OnBase®

Foundation EP5

Front Office Scanning

Reference Guide

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User Guide

Copyright

Document Name .... Front Office Scanning

Department/Group .... Documentation

Revision Number .... Foundation EP5

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Overview

Front Office Scanning is a customizable scanning application that provides an easy way to associate indexing information from any number of data entry workstations with documents scanned using one or more centralized scanning workstations.

Indexing information, such as Keyword Values, can be captured from data entry workstations in a number of ways:

- Data can be manually entered by a user
- Data can be automatically generated by a third-party software application
- Data can be captured via Application Enabler from a third-party software application
- Data Sets can be captured from an HL7 data stream

Note: Some of these options require additional software licensing. See Licensing on page 5 for more information.

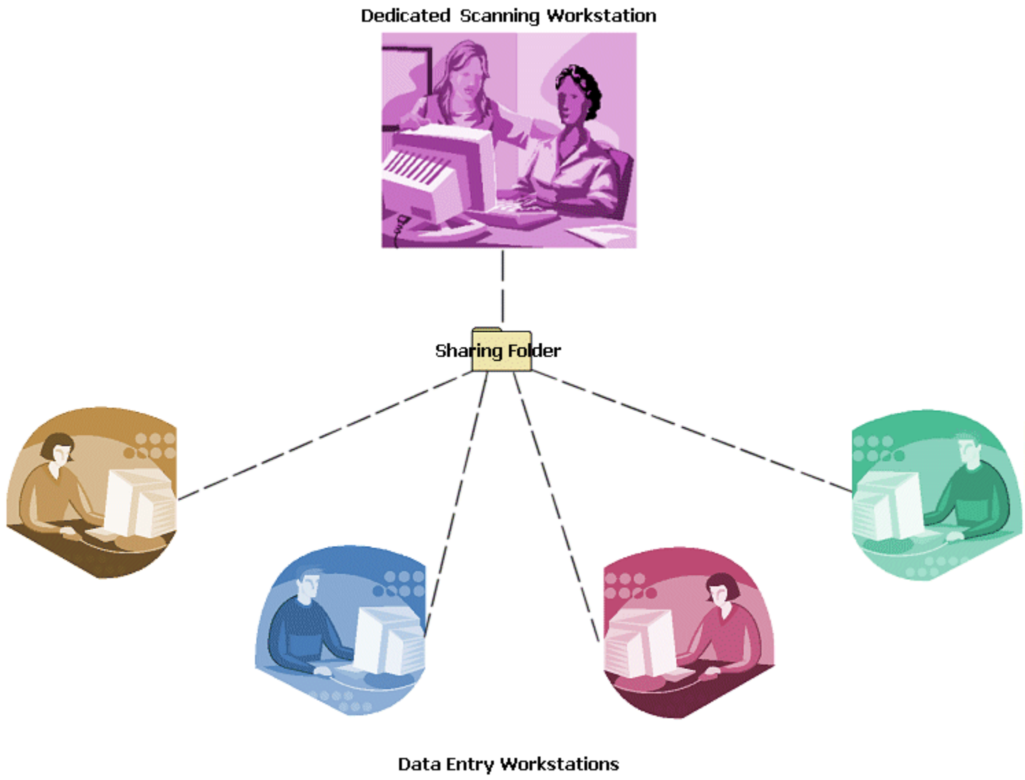
The indexing information, called a Data Set, is made available to a Front Office Scanning workstation; the user at the Front Office Scanning workstation selects an available Data Set and associates it with a document by scanning a paper document, marking up an image template, or completing an E-Form.

Once completed, the documents are uploaded to OnBase. Depending on your configuration, these documents are either immediately uploaded to OnBase, stored locally for a later upload to OnBase, or uploaded as a batch in a Document Imaging scan queue for further processing.

The Front Office Scanning client is accessible from within the OnBase Client or as a standalone application that connects to OnBase via the OnBase Application Server.

Data Entry Workstations and the Front Office Scanning Workstation

Front Office Scanning allows an organization to have multiple workstations or locations for gathering information and one or more workstations that are used to scan/create documents.



For example:

> An emergency room at a hospital has three registration desks where incoming patients can speak with a registrar to update their personal and insurance information. Once patients have been registered, they proceed to another desk where they present their identification (e.g., driver's license) and insurance card for scanning. The scanning operator is able to quickly index the scanned documents with Data Sets created by any of the registration (i.e., data-entry) workstations.

The Data Sets, created by the data entry workstations and used for indexing by the Front Office Scanning workstation, are stored as XML files. The Data Set XML files can be stored either in a local, shared folder or in a network location accessible by the Application Server.

- **Local Shared Folder**. When this option is used, the Data Set XML files are stored in a shared folder accessible locally by all of the data entry workstations and the Front Office Scanning workstation.

- **Network Location**. When this option is used, the Data Set XML files are stored in a location accessible by the data entry workstations and the OnBase Application Server, but not locally accessible by the Front Office Scanning workstation(s). Data Sets are made available to the Front Office Scanning workstation via a web service.

Tip: The network location option is recommended when either your Front Office Scanning solution consists of a large number of data entry workstations and several Front Office Scanning workstations or if your data entry workstations and Front Office Scanning workstations are not connected to the same wide-area network (WAN).

Front Office Scanning & Application Enabler

Front Office Scanning is designed to work hand-in-hand with Application Enabler to easily, accurately, and securely obtain indexing information from a third-party line of business application.

To use Application Enabler with Front Office Scanning, Application Enabler and the Front Office Scanning Enabler Service are installed on the data-entry workstations. Users enter indexing information into the organization’s line of business application and use Application Enabler to capture the specified information for the Front Office Scanning Data Set. The Data Set is saved as an XML file in the shared folder where it can be accessed by the Front Office Scanning workstation to index scanned documents.

The user running the Front Office Scanning client user can select any available Data Set, including those captured via Application Enabler, and associate it with a document that is then uploaded to OnBase.

Front Office Scanning & HL7

When used by a healthcare facility, Front Office Scanning can seamlessly integrate with the OnBase HL7 module to automatically generate Data Sets for the Front Office Scanning workstation from HL7 messages without any user interaction.

Users simply enter data into their facility’s line of business application to trigger the creation of an HL7 message. This message is identified by the OnBase HL7 solution and processed into a Data Set. The Data Set is then made available to the Front Office Scanning workstation without requiring data entry users to perform any additional actions.

The Benefits of a Front Office Scanning Solution

A Front Office Scanning solution has many benefits for low-volume, front-office scanning applications.

- **Centralized scanning can be performed at one workstation while data entry can be performed on a number of non-scanning workstations**. This allows many users to enter data at once without the cost of scanners for each data entry workstation.
- **Data entry is performed more efficiently because multiple users can enter data at the same time**. Users are not waiting for the scanning workstation to become available, allowing them to save time and work more efficiently. Also, because data entry can be performed separately from the scanning workstation, indexing information can be continuously entered while the Front Office Scanning workstation is scanning images and matching documents to Data Sets.
- **When a Front Office Scanning solution is designed in tandem with Application Enabler to capture data, users can enter data once and use it in multiple application**s. By entering data only once into an enabled application and then using that same data to create Data Sets for the Front Office Scanning workstation, processes are simplified by eliminating duplicate data entry (into a scanning application and the organization's line of business application) and reducing the chance for error.
- **When Front Office Scanning is used in tandem with the OnBase HL7 solution, Data Sets can be created automatically without any user interaction**. By simply entering data into a healthcare facility's line of business application, users can automatically generate an HL7 message that is processed into a Front Office Scanning Data Set without any additional work on the part of the users. Like the Front Office Scanning/ Application Enabler solution, this saves time and reduces the chance for error by eliminating the duplication of work.

Applications

Front Office Scanning is ideally suited to the needs of the healthcare industry and is an excellent fit for hospital admissions, urgent care facilities, and medical or dental offices. For example:

- A hospital emergency room has multiple registration desks where registrars speak with incoming patients to gather personal and insurance information. The registrars are already required to enter patient information into the hospital's EMR system; by installing Application Enabler and the Front Office Scanning Enabler Service on the workstations at the registration desks, patient information can be automatically captured with the click of a mouse (or by the capture and process of an HL7 message) and used by a centralized Front Office Scanning workstation to index scanned images of the patient's driver's license and insurance card.

Front Office Scanning also has a number of potential applications outside of the healthcare industry. It is an optimal solution for any office or department where customer information is entered and copies of supporting documentation are required. For example:

- When opening a new checking account, banking regulations require that the bank take certain steps to confirm the identity or identities of the people opening the account. Personal information about the account holders is entered into the bank's line of business application to create the account and Application Enabler can be used to capture this information and create a Data Set. This Data Set can be used by a centralized Front Office Scanning workstation to index scanned images of the applicants' driver's licenses.

System Prerequisites

The Front Office Scanning client requires a properly installed and configured OnBase Application Server.

A properly installed and configured Application Server is also required if Data Sets are obtained from a Web service.

Licensing

Beginning in OnBase Foundation EP5, new customers must use simplified licensing to access Front Office Scanning functionality. Existing customers upgrading from a version of OnBase prior to OnBase Foundation EP5 can continue to use legacy licensing to access this functionality.

If you are a new customer as of OnBase Foundation EP5 or greater, see Simplified Licensing on page 5.

If you are upgrading from a version of OnBase prior to OnBase Foundation EP5, see Legacy Licensing on page 247.

Simplified Licensing

The Essential User, Standard User, or Premier User license is required.

Additional Licensing

Additional licensing may be required to use the following products in conjunction with Front Office Scanning:

- Application Enabler
- HL7 Module
- E-Forms
- Virtual Print Driver

For the licensing requirements of a specific product, see that product's documentation.

OnBase® Foundation EP5

Front Office Scanning

Installation Guide

Requirements

The following sections outline requirement information specific to Front Office Scanning in OnBase Foundation EP5.

General Requirements

For general requirement information that applies to Front Office Scanning and other modules, see the sections on the following topics in the **Installation Requirements** manual:

- Database requirements
- Supported desktop operating systems
- Microsoft .NET Framework requirements
- Microsoft Visual C++ requirements
- Modifying configuration files
- Server browser requirements
- 32-bit server hardware requirements
- 64-bit server hardware requirements

Client Scanning Workstation Hardware Requirements

Hardware	Minimum	Recommended
CPU	1 GHz	2 GHz or faster
Memory (RAM)	512 MB	2 GB or greater
Free Hard Disk Space (total for installation itself and post-installation files)	2 GB	2 GB or greater
Screen Resolution	1280 x 768	1280 x 1024 (1440 x 900 widescreen)
Scanner	TWAIN compliant	

Creating the FOS/Application Enabler Automated Console Registry Settings

Typically, when configuring a Front Office Scanning/Application Enabler Automated Console solution, an administrator would manually log on the Front Office Scanning client once during configuration in order to create the **LastLocation** registry key that allows the Front Office Scanning client to automatically launch.

