

Sage Intelligence

Reporting Trees



Reporting Trees.....	3
Introducing Reporting Trees.....	3
Reporting Unit Structures	4
Parent Child Relationships	6
Account Filters.....	6
Managing Reporting Trees.....	9
Creating a New Reporting Tree.....	10
Editing Reporting Trees.....	13

Reporting Trees

This lesson will provide you with an understanding of Reporting Trees and how it is used in Sage ERP Intelligence Report Designer.

In this lesson, you will learn:

- The benefits of using Reporting Trees
- How to utilize Reporting Trees

Introducing Reporting Trees

Although you can create financial reports without the aid of a reporting tree, the reporting tree allows you to model a very sophisticated reporting structure and view your organization in many different ways with the click of a button. Some companies may have very complex corporate hierarchies that require hundreds of tree units, as well as other hierarchies that require much fewer tree units.

Most organizations have a hierarchical structure in which departments (or other business units) report to one or more higher-level units. In a traditional organizational chart, the lower units on the chart typically report to increasingly higher units.

Sage Intelligence uses the term **reporting unit** for each box in an organizational chart. A reporting unit can be an individual department from the general ledger, or it can be a higher-level, summary unit that combines information from other reporting units. For a Report Designer layout that includes a reporting tree, one report is generated for each reporting unit and at the summary level. All of these reports use the text columns, row and column layouts that are specified in the Report Designer.

Example:

		Period 01			Period 02		
		Activity	PY Activity	Var AP	Activity	PY Activity	Var AP
ABC Distribution and Service Corp.							
INCOME STATEMENT							
for Period Ending Period 12, 2010							
East Branch							
27	REVENUE	245808	193638	52170	228602	211066	17536
28	REVENUES	245808	193638	52170	228602	211066	17536
29	400-01-01 Distributions sales - East	236918	186941	49977	220334	203766	16568
30	400-02-01 Service fees - East	7816	5888	1928	7269	6418	851
31	400-03-01 Freight charges - East	5020	3781	1238	4668	4122	547
32	425-00-01 Returns & allowances - East	(3945)	(2972)	(973)	(3669)	(3239)	(430)
34	COST OF GOODS SOLD	99301	76951	(22349)	95437	81465	(13972)
35	COST OF SALES	99301	76951	(22349)	95437	81465	(13972)
36	450-01-01 Purchases - East	64727	48758	(15970)	60196	53146	(7050)
37	450-02-01 Freight - East	2435	1796	(639)	2459	1922	(538)
38	450-03-01 Warehouseman payroll - East	30281	24872	(5409)	30887	24872	(6015)
39	450-04-01 Serviceman payroll - East	1858	1526	(332)	1895	1526	(369)
41	GROSS PROFIT	146508	116687	29821	133165	129601	3565
42	GP%	59.60%	60.26%		58.25%	61.40%	
44	COST AND EXPENSES	69572	55518	(14054)	70732	56621	(14112)
45	OPERATING EXPENSES	69572	55518	(14054)	70732	56621	(14112)
46	600-01-01 Driver payroll - East	26325	21623	(4702)	26852	21623	(5229)
47	605-01-01 Clericals salaries - East	5501	4519	(983)	5611	4519	(1093)
48	607-01-01 Sick pay - East						
49	608-01-01 Holiday pay - East						
50	609-01-01 Vacation pay - East						
51	610-01-01 Payroll taxes - East	15481	12715	(2765)	15790	12715	(3075)
52	620-01-01 Depreciation expense - East	913	913		913	913	
53	625-01-01 Equipment maintenance - East	1388	1024	(364)	1402	1096	(307)
54	630-01-01 Insurance - East	2415	1781	(634)	2439	1906	(533)
55	635-01-01 Warehouse supplies - East	3667	2704	(962)	3703	2894	(810)

Each reporting tree contains a group of reporting units. Sage Intelligence allows you to easily add or change reporting units without requiring a change to your financial data.

