SCHWAB OpenView Workflow Library

SCHWAB OPENVIEW WORKFLOW LIBRARY ™

BUSINESS OPERATIONS WORKFLOW SERIES: DATA MANAGEMENT PROCESS

SCHWAB INTELLIGENT TECHNOLOGIES

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TIPS AND BEST PRACTICES FOR SUCCESSFUL IMPLEMENTATION OF WORKFLOWS

Having a documented workflow can help you organize tasks used to support client-interaction so each event is repeated the same way and all clients and prospects receive a similar customer experience. This package provides a foundational understanding about the Data Management workflow so you can assess if the processes you are currently using can be more efficient and systematic.

While this document focuses on helping you process and manage the data you receive from Charles Schwab, & Co., in your Portfolio Management System, it also references services, tools, documents and templates found on Schwab Advisor Center™ website for advisors working with Schwab Advisor Services.

REGARDING CUSTOMIZATION

Preparation is the key to success. Because each firm is unique, take the time to analyze your current processes, compare them to the processes and resources in this package and plan any customizations before implementing these workflow steps. The purpose of this workflow package is to help you understand best practices upon which you can build.

INTEGRATION WITH OTHER WORKFLOWS

Some workflows in the Schwab OpenView Workflow Library have relationships to or dependences on other workflows. For this reason, we recommend you download and implement all of the other Business Operations workflows along with this Data Management workflow to realize the fullest benefit.

GETTING ADDITIONAL HELP

The information in this document supports the workflow itself, not how to enter the workflow details into any of your firm's software or systems. For help entering this workflow into your firm's software applications, contact the various software providers.

Large portions of the data management activities in this package assume the use of a portfolio management system. Specific details on data processing and management depend on the portfolio management system you are currently using. Contact your portfolio management software provider for information and details for step-by-step processing of data in that specific application.

UNDERSTANDING THE DATA MANAGEMENT WORKFLOW

The first step to understanding a workflow is to understand where it resides in the overall business process. This section shows how the Data Management workflow is organized, how it relates to other processes in the workflow series, and provides a view of the process in both graphical and checklist formats.



THE BUSINESS OPERATIONS WORKFLOW SERIES

As a small business, you understand that the back office operations are just as important as client-facing operations. Your business operations play a vital role in ensuring that client accounts are accurate and they help provide the information and infrastructure necessary to keep your business running smoothly.

The Business Operations workflow processes will help you organize these and related tasks into easy-to-follow workflows that you can implement into your office, helping you streamline internal processes that enable you to manage client data and monitor the progress of your business.

The Business Operations process consists of six main workflow components:

- **Client Billing** – This process contains the activities and tasks you will need to configure, confirm, and regularly execute billing against a client's accounts.
- **Portfolio Reporting** – This process contains the activities and tasks you will need to create the various reports needed for a client presentation.
- **Data Management** – This process contains the activities and tasks you will need to import and reconcile portfolio and planning data.
- **Data Aggregation** – This process contains the activities and tasks you will need to compile and enter non-managed data for your clients' accounts.
- **Portfolio Rebalancing** – This process contains the activities and tasks you will need to prepare for regular, systematic rebalancing of clients' accounts.
- **Business Reporting** – This process contains the activities and tasks you will need to produce internal reports that highlight sales, profit and loss, assets under management, and other key metrics.

This workflow package discusses the Data Management process. The Client Billing, Portfolio Reporting, Data Aggregation, Portfolio Rebalancing, Process Management and Business Reporting processes are addressed in separate documents.

Important

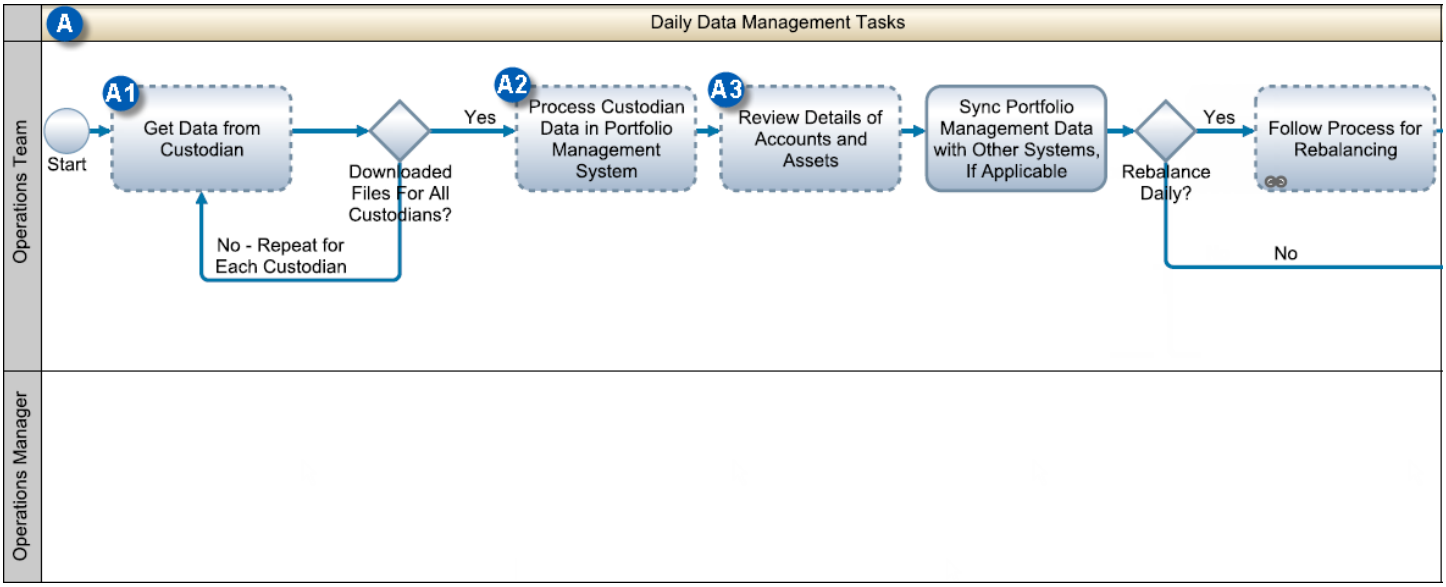
This workflow package discusses only the Data Management process. Packages for other workflows in this series are addressed in separate documents on SchwabIntelligentTechnologies.com:

- Client Billing
- Portfolio Reporting
- Data Aggregation
- Portfolio Rebalancing
- Business Reporting