However, when Windows UAC is enabled, be aware that UAC may, depending on the rights of the administrator, prevent the administrator from adding/modifying registry settings.

There are two potential solutions to this issue:

- **When UAC is Set at the Default Level**. When manually launching Front Office Scanning as part of the Automated Console mode configuration, the Front Office Scanning client must be launched as an administrator (that is, a user with administrator rights must right-click the shortcut to the Front Office Scanning client and select **Run as Administrator**) in order to create the **LastLocation** registry key.
- **When UAC is Set at the Lowest Level**. When manually launching Front Office Scanning as part of the Automated Console mode configuration, the Front Office Scanning client can be launched by any non-administrator to create the **LastLocation** registry key.

Note: For more information on the **LastLocation** registry key, see LastLocation on page 22.

Licensing

See Licensing on page 5 for licensing requirements.

Pre-Installation

OnBase Requirements

OnBase Application Server

In order to upload documents from Front Office Scanning to OnBase via Hyland Services, you must ensure that the OnBase Application Server is properly installed and configured and that the Front Office Scanning workstations have network access to the Application Server.

For information on installing the OnBase Application Server, see the Application Server documentation.

OnBase Client

If your Front Office Scanning solution is designed to launch Front Office Scanning from the OnBase Client, you must ensure that the OnBase Client is properly installed and can be accessed from the Front Office Scanning workstation.

For more information on installing the OnBase Client, see the OnBase Client Installer documentation.

Application Enabler

If your Front Office Scanning solution is configured to use Application Enabler to "scrape" values from another line of business application to create and/or select a Front Office Scanning Data Set, then you must ensure that Application Enabler has been correctly installed and configured, and that a properly configured Application Enabler configuration XML file is available to the scanning workstation that is capturing indexing information via the Front Office Scanning Enabler Service.

Note: The Front Office Scanning Enabler Service is not required if the screen scrape event is being used to select an existing Data Set.

For more information on installing Application enabler, see the Application Enabler documentation.

Additional OnBase Modules

Your Front Office Scanning solution has the ability to integrate with several additional OnBase modules (e.g., Disconnected Scanning, Document Imaging, E-Forms, HL-7, the Hyland Virtual Print Driver, etc.).

For information on installing and configuring these modules, see their associated documentation.

Enabling Active Directory and LDAP Authentication

Active Directory and LDAP authentication can be used to authenticate Front Office Scanning users. This requires that your OnBase solution be configured to use Active Directory or LDAP Authentication and that **Anonymous Access** is not enabled for your OnBase Application Server.

Note: For information on configuring OnBase to use Active Directory and LDAP Authentication, see the **Legacy Authentication Methods** module reference guide.

In order to use Active Directory authentication when launching Front Office Scanning, additional configuration is required. See Enabling Active Directory or LDAP Authentication for the Front Office Scanning Client on page 124 for more information.

Enabling IdP Authentication

Identity Provider (IdP) authentication can be used to authenticate Front Office Scanning users. This requires that your OnBase solution be configured to use IdP authentication. For information on configuring OnBase to use IdP authentication, see the **Identity and Access Management Services** module reference guide.

Upgrade Installation

As of OnBase 18, Front Office Scanning uses a more advanced encryption method, which makes encrypted documents and Data Sets from previous versions incompatible with the newer Front Office Scanning client.

Before upgrading from Front Office Scanning 17 or earlier, you must process all encrypted temporary documents and encrypted data sets in the earlier version of Front Office Scanning.

In addition, any default user login credentials or signatures on file that have been encrypted in Front Office Scanning 17 or earlier must be recreated and re-encrypted in the newer version of Front Office Scanning.

- For more information on changing the default user login credentials, see Specifying a Default User Account for the Front Office Scanning Client on page 123.
- For more information on creating a new signature on file, see Marking Up an Image Template Using a Signature Device on page 311.

Installation

The Front Office Scanning client is installed using the Hyland Front Office Scanning installer. See Running the Front Office Scanning Client Installer on page 12.

Note: Before upgrading from Front Office Scanning 14 or earlier, you must process all encrypted temporary documents and encrypted data sets in the earlier version of Front Office Scanning.

Overview

Standard (EXE or MSI) Installers — There are two methods for running OnBase installers: Interactive and silent. An interactive installation requires user interaction with dialog boxes during the installation process. A silent installation does not require user interaction during the installation process.

OnBase installers may consist of both an executable file (**.exe**) and a Windows Installer Package file (**.msi**). When performing an interactive installation, and both an executable file and MSI are available, use the executable file to ensure a complete installation. The executable validates that all prerequisites are met before proceeding with the installation. If any missing prerequisites are identified, the installer alerts the user. Most missing prerequisites can be installed directly from the installer before continuing the installation process.

Note: The Microsoft .NET Framework prerequisite must always be installed separately before running either the EXE or MSI installer.

When performing a silent installation, and both an executable file and MSI are available, use the MSI. Since the MSI package does not validate prerequisites, you must ensure that Windows Installer 3.0 or greater is installed on each workstation and that all other prerequisites are met before running the MSI. If any prerequisites are not met, a silent installation from the MSI will fail without alerting the user.

For more information about configuring a silent installation, see https://docs.microsoft.com/en-us/windows/win32/msi/command-line-options.

ClickOnce Installers — Some OnBase modules are installed for deployment using ClickOnce. ClickOnce is a Microsoft technology that installs a deployment package to a central server. This package can then be accessed by users to install the application on their local workstations. The application is installed entirely under the user's profile, ensuring that it cannot interfere with other applications installed on the workstation.

ClickOnce deployments also have the following advantages:

- Previously installed versions of the module can be easily and automatically updated to the latest version with little or no user interaction, as long as the deployment server and deployment instance name are not changed.
- The module is installed on a per-user basis and does not require administrator privileges for local installation.
- There can be multiple instances of the module deployed, allowing for different versions of the module to be installed on a per-user basis, to match the version requirements of the workstation it is being installed to.

For more information on Microsoft's ClickOnce technology see https://docs.microsoft.com/en-us/visualstudio/deployment/clickonce-security-and-deployment.

Note: ClickOnce-deployed applications are not supported by Microsoft within a Remote Desktop environment.

OnBase modules that are deployed using ClickOnce should either take advantage of the ClickOnce deployment method as an alternative to a Remote Desktop deployment, or the module should be installed using a standard installer and deployed using the Remote Desktop methodology.

Note: Not all OnBase modules that support ClickOnce have a standard installer available. Contact your first line of support if you are unsure how to install and deploy a specific module.

User Account Control (UAC) — If Windows User Account Control (UAC) is enabled, the installer must be run with elevated administrator privileges, even if an administrator is currently logged on. This can be accomplished by right clicking on the installer executable and selecting **Run as Administrator** from the right-click menu. MSI files cannot be run using the **Run as Administrator** option. Instead, you must launch the MSI package using the command line. For more information on installing files through the command line, refer to your Microsoft support information or see https://docs.microsoft.com/en-us/windows/win32/msi/command-line-options.

Silent Installation Using setup.exe — If you are running setup.exe silently from the command line you must use the **/q** switch and the **/CompleteCommandArgs** switch, followed by the required command-line arguments.

The **q** switch specifies quiet mode and is required to suppress the GUI. The **CompleteCommandArgs** switch must be followed by the command-line parameters required to configure and install the desired components.

The complete string of command-line parameters must be included in double quotes after the **CompleteCommandArgs** switch. If a parameter in the string also requires double quotes, those quotes must be escaped using ****. For example: **setup.exe /q /CompleteCommandArgs "INSTALL_PROPERTY=\\"my value\\" INSTALL_PROPERTY_2=\\"my value 2\\""**.

Note: You should check the return value of the setup.exe process. A return value of **0** (zero) indicates success. Any other value returned may indicate that an error was encountered and the installation failed.

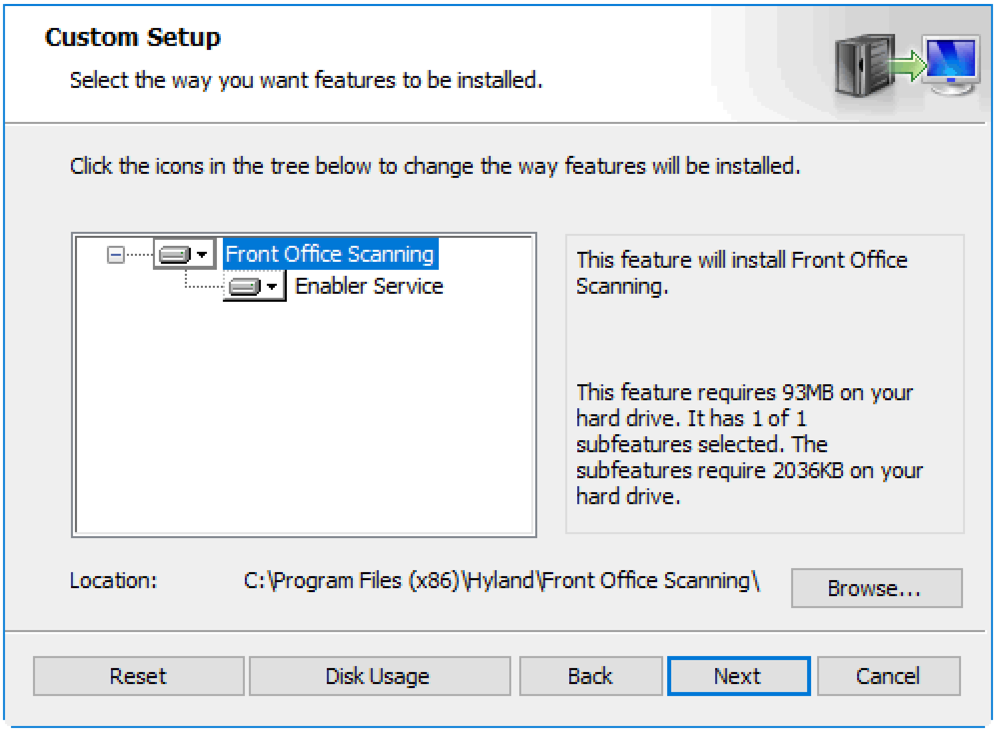
Running the Front Office Scanning Client Installer

Note: The **FOS_COMMANDLINE** and **FOS_LOCAL_DATASET_PATH** parameters have no graphical interface dialogs associated with them in the interactive graphical installer. These parameters can only be set from the command line or by using transforms. See Running the Installer From the Command Line on page 16.

