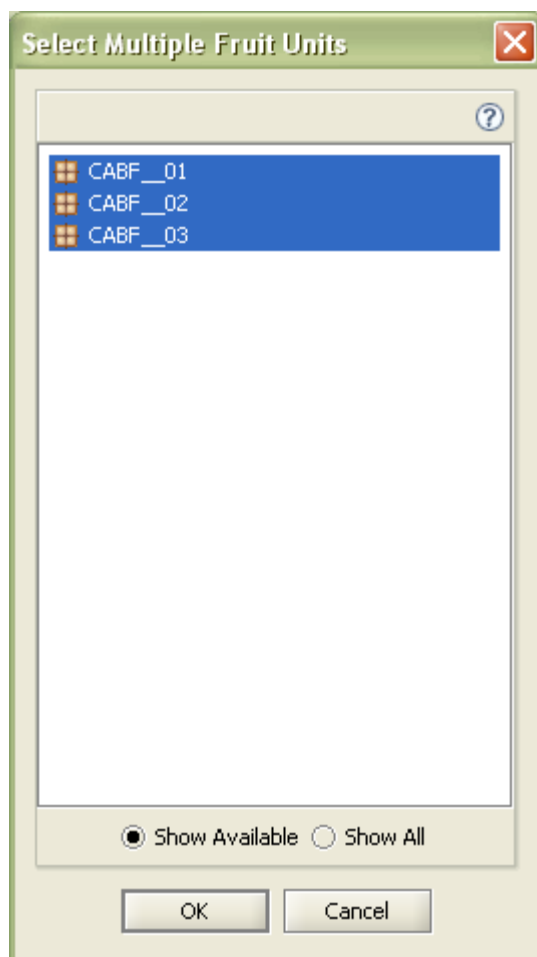
The screenshot shows a dialog box titled "CabFranc2007 - New Crush". It has three tabs: "General", "Fruit Units", and "Note". The "General" tab is selected. The fields are as follows:

Field	Value
Date	23/01/08
Container	Tank_05
Fruit Units	CABF__01
Fruit Quantity (lbs)	1,500

There is a checked checkbox for "Add Fruit Units to Batch Cost". At the bottom are "OK" and "Cancel" buttons.

*Entering a crush record.*



To start, enter the **Date** and **Container** (optional). Next, enter the **Fruit Units**. These are the fruit units that have been received into the winery and have been previously entered in the [Fruit Received](#) dialog. If you are crushing a single fruit unit, then it can be selected from the drop-down box. If your batch is composed of multiple fruit units, click the button beside the drop-down box and select all of the fruit units that are to be crushed.



*Selecting multiple fruit units.*

To select more than one fruit unit, hold the **Ctrl** key down while clicking each item. A continuous range of items can be selected by clicking the first item, then holding down **Shift** while clicking the last item in the range. All fruit units between the first and last will then be selected. Additional information about each fruit unit is displayed as a tooltip when the mouse is held over each item. A batch can be linked to any number of fruit units.

When selecting multiple fruit units, you can choose to view all units or available units. Available units are units that have not already been added to a batch. These items are differentiated by their icons. Fruit units that have already been linked to a batch are gray in color:

-  This fruit unit has already been linked to a batch and the total quantity has been used.
-  This fruit unit has not been linked to a batch or there is remaining unused quantity.

After entering the fruit source(s), the **Fruit Quantity** field will be automatically populated with the sum of the weights of the selected fruit units. However, this field can be manually edited if required.

It is possible to add part of a single fruit unit to the crush. For example, you may have a single delivery of fruit that you want to divide between multiple batches. To do this, select the desired fruit unit from the drop-down box. The **Fruit Quantity** field will be automatically populated with the total weight of the fruit unit. If you do not wish to apply the total fruit quantity to the batch, then edit the **Fruit Quantity**. If the quantity being crushed is less than the total quantity of the fruit unit, then the remaining quantity of the fruit unit will remain available to add to other batches.

If **Add Fruit to Batch Cost** is checked, the cost of the fruit sources will be automatically added to the itemized cost of the batch (**Batch Cost** in the **Batch Data** view). The program will look up the pricing information from **Fruit Received** and then add the cost to the batch.

The **Fruit Sources** tab displays a non-editable list of the fruit sources that are associated with this crush record.

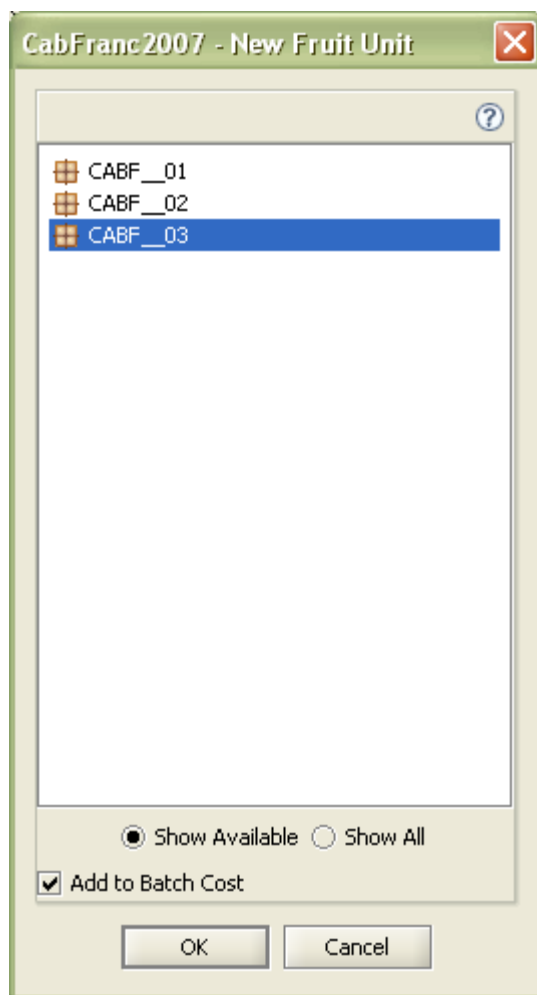
The **Fruit Sources** table in the **Batch Data** view shows all of the fruit units that have been added to the batch, either via the **Crush Dialog** or directly to the **Fruit Composition** table.

As can be seen, the crush dialog is very simple, yet it is also quite powerful, as it automatically acquires data from the **Fruit Received** module and will automatically add records to the **Batch Cost**. It also provides a mechanism to link vineyard data with batch data, allowing a wine to be traced back to the vineyard.

### **Fruit Composition**

The **Fruit Composition** dialog can also be used to link fruit units to a batch and enable tracing the wine back to the vineyard. If you are making wine from fresh fruit, it is preferable to use the **Crush Dialog** for this purpose. However, the **Fruit Source** dialog is also provided so that fruit units that have been previously crushed (such as a receipt of fresh juice or bulk wine) can be linked to a batch. The actual fruit units are added in the **Fruit Received Dialog**. The **Fruit Composition** dialog is simply used to link the fruit unit(s) to the batch. By doing this, the fruit from which the batch is composed can be traced back to its origin in the vineyard.



To add a fruit unit to a batch, select the **Fruit Composition** item from the **Batch Data** view and select the desired fruit unit from the list after clicking the **New Record** button from the toolbar above the table.



*The fruit composition dialog.*

To select more than one fruit unit, hold the **Ctrl** key down while clicking each item. A continuous range of items can be selected by clicking the first item, then holding down **Shift** while clicking the last item in the range. All fruit units between the first and last will then be selected. Additional information about each fruit unit is displayed as a tooltip when the mouse is held over each item. A batch can be linked to any number of fruit units.

When selecting multiple fruit units, you can choose to view all units or available units. Available units are units that have not already been added to a batch. These items can also be easily differentiated by their icons. Fruit units that have already been linked to a batch are gray in color.

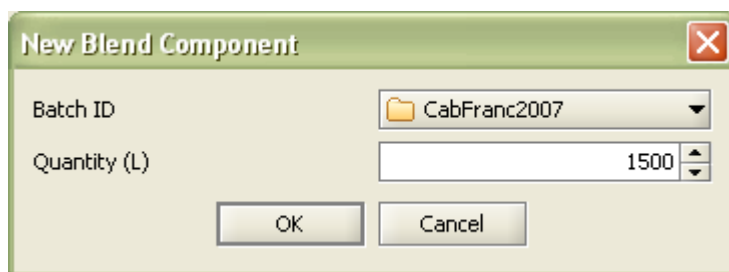
-  This fruit unit has already been linked to a batch and the total quantity has been used.
-  This fruit unit has not been linked to a batch or there is remaining unused quantity.

If **Add Fruit to Batch Cost** is checked, the cost of the fruit sources will be automatically added to the itemized cost of the batch ([Batch Cost](#) in the **Batch Data** view).

Fruit sources can be edited or deleted like other table data. Also, if the fruit sources are entered in the [Crush Dialog](#), they will automatically be added to the **Fruit Sources** table where they can be edited if necessary.

## ***Blend Composition***

If the current batch is a blend, the **Blend Composition** table will show a list of the batch components that make up the blend. In addition to the **Batch ID**, the table will show the variety, quantity and percentage of each component. If your wine is a blend of two or more batches you can manually enter the blend components here. Alternately, if the [Racking](#) feature is used to rack wine between batches, the program will automatically create the blend records.



*Adding a batch component to a blend.*

## ***Fruit Source Sample History***

The **Fruit Source Sample History** shows the **Vineyard Samples** for the fruit units that have been linked to the batch (via [Crush](#) or [Fruit Composition](#)). This allows the development of sugar, TA, and pH in the vineyard to be linked with the finished wine. The actual samples are entered in [Vineyard Samples](#) in the [Vineyard Management](#) view.

## ***Fruit Source Spray History***

The **Fruit Source Spray History** shows the spray applications that were applied to the fruit that has been linked to the batch. This provides a linkage between the [Spray Diary](#) in the [Vineyard Management](#) view and the **Batch Data** view.

## ***Fruit Source Weather History***

The **Fruit Source Weather History** shows the weather conditions that occurred in the vineyard from which the fruit came. This provides a linkage between the [Vineyard Weather](#) in the [Vineyard Management](#) view and the **Batch Data** view.

## Batch Processes

A **Process** is a winery operation that spans a length of time, such as fermentation or aging. All processes define a **Start Date**, **End Date**, **Container**, and **Quantity**. Individual processes (such as fermentation) may have other attributes as well. Processes provide the mechanism where a **Container** becomes linked to a **Batch**. A batch can include any number of concurrent processes in any number of containers. After entering general [Batch Information](#), a process would then be created so that various events can then be recorded for the batch.

### *Starting a Process*

To start a process, a new process record is created. A **Start Date** and a **Wine Quantity** are specified. Once the record is saved, the process becomes active. The following processes are available:

- Cold Settle
- Cold Soak
- Alcoholic Fermentation
- Malolactic Fermentation
- Cold Stabilization
- Sur Lie Aging
- Bulk Aging

### *Ending a Process*

A process can be terminated manually or automatically by the program. A process comes to an end when the **End Date** has passed and/or the **Wine Quantity** becomes zero. If the [Racking](#) feature is used, the software will automatically change the end date and quantity for the affected process record. If the racking feature is not used, the process can be ended manually by editing the process and changing the end date and quantity as necessary.

### *Process Summary*

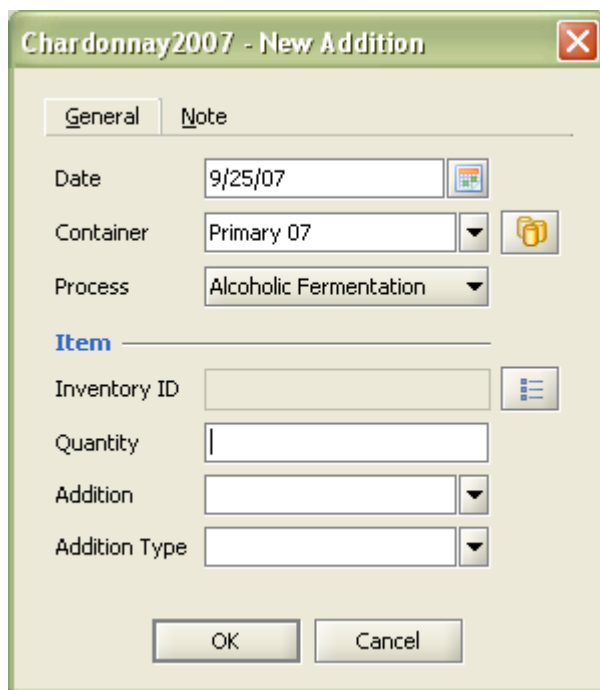
The **Process Summary** table shows all processes that have taken place for the current batch. A batch can have any number of concurrent or sequential processes. The process summary list each process that has been added to the batch along with the associated container, quantity, start date, and end date. It also calculates the **Process Length** in days. If the process is active, the process length is the number of days between today and the process **Start Date**. If the process is inactive, the process length is the number of days between the **Start Date** and **End Date**. Double-clicking on a row in the process summary table will cause the program to display that process.

## Batch Events

**Events** are activities such as additions or measurements that occur during a [Process](#). Normally an event occurs at a moment in time rather than a period of time. **Events** can be linked to a **Process**. For example, this makes it possible to view all measurements that were taken during fermentation. All of the event dialogs allow you to apply the event to a single container or multiple containers. See [Selecting Containers](#) for details. All events allow you to specify a date, container, and a process. Additional fields are provided, depending on the event. The various event types in Amphora are described below.

### Additions

The additions dialog allows tracking of the various additions to the wine. This could include such items as yeast, oak chips, sugar, sulfite, and others. The additions dialog is linked to the [General Inventory](#). This allows the addition to be associated with a specific **Inventory ID**. This in turn allows the addition to be traced back to the associated supplier information that is contained in the **General Inventory** view.



The screenshot shows a dialog box titled "Chardonnay2007 - New Addition". It has two tabs: "General" and "Note". The "General" tab is active. The fields are as follows:

- Date: 9/25/07
- Container: Primary 07
- Process: Alcoholic Fermentation
- Item section:
  - Inventory ID: (empty)
  - Quantity: (empty)
  - Addition: (empty)
  - Addition Type: (empty)

Buttons: OK, Cancel

*The additions dialog.*

### Bottle

Once the wine is ready for bottling, a bottling record can be entered in the **Bottle Dialog**. The **Date** and **Container(s)** that were bottled is entered, along with various attributes of the finished wine and bottle type.