Reporting Unit Structures

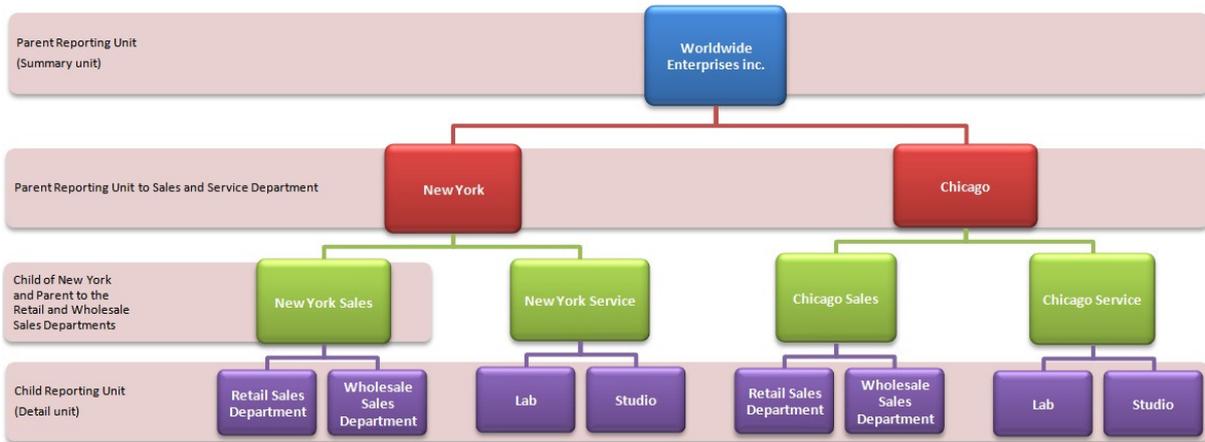
Sage Intelligence uses the following kinds of reporting units:

- A detail unit draws information directly from the financial data or from a Microsoft Excel spreadsheet file.
- A summary unit summarizes data from lower-level units.

A reporting tree consists of parent reporting units and child reporting units:

- A parent reporting unit is a summary unit that pulls summarized information from a detail unit. A summary unit can be both a detail unit and a summary unit; that is, a summary unit can draw information from a lower unit, the financial data, or an Excel spreadsheet. Thus, a parent unit can, in turn, be the child unit of a higher parent unit.
- A child reporting unit can be either a detail unit that pulls information directly from the financial data or a spreadsheet, or it can be an intermediate summary unit (that is, the parent unit to a lower unit, but also the child unit to a higher-level summary unit).

The following diagram shows the parent and child reporting units, and their hierarchical relationship, for the organization **Worldwide Enterprises Inc.**



The lowest-level detail reporting units (Retail Sales, Wholesale Sales, Lab and Studio) represent departments in the financial data.

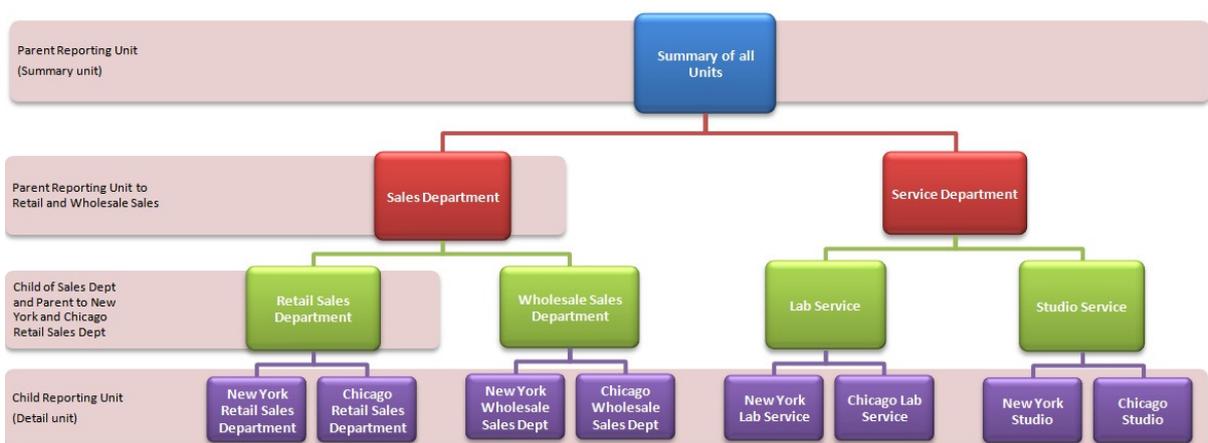
The higher-level summary units simply summarize information from the detail units.

In Sage Intelligence, you can create an unlimited number of reporting trees to view your organization in different ways. Each reporting tree can contain any combination of departments and summary units.

By rearranging the structure among the reporting units, you can create different reporting trees. You can then use the same Report Designer Layout with each reporting tree, enabling you to create different financial report layouts very quickly.