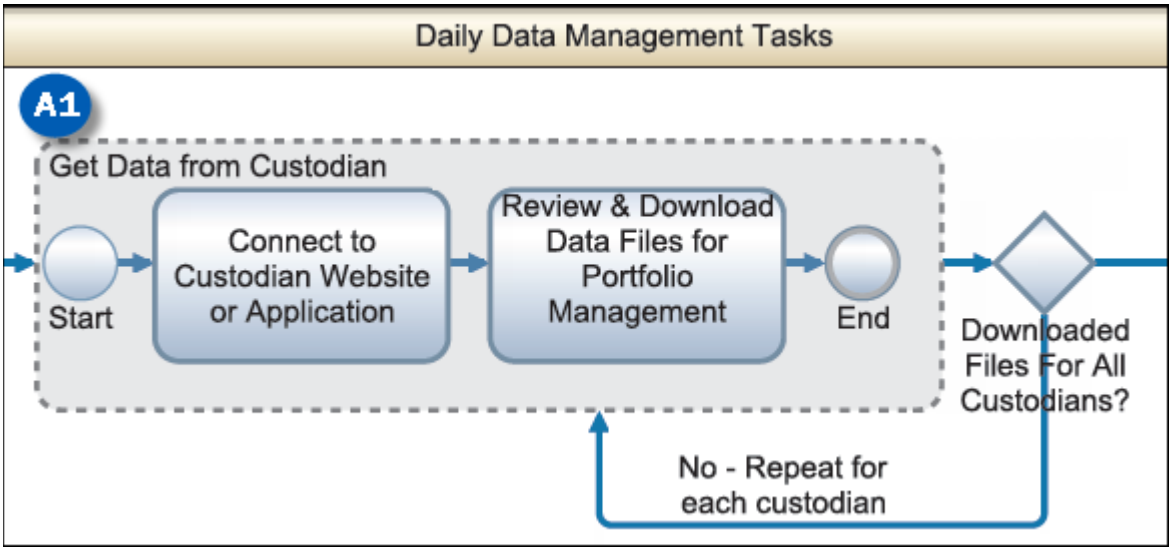
DATA MANAGEMENT PROCESS OVERVIEW

PROCESS DIAGRAM

For some, seeing the workflow as a diagram makes the process easier to understand. The diagram or process map provides a visual outline of the tasks organized by role and allows you to see the entire process end-to-end with interdependencies. This diagram serves as a best practice recommendation only. Adjustments may be needed to suit the needs of your firm.