A **Wine Name** can be entered if the the name of the finished wine will differ from the **Batch ID**. This field is intended to refer to the name under which the finished wine will be marketed or presented. This name will appear on sales invoices. A single batch can have several wine names. For example this makes it possible to bottle part of your batch under one name and another part under a different name (eg. reserve wine).

By default, the **Quantity** field is specified as number of bottles. However, the units can be changed to cases. This preference is set in the [Preferences Dialog](#).

If you have an image file of your bottle label, it can be specified by clicking the **Get Label** button. The label image can then be viewed from within Amphora.

### *Adding Bottles to Inventory*

When entering a bottling record, the bottles can automatically be entered into your [bottle inventory](#). Ensure that **Add to Inventory** is checked. An optional inventory location can also be specified. The location can be anything you like, such as a room or a cellar location. The resulting bottles will then be added to the [Bottle Inventory](#).

### *Reducing General Inventory Items*

The bottling dialog can also automatically reduce your general inventory levels for bottles, closures, capsules, and labels. To do this you need to specify the **Inventory ID** for each of these items in the bottling dialog. Ensure that **Reduce General Inventory** is checked before closing the bottling dialog. The program will then automatically adjust your general inventory according to the bottle quantity.

### *Adding Items to Batch Cost*

In addition to reducing your general inventory, the bottling dialog can automatically add the cost of bottles, closures, capsules, and closures to your [batch cost](#). To do this you need to specify the **Inventory ID** for each of these items. Ensure that **Add Items to Batch Cost** is checked before closing the bottling dialog. The software will look up the cost data from the [General Inventory](#) and insert the appropriate records into the [Batch Cost](#) table.

Chardonnay2007 - New Bottling

General Note Label

Date 9/25/07

Container Primary 07

Wine Name

Wine Quantity (Litres) 1,000

**Measurements**

Alcohol (%/vol.) 12.5

Residual Sugar (g/L) 1

**Bottle Inventory**

Add to Bottle Inventory

Inventory Location Warehouse\_A

**Bottle**

Inventory ID

Bottle Type Burgundy

Bottle Size (ml) 750

Quantity (Bottles) 1,300

**Closure**

Inventory ID

Closure Type

**Capsule**

Inventory ID

Capsule

**Label**

Inventory ID

Bottle Label

Get Label Image...

Reduce General Inventory

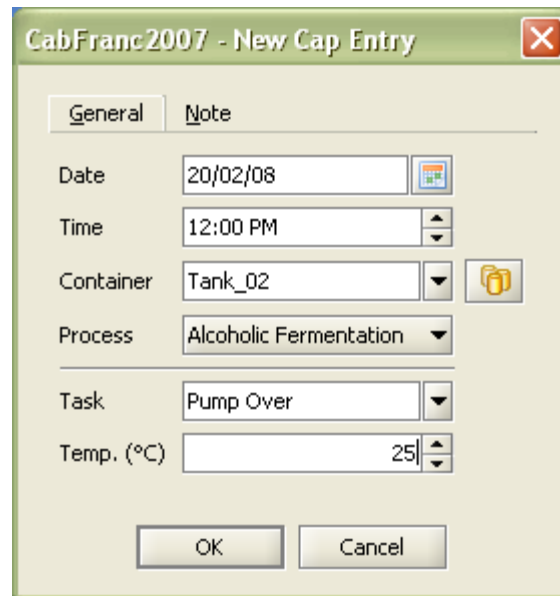
Add Items to Batch Cost

OK Cancel

Bottling a wine.

## Cap Management

The **Cap Management** dialog is a simple dialog that allows tracking of cap management activities such as pumping over. It also provides a field where the cap temperature can be monitored. A chart is available in order to plot the cap temperature.



*Entering a cap record.*

## **Chaptalization**

The **Chaptalization** dialog allows tracking of sugar additions to the wine. Measurements of the starting sugar, ending sugar, and sugar added can be specified. The chaptalization dialog is also linked with [General Inventory](#) and [Batch Cost](#). If your sugar has been added to the [General Inventory](#), the chaptalization entry can reduce the sugar inventory and add the sugar cost to batch cost. There is also an option to add the chaptalization record to the [Additions](#) table.

Chardonnay2007 - New Chaptalization

General Note

Date 9/25/07

Time 10:02 AM

Container Primary 07

Process Alcoholic Fermentation

**Sugar Addition**

Start Sugar (B°) 20

End Sugar (B°) 25

Sugar Added (kg) 75

**General Inventory**

Inventory ID SUCR

Reduce Inventory

Add to Batch Cost

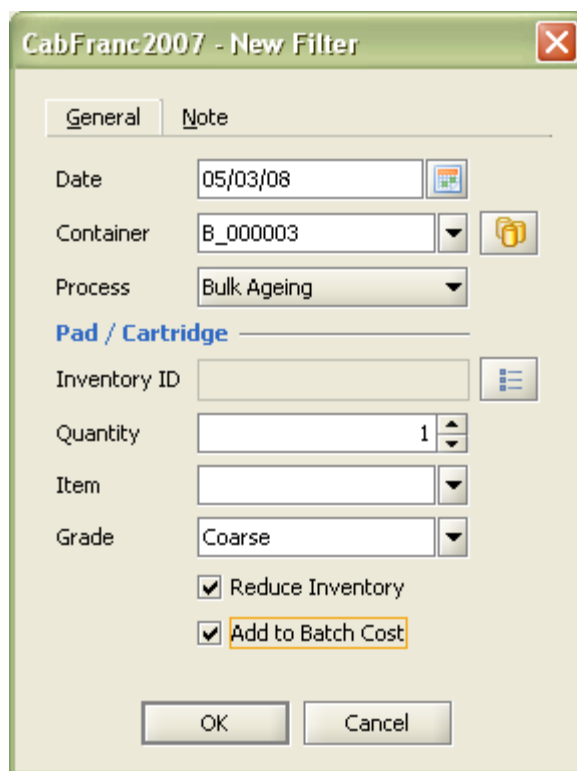
Update Additions

OK Cancel

*Entering a chaptalization record.*

## **Filter**

The filter dialog is a simple dialog to record a filter event. Like all events, the date, container, and process are specified. Specific attributes of the filter event can also be specified. The filter dialog is linked with [General Inventory](#) and [Batch Cost](#). If the **Inventory ID** is specified, the software can reduce the inventory for the filter pad/cartridge and add the cost to the **Batch Cost**. Ensure that **Reduce Inventory** and/or **Add to Batch Cost** are checked in order to enable this feature.



*Recording a filter event.*

## **Measurements**

The measurements dialog is used to enter the large number of measurements that can be taken during the course of the winemaking process. The **Date**, **Time**, and **Container** can be specified, along with the measurements. The **Process** (eg. Alcoholic Fermentation) can also be specified. For example, this allows measurements taken during fermentation to be separated from those taken during other processes. A **Lab Reference** field is also provided so that the measurement record can be linked with a laboratory analysis if desired. If Load Previous Measurements is checked, the software will look up the most recent measurements for the selected container. These measurements will then be automatically populated in the associated field. This allows easy entry for measurements that have not changed since the last measurement.

CabFranc2007 - New Measurement

General | Acid Detail | SO2 Detail | Custom

Date: 05/03/08

Time: 2:53 PM

Container: Tank\_01

Process: Alcoholic Fermentation

Lab Reference:

Load Previous Measurements

Sugar (B°): 20

TA (g/L): 0

pH: 0

Free SO2 (mg/L): 0

Temp. (°C): 25

Alcohol (%): 0

OK Cancel

Entering a measurement.

### Custom Measurements

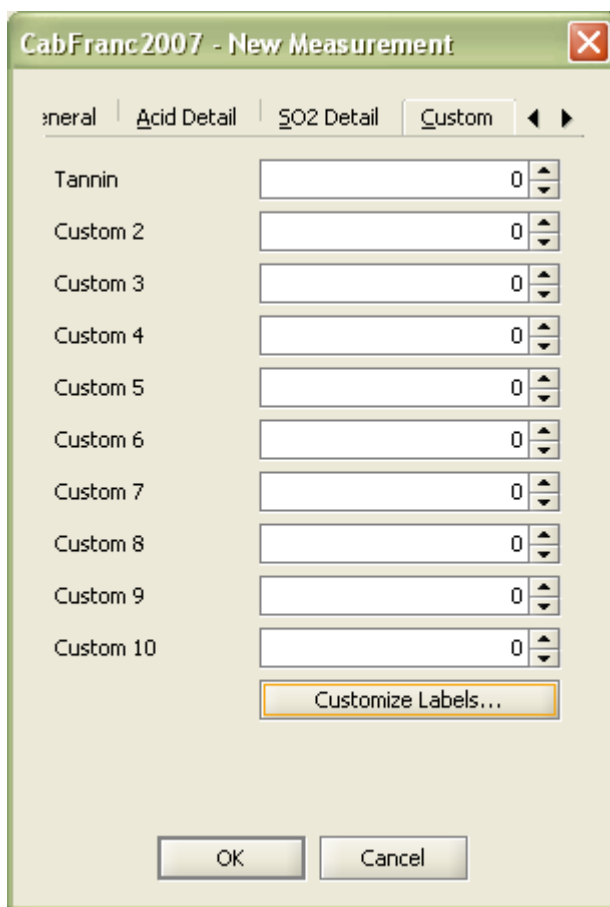
Amphora provides pre-defined fields for the more common measurements. However, Amphora also provides 10 special custom fields that can be used to enter any possible measurement. By default, these fields are named "Custom 1 .. Custom 10". However, these names can be changed to anything you like. Click the **Customize Labels** button and enter a new name for the labels. These labels will also appear in the table header when viewing the measurements table.

Custom Measurement

Field: Custom 1 | Label: Tannin

OK Cancel

Adding a custom label.



*The custom label now appears in custom measurements.*

Amphora includes fields for a large number of measurements. However, many winemakers will not use all these fields and the main table can become cluttered with unused fields. It is possible to remove unused fields from the table. See the entry regarding **Hiding Columns** in [Table Customization](#).

## **Press**

The Press Dialog is used to record the quantity of wine that was pressed. If desired, the quantities of **free run** and **press run** can be specified separately. The **Total Quantity** is automatically populated with the sum of the press and free run quantities, but can be edited if desired.

The **Yield** is automatically calculated, based on the **Total Quantity** pressed and the fruit weight (as entered in the [crush dialog](#)). This number can also be edited if required.

When the press record is saved, it will automatically update the **Size** field in the [Batch Information](#) dialog with the total quantity that was pressed.

## ***Rackings***

Amphora includes an automated racking feature. The racking feature is optional, the quantity of each container can be specified in each process (eg. aging). However, the racking feature provides a more automated method to transfer wine between containers, and of course it also provides a record of racking operations.

To enter a racking event, the containers involved are specified, along with the quantity to rack. Amphora will take care of the details and update the affected records. The dialog also displays the capacity and existing quantity of the container that is receiving the wine. If the quantity being racked is greater than the capacity of the receiving container, the capacity field will be colored red.

If you are not racking the entire contents of a container, ensure that the **Mark Container as Empty** item is not checked. If this item is checked, Amphora will designate the source container as empty after the racking operation. This feature is useful if you want to ensure that the container is recorded as empty, regardless of the quantity that was racked from the container. Even if **Mark Container as Empty** is not checked, the container will be designated as empty if the quantity racked is equal to the existing wine quantity prior to the racking.

After saving the racking entry, the software will automatically update the relevant records. The quantities of each container will be automatically adjusted. In addition, the program will create new records if necessary. For example, if a container was racked to multiple smaller containers, the program will create the new records for each container. Also, if the racking involves a process change such as a move to the aging process, from fermentation, the program will automatically create a new record in the aging table. In order for the program to do this, the process must be specified in the racking dialog. The process defaults to the current process.

### ***Racking Between Single Containers***

Racking between 2 containers is the simplest case. Each container is simply selected from the drop-down fields.

CabFranc2007 - New Racking

General Note

Date 25/02/08

**Rack From**

Batch ID CabFranc2007

Container Tank\_01

Quantity (L) 10,000

Loss (L) 0

Mark Container as Empty (Tank\_01)

