CCH Axcess™

At the Center of the Firm in Motion

TaxTransfer

User Guide

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Chapter 1

INTRODUCTION TO TAXTRANSFER

TaxTransfer gives your firm the ability to import and export data in batches from CCH Axcess Tax returns in an Extensible Markup Language (XML) format. Worksheet view data can be imported or exported. You also can export the data that appears in government forms or use the white-paper statement export to extract the underlying data and calculations for the entries in a government form.

Imports and exports are performed using application programming interfaces (APIs) that are part of the CCH Axcess™ Open Integration Kit (OIK).

Using TaxTransfer, your firm can:

- Integrate data from your internal systems into Tax returns
- Fully customize your imports and exports
- Automate your firm's imports and exports

Figure 1.1 illustrates how data flows into Tax when you use TaxTransfer.
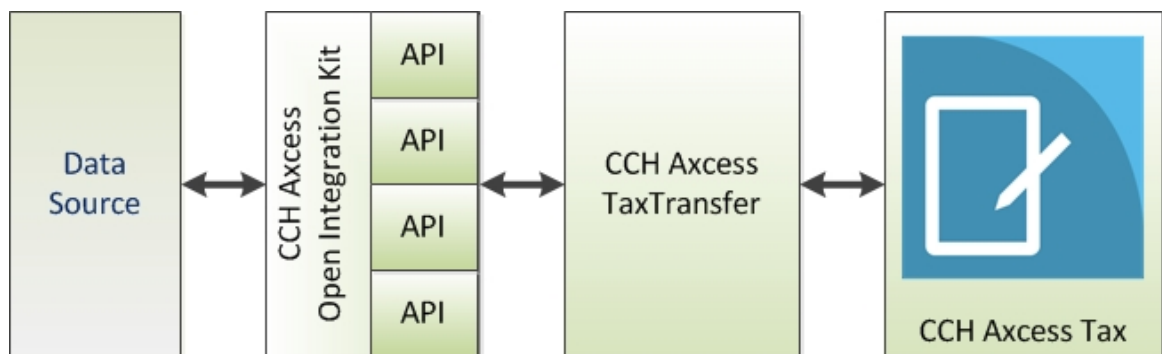
Figure 1.1 - TaxTransfer information flow

> ⚑ **Important**: Your firm must perform custom programming to connect your internal systems with the OIK. See the OIK Help for information about connecting your system to the OIK. You can access the Help on a computer that has the OIK installed by selecting **All Programs > CCH Axcess Open Integration Kit v2.5 > Help**.

Scope of this Guide

This guide provides background information about CCH Axcess Tax that will help you create your XML imports and exports. No previous knowledge of Tax is assumed. In particular, the guide explains the structure of data in a Tax return. Understanding this structure is important because the XML data files used by TaxTransfer use the same structure.

This guide also describes the import and export options that you can select in TaxTransfer. The appendices at the end of the guide include examples that demonstrate the impact of applying these options.

This guide assumes that you understand the basic principles of XML. Three schema documents are available to help you define the structure and content of your TaxTransfer XML documents. These three schema documents are:

- **Payload.xsd**. Defines the information and structure for XML documents containing tax return data to be imported into Tax. Data exported from Tax also conforms to the Payload.xsd.

- **TaxDataExportOptions.xsd**. Defines the options used to export tax returns.

- **TaxDataImportOptions.xsd**. Defines the options that are required to perform an import.

You can find the schema documents at one of the following locations on a computer where you have Tax installed:

- **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

- **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

> ⚑ **Important**: This guide does not include information about connecting your internal systems to the OIK or invoking the APIs included in the OIK. For information on these topics, please see the OIK Help. You can access the Help on a computer that has the OIK installed by selecting **All Programs > CCH Axcess Open Integration Kit v2.5 > Help**.

TaxTransfer Capabilities

You can use TaxTransfer to process Tax worksheet and government form data in batches.

- Worksheet imports and exports are supported for all federal, state, and city returns, beginning with tax year 2011.

- Government form exports are supported from any government form beginning with tax year 2011 that displays in the government forms tree. Government form imports are not available.

- White-paper statement exports are supported for all government forms that contain statement data.

> ⚑ **Constraint**: Data cannot be imported into read-only fields.

Batch Specifications

TaxTransfer can import or export data for up to 200 returns in a single batch. The combined size of the uncompressed raw XML files in a batch must be 80 MB or less.

Export Capabilities

TaxTransfer allows you to choose the returns, worksheets, government forms, and fields from which you want to export data. Some of the options available to you are:

- **Returns**. You can export single returns or batches of returns.

- **Worksheets**. You can export data from any visible worksheet field on federal, state, and city worksheets beginning with tax year 2011.

- **Government forms**. You can export data from any government form that displays in the government forms tree. You can also use a white paper statement export to access the details behind entries in a government form.

- **Fields**. You can select specific fields to export. You also can specify the information to export for a field. For example, you can export:

  - **Field values**. You can choose to include all fields or only fields with data.

  - **Fields without their values**. If you export a return without including the field values, TaxTransfer effectively creates a blank template that you can use as a guide for planning future imports and exports.

  - **Metadata associated with a field**. If needed, you can export field metadata.

  - **Field lookup codes**. The ability to export lookup codes is especially helpful if you will design custom imports. If you export a blank return template and include lookup codes in the export, you will have a reference document that shows you the available options that can be imported into each field.

    > 🗐 **Note**: Exporting metadata and lookup codes can significantly increase the size of the output file and the time required for the export.

Each return exported in a batch is exported to its own XML file. All of the XML files in the batch are compressed and packaged together in a single ZIP file. Data in excess of the 80 MB limit for a batch is skipped. The export log file contains information about the excluded data.

See *Chapter 3: Exporting Data* on page 23 for more information.

> 📰 **Note**: To export data from password-protected returns, you must provide the password along with the return ID in the XML export document. See *Chapter 3: Exporting Data* on page 23.

Import Capabilities

Worksheet imports are supported for all federal, state, and city returns, beginning with tax year 2011. Data can be imported into any worksheet field that can be accessed and manually edited. Government form imports are not available.

You can use TaxTransfer imports, to do any of the following:

- Create new returns for new clients
- Create new returns for existing clients
- Update existing returns for existing clients
- Create new versions of existing returns

See *Chapter 4: Importing Data* on page 39 for more information.

Application Controls

Tax provides various security controls for user accounts and their access. These controls also apply to users who process returns using TaxTransfer.

- User login IDs are assigned by the application administrator. IDs must be unique and include a minimum of six characters. The IDs can contain alpha and numeric characters, the @ symbol, periods, hyphens, and underscores. Once a user ID is made inactive, it cannot be reused. User IDs expire after 60 days of inactivity.

- Passwords must be at least eight characters long and are case sensitive. Password strength and complexity are required. Users can reset their passwords on the login screen if they can answer the security questions they set up at first login.

  Administrators can set up passwords to expire every 30, 45, 60, 90, or 180 days. The administrator can also restrict password reuse. Passwords are stored internally using a SHA-256 hash to prevent password discovery.

- Resource permissions can be assigned through security groups and client access groups. Permissions also can be assigned to particular tax returns. A read-only audit trail of user activity is maintained automatically. Staff members who do not have appropriate permissions cannot use TaxTransfer to process returns.

  TaxTransfer import and export processing is reflected in the tax return history. The history also indicates which users processed returns using TaxTransfer. Various controls in TaxTransfer prevent users from accidentally importing data into the wrong tax return.

- Encryption is applied to all Tax data while it is at rest. During imports and exports, Tax data is encrypted both at rest and while in transit to or from the user workstation.

Information about other controls that are used to protect the data in the hosted application can be provided upon request.

Credentials

You must supply valid CCH Axcess credentials to perform an import or export. Your credentials must include the necessary rights to perform the tasks that TaxTransfer will perform as part of processing. For example, if you are importing data to create new returns for new clients, your credentials must include the ability to create clients and returns.

Credentials are handled with silent authentication through the OIK. See the OIK help for information about silent authentication.

Concurrent Users

Multiple users can use TaxTransfer to process returns at the same time. However, only one user or process can access a single return at the same time. If a return is in use when TaxTransfer attempts to access it, the import or export for that return will fail, and an error is added to the processing log. The rest of the batch can continue processing.

The following examples describe situations when an export for a specific return will fail.

- Sharon submits a batch export request that includes the return Joe has open. TaxTransfer cannot export data from the return Joe has open.

- Tom inadvertently leaves a return open that is included in a batch export that he submits. TaxTransfer cannot export data in the open return.

- Karen submits two XML files for import. Both files include data to be imported into the same return. While TaxTransfer is importing data from the first XML file into the return on one server, TaxTransfer attempts to access the same return on a second server so it can import the data from the second XML file. TaxTransfer cannot import data for that return on the second server, as the return is already in use on the first server.

Validation

TaxTransfer handles XML validation and data validation in separate processes. These separate processes are described in the following two sections.

XML Validation

TaxTransfer validates the syntax and file structure of your XML files when you submit them for processing. If the XML contains errors, messages describing the errors and their locations will display in the client application. No batches are created when these types of errors occur. You can correct the XML errors and then resubmit the file.

We recommend using the schema documents provided with TaxTransfer to validate your XML documents before submitting the files for processing. These schema documents are available at the following location on the computer where you have Tax installed:

- **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources
- **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

Data Validation

Once a file has passed XML validation, it is passed to the TaxTransfer processor, where data validation occurs. All data validation errors are logged. The error log is accessible through either Batch Manager or through the OIK.

- For exports, errors which prevent a field from being exported are logged, and the worksheet is skipped.
- For imports, you can choose how you want to handle data errors. See *Setting Error Handling Options* on page 59 for more information.

Using Batch Manager with TaxTransfer

Batch Manager is a module in CCH Axcess. You can use Batch Manager to track the status of TaxTransfer jobs and to access the zipped files created by an export.

> **Note**: You can also access exported files using the DownloadTaxReturnDataXML API in the OIK. See the OIK Help for information on invoking this API.

To open Batch Manager, do the following:

1. Open the CCH Axcess Dashboard.

2. Click **Application Links** on the navigation panel.

3. Click **Batch Manager** under Tax. The Job Status window displays.

Batches are identified by a combination of the job type and the time stamp when the job was submitted. To view detailed information about the success or failure of a particular batch, double-click the job in the Batch Manager list. The Job Detail Report displays in a separate window. Each return that was part of the batch is listed, along with the following information:

- **Client ID**. Lists the client ID of the return.

- **Tax Year**. Indicates the tax year for the return.

- **Return Type**. Displays the tax system abbreviation for the return. See *Return IDs* on page 10 for a list of the tax system abbreviations.

- **Return Version**. Displays the version number of the selected return.

- **Mode**. Indicates whether the data was imported or exported.

- **Status**. Indicates the status of the import or export for that return

- **Comments**. Indicates whether the import or export succeeded or failed. Click the link in the Comments column to view information about specific worksheets or fields where errors occurred.

To download the zipped file created by an export, click the link for the job in the Download column. See the Batch Manager help file for detailed instructions for using the program.

> **Note**: In Batch Manager, you can verify if an import or export for a particular return was successful. However, you cannot verify that an import from a specific XML file was successful. To view status information for a specific XML file, you must pass the batch GUID as a parameter to the GetBatchDetail API provided with the OIK. See the OIK Help for information on invoking this API.

Chapter 2

UNDERSTANDING TAX RETURNS

The structure of TaxTransfer XML files mimics the structure of Tax returns. This chapter provides background information to help you familiarize yourself with Tax returns. We recommend reading this chapter before attempting XML imports and exports.

Terminology

The terms listed below are commonly used when discussing Tax and TaxTransfer. Understanding these terms can help you create your imports and exports successfully.

Term	Explanation
details grid or details form	A grid or form containing the underlying source data for a summary grid. See *Grids* on page 18.
entity number	An identifying number assigned to an entity. Each entity on a grid must have a unique entity number. Entity numbers do not need to be unique within a return. **Example**: A taxpayer has seven rental properties. Only one rental property can be assigned entity number 1. However, entity number 1 can also be used for a non-rental property entity, such as a foreign tax credit income category.
government forms	Forms to be filed with taxing authorities.
grid	A table of data. Grids can be standalone (non-summary) grids, or they can be summary grids which compile their data based on underlying detail grids or forms. See *Grids* on page 18.

Term	Explanation
lists	Sub-schedules of numeric detail that are summed, with the total inserted in a selected field. Lists cannot be imported or exported with TaxTransfer. The totals, however, can be imported and exported like other field data.
lookup field	A field that contains a predefined list of values to select from. **Example**: The *State code* lookup field lists abbreviations for the U.S. states, Canadian provinces, and various military and foreign locales.
metadata	Descriptive information about a worksheet, section, grid, or field.
note	Free-form text that is associated with a return or field. Notes cannot be imported or exported with TaxTransfer.
repeaters	Worksheets, sections, or fields that have more than one instance in a return. **Example**: The Dependents grid of the General > Basic Data worksheet for Individual returns allows for listing multiple dependents. The fields in this grid (First name, Middle initial, Last name, etc.) are examples of repeater fields, because they are repeated for each dependent.
section	A portion of a worksheet. Worksheet sections are identified with names and ID numbers. See *Worksheet Sections* on page 17.
summary grid	Worksheet grids that display compiled data drawn from a "details" grid or form. See *Grids* on page 18.
tick marks	A visual cue inserted in a Tax field to indicate that it has been reviewed. Tick marks are removed from the affected fields or worksheets when data is imported into those fields or worksheets.
Tax	The Tax module of CCH Axcess.
Tax system	A type of tax return that can be processed by Tax. The tax systems are: 1040 - Individual 1120S - S Corporation 1041 - Fiduciary 5500 - Employee Benefit Plan 1065 - Partnership 706 - Estate and 709 Gift 1120 - Corporation 990 - Exempt Organization

Term	Explanation
white paper statement	Statements that show the underlying detail behind government forms. Each statement is associated to a specific line on a government form.
worksheet	Documents used in Tax to gather data for a return. When a return is calculated, data entered in the worksheets is processed, and the resulting calculated information is inserted into government forms. See *Return Structure in Worksheet View* on page 15.