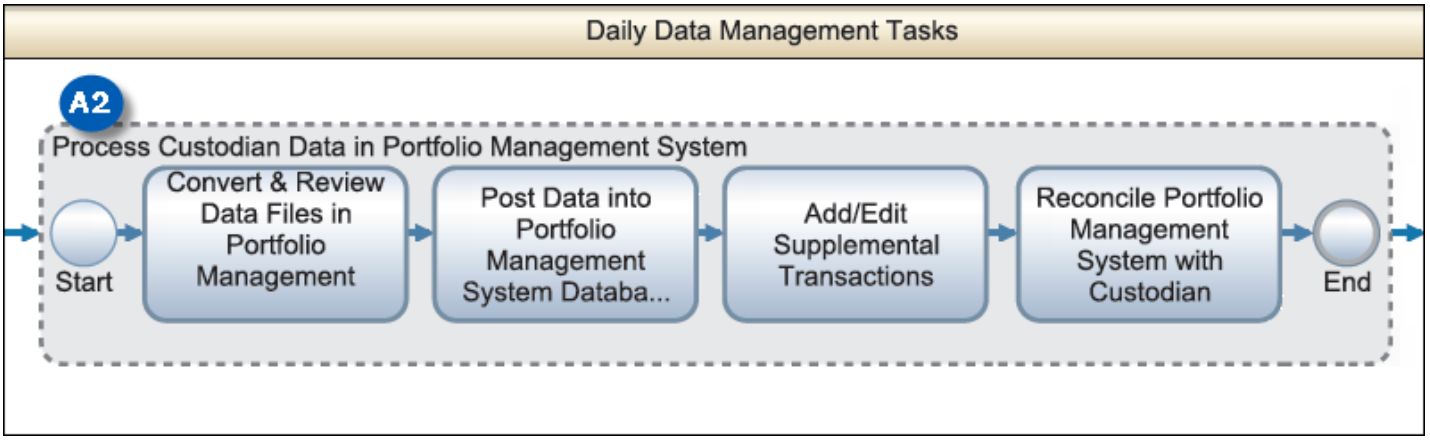


The Daily Data Management Milestone Diagram

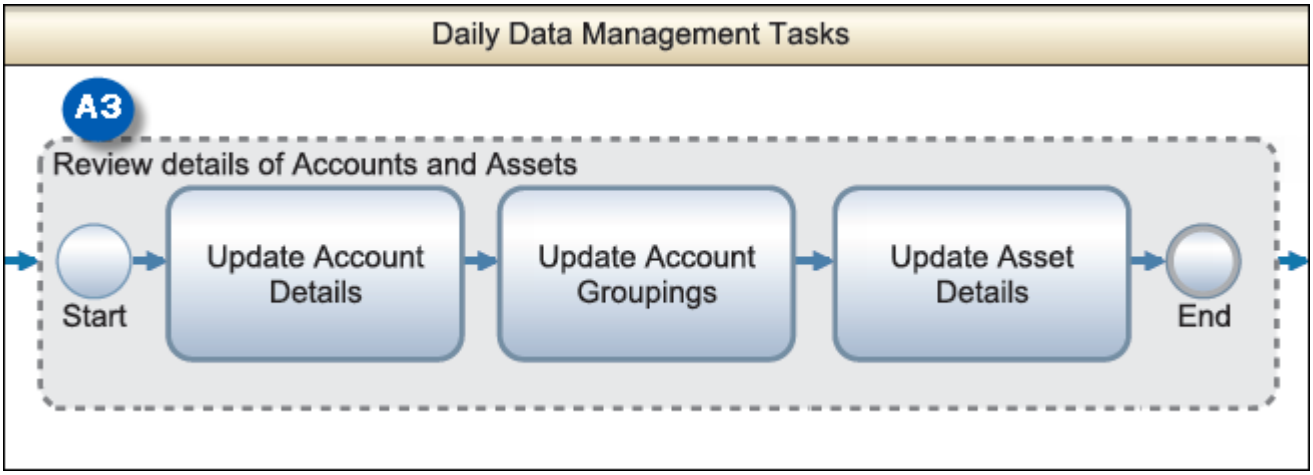


Daily Data Management Tasks: Get Data from Custodian sub-process

DATA MANAGEMENT PROCESS OVERVIEW

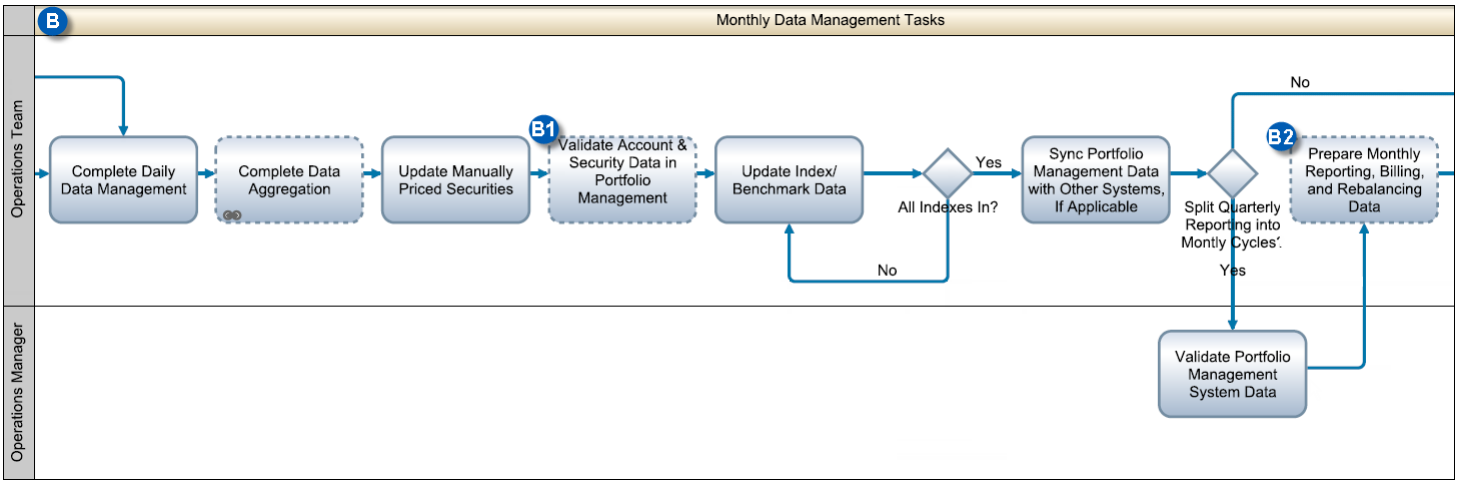


Daily Data Management Tasks: Process Custodian Data in Portfolio Management System sub-process