For example, the diagram below shows a reporting tree that is essentially the same as the reporting tree that is shown above. The difference is that the reporting structure displays an organizational structure that is divided by business function instead of by location. These two reporting trees demonstrate different perspectives on entity operations.

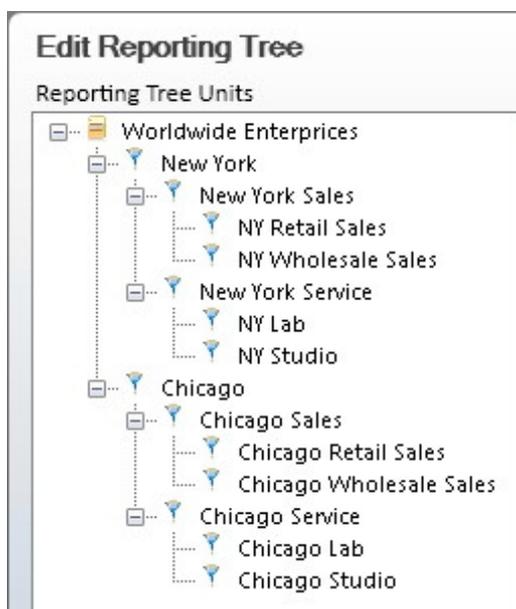
If you create several different reporting trees, you can print a series of financial statements each month that analyze and present your entity's operations in various ways.



Parent Child Relationships

The most common type of reporting tree is composed of parent units that pull summarized information from the detail units and child units that contain detail units of account information. However, many detail/summary hierarchy combinations can be created. A child unit can be both a child to the higher unit as well as a parent to a lower unit.

You can create this parent/child hierarchy structure by moving individual reporting units or an entire branch (parent unit and all child units) to higher or lower levels on the graphical tree. This is called promoting and demoting units. Promoting a unit moves it to a higher level in the tree. Demoting a unit moves a unit to a lower level. When you build a reporting tree, you can promote and demote reporting units using a drag-and-drop operation.



Account Filters

Most organizations use an account structure that separates business entities into different categories. A fully qualified account contains a value for the natural segment e.g. Cash or Sales, as well as values for additional segments, e.g. Location, Division and Department. The following figure demonstrates how the natural segment and the identifying segments combine to form a fully qualified account number.

Account Structure in Financial Data



The distinction between the natural and identifying segment is critical to the successful use of the Report Designer. Typically users specify the natural segment in a row definition and the identifying segment in a reporting tree definition. When reports are generated, these values combine to pull specific financial records from the source.

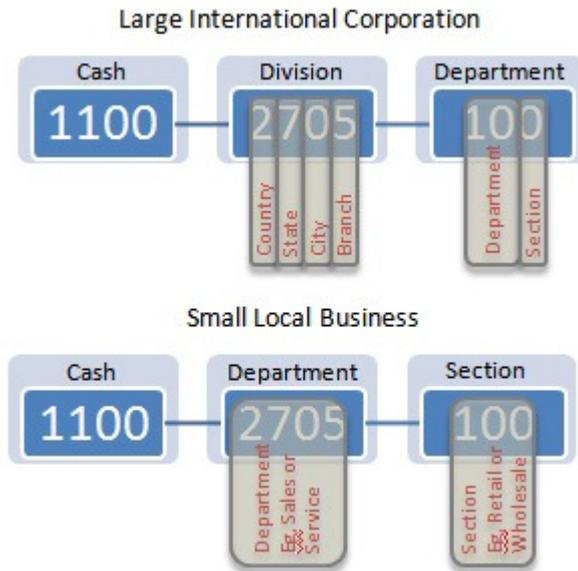
Reporting Trees support the use of special characters as a way to identify multiple segment values without specifically naming each one.

Character	Function
? Question Mark	A placeholder for a single character in a segment. In the above example, the value " 1100-2???-100 " will return all data with a segment range between "1100-2000-100" to "1100-2999-100" which will be all retail sales cash transactions from all branches with codes between 2000 and 2999.
* Asterisk	A placeholder for one or more characters. In the above example, the value " 1100-2000-* " will return all data with a segment range between "1100-2000-0" to "1100-2000-999" which will be all cash transactions from all departments in New York.
OR	Used to describe multiple segments. In the above example, the value " 1100-2000-100 OR 1100-2000-200 " will return all data with a segment of either 1100-2000-100 or a segment range of 1100-2000-200 which will be all retail sales cash transactions from New York branch or wholesale sales cash transactions from New York (if 200 represented wholesale sales)
TO	Used to describe a range of segments. In the above example, the value " 1100-1???-100? TO 1100-8???-100 " will return all data with a segment range from 1100-2000-100 to 1100-8999-100 which will be all cash retail sales from all branches whose branch segments range from 1000 to 8999.

