

Schwab Performance Technologies®

# PortfolioCenter®

**Trading Data Export  
Developer's Guide**

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## Chapter 1: Trading Output

The Trading Data Export function of the PortfolioCenter Export Wizard is intended as a means for a client to easily export a broad range of account specific data. The data included in the export is designed to be data that will contribute to the trading decision process. The file created by the export is designed to be easily read and consume, while the Export Wizard makes it easy to create the file. This section explains creating the file and the layout of the file.

### Generation Methods and Output Formats

Trading output can be generated in two ways using the PC Data Extract Tool:

- ◆ Using the Trading Data Export wizard in the program's graphical user interface (GUI)
- ◆ Using the command line interface

The output file can be in one of the following formats:

<b>Format</b>	<b>Description</b>
XML	Output is stored in one XML file containing one dataset that contains all the pertinent information (model allocation AND portfolio data).
ZIP	Output is identical to XML output, except that the XML file is in a ZIP file.
Stream	Output is identical to XML output, except that the XML output is directed to stdout. With this method, you can retrieve data from the stream as it is written rather than waiting until all output is received.

**Note:**

This option is available only when running the export from the command line.

Using these generation methods and output formats, the Trading Data Export can be run in five distinct ways:

	<b>Generation Type</b>	<b>Output Type</b>
1	Wizard	XML
2	Wizard	ZIP
3	Command line	XML
4	Command line	ZIP
5	Command line	Stream

All options include a results file to indicate which portfolios failed.

## Chapter 1: Trading Output

### Consuming Results

Format	Description
XML	<p>Because the XML file can become very large, we suggest that you use a lightweight forward only reader like <code>xmlReader</code>.</p> <p>Client consumers of the Trading Data output are expected to use an XML parser or derivative to process the output results that are generated by the Trading Data export. The document conforms to the .Net 1.1 Dataset format. Although we do not dictate to clients which specific XML parser they should use, SPT QA will validate our testing results by loading the XML results of each functional test case into the following:</p> <ul style="list-style-type: none"><li>◆ Microsoft Internet Explorer - v. 6.0 or later</li><li>◆ Altova XML Spy 2005</li></ul>
ZIP	Unzip the file, and then proceed with processing the contents as an XML file.
Stream	<p>To consume the stream data, direct the output from the export to the stdin of your executable, which should reference the data using an XML reader class like <code>xmlTextReader</code> class built upon <code>stdin</code>.</p> <p>For example:</p> <pre>PCExport ...&lt;other options here&gt;... /Fmt:Stream /target:stdout &gt; myExe.exe</pre>

---

## Chapter 1: Trading Output

### Data Format

#### *Parameters*

The following parameters control which sections of the trading output results are generated and therefore included in the XML data.

- ◆ General
  - As of Date
  - Price Date
- ◆ Source
  - Source type (All Portfolios, Selected Portfolios, or Portfolios In Set)
  - Portfolios/Set
- ◆ Realized Gain/Loss Information
  - Include Realized Gain/Loss Information
  - From date
  - To date
- ◆ Summary Realized Gain/Loss Information
  - Include Summary Realized Gain/Loss Information
  - From date
  - To date
- ◆ Transaction Information
  - Include Transaction Information
  - From date
  - To date
- ◆ Model Allocations
  - Include Model Allocations
- ◆ Position Information
  - Include Full Position Information

## Chapter 1: Trading Output

### File Layout

The trading output XML file has the following layout:

<Schema/>	Data Schema
<Export Metadata/>	Echo of query parameters
<Model Information> <Model 1/> </Model Information>	Model details for all models in the dataset. See <b>Model Details</b> on page 9 for more information on how models are integrated with positions in PortfolioCenter.
<Portfolio or Group 1>	
<Holdings section> <Group Data> <Underlying account 1> <Security1> <Position> <Trade lots>	Current holdings data exported in a hierarchical fashion down to trade lot details.  See “Portfolios and Groups” on page 5 for more information on the relationships between groups and underlying portfolios
<Realized gain loss section> <Realized gain/loss detail record 1> <Realized gain/loss detail record 2>	Detail records of the realized gains or losses created by sells. This data can be used to evaluate the Wash sale rules.
<Summary Realized gains/losses> <YTD R g/l Portfolio or Group> <YTD R g/l Portfolio1> <YTD R g/l Portfolio2>	Account level summation of Realized gains and losses for a date range. This data can be used to understand a client’s Year to Date gain situation.
<Transactions section> <Transactions Portfolio1> <Transaction 1> <Transaction 2>	Includes all opening and closing transactions over a date range. This data can be used to check for short term redemption issues.

### XML Schema

The Schema, which is embedded in the output file in the <Schema/> section of the file layout, describes the information elements of the respective “Models” and “PortfolioOrGroup” sections. As new data points are introduced into PortfolioCenter in future versions, the file layout and corresponding schema will be updated to accommodate the new data points. Please review a sample file for the most up to date schema.



---

## Chapter 2: Interpreting the Data

This section describes how to interpret the output of the Trade Export wizard, especially for linking:

- ◆ Portfolios and groups
- ◆ Models and portfolios

### Portfolios and Groups

PortfolioCenter supports a concept called “Groups” to organize related Portfolios, typically related by family ties. The Trading Data Export output results can provide information on both the container Group object, as well as the individual portfolios that are contained within the Group.

Clients are responsible for assigning valid account numbers to their individual portfolios and groups. PortfolioCenter does not enforce account number uniqueness. Internally, PortfolioCenter does assign a unique PortfolioID to each portfolio and group. To assist with relating individual portfolios with their corresponding groups and with data in the various export sections, we recommend using the PortfolioID.



#### Note

- ◆ The PortfolioID is not editable by the end client
- ◆ The PortfolioID is unique within a single database. If the portfolio is removed from one database and added to another, the PortfolioID does not carry across.

Information about groups and their underlying portfolio members is contained within the tree-like structure of the XML output.

In the example below, Portfolio “615” is a member of group “921”: Note that the group does not have an account number.