Return IDs

Each Tax return is identified by a unique return ID. The ID is structured as follows:

{TaxYear}{ReturnType}:{ClientID}:{ReturnVersion}

The individual components that make up the ID are explained below.

Placeholder	Description
TaxYear	Four-digit tax year for the given return.
ReturnType	Abbreviation identifying the tax system for the return. The abbreviations are as follows: I = Individual S = S Corporation F = Fiduciary K = Employee Benefit Plan P = Partnership Y= Estate and Gift C = Corporation X = Exempt Organization
ClientID	Unique ID assigned to the client. Client IDs can include up to 15 alphanumeric and special characters. If the firm uses sub-IDs, a sub-ID of up to five characters can be added to the client ID, with a period (.) as a separator. Sub-IDs are unique for each client ID. See *About Client IDs and Sub-IDs* on the facing page.
ReturnVersion	Version number for the return. Each return can have up to nine versions. See *Creating a New Version of an Existing Return* on page 52.

The fields that make up the return ID are used in the return headers of TaxTransfer XML data documents. In the return header, each component is broken out separately, rather than being used together as a single entity.

About Client IDs and Sub-IDs

Client ID is a required field in CCH Axcess. Client sub-IDs can be enabled at the firm level. If client sub-IDs are enabled, they can be either mandatory or optional, depending on the firm's preferences.

To view the client sub-ID options for your firm:

1. Open the CCH Axcess Dashboard.

2. Click **Application Links** on the navigation panel.

3. Click **Settings and defaults** under Firm.

4. Click **Setup Defaults** in the navigation panel.

5. Note the selected options in the Client ID Structure section.

   - **Client ID and Client sub-ID**. If this option is selected, both client IDs and sub-IDs can be used. A client sub-ID will not be required unless a default sub-ID is listed.

   - **Default sub-ID**. If there is an entry in this box, then sub-IDs are required. The default sub-ID entered here is automatically added to a client ID if a sub-ID is not entered manually for the client. This option is only available if the *Client ID and Client sub-ID* option is selected.

   - **Client ID only**. If this option is selected, sub-IDs cannot be added for clients.

Client ID and Sub-ID Specifications

Client IDs can include up to 15 alphanumeric and special characters. If the sub-ID option is enabled, sub-IDs can add up to 5 alphanumeric and special characters. In Tax, the sub-ID is concatenated at the end of the client ID, with a period (.) as a separator.

> **Note**: Periods are permitted characters in the client ID field. If your firm uses periods in client IDs **and** has sub-IDs enabled, special care should be taken when designing your imports to ensure you receive the expected results. See *How TaxTransfer Manages Client IDs and Sub-IDs During Import* on page 46.

Client ID and Sub-ID in TaxTransfer XML Files

In TaxTransfer XML files, the client ID and sub-ID fields are combined in the ClientID attribute. A period separates the client ID from the sub-ID.

> **Example**: A client with ID 97429 and sub-ID 00001 would be represented as <ClientID="97429.00001"> in the XML files.

Note: The characters after the period are a sub-ID only if the sub-ID option is enabled in the CCH Axcess firm settings. If the sub-ID option is not enabled, then all of the characters in the ClientID attribute, including the period and the characters following the period, are considered to be the client ID.

Client IDs that exceed 15 characters and sub-IDs that exceed five characters are truncated.

Views

Tax offers two ways to view return data: in worksheets and in government forms. It is important to understand the differences between these two ways of looking at returns before creating TaxTransfer imports and exports.

Worksheet View

Worksheets are forms that the firm's staff use to gather data for the tax return. Worksheets are not filed with taxing authorities. Worksheet data is usually entered manually or rolled forward from a prior-year return for the same client. Figure 2.1 shows an example of a worksheet with data.

Figure 2.1 - Worksheet View

Government Forms View

Government forms are the documents that are filed as part of a tax return. When you calculate a return, the data from the return's worksheets is automatically transferred to the appropriate government forms. Some, but not all, government form fields allow you to manually override the data transferred from worksheets. Figure 2.2 shows an example of a government form.

Figure 2.2 - Government form

> ⚑ **Important**: The field references and document structures for worksheets and government forms are different. Take care to use the appropriate references when you design your TaxTransfer imports and exports.

White-paper statements are an alternate way to view government forms data. Statements display the underlying data that make up the entries on a government form. For example, a statement could include descriptions, amounts, dates, and calculations. Each statement is associated with a specific line on a government form.

The following images show an example of a line in a government form and its corresponding white-paper statement.

13	Charitable deduction (from Schedule A, line 7)	13	
14	Attorney, accountant, and return preparer fees. If only a portion is deductible under section 67(e), see instructions	14	1344.
15 a	Other deductions (attach schedule). See instructions for deductions allowable under section 67(e) Stmt	15a	1671.
b	Net operating loss deduction. See instructions	15b	
16	Add lines 10 through 15b	16	14993.
17	Adjusted total income or (loss). Subtract line 16 from line 9 17 237951.		
18	Income distribution deduction (from Schedule B, line 15). Attach Schedules K-1 (Form 1041)	18	240951.

Figure 2.3 - The highlighted line for attorney, accountant, and return preparer fees amount as it appears in the government form.

```
Form 1041              Allocation of Attorney, Accounting Fees      Statement 9


Ratio of Attorney, Accounting Fees Attributable to Tax-Exempt

 1. Tax-Exempt Income                                               42.
 2. Gross Income                                               270017.
 3. Capital Gains
 4. Total Gross Income (Lines 1, 2, 3)                         270059.
 5. Allocation Ratio (Line 1 / Line 4)                        .000155522


                                                 Direct        Indirect
Description                                      Amount        Amount
_____

Attorney, Accountant and Return Preparer Fees      900.
Attorney, Accountant and Return Preparer Fees                    444.


Summary of Attorney, Accounting, Return Preparer Fees


Allowable Direct Attorney & Accounting Fees                      900.
   Indirect Attorney & Accounting Fees            444.
     Less: Indirect Fees Allocable to Tax-Exempt    0.
       (           444.    X    .000155522)
Allowable Indirect Attorney & Accounting Fees                    444.

Total to Form 1041, Line 14                                     1344.
```

Figure 2.4- The white-paper statement for *Line 14 - Attorney, accountant, and return preparer fees* provides detailed descriptions and calculation information for the amount reported on the government form.

Return Structure in Worksheet View

TaxTransfer uses the return structure as the basis of imports and exports, so being familiar with the structure can help you plan your imports and exports. Figure 2.5 illustrates the relationship between the various components that make up a tax return in Worksheet View.
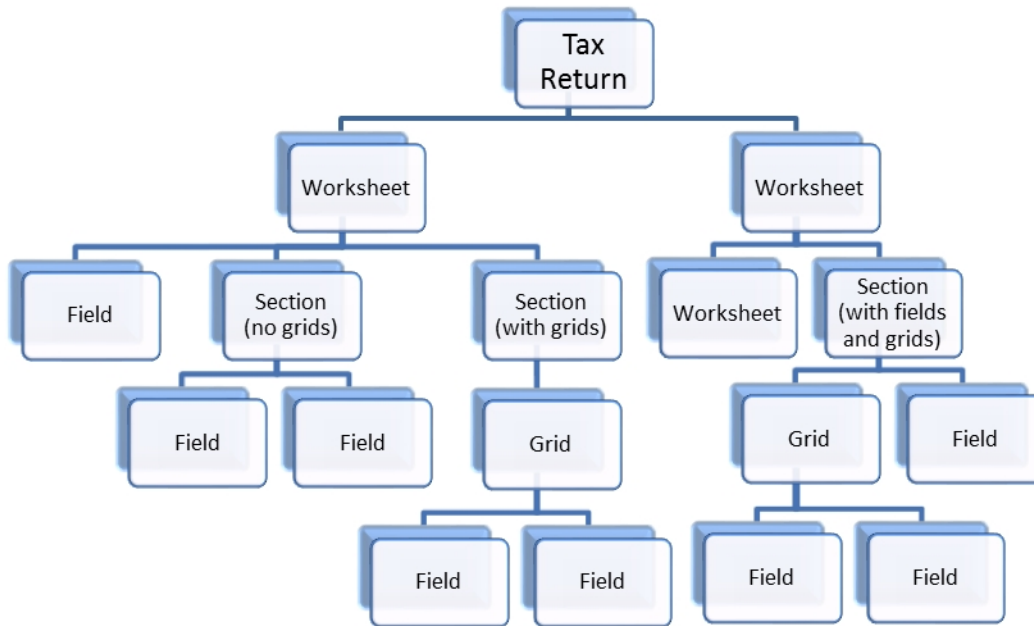
Figure 2.5 - Relationship between worksheet components in a tax return

This figure demonstrates the following characteristics of returns:

- **Tax returns** can include multiple worksheets.

- **Worksheets** can be divided into multiple sections. Some worksheets are "parent" worksheets that contain other "child" worksheets.

- **Sections** can include individual fields, grids, or a combination of both fields and grids.

- **Grids** include multiple fields. Most grids are standalone items. However, there are some grids that present subsets of data pulled from other detail grids. These grids are called summary grids. Summary grids are not represented in Figure 2.5.

About Worksheets

Worksheets are organized in Tax by taxing authority and category. A worksheet's location in the collection of worksheets is described in a hierarchical path such as the following:

Federal\General\Basic Data

In the XML documents you use with TaxTransfer, you will use the hierarchical path for a worksheet as its identifier. For example, the path shown above specifies a federal worksheet

in the General\Basic Data category. The backward slash (\) is used between each level of the hierarchy.

You can determine the hierarchical location of a worksheet in the Tax Worksheet Tree. This tree displays in the navigation pane to the left of a worksheet when you are using Worksheet View. By default, this tree lists all of the worksheets available for the open return, organized by tax authority. Figure 2.6 shows the location of the Federal\General\Basic Data worksheet in the Worksheet Tree.

The numbered items beneath the Basic Data worksheet are sections of the worksheet. Sections are not included in the worksheet hierarchy. See *Worksheet Sections* on the facing page for more information.
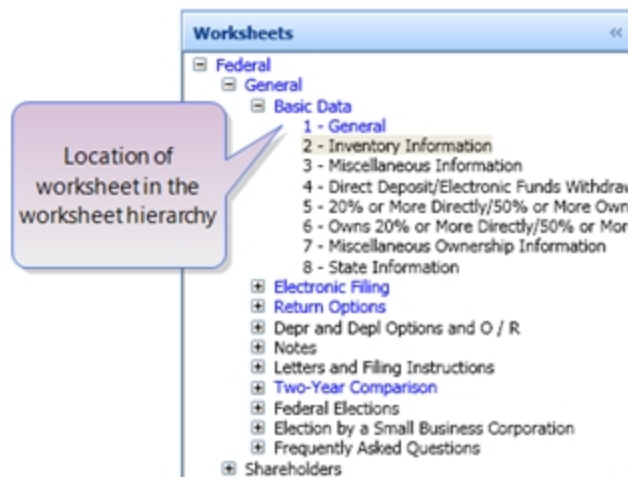
Figure 2.6 - Worksheet hierarchy

> 📇 **Note**: The hierarchical path used to specify state worksheets follows this convention: *States\{State Name}\State Worksheets\{Worksheet Name}*

> 💡 **Tip**: Worksheets and sections that display in blue text have data in them. Items in black text do not contain data. If you want to display only the worksheets that have data in them, right-click the Worksheet Tree, and then select **Show Forms in Return**.

Worksheets can also be identified with their unique ID numbers. You can determine the ID number for a worksheet by using the Field Tag feature in Tax or by performing an export that includes that worksheet. See the Tax Help for information on using the Field Tag feature. See *Chapter 3: Exporting Data* on page 23 for instructions on performing an export.

Worksheet Sections

In the Worksheet Tree, worksheet sections are listed beneath the worksheet name. For example, there are eight sections in the Basic Data worksheet. The first three sections are:

- General
- Inventory Information
- Miscellaneous Information

Sections display as collapsible tabs in worksheets. When a worksheet is first opened, some worksheet sections may be collapsed. Click a section header to expand the section. Figure 2.7 shows an example of a worksheet with collapsed sections.

> **Note**: A worksheet may be missing section numbers if you have not installed the tax products associated with those sections. For example, if a section is used for state data, and you do not have state products installed, then the section will not display.

Figure 2.7 - Worksheet with multiple tabs

In the XML documents you use with TaxTransfer, a worksheet section must be identified by its title (the "Name" attribute). To further identify a worksheet section, you can also use the worksheet section number (the SectionNumber attribute) and, for multi-page worksheets, the worksheet page (the PageNumber attribute).

> **Important**: Worksheet sections should not be included in the worksheet hierarchy path. Sections are specified with a separate WorksheetSection element in TaxTransfer XML documents.

Alternate Worksheets

Some worksheets offer an "alternate" version of the worksheet. Alternate versions display as a second tab located to the right of the main worksheet tab. For example, the Depreciation and Amortization (Form 4562) worksheet, shown in Figure 2.8, offers an alternate Totals tab.

Figure 2.8 - Worksheet with alternate worksheet

Alternate worksheets do not display in the worksheet hierarchy. You can import or export data from alternate worksheets, with some special considerations. See *Exporting Alternate Worksheets* on page 34 for information about exporting alternate worksheets. See *Referencing Worksheets, Worksheet Sections, and Alternate Worksheets on page 48* for information on importing data into alternate worksheets.

Grids

Grids are identified by their IDs and their descriptions. There are three types of grids:

- **Standalone grids** contain data that is not tied to another form or grid.

- **Summary grids** contain subsets of data that are based on source data from other grids or forms. A summary grid displays a Detail button immediately above the grid. Clicking this button opens the corresponding detail grid for the summary grid.

- **Detail grids** provide the underlying source data for a summary grid. To access a detail grid, click the Details button above a summary grid. To return to a summary grid from a detail grid, click the Summary button.

> **Note**: Summary and detail grids are available only in worksheets. They are not available in government forms.

Figure 2.9 shows a portion of the Wages and Salaries summary grid from the Federal > Income/Deductions > Wages, Salaries and Tips worksheet for Individual returns. This grid displays data taken from a W-2. However, some information on the W-2, such as state tax information, in not included in the grid.