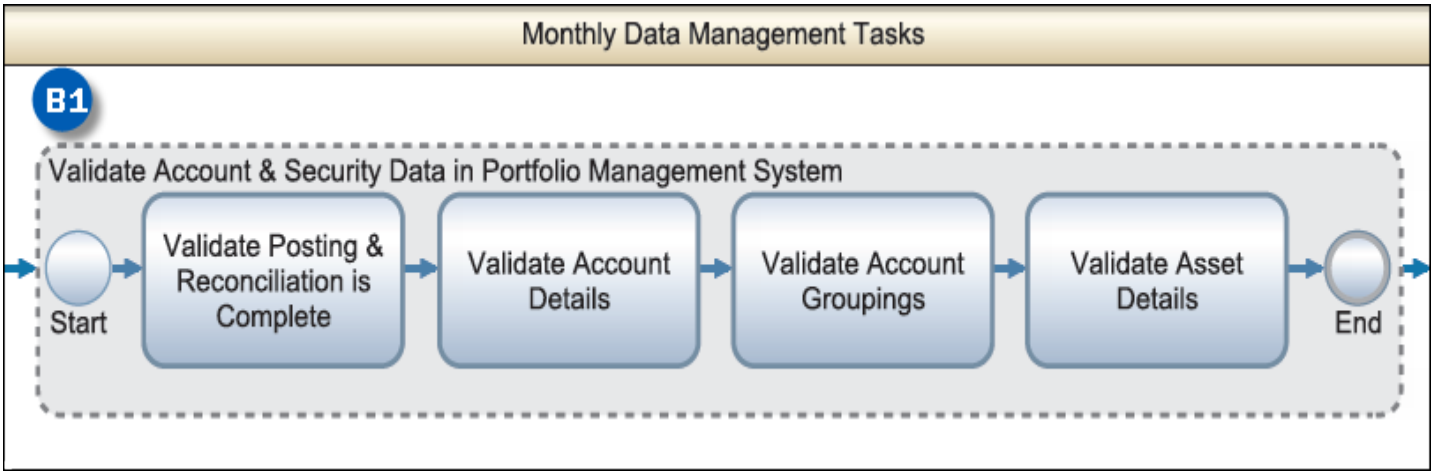


Daily Data Management Tasks: Review Details of Accounts and Assets sub-process

DATA MANAGEMENT PROCESS OVERVIEW

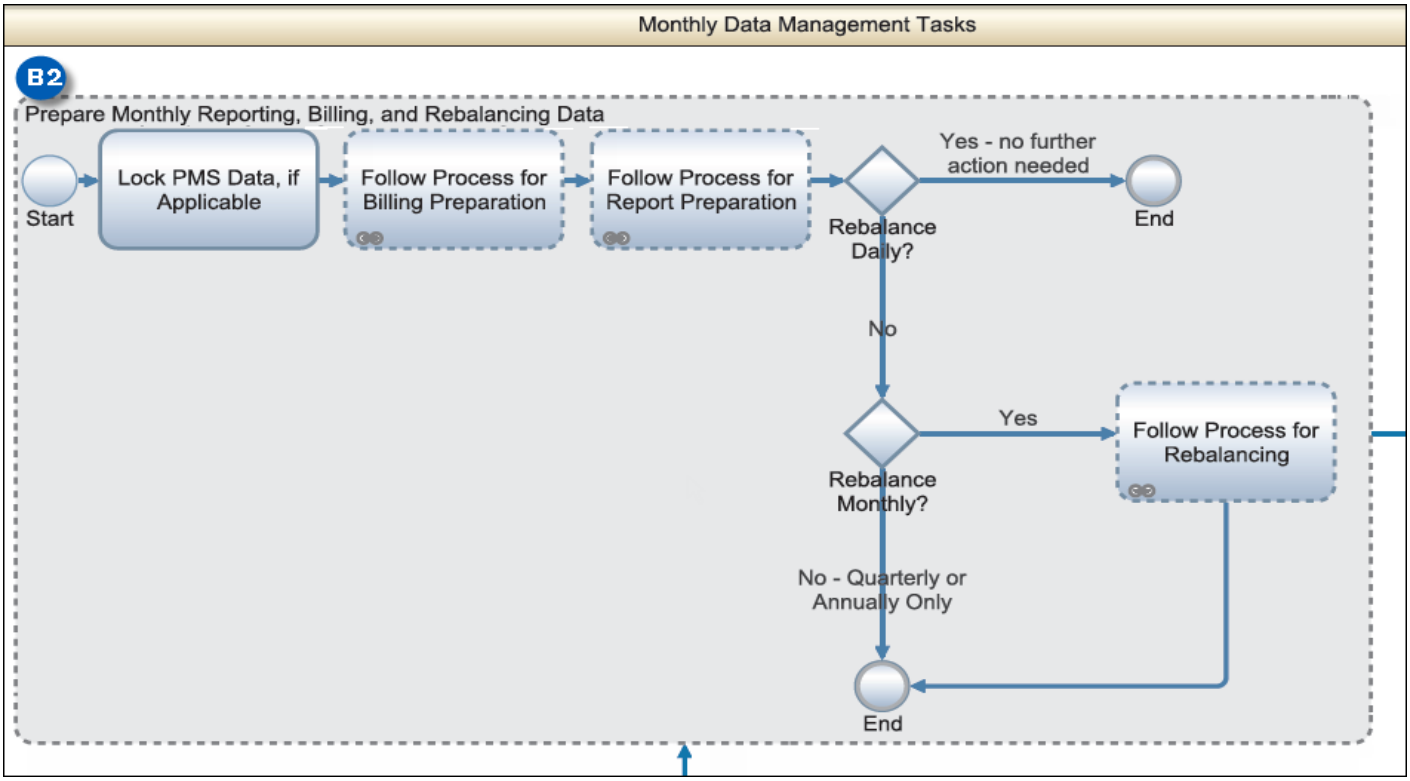


The Monthly Data Management Milestone Diagram



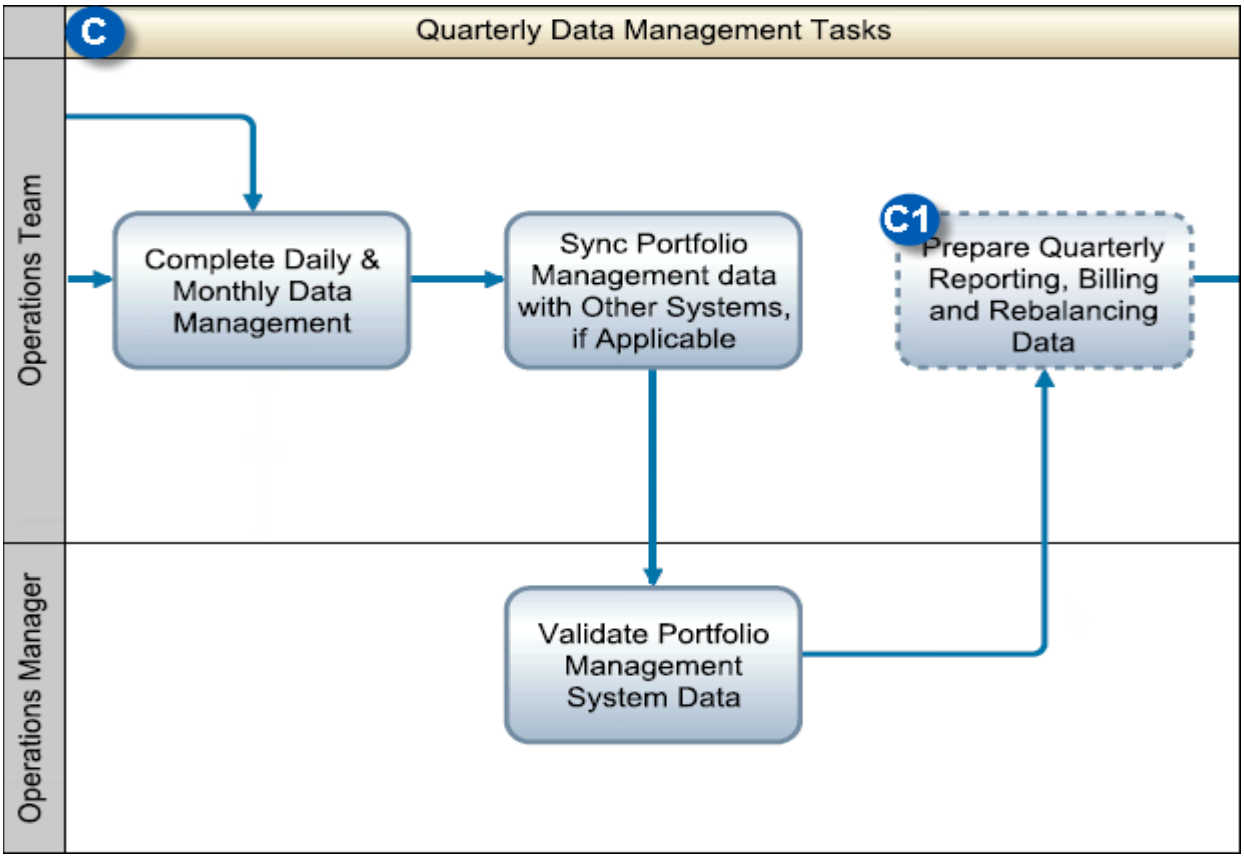
Monthly Data Management Tasks: Validate Account and Security Data in Portfolio Management System sub-process