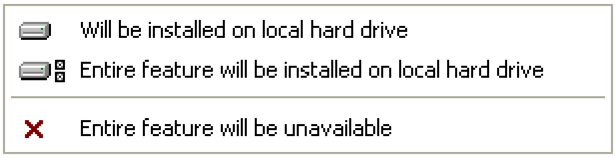
Launch the Hyland Front Office Scanning installer by executing **setup.exe**. This executable is usually located in the **\install\Front Office Scanning** folder of your source installation files.

Note: If the installer is being copied from the source location to be run from a different location, the entire **Front Office Scanning** folder and its contents must be copied to the new location.

1. The Hyland Front Office Scanning Setup Wizard welcome dialog box is displayed.
2. Click **Next**. The **Custom Setup** dialog box is displayed.



3. Click the drop-down list beside the name of a component to display the installation options:

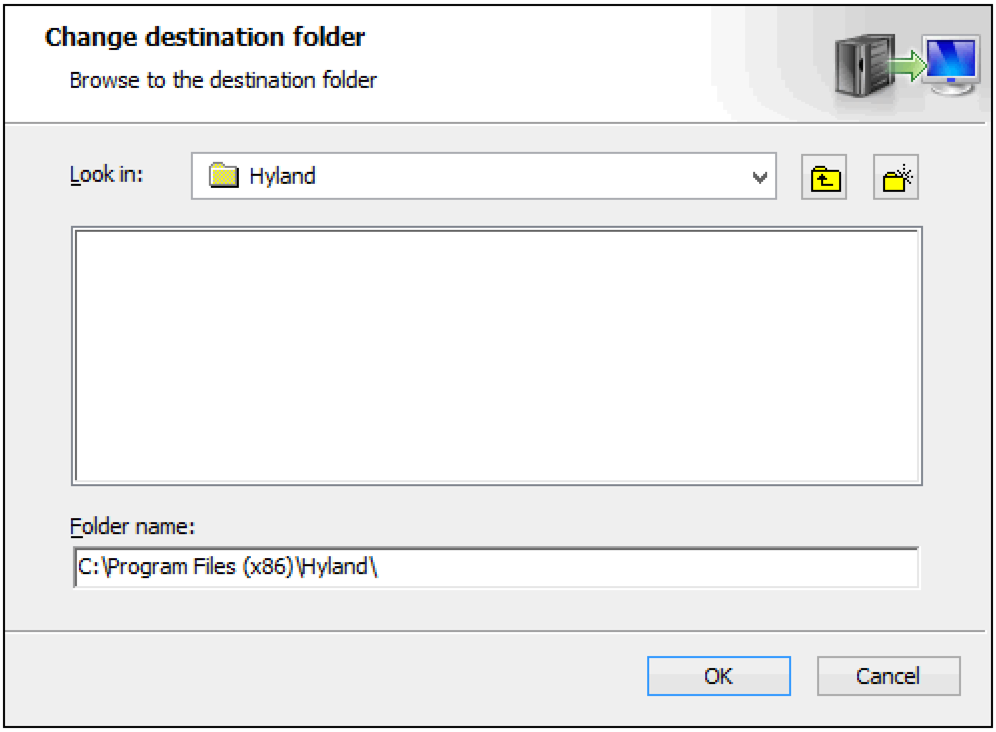


Option	Description
Will be installed on local hard drive	Installs the selected feature and does not install any dependent, optional functionality. To view optional functionality, click the **+** icon next to the feature to expand the sub feature list.

Option	Description
Entire feature will be installed on local hard drive	Installs the selected feature and any dependent functionality. To view the dependent functionality, click the **+** icon next to the feature to expand the sub feature list.
Entire feature will be unavailable	Select this option to remove a feature from the list of features to install.

4. Select **This feature will be installed on local hard drive** for each component you want to install.

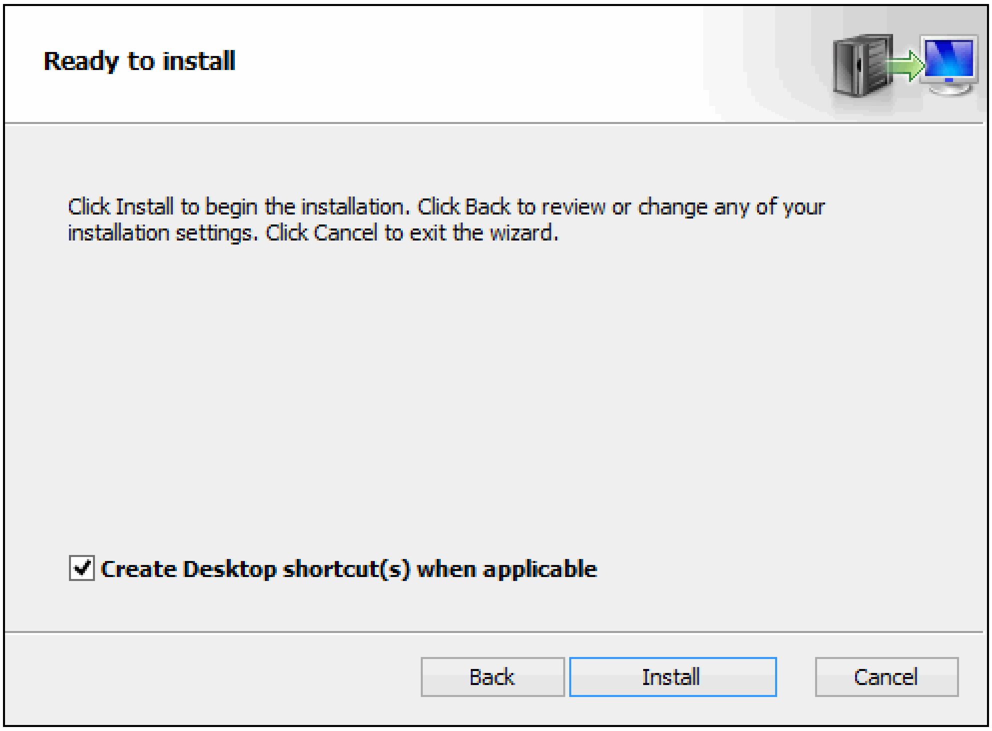
   To install all components, select **Entire feature will be installed on local hard drive** from the drop-down list beside the top-level component.
5. To determine the amount of space available for installation of the selected components, click **Disk Usage**. The **Disk Space Requirements** dialog box is displayed, with information on the space required for the selected components and the space available on the drives accessible by the installation machine.
6. To change the installation location of a component, select it and click **Browse**. The **Change destination folder** dialog box is displayed.



   Enter a **Folder name** in the field provided or select it from the **Look in** drop-down list. If the destination folder is not changed, components are installed to the default locations listed in the following table.

Component	Default Location
Front Office Scanning	**C:\Program Files\Hyland\Front Office Scanning** (when installing Front Office Scanning on 32-bit systems). **C:\Program Files (x86)\Hyland\Front Office Scanning** (when installing Front Office Scanning on 64-bit systems).
Enabler Service	The Enabler Service components are installed to the same location as Front Office Scanning.

7. Click **Next**. The **Ready to install** dialog is displayed.



8. Select **Create Desktop shortcut(s) when applicable** to create shortcuts to the installed components in the Windows **Start | All Programs | Hyland** menu, on the Windows desktop, or in both locations, when applicable.
9. Click **Install** to continue with the installation, or click **Cancel** to cancel the installation.
10. When the installation is complete, click **Finish**.

Tip: In order to ensure that the required system settings take effect, it is a best practice to restart the installing machine once the installer has finished.

Change, Repair, or Remove an Installation

After initial installation, the setup program can be used to change, repair, or remove components from a previous installation. After launching **setup.exe** or the ***.msi** installation package, and clicking **Next** at the welcome dialog, the **Change, repair, or remove installation** dialog box is displayed.

Select the option for the actions you wish to perform:

Option	Description
Change	Add or remove components using the **Custom Setup** dialog. **Note:** This option is not available if the installer has no independently selectable features. The steps for adding selected components are the same as those under the Component Selection section of the installation instructions, if applicable to the installer. **Note: Change** does not allow you to alter configuration options originally set during a previous installation of components contained in the installer.
Repair	Repair errors in the most recent installation of the component, such as missing and corrupt files, shortcuts, and registry entries. **Note:** This option is not available from all installers. **Repair** does not include errors made in the configuration options set by the user during installation. For specific troubleshooting information regarding an installed component, see the module reference guide for that component.
Remove	Removes all previously installed components.

Running the Installer From the Command Line

You can control the installation of components from the command line by passing its feature name to the installer using the **ADDLOCAL** property. The values of the configuration options available in the graphical installation wizard are passed to the installer using the property names associated with the installer options.

This section describes the feature names and properties associated with this installer.

Note: Feature and Property names are case sensitive.

Feature Names

To install Front Office Scanning, the value of the **ADDLOCAL** property is **Front_Office_Scanning**.

The **ADDLOCAL** property is added to the installation command line, as shown here:

msiexec /i "Hyland Front Office Scanning.msi" ADDLOCAL=Front_Office_Scanning

Properties

When controlling the installation of components from the command line you must also configure the settings for each component you are installing by using the properties listed in the following table. If a property is not included, the default value is configured for that property.

Property	Description
FRONTOFFICESCANNING_FILES	The location to which the component files are installed. By default, this component is installed to **C:\Program Files\Hyland\Front Office Scanning** For example: **FRONTOFFICESCANNING_FILES= "C:\My\Custom\Location\FOS\"**
CREATE_DESKTOP_SHORTCUTS	Set to **1** to add desktop shortcuts for the installed component, or leave empty to not add the shortcuts. By default, this property is empty. For example: **CREATE_DESKTOP_SHORTCUTS="1"** or **CREATE_DESKTOP_SHORTCUTS=""**
CREATE_MENU_SHORTCUTS	Set to **1** to add program menu shortcuts for the installed component, or leave empty to not add the shortcuts. By default, this property is empty. For example: **CREATE_MENU_SHORTCUTS="1"** or **CREATE_MENU_SHORTCUTS=""**

Property	Description
FOS_COMMANDLINE **Note:** The **FOS_COMMANDLINE** property is not available in the graphical user interface. It must be set using the command line or transforms.	Set the **FOS_COMMANDLINE** property to specify a Front Office Scanning (FOS) XML configuration file in the target of the FOS desktop shortcuts created by the Hyland Front Office Scanning installer. The same value is also written to the **LastLocation** registry key for Front Office Scanning. With a configuration file specified, the end user is not prompted to choose a configuration file when launching Front Office Scanning. For example: **FOS_COMMANDLINE="\\MyServer\MyPath\MyFOSconfig.xml"** **Note:** If the target of the shortcut requires the configuration file path to be enclosed in double quotation marks, then the **FOS_COMMANDLINE** property must delimit the quotes with another set of double quotes: **FOS_COMMANDLINE="""\\my server\my path\my file.xml"""**. Optional when **CREATE_DESKTOP_SHORTCUTS** is set to **1**.
FOS_LOCAL_DATASET_PATH **Note:** The **FOS_LOCAL_DATASET_PATH** property is not available in the graphical user interface. It must be set using the command line or transforms.	Set the **FOS_LOCAL_DATASET_PATH** property to configure the installer to create a local path where the Data Set XML files for Front Office Scanning are located. The path entered as the value of the **FOS_LOCAL_DATASET_PATH** property is created on the installation machine. This value is also written to the Front Office Scanning configuration file in the **<SharePath>** element. For example: **FOS_LOCAL_DATASET_PATH="C:\MyPath\FOS\DataSets"** **Note:** This value must be a path local to the installation machine in order for the installer to create it. Network (UNC) paths must be created by a network administrator. Optional when installing Front Office Scanning. If no value is entered, or the value is not valid, or the property is not included at all, no path is created and the configuration file is not updated.