Figure 2.9 - Summary grid for the Wages and Salaries section

Clicking the **Detail** button located above the grid opens the detail view for the selected line, as shown in Figure 2.10. The detail view contains all the fields on the W-2, including the state tax information.

Figure 2.10 - Detail information for the Wages and Salaries section

If you import or export data for summary grids, be aware of the following:

- **Imports**. You must specify if data should be imported into the detail grid or the summary grid. You cannot import both summary and detail data for the same grid.

- **Exports**. If you export data from a summary grid, by default TaxTransfer will export the detail data. If you want to export the summary data, you can do so by setting the WorksheetGridExportMode option to SummaryMode mode in the TaxDataExportOptions.xml.

Entities

Some worksheets and sections have multiple occurrences. For example, the Other Home Mortgage Interest Paid section on the Itemized Deduction worksheet can be repeated for a taxpayer with multiple mortgages. Items that have multiple occurrences are known as "repeaters." Individual items in a repeater list are known as "entities."

When an open worksheet has the ability to include multiple occurrences, an Entities pane displays on the navigation panel below the Worksheet Tree. You can select an entity in the list to open the respective worksheet section.

In the XML documents used with TaxTransfer, entities are specified by their ID numbers.

> **Important**: When creating your XML documents, do not include entities as part of the worksheet hierarchy path. Entities are specified separately in the XML document.

Return Structure and Government Forms

As shown in Figure 2.11 a return's structure can be represented in terms of the government forms it contains, just as it can be described in relation to the worksheets that are used in the return.
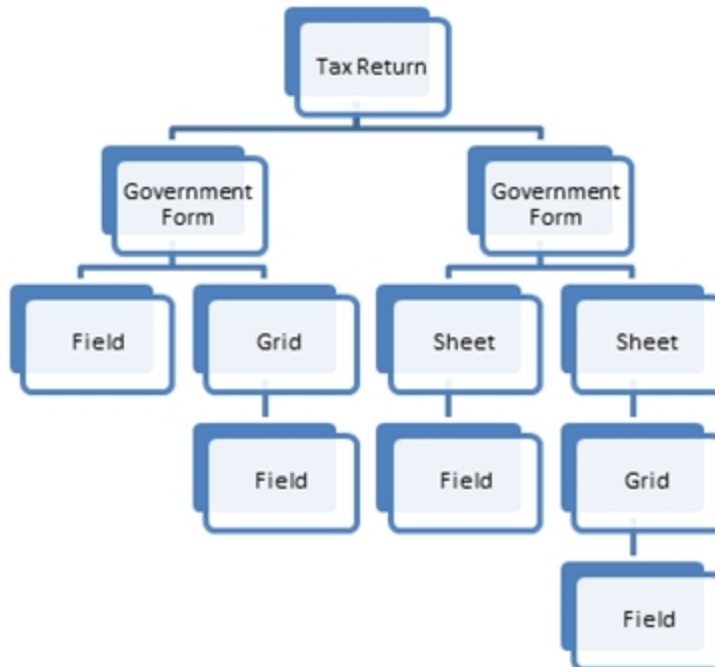
Figure 2.11 - Relationship between government form components in a tax return

The following characteristics are represented in this diagram:

- **Tax returns** can include multiple government forms.

- **Government forms** can include fields and grids. Some government forms have multiple sheets.

- **Grids** contain multiple fields. Unlike worksheets, there are no detail grids on government forms. All grids on government forms are summary grids.

Government Forms Hierarchy

Like worksheets, government forms are organized by taxing authority and the form name. The location in the collection of government forms is described in a hierarchical path such as the following:

Federal\Sch D - Capital Gains and Losses\Form 8949 Short-Term A

This hierarchy indicates where you can find the form in the Government Forms pane. The backward slash (\) separates hierarchy levels. The Government Forms pane displays to the left of a form when you are viewing government forms. By default, this pane lists all of the government forms available for the open return, organized by tax authority.

Figure 2.12 shows the location of the government form listed above in the Government Forms Tree.
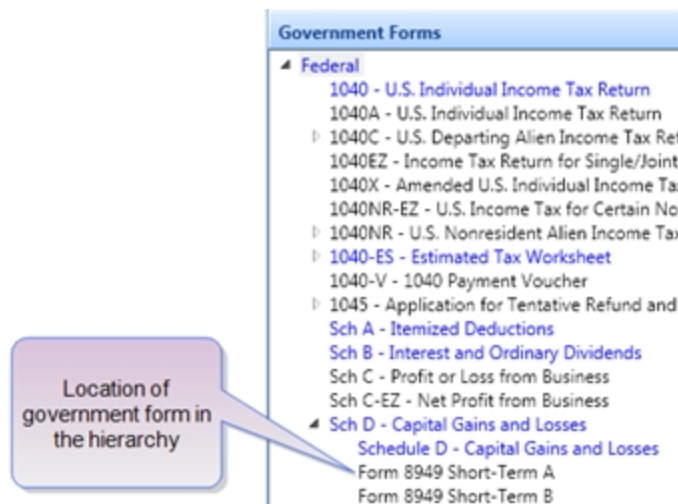
In the XML documents you use with TaxTransfer, the hierarchical path of a government form is used to identify the form. Government forms can also be identified with their unique ID numbers. You can determine the ID number for a form by using the Field Tag feature in Tax or by performing an export that includes that form. See the Tax Help for information on using the Field Tag feature. See *Chapter 3: Exporting Data* on page 23 for instructions on performing an export.
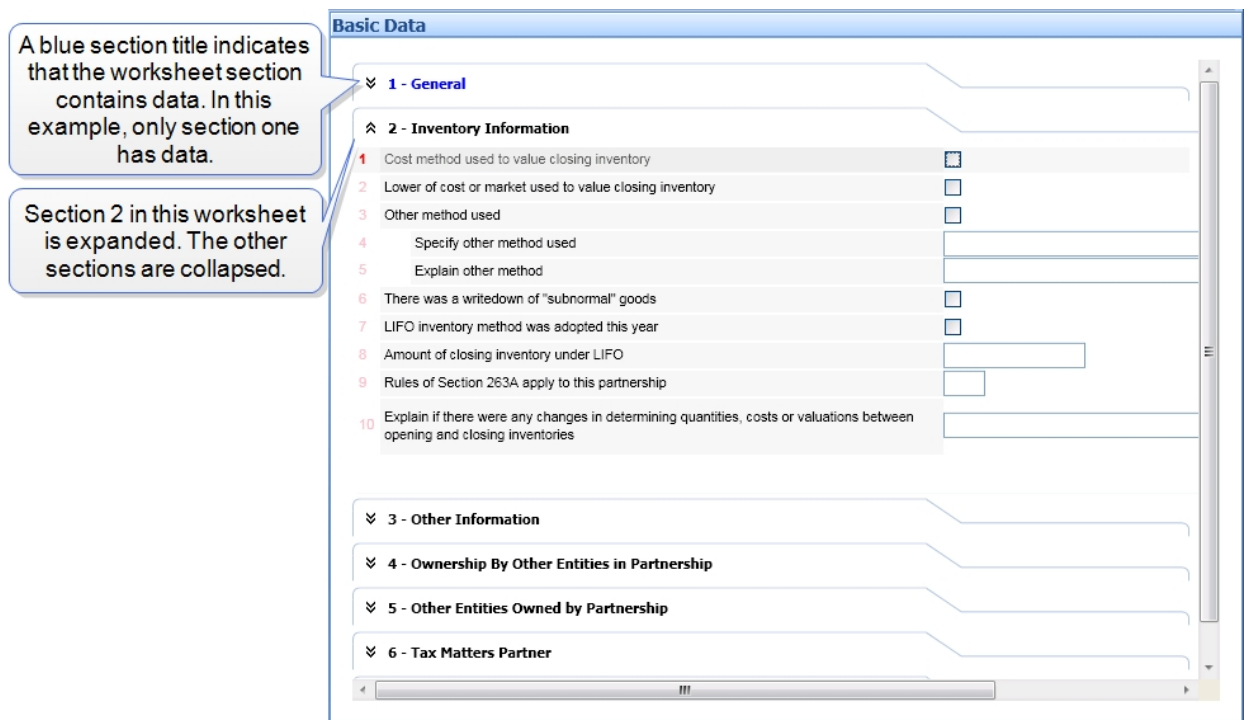
Figure 2.12 - Government forms hierarchy

Tip: Government forms that display in blue text have data in them. Items that appear in black text do not contain data. You can select to display only the forms that have data by clicking **Forms in Return** in the Show/Hide section of the View ribbon.

Government Forms with Multiple Sheets and Entities

The same return may include multiple instances of a single government form. There are two reasons that this may occur, and each has different implications when using TaxTransfer.

- **Form with multiple sheets**. Some returns may have more than one sheet for the same government form. This situation occurs if there are more entries for a particular tax line than can fit on one sheet. When there is more than one sheet for a form, each sheet is identified by a sheet ID number.

  Example: Line 21 of the Federal Schedule A - Itemized Deductions form provides two lines for itemizing unreimbursed job expenses. An employee who needs to claim four unreimbursed expenses would need a second sheet of this form to report all four deductions.

  Note: Field IDs are not unique across multiple sheets. For example, the field ID for line 21 of the Schedule A is identical to the field ID for that same line on additional sheets of that form. The sheet ID number will be used to identify each instance of a field.

- **Multiple entities**. Some returns may require multiple versions of the same form for different entities. For example, a sole proprietor who owns two businesses must complete a separate Schedule C - Profit or Loss from Business form for each business. In instances where a new instance of a government form is required for multiple entities, the forms are also identified with a entity ID number.

Chapter 3

EXPORTING DATA

Overview

TaxTransfer gives you the ability to export batches of Tax return data to XML files. TaxTransfer accesses the return data via the ExportTaxReturnDataXMLAsync API included in the OIK. Data can be exported from Tax worksheets and from government forms that are accessible in the Worksheet tree and Government tree respectively.

> **Note**: Custom programming is required before you can perform a TaxTransfer export. The OIK must be configured to work with your custom application through Web services.

This chapter outlines a general workflow for performing a TaxTransfer export. It also explains the export options that are available in TaxTransfer. We recommend that you also review the following resources when you prepare your exports:

- **Export examples**. *Appendix B: Comparing Export Modes* on page 68 uses sample data to demonstrate how each of the export options affects the end result of an export.

- **Export schema**. The TaxDataExportOptions.xsd can help you configure your exports. This schema document is at the following location on the computer where Tax is installed:

  - **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

  - **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

- **Technical documentation for integrating with the OIK**. The help files provided with the OIK contain information about invoking the ExportTaxReturnDataXMLAsync API. If the OIK is installed with default settings, these help files are available on the Start menu of the computer where the OIK is installed.

Export Capabilities

You can specify the following for your exports:

- **The returns included in the export**. The returns are specified by passing an array of ReturnIDs as a parameter to the API. See *Specifying the Returns for Export with the ReturnID Parameter* on page 28 for details.

- **The worksheets and government forms from which you want to export data**. If needed, you can export data from both worksheets and government forms in the same export. Worksheets and government forms are specified in the ConfigurationXML property of the TaxDataRequest object.

- **The fields to export**. You can choose to export all fields or only fields with data.

- **The values to export**. In addition to being able to export the actual field values, you can also do the following:

    - Create a blank return template by performing an export that does not include return data. This template can be helpful as you plan your imports and exports.

    - Export field metadata.

    - Export lookup codes. The ability to export lookup codes is helpful if you will design custom imports. If you export a blank return template and select to include lookup codes in the export, you will have a reference document that shows the available options for import into each field.

Each of these options is independent of each other. You can combine them in a number of configurations to generate the export that you need.

Each return in a batch is exported to its own XML file. The file name for the export XML file is a combination of the ReturnID and the timestamp. The XML files generated through an export are packaged together in a single ZIP file of 20 MB or less. Exports that generate data in excess of this size will create additional ZIP files as needed. You can download and name the ZIP file via a second API, DownloadTaxReturnDataXML, or you can auto-extract the ZIP file data. See the OIK help for more information on these options.

Data Available for Export

You can export data from any worksheet field that is accessible in a tax year 2011 or later return. You also can export data from government forms that are accessible in the Government tree for tax year 2011 or later.

The following items cannot be exported:

- Lists and notes
- Passwords for password-protected returns

- Preparer statements
- Tax reports
- Invoices

> 📰 **Note**: Although passwords are not exported, the Password attribute is added to the return headers for password-protected returns. A masked value will display for this attribute, as shown in the bold-faced text in the following example:
>
> ```
> <ReturnHeader ClientID="buntaroi TaxYear="2011" ReturnType="I"
>     ReturnGroupName="Default" Country="US" OfficeName="Main Office"
>     BusinessUnitName="Main" ConfigurationSet="Default"
>     ReturnVersion="5" EINorSSN="111-22-3333" Password="****" />
> ```
>
> Reimporting an XML file with a masked password value will result in failure. See *Specifying Passwords for Password-Protected Returns* on page 28 for more information.

Data cannot be exported from a return that is currently open. You also cannot export data from a large return that is in the process of being printed. If a return is inaccessible for either of these reasons, an error will be logged in the job detail report.

Batch and File Size

Up to 200 returns can be included in a single export. The final ZIP file created by the export process is limited to 20MB (approximately 60-80MB of raw XML files). If the compressed size of all the exported data exceeds 20 MB, additional ZIP files are created.

Auditability

When you export return data, the activity is noted in the return history for audit purposes.

Export Procedure Overview

This section describes the general process for exporting data from Tax returns to XML files. For more information about each step, see the referenced sections or documents.

> ⚑ **Important**:
>
> - This procedure assumes that you have already completed the custom programming required to connect your custom engine to the OIK.
> - The code samples included here are for demonstration purposes only. For more detailed information about submitting batches to the APIs, see the OIK help files.

To perform an XML export from Tax returns, do the following:

1. Identify the returnIDs for the returns to be exported. The returnIDs will be passed as an array to the Web service. See *Specifying the Returns for Export with the ReturnID Parameter* on page 28.

   > 🗐 **Note**: If you want to export data from password-protected returns, the passwords must be appended to their corresponding return IDs. See *Specifying Passwords for Password-Protected Returns* on page 28 for more information.