**Rack To**

Batch ID CabFranc2007

Process Alcoholic Fermentation

Container Tank\_03

Capacity (L) 10,000.00

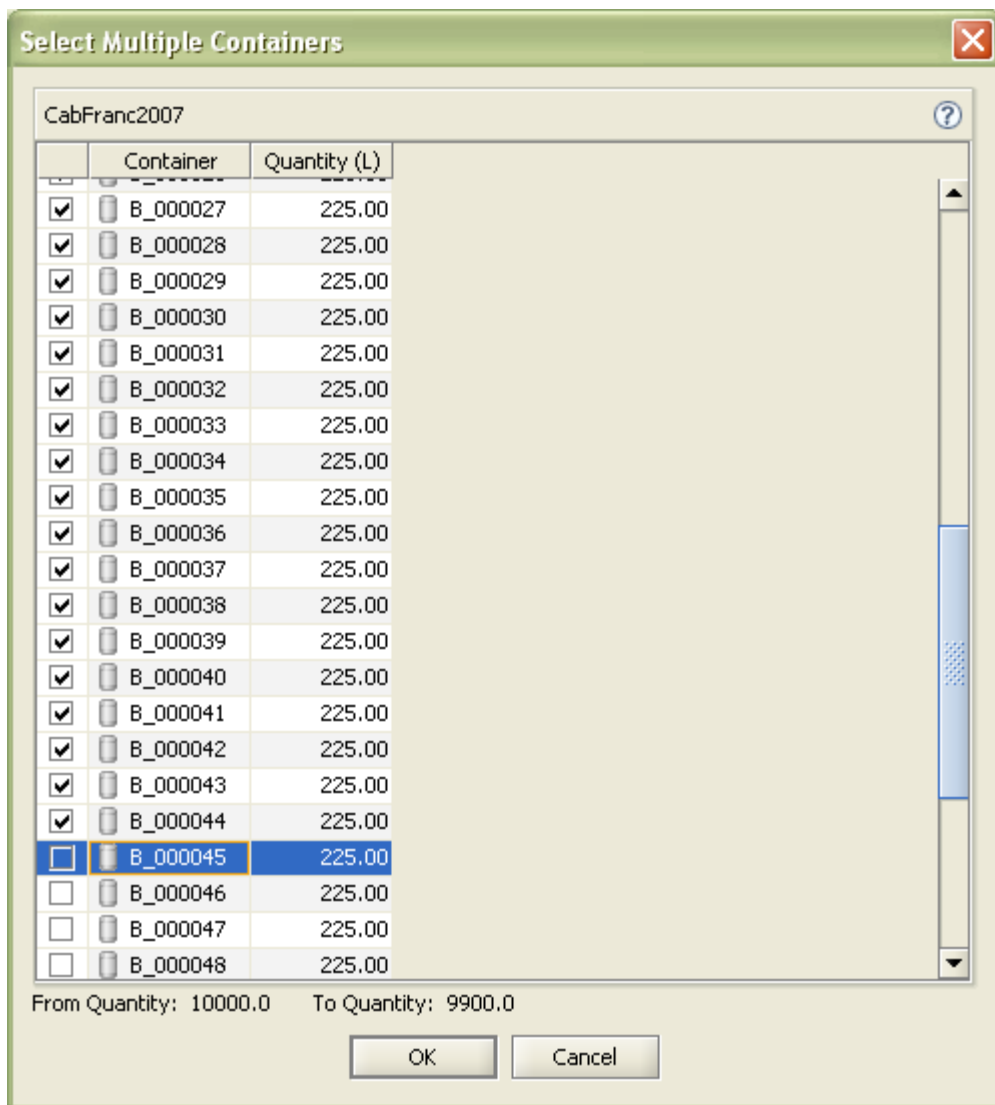
Existing Quantity (L) 0.00

OK Cancel

*Racking between single containers.*

### *Racking From a Single Larger Container to Multiple Smaller Containers*

In this situation the wine is transferred from a single large container such as a fermentation tank to multiple smaller containers such as barrels. The single large container is specified in the container drop-down field in the **Rack From** section of the dialog. Then the smaller containers are selected by clicking the button beside the container drop-down in the **Rack To** section. This will open a dialog where multiple containers can be selected. To select a container, check the box on the left side of the window. The **Quantity** will default to the capacity of the container. However the quantity of each container can be edited if necessary. After selecting the desired containers, click **OK** to close the window. When the **OK** button on the racking dialog is clicked, the software will generate an entry for each selected container.



Selecting multiple containers to rack to.

CabFranc2007 - New Racking

General Note

Date 25/02/08

**Rack From**

Batch ID CabFranc2007

Container Tank\_02

Quantity (L) 10,000

Loss (L) 0

Mark Container as Empty (Tank\_02)

**Rack To**

Batch ID CabFranc2007

Process Bulk Ageing

Container Multiple Containers

Capacity (L)

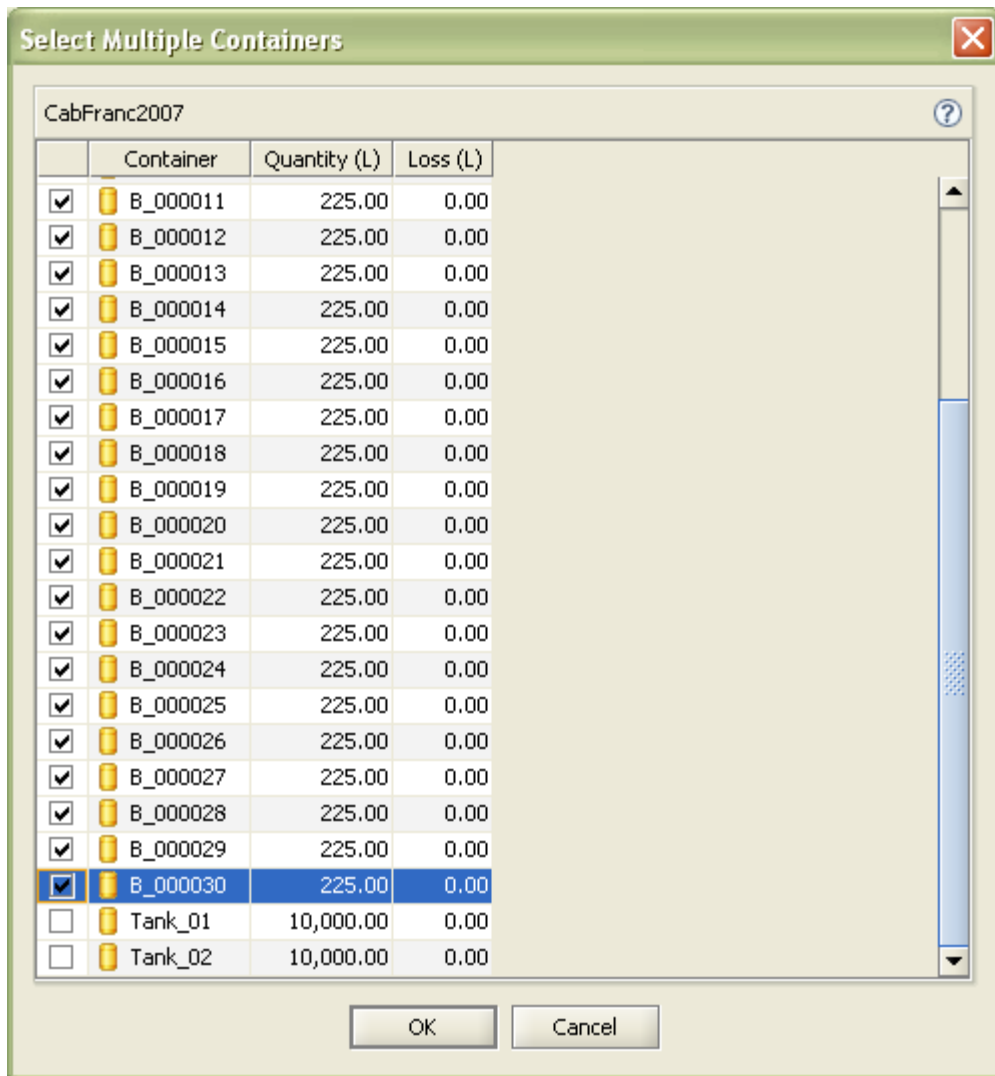
Existing Quantity (L)

OK Cancel

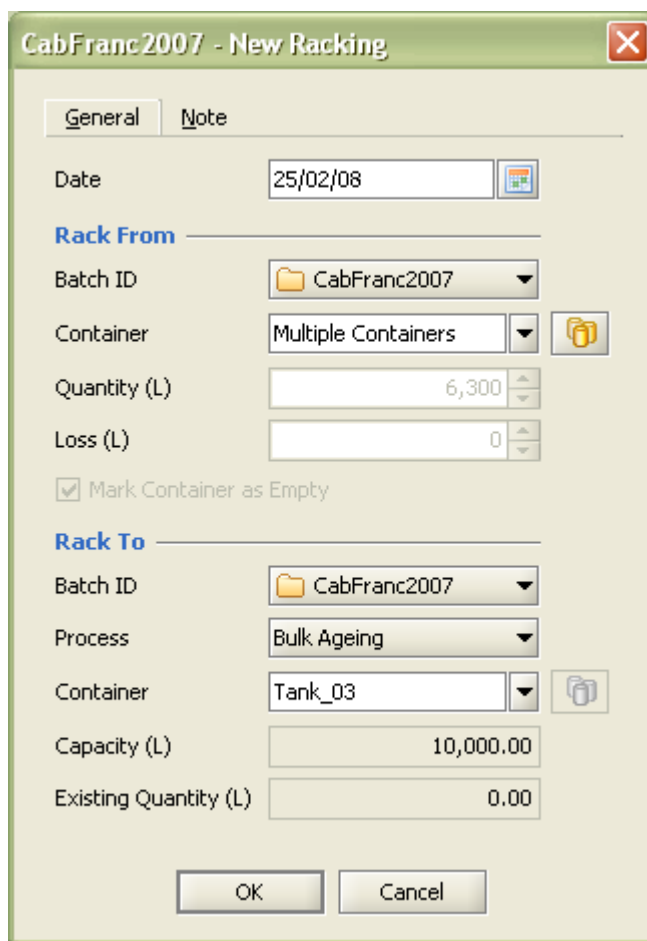
*Racking from a tank to multiple barrels.*

### ***Racking From Multiple Smaller Containers to a Single Larger Container***

In this situation the wine is transferred from multiple smaller containers such as barrels to a single large container such as a tank. The smaller containers are selected by clicking the button beside the container drop-down in the **Rack From** section. This will open a dialog where multiple containers can be selected. To select a container, check the box on the left side of the window. The **Quantity** will default to the current wine quantity of the container. However the quantity of each container can be edited if necessary. After selecting the desired containers, click **OK** to close the window. Then the single large container is specified in the container drop-down field in the **Rack To** section of the dialog. When the **OK** button on the racking dialog is clicked, the software will generate an entry for each selected container.



Selecting multiple containers to rack from.



*Racking multiple barrels to a tank.*

### *Blending Wine*

The racking feature can be used to blend wine between different batches. Entering a blend is exactly the same as a regular racking except that different Batch IDs will be specified in the **Rack From** and **Rack To** sections. The software will also automatically track the composition of the blend. This is visible in the [Blend Composition](#) table in the **Batch Data** view.

When creating a blend it is often useful to create a new batch to represent the blend. This way the data for the blend can be kept separate from the data associated with the blend components. To do this, [create a batch](#) in the usual way. After the batch (blend) has been created, the racking dialog can be used to transfer wine to the new blend. The **Blend Composition** table for the blended batch will show the batches that were used to create the blend, along with the relative proportions.

CabFranc2007 - New Racking

General Note

Date 25/02/08

**Rack From**

Batch ID CabFranc2007

Container Tank\_01

Quantity (L) 3,000

Loss (L) 0

Mark Container as Empty (Tank\_01)

**Rack To**

Batch ID Cab Sauv/Cab Franc 2007

Process Bulk Ageing

Container Tank\_05

Capacity (L) 10,000.00

Existing Quantity (L) 0.00

OK Cancel

*Racking between batches (blending)*

## **Tastings**

The **Tastings** dialog is a very simple dialog intended for recording tasting notes. Like the other event dialogs, the container and process can be recorded along with the note.

## **Top Ups**

The top up dialog allows tracking of the topping up process. The container to be topped up is specified, along with the container of the source and the top up quantity. If desired, the program will automatically adjust the container quantities in the associated process records. If **Increase Top Up Container Quantity** is checked, the program will automatically increase the quantity by the amount of the top up. If **Decrease Source Container Quantity** is checked, the program will automatically decrease the source quantity by the amount of the top up.

CabFranc2007 - New Top Up

General Note

Date 27/02/08

Container B\_000004

Existing Quantity (L) 225

Process Bulk Ageing

**Top Up Source**

Source Batch CabFranc2007

Source Container B\_000030

Top Up Quantity (L)

Increase Top Up Container Quantity

Decrease Source Container Quantity

OK Cancel

*Recording a Top Up*

## ***Event Summary***

The **Event Summary** is a non-editable table that provides an overview of all events such as additions and measurements, that have been applied to the batch. The table shows the date, process, container, and a description of the event.

## Measurement Views

All measurements are entered and edited via the measurements dialog and can be viewed in the main table. However, it is possible to have more concise views of the measurement data. **Measurement Views** are non-editable views of measurements, broken down by categories such as Acid or SO<sub>2</sub>. Charts are automatically created and displayed in the lower half of the window. If necessary, each half of the screen can be resized with the mouse.

The embedded charts can be customized, saved, or printed just like the other charts by using the toolbar above the chart, or by right-clicking the chart and selecting the appropriate item from the context menu. See the [Charts](#) entry for details. Charts can also be generated in the normal way by clicking the chart item in the table toolbar if an independent chart window is desired.

### **Selecting Data by Container**

By default the chart is created using data for all containers listed in the table. If more than one container is listed in the table, a chart can be created using the data for a single container. Select the desired container from the drop-down on the toolbar above the chart. A new chart will be automatically generated using the data for the single selected container.

### **Fermentation Detail**

The **Fermentation Detail** view provides a view of sugar and temperature during fermentation. Unlike the other measurement views, fermentation detail only displays measurements that were taken during fermentation. In order for this feature to work, the **Process** field in the [Measurements](#) Dialog must be defined as **Alcoholic Fermentation** when entering measurements during the fermentation process.

# Container Management

## Container Inventory

Amphora can track all your tanks, barrels, carboys, or other containers. Basic information about containers such as type and capacity is held in the **Container Inventory**. The inventory of all containers can be viewed by selecting the **Container Management** view. One of the first things you will want to do when beginning to use Amphora is to add your containers to the container inventory. After a container is added to the **Container Inventory** it will be listed in the container drop-down boxes and lists throughout the program.

### *Creating and Editing Containers*

New containers can be created by selecting the **Container Management** view and clicking the **New Record** button above the table or by selecting **New Record** from the context menu after right clicking the table. The **Container** field represents the name of the container and is the only required field. The container details can then be entered. While these details are optional, it is best to enter as much information as possible. This makes it possible for Amphora to extract useful information such as that found in **Winery Reports**. The **Age** field is automatically calculated, based on the **Manufacture Date**. Large numbers of identical containers can be created using [Container Templates](#).

The screenshot shows a 'New Container' dialog box with the following fields and values:

Field	Value
Container	Tank_01
Date Acquired	22/01/07
Manufacture Date	22/01/07
Age (Years)	1
Type	Stainless Steel
Capacity (L)	10,000
Cooper	
Forest	
Toast	
Location	Ferm_01
Group	
Cost (\$)	0.00

*Creating a new container.*

## Container Templates

Amphora is able to instantly create any number of containers using container templates. For example, it is possible to create 500 identical barrels in the same time it takes to create a single barrel. Templates can save a lot of data entry time if you have large numbers of identical containers.

### Creating and Editing Container Templates

A container template defines the attributes of a container type. To create a new template, click on **Container Templates** from the left side of the screen (in **Container Management** view). The table will show a list of templates that have already been created (if any). Click the **New Record** button to create a new template. You can also edit or delete existing templates. The template dialog will appear where the details can be entered. The template dialog is nearly identical to the container dialog. The main difference is that you need to provide a template name rather than a container name. For example you might create a template for barrels with a 225 litre capacity. You might name the template "barrel\_225\_litre". You also might include other details such as toast level in the template name. The

template name can be anything you like, but each template must have a unique name. Then specify the other attributes of the container. After all the details are entered, just click **OK** and the template will be saved.