Account Filter Examples

Depending on the size of the organization, fully qualified account number segments can have different representations for different companies.

Example below:



In the above example to include all cash transactions, an account filter rule of **1100-????-???** would be used.

An extra digit may even be added to further identify a segment:



In this example to include all cash transactions, an account filter rule of **1100-????-????** would be used.

Managing Reporting Trees

To manage Reporting Trees, do the following:

Run a Report Designer enabled report from the Sage Intelligence Report Manager.

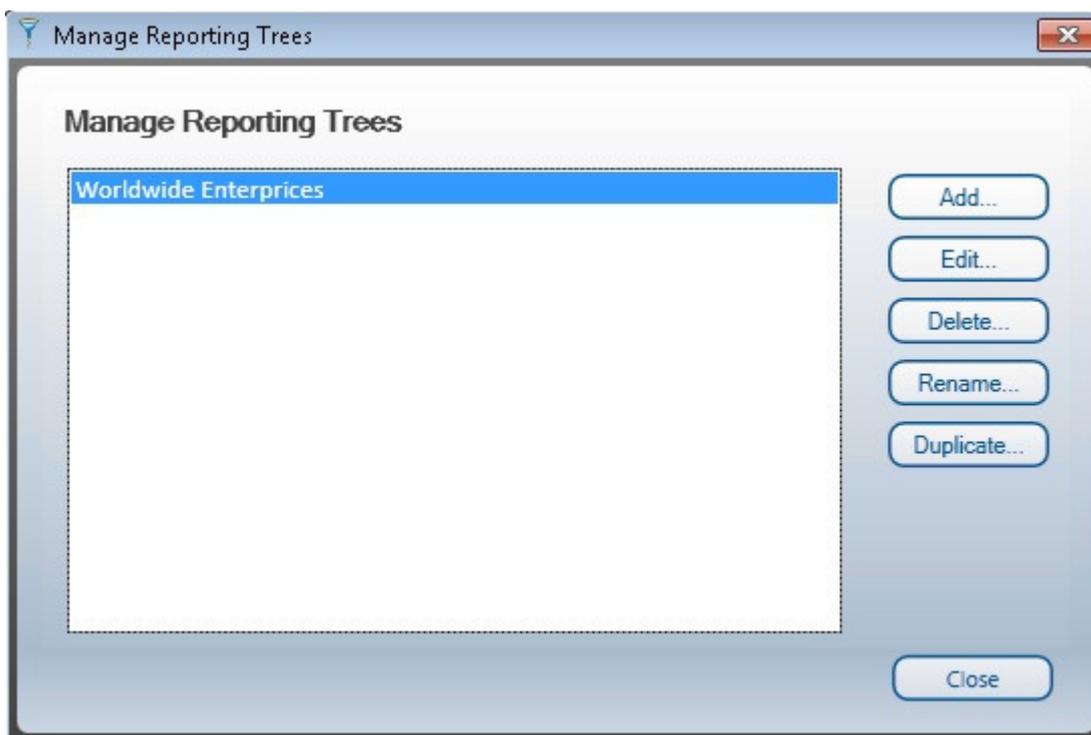
In Microsoft Excel, select the **BI Tools** tab.



In the **Report Designer** group, click **Reporting Trees**.



From the **Manage Reporting Trees** window, you can now **Add, Edit, Delete, Rename** or **Duplicate** your trees.