DATA MANAGEMENT PROCESS OVERVIEW

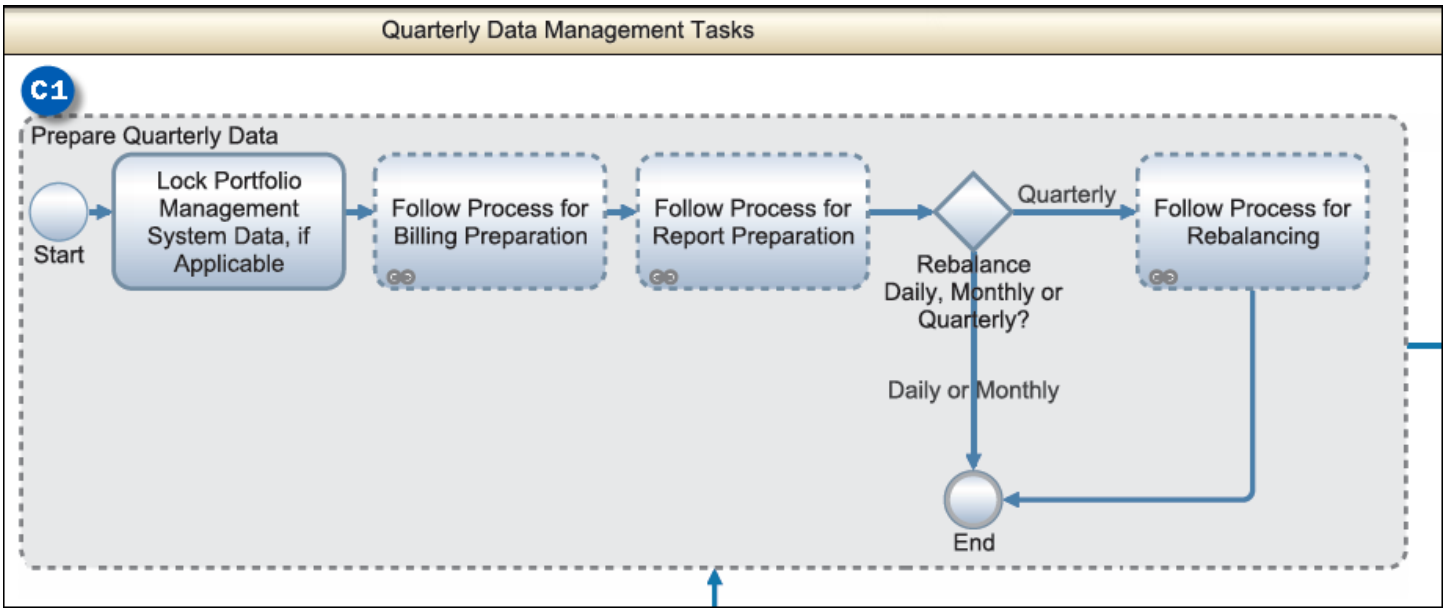


Monthly Data Management Tasks: Prepare Monthly Reporting, Billing and Rebalancing Data sub-process