## Chapter 2: Interpreting the Data

### Holdings

```
<PortfolioOrGroup>
<Holdings xmlns="http://www.schwabpt.com/PortfolioMgmt/DataExport/Trading/TradingDataExport">
<GroupData>
<GroupOrPortfolioID>921</GroupOrPortfolioID>
<BillingAccountNumber />
<GroupOrPortfolio>Portfolio</GroupOrPortfolio>
<ModelName>SYMTEST MODEL</ModelName>
<ModelID>195</ModelID>
<Objective />
<AccountNumber />
<AccountType />
<Description>John Smith</Description>
<TotalCashBalance>2589179.56</TotalCashBalance>
<TotalValue>2589179.56</TotalValue>
<PerformanceInception>04/30/1994</PerformanceInception>
<Notes />
<TaxID />
<Advisor />
<Target />
<PortfolioData>
<PortfolioID>615</PortfolioID>
<AdvisorDescription>Ellie Smith</AdvisorDescription>
<Taxable>-1</Taxable>
<TaxID>000-00-0000</TaxID>
<FedTaxRate>0</FedTaxRate>
<FedTaxRateQualified>15</FedTaxRateQualified>
<StateTaxRate>0</StateTaxRate>
<Objective>Test Account</Objective>
<AccountNumber>999-0801</AccountNumber>
<AccountType>SMA Account</AccountType>
<Description>BB&T Bank 9</Description>
<MasterAccount />
<MinCashBalance>0</MinCashBalance>
<Discretionary>0</Discretionary>
<BirthDate />
<ResidenceState>NC</ResidenceState>
<CustodianAccount />
<EquityLotSize>0</EquityLotSize>
<MutualFundLotSize>0</MutualFundLotSize>
<FixedIncomeLotSize>0</FixedIncomeLotSize>
<RoundingInstructions>Round To Nearest</RoundingInstructions>
<BrokerDescription />
<EquitySellMethod>First In First Out</EquitySellMethod>
<MutualFundSellMethod>Average Cost</MutualFundSellMethod>
<SweepAccount>MMF</SweepAccount>
<SMAAccount>-1</SMAAccount>
<SMADescription>Michael Warner, Manager</SMADescription>
<SMAExtendedDescription1>Large Cap Diversified</SMAExtendedDescription1>
<SMAExtendedDescription2 />
<SMAAssetClassCode>USEQ</SMAAssetClassCode>
<SMASectorCodeName>GROWLG</SMASectorCodeName>
<SMASubsectorCodeName>DIVERSIFI</SMASubsectorCodeName>
<SMAAssetClassDescription>US Equities</SMAAssetClassDescription>
<SMASectorCodeDescription>Growth - Large</SMASectorCodeDescription>
<SMASubsectorCodeDescription>Diversified</SMASubsectorCodeDescription>
<ClosedAccount>0</ClosedAccount>
```

## Chapter 2: Interpreting the Data

### Realized Gain/Loss

```
<RGLRealizedGainsAndLosses>
<PortfolioID>615</PortfolioID>
<AccountNumber>999-0801</AccountNumber>
<PortfolioDescription>BB&T Bank 2</PortfolioDescription>
<Symbol>DFREX</Symbol>
<CostOfSharesSold>2633.79</CostOfSharesSold>
<DateAcquired>08/27/1999</DateAcquired>
<DateSoldorPayDate>08/02/2000</DateSoldorPayDate>
<QuantitySold>213.371</QuantitySold>
<SellMethod>First In First Out</SellMethod>
<TotalGains>346.21</TotalGains>
<GrossProceeds>3000.00</GrossProceeds>
<NetProceeds>2980.00</NetProceeds>
```

### Summary Realized Gain/Loss

```
<YTDRealizedGains xmlns="http://www.schwabpt.com/PortfolioMgmt/DataExport/Trading/TradingDataExport">
<YTDGroupsOrPortfolios>
<GroupID>921</GroupID>
<ShortTermGain>9732.47</ShortTermGain>
<TotalLongTermGain>18892.20</TotalLongTermGain>
<TotalGainLoss>28624.67</TotalGainLoss>
<YTDPortfolios>
<PortfolioID>615</PortfolioID>
<AccountNumber>999-0801</AccountNumber>
<ShortTermGain>8998.42</ShortTermGain>
<TotalLongTermGain>20513.29</TotalLongTermGain>
<TotalGainLoss>29511.71</TotalGainLoss>
</YTDPortfolios>
```

### Transactions

```
<TransactionsQuery xmlns="http://www.schwabpt.com/PortfolioMgmt/DataExport/Trading/TradingDataExport">
<TDPortfolios>
<TDAccountNumber>999-0801</TDAccountNumber>
<Transaction>
<TDPortfolioID>614</TDPortfolioID>
<AccountNumber>46176004</AccountNumber>
<Quantity>369.849</Quantity>
<CostPerUnit>10.004</CostPerUnit>
<ActivityID>70</ActivityID>
<Activity>Buy</Activity>
<TradeDate>04/29/2004</TradeDate>
<Symbol>DFGFX</Symbol>
<OtherFees>0</OtherFees>
<EntryDate>04/30/2004</EntryDate>
<Principal>3680</Principal>
<SettlementDate>04/30/2004</SettlementDate>
<NetAmount>-3700</NetAmount>
<AdvisorFee>20</AdvisorFee>
<BrokerName>SCHWAB</BrokerName>
<OriginalTradeDate>04/29/2004</OriginalTradeDate>
</Transaction>
```

## Chapter 2: Interpreting the Data

### Models and Portfolios

The trading data export output contains both Model information and Portfolio information. The Model section contains all the model information contained in the dataset. The Portfolio section contains information for the portfolios for which the Trading Data Export was executed, which is usually all portfolios, selected portfolios, or portfolios contained with a set. (A set is another mechanism clients can use to organize similar portfolios. Typically, sets are used to collect portfolios with similar characteristics other than family ties, such as broker dealer or investment strategy.)

#### *Model Identity*

The <PortfolioOrGroup> section contains two fields, either of which can be used to uniquely identify within a dataset the Model associated with the portfolio. These fields are <ModelName> and <ModelID>. In the example below, the portfolio is associated with a model named “50% EQUITY MIX 21” with a ModelID of “134”.

```
<PortfolioOrGroup>
<Holdings xmlns="http://www.schwabpt.com/PortfolioMgmt/DataExport/Trading/TradingDataExport">
<GroupData>
<GroupOrPortfolioID>613</GroupOrPortfolioID>
<BillingAccountNumber>Direct</BillingAccountNumber>
<ModelName>50% EQUITY MIX 21</ModelName>
<ModelID>134</ModelID>
<Objective>Test Account</Objective>
<AccountNumber />
<AccountType>Balanced Account</AccountType>
<Description>BB&T Bank 1</Description>
<TotalCashBalance>4077.06</TotalCashBalance>
<TotalValue>875106.37</TotalValue>
<PerformanceInception>04/30/1994</PerformanceInception>
<Notes />
<TaxID />
<Advisor>DHB</Advisor>
<Target />
```

## Chapter 2: Interpreting the Data

### Model Details

This information can be cross-referenced against the details of the <Model> section. For example, the details of the model named “50% EQUITY MIX 21” (ModelID = “134”) are given below:

```
<Model>
<ModelID>134</ModelID>
<ModelName>50% EQUITY MIX 21</ModelName>
<ModelDescription>Asset Class 50% Equity Portfolio</ModelDescription>
<ModelType>Asset Class</ModelType>
<Tolerance>0</Tolerance>
<LotSize>0</LotSize>
<ShowModelsOnly>0</ShowModelsOnly>
<WeightUsingModelComponents>0</WeightUsingModelComponents>
  <CategoriesOrSymbols>
    <CodeName>USSC</CodeName>
    <CodeDescription>US Small Cap</CodeDescription>
    <MaxAmount>12</MaxAmount>
    <MinAmount>8</MinAmount>
    <PercentOfTotal>20</PercentOfTotal>
    <SecuritySymbol />
    <SecurityDescription />
  </CategoriesOrSymbols >
  <CategoriesOrSymbols >
    <CodeName>GLC</CodeName>
    <CodeDescription>Global Large Cap</CodeDescription>
    <MaxAmount>22</MaxAmount>
    <MinAmount>18</MinAmount>
    <PercentOfTotal>20</PercentOfTotal>
    <SecuritySymbol />
    <SecurityDescription />
  </CategoriesOrSymbols >
  <CategoriesOrSymbols >
    <CodeName>IB</CodeName>
    <CodeDescription>Int'l Bonds</CodeDescription>
    <MaxAmount>13.75</MaxAmount>
    <MinAmount>11.25</MinAmount>
    <PercentOfTotal>22.5</PercentOfTotal>
    <SecuritySymbol />
    <SecurityDescription />
  </CategoriesOrSymbols >
  <CategoriesOrSymbols >
    <CodeName>STB</CodeName>
    <CodeDescription>Short Term Bonds</CodeDescription>
    <MaxAmount>41.25</MaxAmount>
    <MinAmount>33.75</MinAmount>
    <PercentOfTotal>37.5</PercentOfTotal>
    <SecuritySymbol />
    <SecurityDescription />
  </CategoriesOrSymbols >
</Model>
```