2. Create the ConfigurationOption parameters XML document. This document identifies the export options to be used for the export. See *Specifying Export Options in the ConfigurationOption XML* on page 29 for details about the export options.

3. Submit the array of ReturnIDs and the ConfigurationOption XML string to the ExportTaxReturnDataXmlAsync Web service. The code sample which follows demonstrates one method for doing this.

   > 🗐 **Note**: Use caution when copying XML snippets from this document or the OIK help files. XML declaration uses straight quotation marks (LocationType="Description"), but word processing software may automatically apply curved quotation marks (LocationType="Description").

```
try
    {
    AuthenticationTicket ticket = null;
    NamePasswordCredential credential = new
    NamePasswordCredential("<userName>", "<password>", "<accountNumber>");
    IAuthenticationManager authManager = new
    AuthenticationManager("https://commonservices.cchaxcess.com",
    InstallationType.SaaS);
    authManager.Login(credential);
    ticket = authManager.AuthenticationTicket;

ITaxTransferManager taxTransferManager = new TaxTransferManager(ticket);
    TaxDataExportXmlRequest taxDataRequest = new TaxDataExportXmlRequest();
    taxDataRequest.ReturnIDs = new List<string>{
    "<taxyear><taxreturntype>:<clientID>:<version>","<taxyear><taxreturntype
    >:<clientID>:<version>" };
    taxDataRequest.ConfigurationXml = <Export Configuration Xml>;

Guid workFlowGuid = taxTransferManager.ExportTaxReturnDataXmlAsync
    (taxDataRequest);

//Refer to the DownloadTaxReturnDataXml method to check the batch status and
    download the exported file.
    }
```

```
catch (PfxValidationException ex)
{
System.Text.StringBuilder errorDetails = new System.Text.StringBuilder
();
foreach (ValidationExceptionDetail exDetail in ex.Details)
{
errorDetails.Append(exDetail.Message);
}
Console.WriteLine(errorDetails.ToString());
}
catch (PfxApplicationException ex)
{
Console.WriteLine(ex.Message);
```

The system validates the XML before beginning the export.

- If there are XML errors, the system logs the errors, and the export is stopped.

- If the XML passes validation, the system assigns a Globally Unique Identifier (GUID) to the batch, and then invokes the TaxTransfer export engine. The export engine performs the following tasks:

    i. Reads the ConfigurationXML document to determine which data should be exported.

    ii. Locates and extracts the specified return data.

    > **Note**: If an error prevents data from being exported from a worksheet, the error is recorded in the processing log, and the worksheet is skipped. Processing continues for other worksheets in the export.

    iii. Creates a unique XML document for each return that is being exported.

    iv. Packages all of the exported returns as a single ZIP file of 20 MB or smaller. If the compressed size of all the exported data exceeds 20 MB, additional ZIP files are created.

4. When the batch completes, verify the success of the export by reviewing the batch log. If necessary, correct any errors, and then re-run the export.

> **Note**: You can track the status of the export in Batch Manager using the confirmation GUID. You can also invoke the GetBatchDetail API as needed to get the status of a batch. See the OIK help for more information.

5. Download and name the ZIP file containing the exported data via one of the following:

- **DownloadTaxReturnDataXML API**. You can access a batch by invoking this API, passing the batch GUID as a parameter.

- **Batch Manager**. You can download the ZIP file by selecting the link for the job in the Download column.

> **Note**: ZIP files remain available for download for up to 30 days, depending on your Batch Manager firm settings. They can be downloaded multiple times as needed. See the Batch Manager help for more information.

See *Accessing Exported Data* on page 38 for more information about downloading the exported data.

Preparing an Export

This section describes how to prepare an export with TaxTransfer.

Specifying the Returns for Export with the ReturnID Parameter

To specify the returns you want to export data for, you must pass the array of ReturnIDs as a parameter to the API. The ReturnID is a unique identifier that is used for each return. See *Return IDs* on page 10 for detailed information about the components that make up the return ID.

The following example illustrates how you can submit the array:

```
taxDataRequest.ReturnIDs = new List<string>{
    "<taxyear><taxreturntype>:<clientID>:<version>","<taxyear><taxreturntype>:<c
    lientID>:<version>::<password>" };
```

> **Note**: This example includes the ::<password> parameter, which is only required for password protected returns. See *Specifying Passwords for Password-Protected Returns* below for more information about password-protected returns.

Specifying Passwords for Password-Protected Returns

To export data from password-protected returns, you must provide the passwords as part of the export request. Passwords should be appended to the corresponding return IDs in the array of return IDs that you submit for processing. Insert two colons (::) between the return ID and password, as shown in the following example:

2013P:ClientA:V1::password1

If you do not provide the correct password for a password-protected return, the data for that return will not be exported, and the system will log an error.

> ⚑ **Important**:
>
> - In TaxTransfer, the password can only be used to open a return. It cannot be used to change the return password.
>
> - When a password protected return is exported, the Password attribute is included in the return header. However, the actual password is not exported. Instead, a masked value displays, as shown in the following example:
>
>   ```
>   <ReturnHeader ClientID="buntaroi" TaxYear="2013" ReturnType="I"
>       ReturnGroupName="Default" Country="US" OfficeName="Main Office"
>       BusinessUnitName="Main" ConfigurationSet="Default" ReturnVersion="5"
>       EINorSSN="111-22-3333" Password="****" />
>   ```
>
> - To import data from an XML file that includes a masked password, you must replace the mask with the actual password for the return. If you attempt to import the file with the masked value, the import will fail.

Specifying Export Options in the ConfigurationOption XML

You must specify the export options for a TaxTransfer export in the ConfigurationXML property of the TaxDataRequest object. You can specify one set of export options to apply to all the worksheets and government forms included in the export, or you can set separate options for worksheets and government forms. The export options you can select are:

- The worksheets and government forms to export
- The fields to export
- Whether fields will be identified by field ID, field name, or field description (for worksheets)

> 📰 **Note**: For government forms, you must use the Field ID as the field identifier. Field names and field descriptions cannot be used.

- Whether summary grid data should be exported as summary data or as the underlying detail grid data (for worksheets only)
- Whether to include field values in the export
- Whether to include metadata and lookup values in the export
- Whether to export white paper statement data and what information to include (for government forms only)

The XML below represents the standard export options XML without any custom preferences set. In the sections that follow, additional code samples are used to demonstrate how to apply different options to your export.

```
<TaxDataExportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">

<ExportUnitsSelectionPreference>SelectedUnits</ExportUnitsSelectionPreference>

<DefaultPreferences>

    <GenerateMeta>false</GenerateMeta>

    <GenerateLookupItems>false</GenerateLookupItems>

    <FieldValueExportSelection>OnlyFieldsWithData</FieldValueExportSelection>

    <WorksheetGridExportMode>DetailMode</WorksheetGridExportMode>

    <WhitepaperStatementExportMode>Suppress</WhitepaperStatementExportMode>

</DefaultPreferences>

<DefaultFieldIdentifierPreference>Description</DefaultFieldIdentifierPreference>
    </TaxDataExportOptions>
```

> **Note**: Use caution when copying XML snippets from this document or the OIK help files. XML declaration uses straight quotation marks (LocationType="Description"), but word processing software may automatically apply curved quotation marks (LocationType="Description").

The export options are explained in greater detail in the following sections. You also can review the TaxDataExportOptions.xsd to view information about the validation rules for the XML options. You can find the schema document at the following location on the computer where you have Tax installed:

- **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

- **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

Setting Custom Export Preferences

A single export can include both worksheets and government forms in a variety of configurations, as well as white paper statement information. By default, the export options you select are applied to all the worksheets and government forms in the export. If needed, you can override the defaults with options applied separately to worksheets and government forms. To set options separately for worksheets and government forms, use the CustomExportPreferenceCollection element. Within this element, you can set different options for worksheets and government forms.

The following code snippet demonstrates how to configure an export with separate options for worksheets and government forms.

```xml
<TaxDataExportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">
    <ExportUnitsSelectionPreference>SelectedUnits</ExportUnitsSelectionPr
        eference>
    <DefaultPreferences>
        <GenerateMeta>false</GenerateMeta>
        <GenerateLookupItems>false</GenerateLookupItems>
        <FieldValueExportSelection>OnlyFieldsWithData</FieldValueExportSe
            lection>
        <WorksheetGridExportMode>DetailMode</WorksheetGridExportMode>
    </DefaultPreferences>
    <DefaultFieldIdentifierPreference>FieldID</DefaultFieldIdentifierPref
        erence>
    <CustomExportPreferenceCollection>
        <CustomExportPreferences>
            <GenerateMeta>false</GenerateMeta>
            <GenerateLookupItems>true</GenerateLookupItems>
            <FieldValueExportSelection>AllFieldsAndExcludeData_
                Template</FieldValueExportSelection>
            <WorksheetGridExportMode>SummaryMode</WorksheetGridExportMode
                ><Name>Worksheet</Name>
        </CustomExportPreferences>
        <CustomExportPreferences>
            <GenerateMeta>true</GenerateMeta>
            <GenerateLookupItems>false</GenerateLookupItems>
            <FieldValueExportSelection>AllFieldsAndIncludeData</FieldValu
                eExportSelection>
            <Name>Government</Name>
        </CustomExportPreferences>
    </CustomExportPreferenceCollection>
</TaxDataExportOptions>
```

Selecting Worksheets and Government Forms to be Exported (ExportUnitsSelectionPreference)

Exports can include state and city worksheets as well as federal worksheets. They can also include government forms that are accessible in the government forms list or tree. You can identify the worksheets and government forms to be exported with the ExportUnitsSelectionPreference element. You can select one of the following options for this element:

- **SelectedUnits**. Data will be exported from the individual worksheets and government forms that you specify in the ExportUnits element. Worksheets and government forms can be specified by their hierarchies or by their identification numbers.

  You can also use the parent category for a worksheet or government form as a wildcard. A wildcard must end with a single "\" character after the category name. In contrast, to specify a particular worksheet or form for export, you should not add a "\" to the specification.

  The following XML specifies that the Federal > General > Basic Data worksheet should be exported. It also uses the California worksheets category as a wildcard to specify that all California worksheets should be exported. Similarly, the Federal government form category is used as a wildcard to indicate that all the Federal government forms should be exported.

```
<TaxDataExportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">

<ExportUnitsSelectionPreference>SelectedUnits</ExportUnitsSelectionPreference>

<ExportUnits>

    <ExportUnit xsi:type="WorksheetDataExportUnit">

        <Worksheet>Federal\General\Basic Data</Worksheet>

    </ExportUnit>

    <ExportUnit xsi:type="WorksheetDataExportUnit">

        <Worksheet>States\California\</Worksheet>

    </ExportUnit>

    <ExportUnit xsi:type="GovernmentDataExportUnit">

        <Form>Federal\</Form>

    </ExportUnit>

</ExportUnits>

</TaxDataExportOptions>
```

Refer to "WorksheetHierarchyOrWorksheetID" or "GovernmentHierarchyOrFormID" in the TaxDataExportOptions.xsd file for more information.

> **Note**: The back slash (\) is used to separate the different levels of the worksheet or government form hierarchy. To generate a list of worksheet or government form IDs, you can export a template with metadata in it. See *Return Structure in Worksheet View* on page 15 for detailed information about worksheet and government form hierarchies.

- **EntireReturnAllWorksheetUnits**. Exports data from all worksheets for the selected tax system, including worksheets that do not contain data.

- **EntireReturnAllGovtUnits**. Exports data from all government forms available for the tax system, including forms that do not contain data.

- **FilledWorksheetUnits**. Exports only worksheets that have data in them.

- **FilledGovtUnits**. Exports only government forms that have data in them.

- **FilledWorksheetAndFilledGovtUnits**. Exports all worksheets with data in them and all government forms that have data in them.

- **AllWorksheetsAndFilledGovtUnits**. Exports all worksheets available for the tax system plus any government forms that have data in them.

- **FilledWorksheetAndAllGovtUnits**. Exports all worksheets with data in them and all government forms available for the tax system.

Additional export units can be specified in conjunction with any other ExportUnitsSelectionPreference. This feature allows you to, for example, select FilledWorksheetAndFilledGovtUnits and also specify any other worksheets or forms in addition to those that are not included by the FilledWorksheetAndFilledGovtUnits criteria.

In the example code below, all worksheets and government forms with data will be exported. In addition, *Form 1040, 1040A or 1040EX - Practioner PIN* and the federal *Electronic Filing* worksheet will be included in the export, regardless of whether they have data in them.

```
<TaxDataExportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">

<ExportUnitsSelectionPreference>FilledWorksheetAndFilledGovtUnits</ExportUnitsSe
    lectionPreference>

    <ExportUnits>

        <ExportUnit xsi:type="GovernmentDataExportUnit">

            <Form>Federal\Jurat\Disclosure\Form 1040, 1040A or 1040EZ -
                Practitioner PIN</Form>

        </ExportUnit>
```

```
        <ExportUnit xsi:type="WorksheetDataExportUnit">

            <Worksheet>Federal\General\Electronic Filing</Worksheet>

        </ExportUnit>

    </ExportUnits>

<DefaultPreferences/>

<DefaultFieldIdentifierPreference>Description</DefaultFieldIdentifierPreference>

</TaxDataExportOptions>
```

> 💡 **Tip**: When deciding which export option to use, consider how much data you actually need. Exporting entire returns generates large XML files. Exporting specific worksheets or government forms will produce more compact export files.

Exporting Alternate Worksheets

Alternate worksheets are not independent worksheets, and thus are not accessible from the worksheet tree. They are dependent on their parent worksheets. For this reason, alternate worksheets can only be exported when the parent worksheet is selected for export. You cannot use a wildcard or worksheet hierarchy to export alternate worksheet data independent of its parent worksheet.

The export options you apply to a parent worksheet, such as the options to export metadata or lookup information, will be applied to any alternate worksheets as well. Similarly, other global or custom preferences that you set for the export will apply to the alternate worksheet as well. For example, if you select to export only fields with data, only the alternate worksheet fields with data will be exported.

See *Alternate Worksheets* on page 18 for more information.

Selecting the Data to Export (ExportUnitPreferences)

You can select which kinds of data should be exported from the selected worksheets and government forms with the ExportUnitPreferences item. You can combine these preference options with the worksheet and government form selection options discussed in the previous section to customize your export.