Additional Installation Information

Specifying a Language Resource DLL

By default, when the Front Office Scanning client is installed via the Hyland Front Office Scanning installer, all available Front Office Scanning language resource DLLs are installed in the Front Office Scanning installation folder.

The Front Office Scanning client first looks for the language DLL that matches your workstation's regional settings. If no matching DLL is found, the Front Office Scanning client will revert to English.

The **-LANG** command line switch can also be used force Front Office Scanning to use a language DLL that does not match the workstation's regional settings.

For more information, see -LANG on page 24.

Manually Installing the Front Office Scanning Client

It is recommended that the Front Office Scanning client be automatically installed using the Hyland Front Office Scanning installer, but the following manual installation steps can be used when using the installer is not an option.

1. From Windows, browse to the location where you would like to install the Front Office Scanning client and create a folder to store its installation files.

Tip: It is recommended that you install the Front Office Scanning client in its own sub-folder of the **Hyland** folder in the **Program Files** folder (e.g., **C:\Program Files\Hyland\Front Office Scanning** on 32-bit systems or **C:\Program Files (x86)\Hyland\Front Office Scanning** on 64-bit systems) so that its installation location is consistent with other OnBase products.

2. Copy the following files to the folder you created in Step 1:
   - FrontOfficeScanning.exe
   - FrontOfficeScan.chm
   - OBIMGLIB.dll
   - The appropriate Front Office Scanning language DLL.

     Front Office Scanning will first look for the language DLL that matches your workstation's regional settings. If no matching DLL is found, Front Office Scanning will revert to English.

     The **-LANG** command line switch can also be used force Front Office Scanning to use a language DLL that does not match the workstation's regional settings.

     For more information, see -LANG on page 24.

Installing the Front Office Scanning Enabler Service

The Front Office Scanning Enabler Service is an application that allows the Front Office Scanning client to interact with Application Enabler to obtain Keyword Values and create Data Set XML files.

The Front Office Scanning Enabler Service consists of two files:

- An executable (**FOSEnabler.exe**)
- A configuration file (**FOSEnabler.ini**)

The **FOSEnabler.ini** file is manually created and configured. See Configuring Front Office Scanning to Interact with Application Enabler on page 115 for more information.

The **FOSEnabler.exe** file is automatically installed and registered when the Front Office Scanning client is installed using the Hyland Front Office Scanning installer. However, if you have installed the Front Office Scanning client manually, you must manually install and register the **FOSEnabler.exe** file.

Manually Installing and Registering the FOSEnabler.exe File

Note: The **FOSEnabler.exe** file is automatically installed and registered when the Front Office Scanning client is installed using the Hyland Front Office Scanning installer. This information is only relevant if you have installed the Front Office Scanning client manually.

1. Obtain the **FOSEnablerService.exe** file from your solution provider and copy it into the Front Office Scanning installation folder.
2. Create a shortcut to the **FOSEnablerService.exe** file.
3. Right-click on the **FOSEnablerService.exe** shortcut and select **Properties**. The **Shortcut to FOSEnablerService.exe Properties** dialog box is displayed.
4. Add the -**RegServer** command line switch to the **Target** field by appending -**RegServer** to the end of the information already in the field.
5. Click **OK**. The **Shortcut to FOSEnablerService.exe Properties** dialog box is closed.
6. Double-click on the shortcut. The Front Office Scanning Enabler Service opens and closes before any user actions can be performed.
7. Right-click on the shortcut and select **Properties**. The **Shortcut to FOSEnablerService.exe Properties** dialog box is displayed.
8. Remove the **-RegServer** switch from the **Target** field. The Front Office Scanning Enabler Service cannot obtain data and create Data Sets with the command line switch in place.
9. Click **OK**. The **Shortcut to FOSEnablerService.exe Properties** dialog box is closed.

To unregister **FOSEnablerService.exe**, repeat Steps 3 through 9 using the **-UnregServer** switch instead of the **-RegServer** switch.

Administrative Installations

An administrative installation creates an uncompressed source image for the products contained in an installer.

An administrative installation can be used to make changes to any configuration files, or other items that cannot be set on the command line or by using the installer GUI, before the installer is run. The uncompressed installer can then be run from the uncompressed location and will include the changes made to the source image files.

Caution: Administrative installations should not be used unless you fully understand the effect the changes you make will have on the installation. For details on administrative installations, see the **Administrative Installation** section of the **Microsoft Dev Center**: http://msdn.microsoft.com/en-us/library/windows/desktop/aa367541%28v=vs.85%29.aspx.

To perform an administrative installation, execute a command like this example from the command prompt:

```
msiexec /a "C:\Installer\Installer File.msi"
TARGETDIR="C:\Installer\admin" /qb
```

In this example, the **Installer File.msi** is uncompressed to the **C:\Installer\admin** directory.

After modifying the uncompressed files, the installer located at **C:\Installer\admin\Installer File.msi** must be run, not the original compressed *.msi.

Note: When executing the installer from the command line, any additional options with command-line parameters must still be applied when executing the uncompressed installer. If parameters are not applied, the default options for those parameters are used. See the command-line installation instructions for the specific installer you are running.

Skip Persistence

When controlling an installation from the command line, the **SKIPPERSISTENCE** property can be used to ignore default values taken from a previous installation. To ignore saved values, set the **SKIPPERSISTENCE** property to **1**.

When applying transforms to an installation, it is a best practice to set the **SKIPPERSISTENCE** property to **1**. If this property is not included or is set to **0** (or **false**), values saved from a previous installation may overwrite the values applied using the transform.

Registry Settings

Caution: Modify the registry at your own risk. Incorrectly editing the Windows registry can cause serious problems that may require you to reinstall your operating system. Be sure to back up the registry before making any changes to it. For more registry information, see the following Microsoft articles: http://support.microsoft.com/kb/256986 and http://technet.microsoft.com/en-us/library/cc725612.aspx

Note: If your Front Office Scanning workstation is running Windows with the User Access Controls (UAC) enabled, the user who launches the Front Office Scanning client to create the appropriate registry settings must have Windows administrative rights. For more information, see Creating the FOS/Application Enabler Automated Console Registry Settings on page 8.

LastLocation

This registry key contains the location of the Front Office Scanning executable.

It is automatically created when your Front Office Scanning solution is configured to run in Automated Console mode (in conjunction with your Application Enabler solution) so that the Front Office Scanning client can be launched automatically.

On a 32-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\Software\Hyland\Front Office Scanning\LastLocation**

On a 64-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hyland\Front Office Scanning\LastLocation**

OnTop

This registry key specifies if other windows can be opened and placed on top of the Front Office Scanning client window or if the Front Office Scanning client window will always remain the topmost window as long as it is open.

This setting is set in the Front Office Scanning client by the **Window | Always on Top** option.

This registry setting is located here (on both 32-bit and 64-bit workstations):

- **HKEY_CURRENT_USER\SOFTWARE\Hyland\Front Office Scanning\WindowState\OnTop**

Application Server Web.config Settings

In the Application Server Web.config file, the following settings are specific to Front Office Scanning. For descriptions of other Web.config settings, see the **Application Server** module reference guide.

watchFolder

This setting contains the path to the folder containing the Data Set XML files.

Note: The location specified by this path must be accessible from the Application Server and the data entry workstations, but does not need to be accessible from the Front Office Scanning workstations.

siteIDKeywordType

This setting specifies the Keyword Type whose Keyword Values are used for site-based Data Set filtering.

cleanupTimerInterval

To prevent unused and unneeded Data Sets from accruing in the network location, unused Data Sets stored in the network location are automatically configured to expire after a specified number of hours.

The Application Server is configured to poll the network location (i.e., the folder specified by the **watchFolder** setting) at regular intervals to delete expired Data Sets. By default, the Application Server polls the network location every 15 minutes.

To increase or decrease this amount of time, set the cleanupTimerInterval setting to the amount of time (in minutes) allowed to pass before the Application Server polls the network location for expired Data Sets.

Note: Ensure that this setting is set to an appropriate length of time. Be aware that a Data Set is still be available to the Front Office Scanning workstation after it expires if the Application Server has not yet polled the network location and deleted its Data Set XML file.

maxFileAgeInHours

This setting specifies the lifespan of Data Sets (in hours) stored in the network location.

After a Data Set's lifespan expires, the Data Set XML file will be deleted the next time the Application Server polls the network location where the Data Sets are stored.

Once the Data Set XML file is deleted, the Data Set is no longer available to the Front Office Scanning workstations.

Note: A Data Set is still be available to the Front Office Scanning workstation after it expires if the Application Server has not yet polled the network location and deleted its Data Set XML file.

Command Line Switches

Front Office Scanning Client

The following command line switches can be used in conjunction with the Front Office Scanning client.

-LANG

The **-LANG** command line switch can be used with either the Bar Code Generator client or the Front Office Scanning client.

The **-LANG** command line switch is used to force the client to use any language DLL it finds, not just the language DLL that matches the workstation's regional settings.

When the **-LANG** switch is used, the client will use the first language DLL it finds. If no language DLL is found, the client will revert to English.

Front Office Scanning Enabler Service

The following command line switches can be used when installing the Front Office Scanning Enabler Service if Front Office Scanning Enabler Service was not installed using the Hyland Front Office Scanning Installer.

For more information on installing the Front Office Scanning Enabler Service, see Installing the Front Office Scanning Enabler Service on page 20.

-REGSERVER

The **-REGSERVER** command line switch is used to register the Front Office Scanning Enabler Service executable (**FOSEnablerService.exe**) when the Front Office Scanning client has been manually installed.

-UNREGSERVER

The **-UNREGSERVER** command line switch is used to unregister the Front Office Scanning Enabler Service executable (**FOSEnablerService.exe**) when the Front Office Scanning client has been manually installed.

INI Settings

The following INI setting relates to the Front Office Scanning module. This setting can be configured in the onbase32.ini file, which is located, by default, in **C:\ProgramData\Hyland Software**.