The screenshot shows a 'New Container Template' dialog box with the following fields and values:

Field	Value
Template	barrel_225L
Date Acquired	9/25/07
Manufacture Date	9/25/07
Type	Oak - American
Capacity (Litres)	225
Forest	
Cooper	
Toast	Medium Plus
Location	Cellar
Group	group_002
Cost (\$)	450

Buttons: 'Create Containers from Template...', 'OK', 'Cancel'

*Creating a new container template.*

### *Using Templates to Create New Containers*

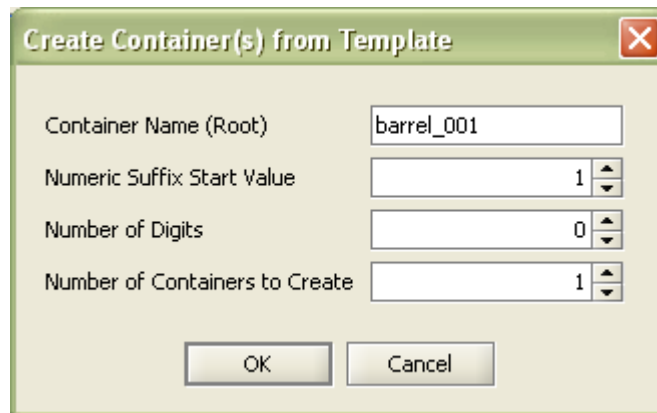
Once a template has been created, it can be used to create new containers. To create new containers from a template, open the template by double-clicking the template in the table or click the **Edit Record** button to open the template dialog. Then click the **Create Container(s) from Template** button at the bottom of the dialog.

Creating new containers from a template simply involves specifying how the new containers should be named, and how many containers to create. The template will name the new containers based on a root name and a numeric suffix such as "Container001". The suffix is specified by entering the starting value for numbering and the number of digits. Specifying the number of digits allows zeros to be used as placeholders. This process is best illustrated with some examples:

### *Creating a Single Container from a Template*

The simplest case is to create a single container from a template. To do this the **Container Name** is entered. The other fields can be left alone. Click **OK** and a new container will be created with the specified name and the attributes specified in the template.

If you enter a container name that already exists, the program will ask if you want to overwrite the existing container. If you choose "Yes", the attributes of the existing container will be modified to reflect the template. If you choose "No", the new container will not be created, and the existing container will be left as is.



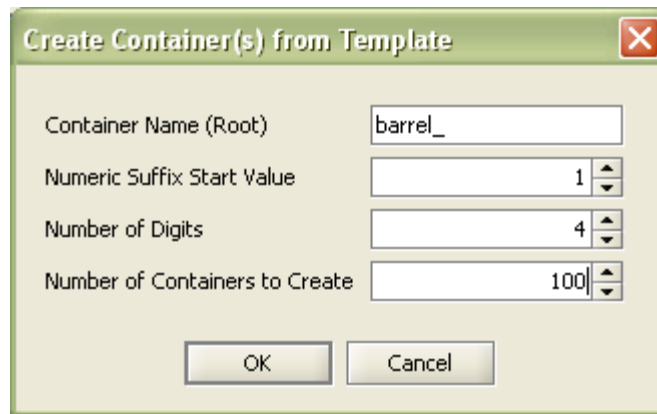
*Creating a single container using a template.*

### *Creating Multiple Containers from a Template*

Creating a single container from a template can be useful as it can save a bit of time. However, the real power of templates is when it is necessary to create multiple containers. For example, using templates, it is possible to create 500 barrels with just a couple clicks of the mouse.

Creating multiple containers is done in the same way as creating a single container, except that you need to specify a root and a suffix so that the software can automatically name the containers.

For example, you may wish to create 100 barrels, named "barrel\_0001" to "barrel\_0100". To do this you enter "barrel\_" as the **Container Name**, "1" as the **Numeric Suffix Start Value**, "4" as the **Number of Digits**, and "100" as **Number of Containers to Create**.



*Creating 100 containers using a template.*

It is also possible to start the numbering at a different point. For example, you may have already created barrels 0001 to 0100. Now you wish to create *barrel\_0101* to *barrel\_0200*. To do this you just specify "101" as the **Numeric Suffix Start Value**.

The **Number of Digits** is an optional setting. It can be used to ensure your container names are all the same size and thus look nicer on reports. This setting will add leading zeros to the container names where necessary. For example, if "0" was specified as **Number of Digits**, the above containers would be named "*barrel\_1*" to "*barrel\_100*". Alternately, if "6" was specified, the containers would be named "*barrel\_000001*" to "*barrel\_000100*".

After clicking **OK**, the software will automatically create 100 containers with the attributes specified in the template. The new containers are added to the **Container Inventory**. It is possible to create any number of containers using the template mechanism. However, the software only allows the creation of 1000 containers at a time. This prevents accidental creation of millions of unwanted containers! You can still create more than 1000 containers if desired, it will just require more than one step.

### *Editing Existing Containers Using Templates*

The container template mechanism can also be used to edit the containers that were created using that template. For example, you may have created 100 containers using a template. Perhaps you accidentally entered "Medium" as the toast level, when it should be "Medium Plus". To correct this error, open the template and change the toast field to the correct value. After clicking **OK**, the program will automatically change this value for all 100 containers that are linked to this template.

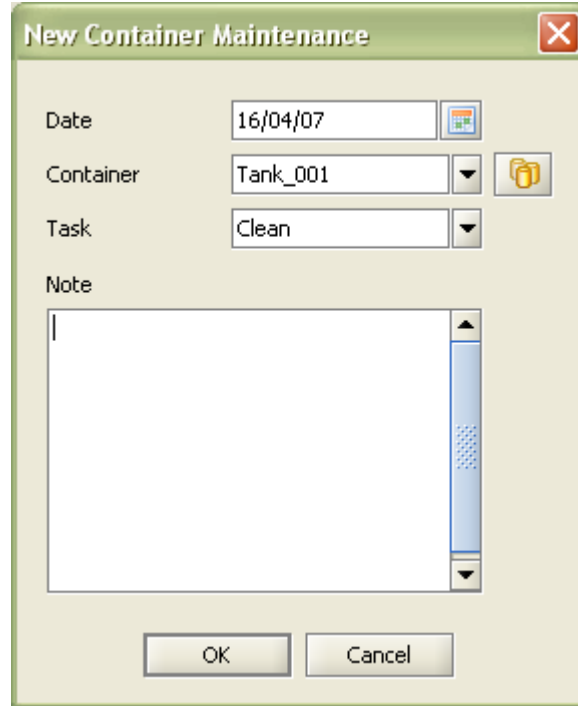
## **Container Maintenance**

Amphora can track container maintenance activities such as cleaning and repair. Container maintenance can be viewed by selecting **Container Maintenance** from the **Container Management View**.

### *Entering and Editing Container Maintenance Activities*

Click the **New Record** button above the table to enter a new maintenance item or click the appropriate

button to edit or delete existing items. The **Container** field will list all containers in the [Container Inventory](#). Previously entered tasks will be listed in the **Task** drop-down field.



*Creating a container maintenance record.*

### *Entering Maintenance on Multiple Containers*

Maintenance activities may be conducted on several containers at the same time. For example, several containers might be cleaned at one time. It is possible to record this activity with a single entry. Just click the button beside the **Container** drop-down field. A dialog will appear, listing all containers.

To select more than one container, hold the **Ctrl** key down while clicking each container. A continuous range of containers can be selected by clicking the first container, then holding down **Shift** while clicking the last container in the range. All containers between the first and last will then be selected. Amphora will then generate an maintenance entry for each selected container.

### *Selecting Container Groups*

It is also possible to select multiple containers by choosing container groups (containers can be assigned to groups in [Container Inventory](#)). For example, you may wish to record a maintenance task for all containers in one or more groups. To do this, click the button beside the **Container** field and choose the **Groups** tab. Groups are selected in the same manner as containers (see above). After clicking **OK**, the software will generate a record for every container in the selected group(s). Groups can be expanded to show the containers that belong to that group. You can expand all groups by

clicking the "+" button. All groups are collapsed by clicking the "-" button.

## Container Reports

### *Container Age*

The container age report shows the age of all of your containers based on the elapsed time since the **Manufacture Date**, as specified in the [Container Inventory](#).

### *Container Status*

While the **Container Inventory** tracks the static aspects of containers, **Container Status** provides the ability to track dynamic aspects, such as container content throughout the winemaking process. **Container Status** can be viewed by selecting **Container Status** from the **Container Management** view. The container status table shows the current status of each container.

**Container Status** is a read-only view and cannot be edited. Amphora automatically inspects your data and determines the container status. Whenever data is entered which affects the container status, Amphora will automatically adjust the status.

The container status table shows each container, along with **quantity** of wine in the container, the **Batch ID** of that wine, and the **winemaking process** (eg. fermentation, aging).

The graphics in the table are color coded. A yellow container graphic indicates that the container contains wine, while the gray graphic indicates the container is empty. In addition, warning messages will be displayed below the table if duplicate containers are found in the status table. This indicator helps locate data entry errors since each container should only appear once in the table. If a duplicate warning message appears, the affected containers will be colored red in the status table. The status table will indicate the batches in which the container can be found. Since a container can only contain one batch at a time, one of the entries must be incorrect. After the data has been corrected, the container status will automatically be regenerated.

### *How Container Status Works*

Amphora generates the container status by searching all process records (cold soak, alcoholic fermentation, malolactic fermentation, cold stabilization, and bulk aging). The program then determines the container status using the following rules:

1. Containers that are not currently used in any batch are classified as **Empty**.
2. Containers that are used in a batch but where **Quantity=0** are classified as **Empty**.
3. If the **End Date** of the process has been edited and the **End Date** is in the past, the program assumes that this process is finished and the container will be classified as **Empty** (even if the **Quantity** is not zero).
4. If the **Process** is ongoing (ie. the **End Date** has not been edited or the **End Date** is in the future) and the **Quantity** is not zero, the program will record the associated **Batch ID**, **Quantity**, and **Process** and add the record to the container status.

## Container Mapping

Amphora provides the ability to create user-defined interactive maps of tanks, barrels, or other containers. The map is linked to the database so that information regarding each container can be easily accessed. The map provides an interactive, visual representation of the winery.

### *Creating a New Map*

An unlimited number of maps can be created. For example, a map might be created for each container room, or a separate map might be created for different sections of a room, if there are many containers. To create a new map select **New Container Map** while in the **Container Management** view.

A dialog will appear where the **Name** of the map (room) is entered. You can enter anything you like but each map must have a unique name:

### *Adding and Deleting Containers*

After entering the **Map Name**, a blank map will be shown below the table. The table contains a listing of all available containers in the **Container Inventory**. To add a container to the map, select a container from the table. Right-click the table row and choose **Add to Map** from the pop-up menu.

A square will appear on the map, representing the selected container. The graphic can be moved or resized using the mouse. This procedure is then repeated for each container that you wish to add to the map.

To remove a container from the map, click **Delete Graphic** from the pop-up menu after right-clicking the graphic. Each graphic displays the **Container Name** and the **Batch ID** of the container contents. Additional information is displayed as a tooltip when the mouse is hovered above the container:

Each graphic is automatically color-coded depending on its contents. Normally the color represents the color of the wine. If no wine color has been specified, the graphic will be gray in color. Empty containers are colored white. The color that is used to represent the wine color can be changed in the program Preferences.

### *Moving and Resizing Container Graphics*

The mouse can be used to move and resize each graphic to represent the actual layout of your winery. Multiple containers can also be moved together by selecting more than one container at a time. Once the container position is finalized, the graphic can be locked by selecting **Options > Locked** from the pop-up menu after right-clicking the graphic. When locked, the graphic cannot be moved or resized. This is useful as it is very easy to accidentally move the graphic when clicking on the map. The graphic can be unlocked by selecting the same menu item again.

## ***Changing Container Graphic Shapes***

By default the added container will be square. However, the shape can be changed to an ellipse, or rounded rectangle. To change the shape, right-click on the graphic and choose the desired shape from the **Options** item. The shape can be changed at any time.

## ***Viewing and Editing Container Data***

Basic information such as the container attributes and contents can be viewed in a tooltip by moving the mouse above the map graphic. Attributes of the container itself can be edited by double-clicking the container graphic. This will trigger the **Container Inventory** dialog where container attributes can be edited. Other, more detailed information can be viewed via the **Events** and **Charts** menu items, after right-clicking to display the pop-up menu. Events such as **Measurements** and **Additions** can be viewed for individual containers. New measurements, additions, or other events can be applied to the container by clicking the **New Record** button above the table. The data can also be edited or deleted in the usual way by selecting the buttons above the table. Reports can be generated by clicking the report button above the table. It is possible to enter and edit nearly all winemaking data via the container map. Those who prefer a visual representation of the winery may prefer to enter all data via the map rather than via the data tables. Entering data via the container map is also useful as you can enter data for different batches without opening those batches. The container map allows the winemaker to work on more than one batch in a single screen.

## ***Resizing the Viewing Area***

The viewing area of the map can be resized by moving the program dividers to new locations. In addition, the toolbar can be removed to provide additional viewing area.

## ***Loading Existing Maps***

Maps that have been previously created can be loaded by selecting the **Map Name** from the left side of the screen under **Container Maps**.

## ***Deleting Maps***

A map can be permanently deleted by clicking the **Delete Map** button in the toolbar above the map or by clicking the **Delete Map** item from the context menu after right clicking on an empty portion of the map.

## ***Printing Maps***

A map can be printed by clicking the **Print Map** button in the toolbar above the map or by clicking the **Print Map** item from the context menu after right clicking on an empty portion of the map. This print feature provides very basic print capabilities. It may be preferable to save the map as an image file and print the map using the print features of a graphics program.

## ***Saving Maps as Images***

Maps can be saved as image files in **PNG** (Portable Network Graphic) format. Click the **Save Map as Image** button in the toolbar above the map or click the **Save Map as Image** item from the context menu after right clicking on an empty portion of the map. A save dialog will appear where you can specify the file name and location. The resulting image can then be manipulated in a graphics program or embedded in other documents such as a word-processing document.