DATA MANAGEMENT PROCESS OVERVIEW

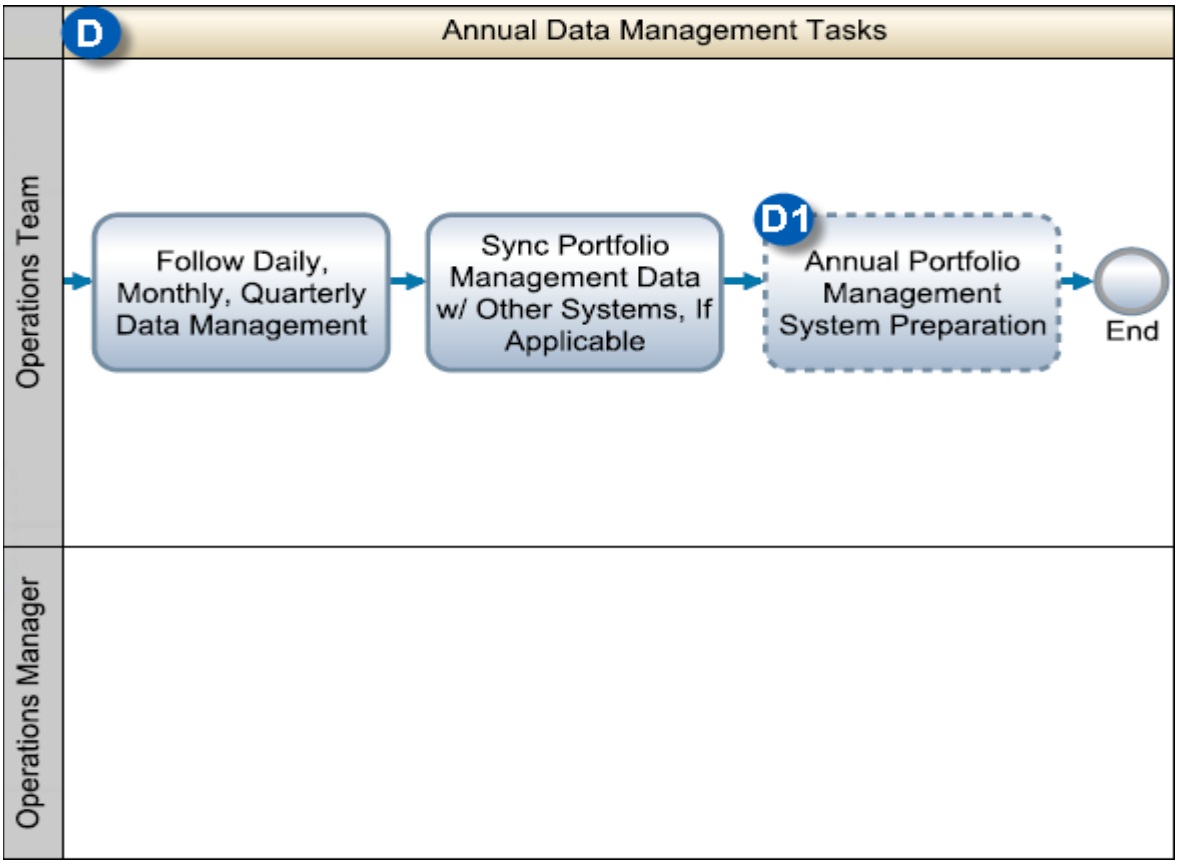


The Quarterly Data Management Milestone Diagram

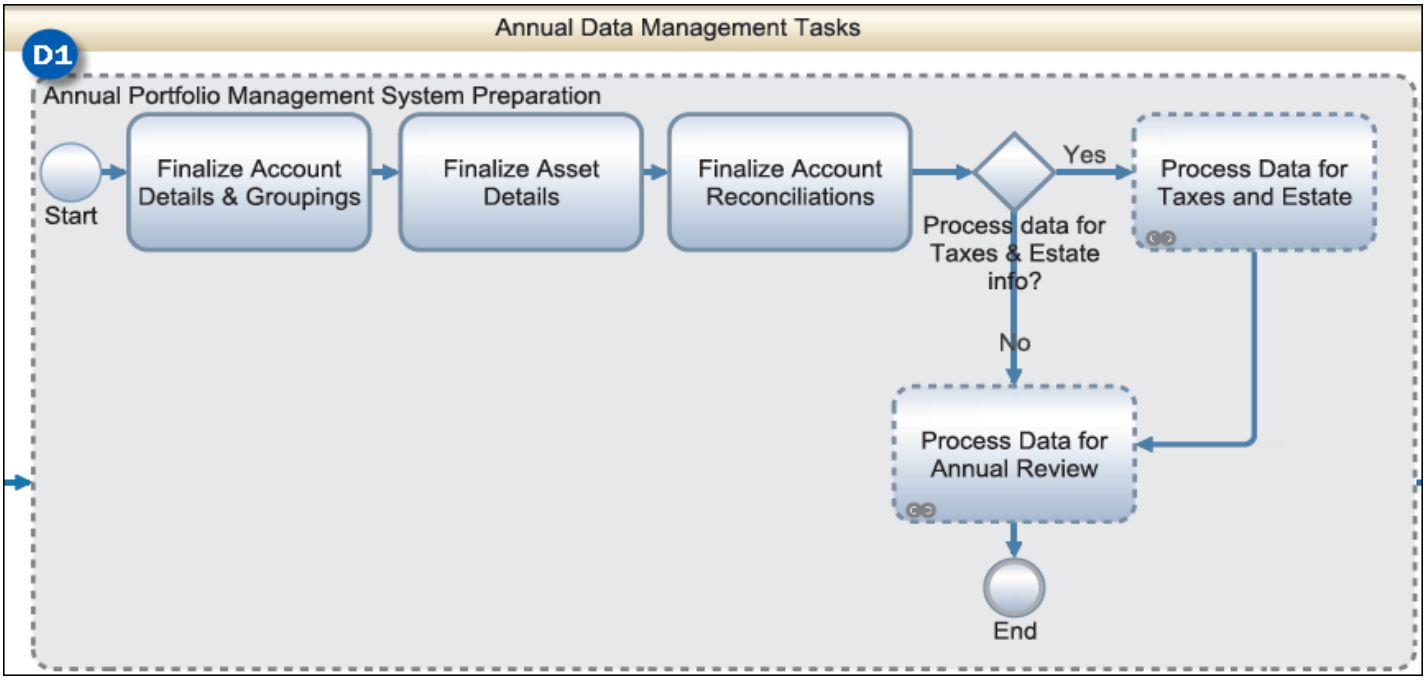


The Quarterly Data Management Tasks: Prepare Quarterly Data sub-process

DATA MANAGEMENT PROCESS OVERVIEW



The Annual Data Management Milestone Diagram



The Annual Data Management Tasks: Annual Portfolio Management System Preparation sub-process

DATA MANAGEMENT PROCESS OVERVIEW

HIGH-LEVEL PROCESS CHECKLIST

The Data Management process checklist shows the workflow tasks in a checklist format rather than a process map or diagram. The checklist helps you focus on gathering all the information required to complete the workflow effectively. This checklist serves as a best practice recommendation only. Adjustments may be needed to suit the needs of your firm.

The checklists below are broken into three phases for daily, monthly and quarterly task lists. The task lists are cumulative—all daily tasks must be completed before moving on to the monthly tasks and all monthly tasks must be completed before moving on to the quarterly tasks.

DAILY DATA MANAGEMENT STEPS

STEP	ROLE
☐ Get Data from Custodian • Connect to the website or application • Review and download data files for Portfolio Management Software • Repeat for each custodian	Operations Team
☐ Process Custodian Data in Portfolio Management System • Convert and review data files in Portfolio Management Software • Post data into Portfolio Management Software • Edit transactions or add supplemental transactions, as needed • Reconcile data in Portfolio Management Software with custodian	Operations Team
☐ Review details of Accounts and Assets and update as needed	Operations Team
☐ Synchronize Portfolio Management data with other applications, as necessary	Operations Team
☐ Rebalance portfolios if you do so daily.	Operations Team

DATA MANAGEMENT PROCESS OVERVIEW

MONTHLY DATA MANAGEMENT STEPS

STEP	ROLE
☐ Complete all the daily data management tasks that apply to your firm.	Operations Team
☐ Complete the data aggregation process, as applicable for your firm. For more information about the data aggregation process, review the Workflow Process Package: Data Aggregation document.	Operations Team
☐ Update manually priced securities for separately managed assets, alternative securities or other assets not priced through the data download, as applicable.	Operations Team
☐ Validate data posted through month-end: • Verify all posting is complete – all files should have all data posted into the Portfolio Management System • Verify all accounts reconcile – all data in the Portfolio Management System should reconcile with the custodian • Verify all account and asset details are complete – any data you add to account or asset details should be added or updated and verified using reports or tools to see all of them at once.	Operations Team
☐ Update index/benchmark data for performance reporting.	Operations Team
☐ If you split accounts into monthly reporting, billing and/or rebalancing cycles, follow the processes to produce billing statements, reporting and rebalance trades for the current cycle. For more information about these processes, see: • Client Billing workflow package • Portfolio Reporting workflow package • Portfolio Rebalancing workflow package	Operations Team



Note

If you have a large enough client base, consider splitting your clients into three groups so that you can do quarterly reporting for a third of the clients each month. This way, you are performing the billing, reporting and rebalancing functions monthly, but for a third of your clients at a time.

☐ If applicable, synchronize portfolio management data with other systems to include monthly updates	Operations Team

DATA MANAGEMENT PROCESS OVERVIEW

QUARTERLY AND ANNUAL DATA MANAGEMENT STEPS

STEP	ROLE
☐ Complete daily and monthly tasks	Operations Team
☐ If applicable, synchronize portfolio management data with other systems to include monthly updates	Operations Team
☐ Validate Portfolio Management System Data	Operations Manager
☐ Post data from the custodian into the portfolio management system	Operations Team
☐ Follow the processes to produce billing statements, reporting and rebalance trades.	Operations Team
☐ Finalize any account information, as needed	Operations Team
☐ Prepare reports and account information for annual meeting or special services meetings	Operations Team

Note

At a high level, the operations manager should spot check the account values, returns and billing for the period. See the Data Validation Checklist section on page 14 for suggestions of data to verify or check.

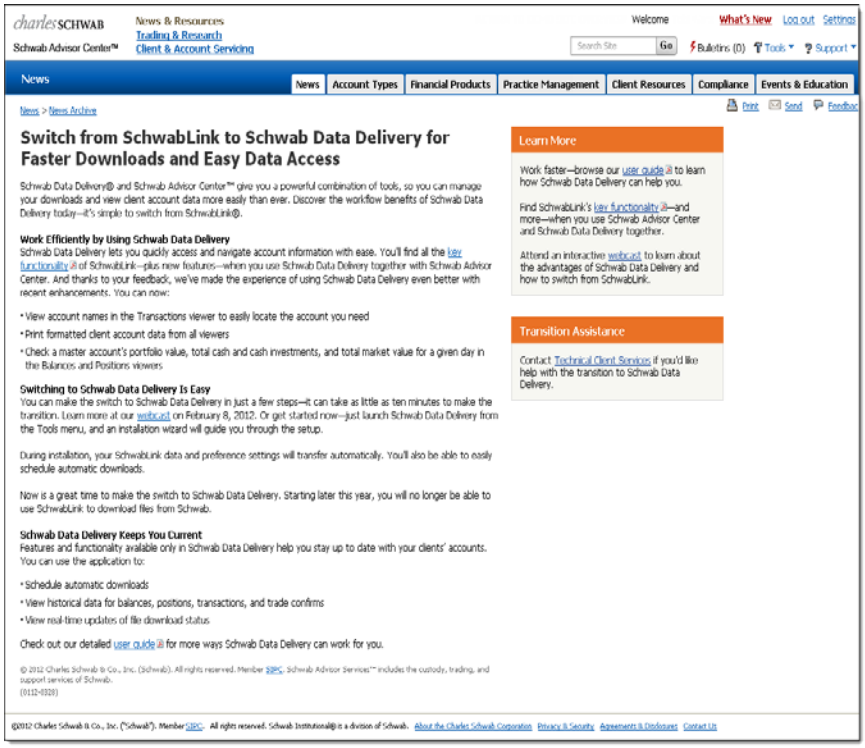
ADDITIONAL RESOURCES

A large portion of the data management activities occur in a portfolio management system application. Specific details on data processing and management depend on the portfolio management system you are currently using. Contact the software vendor of your portfolio management system for detailed instructions for processing and managing your data.