The details for each component of the model are defined in each <Categories> section. In the example above, the model allocations are:

<u>Model Component (Category)</u>	<u>Target Allocation</u>
“US Small Cap”	20%
“Global Large Cap”	20%
“Int’l Bonds”	22.5%
“Short Term Bonds”	37.5%
<b>TOTAL</b>	<b>100%</b>

## Chapter 2: Interpreting the Data

### Security Based Models Section

In the event that a portfolio has a security-based model assigned to it, the following data is placed between the Security Description and CategoriesOrSymbols end tags. In the example below, the beginning of the code was pulled from the Model Details section on page 9. The code starting with the <ModelSecurities> tag and ending with the </ModelSecurities> tag shows the data for each asset in the model. This section is repeated for each security in the model.

```
<Model>
<ModelID>134</ModelID>
<ModelName>50% EQUITY MIX 21</ModelName>
<ModelDescription>Asset Class 50% Equity Portfolio</ModelDescription>
<ModelType>Asset Class</ModelType>
<Tolerance>0</Tolerance>
<LotSize>0</LotSize>
<ShowModelsOnly>0</ShowModelsOnly>
<WeightUsingModelComponents>0</WeightUsingModelComponents>
  <CategoriesOrSymbols >
    <CodeName>USSC</CodeName>
    <CodeDescription>US Small Cap</CodeDescription>
    <MaxAmount>12</MaxAmount>
    <MinAmount>8</MinAmount>
    <PercentOfTotal>20</PercentOfTotal>
    <SecuritySymbol />
    <SecurityDescription />
      <ModelSecurities>
        <Symbol>YUM</Symbol>
        <Description>Yum! Brands Inc.</Description>
        <AssetClassCode>USEQ</AssetClassCode>
        <AssetClassDescription>US Equities</AssetClassDescription>
        <Factor>0</Factor>
        <Price>32.61</Price>
        <CUSIP />
        <AnnualIncomeRate>0.6</AnnualIncomeRate>
        <SecurityState />
        <MaturityDate />
        <SectorCodeName>SERVICE</SectorCodeName>
        <SectorCodeDescription>Services</SectorCodeDescription>
        <Notes />
        <SecurityType>Equities</SecurityType>
        <SharesPerContract>0</SharesPerContract>
        <FedTaxable>-1</FedTaxable>
        <StateTaxable>-1</StateTaxable>
        <SubsectorCodeName>REST</SubsectorCodeName>
        <SubsectorCodeDescription>Restaurants</SubsectorCodeDescription>
        <IncomeFrequency>Quarterly</IncomeFrequency>
        <BondStatus />
        <SandPRating />
        <MoodyRating />
        </ModelSecurities>
      </CategoriesOrSymbols >
```

## Chapter 2: Interpreting the Data

### Data Point Definitions

The following data fields are available on the trade file export:



#### Note

Certain fields in the **PortfolioOrGroup +Holdings** section, marked with an F in the list below, are exported only with a full position export.

DataSet	
AsOfDate	Echo of As of date Parameter
PriceDate	Echo of Price date Parameter
DataSetName	Echo of Dataset name Parameter
RGLFromDate	Echo of Realized gain/loss beginning date Parameter
RGLToDate	Echo of Realized gain/loss ending date Parameter
YTDRGLFromDate	Echo of Summary realized gain/loss beginning date Parameter
YTDRGLToDate	Echo of Summary realized gain/loss ending date Parameter
TransactionDetailsFromDate	Echo of transaction beginning date Parameter
TransactionDetailsToDate	Echo of transaction ending date Parameter
+ <b>Model</b>	<b>Note: All models from a dataset are exported</b>
ModelID	ID of Model -used for mapping
ModelName	Name of the model
ModelDescription	Description of the model
ModelType	The type of the model. The values can either be Asset Class, Sector Code, Subsector Code or Symbol .
Tolerance	Tolerance value on the model.
LotSize	Lot size value on the model.
ShowModelOnly	Show Model Only flag on the model. 0 = unchecked. -1 = checked
WeightUsingModelComponents	Compute Weight Using Model Components only flag on the model. 0 = unchecked. -1 = checked.

## Chapter 2: Interpreting the Data

### Data Point Definitions

<b>+ CategoriesOrSymbols</b>	
CodeName	Category Code for the model. Note: Only applies to Category based models.
CodeDescription	Category Description for the model. Note: Only applies to Category based models.
MaxAmount	Target Maximum Percent value for the category or symbol in the model.
MinAmount	Target Minimum Percent value for the category or symbol in the model.
PercentOfTotal	Target Percent value for the category or symbol in the model.
SecuritySymbol	Symbol for the model. Note: Only applies to Security based models.
SecurityDescription	Security Description for the model. Note: Only applies to Security based models.
<b>+ ModelSecurities</b>	
Symbol	Security symbol
Description	Security description
AssetClassCode	Asset Class Code for the asset class associated with the security. Asset classes are created by the user and are unique to each dataset.
AssetClassDescription	Asset Class Description for the asset class associated with the security. Asset classes are created by the user and are unique to each dataset.
Factor	Current Factor based on selected price file. If security type does not support factors (i.e. not a mortgage backed security) then the factor will return 0
Price	Current Price based on selected price file
CUSIP	CUSIP
AnnualIncomeRate	Corresponds to the Annual Income Rate column on the portfolio statement report in PortfolioCenter
SecurityState	Issue State
MaturityDate	Maturity Date for fixed income type securities. Will also show the expiration date for options
SectorCodeName	Sector Code for the sector associated with the security. Sector codes are created by the user and are unique to each dataset.
SectorCodeDescription	Sector Description for the sector associated with the security. Sector codes are created by the user and are unique to each dataset.
Notes	Security Comment