## ***Zooming Maps***

A map can be zoomed by clicking the **Zoom In** or **Zoom Out** buttons in the toolbar above the map or by selecting the **Zoom In** or **Zoom Out** items from the context menu after right clicking on an empty portion of the map.

## ***Map Preferences***

Map preferences can be changed by clicking the **Map Preferences** button in the toolbar above the map or by selecting the **Map Preferences** item from the context menu after right clicking on an empty portion of the map. The **Map Preferences** are also accessible from the main Preferences item in the program toolbar and menu. The Map Preferences include such attributes as grid type and colors.

# Inventory Management

## General Inventory

**General Inventory** is intended to track non-wine inventory. The general inventory stores the item ID, name, quantity, and purchase information such as vendor and price. The General Inventory dialog is linked with the **Contacts** table for easy lookup of supplier details. A button is also provided for recording purchases of the inventory item. When the **Purchase** button is clicked, the **New Purchase** dialog will appear and will be automatically populated with the corresponding details of the inventory item. Amphora also automatically compares the quantity on hand to the re-order level. When the quantity on hand falls below the re-order level, the inventory item will be flagged.

The screenshot shows the 'New General Inventory' dialog box. It features a title bar with a close button. The main area is divided into four sections: 'Item', 'Quantity', 'Vendor', and 'Note'. The 'Item' section includes text boxes for 'Inventory ID', 'Item', 'Category', and 'Location'. The 'Quantity' section includes spinners for 'Quantity', 'Re-Order Level', and 'Re-Order Quantity', and a dropdown for 'Units'. The 'Vendor' section includes a dropdown for 'Vendor', and spinners for 'Unit Price (\$)' and 'Tax Rate (%)'. The 'Note' section is a large text area. At the bottom, there is a 'Purchase Item' button with a green shopping cart icon, and 'OK' and 'Cancel' buttons.

*The General Inventory dialog*

## Purchases

### Tracking Purchases

The **Purchases** module tracks purchases of inventory items. Select the **Item** from the drop-down box. The dialog will then be automatically populated with the data contained in the **General Inventory**. The fields can then be edited if necessary. Then click **Add Item** to add the item to the purchase list. This procedure is then repeated for each item that you wish to purchase from the selected vendor.

If you wish to generate a purchase order (in Adobe PDF format), ensure that the **Create P.O.** box is checked. After clicking **OK**, the software will generate a purchase record for each item in the **Added Items** list. If you have chosen to create a purchase order, the software will also prompt for a location to save the purchase order file. See the following section for additional details regarding purchase orders.

If **Increase Inventory** is checked, the program will automatically increase the inventory by the amount of the purchase.

**New Purchase**

General Note

**General**

Date: 08/04/08

Vendor: [Dropdown]

**Purchase Order**

Create P.O. (PDF):

P.O. Number: 0

**General Inventory**

Increase Inventory:

**Item**

Inventory ID: [Field]

Item: [Dropdown]

Quantity: 0

Units: [Dropdown]

**Cost**

Unit Price (\$): 0.00

Sub Total (\$): 0.00

Tax Rate (%): 0

Tax Amount (\$): 0.00

Total (\$): 0.00

+ Add Item to Purchase List

**Added Items**

[Empty List Box]

OK Cancel

Recording a purchase.

### *Creating Purchase Orders*

Amphora can easily generate purchase orders in Adobe PDF format. When recording a purchase, ensure that **Create P.O.** is checked. The program will prompt for a location to save the purchase order file. The file name will default to Purchase#####, where ##### is the purchase order number. This name can be changed if desired. The resulting file can then be viewed or printed from Adobe Reader or other PDF viewer.

When creating a purchase order the program obtains the data from several sources. The primary data such as item, quantity, and cost is obtained from the associated purchase record. The **Vendor** details such as address is obtained from the **Contacts** table. The **Ship To** information is obtained from the **Winery Information** in the **Data** menu.

## Bottle Inventory

Amphora can track bottle inventory. You can manually add or edit inventory by adding or editing records after choosing **Bottled Inventory** from the **Inventory Management** view. In addition, inventory records can be automatically created via the **Bottling** dialog.

The image shows a 'New Inventory Entry' dialog box. It has a title bar with a close button. The fields are: Quantity (Cases) set to 148, Batch ID set to Chardonnay2007, Wine Name set to Estate Chardonnay, and Location set to Warehouse\_A. There is a Note field which is currently empty. At the bottom are OK and Cancel buttons.

*Creating a bottle inventory entry.*

## Sales

**New Sale**

**General**

Date: 9/25/07

Buyer: The Wine Store

**Sales Invoice**

Create Invoice (PDF)

Invoice Number: 457

**Bottle Inventory**

Reduce Inventory

Inventory Location: Warehouse\_A

**Item**

Batch ID: Chardonnay2007

Wine Name: Estate Chardonnay

Quantity (Cases): 10

**Cost**

Unit Price (\$): 249

Sub Total (\$): 2,490

Tax Rate (%): 0

Tax Amount (\$): 0

Total (\$): 2,490

**Added Items**

10 Cases @ \$249.00	Estate Chardonnay	\$2,490.00
---------------------	-------------------	------------

Buttons: OK, Cancel

*Selling bottles from your inventory*

### Tracking Sales

The **Bottle Sales** module tracks sales from bottle inventory. Enter the details of the sale. Then click **Add Item** to add the item to the sale list. This procedure is then repeated for each item that you wish to sell to the selected buyer.

If you wish to generate a sales invoice (in Adobe PDF format), ensure that the **Create Invoice** box is checked. After clicking **OK**, the software will generate a sales record for each item in the **Added Items** list. If you have chosen to create a sales invoice, the software will also prompt for a location to save the sales invoice file. See the following section for additional details regarding sales invoices.

If **Reduce Inventory** is checked, the program will automatically decrease the bottle inventory by the amount of the sale.

### *Creating Sales Invoices*

Amphora can easily generate sales invoices in Adobe PDF format. When recording a sale, ensure that **Create Invoice** is checked. The program will prompt for a location to save the sales invoice file. The file name will default to Sale#####, where ##### is the sales invoice number. This name can be changed if desired. The resulting file can then be viewed or printed from Adobe Reader or other PDF viewer.

When creating a sales invoice the program obtains the data from several sources. The primary data such as item, quantity, and cost is obtained from the associated sales record. The **Buyer** details such as address is obtained from the **Contacts** table. The **Vendor** information is obtained from the **Winery Information** in the **Data** menu.

## Bottle Transfers

The **Bottle Transfer** feature is an automated method to record transfers of your [Bottle Inventory](#) from one location to another. Inventory location changes could be recorded by manually editing the associated inventory entries. However, the Bottle Transfer feature automatically creates a record of the transfer and updates the associated inventory records.

**New Bottle Transfer**

Date: 9/25/07

Batch ID: Chardonnay2007

Wine Name: Estate Chardonnay

Quantity (Cases): 5

**Transfer Details**

From Location: Warehouse\_A

To Location: Warehouse\_B

Transfer Type: Removed for Export

**Note**

OK Cancel

*Recording a bottle transfer.*

# Task Management

# Vineyard Management

## Vineyards and Blocks

Amphora includes vineyard management features that allow tracking of vineyard activities, such as harvest and weather. The **Vineyard Management** view is also used to track fruit, juice, or bulk wine that has been received into the winery. All vineyard data is entered in the **Vineyard Management** view. Before tracking these activities it is necessary to set up the vineyards and associated vineyard blocks that you wish to track. The first step is to create a vineyard. You can create entries for your own vineyards, as well as for vineyards from which you receive fruit.

### *Vineyards*

#### *Creating New Vineyards*

Click the **Vineyards** item from the **Vineyard Management** view and click the **New Record** button to launch the **Vineyard** dialog.. The **Vineyard** name is the only required field. Other general information, such as the region, appellation, and grower can optionally be entered. Each vineyard must have a unique name. More detailed vineyard information is entered in the **Vineyard Block** dialog.

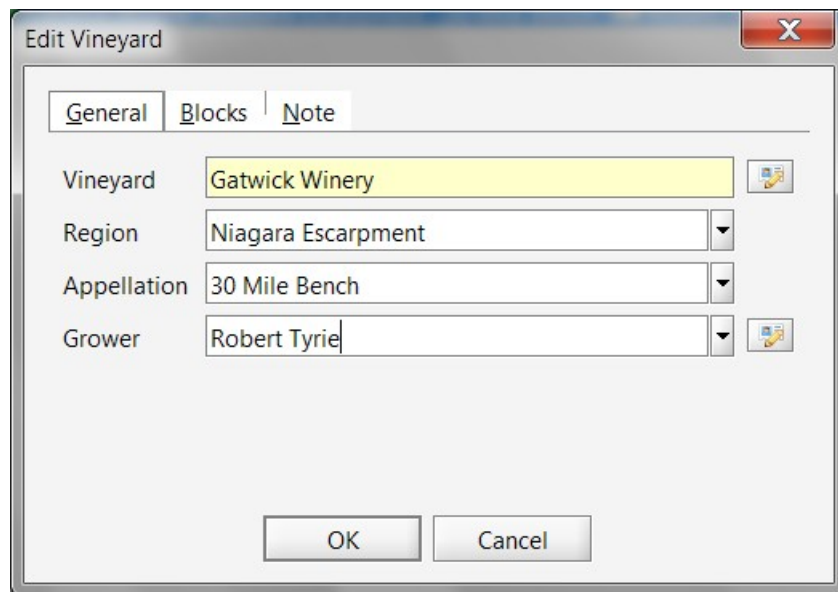
The **Contact Information** button beside the vineyard name and grower can be used to enter the address and other contact information.

The **Blocks** tab shows a list of all blocks that belong to the vineyard. This list will be empty if you are creating a new vineyard.

#### *Editing and Deleting Vineyards*

Vineyards can be edited or deleted by clicking the **Edit Record** or the **Delete Record** button. When a vineyard is deleted, all data associated with that vineyard such as blocks and events will also be deleted. Because of this, deleting a vineyard would not be a normal operation. The software will provide a warning before a vineyard is deleted.





*Creating or editing a vineyard.*

## **Vineyard Blocks**

All vineyard activities are associated with vineyard blocks. Each vineyard must contain at least one block. If your vineyard is not divided into blocks then you can create a single block that represents the entire vineyard. Before entering blocks, ensure that the vineyard information has been set up (see above).

### **Creating and Editing Vineyard Blocks**

Click the **Vineyard Blocks** item from **Vineyard Management** view and click the **New Record** button to launch the **Vineyard Block** dialog. The **Block** name is the only required field. Other information about the block such as area and spacing can also be entered. Repeat this procedure and create a record for each block in your vineyard(s).

The **Vineyard** drop-down box is automatically populated with all previously entered vineyards. Additional vineyard information is displayed as a tooltip when the mouse is hovered over each vineyard.

The **Parent Block** is an optional field that can be used if your vineyard has a "block in block" structure. For example, a vineyard might be divided into several major blocks. These major blocks might then be sub-divided into smaller minor blocks. If your vineyard has this structure, the name of the enclosing block can be specified in this field.

The **Vine Density** is automatically calculated based on the **Area** and **Vine Number**. However, this number can be manually edited if required.

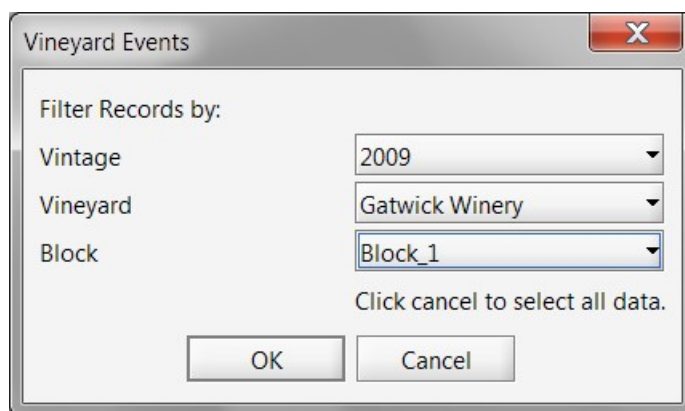
Vineyard blocks can be edited or deleted in the same manner as other table data. Once your vineyards and blocks have been set up, data such as weather, samples, harvest, and other events can be recorded.

General		Detail	
Block	Block_1	Year Planted	2001
Vineyard	Gatwick Winery	Area (Hectares)	4.5
Parent Block		Vine Number	9,500
Variety	Cabernet Franc	Vine Density (Vines/Hectare)	2,111
Clone	301	Vine Spacing	6 x 10
Rootstock	342	Soil Type	Clay
		Organic	<input type="checkbox"/>

*Creating or editing a vineyard block.*

## Vineyard Events

Vineyard events are divided into several categories, including samples, spray, and stages. The generic **Vineyard Events** table is used as a generic entry dialog where any event can be entered. When clicking on these items, a data filter is provided so that a subset of the data can be viewed. For example, the filter below will only display vineyard events from the 2009 vintage, in Block\_1 at Gatwick Winery. Such filters are applied to other events as well. If you click Cancel, then the filter is ignored, and all data will be displayed.



*Filtering vineyard events*

## Vineyard Events

The vineyard events dialog allows tracking of any vineyard activities. This module was designed to be generic so that each user can customize the events and event types. The program will then remember the events and add them to the drop-down box.

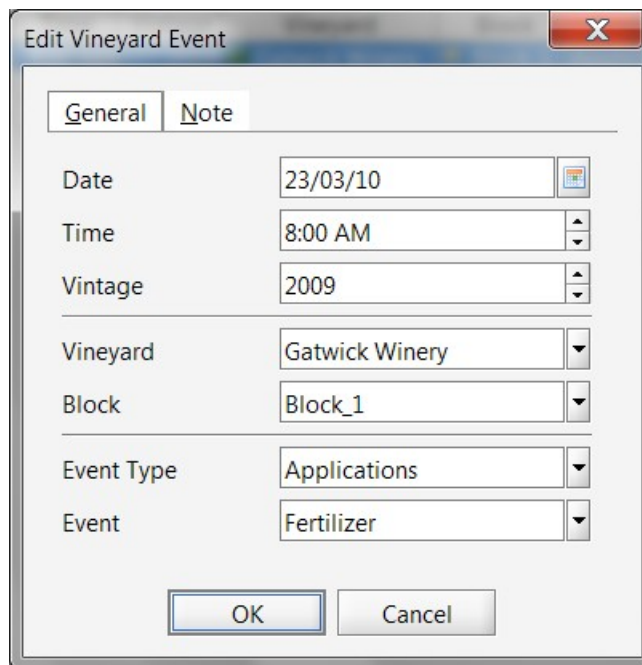
### *Adding New Vineyard Events*

Click the **Vineyard Events** item from the **Vineyard Management** view and click the **New Record** button to launch the Vineyard Event dialog. The vineyard and block can be specified along with the event. The vineyard and block drop-down fields are automatically populated with any vineyards and blocks that have been entered.