ConfigFile

This option allows you to specify a default Front Office Scanning configuration file to automatically use when launching Front Office Scanning from the OnBase Client. Set the option to the full path of the desired configuration file (e.g., **ConfigFile="C:\FOS\ConfigFiles \Presidents\PresidentsTemplate.xml"**).

Backup/Recovery

Backup

Configuration

The Front Office Scanning configuration information is stored in the Front Office Scanning configuration file. A proper backup of this file will contain all Front Office Scanning configuration information.

Other OnBase-specific configuration information (e.g, Keyword Types, Document Types, etc.) is stored in the OnBase database and is backed up when the database is properly backed up.

Registry Settings

The following registry setting apply to Front Office Scanning and need to be backed up.

Caution: Modify the registry at your own risk. Incorrectly editing the Windows registry can cause serious problems that may require you to reinstall your operating system. Be sure to back up the registry before making any changes to it. For more registry information, see the following Microsoft articles: http://support.microsoft.com/kb/256986 and http://technet.microsoft.com/en-us/library/cc725612.aspx

LastLocation

On a 32-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\Software\Hyland\Front Office Scanning\LastLocation**

On a 64-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hyland\Front Office Scanning\LastLocation**

OnTop

This registry setting is located here (on both 32-bit and 64-bit workstations):

- **HKEY_CURRENT_USER\SOFTWARE\Hyland\Front Office Scanning\WindowState\OnTop**

External Files

In addition to your Front Office Scanning installation files, ensure that your Front Office Scanning configuration file is backed up.

Additionally, you will need to back up any bitmaps used on Document Type buttons, images used as image template, and HTML forms used to manually create Data Sets or to create E-Forms that are stored outside of OnBase.

It is recommended that you regularly back up the folder used to temporarily store documents scanned/created in the Front Office Scanning client while they are awaiting upload (i.e., the folder specified in the **TempPath** element in the Front Office Scanning configuration file). This folder may, depending on your configuration, coincide with the **Temp** directory specified in Windows Environment Variables.

You may also want to regularly back up the contents of the local shared folder (i.e., the SharePath) or the network location where your Data Set XML files are stored if your unused Data Sets cannot be easily recreated.

If your Front Office Scanning solution integrates with Application Enabler, ensure that your Application Enabler installation files, the Application Enabler configuration file, and the FOS Enabler Service installation files **(FOSEnablerService.exe** and **FOSEnablerService.ini**) are properly backed up.

If your Front Office Scanning solution integrates with other OnBase modules (e.g., Disconnected Scanning, the Hyland Virtual Print Driver, etc.), ensure that they are properly backed up. See the modules' documentation for more information on their backup procedures.

Module-Related INI Options

Use the following chart to track the current settings of all related INI settings for Front Office Scanning.

Section	Setting	Current Value
Front Office Scanning	ConfigFile	

Additional Steps

There are no additional backup steps required for Front Office Scanning.

Recovery

Configuration

All Front Office Scanning configuration information is stored in the Front Office Scanning configuration file and all OnBase-specific information is stored in the OnBase database. Restoring the OnBase database and the Front Office Scanning configuration file will restore all Front Office Scanning configuration information.

Registry Settings

Caution: Modify the registry at your own risk. Incorrectly editing the Windows registry can cause serious problems that may require you to reinstall your operating system. Be sure to back up the registry before making any changes to it. For more registry information, see the following Microsoft articles: http://support.microsoft.com/kb/256986 and http://technet.microsoft.com/en-us/library/cc725612.aspx

Restore the following registry setting:

LastLocation

On a 32-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\Software\Hyland\Front Office Scanning\LastLocation**

On a 64-bit workstation, this registry setting is located here:

- **HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Hyland\Front Office Scanning\LastLocation**

OnTop

This registry setting is located here (on both 32-bit and 64-bit workstations):

- **HKEY_CURRENT_USER\SOFTWARE\Hyland\Front Office Scanning\WindowState\OnTop**

External Files

Ensure that your Front Office Scanning configuration file is recovered from the most recent valid backup.

Additionally, you will need to recover any bitmaps used on Document Type buttons, images used as image template, and HTML forms used to manually create Data Sets or to create E-Forms that are stored outside of OnBase from valid backups.

Depending on your solution, you may also need to recover the folder used to temporarily store documents scanned/created in the Front Office Scanning client while they are awaiting upload (i.e., the folder specified in the **TempPath** element in the Front Office Scanning configuration file). This folder may, depending on your configuration, coincide with the **Temp** directory specified in Windows Environment Variables.

You may also need to recover he contents of the local shared folder (i.e., the SharePath) or the network location where your Data Set XML files are stored from valid backups if you cannot easily recreate any lost, unused Data Sets stored in these locations.

If your Front Office Scanning solution integrates with Application Enabler, ensure that you recover your Application Enabler installation files, the Application Enabler configuration file, and the FOS Enabler Service installation files **(FOSEnablerService.exe** and **FOSEnablerService.ini**) from valid backups.

If your Front Office Scanning solution integrates with other OnBase modules (e.g., Disconnected Scanning, the Hyland Virtual Print Driver, etc.), ensure that they are properly recovered. See the modules' documentation for more information on their backup procedures.

Module-Related INI Options

The .INI file can be restored from the backup if the recovery machine is intended to be used for exactly the same purpose as the original machine. If this machine will be used for other modules, you may need to recover only the listed INI settings from the table above.

The .INI file is restored to the Windows folder.

Registration

If you intend to launch Front Office Scanning from the OnBase Client, you will need to migrate your Front Office Scanning registration from the original Front Office Scanning workstation to the recovery workstation.

The registration may need to be revoked from the original workstation before it can be added to the recovery workstation.

Additional Steps

There are no additional recovery steps required for Front Office Scanning.

Upgrade Considerations

The following upgrade considerations have been compiled by OnBase subject matter experts. These upgrade considerations are general and applicable to most OnBase solutions and network environments and should be considered each time an upgrade is performed.

Carefully consider the impact of making any changes, including those listed below, prior to implementing them in a production environment.

For additional general information about upgrading OnBase, refer to the Upgrade Guidelines reference manual, and visit the Hyland Community at: https://www.hyland.com/community.

Front Office Scanning Upgrade Considerations

The following information should be considered or noted when upgrading Front Office Scanning deployments. Read this information prior to upgrading your version of OnBase.

General Deployment Considerations — The following should be considered with regard to a general deployment:

- Beginning in OnBase 18, Front Office Scanning uses a more advanced encryption method than earlier encryption methods. If you are upgrading from a version of OnBase prior to OnBase 18, you must recreate all existing encrypted Data Sets.

For more information, see Upgrade Installation on page 10.

Troubleshooting

Common Issues

Document Date Formats

In the Front Office Scanning client, the Document Date is stored in the OnBase database using the date format associated with the regional settings of the workstation it was uploaded from.

When retrieving these documents from a workstation in a different location with different workstation regional settings, the date format for these documents will remain the same as the workstation they were uploaded from.

Settings in the Configuration File Are Not Being Respected

Case-sensitive passwords and passwords with leading and trailing spaces are now supported. To ensure compatibility with Front Office Scanning, a property was modified to force all values to respect whitespace. As a result of this change, values containing unintended spaces in the Front Office Scanning configuration file can produce unwanted results. To avoid potential issues with unintended spaces, ensure that all values are entered correctly in your configuration file.

For more information on case-sensitive passwords and passwords with leading and trailing spaces, see the System Administration documentation.

Images Created from E-Forms Are of a Lower Quality than Expected

When signing an E-Form, the E-Form is automatically converted to an image. If that image is of a lower quality than expected, open the Front Office Scanning configuration file and set the **imagepng** setting in the **FOSCONFIGURATION** parent element to **true**. Then, E-Forms will be automatically converted to uncompressed PNG images when signed.

Note: If the **imagepng** setting in the **FOSCONFIGURATION** parent element is set to **true**, all temporary image files will also be saved as uncompressed PNG images. Uncompressed PNG images require more disk space than the default temporary image format. For more information, see The FOSCONFIGURATION Parent Element on page 40.

If the image quality is still lower than expected, try adjusting any of the following settings of the **DocType** sub-element that corresponds to E-Forms:

Note: These settings require that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

Note: For more information on the following options, see The DocTypes Element on page 89.

- Increasing the **xresolution** and the **yresolution** settings may improve the quality of the image. This will also increase the size of the image file.
- If the **pixeltype** setting is set to **BW** (which is the default setting), adjusting the **threshold** setting may improve the quality of the image. If the text on the image is dark, set the **threshold** setting to 130. If the text on the image is gray, or if there are other colors on the image, set the **threshold** setting to 190.
- Setting the **pixeltype** setting to **GRAY** may improve the quality of the image. However, it may also decrease the contrast between text and whitespace on the image.

Images Created from E-Forms Not Being Displayed Correctly

When signing an E-Form, the E-Form is automatically converted to an image. Depending on how your E-Form is coded, a scroll bar may be displayed as part of the image.

Normally, scroll bars are removed when converting the E-Form to an image. However, the scroll bar is not removed for E-Forms that specify the XHTML Document Type Declaration.

When converting an E-Form into an image, if a scroll bar is displayed, it will not cover any part of the document.

Signature Pad Issues

If your Front Office Scanning solution is configured to use a TOPAZ device to allow image templates to be marked up or signed, ensure that you have the latest TOPAZ drivers installed on the Front Office Scanning workstation to allow for an optimal integration between your TOPAZ hardware and your Front Office Scanning software.

Document Uploads and/or Retrievals are Slow or Failing

If documents are not being uploaded to OnBase or retrieved within the Front Office Scanning client in a timely manner, of if the documents are failing to be uploaded/retrieved entirely, environment issues may be preventing data from being passed between Front Office Scanning and the Application Server in the standard, binary fashion.

To work around this issue, you can configure your Front Office Scanning solution to use the SOAP XML data transport method instead of the binary transport method when uploading documents into OnBase and/or retrieving them within the Front Office Scanning client. Within the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element, set the **UseSOAPUpload** and **UseSOAPDownload** settings to use the appropriate transport method:

- If **UseSOAPUpload** is set to **true**, then the SOAP XML transport method is used to upload documents into OnBase.
- If **UseSOAPUpload** is set to **false**, or if no value is present, then the binary transport method is used to upload documents into OnBase.
- If **UseSOAPDownload** is set to **true**, then the SOAP XML transport method is used to retrieve documents within the Front Office Scanning client.
- If **UseSOAPDownload** is set to **false**, then the binary transport method is used to retrieve documents within the Front Office Scanning client.

Notes, Redactions, Burned Markups, and Deficiencies on Documents with Overlays

Notes, redactions, burned markups, and deficiencies on documents that have an overlay applied may encounter unexpected behavior. The position of notes, redactions, burned markups, and deficiencies may shift when the document is rendered.