## Chapter 2: Interpreting the Data

### Data Point Definitions

SecurityType	Security Type -Will return the security type as defined in PortfolioCenter.																								
	<table border="1"> <tr> <td>PC security type</td> <td>Output</td> </tr> <tr> <td>Equities</td> <td>Equity</td> </tr> <tr> <td>Fixed Income</td> <td>Fixed</td> </tr> <tr> <td>Mutual Funds</td> <td>Mutual</td> </tr> <tr> <td>User Defined</td> <td>UserDef</td> </tr> <tr> <td>CDs</td> <td>CD</td> </tr> <tr> <td>Mortgage-Backed</td> <td>Mortgage</td> </tr> <tr> <td>Unit Trusts</td> <td>UnitTrust</td> </tr> <tr> <td>Options</td> <td>Option</td> </tr> <tr> <td>T-Bills</td> <td>T-bill</td> </tr> <tr> <td>Commercial Paper</td> <td>Paper</td> </tr> <tr> <td>Cash and Money Funds</td> <td>Cash</td> </tr> </table>	PC security type	Output	Equities	Equity	Fixed Income	Fixed	Mutual Funds	Mutual	User Defined	UserDef	CDs	CD	Mortgage-Backed	Mortgage	Unit Trusts	UnitTrust	Options	Option	T-Bills	T-bill	Commercial Paper	Paper	Cash and Money Funds	Cash
PC security type	Output																								
Equities	Equity																								
Fixed Income	Fixed																								
Mutual Funds	Mutual																								
User Defined	UserDef																								
CDs	CD																								
Mortgage-Backed	Mortgage																								
Unit Trusts	UnitTrust																								
Options	Option																								
T-Bills	T-bill																								
Commercial Paper	Paper																								
Cash and Money Funds	Cash																								
SharesPerContract	Shares Per Contract for option securities. If the security type is not 'Option', the filed will return 0																								
FedTaxable	Federal Taxable 0 = unchecked. -1 = checked																								
StateTaxable	State Taxable 0 = unchecked. -1 = checked																								
SubsecortCodeName	Sub-sector Code for the sub-sector associated with the security. Sub-sector codes are created by the user and are unique to each dataset.																								
SubsectorCodeDescription	Sub-sector Description for the sub-sector associated with the security. Sub-sector codes are created by the user and are unique to each dataset.																								
IncomeFrequency	Frequency of income paid on the security. Value will be one of the following: Annual                      SemiAnnual Quarterly                      Monthly Maturity (CD's only)																								
BondStatus	Bond Status from the Properties tab of the securities dialog for fixed income type securities.																								
SandPRating	S&P rating for fixed income type securities on the as of date																								
MoodyRating	Moody's rating for fixed income type securities on the as of date																								

## Chapter 2: Interpreting the Data

### Data Point Definitions

+	<b>PortfolioOrGroup</b>	<b>+Holdings</b>	F = only with full position export
+	<b>GroupData</b>		<b>Client Information: Group data if reporting on a group or account data if reporting on a single portfolio</b>
F	GroupOrPortfolioID		Unique ID associated with a group or portfolio. Portfolio ID is not editable by end client
	GroupOrPortfolio		Indicates whether the data exported is from portfolio or group
F	BillingAccountNumber		Portfolio/Group Billing Account Number
	ModelName		Model name for model associated with Portfolio/Group
F	ModelID		Unique Model ID for model associated with Portfolio/Group
F	Objective		Portfolio/Group Objective
F	AccountNumber		Portfolio/Group Account Number
F	AccountType		Portfolio/Group Account Type
F	Description		Portfolio/Group Description
F	TotalValue		Total Portfolio Value of Portfolio/Group on as of date. Includes accrued income
F	TotalCashBalance		Total cash balance for Portfolio/Group. Sum of the balances of all cash and money fund accounts on as of date.
F	PerformanceInception		Portfolio/Group Inception date
F	Notes		Portfolio/Group Comment
F	TaxID		Portfolio/Group Tax ID
F	Advisor		Advisor code for advisor associated with Portfolio/Group
F	Target		Target code for advisor associated with Portfolio/Group

## Chapter 2: Interpreting the Data

### Data Point Definitions

	+ PortfolioData	Group Member/underlying account data. If reporting on a single portfolio (i.e. not a group) this data will replicate data in GroupData section		
F	PortfolioID	Unique ID associated with a portfolio. Portfolio ID is not editable by end client		
	Advisor	Advisor code for advisor associated with Portfolio/Group		
	Taxable	Underlying Portfolio Taxable flag 0 = unchecked. -1 = checked.		
F	TaxID	Underlying Portfolio Tax ID		
	FedTaxRate	Underlying federal tax rate		
	FedTaxRateQualified	Underlying federal qualified tax rate		
	StateTaxRate	Underlying state tax rate		
	AccountNumber	Underlying Portfolio Account Number		
	AccountType	Underlying Portfolio Account Type		
	Description	Underlying Portfolio Description		
F	Objective	Underlying Portfolio Objective		
F	MasterAccount	Underlying Portfolio IM Account		
F	MinCashBalance	Underlying Portfolio Minimum Cash Balance		
F	BrokerDescription	Underlying Portfolio Broker		
F	CustodianAccount	Underlying Portfolio Custodian		
F	EquityLotSize	Underlying Portfolio Equity Lot Size		
F	MutualFundLotSize	Underlying Portfolio Mutual Fund lot size		
F	FixedIncomeLotSize	Underlying Portfolio Fixed Income lot size		
F	RoundingInstructions	Underlying Portfolio Rounding instructions Round to nearest Round up Round down No rounding		
F	Discretionary	Underlying Portfolio Discretionary account 0 = unchecked. -1 = checked.		
F	EquitySellMethod	Underlying equity matching method	Average Cost	First In First Out Last In First Out
			High Cost	Low Cost Selected
F	MutualFundSellMethod	Underlying mutual fund matching method	Average Cost	First In First Out Last In First Out
			High Cost	Low Cost Selected
F	SweepAccount	Underlying default sweep account		
F	ResidenceState	State of primary residence		
F	BirthDate	Birth date		

## Chapter 2: Interpreting the Data

### Data Point Definitions

SMAAccount	Underlying Portfolio SMA (Separately Managed Account) setting flag 0 = unchecked. -1 = checked.
SMADescription	Description of the SMA account as set in the details of the underlying portfolio.
SMAExtendedDescription1	Additional description of the SMA account as set in the details of the underlying portfolio.
SMAExtendedDescription2	Additional description of the SMA account as set in the details of the underlying portfolio.
SMAAssetClassCode	Asset Class Code for the asset class associated with the underlying SMA account. Asset Class Codes are created by the user and are unique to each dataset.
SMASectorCodeName	SMA Sector Code for the sector associated with the underlying SMA account. Sector Codes are created by the user and are unique to each dataset.
SMASubsectorCodeName	SMA Subsector Code for the subsector associated with the underlying SMA account. Subsector Codes are created by the user and are unique to each dataset.
SMAAssetClassDescription	Asset Class Description for the asset class associated with the underlying SMA account. Asset classes are created by the user and are unique to each dataset.
SMASectorCodeDescription	Sector Code Description for the sector associated with the underlying SMA account. Sectors are created by the user and are unique to each dataset.
SMASubsectorCodeDescription	Asset Class Description for the asset class associated with the underlying SMA account. Subsectors are created by the user and are unique to each dataset.
ClosedAccount	Underlying Portfolio Closed setting flag – indicates whether an account is open (unchecked) or closed (checked). 0 = unchecked. -1 = checked.