For example, you may decide to specify an **Event Type** called Applications and the **Event** might be specified as pesticide. Another event in the Applications category might be fertilizer. You can specify any event types and events that you wish. These items will then be available from the drop-down boxes the next time an event is entered. This way each winemaker can create a personalized list of events.

Additional information about the vineyard and block are available as tooltips when the mouse is

hovered above each item in the drop-down box.



The screenshot shows a dialog box titled "Edit Vineyard Event". It has two tabs: "General" and "Note". The "General" tab is selected. The fields are as follows:

Field	Value
Date	23/03/10
Time	8:00 AM
Vintage	2009
Vineyard	Gatwick Winery
Block	Block_1
Event Type	Applications
Event	Fertilizer

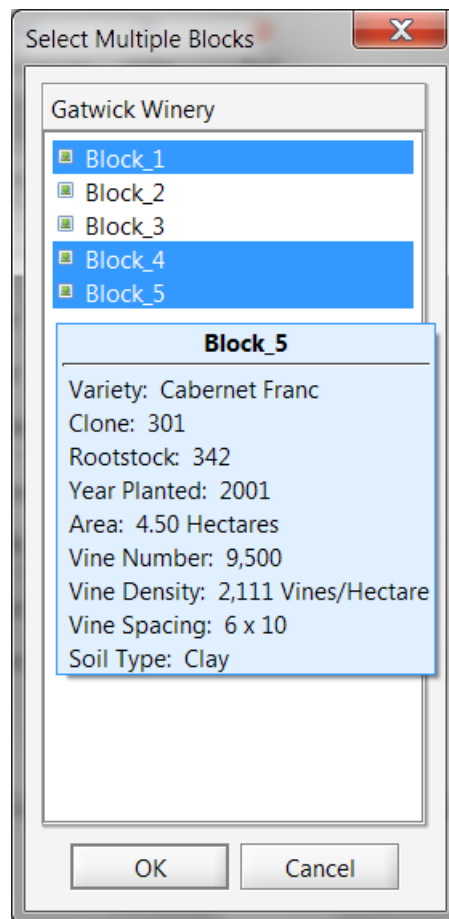
At the bottom of the dialog are "OK" and "Cancel" buttons.

*Creating or editing a vineyard event.*

### ***Adding Events to Multiple Blocks***

You may wish to apply an event to more than one block. For example, you may wish to apply pesticide to every block in the vineyard. This can be done with a single entry. First, select the desired vineyard from the drop-down box. Then click the button beside the **Block** field.

A dialog will be shown that contains all of the blocks that belong to the selected vineyard. To select more than one block, hold the **Ctrl** key down while clicking each block. A continuous range of blocks can be selected by clicking the first block, then holding down **Shift** while clicking the last block in the range. All blocks between the first and last will then be selected. Amphora will then generate an event entry for each selected block. This multiple block entry dialog is included in several dialogs in the Vineyard Management view.



Selecting Multiple Blocks

## Vineyard Samples

The vineyard samples feature allows tracking of sugar, TA, and pH in the vineyard. This data can be charted and used as an aid in deciding harvest date.

### Adding New Vineyard Samples

Click the **Vineyard Samples** item from **Vineyard Management View** and click the **New Record** button to launch the **Vineyard Sample** dialog. Information such as vintage, vineyard, and block are entered in order to identify the time and location of the sample. A **Sample ID** can be entered in order to uniquely identify the particular sample. The ID can be anything you like. Then the actual sample measurements are entered.

### Viewing Sample Data

All of the samples can be viewed in the table. When you first click on **Vineyard Samples**, a dialog will be displayed allowing you to choose **Vintage**, **Vineyard**, and **Block**. This allows you to view only the samples from a particular vineyard or block, or from a particular vintage. If you click **Cancel**, then the vintage, vineyard, and block selections will be ignored and all samples will be displayed.

If vineyard and/or block is selected, a chart will be automatically created, depicting the sugar, TA, and pH of the samples from the selected vintage/vineyard/block.

The screenshot shows a dialog box titled "Edit Vineyard Sample" with a close button (X) in the top right corner. The dialog is divided into two tabs: "General" and "Note". The "General" tab is active and contains the following fields:

- Date: 23/03/10
- Vintage: 2010
- Sample Source**
  - Vineyard: Gatwick Winery
  - Block: Block\_1
  - Variety: Cabernet Franc
- Sample Data**
  - Sample ID: S\_20090831\_15
  - Sugar (B°): 21
  - TA (g/L): 7
  - pH: 3.2
- Maturity Index**
  - Brix / TA: 30.00
  - Brix \* pH<sup>2</sup>: 215.04

At the bottom of the dialog are two buttons: "OK" and "Cancel".

*Creating or editing a vineyard sample.*

### Vineyard Stages

The vineyard stages feature allows tracking of the major stages of the vineyard, including fruit set, veraison, and harvest.

### *Adding New Vineyard Stages*

Click the **Vineyard Stages** item from **Vineyard Management View** and click the **New Record** button to launch the **Vineyard Stage** dialog. This is a very simple dialog. The time (date, vintage) and place (vineyard, block) are entered. You then specify the vineyard stage. The stage can be selected from the list or the stage can be manually typed in. The **Select Multiple Blocks** button can be used to enter the stage for multiple blocks.



*Creating or editing a vineyard stage.*

## **Spray Diary**

### ***Chemicals***

## **Vineyard Weather**

## Fruit Received

The **Fruit Received** feature allows tracking of harvested or received fruit, along with associated data such as sugar, TA, pH, and cost. This module can be used to track fruit harvested from your own vineyard or fruit or juice received from others. These fruit units can later be linked to individual wine batches (via the Crush or Fruit Sources dialog). This feature makes it possible to trace a finished wine back to the original fruit from which it was made. A finished wine can not only be traced back to the attributes of the fruit received, but can also be traced back to the physical attributes of the vineyard block from which the fruit came, such as weather, soil, spray applications and any other data that has been entered for the originating block(s).

### *Adding New Fruit Units*

Click the **Fruit Received** item from the **Vineyard Management View** and click the **New Record** button to launch the Fruit Received dialog. The details of the fruit that was received into the winery can then be entered. The **ID** is the only required field and it must be unique. The **ID** can be anything you like, but it might be useful to identify the vintage and vineyard within the **ID** so that it can easily be identified. Other details can also be recorded.

The Vineyard and Block drop-downs will display a tooltip to provide additional information when the mouse is hovered above each item.

The drop-down fields are also dynamic. For example, if you select a grower, the vineyard drop-down will be re-populated with vineyards that belong to that grower. Once a vineyard has been selected, the block drop-down will be automatically populated with blocks that belong to the selected vineyard. And when a block has been selected, the variety field will be set to the associated variety.

The total cost field is automatically calculated based on the unit cost and quantity when the field receives the focus. This amount can be edited if necessary.

The Contact Information button can be used to enter or view contact information for the vineyard.

### *Viewing Fruit Received Data*

All of the fruit units that have been entered can be viewed in the main table. When you first click on Fruit Received, a dialog will be displayed allowing you to choose Vintage, Vineyard, and Block. This allows you to view only the fruit from a particular vineyard or block, or from a particular vintage. If you click CANCEL, then the vintage, vineyard, and block selections will be ignored and all fruit units will be displayed.

### *Linking Fruit Units to Wine Batches*

Once the fruit received into the winery has been entered, these fruit units can then be added to a wine batch. This way you will always know the origin from which each batch is composed. If you are making wine from fresh grapes, the fruit units can be added via the Crush Dialog. If grapes are not being crushed, such as when making wine from juice, the fruit units can be entered in the Fruit

Sources table in the Batch Data view.

Linking fruit received to wine batches opens up many information possibilities. For example, any batch of wine can be linked not only to the fruit source, but also to the physical attributes of the vineyard such as weather or spray applications.

## Vineyard Mapping

The software includes a vineyard mapping feature that provides a visual representation of the vineyard. Data such as events and samples can then be entered via the map. The vineyard mapping feature works exactly the same as the **Container Mapping** feature except that vineyard blocks are added to the map rather than containers. See [Container Mapping](#) for details.

# Winery Reports

## Introduction

Winery Reports are non-editable data views that apply to the entire winemaking operation, rather than to a specific batch. This includes such items as Inventory and Production. Winery Reports are accessed by selecting Winery Report View. Charts are automatically created and displayed in the lower half of the window. If necessary, each half of the screen can be resized with the mouse.

The embedded charts can be customized, saved, or printed just like the other charts by using the toolbar above the chart, or by right-clicking the chart and selecting the appropriate item from the context menu. See the Charts entry for details. Charts can also be generated in the normal way by clicking the chart item in the table toolbar if an independent chart window is desired.

Winery reports are very powerful as they can extract data from different batches and create meaningful information that is difficult to obtain from paper-based records. Winery reports take advantage of the relational database management system that lies at the core of Amphora.

### **Active Processes**

The **Active Processes** tables show all ongoing processes for the winery. There is a table for each available process. The table lists each batch, container, start date, quantity, and the process length in days.

### **Inventory (Bulk Wine)**

The **Bulk Wine Inventory** tables show the quantity of wine currently in bulk containers. There are various tables that show the bulk wine according to various attributes, such as batch, variety, process, and others.

### **Inventory (Bottled Wine)**

The **Bottled Wine Inventory** is similar to the bulk wine inventory except that it shows wine in bottles rather than bulk containers.

### **Production (Bottled Wine)**

The **Production** tables show the winery production, as measured by bottles produced. Like the inventory tables, it is broken down by batch, variety, and other attributes.

### **Costs**

The **Cost** tables show the total costs associated with the winery operation. These tables provide a date selector so that costs can be viewed in total, by vintage, or by a user-defined date range.

# Reports

## Generating Reports

Most data tables have an associated report that can be saved or printed. Reports are previewed by clicking the **Report Preview** button from the table toolbar or by selecting the **Report Preview** item from the context menu after right-clicking in the table.

It is also possible to bypass the internal Report Preview and preview the report directly in Adobe Reader by choosing **PDF Report Preview** from the toolbar or context menu. See [PDF Reports](#) regarding this feature.

The type of report generated is dependent on the type of data currently displayed in the main table. For example, if fermentation data is currently displayed in the table, then clicking the report button will generate a fermentation report. The report button will be disabled if there is no report available for the data currently displayed in the table.

## Saving and Printing Reports

### *Saving Reports*

Reports can be saved in Adobe PDF format. Saving reports as PDF documents is useful as it results in a high quality portable document. The document can be viewed with the freely available [Adobe Reader](#).

To save a report, select the **Save to PDF Format** button in the report preview toolbar. After choosing a format, a dialog will appear where more detailed specifications can be entered. The only required entry in this dialog is the file name. Alternately, the report can be previewed directly in Adobe Reader and saved using the save function in Adobe Reader.

### *Printing Reports*

Reports can be printed by clicking the **Print Report** button in the report preview toolbar. If Adobe Reader is being used to preview the report, then the printing functionality of Adobe Reader can be used. Alternately, a report can be sent directly to the printer (bypassing the preview) by clicking the **Print Report** button on the toolbar or in the context menu in the data table.

## PDF Reports

Amphora supports the creation of PDF (Portable Document Format) reports. This format is very useful as reports can be saved to PDF format to create a permanent record of your data. This data can be viewed even if Amphora is not installed on your system. Such reports are easily exchanged or emailed to others as nearly everyone will have [Adobe Reader](#) on their system.

### *PDF Report Preview*

Reports can be exported to PDF via the Report Preview screen. It is also possible to bypass the internal report preview screen and preview a report directly in Adobe Reader. Right click on the table and click **PDF Report Preview** in the context menu or toolbar. This will launch Adobe Reader and automatically load the report. This feature requires that [Adobe Reader](#) is installed on your system.

### *Creating a PDF Batch Log*

This powerful feature will export all of your batch data to a single PDF file that can be viewed with Adobe Reader. Amphora will even create bookmarks in the PDF file so that your data can be easily found. For example, Amphora will create bookmarks for additions, measurements, and any other available categories. If you have specified a bottle label for your batch, the label image will be added to the title page of the PDF log. To create a PDF wine log, click **PDF Batch Log** from the **Batch** menu. This will create a PDF document for the currently opened batch. Alternately, you can highlight any batch in the [All Batches](#) table and select **PDF Batch Log** from the context menu. You will then be prompted for a location to save the PDF file. After clicking the **Save** button, the PDF file will be generated and saved in the selected location. The file can then be viewed with Adobe Reader or other PDF viewer. This is a good way to create a permanent record of your batch.

### *Transferring Data to Spreadsheets*

Data in the main table can be printed using the reports feature. However, if you wish to manipulate or customize the data, the data can be exported to a spreadsheet.

Data in the main table can be easily transferred to spreadsheets. For example, if you wish to transfer the entire table to Excel, click the **Excel Report** item from the context menu. If you wish to transfer only part of the table, use the mouse to select the data to transfer. Then select **Copy Selected Rows** from the context menu. Open a spreadsheet and click paste. The data will be pasted into the spreadsheet. In addition, the table headers will be transferred as well.

If you use a spreadsheet other than Excel (such as [OpenOffice](#)), you should use the **Select and Copy** method described above. The data is formatted in a "tab separated format" that most spreadsheets should understand.

It is also possible to create a **Batch Log** in Excel. Select Excel Batch Log from the Batch menu. This will transfer all of your batch data to an Excel file. Each data table will occupy a separate sheet in the Excel file.