> 🔍 **Example**: To export a blank template that includes only the worksheets containing data and all government forms, specify AllFieldsAndexcludeData_Template for the FieldValueExportSelection and FilledWorksheetAndAllGovtUnits for the ExportUnitsSelectionPreference.

Selecting Field Export Options (FieldValueExportSelection)

The FieldValueExportSelection element allows you to choose which fields are included in the export. This option can be applied as the default for both worksheets and government forms, or you can override the defaults by setting a preference specifically for worksheets and government forms.

The options are as follows:

- **OnlyFieldsWithData**. Fields with data are exported. Blank fields are not exported.
- **AllFieldsAndIncludeData**. All fields, including blank fields, are included in the export file.
- **AllFieldsAndExcludeData_Template**. A blank template is generated from the selected return. All fields are included in the export, but the field values are excluded.

> **Tip**: You can use the template as a guide for creating your import files. Once you generate the template, you can fill in the blank field values with actual data. Then you can import the file. Imports are only applicable for worksheets.

> **Note**: If you configure custom export options for worksheets or government forms and do not specify a FieldValueExportSelection preference, the OnlyFieldsWithData option is selected by default. This option is selected even if you specify a different option as a default.

Identifying Fields in an Export XML Document

If you want to export specific fields, you must correctly identify the fields to be exported in your export options XML. Field identifier options are different for government forms and worksheets.

- For government forms, fields must be identified by the field ID. The field ID is a static identifier that does not need to be updated each year. You can locate the field ID by using the Field Tag feature in Tax. Field IDs never change, even if a field is repositioned in a form.
- For worksheet fields, you can use any one of three identifiers for fields:
  - **Field ID**. As with the field ID used for government forms, the field ID for a worksheet is a static identifier that can be located using the Field Tag feature in Tax. Field IDs never change, even if a field is repositioned in the worksheet.
  - **Field Name**. The field name is an internal code used in Tax application. It is not visible to users in Tax and can seem cryptic. If needed, you can get the field names for a worksheet by doing an export that includes metadata. Field names can change, although infrequently.

- **Description**. The field description is a user-friendly description that is similar to the field labels that appear in the Tax application. Of the three worksheet field identifiers, the description is the one most likely to change. When this occurs, you will need to update your XML source files.

As mentioned above, you can locate the field ID for a government form or worksheet by either using the Field Tag feature in Tax or by doing an export of the form or worksheet that you want to get field IDs for. See the Tax help for details on using the Field Tag feature.

> **Note**: You can also use the field tag feature to get worksheet and government form names and numbers. The field tag feature is available only for government forms that are accessible in the Government tree and for worksheets that are accessible in the Worksheet tree view or list.

Exporting Metadata and Lookup Items

If you select to include data in an export, the value of the field is exported as well. You can generate additional field data with the following options:

- **GenerateMeta**. Enabling this option causes the metadata associated with the worksheets, government forms, and fields to also be exported. The metadata includes information such as formatting specifications, captions, and field length, among other items.

- **GenerateLookupItems**. When you enable this option, the lookup codes and descriptions for fields in the tax return are listed in the export file. You can use this option to get a list of all the available options so you can perform pre-import validation.

> **Tip**: Including metadata and lookup items in an export can significantly increase the size of the output file. It also increases the time required for the export. For most exports, we recommend keeping the GenerateMeta and GenerateLookupItems options disabled.

> **Notes**:
>
> - If you are configuring custom export options for worksheets or government forms and do not specify a selection for the GenerateMeta or GenerateLookupItems option, it will be set to "false." This option will be selected even if you have specified a "true" as a default preference.
>
> - Occasionally the value that displays for a field in Tax may be different than the value that was originally entered. For example, dollar amounts entered with pennies ($47.98) are rounded to the nearest dollar ($48) in Tax. If you export data for a field that has different entered and displayed values, the export XML will export the entered value.

Selecting Whether to Export Summary or Detail Data for Summary Grids

By default, TaxTransfer exports the detail source data that underlies a worksheet summary grid. If you want to export the grid summary data, you must specify this option in the export options XML document. To do this, specify "SummaryMode" in the WorksheetGridExportMode element, as shown in the bold-faced line in the XML example below:

```
<TaxDataExportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">

    <ExportUnitsSelectionPreference>SelectedUnits</ExportUnitsSelectionPreferenc
        e>

    <ExportUnits>

        <ExportUnit xsi:type="WorksheetDataExportUnit">

            <Worksheet>Federal\General\Basic Data\<\Worksheet>

        </ExportUnit>

    </ExportUnits>

    <DefaultPreferences>

        <WorksheetGridExportMode>SummaryMode</WorksheetGridExportMode>

    </DefaultPreferences>

    <DefaultFieldIdentifierPreference>Description</DefaultFieldIdentifierPrefere
        nce>

</TaxDataExportOptions>
```

When the export is complete, the <SummaryGridDetail> element will indicate data that belongs to a summary grid. A detail grid will contain <Detail> sub-modes in the XML.

> **Note**: This option applies only to worksheets. It is not applicable for government forms.

Specifying White Paper Statement Export Options

Exports from white paper statements provide underlying data for the entries in a government form. You can select to export white paper statements if you are exporting government forms. It is not available for worksheet exports.

The following options for WhitepaperStatementExportMode allow you specify the information to include in the export:

- **Suppress**. No white paper statement data will be included in the export. This option is the default mode.

- **GenerateStatementData**. Return-specific data, such as amounts, dates, and description will be exported from the government forms.

- **GenerateStatementStructure**. A template of the data in the statement is exported, but no actual return data is included.

- **GenerateStatementStructureAndData**. Both return-specific-data and the statement layout are exported.

> 📰 **Note**: Statements cannot be exported when you are using the AllFieldsAndExcludeData_Template option for the FieldValueExportSelection.

Accessing Exported Data

You can download the ZIP file containing the exported data in Batch Manager. To do so, click the link for the job in the Download column in the Batch Manager grid. See the Batch Manager help for more information about using Batch Manager.

You can also use the DownloadTaxReturnDataXML API in the OIK to download the file. See the OIK help files for information on invoking this API.

The XML files in the export ZIP file are named using a variation of the ReturnID (separated by underscores), along with the date and time stamp for the submitted batch. The naming convention is as follows:

{YYYY}{ProductCode}_{ClientID}_V{VersionNumber}_{yyyyMMDD_hhmmssAM|PM}.xml

By default, export files include a control number that is based on the date and time stamp, in the following format:

yyyyMMDDhhmmssffff

The control number is in the return header, where you can edit it as needed. If you will use the export XML for a future TaxTransfer import, your control number must:

- Be 20 characters or less

- Start and end with alpha-numeric characters

- Include only alpha-numeric characters, colons (:), or hyphens (-)

While the control number is an optional attribute, if present, it must meet these requirements to pass XML validation.

Chapter 4

IMPORTING DATA

Overview

TaxTransfer provides a way for you to perform batch imports from XML files into Tax returns. The return data is accessed via the ImportTaxReturnDataXMLAsync API packaged in the OIK.

- Data can be imported into worksheets. You cannot import data into government forms.

- Custom programming is required before you can perform a TaxTransfer import. The OIK must be configured to work with your custom application through Web services.

- White-paper statement data cannot be imported. It is ignored if it is included in the import source file.

This chapter describes the process of importing return data from an XML file. It also explains the import options you can select when performing an export. In addition, you may want to refer to the following resources:

- *Appendix C: Comparing Import Modes* on page 72 provides examples that demonstrate the effect of applying different import options to the same data.

- The TaxDataImportOptions.xsd provides information to help you configure your exports. You can find this schema document at the following location on the computer where Tax is installed:

    - **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

    - **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

- The help files provided with the OIK contain information about invoking the ImportTaxReturnDataXMLAsync API. See the OIK help file.

Import Capabilities

You can import data into any worksheet view field that is accessible in a 2011 tax year or later return. The import file is limited to 200 returns or 80 MB of uncompressed XML files.

> ⚠️ **Constraints**: Data cannot be imported into:
>
> - Lists and notes fields
> - Locked, checked out, or read-only returns
>
> You also cannot import white-paper statement data. If statement data is in the import source file, it will be ignored during import.

You can create new returns for new and existing clients with a TaxTransfer import. You can also update existing returns, or create new versions of existing returns.

You can control several aspects of your imports through the import options. Some of the import options you can select include:

- How new data imported into existing returns will affect existing data in the return
- How data errors should be handled
- How new versions of existing returns are numbered
- Whether a calculation should be initiated automatically after the import is completed

See *Import Options* on page 54 for more information.

Auditability

When you import return data, the activity is noted in the return history for audit purposes.

Import Procedure Overview

The process for importing data to Tax returns from XML files is described below. For more details about each step, see the referenced sections or documents.

> ⚑ **Important**:
>
> - This procedure assumes that you have already completed the custom programming required to connect your custom engine to the OIK.
> - The code samples included here are for demonstration purposes only. For best results, see the OIK help files when preparing to submit batches.

To import data from an XML file to Tax returns, do the following:

1. Create the TaxDataImportOptions parameters document. You can use the TaxDataImportOptions.xsd to validate your document. See *Import Options* on page 54 for information about the available options.

   The following is an example of a simple import configuration XML using the MatchAndUpdate mode, with the option to ignore data errors selected:

   ```
   <TaxDataImportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-
       instance"xmlns:xsd="http://www.w3.org/2001/XMLSchema">

       <ImportMode>MatchAndUpdate</ImportMode>

       <InvalidContentErrorHandling>IgnoreAllDataErrors</InvalidContentErrorHan
           dling>

   </TaxDataImportOptions>
   ```

   > **Note**: Use caution when copying XML snippets from this document or the OIK help files. XML declaration uses straight quotation marks (LocationType="Description"), but word processing software may automatically apply curved quotation marks (LocationType="Description").

2. Generate the import data documents using the specifications in the Payload.xsd. You can pass multiple files in a single batch, and each file can include multiple returns.

   The following code sample is a example of valid XML for import with TaxTransfer:

   ```
   <?xml version="1.0" encoding="utf-16"?>

   <Payload DataType="Tax" DataFormat="Standard">

       <TaxReturn>

           <ReturnHeader ClientID="PM06" TaxYear="2011" ReturnType="I"
               ReturnGroupName="Default" Country="US" OfficeName="Main Office"
               BusinessUnitName="Main" ConfigurationSet="Default"
               ReturnVersion="1" EINorSSN="566-87-6754" />

           <TaxPayerDetails NameLine1="Mike1" NameLine2="Thorton" />

       </TaxReturn>

   </Payload>
   ```

3. Submit the TaxDataImportOptions and Payload files as XML strings to the Web service. This code sample demonstrates one way to call the ImportTaxReturnDataXmlAsynch. This method includes password authentication.

```
try
    {
      AuthenticationTicket ticket = null;
      NamePasswordCredential credential = new
    NamePasswordCredential("<userName>", "<password>",
    "<accountNumber>");
      IAuthenticationManager authManager = new AuthenticationManager
    ("https://commonservices.cchaxcess.com", InstallationType.SaaS);
      authManager.Login(credential);
      ticket = authManager.AuthenticationTicket;

ITaxTransferManager taxTransferManager = new TaxTransferManager(ticket);

TaxDataImportXmlRequest taxDataRequest = new TaxDataImportXmlRequest();
    taxDataRequest.FilePaths = <List of file paths>;
    taxDataRequest.ConfigurationXml = <Import Configuration Xml>;

Guid workflowGuid = taxTransferManager.ImportTaxReturnDataXmlAsynch
    (taxDataRequest);

//Call batch manager to get the batch status based on the Workflow Guid
      IBatchProcessingManager batchProcessingManager = new
    BatchProcessingManager(ticket);
      BatchTypeCode batchTypeCode = BatchTypeCode.Import;
      BatchResult batchResponse = batchProcessingManager.GetBatchDetail
    (workflowGuid, batchTypeCode);
    }
    catch (PfxValidationException ex)
    {
    System.Text.StringBuilder errorDetails = new System.Text.StringBuilder
    ();
    foreach (ValidationExceptionDetail exDetail in ex.Details)
    {
    errorDetails.Append(exDetail.Message);
    }
    Console.WriteLine(errorDetails.ToString());
    }
    catch (PfxApplicationException ex)
    {
    Console.WriteLine(ex.Message);
    }
```

The system validates the XML in the files before submitting them for processing. Each XML file in a batch is validated individually.

- Files in the batch that fail validation are not submitted for processing. The system logs the validation errors. Validation continues for other files in the batch.

> **Note**: There is a limit of 200 validation errors per batch. Once the system reaches this limit, validation on any remaining files in the batch stops.

- XML files that pass validation are submitted for processing. A confirmation GUID is assigned to the batch. When the import begins, the processor does the following:

    i. Reads the XML parameters document

    ii. Reads the XML data import document

    iii. Identifies or creates the correct returns and worksheets into which data should be imported

    iv. Completes the data import

    v. Generates an error log for the import, if needed

4. When the batch completes, review the import results. You can use Batch Manager, the GetBatchDetail API, or both of these to confirm the status of an import.

- Batch Manager identifies batches by a combination of the job type and the time stamp when the job was submitted. You can review the import results for the batch by return. Batch Manager does not track the status of individual XML files within the batch.

- The GetBatchDetail API identifies batches with a GUID. By invoking this API, you can access the import results for individual XML files in a batch. See the OIK help for information about using this API.

5. If necessary, correct any errors, and then re-run the export. See *Setting Error Handling Options* on page 59 for more information.

> **Tip**: By default, data in a tax return displays in a black typeface. Data imported into a return displays in a blue typeface. If you edit imported data in a return, the typeface changes back to black.

Importing Data for Different Return Types in the Same Import or Import File

Some additional points to keep in mind regarding imports:

- A single import file can include data for more than one return type. For example, you can include data for Individual returns in the same XML file with data for Corporate returns.

- If a single data set must be imported into multiple return types, the data must be imported once for each return type.

- A single return can receive data from multiple XML files. However, only one instance of a return can be open at one time. If a return is open when you attempt to import data from a second XML, the second import will fail since the return is already in use.