## Chapter 2: Interpreting the Data

### Data Point Definitions

	<b>+</b> <b>Securities</b>	<b>Security data</b>																								
F	AssetClassCode	Asset Class Code for the asset class associated with the security. Asset classes are created by the user and are unique to each dataset.																								
F	AssetClassDescription	Asset Class Description for the asset class associated with the security. Asset classes are created by the user and are unique to each dataset.																								
F	Factor	Current Factor based on selected price file. If security type does not support factors (i.e. not a mortgage backed security) then the factor will return 0																								
F	Price	Current Price based on selected price file																								
F	CUSIP	CUSIP																								
F	ExpirationDate	Expiration Date. Only valid for options																								
F	AnnualIncomeRate	Corresponds to the Annual Income Rate column on the portfolio statement report in PortfolioCenter																								
F	SecurityState	Issue State																								
F	MaturityDate	Maturity Date for fixed income type securities. Will also show the expiration date for options																								
F	RedemptionDate	Call date for fixed income type securities																								
F	RedemptionPrice	Call price for fixed income type securities																								
F	SectorCodeName	Sector Code for the sector associated with the security. Sector codes are created by the user and are unique to each dataset.																								
F	SectorCodeDescription	Sector Description for the sector associated with the security. Sector codes are created by the user and are unique to each dataset.																								
F	Notes	Security Comment																								
F	Description	Security Description																								
	SecurityType	Security Type -Will return the security type as defined in PortfolioCenter.																								
		<table border="1"> <tbody> <tr> <td>PC security type</td> <td>Output</td> </tr> <tr> <td>Equities</td> <td>Equity</td> </tr> <tr> <td>Fixed Income</td> <td>Fixed</td> </tr> <tr> <td>Mutual Funds</td> <td>Mutual</td> </tr> <tr> <td>User Defined</td> <td>UserDef</td> </tr> <tr> <td>CDs</td> <td>CD</td> </tr> <tr> <td>Mortgage-Backed</td> <td>Mortgage</td> </tr> <tr> <td>Unit Trusts</td> <td>UnitTrust</td> </tr> <tr> <td>Options</td> <td>Option</td> </tr> <tr> <td>T-Bills</td> <td>T-bill</td> </tr> <tr> <td>Commercial Paper</td> <td>Paper</td> </tr> <tr> <td>Cash and Money Funds</td> <td>Cash</td> </tr> </tbody> </table>	PC security type	Output	Equities	Equity	Fixed Income	Fixed	Mutual Funds	Mutual	User Defined	UserDef	CDs	CD	Mortgage-Backed	Mortgage	Unit Trusts	UnitTrust	Options	Option	T-Bills	T-bill	Commercial Paper	Paper	Cash and Money Funds	Cash
PC security type	Output																									
Equities	Equity																									
Fixed Income	Fixed																									
Mutual Funds	Mutual																									
User Defined	UserDef																									
CDs	CD																									
Mortgage-Backed	Mortgage																									
Unit Trusts	UnitTrust																									
Options	Option																									
T-Bills	T-bill																									
Commercial Paper	Paper																									
Cash and Money Funds	Cash																									

## Chapter 2: Interpreting the Data

### Data Point Definitions

F	SharesPerContract	Shares Per Contract for option securities. If the security type is not 'Option', the filed will return 0
F	StateTaxable	State Taxable 0 = unchecked. -1 = checked
	+ Securities	Security data
F	FedTaxable	Federal Taxable 0 = unchecked. -1 = checked
F	SubSectorCodeName	Sub-sector Code for the sub-sector associated with the security. Sub-sector codes are created by the user and are unique to each dataset.
F	SubSectorCodeDescription	Sub-sector Description for the sub-sector associated with the security. Sub-sector codes are created by the user and are unique to each dataset.
F	IncomeFrequency	Payment frequency Annual SemiAnnual Quarterly Monthly Maturity (CD's only)
F	BondStatus	Bond Status from the Properties tab of the securities dialog for fixed income type securities.
F	MoodyRating	Moody's rating for fixed income type securities on the as of date
F	SandPRating	S&P rating for fixed income type securities on the as of date
	Symbol	Symbol
F	YieldToMaturityMarket	YTM at Market
F	Duration	Duration at Market

## Chapter 2: Interpreting the Data

### Data Point Definitions

	<b>+</b>	<b>Positions</b>	<b>Position Data</b>
F		Symbol	Symbol
F		CostBasis	Position Cost Basis
F		TotalValue	Position Total Value Including accrued interest
F		MarketValue	Position Market Value (not including accrued interest)
F		TradeDate	Trade Date: Date position was originally opened including trade lots that have been closed prior to the as of date.
F		Quantity	Position Quantity
F		Weight	Position weight as a percentage of total portfolio value
F		AccruedIncome	Position Total Accrued income
F		ExcludeFromPerformance	Excluded from performance flag for exported position. 0 = unchecked. -1 = checked (excluded).
F		ExcludeFromBilling	Excluded from billing flag for exported position. 0 = unchecked. -1 = checked (excluded).
	<b>+</b>	<b>TradeLots</b>	<b>Trade Lot Data</b>
F		CostBasis	Cost Basis of trade lot
F		InterfaceAccount	Interface Account Number (from interface posting)
F		Location	Location field from trade lot opening transaction.
		MarketValue	Market Value of trade lot. (not including accrued interest)
		OriginalTradeDate	Original Trade Date (for trade lots that were receive into an account)
F		UnrealizedGainLossPercent	Percent Gain or Loss
		Quantity	Quantity
F		SettlementDate	Settlement Date
F		TradeDate	Trade Date on trade lot. For trade lots that are opened with a receipt or credit transaction, this will equal the receipt date. Original trade date should be used to determine projected long or short term gains.
		CostPerUnit	Unit Cost
F		UnrealizedGainLoss	Unrealized Gain
		ReinvestIncomeGains	Reinvest income/Gain A positive number will indicate that the trade lot was created by a reinvested income. 0 indicates that it was created by a buy, receipt, or reinvestment transaction with 0 income.
F		Weight	Weight as a percentage of total portfolio value
F		TradeLotID	Trade Lot ID Unique ID for trade lot.

## Chapter 2: Interpreting the Data

### Data Point Definitions

+ <b>RGLRealizedGainsAndLosses</b>	<b>Realized Gain/Loss data at the transaction detail level. Includes sells only, not gain distributions</b>
GainTypeDescription	Gain Type Description –A node will appear for all gain types processed, though some will not have any detail records. Ignore the nodes with no detail records. A complete list of gain types is included in the appendix.
+ PortfolioID	Underlying Portfolio ID
AccountNumber	Underlying Portfolio Account Number
PortfolioDescription	Underlying Portfolio Description
Symbol	Symbol
CostOfSharesSold	Cost
DateAcquired	Date Acquired
DateSoldorPayDate	Date Sold
QuantitySold	Quantity Sold
SellMethod	Sell Method Average Cost First In First Out High Cost Last In First Out Low Cost Selected
TotalGains	Total Gains
GrossProceeds	Gross Proceeds
NetProceeds	Net Proceeds
+ <b>YTDRealizedGains</b> + <b>YTDGroupsOrPortfolios</b>	<b>Summary Realized Gain/Loss numbers for the selected group or portfolio</b>
GroupID	ID for group if the query is being run against a group
ShortTermGain	Group short term gains
TotalLongTermGain	Group long term gains
TotalGainLoss	Group Total Gains
+ <b>YTDPortfolios</b>	<b>Summary Realized Gains and losses for underlying accounts</b>
PortfolioID	ID for specific account that have produced gains
AccountNumber	Account number of account that has produced gains
TotalLongTermGain	Total account gains/losses
ShortTermGain	Account short term gains
TotalGainLoss	Account long term gains



## Chapter 2: Interpreting the Data

### Data Point Definitions

+ <b>TransactionsQuery</b>	<b>Transaction data</b> Limited to opening and closing transactions. Buys, Sells, receipt, transfer, debit, credit, buy open, buy close, sell open, sell close, short, cover.
+ <b>Transactions</b>	
AccountNumber	Account Number
TDPortfolioID	PortfolioID
Quantity	Quantity
CostPerUnit	Unit Cost. For activities that do not have a unit cost, (i.e. Sell, Transfer, Debit) the value will be zero.
Activity	Activity
TradeDate	Trade Date
Symbol	Symbol
OtherFees	Other fees. Only valid for buys, sells, buy open, buy close, sell open, sell close, short, and cover
EntryDate	Entry date
Principal	Principal amount of transactions. Will show as a negative number for sells
SettlementDate	Settlement Date
NetAmount	Net Amount of transaction. Will show as an absolute value
AdvisorFee	Broker fee. . Only valid for buys, sells, buy open, buy close, sell open, sell close, short, and cover
BrokerName	Broker
OriginalTradeDate	Original Trade Date



## Chapter 3: Rebalancing Business Rules

PortfolioCenter generates a rebalancing report by comparing the current positions in an account to the model details for the model assigned to that account. This section details the business rules that are used to create the rebalancing report.