Once the data has been transferred to a spreadsheet, you can use any of the formatting and reporting tools included with the spreadsheet software. This makes it possible to create highly customized reports.

# Charts

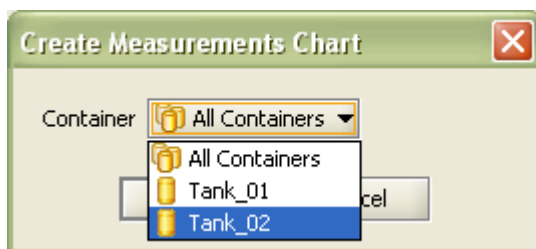
## Generating Charts

Charts are generated by clicking the **Chart** button in the table toolbar or by selecting the **Chart** item from the context menu after right-clicking in the table. In addition, some charts such as those in the [Measurement Views](#) and [Winery Reports](#) are generated automatically and are shown in the lower right portion of the program window. If a chart does not exist for a particular table, then the button will be disabled.

### Selecting the Chart Data in Measurement Charts

If a batch is composed of multiple containers, measurements may be taken for each container. The program can generate a chart for a particular container or it can generate a chart representing a sequence of measurements from several containers.

If more than one container is referenced in a measurement table, a dialog will appear so that you can select the container whose data will be used to generate the chart. The dialog also provides an option so that data can be charted for all referenced containers. This option is useful if the each container represents a sequence in time. For example, the wine may have been in *Tank\_01* and then racked to *Tank\_02*. It would be useful to generate a chart that depicts the entire measurement history for both containers. Of course it is also possible to generate a chart for the measurement history of a single container.



*Selecting the container to create a measurement chart.*

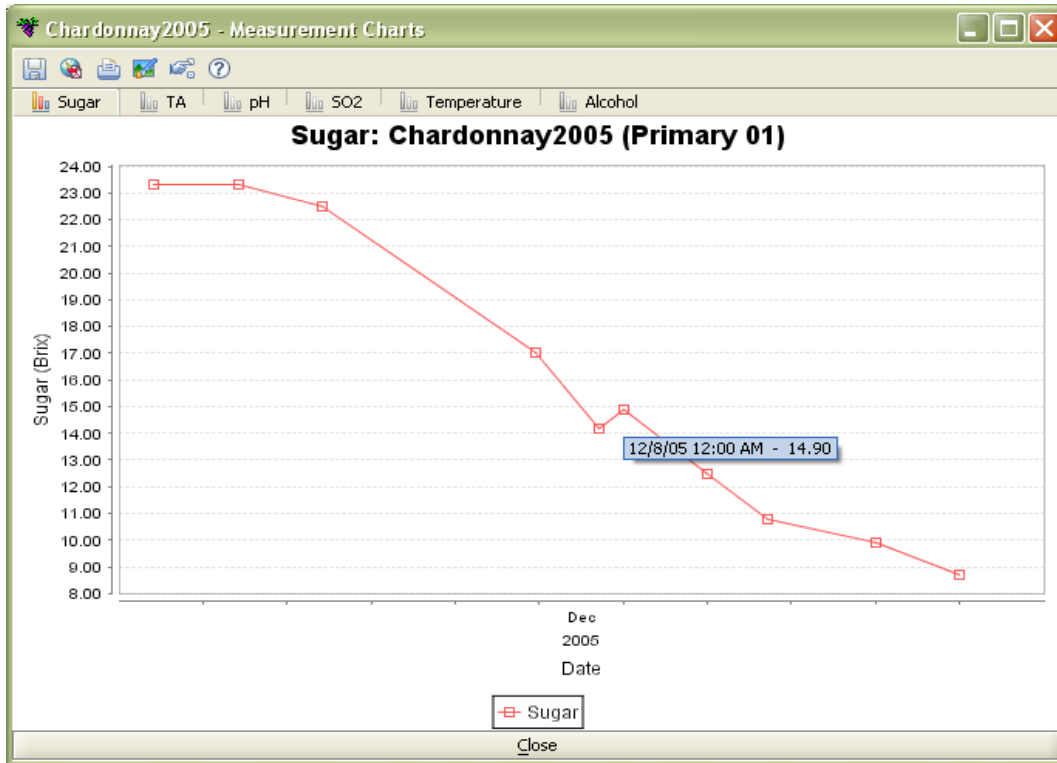
### Chart Types

The type of chart generated is dependent on the type of data currently displayed in the main table. For example, if fermentation data is currently displayed in the table, then clicking the chart button will generate a fermentation chart. The chart button will be disabled if there is no chart available for the data currently displayed in the table.

The style of chart generated is dependent on the data in the table. Amphora can generate line, bar, and pie charts. Bar and pie charts can be viewed in 2D or 3D. This preference can be selected in the [Preferences](#) dialog.

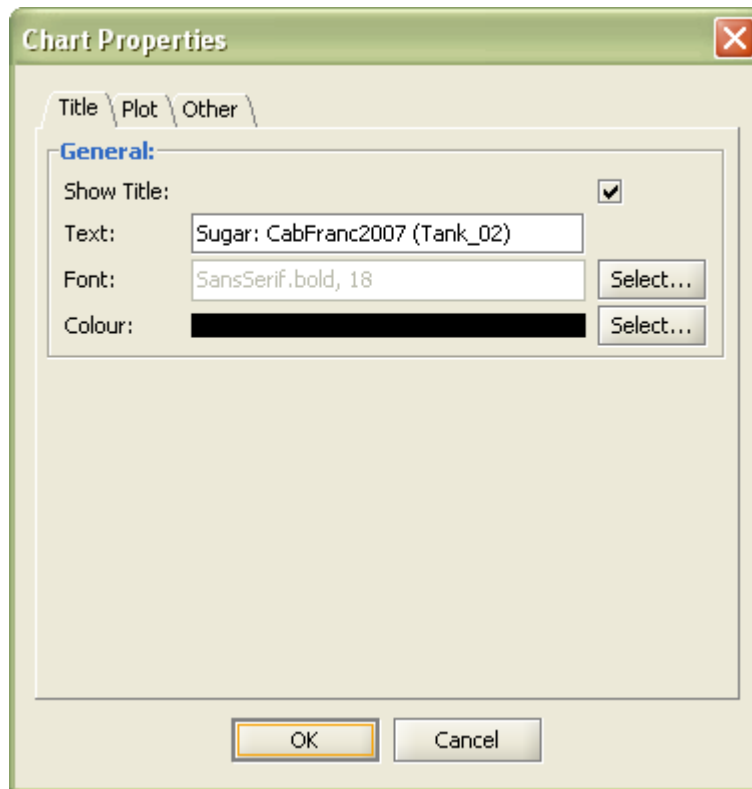
## Chart Tooltips

Hovering the mouse over a data point on the chart will trigger a tooltip that shows the data for that point. Bar charts and pie charts also show tooltips when the mouse is hovered over a particular section.



## Customizing Charts

Charts can be completely customized before saving or printing by right clicking on the chart and selecting **Properties...** or by clicking the **Chart Properties** button from the chart toolbar.



*Chart Properties*

A wide range of customizations is available. Customizations include label text, fonts, colors, tick marks and others. The exact customizations available depend on the type of chart displayed. These customizations are on a per-chart basis and are not saved.

General chart preferences can be entered in the [Program Preferences](#). These general preferences are saved and are automatically applied to every chart that is generated.

## Zooming Charts

It is possible to zoom to a specific part of the chart by selecting the desired area with the mouse. There are also zoom menu items in the context menu after right-clicking on the chart.

## ***Chart Cross-hairs***

### ***Slicing Pie Charts***

Pie charts can be "sliced" in order to emphasize a particular section. To do this, simply double-click on the desired pie section. The section will be removed from the main chart. Double-click again in order to put the pie back together. Multiple sections can be sliced by double clicking on each section. This feature only works with 2D pie charts.

### ***Rotating Pie Charts***

Pie charts can be rotated before saving or printing if you prefer a different orientation. To rotate a pie chart, drag the mouse across the chart screen. Dragging the mouse to the right will rotate the chart clockwise. Dragging the mouse to the left will rotate the chart counter-clockwise.

## **Saving and Printing Charts**

### ***Saving Charts as Images***

Charts can be saved as an image in PNG (Portable Network Graphic) format. To save your chart, right click on the chart and choose **Save as...** or click the **Save Chart as Image** button from the chart toolbar.

Select the location to save the file, name the file, and choose PNG as the file type. Then click **Save**. The resulting image files can be viewed in any graphics program or can be embedded into other documents.

### ***Saving Charts as PDF Documents***

Charts can also be saved as a PDF document, viewable with Adobe Reader or other PDF viewer. To save the chart as PDF, click the **Save Chart as PDF** button from the chart toolbar. Enter a file name and click **Save**.

### ***Printing Charts***

Charts can be printed by right clicking on the chart and selecting **Print...** or by clicking the **Print Chart** button from the toolbar.

# Database Operations

## Introduction

At the core of Amphora lies a complete relational database. This is the main reason Amphora is superior to a paper based or spreadsheet record system. The various data tables can be “related” to each other. For example, this allows the vineyard management data to be connected to the batch data.

## Database Modes

Amphora supports 2 types of database connections:

- Embedded
- Server

It is not necessary to choose a single connection type. Both embedded and server databases can be set up at the same time. You may access a server database during one session and access an embedded database during another session. You can set up any number of server or embedded databases.

### ***Embedded Databases***

An embedded database is a local database that resides with the application on the same computer. The main advantage of an embedded database is high speed data access since no network communication is involved. The main disadvantage of an embedded database is that it only allows a single connection. An embedded database should be used where Amphora is installed on a single computer. Home users and small wineries where data is entered on a single computer should use an embedded database. By default, Amphora uses an embedded database. This default database is created automatically and requires no additional setup by the user.

### ***Server Databases***

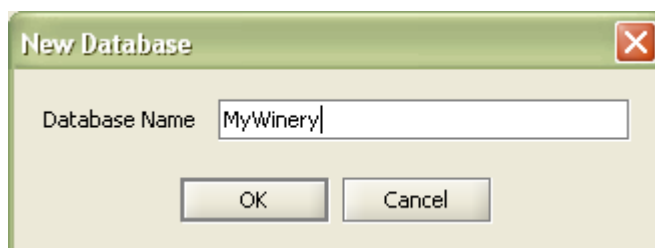
A database server is installed on a single computer in a network. Amphora Wine Log can then be installed on multiple computers within the network. All Amphora Wine Log installations can then access the same central database. It is possible for a single computer to run both the database server and Amphora Wine Log. Database access is slower with a server database since the data needs to travel across the network. The main advantage of a server database is that it allows multiple users to connect to the same database at the same time. A server database should be used whenever multiple users need to access the same data from separate computers. In order to use server databases, [Amphora Database Server](#) must be installed.

## Using Multiple Databases

Amphora will automatically create a default database. Most users will find that the default database is adequate and will not need to create additional databases. However, Amphora provides the ability to create any number of additional databases. For example, if you have more than one winery, you could create a separate database for each winery. Consultants may also create a separate database for each client. You can also create any combination of server and embedded databases. For example, you may connect to a database server to access the main winery data and also use embedded databases for private or experimental data.

### Creating a New Embedded Database

To create a new embedded database select **Data - New Embedded Database** from the program menu. A dialog will appear where you specify the name for the database. Each database must have a unique name. The name can be anything you like, such as the name of your winery. After clicking **OK**, Amphora will create the new database. Amphora will automatically copy the user preferences from the current database to the new database. The program will then need to be restarted in order to load the new database.



*Creating a new embedded database.*

### Creating a New Server Database

If you are running [Amphora Database Server](#), you may create a server database. Once the server has been set up and is running, Amphora Wine Log will be able to connect to the server. However, the server configuration must be set up first. In Amphora Wine Log, go to **Data - New Database Server** in the menu.

#### Server Name

First, enter a **Server Name**. This can be anything you like. Amphora Wine Log can connect to multiple servers and databases and so a unique name is required in order to differentiate them.

#### Server Type

Next select the **Server Type**. Currently **Amphora Database Server** is the only option. However, in the future, other database servers such as MySQL may be supported.

### Server Location

Next enter the **Server Location**. This tells Amphora Wine Log where to look for the server. This is the **IP Address** or **Name** of the computer where the database server has been installed. If Amphora Wine Log and the database server are running on the same computer, the IP address will be **127.0.0.1** or **localhost**. If Amphora Wine Log and the database server are installed on different computers, the IP address of the server computer must be found.

#### *Finding the IP Address on Windows Computers*

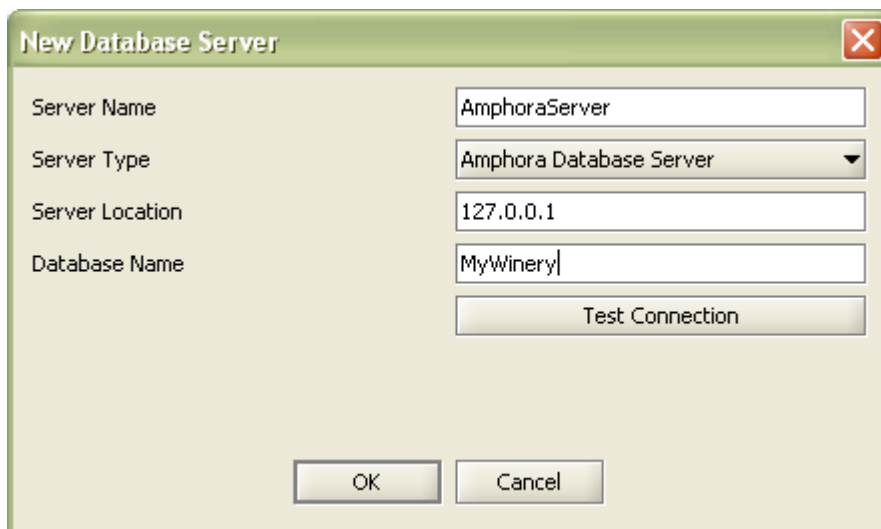
Select **Run...** from the **Start** menu. Type **cmd** and click **OK** to open a console. Then type **ipconfig** in the console window. After pressing enter, you will see your IP address. Enter this number in the **Server Location** field. Alternately, you can enter the name of your computer rather than the IP address. To find your computer name, go to the **System** panel in the control panel. Select the **Computer Name** tab. Your computer name is found beside **Full Computer Name**.