Creating an Import XML Document

The Payload.xsd document contains information about the proper syntax and formatting for an import XML file. The following sections provide information to help you reference specific returns, worksheets, sections, entities, activities, grids, and fields in your import files.

> **Note**: You can use the Payload.xsd to validate your XML files before submitting them to TaxTransfer. However, TaxTransfer also validates the XML when you submit a batch for processing. The system provides a list of errors and their locations as part of the validation process so you can more easily resolve any errors.

Referencing a Return

A single XML import file may contain information for one return or many. Information for each return must be preceded by the ReturnHeader element to ensure data reaches the correct return. The components that make up the ReturnHeader include:

- BusinessUnitName
- Country
- ReturnGroupName
- TaxYear
- ClientID
- EINorSSN
- ReturnType
- ConfigurationSet
- OfficeName
- ReturnVersion
- Password (for password-protected returns only)

> **Notes**:
> - The Password attribute is not a required part of the header. However, if you are importing into a password-protected return, and the password is not included in the header, the import will fail.
> - If you are importing data from an XML file that includes a masked password, you must replace the mask with the actual password for the return. If you attempt to import the file with the masked value, the import will fail. See *Specifying Passwords for Password-Protected Returns* on page 28 for information about masked passwords in the return header.

The sample XML shown here demonstrates how data for two tax returns can be included in a single XML file.

```
<?xml version="1.0" encoding="UTF-16"?>

<Payload DataFormat="Standard" DataType="Tax">

<TaxReturn>

    <ReturnHeader EINorSSN="514-94-2545" ReturnVersion="1"
        ConfigurationSet="Default" BusinessUnitName="Main" OfficeName="Main
        Office" Country="US" ReturnGroupName="Default" ReturnType="I"
        TaxYear="2012" ClientID="OliverS" Password="7972ak" />

    <TaxPayerDetails NameLine2="Oliver" NameLine1="Stanley"/>

    <View xsi:Type="Worksheet">

    <Identifier Hierarchy="Federal\General\Basic Data"/>

        <WorkSheetSection Name="General">

            <FieldData Value="CA" LocationType="Description" Location="Home
                state"></FieldData>

            <FieldData Value="Head of household" LocationType="Description"
                Location="Filing status"></FieldData>

            <FieldData Value="Oliver" LocationType="Description"
                Location="First name and initial - TP"></FieldData>

            <FieldData Value="Stanley" LocationType="Description"
                Location="Last name - TP"></FieldData>

            <FieldData Value="514-94-2545" LocationType="Description"
                Location="Social security number - TP"></FieldData>

        </WorkSheetSection>

    </View>

</TaxReturn>

<TaxReturn>
```

```
<ReturnHeader EINorSSN="510-49-5412" ReturnVersion="1"
    ConfigurationSet="Default" BusinessUnitName="Main" OfficeName="Main
    Office" Country="US" ReturnGroupName="Default" ReturnType="I"
    TaxYear="2011" ClientID="MartiniK"/>

<TaxPayerDetails NameLine2="Martin" NameLine1="Keller"/>

    <View xsi:Type="Worksheet">

    <Identifier Hierarchy="Federal\General\Basic Data"/>

        <WorkSheetSection Name="General">

        <FieldData Value="CA" LocationType="Description" Location="Home
            state"></FieldData>

        <FieldData Value="Head of household" LocationType="Description"
            Location="Filing status"></FieldData>

        <FieldData Value="Martin" LocationType="Description" Location="First
            name and initial - TP"></FieldData>

        <FieldData Value="Keller" LocationType="Description" Location="Last
            name - TP"></FieldData>

        <FieldData Value="510-49-5412" LocationType="Description"
            Location="Social security number - TP"></FieldData>

        </WorkSheetSection>

    </View>

</TaxReturn>

</Payload>
```

> 📰 **Note**: Use caution when copying XML snippets from this document or the OIK help
> files. XML declaration uses straight quotation marks (LocationType="Description"),
> but word processing software may automatically apply curved quotation marks
> (LocationType="Description").

How TaxTransfer Manages Client IDs and Sub-IDs During Import

In your TaxTransfer XML documents, the clientID attribute contains the information that is
imported into the CCH Axcess client ID and client sub-ID fields. Firm-level options in CCH
Axcess control how the data is split between these fields. You should verify which client ID
options are selected for your firm before designing your imports. Doing so will help ensure
your import returns the desired result.

> 📰 **Note**: For information about where to view the ID and sub-ID options, see *About
> Client IDs and Sub-IDs* on page 1.

The general rule of thumb for imports is as follows:

- If sub-IDs are not enabled in the firm settings, then the entire clientID attribute value in the XML document is imported.

- If sub-IDs are enabled and a sub-ID is present in the XML, the value from the XML document is used for the sub-ID.

- If a sub-ID is not specified in XML, but a default sub-ID is specified in the firm settings, then the default sub-ID is used.

> **Note**: The client ID field is limited to 15 characters. The client sub-ID field is limited to 5 characters. Characters in excess of these limits are not imported.

The client IDs and sub-ID should be separated by a period in the clientID attribute. However, since periods are permitted characters in the client ID field, it is possible that the clientID attribute could contain more than one period.

The table below explains the detailed logic that TaxTransfer uses to import data for the client ID and sub-ID fields.

Firm Setting in CCH Axcess	Data Import Behavior
Client sub-IDs are not enabled	The first 15 characters in the clientID attribute are imported into the client ID field, including any periods. No data is imported into the client sub-ID field.
Client sub-IDs are enabled with no default sub-ID is configured	The import behavior depends on whether a period (.) is present in the clientID attribute. - **No period is in the clientID attribute**. The first 15 characters in the clientID attribute are imported into the client ID field. No data is imported into the client sub-ID field. - **ClientID attribute includes at least one period**. The first 15 characters preceding the last period in the clientID attribute are imported into the client ID field. The first five characters following the last period are imported into the client sub-ID field.
Client sub-IDs are enabled and a default sub-ID is configured	The import behavior depends on whether a period (.) is present in the clientID attribute. - **No period is in the clientID attribute**. The first 15 characters are imported into the client ID field. The default ID configured in CCH Axcess populates the client sub-ID field.

Firm Setting in CCH Axcess	Data Import Behavior
	• **ClientID attribute includes at least one period**. The first 15 characters preceding the last period are imported into the CCH Axcess client ID field. The first five characters following the last period in the ClientID attribute are imported into the client sub-ID field.

> 💡 **Tip**: Avoid creating client IDs that begin with a period (.). TaxTransfer cannot create a new return for a non-existing client when the client ID starts with a period. In such a scenario, you must create a blank return for the client manually in CCH Axcess Tax. Then, you can import the XML data into existing return or create a new return through TaxTransfer/TD import. This limitation only applies to import where client/return does not exist.

Importing Password-protected Returns

You can import data into password-protected returns if the password is included as part of the ReturnHeader element. The password is valid for opening the return and completing the import. However, it cannot be used for changing the return password.

If a return is password-protected and you do not provide the correct password in the XML file, TaxTransfer will not complete the import.

Referencing Worksheets, Worksheet Sections, and Alternate Worksheets

A **worksheet** is referenced by its location in the worksheet hierarchy. See *About Worksheets* on page 15 for more information.

A **worksheet section** is identified by its name (the WorksheetSection attribute). Worksheets which have multiple pages or which include "child" worksheets may also require the PageNumber, ParentSectionName, or ParentSectionPageNumber attributes. See *Worksheet Sections* on page 17 for more information.

An **alternate worksheet** is referenced by its parent worksheet and section. It also is designated by the "Alternate" XML tag in the WorksheetSection tag, as shown below.

```
- <View xsi:type="Worksheet">
    <Identifier Hierarchy="Federal\Income/Deductions\Business"/>
  - <Controls>
      <Entity ID="1"/>
```

```
        </Controls>
  - <WorkSheetSection Name="Depreciation and Amortization (Form 4562)">
    - <Controls>
        <Dependency ParentSectionName="General"/>
    </Controls>
  + <GridData ID="-47170" Description="Depreciation and Amortization">
  - <AlternateWorksheet>
      - <Identifier Hierarchy="Depreciation and Amortization Totals (Form
          4562)"/>
      - <Controls>
          <Entity ID="2"/>
      </Controls>
      - <WorkSheetSection Name="Election to Expense Certain Tangible
          Property">
      - <GridData ID="A41006" Description="Election to Expense Certain
          Tangible Property">
          - <Fields>
              <FieldHeader LocationType="Description" Location="Description
                  of asset" FieldIndex="1"/>
              <FieldHeader LocationType="Description" Location="Cost of
                  asset" FieldIndex="2"/>
              <FieldHeader LocationType="Description" Location="Elected
                  cost" FieldIndex="3"/>
              <FieldHeader LocationType="Description" Location="Type of real
                  property" FieldIndex="4"/>
          </Fields>
          - <Row>
              <RowValue Value="Desk" FieldIndex="1"/>
              <RowValue Value="340" FieldIndex="2"/>
          </Row>
      </GridData>
```

See *Alternate Worksheets* on page 18 for more information about alternate worksheets.

Referencing Entities and Activities

Entities and activities are identified by their IDs by default.

Referencing Fields

Worksheet fields can be referenced by setting the "LocationType" to one of the following:

- **FieldID.** The field ID is a static code that can be located using the Field Tag feature in Tax. Field IDs never change, even if a field is repositioned in the worksheet.

- **Description**. The field description is a user-friendly description that is similar to the field labels that appear in the Tax application. Of the three worksheet field identifiers, the description is the one most likely to change. When this occurs, you will need to update your XML source files.

- **FieldName**. The field name is an internal code used in Tax application. It is not visible to users in Tax and can seem cryptic. If needed, you can get the field names for a worksheet by doing an export that includes metadata. Field names can change, although infrequently.

Keep in mind the following when selecting your identifier:

- Line number and label matching is not available, since there may be multiple fields for a label or line.

- If an XML file specifies a field value of "", TaxTransfer interprets this as a blank value. When the XML file is imported, any existing data in that field is replaced with a blank value.

As mentioned above, you can locate the field ID for a government form or worksheet by either using the Field Tag feature in Tax or by doing an export of the form or worksheet that you want to get field IDs for. See the Tax help for details on using the Field Tag feature.

> **Note**: You can also use the field tag feature to get worksheet and government form names and numbers. The field tag feature is available only for government forms that are accessible in the Government tree and for worksheets that are accessible in the Worksheet tree view or list.

Formatting EIN/SSN and Date Fields

Date and EIN/SSN fields are formatted differently depending on where they are used in a return. You do not need to apply formatting when you import data into these fields with TaxTransfer. The system will apply the appropriate format as needed. When data is exported from these fields, the proper format is displayed in the export XML file.

Referencing Data in Summary Grids

If you are importing data for a summary grid, use the <SummaryGridDetail> element to indicate data that belongs to a summary grid. Use <Detail> sub-modes to indicate data for a detail grid.

Creating New Returns

You can use a TaxTransfer import to create new tax returns. As explained in *Referencing a Return* on page 44, every return in the import file must be preceded by a return header that contains basic identifying information about that return. When you create new returns, additional minimal data about the client and return may be necessary. The following sections describe different return creation scenarios and the information required to create a return.

Creating a New Return for a New Client

Before TaxTransfer can create a return for a new client, it first must add the client to the CCH Axcess client database. To create this new record, the XML data for the return must include the TaxPayerDetails element. This element provides the client name information that is required for creating a new client in the CCH Axcess system. There are two attributes for this element:

- **NameLine1**. All tax systems must include a value for this attribute.

- **NameLine2**. For Individual clients, a value is also required for this attribute. It is not required for the other tax systems.

The TaxPayerDetails element is not needed when you create returns for existing clients. If you do include the TaxPayerDetails element, at minimum, the NameLine1 attribute must include a value.

> **Note**: Tax requires that you provide a taxpayer name for a new return. If a name is not specified in the XML import file for a new client return, TaxTransfer uses the Client ID as the client name. After the import completes, you can edit the Client Name field in the return.

Creating a New Version of an Existing Return

Tax supports up to nine versions of a return for a given client ID. You can specify in the XML document how TaxTransfer should update the version number. If you specify:

- **"N" as the version number**. TaxTransfer creates a new return version with a version number that is incremented by 1 from the existing versions.

- **A version number in the range 1-9**. TaxTransfer attempts to find a matching version of the return for the client and tax system. If a match is found, the system uses the existing return. If a match is not found, the system creates a new version with the specified version number.

If a return already has nine versions, TaxTransfer cannot create another version of the return.

Example: You are importing data into a return that has the following versions:

    2011S:ABC Corp:v1   2011S:ABC Corp:v2   2011S:ABC Corp:v3

If you make a new version of the return, you will have the following results, depending on the way you set the version number in the XML document:

Version Number in the XML document	System Response
N	Creates a new version with the return ID 2011S:ABC Corp:v4
7	Creates a new version with the return ID 2011S:ABC Corp:v7
2	Uses the existing return 2011S:ABC Corp:v2

Note: When you import data into an existing worksheet that contains tick marks, TaxTransfer removes the tick marks for worksheets being imported.

Anticipating Subsequent Imports

We strongly recommend that you include the EIN/SSN value when you create a new return. Doing so will ensure that the EIN/SSN is available for matching purposes if you perform subsequent imports into the same return. See the next section, *Return Matching for Existing Returns* below for an explanation of EIN/SSN matching.

The EIN/SSN value is on the Federal\General\Basic Data worksheet, as shown in the following code:

```
<ReturnHeader ClientID="SmithJonesLLC" TaxYear="2011" ReturnType="P"
    ReturnGroupName="Default" Country="US" OfficeName="Main Office"
    BusinessUnitName="Main" ConfigurationSet="Default" ReturnVersion="1"
    EINorSSN="98-5523456" />

<TaxPayerDetails NameLine1="Smith Jones LLC" NameLine2="" />

<View Type="Worksheet">

<Identifier Hierarchy="Federal\General\Basic Data" />

    <Controls><Entity ID="1" /></Controls>

    <WorkSheetSection Name="General">

        <FieldData Location="Employer ID number" LocationType="Description"
            Value="98-5523456" />
```

Return Matching for Existing Returns

An existing return is matched to the XML import data based on the following fields in the Return ID:

- Tax Year
- Client ID (including client sub-ID, if present)
- Tax Product
- Version Number

Firms requiring an additional level of security can also include the Employer ID Number (EIN) or Social Security Number (SSN) as matching criteria. The EIN/SSN is taken from the return header. If any one of the following conditions is met, the match is considered to be valid:

- All nine digits of the EIN/SSN are present in both the return and the XML import file
- All nine digits of the EIN/SSN are present in the return, and the last four digits of the EIN/SSN are present in the XML import file
- The EIN/SSN attribute is null in both the return and the XML import file
- The EIN/SSN attribute in the XML file is missing

The matching of EIN/SSN is independent of format considerations. Social security number *123456789* will match with *123-45-6789*.