Downloading data files for your clients from Charles Schwab & Co. can be done using the Schwab Data Delivery® application.

In this package, a few tools and templates are highlighted that you might find helpful for the workflow documented in this packet, including:

- **Using Schwab Data Delivery** starting on page 13 – find resources on setting up, configuring and using Schwab Data Delivery to download data files for use in your portfolio management system application. You can also get information transitioning from SchwabLink™ to Schwab Data Delivery and a feature comparison of the applications.
- **Data Validation Checklist** starting on page 14 – establish a best practice checklist for the operations manager to focus in on certain data points when doing monthly, quarterly, or annual data validation.



- **Tools to Help You Produce Analytical Reports** starting on page 15 – Learn more about useful reports found in most portfolio management systems that can help you validate the accuracy of your client's performance and information prior to generating the client reports.

ADDITIONAL RESOURCES

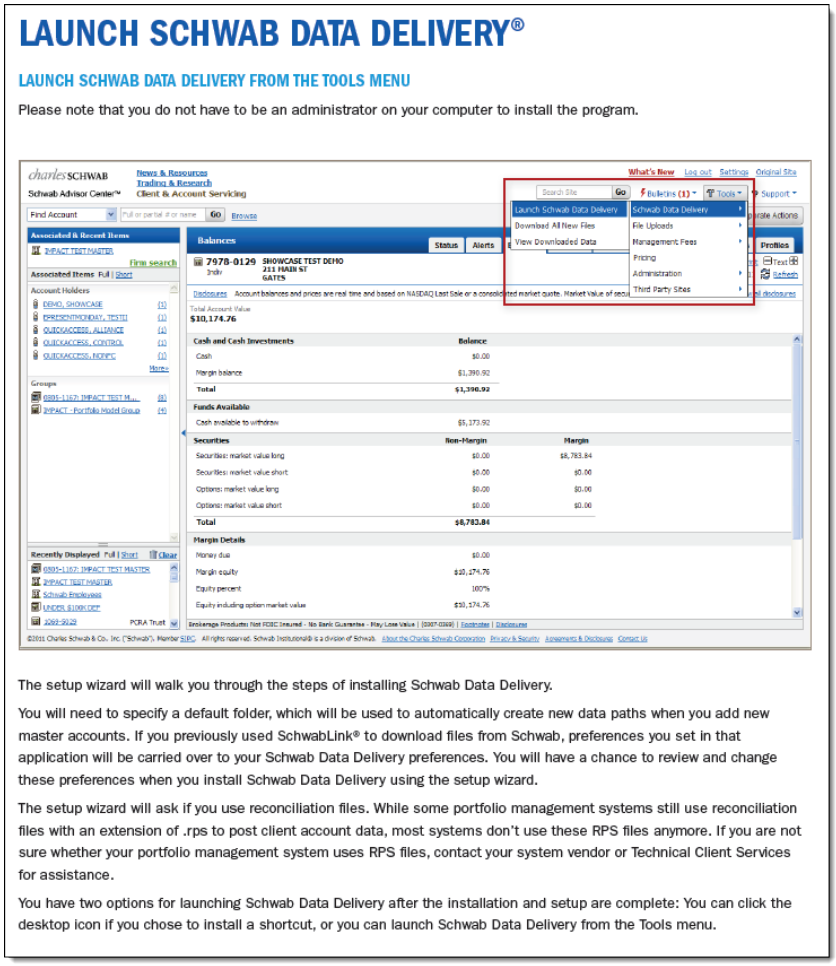
USING SCHWAB DATA DELIVERY

Schwab Data Delivery is an application provided by Schwab Advisor Services to help you manage downloads and view the contents of those downloaded files.

If you are a current user of SchwabLink and have not migrated to Schwab Data Delivery, take the time to review the Functionality Comparison Chart to see the similarities between the two applications as well as a list of features only available in Schwab Data Delivery.

Also, if you are considering or in the process of migrating, review the complimentary webcast on transitioning from Schwablink to Schwab Data Delivery. To access the class, go to the Switch from SchwabLink to Schwab Data Delivery for Faster Downloads and Easy Access news article, and then click the link for the webcast in the Learn More box on the right.

Consult the comprehensive Schwab Data Delivery user guide Managing Data File Downloads with Schwab Data Delivery for more detailed information about the features, including scheduling downloads and the various data file views.



LAUNCH SCHWAB DATA DELIVERY®

LAUNCH SCHWAB DATA DELIVERY FROM THE TOOLS MENU

Please note that you do not have to be an administrator on your computer to install the program.

The setup wizard will walk you through the steps of installing Schwab Data Delivery.

You will need to specify a default folder, which will be used to automatically create new data paths when you add new master accounts. If you previously used SchwabLink® to download files from Schwab, preferences you set in that application will be carried over to your Schwab Data Delivery preferences. You will have a chance to review and change these preferences when you install Schwab Data Delivery using the setup wizard.

The setup wizard will ask if you use reconciliation files. While some portfolio management systems still use reconciliation files with an extension of .rps to post client account data, most systems don't use these RPS files anymore. If you are not sure whether your portfolio management system uses RPS files, contact your system vendor or Technical Client Services for assistance.

You have two options for launching Schwab Data Delivery after the installation and setup are complete: You can click the desktop icon if you chose to install a shortcut, or you can launch Schwab Data Delivery from the Tools menu.

ADDITIONAL RESOURCES

DATA VALIDATION CHECKLIST

At a high level, we recommend the operations manager spot check the account values, returns and billing for the period in the Portfolio Management System. Some methods of validating data in the Portfolio Management System are:

- Running firm-wide reports displaying asset values for accounts
- Reviewing or searching report files for accounts to locate data outside of a threshold
- Exporting data to sort and filter the data to locate items outside of a threshold

Some specific items the data manager can look for are:

STEP	PURPOSE
☐ A list of accounts with key detail information included on the report or export	Find missing account data that might be necessary for creating client reporting sets
☐ A list of assets with key detail information included on the report or export	Find missing asset data that might affect returns or how an asset appears on the report
☐ A list of assets with prices for certain dates or date ranges	Find missing price files or asset values that could negatively impact or skew performance returns
☐ A list of index or benchmark returns associated with the assets included in the current reporting period.	Find missing or incorrect index or benchmark returns
☐ A list of returns for the set of clients for which you are preparing reports including at least the current reporting period, previous reporting period and since inception of the portfolio.	Find data anomalies attributed to missing or invalid data, such as missing prices or incorrect transactions that could inflate returns.