#### *Finding the IP Address on Mac OS X*

On Mac OS X, go to *System Preferences – Network – Built in Ethernet*.

### Database Name

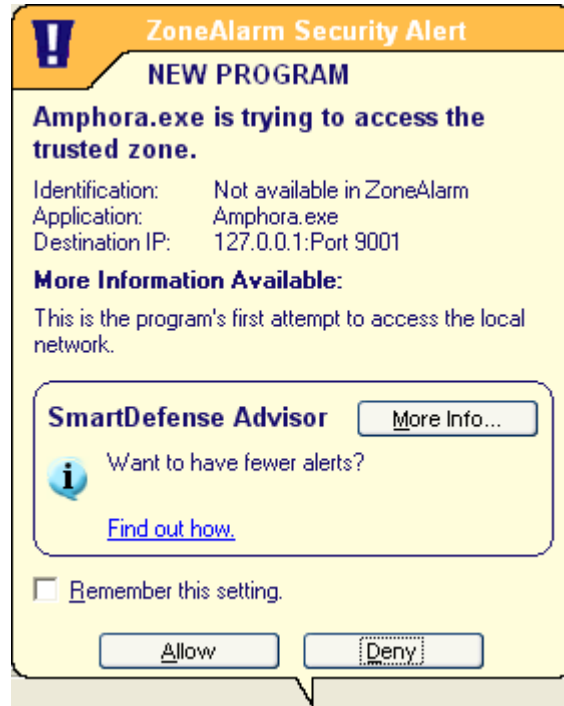
Finally enter the **Database Name** of the database that you wish to connect to. A database name is required because the server may be running several databases at the same time. This will be the same database name that you entered in **Amphora Database Server**. It is critical that the database name in **Amphora Wine Log** matches the database name that was specified in **Amphora Database Server**. If the 2 names do not match, Amphora Wine Log will not be able to locate the database.



### Testing the Server Connection

The server configuration can now be tested by clicking **Test Connection**. Ensure that the server is running before testing the connection. If any errors are received, review the above setup information and ensure that the proper firewall permissions have been granted.

The first time you attempt to connect you will likely receive a warning similar to the one below if your computer is protected by a firewall. The image below is from Zone Alarm firewall. If you are using a different firewall, the warning will look different.



This is not a security threat. Amphora must be able to access you network in order to locate your database server. You must select **Allow** so that Amphora Wine Log can communicate with the server. You should also select **Remember this setting** so that this dialog does not appear every time you connect to the server.

After the server attributes have been entered and tested, click **OK** to save the server information. When Amphora Wine Log is restarted, the server name will be found under **Data - Database Servers** in the menu. Click the desired menu item in order to connect to the server.

## ***Switching Databases***

If you have more than one database, you can switch databases by selecting the desired database from the program menu. Go to **Data - Embedded Databases** or **Data - Database Servers** and select the database from the menu. The program will then need to be restarted in order to load the new database. The active database is displayed in the title bar of the application. If you have created more than one database, Amphora will display a dialog at startup that allows the desired database to be selected.

## Backing Up Databases

**NOTE:** The following describes the backup of embedded databases. Server databases are backed up from within the server program.

### ***Automatic Backup***

The program automatically backs up your data each time the application is closed. Thus it is always possible to restore the database to the state of the previous session. For example, if a batch is accidentally deleted, it can be restored by loading the database from the previous session. However, any changes in the current session will be lost. When the application is closed again, a new backup will be created.

Automatic backups can only be used to restore the database to the state of the previous session. To fully protect against possible data loss it is necessary to manually back up your data to external media such as a CD.

### ***Manual Backup***

The database can be manually backed up at any time. Select **Data - Database Backup - Backup Current Database...** in order to backup the current database. If you have created multiple databases you can back up all of your databases in one step by choosing **Backup All Databases...** A dialog will be shown where the location of the backup can be selected. If you have previously backed up your database, the program will remember the location and automatically initialize the file dialog to the correct directory. After choosing a backup location, click **Select** and the database(s) will be backed up to the selected location.

In order to protect against data loss it is advisable to back up your data on a regular basis and save it to an external media such as a CD. If the default database is backed up, the resulting backup file will be named *amphora\_data.zip*. If you are backing up a custom database, the resulting backup file will have the same name as the database and will have the *.zip* file extension (eg. *my\_winery.zip*).

### ***Backup Compression***

When the software performs a manual backup, the database will automatically be compressed to **ZIP** format. This greatly reduces the file size and makes it easier to store the backup on a floppy or CD. If the backup is restored, the software will automatically "unzip" the file before restoring the database. There is no need to use a third party compression utility.

## Restoring Databases

**NOTE:** The following describes the restoring of embedded databases. Server databases are restored from within the server program.

### ***Restoring from Automatic Backup***

The database can be restored to its previous state by choosing **Data - Database Restore - Restore from Automatic Backup**. This is useful if you accidentally delete records and want to return the database to its state at the beginning of the session.

### ***Restoring from Manual Backups***

The database can also be restored to any previous state if a manual backup is available. To restore the database using a manual backup, choose **Data - Database Restore - Restore from Manual Backup**. A dialog will be displayed where the backup file can be selected. The program will remember where the last backup was created and automatically initialize the file dialog to that directory. The default database file is named *amphora\_data.zip*. If you have backed up custom databases, the backup file will have the same name as the database and will have the *.zip* extension (eg. *my\_winery.zip*). The dialog will automatically filter the file list and display ZIP files only. After selecting the database file, the program will restore the selected database. Amphora will then need to be shut down and restarted in order to load the new database.

## Custom Database Queries

### *Creating and Executing Queries*

One of the most powerful features of Amphora is the ability to create customized database queries. Using queries, information can be extracted from the database in a near infinite number of ways. The extracted data can then be exported to spreadsheets where customized reports can be generated. This feature will mainly appeal to users who have some database knowledge. Most users will not have a need to use this feature, as the built-in reports are adequate for their purpose.

Queries are written using **Structured Query Language (SQL)**. Writing basic queries using SQL is very easy. However, if you are not familiar with SQL, the following sections and examples should get you started quickly. If you prefer to write queries using a graphical query builder, the Amphora database can be integrated with **OpenOffice Base**.

### *Executing Queries*

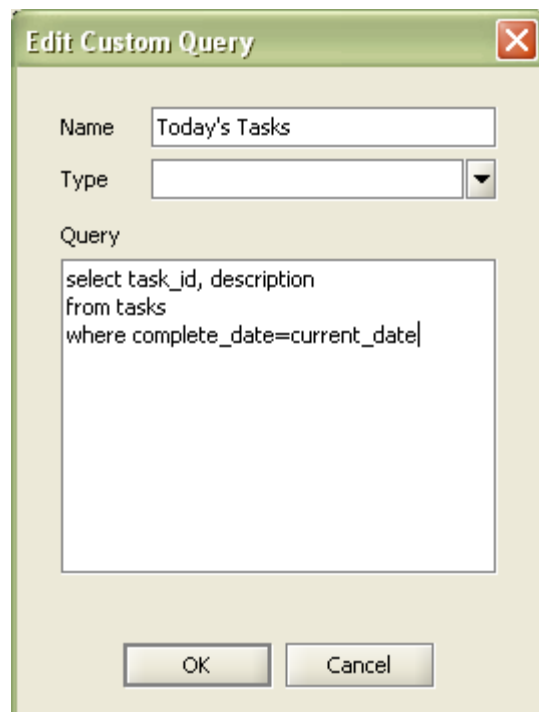
To execute a custom query go to **Data - Custom Queries**.

The main table will display all of the saved queries. If you have not yet created a custom query then the table will be empty. If you have previously saved queries then select the query that you wish to run and click **Execute Query** in the Data menu. The main table will then display the results of the query.

You can also execute a query that has not been saved. Simply type the query into the text area below the main table and click **Execute Query** in the data menu. Alternately, the **Execute Query** item can be selected from the context menu. The main table will then display the results of the query.

### *Creating, Editing, and Deleting Queries*

Creating, editing, and deleting queries is done in the same way as all other data. Simply click on the New Record, Edit Record, or Delete Record buttons above the table. In order to edit or delete a query it is necessary to highlight the query in the table.



*Creating a Custom Query*

## **Writing Queries**

### *Database Structure*

Before writing queries it is first necessary to understand how the program data is organized. The data is organized into logical groups called tables. The list on the left side of the program (Batch Information, Additions etc...) is actually a list of database tables relating to a particular batch. The **Data** menu contains a listing of tables that are not related to a particular batch (varieties, yeast etc...). When these items are clicked, the contents of the database table are displayed in the main application table. Writing a database query simply involves specifying the table(s) that contain the data and specifying the table column(s) that you want to retrieve. When writing queries, the Amphora database schema (included in this help file) will be needed as a reference.

### *Basic Query Syntax*

### *Query Examples*

## **Database Schema**

## **Database Functions**

# Tools

## Acid Calculator

## Calculator

## Hydrometer Corrector

## **Sugar Calculator**

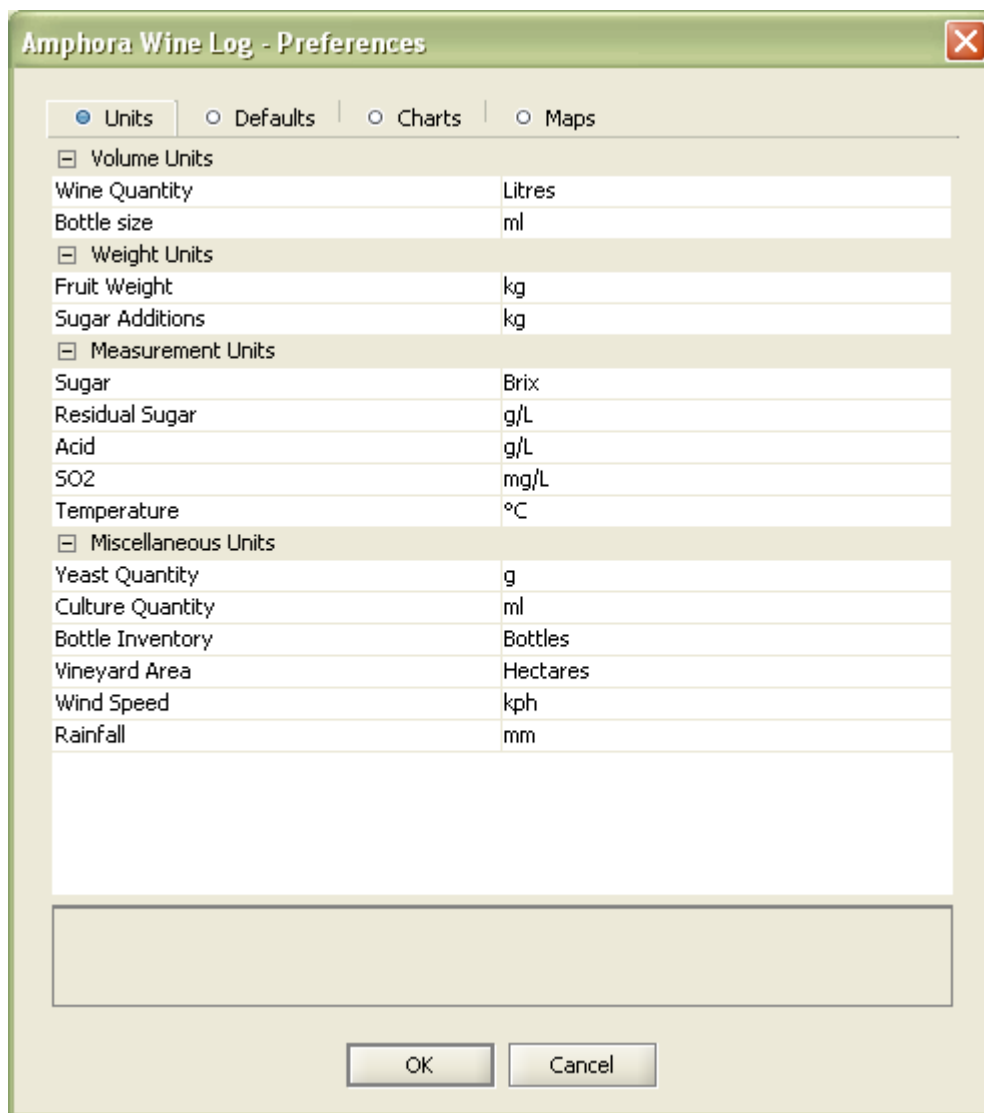
## **Sulfite Calculator**

## **Custom Tools**

# Program Preferences

## Default Settings

Default settings are set by clicking **Preferences** in the application menu or by clicking the **Preferences** button in the main toolbar. Default settings can then be selected for such items as temperature, batch size, charts, and maps, and others. After selecting the desired preferences, click **OK** and the settings will be saved and will be loaded automatically. Preferences would normally be set just once when you begin to use the software, however, you are free to change the settings at any time.



*The Preferences Dialog*

## Locale

As Amphora is used in many regions around the world, various settings can be adjusted using the locale. The locale defines a language and region. For example, the most commonly used locale is English (United States). However, a large number of additional locales are available. When a locale is selected, Amphora will automatically use the date, time, number formats, and currency associated with the selected locale.

### *Setting Locale*

The first time Amphora is launched, a message box will be displayed where the desired locale can be selected. However, the locale can be changed at any time in the **Preferences** dialog. Simply select the desired locale from the drop-down list and click OK. Amphora will then automatically use the default date, time, and number formats for the selected locale after the program is restarted.

## Date and Time

By default, Amphora will choose date and time formats appropriate for your locale. Amphora will use the SHORT date format and SHORT time format that are defined for your locale. These default settings will be appropriate for most users. However, Amphora provides the ability to change these formats to any possible format. The date and time formats can be changed at any time. For example, it is possible to use a particular format in order to generate a particular report. You can then switch back to your regular format.

### ***Setting Custom Formats***

Custom formats can be set in the **Preferences** dialog. Using the drop-down, most common formats can be selected. If the format that you wish to use is not defined in the list, it can be defined using the formatting codes below. Using custom formats, it is possible to use any date format you wish.

### ***Formatting Codes***

Most users will not need to create a custom format. However it is possible to define any format you wish. The following table shows all of the codes you can use to generate your customized date and time formats.