The position shift may occur in the following instances:

- Text documents that contain overlays with an offset configured
- Text documents accessed using modules that render text documents as an image for display

- Image documents with overlays that do not have the same DPI or dimensions as the document

Caution: If a redaction, burned markup, or deficiency is not in the location you expect, do not save or sign the document until the location has been corrected. Saving or signing the document will permanently place the redaction, burned markup, or deficiency in the shifted position. In some instances, the location of a signature can only be changed by a system administrator.

When setting up overlays for documents that may also include notes, redactions, burned markups, or deficiencies:

- Ensure the dimensions of the overlay match the dimensions of the document.
- Do not use offsets with overlays since the document may contain notes, redactions, burned markups, or deficiencies.
- For text documents, use 96 DPI for overlays.
- For image documents, ensure the DPI of the overlay matches the DPI of the document.

A position shift can be corrected through the following methods:

- For text documents, recreate the overlay to match the dimensions of the document instead of using an offset. For example, add an empty space to the margin of the overlay instead of using an offset to account for this space.
- For text documents, the best practice is to set the DPI of the overlay to 96 DPI. Some OnBase modules render text documents as an image for display, and in most cases, the image is rendered at 96 DPI.
- For image documents, recreate the overlay to match the DPI and dimensions of the document.

If the issue still occurs, contact your first line of support.

Error Messages

'Bad Configuration File' Errors

These error messages are displayed when you attempt to launch Front Office Scanning using a configuration file that contains an error. These may be as simple as a missing end tag or another syntax error. Check your configuration file for errors and re-try to launch the Front Office Scanning console.

Data Set Errors

Bad Data Set file. "Keyword" element does not contain a "name" attribute.

This message indicates that one of the Keyword Types specified in the Front Office Scanning configuration file was not given a **Name** attribute containing a valid OnBase Keyword Type name.

Each Keyword Type specified in the configuration file must be named or you will not be able to use the Data Set.

All keywords must have a value entered. Please edit them.

This message indicates that a required Keyword Value is missing from the currently-selected Data Set. You cannot assign a document to a Document Type unless currently-selected Data Set contains all required Keyword Values.

Scanning Errors

TWAIN Drive
A general fault of the MSG_OPENDS response. (Internally)
There has been a sharing violation. Twain source may be in use. (Code: DS50171)

This error occurs when Front Office Scanning attempts to use a TWAIN driver and finds it already in use by another module or application. Wait until that module or application has finished scanning and unlocks the driver, or ensure that no module or application currently has the TWAIN driver window open.

Importing Errors

Unable to import images from the file.

This error occurs when attempting to import a document with a non-standard image file format (e.g., **.xml**, **.htm**, **.xlsx**, **.docx**, **.one**, **.ppt**, etc.) into the Front Office Scanning client. Only PDFs or image documents with standard image file formats (e.g., **.jpg**, **.tiff**, **.gif**, **.bmp**, **.img**, **.png,** etc.) can be imported.

Document Type Assignment Errors

An error occurred while attempting to copy the temporary image file during Document Type assignment. The temporary image file may be corrupt or missing. Please delete the image in the viewer and scan or import the image again.

This error occurs when the temporary image file cannot be correctly and completely copied for any reason (e.g., if you attempt to rename a temporary file before the scanning process has completed). Delete the image in the viewer and then re-scan or re-import it.

An error occurred with this document in the temporary file directory and it cannot be recovered. The document will be discarded. Please scan or import the document again.

This error occurs in the Front Office Scanning client when attempting to assign a Document Type to a scanned document if you have renamed or deleted any of the pages of the document. All associated documents will be removed from the viewer. All associated documents except renamed files will be removed from the temporary folder. Delete any renamed files from the temporary folder and then re-scan any deleted documents.

Uploading Errors

An error occurred uploading the document.

This error is displayed in the Front Office Scanning client when attempting to upload a scanned document if you have renamed or deleted any of the pages of the document after assigning it to a Document Type. All associated documents will be removed from the viewer. All associated documents except renamed files will be removed from the temporary folder. Delete any renamed files from the temporary folder and then re-scan any deleted documents.

The date value 'mm/dd/yyyy' is prior to the minimum date allowed by the database and will be set to the current date and time to allow the Data Set to be uploaded.

This notice is displayed after clicking **Upload Images** if a date value in a Data Set to be uploaded is earlier than the minimum date allowed by the database (January 1, 1753). The images are still uploaded, but the date value is changed from its original value to the current date and time to allow the upload to occur. Users receiving this message should check the document and keywords in OnBase to correct any errors in the date value.

Log On Errors

Log on failure. Please enter a valid user name and password.

This error is displayed when launching the Front Office Scanning client and an invalid user name or password was entered.

Have the user check his/her logon credentials, or if the logon credentials are specified in the FOS configuration file, check the settings in the **CommParams** element to ensure they are correct.

Contacting Support

When contacting your solution provider, please provide the following information:

- The OnBase module where the issue was encountered.
- The OnBase version and build.
- The type and version of the connected database, such as Microsoft SQL Server 2014 or Oracle 12c, and any Service Pack that has been installed.
- The operating system that the workstation is running on, such as Windows 10 or Windows Server 2012 R2, and any Service Pack that has been installed. Check the supported operating systems for this module to ensure that the operating system is supported.
- The name and version of any application related to the issue.
- The version of Internet Explorer and any Service Pack that has been installed, if applicable.
- A complete description of the problem, including actions leading up to the issue.
- Screenshots of any error messages.

Supplied with the above information, your solution provider can better assist you in correcting the issue.

OnBase®
Foundation EP5

Front Office Scanning

Administration Guide

Foundation EP5

Front Office Scanning is a highly customizable scanning solution that allows you to create a scanning and indexing application tailored to your users' specific needs.

Because of this, Front Office Scanning requires some manual configuration.

The Front Office Scanning Configuration File

Overview

The Front Office Scanning configuration file is an XML file that contains all of the configuration information used by the Front Office Scanning client. For example, the Front Office Scanning configuration file contains information on scanner settings, OnBase Document Types and Keyword Types, the paths to image templates and E-Forms, and connection information to the OnBase Application Server.

The Front Office Scanning configuration file must be manually created and edited by an administrator. A properly formatted Front Office Scanning configuration file is required to launch the Front Office Scanning client. If the configuration file cannot be opened (e.g., it contains incorrectly formatted XML) or if contains a misspelled or invalid OnBase Document Type, an error message is displayed and the Front Office Scanning client is not launched.

Note: Case-sensitive passwords and passwords with leading and trailing spaces are now supported. To ensure compatibility with Front Office Scanning, a property was modified to force all values to respect whitespace. As a result of this change, values containing unintended spaces in the configuration file can produce unwanted results. To avoid potential issues with unintended spaces, ensure that all values are entered correctly in your configuration file. For more information on case-sensitive passwords and passwords with leading and trailing spaces, see the System Administration documentation.

Tip: See The Front Office Scanning Configuration File on page 218 for a sample Front Office Scanning configuration file.

Elements of the Front Office Scanning Configuration File

A Front Office Scanning configuration file is composed of some or all of the following elements. Not every element is required for each Front Office Scanning solution. Many of these elements have corresponding sub-elements or attributes; not all of these sub-elements or attributes are required for each Front Office Scanning solution.

Front Office Scanning Configuration File Element	Description
The FOSCONFIGURATION Parent Element	The **FOSCONFIGURATION** parent element contains general Front Office Scanning system options. It also indicates the beginning and the end of the Front Office Scanning configuration file. See The FOSCONFIGURATION Parent Element on page 40 for more information.
The Display Element	The **Display** element contains configuration options that control how the Front Office Scanning client is displayed on the Front Office Scanning workstation. See The Display Element on page 49 for more information.
The ScreenName Element	The **ScreenName** element is used to specify the text that is displayed in the Front Office Scanning client window's title bar. See The ScreenName Element on page 53 for more information.
The Columns Element	The **Columns** element specifies which Keyword Values in the Data Set are displayed in the **Available Data Sets** list. See The Columns Element on page 53 for more information.
The SharePath Element	The **SharePath** element is used to specify the location (i.e., the sharepath) where the Front Office Scanning client will find Data Set XML files. See The SharePath Element on page 54 for more information.
The DataSetSourceURL Element	The **DataSetSourceURL** element is used to specify that Data Set XML files are stored in a network location instead of a local shared folder (i.e., the sharepath). See The DataSetSourceURL Element on page 54 for more information.
The SiteID Element	The **SiteID** element is used to identify Front Office Scanning workstation(s) so that Data Sets stored in a network location and provided to the workstations via a web service can be filtered and directed to the proper Front Office Scanning workstation. See The SiteID Element on page 55 for more information.

Front Office Scanning Configuration File Element	Description
The MaintainLocalCopyPath Element	The **MaintainLocalCopyPath** element is used to specify the location where a local copy of each document can be saved before the document is uploaded to OnBase. This is an optional feature. See The MaintainLocalCopyPath Element on page 55.
The Application Element	The **Application** element is used to configure an external application to open from within the Front Office Scanning client. See The Application Element on page 56 for more information.
The DataSetListText Element	The **DataSetListText** element is used to specify the name of the **Available Data Sets** list within the Front Office Scanning client. See The DataSetListText Element on page 57 for more information.
The DataSetLifeSpan Element	The **DataSetLifeSpan** element is used to configure the amount of time Data Sets are available to the Front Office Scanning workstation before they expire and are deleted. See The DataSetLifeSpan Element on page 57 for more information.
The DataSetForm Element	The **DataSetForm** element is used to configure the Front Office Scanning client to allow users to enter Keyword Values into a custom HTML form instead of directly into the **Selected Data Set** window when manually creating a Data Set inside of the Front Office Scanning client. See The DataSetForm Element on page 58 for more information.
The Printer Element	The **Printer** element is used to automatically specify the printer(s) to be used when documents are printed from within the Front Office Scanning client. See The Printer Element on page 58 for more information.
The CommParams Element	The **CommParams** element contains the information needed to configure your Front Office Scanning client to connect to your OnBase Application Server. For more information, see The CommParams Element on page 59.