ADDITIONAL RESOURCES

TOOLS TO HELP YOU PRODUCE ANALYTICAL REPORTS

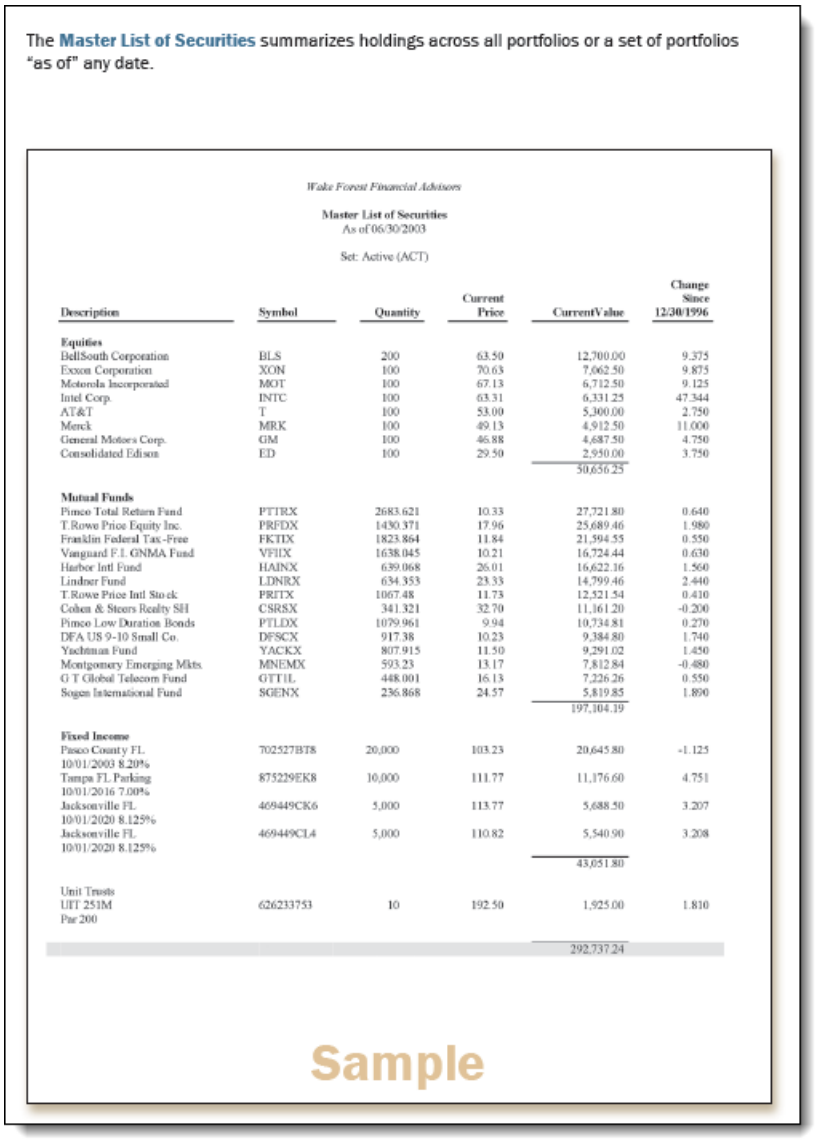
Important

The supporting documentation referenced in this package and provided by Schwab Performance Technologies website is meant to be a guide to help you understand the types of reports to prepare for the client reporting cycle. If you are using a portfolio management system other than PortfolioCenter, contact your provider for guidance on reports and best practices.

Prior to generating client reports, use the global analytical reports available in your portfolio management system to verify accuracy of performance numbers and to identify and update client information that is missing or inaccurate. The following are some of the many helpful reports and informational tools that may be available to you:

- Sample Global Performance Review – use this document to help you understand the Global Performance Review report which allows you to compare and troubleshoot portfolio returns prior to generating client reports.
- Sample PortfolioCenter Master List of Securities – use this document to help you construct the report internally.

The **Master List of Securities** summarizes holdings across all portfolios or a set of portfolios "as of" any date.



Wake Forest Financial Advisors

Master List of Securities
As of 06/30/2003

Set: Active (ACT)

Description	Symbol	Quantity	Current Price	Current Value	Change Since 12/30/1996
Equities					
BellSouth Corporation	BLS	200	63.50	12,700.00	9.375
Exxon Corporation	XON	100	70.63	7,062.50	9.875
Motorola Incorporated	MOT	100	67.13	6,712.50	9.125
Intel Corp.	INTC	100	63.31	6,331.25	47.344
AT&T	T	100	53.00	5,300.00	2.750
Merck	MRK	100	49.13	4,912.50	11.000
General Motoes Corp.	GM	100	46.88	4,687.50	4.750
Consolidated Edison	ED	100	29.50	2,950.00	3.750
				50,656.25	
Mutual Funds					
Pimco Total Return Fund	PTTRX	2683.621	10.33	27,721.80	0.640
T.Rowe Price Equity Inc.	PRFDX	1430.371	17.96	25,689.46	1.980
Franklin Federal Tax-Free	FKTIX	1823.864	11.84	21,594.55	0.550
Vanguard F.I. GNMA Fund	VFIIX	1638.045	10.21	16,724.44	0.630
Harbor Intl Fund	HAINX	639.068	26.01	16,622.16	1.560
Lindner Fund	LDNRX	634.353	23.33	14,799.46	2.440
T.Rowe Price Intl Stock	PRITX	1067.48	11.73	12,521.54	0.410
Cohen & Steers Realty SH	CSRSX	341.321	32.70	11,161.20	-0.200
Pimco Low Duration Bonds	PTLDX	1079.961	9.94	10,734.81	0.270
DFA US 9-10 Small Co.	DFSCX	917.38	10.23	9,384.80	1.740
Yachtman Fund	YACKX	807.915	11.50	9,291.02	1.450
Montgomery Emerging Mkts	MNEMX	593.23	13.17	7,812.84	-0.480
G T Global Telecom Fund	GTTIL	448.001	16.13	7,226.26	0.550
Sogen International Fund	SGENX	236.868	24.57	5,819.85	1.890
				197,104.19	
Fixed Income					
Pasco County FL 10/01/2003 8.20%	702527BT8	20,000	103.23	20,645.80	-1.125
Tampa FL Parking 10/01/2016 7.00%	875229EK8	10,000	111.77	11,176.60	4.751
Jacksonville FL 10/01/2020 8.125%	469449CK6	5,000	113.77	5,688.50	3.207
Jacksonville FL 10/01/2020 8.125%	469449CL4	5,000	110.82	5,540.90	3.208
				43,051.80	
Unit Trusts					
UIT 251M Par 200	626233753	10	192.50	1,925.00	1.810
				292,737.24	

Sample