### Model Settings

Portfolio models (desired allocations) can be created on the individual security level or one of the category levels (asset classes, sectors, subsectors) available in PortfolioCenter, and the models can be assigned to portfolios and groups. Results on the Portfolio Rebalancing Report depend on the model assigned to the portfolio or group.

The screenshot shows a window titled "REB, mut funds" with a menu bar (Window, Edit, View, Help) and a "Close" button. The main area is titled "Model Details".

Fields on the left:

- Name: REB, MUT FUNDS
- Title: REB, mut funds
- Based On: Security (dropdown)
- Tolerance: 5.00
- Lot Size: 50.00
- Show Model Only
- Compute Weight Using Model Components Only

Security	% Total =	Minimum	Maximum
ABC	25.00	0.00	0.00
CASH	2.00	0.00	0.00
FIX10	5.00	0.00	0.00
FIXED	30.00	0.00	0.00
MUTX	8.00	0.00	0.00
MUTY	5.00	0.00	0.00
XYZ	25.00	0.00	0.00

Buttons at the bottom: Save, Go to Assignments, New, Delete.

Models are given a name, title and the 'Based On' field is where users determine how to build models (based on individual securities, asset classes, sectors, or subsectors). All categories and security categorizations are determined by the user.

## Chapter 3: Rebalancing Business Rules

### Determining Out of Balance Positions

PortfolioCenter provides several ways of determining if a position is out of balance with its model.

#### ***Model Tolerance***

The tolerance is a percentage that is applied to all position target weights. For example, the target weight is 75% for equities and the tolerance is 5%. If the actual weight of the category is less than 70% or more than 80%, then the category **is** out of tolerance. If the actual weight is between 70% and 80%, then the category is out **not** of tolerance.

Advisors use the Tolerance setting when they want to apply the same tolerance level to all securities or categories in the model.

#### ***Category Tolerance (Minimum/Maximum)***

The tolerance can be designated per category or security to set the minimum and maximum weights that the position can be without being out of tolerance. For example, the fixed income target weight is 10%, with a minimum of 5% and a maximum of 15%. If the actual weight of the category is less than 5% or more than 15%, then the category is out of tolerance. If the actual weight is between 5% and 15%, then the category is out **not** of tolerance.

The Min/Max settings override the Tolerance setting when both are set. Advisors use the Min/Max setting when they want to be very precise about the tolerance levels for each category or security within a model.

#### ***Lot Size (Security-Based Models Only)***

If the Advisor normally buys and sells securities in a specific lot size (for example, 100), they can enter the size of the lot here. PortfolioCenter uses this setting in determining how many shares they need to buy or sell to bring a portfolio back into balance, which is displayed in the Quantity Difference column.

For example, if the Lot Size is 100 and the difference between the model quantity and portfolio quantity is 215, then the Quantity Difference is shown as 200, which is two lots. If left blank, the system uses a trade lot size of 1.

## Chapter 3: Rebalancing Business Rules

### Other Important Model Settings

#### *Show Model Only (Security-based models only)*

This setting indicates whether to show only model-related information on the Portfolio Rebalancing Report and Export.

<b>If</b>	<b>Then</b>
Checked	Only securities in the model appear on the Rebalancing Report and export. Additional securities held in the portfolio are not included on the Rebalancing Report and export.
Unchecked (default)	All securities in the portfolio are shown in the Rebalancing Report and export, even those that are not part of the portfolio model.  When securities are held that are not a part of the portfolio model, the Target Percent and Target Value are 0.00 and the position is highlighted in gray, denoting that it is out of balance. All other columns calculate normally.

#### *Compute Weight Using Model Components Only*

When calculating the weight of a component on a rebalancing report and export, the Advisor can use all components in the portfolio or only those that are defined in the model.

<b>If</b>	<b>Then</b>
Checked	Only the model components are used when calculating weight. Positions not included in the model are not included in the weights, report, or export. (i.e. checking this setting will override the 'Show Model Only' setting)
Unchecked (default)	All positions are used when calculating weight.

## Chapter 3: Rebalancing Business Rules

### Example

A symbol model has these securities and weights:

- ♦ BLUBIRD 20%
- ♦ BLKBIRD 30%
- ♦ CARDNL 50%

The portfolio to which the model is assigned has these holdings:

- ♦ BLUBIRD \$20,000
- ♦ BLKBIRD \$40,000
- ♦ CARDNL \$40,000
- ♦ CASH \$20,000

The results of the report vary depending on the settings in the model.

Model Settings						
Show Model Only	Unchecked		Checked		Checked/Unchecked	
Compute Weight Using Model Components Only	Unchecked		Unchecked		Checked	
Report Display						
	Actual	Target	Actual	Target	Actual	Target
BLUBIRD	16.67%	20%	16.67%	20%	20%	20%
BLKBIRD	33.33%	30%	33.33%	30%	40%	30%
CARDNL	33.33%	50%	33.33%	50%	40%	50%
CASH	16.67%	0%				
Total	100.00%	100%	83.33%	100%	100%	100%

## Chapter 3: Rebalancing Business Rules

### Portfolio and Report Settings

#### Unmanaged Assets

In PortfolioCenter, users can designate securities as unmanaged for performance and billing calculations. This setting is included in the position section of the export, as Non-Billable Asset and Non-Managed asset. Values for the fields are:

0 = setting is unchecked or false

-1 = setting is checked or true (designated as non-billable or non-managed asset)

On the Rebalancing report, the setting **Treat unmanaged assets as managed** controls whether assets designated as non-managed assets are excluded from the account positions on the report.

If a security in an account is marked as unmanaged **AND** **Treat unmanaged assets as managed** is set to False **AND** the security is also part of the model, PortfolioCenter excludes the asset from the account positions used for rebalancing but not from the model components, which could lead to a recommendation to buy a security that is held as unmanaged in an account.

#### Accrued Income

Accrued interest for fixed income securities is controlled by settings on the portfolio level and settings in the report.

#### Portfolio Settings

On the Settings tab for each portfolio, users can choose to display accrued interest.