Front Office Scanning Configuration File Element	Description
The ScanOptions Element	The **ScanOptions** element contains advanced configuration options for configuring the scanner(s) used by the Front Office Scanning client. See The ScanOptions Element on page 63 for more information.
The TempPath Element	The **TempPath** element specifies the temporary location where documents scanned/created in the Front Office Scanning client are stored before they are uploaded to OnBase. See The TempPath Element on page 71 for more information.
The Keywords Element	The **Keywords** element specifies required Keyword Types associated with a Front Office Scanning Data Set. See The Keywords Element on page 71 for more information.
The DataSet Element	The **DataSet** element specifies non-required Keyword Types associated with a Front Office Scanning Data Set. See The DataSet Element on page 74 for more information.
The Retrieval Element	The **Retrieval** element specifies the Keyword Types whose Keyword Values are used to determine if an existing OnBase document is a match to the selected Data Set. **Note:** The **Retrieval** element is only used if your solution is configured to allow users to view/retrieve existing documents matching the selected Data Set (i.e., if the **DocHitList** setting in the **Display** element is set to **true**). See The Retrieval Element on page 77 for more information.
The RetrievalDocTypes Element	The **RetrievalDocTypes** element specifies Document Types that have not been configured for a Document Type button but may still be used to retrieve existing OnBase documents whose Keyword Values match those of the selected Data Set. **Note:** The **RetrievalDocTypes** element is only used if your solution is configured to allow users to view/retrieve existing documents matching the selected Data Set (i.e., if the **DocHitList** setting in the **Display** element is set to **true**). See The RetrievalDocTypes Element on page 77 for more information.
The Filter Element	The **Filter** element allows you to filter the available Document Type buttons based on a specified Keyword Value in the selected Data Set. See The Filter Element on page 78 for more information.

Front Office Scanning Configuration File Element	Description
The MergeItems Element	The **MergeItems** element allows you to configure Data Set Keyword Merges for the existing templates in the Front Office Scanning client. A Data Set Keyword Merge is an automated process that "stamps" a Keyword Value onto a template. **Note:** Data Set Keyword Merges are not supported on scanned images. See The MergeItems Element on page 80 for more information.
The SignatureItems Element	The **SignatureItems** element allows you to configure Signature Merges for the documents scanned/created in the Front Office Scanning client. Signature Merges allows a signature captured from a signature device to be "stamped" onto a document. **Note:** A Signature Merge is not used if a captured signature is added as a markup to a document. For information on adding a signature as a markup to a document, see Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device on page 189. See The SignatureItems Element on page 86 for more information.
The SignatureOnFilePath Element	The **SignatureOnFilePath** element allows you to specify the location where a signature is saved when your Front Office Scanning solution is configured to allow a stored signature to be automatically stamped on a document. See The SignatureOnFilePath Element on page 88 for more information.
The DocTypes Element	The **DocTypes** element allows you to configure the Document Types available to the Front Office Scanning client. See The DocTypes Element on page 89 for more information.

The FOSCONFIGURATION Parent Element

The **FOSCONFIGURATION** parent element contains general Front Office Scanning system options.

It also indicates the beginning and the end of the Front Office Scanning configuration file.

```
<FOSCONFIGURATION FileImportPath="C:\FOS\Default Image Import"
PreventAutoFillOnUpload="true" encryptfiles="false"
multiplepaths="true" aedatasetselect="false" reusedatasets="false"
```

```
foregroundupload="true" disconnected="false" deleteafterimport="true"
closeafterupload="false" UseSOAPUpload="false"
UseSOAPDownload="false" maintainLocalCopy="false"
allowmodifykeywords="false" RemoveSharePathDataSetsOnClose="false"
imagepng="false" DisableFileImport="" FileImportSpec="">
```

Note: The name of the **FOSCONFIGURATION** parent element must be in all capital letters for the Front Office Scanning configuration file to load successfully.

The following settings are found in the **FOSCONFIGURATION** parent element:

FOSCONFIGURATION Parent Element Settings	Description
FileImportPath	This setting allows you to specify a default folder location to initially display in the **Open** dialog when performing an ad hoc import of an image file into the Front Office Scanning client (i.e., by selecting **File | Import Image File**). You can specify either a local path or a UNC path. For example: • **FileImportPath="C:\FOS\Default Image Import"** (local path) • **FileImportPath="\\test-000100\FOS\Default Image Import"** (UNC path)
PreventAutofillOnUpload	This setting allows you to prevent AutoFill Keyword Sets from being expanded when uploading documents to OnBase from the Front Office Scanning client. • If **PreventAutofillOnUpload** is set to **true**, then AutoFill Keyword Sets will not be automatically expanded when you upload documents to OnBase from the Front Office Scanning client. • If **PreventAutofillOnUpload** is set to **false**, or if no value is present, then AutoFill Keyword Sets will be automatically expanded when you upload documents to OnBase from the Front Office Scanning client. **Note:** In order to expand AutoFill Keyword Sets when manually creating a Data Set within the Front Office Scanning client (i.e., when the **KeywordAutofill** setting is set to **true**), the **PreventAutofillOnUpload** setting must be set to **true**.

FOSCONFIGURATION Parent Element Settings	Description
encryptfiles	This setting controls if documents scanned/created in the Front Office Scanning client (and their corresponding indexing information) are encrypted while being temporarily stored on the Front Office Scanning client workstation and during upload. • If **encryptfiles** is set to **true**, then documents and their indexing information are encrypted while pending and during upload to OnBase. • If **encryptfiles** is set to **false**, or if no value is present, then documents and their indexing information are not encrypted while pending and during upload to OnBase.
multiplepaths	This setting allows you to filter the Data Sets displayed in the **Available Data Sets** list by allowing users to select which sub-folder(s) of the sharepath folder they would like to access Data Sets from. • If **multiplepaths** is set to **true**, then the user at the Front Office Scanning workstation can select which sub-folders of the sharepath folder they would like to display Data Sets from in the **Available Data Sets** list. • If **multiplepaths** is set to **false**, or if no value is present, then the Front Office Scanning scanning workstation will display all Data Sets available in the sharepath folder in the **Available Data Sets** list. **Note:** The functionality offered by this setting is only available if your Front Office Scanning solution is designed to access Data Sets from a shared folder. It is not available if your Front Office Scanning solution is designed to retrieve Data Sets from a network location via your OnBase Application Server. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Data Set Sub-Categories on page 153.

FOSCONFIGURATION Parent Element Settings	Description
aedatasetselect	This setting allows you to automatically select a Front Office Scanning Data Set when an Application Enabler screen scrape event is performed and a Data Set already exists with the same values as those obtained from the screen scrape event. **Note:** The Front Office Scanning Enabler Service is not required to use this feature. • If **aedatasetselect** is set to **true**, then an existing Front Office Scanning Data Set is selected when an Application Enabler screen scrape event is performed if the Data Set values match the values obtained from the screen scrape event. This setting also prevents the Front Office Scanning client from automatically refreshing the **Available Data Sets** list. The Front Office Scanning client is unresponsive while the **Available Data Sets** list is being refreshed; unnecessarily refreshing it may be undesirable to users. • If **aedatasetselect** is set to **false**, or if no value is present, then no Data Set is selected when the Application Enabler screen scrape event is performed. **Note:** To use the functionality offered by this setting, the Front Office Scanning client, Application Enabler, and the line of business application that the values are being captured from must all be running on the same workstation. **Tip:** If a Data Set with the same values as those obtained from the screen scrape event does not already exist, no Data Set is selected in the Front Office Scanning client. To create a Data Set via an Application Enabler screen scrape event and then automatically select it in the Front Office Scanning client, see Automated Console Mode on page 119.

FOSCONFIGURATION Parent Element Settings	Description
reusedatasets	This setting is used to determine what happens to Data Sets after they are used. • If **reusedatasets** is set to **false**, or if no value is present, Data Set XML files (and the Data Sets they represent) are automatically deleted once they are associated with one or more documents and the document(s) are uploaded to OnBase. • If **reusedatasets** is set to **true**, Data Set XML files (and the Data Sets they represent) are not deleted and remain available for use after they are associated with one or more documents and the document(s) are uploaded to OnBase. **Note:** Regardless of the value of the **reusedatasets** setting, manually created Data Sets are always deleted once they are associated with a document that is uploaded to OnBase. **Tip:** If **reusedatasets** is set to **true**, it should ALWAYS be used in conjunction with the **DataSetLifeSpan** setting to ensure that the Data Set XML file (and the Data Set it represents) is eventually deleted. If the **reusedatasets** setting is not used in conjunction with the **DataSetLifeSpan** setting, Data Sets will never be automatically deleted and will continue to accrue in the sharepath folder.
foregroundupload	This setting is used to specify how documents are uploaded to OnBase. • If **foregroundupload** is set to **false**, or if no value is specified, then documents are uploaded using a background upload process while users continue to perform other tasks in the Front Office Scanning client. • If **foregroundupload** is set to **true**, then the upload process takes place in the foreground and users are unable to perform other tasks in the Front Office Scanning client until the upload is complete. **Note:** This setting must be set to **true** when configuring the Front Office Scanning client to close automatically after a document is uploaded to OnBase (i.e., the **closeafterupload** setting is set to **true**).

<table>
<tr><th>FOSCONFIGURATION Parent Element Settings</th><th>Description</th></tr>
<tr><td>disconnected</td><td>This setting allows you to enable Disconnected mode for your Front Office Scanning client workstations.
If Disconnected is set to true, then your Front Office Scanning client workstations will run in Disconnected mode.
In Disconnected mode, users are able to scan/create documents for multiple Data Sets using the Front Office Scanning client (i.e., select the first Data Set, scan/create documents for that Data Set, select a second Data Set, scan/create documents for that Data Set, etc.) and queue them locally on the workstation until they can all be uploaded to OnBase at a later time.
If Disconnected is set to false, or if no value is present, then your Front Office Scanning client workstation will run in Standard mode.
In Standard mode, all documents associated scanned/created for a Data Set must be uploaded before another Data Set can be selected and documents can be scanned/created for it.
For more information, see Determining how the Front Office Scanning Client Responds to Application Enabler on page 117.</td></tr>
<tr><td>deleteafterimport</td><td>This setting allows you to automatically delete a document from its source location once you import it into the Front Office Scanning client.
If deleteafterimport is set to true, then any document you import into the Front Office Scanning client is automatically deleted from its source location.
If deleteafterimport is set to false, or if no value is present, then any document you import into the Front Office Scanning client also remains in its source location.</td></tr>
</table>

FOSCONFIGURATION Parent Element Settings	Description
closeafterupload	This setting allows you to configure the Front Office Scanning client to automatically close after a document is uploaded to OnBase. **Note:** In order to use this setting, the **foregroundupload** setting must be set to **true**. This prevents the Front Office Scanning client from closing before background uploads are completed and prevents users from performing additional actions in the Front Office Scanning client before it is closed. • If **closeafterupload** is set to **true**, then the Front Office Scanning client will automatically close after a document is uploaded to OnBase. • If **closeafterupload** is set to **false**, or if no value is present, then the Front Office Scanning client will remain open after a document is uploaded to OnBase, allowing you to scan/ create additional documents.
UseSOAPUpload	This setting controls which transfer method is used to upload documents from the Front Office Scanning client to OnBase. **Note:** The SOAP XML transfer method should only be used if the binary method is not functional due to environment issues. • If **UseSOAPUpload** is set to **true**, then the SOAP XML transport method is used to upload documents into OnBase. • If **UseSOAPUpload** is set to **false**, or if no value is present, then the binary transport method is used to upload documents into OnBase.
UseSOAPDownload	This setting controls which transfer method is used to retrieve documents within the Front Office Scanning client. **Note:** The SOAP XML transfer method should only be used if the binary method is not functional due to environment issues. • If **UseSOAPDownload** is set to **true**, then the SOAP XML transport method is used to retrieve documents within the Front Office Scanning client. • If **UseSOAPDownload** is set to **false**, or if no value is present, then the binary transport method is used to retrieve documents within the Front Office Scanning client.