> ⚑ **Important**: If the EIN/SSN field is empty on a return's Federal\General\Basic Data worksheet, do one of the following to prevent an EIN/SSN mismatch for an import into that return:
>
> - Omit the EINorSSN attribute from the return header of your import file. When this attribute is eliminated, TaxTransfer will not attempt EIN/SSN matching.
>
> - Set the EINorSSN attribute in the return header as blank (EIN/SSN=""). If the attribute in the import file return header is blank, and the EIN/SSN value in the return is blank, then the match is successful.

Import Options

Import options are set at the batch level, but are applied at the return level. These options must be specified in the TaxDataImportOptions XML document.

Selecting the Import Mode

The ImportMode element allows you to specify how data imported into an existing return affects existing data. There are three import modes to select from:

- DeleteAndReplace
- AppendAll
- MatchAndUpdate

The following sections provide an overview of each import method. To ensure data is imported correctly to the corresponding returns, we recommend reviewing the information for all three modes before setting up your import.

> 💡 **Tip**: To compare how each mode impacts a return, review the information in *Appendix B: Comparing Export Modes* on page 68. This section uses sample data to demonstrate how a return would be affected when different import modes are selected.

> 📇 **Note**: Regardless of which mode you select, a new return is created when there is not an existing return that matches the import data.

DeleteAndReplace

When this option is selected, TaxTransfer deletes all instances of the worksheets specified in the XML file and replaces them with worksheets containing the import data. This mode can be used when re-importing data into an existing return.

> ⚑ **Important**: This mode does not allow for deleting and replacing portions of a worksheet. The entire worksheet is always deleted and replaced. If you want to update portions of a worksheet, you should consider using the MatchAndUpdate mode.

> 🔍 **Examples**:
>
> - You are importing data into a return that has 50 instances of Worksheet A. The XML file you are importing includes only two instances of Worksheet A. When you complete the import using DeleteAndReplace mode, the return includes only two instances of Worksheet A.
>
> - Worksheet A in a return includes sections 1 and 2, and both of these sections contain data. You import another Worksheet A into the same return using DeleteAndReplace mode. The XML import file for Worksheet A only contains data for section 1. When the import completes, only section 1 of Worksheet A contain data, because the data that was in section 2 was deleted as part of the import.

AppendAll

When you select this mode, the import data is added to the existing data in the return according to the following rules:

- For repeater fields, a new record is created.
- For non-repeating fields, the existing record is updated.

> ⚑ **Important**: If you are importing repeater data into an existing return, verify that existing values in primary key fields are not duplicated in the import file. If you attempt to import a duplicate primary key into a repeater field, the import will fail.

As an example, assume that you want to import asset information into an existing return using the AppendAll mode. You have set the asset number as a primary key for the assets grid. The asset numbers in the existing return and the XML import file are as follows:

Asset number	Asset description	Asset number	Asset description
Asset 1	2012 Ford Focus		
Asset 2	2010 Honda Accord		
Asset 3	2010 Toyota Tundra	Asset 3	2011 Honda Prelude
		Asset 4	2010 Honda Accord
		Asset 5	2009 Chevy HHR

This import will fail, because appending Asset 3 from the XML file would create a duplicate value in a keyed field.

Duplicates in non-keyed fields do not create the same issue. For example, in the following table, the duplicate asset numbers have been eliminated. However, there are duplicate asset descriptions.

Assuming that asset description is not a keyed field, TaxTransfer would be able to successfully append Assets 4 through 6 to the return.

Asset number	Asset description	Asset number	Asset description
Asset 1	2012 Ford Focus		
Asset 2	2010 Honda Accord		
Asset 3	2010 Toyota Tundra	Asset 4	2011 Honda Prelude
		Asset 5	2010 Honda Accord
		Asset 6	2009 Chevy HHR

MatchAndUpdate

When you select this option, TaxTransfer updates any non-repeating data. For repeaters, TaxTransfer attempts to correlate existing return data with the information being imported, and then updates any matching rows. If you do not specify any matching criteria, the data will be appended to the existing data. See the previous section for information about the AppendAll logic.

> ⚑ **Important**:
>
> - Data in the XML file is always imported, as long as it is valid for the given field. If an XML field is blank, and the return field has data, the XML file overrides the return field.
>
> - There is no partial matching. Spaces are included as part of the match, including leading and trailing spaces.
>
> - The system honors case-sensitive matching as described in *Setting the Case Matching Option* on page 59.

TaxTransfer uses entity number (Entity ID) by default as the primary key for data matching. However, you can choose to ignore this value. If Entity ID is ignored, the system uses the remaining primary key values for data matching purposes.

To ignore the entity number as a primary key, create an attribute called IgnoreEntityNumberMatching and set its value to "true." To specify a primary key field, set the IsPrimaryField attribute for the field to "true." To specify a primary field in a grid, the IsPrimaryField attribute must be set in the FieldHeader element for the field.

If the IgnoreEntityNumberMatching attribute is absent or is not set to "true," TaxTransfer will use Entity ID for data matching.

In the following example, the Entity ID will be ignored and the Business name field will be used as the primary key.

```
<View xsi:Type="Worksheet">

<Identifier Hierarchy="Federal\Income\Business"/>

<Controls IgnoreEntityNumberMatching="true">

    <Entity ID="4">

<WorkSheetSection Name="General">

  <FieldData Location="Business name" LocationType="Description" Value="Hanover
  Bank" IsPrimaryField="true"/>

  <FieldData Location="Street address" LocationType="Description" Value="215
  Carroll Street"/>
```

```
    <FieldData Location="Business City" LocationType="Description"
     Value="Madison"/>

    <FieldData Location="State" LocationType="Description" Value="WI"/>

    <FieldData Location="ZIP code" LocationType="Description" Value="53700"/>

  </WorkSheetSection>

</View>
```

> ⚠️ **Warning!** If no primary keys are provided, data may be overlapped or overwritten.

> 🗐 **Note**: Import data is matched by activities for K-1 input areas in Individual returns. If a match does not exist, a new activity is created.

Worksheet Matching

You can select to match up to a total of five primary key fields per worksheet. Each section of a worksheet can also have up to five primary keys, as explained in the *Section Matching* section which follows. Different primary key fields can be set for different worksheets. Any field that is not part of a grid or a repeating section can be used for worksheet matching.

If there are multiple instances of the same worksheet, the same primary keys must be used for all instances of that worksheet. The primary keys should only be set in the first instance of that worksheet. If multiple matches are found, the system updates the first occurrence.

> 🔍 **Example**: If you import to a rental activity number 12, use the activity number as the matching field.

Section Matching

You can also match up to five primary keys for a section. The matching process is based on primary keys specified in the first instance of a section.

- Any field that is part of a section and not part of a grid can be used for section matching.

- Any field which is part of a repeating section can be used for repeating section matching.

> 🔍 **Example**: If, on a Federal Partnership return, you import to the Income > Passthrough Items worksheet, you can use Activity as the matching field.

Grid Matching

For grid matching, you can specify up to five primary fields per grid. If a section has multiple grids, you can specify up to five primary fields for each grid. Any field within a grid can be used for grid matching. To specify a primary field in a grid, the IsPrimaryField attribute must be set to "true" in the FieldHeader element for the field. For grids that belong to a repeating worksheet, the IsPrimaryField attribute must be specified for each entity.

> **Example**: You are importing data for other expenses for trade or business and want to match on the "Telephone Expense" field. Select to match on the description field for the words "Telephone Expense."

Alternate Worksheet Matching

For the grids on an alternate worksheet, follow the instructions in the previous section for grid matching. Otherwise, no special steps are required for matching.

Setting the Case Matching Option

Case sensitivity is used to find fields, sections, and worksheets. Specify if you want to perform case-sensitive matching in an import. By default, matching is not case sensitive.

> **Tip**: Using case-sensitive matching can improve processing time.

Setting Error Handling Options

You can choose whether an import should proceed when there are data errors. All errors are logged to a file that you can view when the import process is completed. There are three error handling options available:

- **RejectReturnOnAnyError**. If an error occurs, the entire import fails, and the changes to the return are not saved. However, the system will validate the rest of the data, and log all additional errors so that you can view and correct them.

- **IgnoreAllDataErrors**. When an ignorable error occurs, the error is logged, and the failed piece of data is not imported. The system continues processing the rest of the import. All changes to the return, with the exception of the failed data, are saved.

> **Note**: Some errors can still cause the import to be canceled even when this option is selected. For example, if the return is in use elsewhere, the import is canceled. Also, if your credentials do not allow access to the returns into which you are importing data, the import is canceled.

- **ValidationOnly**. If you select this option, no import will occur. This option allows you to validate the data without completing the imports. All errors are recorded in the processing log so you can correct them before performing your import. The return is then closed without saving any import data or changes.

Setting the Option to Initiate a Calculation After Import

You can configure TaxTransfer to automatically calculate the affected returns once an import completes. To select this option, set the CalculateReturnAfterImport option to "true." Performing a calculation will cause the data imported into the worksheets to populate the appropriate government forms.

> **Note**: Choosing the option to calculate returns automatically can cause performance issues.

The error handling option you select can affect whether a calculation can be performed, as shown in the following table.

Error Handling Option	Impact on Calculation
RejectReturnOnAnyError	TaxTransfer will only initiate a calculation if there are no errors found on the return.
ValidationOnly	The calculation option is inapplicable since this option is used only to validate the import file without actually importing data.
IgnoreAllDataErrors	The system will begin the calculation after import. Data errors that cause the calculation to fail will be noted in the error log.

The bold line of text in the following sample TaxDataImportOptions XML demonstrates how to enable the auto calculation feature for a TaxTransfer import.

```
<TaxDataImportOptions xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xmlns:xsd="http://www.w3.org/2001/XMLSchema">

    <ImportMode>MatchAndUpdate</ImportMode>

    <CaseSensitiveMatching>false</CaseSensitiveMatching>

    <InvalidContentErrorHandling>RejectReturnOnAnyError</InvalidContentErrorHand
        ling>

    <CalcReturnAfterImport>true</CalcReturnAfterImport>

</TaxDataImportOptions>
```

Setting the Option to Update Client Profiles

CCH Axcess has a common client database that is used in all product modules, including Tax. Each client in the database has a profile that includes information such as the client name, address, and phone number. A full list of client profile data is provided in the Tax help file.

When you import return data for existing CCH Axcess clients, you can select whether the client data in a return will overwrite data in the client profile. This option is set using the UpdateExistingClientProfile element. The options you can select for this option are:

- **SkipUpdateForExistingClients**. The client profile for an existing client will not be overwritten by the client data in a corresponding return. This is the default option.

- **AlwaysUpdate**. The client profile will be overwritten by the client data in the return.

  > **Note**: To use this option, your firm must enable the firm setting that allows client profiles to be updated from Tax returns. See *Managing Your Tax Options* in the Tax Help for information about this setting.

Keep in mind the following when you are deciding which option to select:

- Client profile data will only be updated when you import return data for the most recent year return that is present for a given client. For example, if a client has both a 2012 return and a 2013 return, only client data imported for the 2013 return will overwrite the client profile data.

- Regardless of the option you select, the client profile data will not be overwritten if validation fails or you cancel the import.

- If a corresponding client profile does not exist for a return, the client data in the XML file is used to create the client profile, regardless of the setting you have selected.

  > **Example**: The XML you would use to update existing clients would look like this:
  >
  > ```
  > <UpdateExistingClientProfile>AlwaysUpdate</UpdateExistingClientProfile>
  > ```

Including a Control Number

If needed, you can use a control number to identify the individual XML files that you import into a return. To do so, enter a value for the ControlNumber attribute in the return header. When you have completed your import, the control number value will display in the Batch Manager Job Details Report as well.

TaxTransfer export files include a default control number that is based on the date and time stamp of the export. If you use an export file as the basis of your import, you can use this default control number, or you can edit it as needed in the XML file.

To pass XML validation, the control number must:

- Be 20 characters or less
- Start and end with alpha-numeric characters
- Include only alpha-numeric characters, colons (:), or hyphens (-)

Appendix A

SAMPLE PAYLOAD XML

The sample XML in this appendix shows the structure of a typical Payload.xml document. Use this sample as a reference for creating TaxTransfer import files or to help understand the file generated by a TaxTransfer export. While this example only includes a single tax return, you can include multiple returns in the same XML document if needed.

> **Note**: A payload schema file (Payload.xsd) is available to help you structure your XML documents.The file is at the following location on a computer where you have Tax installed:

- **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources
- **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

The elements and attributes in the example are a subset of all available elements and attributes. Your XML export files can have additional attributes and elements depending on the export options that you select.

XML import files will likely contain fewer elements and attributes than an export file. For example, metadata and lookup fields are not needed for imports. In fact, they should be avoided to reduce file size and prevent mismatch issues.