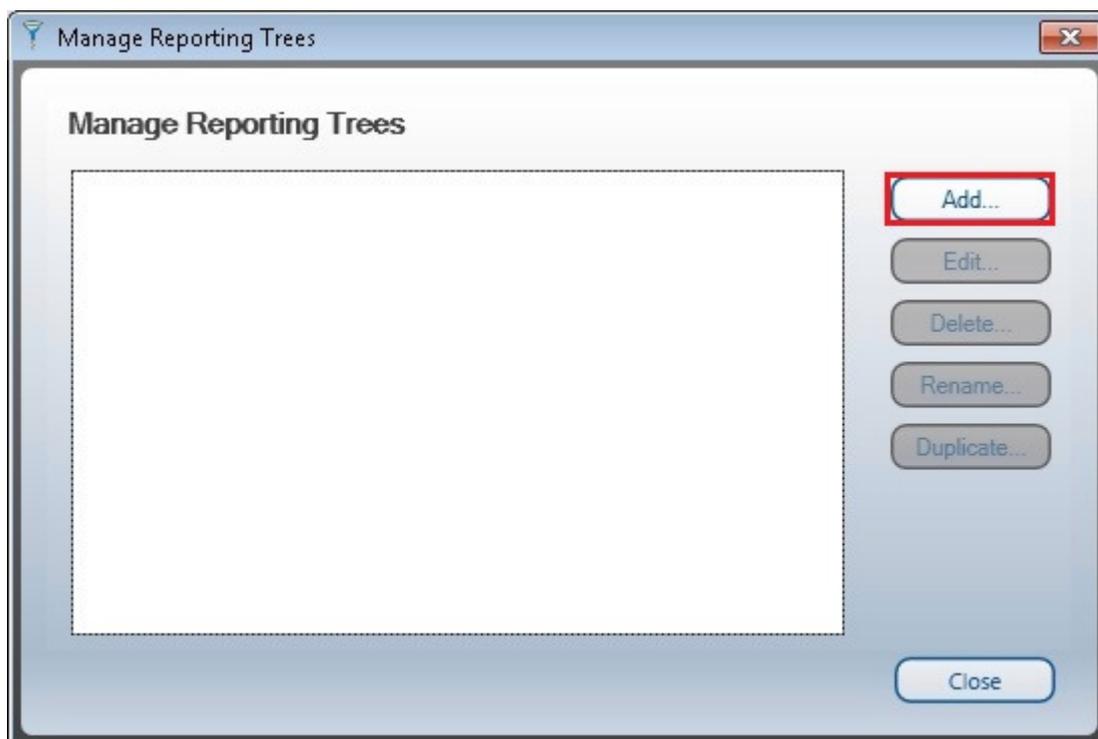


Creating a New Reporting Tree

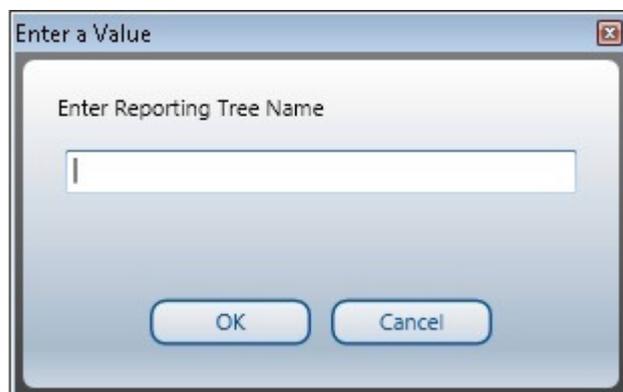
Before you build any reporting trees, you will first need to determine the various reporting structures your company will require. The best approach is to draw an organizational chart of your company. Use your current general ledger departments as the lowest detail level. Add to these as many boxes as you need to show higher-level divisions or regions. Remember that each box represents a potential reporting unit in any of your reporting trees.

To create a new reporting tree, do the following:

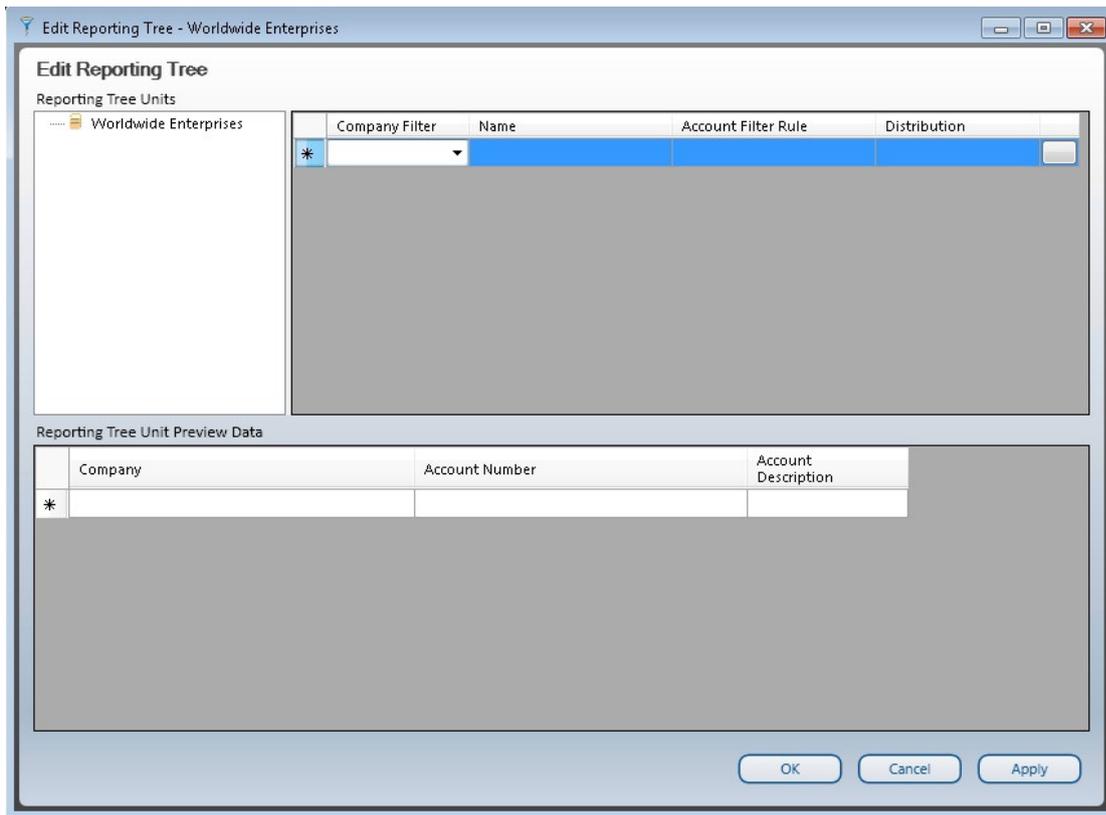
From the **Manage Reporting Trees** window, click **Add**.



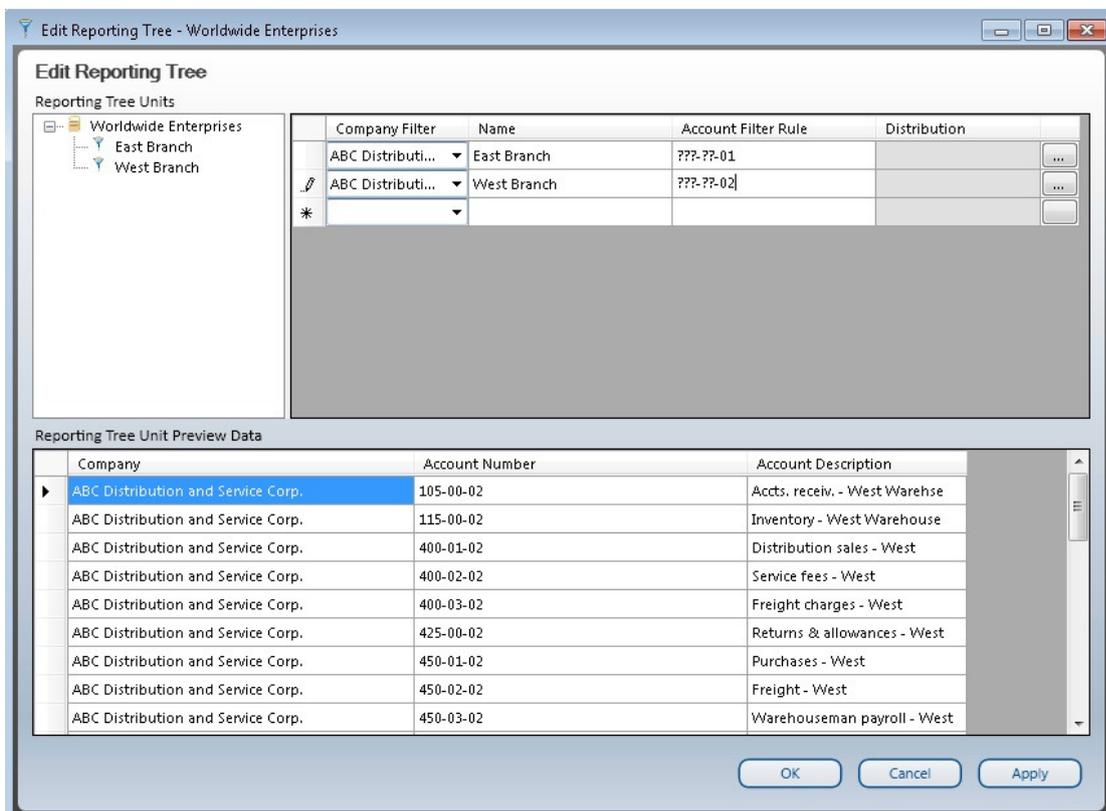
Enter a name for your Reporting Tree and click **OK**.