The screenshot shows the 'Portfolio Details' window with the 'Settings' tab selected. The window contains various settings for a portfolio, including Model (CONSV), Target (Blend), Benchmark 1 (Constant), Benchmark 2 (Varied), Disclaimer (Bear), Billing Spec (Arrears), Billing Form (Household), and Group for Billing (Household). The 'Display accrued interest' checkbox is checked and circled in red. Other checkboxes include 'Include accrued gains' and 'Include accrued dividends', both of which are unchecked. The 'Fiscal Year End' is set to 12/31, and the 'Payout Rate' and 'Discount Rate' are both set to 0.00%. There are also 'Commentary Page Settings' for Page 1 and Page 2, and an 'Exclude Assets' button. At the bottom of the window are buttons for 'Save', 'Reports', 'Bill History', 'Intervals', 'Custom Fields...', 'Transactions', and 'Balances'.

If this setting is checked, current values for fixed income securities include accrued interest in the position and rebalancing export. If the box is unchecked, current values for fixed income securities do not include accrued interest.

## Chapter 3: Rebalancing Business Rules

### Portfolio and Report Settings

#### Report Settings

The rebalancing report has two additional settings related to accrued income that statement reports do not have:

<b>Setting</b>	<b>Values</b>
Include Accrued in Position Weights	<ul style="list-style-type: none"><li>◆ Yes</li><li>◆ No</li></ul> <p>When set to No, this setting overrides the portfolio setting and removes accrued income from the numerator of the portfolio weight calculation.</p> <p><b>Note:</b> This setting applies only to accrued interest, not to accrued dividends and gains.</p>
Accrued Income	<ul style="list-style-type: none"><li>◆ Use portfolio defaults</li><li>◆ Include accrued income</li><li>◆ Exclude accrued income</li></ul>



#### Note

When the report is set to exclude accrued income, through either the portfolio setting or the report setting, PortfolioCenter does not include accrued income in the total portfolio value, which affects the denominator of the portfolio weight calculation as well as the target values for components of the model.



## Chapter 3: Rebalancing Business Rules

### Rebalancing Column Calculations

#### ***Difference Percent***

Target Percent – Percent Weight

#### ***Difference Value***

Target Value – Current Value

#### ***Percent Weight***

The percent each position is of the total portfolio. See explanations of the Compute Weight Using Model Components setting and the accrued income settings above.

#### ***Quantity Difference***

PortfolioCenter uses the Current Price column to convert the Difference Value column into a quantity. The quantity difference is also affected by the Lot Size setting from the Model (Not to be confused with the lot size settings that are available in portfolio details).

For each security type:

<b>Security Type</b>	<b>Calculation</b>
Equity, Mutual Fund, User Defined Unit Trust	Difference Value / Current Price
Fixed Income, CD, T-Bill, Commercial Paper	Difference Value / Current Price * 100
Mortgage-Backed	Difference Value / Current Price / Factor * 100
Options	Difference Value / Current Price / Shares per Contract
Cash and Money Fund	Difference Value

#### ***Target Percentage***

Specified in the model settings.

#### ***Target Value***

Total Portfolio Current Value x Target Percentage

---

## Chapter 3: Rebalancing Business Rules

### Rebalancing Column Calculations

#### *Target Maximum Percent*

The Target Maximum Percent is calculated by looking at several factors.

- 1 First, the calculation looks at the maximum percent that is specified for that component of the model.
- 2 If no maximum is specified, then the calculation looks to the Tolerance setting on the model and adds that number to the target percent specified for the model component.

#### *Target Minimum Percent*

The Target Minimum Percent is calculated by looking at several factors.

- 1 First, the calculation looks at the minimum percent that is specified for that component of the model.
- 2 If no minimum is specified, then the calculation looks to the Tolerance setting on the model and subtracts that number from the target percent that is specified for the model component.

---

## Chapter 4: Command Line Interface

The command line interface (also called the headless interface) for the PC Export Wizard allows running the Trading Data export without the user interface, which lets users automate export process.

### Required Parameters

When running in headless mode, the following parameters are expected via the command line:

- ◆ Username
- ◆ Password
- ◆ Application Server Name
- ◆ SQL Database Name
- ◆ Dataset
- ◆ Export name (currently only trading data export is supported)
- ◆ File format
- ◆ Target filename
- ◆ Options filename (options file contains all the export parameters for the trading data export)

Validation of the export parameters works the same as the GUI version, so all parameter errors caught from GUI parameter validation should be caught when running in headless mode. If errors occur, a dialog box with the error is displayed to the user.



#### **Important**

All export parameters must have quotes around them. For an example of the code, with the quotes, see the Sample Command Line section on page 33.

## Chapter 4: Command Line Interface

### Command Line Options



#### Note

All the commands for user name, password, server, database name and dataset are case sensitive.

Parameter	Description
/auto	Runs the wizard without the GUI.
/usr:{username}	Provides the PortfolioCenter username. When /auto is used, if the username is not supplied, it is read from the registry.
/pwd:{password}	Provides the password. When /auto is used, if the password is not supplied, it is read from the registry (if available).
/svr:{appserver}	Provides the application server. When /auto is used, if appserver is not supplied, it is read from the registry.
/sqldb {database name}	Provides the name of the database When /auto is used, if sqldb is not supplied, it is read from the registry.
/ds: {dataset name}	Provides the dataset name. When /auto is used, if dataset name is not supplied, it is read from the registry.
/ex: {export name}	Provides the default export name. Required when /auto is used. Needs to be 'Trading Data Export'.
/fmt: {format name}	Provides the format for the export. Required when /auto is used. Valid options are 'XML Format' and 'ZIP Format'.
/trgt: {target filename}	Provides the target filename for the export. Required when /auto is used. Filename should include both path and file name. If streaming the output file, should be 'stdout' (see Consuming results section).
/log: {log filename}	Provides the log filename for the export. If not specified, the file name defaults to lastlog.txt in the user temp directory.
/opt: {options filename}	Provides the path and filename of the options file for the export. The options file is an XML document containing the export settings. See "Creating an Options File" on page 33 for setup details. Required when /auto is used.
/?	Shows the message describing the parameters.

## Chapter 4: Command Line Interface

### Sample Command Line



#### Note

All text fields should have quotes around them, such as the user name, password, server name, SQL Database name, dataset name, export name, export format, target file location and option file location. Also, there should be a space between each command (/) as shown in the string below.

```
PCExportWizard /auto /usr:"securityadmin" /pwd:"password" /svr:"pcserver"  
/sqldb:"PortfolioCenter" /ds:"PC Sample Dataset" /ex:"Trading Data Export"  
/fmt:"XML format" /trgt:"c:\output.xml" /opt:"c:\mysettings.xml"
```

### Creating an Options File

The options file is an XML file that contains the export parameters for the Trading Data Export. The simplest way to create a file is to run the export once manually to create a file called LastExportSettings.XML in the user temp directory. Most of the settings are very straight forward. However, the Source and General settings require a little explanation.

Source Type has three options:

Option	Additional data required
Portfolios In Set	Set name must be supplied in the <Set> tag.
Selected Portfolios	A list of PortfolioIDs must be supplied (separated by commas) in the <Portfolios> tag.  <b>Note:</b> Portfolio IDs are specific to a dataset. In other words, if the portfolio is copied to a new dataset or database, the same portfolio ID should not be used.
All Portfolios	None.  <b>Note:</b> This option retrieves individual portfolios only, not groups.

General settings 'AsOfDate' and 'PriceDate' are likely to be different for each day that the export is run. If left blank in the options file, these settings use default values.

- AsOfDate defaults to the current system date.
- PriceDate first looks for a price file on the day prior to the AsOfDate (i.e. the previous day's closing prices). If no price file is available for that date, the program looks backward up to two more days for a price file.