The following items are included in the sample Payload.xml:

Item	Description
A	**ReturnHeader** and **TaxPayerDetails** are used to locate an existing return or, if no match is found, to create a new return.
B	**ControlNumber** is an optional field you can use to correlate IDs between two systems.
C	The **EINorSSN** attribute is used as an additional safety measure to ensure a return

Item	Description
	matches based on either the full nine-digits or the last four-digits of the social security number or employer identification number.
D	The **Password** attribute is required in the return header for password-protected returns only. The password is not exported. Instead, a masked value displays, as shown here. You must enter the actual password when importing into a password-protected return.
E	Each **TaxReturn** element can have one or more **View** elements. The View elements represent the type of data in the XML file.
F, G	You can specify worksheets with a unique combination of **Hierarchy** and **Entity ID**. To ignore the entity number as a primary key, create an attribute called IgnoreEntityNumberMatching and set its value to "true." If the Entity ID is not used, the system uses the remaining primary key values for data matching purposes. See *MatchAndUpdate* on page 57 for more information.
H	Each worksheet has at least one section which contains data. This sample **WorkSheetSection** element contains non-repeating **FieldData**.
I	This instance of WorkSheetSection contains repeating data in a summary grid. The grid details are in the **GridData** element. The grid is identified by its **ID** and **Description**. Each summary grid has one or more **FieldHeader** tags to represent columns.
J	Specify the **IsPrimaryField** attribute at the FieldHeader level for matching purposes. Doing so identifies the combination of field values that uniquely identifies the row. This identifier can vary from user to user or from grid to grid. It is not a system-defined item.
K	Each grid also has one or more **Row** items which represent the data rows. Each Row item has at least one **RowValue** to represent cells.
L	This WorkSheetSection instance represents a detail worksheet within a summary grid.
M, N	Each **GridData** item has at least one **Detail** element. Each detail record is a worksheet, so it uses the same XML hierarchy as the parent worksheet. Each Detail element can have one or more WorkSheetSection elements. Each WorkSheetSection can combine non-repeating/static fields, summary grids, and additional levels of Detail grids as needed.

Item	Description
O, P	Specify government forms with a combination of the Hierarchy and the Sheet and Entity IDs.
Q	You can use custom options to set different export options for worksheets than for the government forms in the same export. In this example, custom options were set up so that metadata was exported from the government form, but not from the worksheets.

```xml
<?xml version="1.0"?>
- <Payload DataFormat="Standard" DataType="Tax">
  - <TaxReturn>
      <ReturnHeader ControlNumber="201304300139076283"     B
        EINorSSN="549-82-0001" ReturnVersion="1"  C
        ConfigurationSet="Default" BusinessUnitName="Main"
        OfficeName="Main Office" Country="US"
        ReturnGroupName="Default" ReturnType="I" TaxYear="2012"
        ClientID="NSV001" Password =" **** "/> D
      <TaxPayerDetails NameLine2="Dayton" NameLine1="Daria"/>
    - <View xsi:type="Worksheet">
   F    <Identifier Hierarchy="Federal\General\Basic Data"/>
      - <Controls>
   G        <Entity ID="1"/>
        </Controls>
      - <WorkSheetSection Name="General">
   H        <FieldData Value="IL" LocationType="Description"
              Location="Home state"/>
            <FieldData Value="Single" LocationType="Description"
              Location="Filing status"/>
        </WorkSheetSection>
        <WorkSheetSection Name="Dependents"/>
    </View>
    - <View xsi:type="Worksheet">
        <Identifier Hierarchy="Federal\Income/Deductions\Wages,
          Salaries and Tips"/>
      - <Controls>
            <Entity ID="1"/>
        </Controls>
```

```xml
- <WorkSheetSection Name="Wages and Salaries">
    - <GridData ID="-47009" Description="Wages and Salaries"
        - <Fields>
            <FieldHeader LocationType="Description"
                Location="TS" IsPrimaryField="True"  J
                FieldIndex="1"/>
            <FieldHeader LocationType="Description"
                Location="Wages, tips other compensation"
                FieldIndex="4"/>
        </Fields>
    - <Row>
        <RowValue Value="T" FieldIndex="1"/>
        <RowValue Value="38843" FieldIndex="4"/>
    </Row>
    - <Row>
        <RowValue Value="T" FieldIndex="1"/>
        <RowValue Value="24757" FieldIndex="4"/>
    </Row>
    </GridData>
    </WorkSheetSection>
    </View>
- <View xsi:type="Worksheet">
    <Identifier Hierarchy="Federal\Partners\Partner
        Information"/>
  - <Controls>
        <Entity ID="1"/>
    </Controls>
  - <WorkSheetSection Name="Partner Information">
    - <GridData ID="-47027" Description="Partner
        Information">
        - <Detail>
            - <WorkSheetSection Name="Basic Partner Data">
                <FieldData Value="1"
                    LocationType="Description"
                    Location="Partner number"/>
                <FieldData Value="Abby"
                    LocationType="Description"
                    Location="Partner's first name - line 1"/>
            </WorkSheetSection>
        </Detail>
        - <Detail>
            - <WorkSheetSection Name="Basic Partner Data">
                <FieldData Value="2"
                    LocationType="Description"
                    Location="Partner number"/>
                <FieldData Value="Ben"
                    LocationType="Description"
                    Location="Partner's first name - line 1"/>
            </WorkSheetSection>
        </Detail>
    </GridData>
    </WorkSheetSection>
    </View>
```

```xml
- <View xsi:type="Government">
    <Identifier ID="13302" Hierarchy="Federal\Sch D -
        Capital Gains and Losses\Form 8949 Short-Term
        A"/>
  - <Controls>
        <Sheet ID="1"/>
        <Entity ID="1"/>
    </Controls>
  - <FieldData Value="X" Location="A"
    LocationType="FieldID">
        <FieldMeta IsReadOnly="false" IsMandatory="false"
            Type="Enum"/>
    </FieldData>
  - <FieldData Value="123-45-0042" Location="SOCSEC"
    LocationType="FieldID">
        <FieldMeta IsReadOnly="false" IsMandatory="true"
            Type="Text" Format="NNN-NN-NNNN"/>
    </FieldData>
  - <FieldData Value="Box 40 Box 41" Location="NAME"
    LocationType="FieldID">
        <FieldMeta IsReadOnly="false" IsMandatory="false"
            Type="Text"/>
    </FieldData>
  </View>
  </TaxReturn>
</Payload>
```

O
P
Q

Appendix B

COMPARING EXPORT MODES

The examples in this appendix illustrate the different results that you can get from an export depending on the export mode you select.

While the examples shown here use worksheet data, the export modes also apply for government forms exports and for exports that combine worksheet and government forms data.

Sample Return Data for Export

The table below contains sample data for a hypothetical tax return that includes four worksheets. Two of these worksheets (Worksheets 1 and 3) contain data in some, but not all, available fields. The remaining two worksheets (Worksheets 2 and 4) do not contain data.

	Worksheet 1 (contains data)	Worksheet 2 (no data)	Worksheet 3 (contains data)	Worksheet 4 (no data)
Tax Return Data	Field 1: "A" Field 2: "B" Field 3: <empty> Field 4: <empty>	Field 1: <empty> Field 2: <empty> Field 3: <empty> Field 4: <empty> Field 5: <empty> Field 6: <empty>	Field 1: "C" Field 2: "D" Field 3: "E" Field 4: "F" Field 5: "G" Field 6: "H" Field 7: "I" Field 8: "J" Field 9: <empty> Field 10: <empty>	Field 1: <empty> Field 2: <empty> Field 3: <empty>

Export Results by Export Mode

The content that is exported by TaxTransfer varies depending on the export mode and the export options selected, as shown in the example results that follow.

> **Notes**:
>
> - Fields with a blank value are represented by empty quote marks (""), both in the examples which follow and in the export XML file.
>
> - For details about each export mode and the export options, see *Chapter 3: Exporting Data* on page 23.

Export Mode: Specified Worksheets

In this example, Worksheets 1 and 4 are specified for export. In this scenario, data in worksheets 2 and 3 is skipped entirely because those worksheets are not selected for export. The data from Worksheets 1 and 4 that is exported varies depending on the export option that is selected.

	Export Option Selected		
	Fields with data	**All fields with and without data**	**Generate template**
Output Generated to XML File	**WKS1 (Header)** Field 1="A" Field 2="B" **WKS4 (Header)**	**WKS1 (Header)** Field 1: "A" Field 2: "B" Field 3: "" Field 4: "" **WKS4 (Header)** Field 1: "" Field 2: "" Field 3: ""	**WKS1 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" **WKS4 (Header)** Field 1: "" Field 2: "" Field 3: ""

Export Mode: Worksheets with Data

In this example, only the two worksheets which have data (Worksheets 1 and 3) are included in the export. The data from Worksheets 1 and 3 that is exported varies depending on the export option that is selected.

	Export Option Selected		
	Fields with data	**All fields with and without data**	**Generate template**
Output Generated **to XML File**	**WKS1 (Header)** Field 1="A" Field 2="B" **WKS3 (Header)** Field 1: "C" Field 2: "D" Field 3: "E" Field 4: "F" Field 5: "G" Field 6: "H" Field 7: "I" Field 8: "J"	**WKS1 (Header)** Field 1: "A" Field 2: "B" Field 3: "" Field 4: "" **WKS3 (Header)** Field 1: "C" Field 2: "D" Field 3: "E" Field 4: "F" Field 5: "G" Field 6: "H" Field 7: "I" Field 8: "J" Field 9: "" Field 10: ""	**WKS1 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" **WKS3 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" Field 5: "" Field 6: "" Field 7: "" Field 8: "" Field 9: "" Field 10: ""

Export Mode: All Worksheets

All four worksheets are included in the export when this export mode is selected.

Export Option Selected		
Fields with data	**All fields with and without data**	**Generate template**
WKS1 (Header) Field 1= "A" Field 2= "B" **WKS2 (Header)** **WKS3 (Header)** Field 1: "C" Field 2: "D" Field 3: "E" Field 4: "F" Field 5: "G" Field 6: "H" Field 7: "I" Field 8: "J" **WKS4 (Header)**	**WKS1 (Header)** Field 1: "A" Field 2: "B" Field 3: "" Field 4: "" **WKS2 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" Field 5: "" Field 6: "" **WKS3 (Header)** Field 1: "C" Field 2: "D" Field 3: "E" Field 4: "F" Field 5: "G" Field 6: "H" Field 7: "I" Field 8: "J" Field 9: "" Field 10: "" **WKS4 (Header)** Field 1: "" Field 2: "" Field 3: ""	**WKS1 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" **WKS2 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" Field 5: "" Field 6: "" **WKS3 (Header)** Field 1: "" Field 2: "" Field 3: "" Field 4: "" Field 5: "" Field 6: "" Field 7: "" Field 8: "" Field 9: "" Field 10: "" **WKS4 (Header)** Field 1: "" Field 2: "" Field 3: ""

(Row label for the data rows: **Output Generated to XML File**)

Appendix C

COMPARING IMPORT MODES

This appendix demonstrates the different outcomes that may result from a TaxTransfer import depending on the import mode selected. The hypothetical scenario used here assumes that you are importing data into an existing return that has existing data.

The existing return data prior to the import is as follows:

Existing Return

First Name	John
Last Name	Brown
State	California

Assets

Name	Type	Value	Depr. Code
Car	Automobile	$15,000	X
Laptop	Electronics	$2,000	Y
Entertainment System	Appliances	$4,000	Z

The data to be imported into the sample return is shown in the following table. Italics indicate data that differs from the existing data in the sample return.

Import XML

First Name	John
Last Name	*Smith*
State	*Nevada*

Assets

Name	Type	Value	Depr. Code
Car	Automobile	$15,000	X
Books	*Educational*	*$600*	*B*
Entertainment System	*Electronics*	*$8,000*	*A*

Import Results by Import Mode

The tables which follow show the results achieved for the import described in the previous section using the specified import mode.

DeleteAndReplace

When the DeleteAndReplace mode is selected, all existing data is deleted for the given worksheet prior to import. The data in the import XML file is then imported into the return.

Results after import

First Name	John
Last Name	Smith
State	Nevada

Assets

Name	**Type**	**Value**	**Depr. Code**
Car	Automobile	$15,000	X
Books	Educational	$600	B
Entertainment System	Electronics	$8,000	A

AppendAll

When the AppendAll mode is selected, all static data in the worksheet is updated. Repeater data is appended. In this example, First Name, Last Name, and State are static fields. Name, Type, Value, and Depr. Code are repeater fields.

Results after import

First Name	John
Last Name	Smith
State	Nevada

Assets

Name	**Type**	**Value**	**Depr. Code**
Car	Automobile	$15,000	X
Laptop	Electronics	$2,000	Y
Entertainment System	Appliances	$4,000	Z
Car	Automobile	$15,000	X
Books	Educational	$600	B
Entertainment System	Electronics	$8,000	A

MatchAndUpdate

Using the MatchAndUpdate mode, non-matching repeater data is appended, and the remaining data is updated. The differences between the two results shown in the following two tables are the different choices of PrimaryField. The first example uses the Name field only, while the second uses both the Name and Type fields.

PrimaryField set for Name field only

Results after import

First Name	John
Last Name	Smith
State	Nevada

Assets

Name	Type	Value	Depr. Code
Car	Automobile	$15,000	X
Laptop	Electronics	$2,000	Y
Entertainment System	Electronics	$8,000	A
Books	Educational	$600	B

PrimaryField set for Name and Type fields

Results after import

First Name	John
Last Name	Smith
State	Nevada

Assets

Name	Type	Value	Depr. Code
Car	Automobile	$15,000	X
Laptop	Electronics	$2,000	Y
Entertainment System	Appliances	$4,000	Z
Books	Educational	$600	B
Entertainment System	Electronics	$8,000	A

Appendix D

XML Schema

The three TaxTransfer schema documents are included at the following location on the computer where you have Tax installed:

- **32-bit computers**. C:\Program Files\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

- **64-bit computers**. C:\Program Files (x86)\WK\ProSystem fx Suite\Smart Client\SaaS\IXResources

You can use these schema documents to help you design your TaxTransfer imports and exports. You also can use them to validate your XML documents before submitting them for processing.

The three schema documents are:

- **Payload.xsd**. Defines the structure and content of the XML documents used to hold tax return data. Data you submit for import must conform to the specifications in this document. Data exported from Tax will also conform to the Payload.xsd.

- **TaxDataExportOptions.xsd**. Defines the structure of the options file used for exporting tax returns.

- **TaxDataImportOptions.xsd**. Defines the options that must be provided to perform a data import.

> **Note**: The schema documents do not include sample data. You can use the XMLSampleGenerator to help test your XML documents. However, you should verify that the sample data that is generated is appropriate for the Tax application. You may need to consult the CCH Axcess Help files for information about the type of data that is expected in particular areas of the program.