In the right pane, each reporting unit will need to be added in a separate row with its relevant account filter rule.



The graphical tree on the left pane of the Reporting Tree Manager allows you to visualize the relationship of parent/child unit hierarchy while the right pane displays each reporting unit in a separate row with its relevant account filter. The Preview Pane will change dynamically to display the results of the account filter for each reporting unit. Example below:



An optional Company filter may be applied. This will further filter the reporting unit to apply only to a specified company.

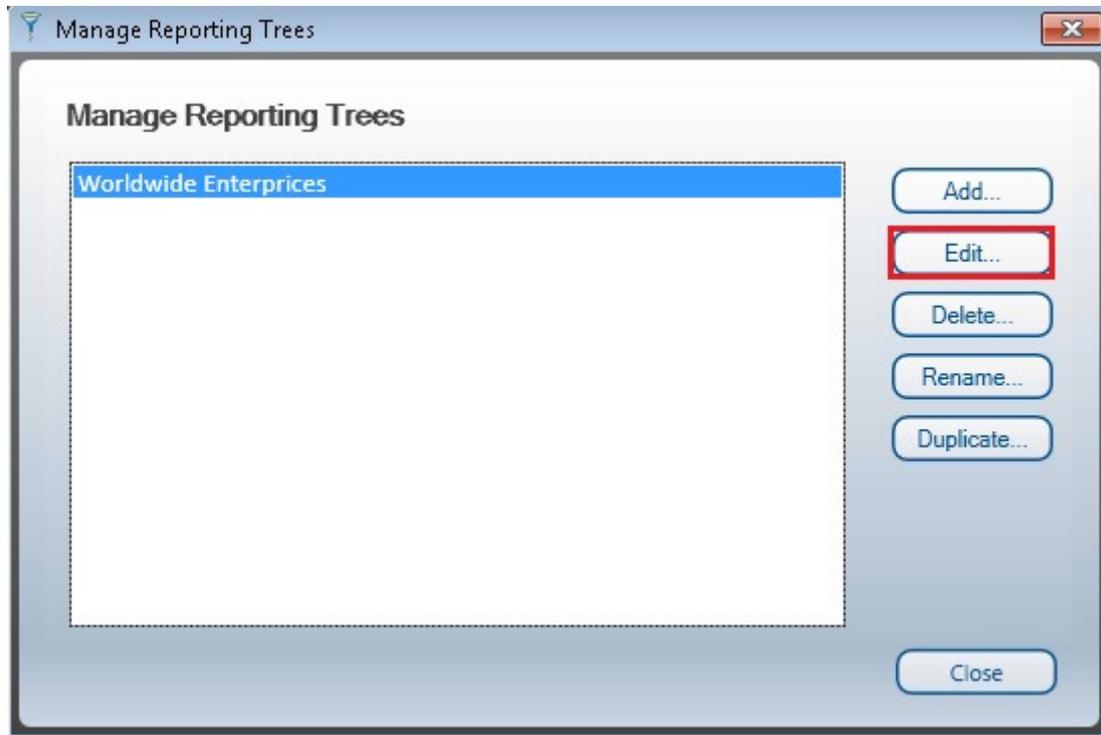
An optional distribution instruction may be added to each reporting unit. The distribution instruction entered here will automatically be linked to the generated worksheet. This prevents instructions from having to be selected and linked to each individual report. This will be covered in more detail in the Advanced Report Writing course.

Using drag and drop functionality, you can arrange reporting units into parent/child hierarchies.

Click **Apply** to save and continue. Click **OK** to save and exit.

Editing Reporting Trees

From the **Manage Reporting Trees** window, select the Reporting Tree you wish to edit and click the **Edit** button.



Make the necessary changes. Click **Apply** to save and continue. Click **OK** to save and exit.

Using the same method as above but selecting the other buttons, you can also delete, rename or duplicate your reporting trees.