## Chapter 4: Command Line Interface

### Creating an Options File

#### *Sample Options File*

```
<?xml version="1.0" encoding="us-ascii" standalone="yes" ?>
<ExportSettings Dataset="AWCCostBasisExtract56" ExportName="Trading Data Export"
  xmlns="www.schwabperformanceTechnologies.com">
  <General>
  <AsOfDate>6/22/2005</AsOfDate>
  <PriceDate>4/30/2004</PriceDate>
  </General>
  <Source>
  <SourceType>Portfolios in Set</SourceType>
  <Portfolios />
  <Set>TEST Adams Newtest</Set>
  </Source>
  <RealizedGainLossDetail>
  <IncludeRealizedGainLossDetail>True</IncludeRealizedGainLossDetail>
  <FromDateRGL>5/23/2005</FromDateRGL>
  <ToDateRGL>6/22/2005</ToDateRGL>
  </RealizedGainLossDetail>
  <YTDRealizedGainLossDetail>
  <IncludeYTDRealizedGainLossDetail>True</IncludeYTDRealizedGainLossDetail>
  <FromDateYTD RGL>1/1/2005</FromDateYTD RGL>
  <ToDateYTD RGL>6/22/2005</ToDateYTD RGL>
  </YTDRealizedGainLossDetail>
  <TransactionDetail>
  <IncludeTransactionDetail>True</IncludeTransactionDetail>
  <FromDateTD>4/23/2005</FromDateTD>
  <ToDateTD>6/22/2005</ToDateTD>
  </TransactionDetail>
  <ModelAllocations>
  <IncludeModelAllocations>True</IncludeModelAllocations>
  </ModelAllocations>
</ExportSettings>
```

---

## Chapter 4: Command Line Interface

### Error Condition

#### **/auto is used without all associated required command line options**

An error is returned indicating the missing parameter. Only one missing parameter is reported per execution, so if more than one parameter is missing, it will not be reported until the next execution.

#### **/auto is used and export specified in /ex command line option is not the trading data export**

For this release, only the trading data export is supported with the /auto option. An error is returned indicating that trading data export must be chosen when specifying the /auto option.

#### **/auto is used and some export parameters are missing from options file**

An error is returned indicating the missing parameter. For the /auto option, all parameters must be specified in the options file. In other words, defaults are not assumed for missing parameters with the exceptions of 'AsOfDate' and 'PriceDate'.

---

## Multi-Threading and Query Size

When the Trading Data Export processing occurs, multiple queries are processed. To control performance, the number of portfolios in each query and the number of concurrent queries can be altered.



### Important

These registry keys must be edited on the machine you are using for the export. If you are using PortfolioCenter in a networked environment and you are exporting data on a client machine, make these changes on the client machine.

The number of portfolios included in each query can be controlled through the following registry setting:

```
HKLM\Software\Schwab Performance Technologies\PortfolioCenter\ExportWizard\Plugins\  
SchwabPT.PortfolioMgmt.DataExport.Trading
```

Key = DWORD; QueryPageSize

The default value is “20”. We recommend keeping the default, unless you have a need to affect the performance of your data extraction processing. If so, take care in selecting an optimal value so as to not impact your other “normal” data processing.

Our testing has shown that the greatest performance benefit per account is achieved by setting the value to 20 portfolios. Increasing the number improves performance with diminishing returns until a point where the query size exceeds the resources of the computer and performance begins to get worse.

The maximum number of concurrent processing threads can be controlled through the following registry setting:

```
HKLM\Software\Schwab Performance Technologies\PortfolioCenter\ExportWizard\Plugins\  
SchwabPT.PortfolioMgmt.DataExport.Trading
```

Key = DWORD; NumberOfWorkers

The default value is “3”. We recommend keeping the default, unless you have a need to affect the performance of your data extraction processing. If so, take care in selecting an optimal threading value so as to not impact your other “normal” data processing.

Internal testing has been conducted with up to six threads. Raising the setting adds additional load to the application server.



## Appendix

This listing shows all possible Gain Types from the Realized Gains and Losses Node. Many of these are legacy fields and should never show up. In addition, the distribution gain types should never have any detail children.

Gain Type	Comment	Detail records
Unknown Status Type	Ignore	No
<b>Gains from sales in taxable accounts</b>		
Short Term Capital Gains and Losses	<i>This gain type should have detail records</i>	Yes
Long Term Gains (Sales) Realized After May 5, 2003	<i>This gain type should have detail records</i>	Yes
Long Term Gains (Sales) Realized Prior to May 6, 2003	Only on sales prior to 5/6/2003	Yes
Mid Term Capital Gains and Losses	Repealed in 1998. You should not see	Yes
Long Term Capital Gains and Losses	Not used after 2003 tax changes	Yes
Qualified Five Year Gains (Sales)	Replaced by 2003 tax laws. You should not see.	Yes
Long Term Capital Gains and Losses for Assets Purchased after 12/31/00 Held More Than 5 Years	Replaced by 2003 tax laws. You should not see.	Yes
<b>Gains from sales in non-taxable accounts</b>		
Short Term Capital Gains and Losses in Non-Taxable or Tax Deferred Accounts	<i>This gain type should have detail records</i>	Yes
Long Term Gains Realized After May 5, 2003 in Non-Taxable Accounts	<i>This gain type should have detail records</i>	Yes
Long Term Gains Realized Prior to May 6, 2003 in Non-Taxable Accounts	Only on sales prior to 5/6/2003	Yes
Mid Term Capital Gains and Losses in Non-Taxable or Tax Deferred Accounts	Repealed in 1998. You should not see	Yes
Long Term Capital Gains and Losses in Non-Taxable or Tax Deferred Accounts	Not used after 2003 tax changes	Yes
Qualified Five Year Gains and Losses in Non-Taxable Accounts	Replaced by 2003 tax laws. You should not see.	Yes
Long Term Capital Gains and Losses for Assets Purchased after 12/31/00 Held More Than 5 Years in Non-Taxable Accounts	Replaced by 2003 tax laws. You should not see.	Yes

## Appendix

Gain Type	Comment	Detail records
<b>Gains from distributions in taxable accounts</b>		
Short Term Capital Gain Distributions	You should see no detail children for Distribution Nodes	No
Mid Term Capital Gain Distributions	You should see no detail children for Distribution Nodes	No
Long Term Capital Gain Distributions	You should see no detail children for Distribution Nodes	No
Long Term Gain Distributions Realized Prior to May 6, 2003	You should see no detail children for Distribution Nodes	No
Qualified Five year Gain Distributions	You should see no detail children for Distribution Nodes	No
Long Term Capital Gain Distributions: Realized After May 5, 2003	You should see no detail children for Distribution Nodes	No
Unclassified Capital Gain Distributions	You should see no detail children for Distribution Nodes	No
<b>Gains from distributions in non-taxable accounts</b>		
Short Term Capital Gain Distributions in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Mid Term Capital Gain Distributions in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Long Term Capital Gain Distributions in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Long Term Capital Gain Distributions Prior To May 6, 2003 in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Qualified Five Year Gains in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Long Term Capital Gain Distributions After May 5, 2003 in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No
Unclassified Capital Gain Distributions in Non-Taxable or Tax Deferred Accounts	You should see no detail children for Distribution Nodes	No