FOSCONFIGURATION Parent Element Settings	Description
maintainLocalCopy	This setting controls whether a local copy of each document is saved before the document is uploaded to OnBase. The location of the local copy is specified using the **MaintainLocalCopyPath** element. • If **maintainLocalCopy** is set to **true**, then each time a document is uploaded to OnBase, a local copy of that document is saved to the location specified in the **MaintainLocalCopyPath** element. • If **maintainLocalCopy** is set to **false**, or if no value is present, then no local copy of the document is saved upon upload to OnBase.
allowmodifykeywords	This setting allows you to modify existing Keyword Values that are associated with a selected Data Set from within the Front Office Scanning client. • If **allowmodifykeywords** is set to **true**, then you are able to modify existing Keyword Values that are associated with a selected Data Set from within the Front Office Scanning client. • If **allowmodifykeywords** is set to **false**, or if no value is present, then you are not able to modify existing Keyword Values that are associated with a selected Data Set from within the Front Office Scanning client. **Note:** Modifying Keyword Values in this way will not affect the Data Set XML file. **Note:** This setting has no impact on your ability to modify the Keyword Values associated with a manually created Data Set. **Note:** If there is no Keyword Value associated with a Keyword Type for a selected Data Set, a Keyword Value can be manually entered into that Data Set from within the Front Office Scanning client. This is true even if **allowmodifykeywords** is set to **false**. See Manually Entering Keyword Values into an Existing Data Set on page 275 for more information.

<table>
<tr><th>FOSCONFIGURATION Parent Element Settings</th><th>Description</th></tr>
<tr><td>RemoveSharePathDataSetsOnClose</td><td>This setting controls whether all Data Set XML files are deleted from the sharepath after the Front Office Scanning client is closed.
• If RemoveSharePathDataSetsOnClose is set to true, all Data Set XML files will be deleted from the sharepath when the Front Office Scanning client is closed.
• If RemoveSharePathDataSetsOnClose is set to false, or if no value is present, then the Data Set XML files will not be deleted from the sharepath when the Front Office Scanning client is closed.
Once the Data Set XML files are deleted, the Data Sets are no longer available to the Front Office Scanning workstations.

Caution: Depending on your configuration, the Data Set XML files may be deleted from the sharepath for other reasons (e.g., when the reusedatasets setting is set to false and a Data Set XML file is associated with one or more documents and the document(s) are uploaded to OnBase). Setting RemoveSharePathDataSetsOnClose to false will not prevent the deletion of the Data Set XML files in those cases.

Note: If the DataSetSourceURL element is set to true, this setting is ignored.

Tip: When RemoveSharePathDataSetsOnClose is set to true, you can prevent a Data Set from being deleted by marking its Data Set XML file as read-only.</td></tr>
<tr><td>imagepng</td><td>This setting controls how temporary image files and images created from E-Forms are stored.
• If imagepng is set to true, all temporary images and image files created from E-Forms will be stored as uncompressed PNG images.
• If imagepng is set to false, or if no value is present, all temporary images and image files created from E-Forms will be stored using the default image file formats.

Note: Setting imagepng to true may increase the quality of temporary images and images created from E-Forms. However, uncompressed PNG images require more space than the default temporary image formats.</td></tr>
</table>

FOSCONFIGURATION Parent Element Settings	Description
DisableFileImport	The **DisableFileImport** setting allows you to disable the **File | Import File** menu option, preventing users from importing an image or PDF document into the Front Office Scanning client. • If **DisableFileImport** is set to **true**, the **File | Import File** option is disabled. • If **DisableFileImport** is set to **false**, or if no value is present, the **File | Import File** option is enabled when a valid data set is available in the Front Office Scanning client.
FileImportSpec	This setting allows you to specify default file types to initially display in the **Open** dialog box when performing an ad hoc import of a file into the Front Office Scanning client. You can specify either a single file type or a set of file types. Each file type is represented by its extension, and each extension must be preceded by the * wildcard. If more than one file type is set, each corresponding extension must be separated by semicolons. For example: • **FileImportSpec = "*.pdf"** (a single file extension) • **FileImportSpec = "*.jpg;*.pdf"** (multiple file extensions)(When **FileImportSpec** is set to one or more file extension, the **Open** dialog box will be displayed with a default filter that corresponds to your setting. For example, if you set **FileImportSpec = "*.pdf"** (as in the first example above), only PDF files will be displayed by default. **Note:** When **FileImportSpec** is set to one or more file extension, you still have the option to display all file types once the **Open** dialog box is displayed. If **FileImportSpec=""**, or if the element is not present, the default **Open** dialog box will be displayed.

The Display Element

The **Display** element contains configuration options that control how the Front Office Scanning client is displayed on the Front Office Scanning workstation.

```
<Display aliasing="Scale to Gray" largetoolbar="true"
interface="advanced" disableprint="true" smallbuttons="true"
dochitlist="true" fullscreenswap="false" clonestart="" clonestop="" />
```

The following settings are found in the **Display** element:

Display Element Settings	Description
aliasing	This setting controls the color and size settings for documents displayed in the **Working** window. • If **aliasing** is set to **normal**, images are displayed in the Working window as they are, without any size or color changes. • If the **aliasing** is set to **scale to gray**, or if no value is present, images are displayed in grayscale. • If **aliasing** is set to **preserve black**, images are displayed bi-tonally (in black and white). **Tip:** The **preserve black** setting strengthens the coloring of the black pixels, making images with light text easier to read.
largetoolbar	This setting controls the size of the toolbar buttons in the Front Office Scanning toolbar and the Markup toolbar. • If **largetoolbar** is set to **false**, or if no value is present, then standard size toolbar buttons are displayed in the toolbars. • If **largetoolbar** is set to **true**, then larger toolbar buttons are displayed in the toolbars. **Note:** After the Front Office Scanning client is launched, the size of the toolbar buttons in the Front Office Scanning toolbar can be toggled by pressing **Ctrl+Alt+T**.
interface	This setting allows you to configure if the Document Date for the documents scanned/created in the Front Office Scanning client is configurable or if the current date is automatically used. • If **interface** is set to **standard**, or if no value is present, then the current date is used as the Document Date and cannot be changed. • If **interface** is set to **advanced**, then the **Document Date** drop-down is displayed in the **Scan/Create Document** window, allowing the user to select a date to use as the Document Date. **Note:** When **interface** is set to **advanced**, the Document Date must be set before the current document is assigned to a Document Type. Once the Document Type is assigned, the **Document Date** field is disabled.

Display Element Settings	Description
disableprint	This setting controls whether restrictions are placed on a user's printing options in the Front Office Scanning client. • If **disableprint** is set to **true**, conventional print and print preview options in the **Related Documents** window are disabled. • If **disableprint** is set to **false**, or if no value present, conventional print and print preview options in the **Related Documents** window are enabled. **Note:** The **DocType** sub-element's **preprint** and **autoprint** settings override the **disableprint** setting. If the appropriate input button or Document Type button is clicked, for instance, the selected document is printed, regardless of the status of the **disableprint** setting.
smallbuttons	This setting controls the size of the Document Type buttons in the **Scan/Create Document** window. • If **smallbuttons** is set to **true**, smaller Document Type buttons are displayed in the **Scan/Create Document** window (up to 32 Document Type buttons can be displayed without scrolling). • If **smallbuttons** is set to **false**, or if no value is present, larger Document Type buttons are displayed in the **Scan/Create Document** window (up to five Document Type buttons can be displayed without scrolling).

Display Element Settings	Description
dochitlist	This setting controls if existing documents related to the selected Data Set can be retrieved/viewed by the Front Office Scanning user. • If **dochitlist** is set to **true**, or if no value is present, then documents pending upload to OnBase or existing documents stored in OnBase that have one or more Keyword Values in common with the selected Data Set are listed in the **Related Documents** window. **Note:** The Keyword Value(s) used to determine if a document matches the selected Data Set are specified in the **Retrieval** element. See The Retrieval Element on page 77 for more information. **Tip:** Documents can be retrieved and viewed in the Front Office Scanning client from the **Related Documents** window; see Performing Document Retrieval in the Front Office Scanning Client on page 324 for more information. • If **dochitlist** is set to **false**, then the **Related Documents** window is not displayed in the Front Office Scanning client and users cannot retrieve/view existing documents that share Keyword Values with the selected Data Set. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.
fullscreenswap	This setting allows you to configure the Front Office Scanning client to be automatically swapped from the primary monitor to a secondary monitor when the Front Office Scanning client is displayed in Full Screen view. • If **fullscreenswap** is set to **true**, then the Front Office Scanning client is automatically swapped to the secondary monitor when the Front Office Scanning client is displayed in Full Screen view. • If **fullscreenswap** is set to **false**, or no value is present, then the Front Office Scanning client is not automatically swapped to the secondary monitor when it is displayed in Full Screen view. For more information on this feature, see Configuring Full Screen Swapping on page 126.

Display Element Settings	Description
clonestart	This setting allows you to specify the hot key combination that turns on cloning mode for the Front Office Scanning client. **Note:** When displayed in cloning mode, the Front Office Scanning client is displayed on both the primary monitor and the secondary monitor. The **clonestart** setting should be set to the hot key combination configured for your video card's cloning capabilities. For example: **clonestart="CTRL+ALT+F7"** For more information on this feature, see Configuring Cloning on page 127.
clonestop	This setting allows you to specify the hot key combination that turns off cloning mode for the Front Office Scanning client. **Note:** When displayed in cloning mode, the Front Office Scanning client is displayed on both the primary monitor and the secondary monitor. The **clonestop** setting should be set to the hot key combination configured for your video card's cloning capabilities. For example: **clonestart="CTRL+ALT+F8"** For more information on this feature, see Configuring Cloning on page 127.

The ScreenName Element

The **ScreenName** element is used to specify the text that is displayed in the Front Office Scanning client window's title bar.

```
<ScreenName>Hyland Hospital - Registration</ScreenName>
```

The text you would like to be displayed in the Front Office Scanning client window's title bar should be entered directly between the **ScreenName** tags.

The Columns Element

The **Columns** element specifies which Keyword Values are displayed for a Data Set in the **Available Data Set** list.

```
<Columns>
<Column>Name</Column>
<Column>City</Column>
<Column>State</Column>
</Columns>
```

The **Columns** element is composed of one or more **Column** sub-elements. Each **Column** sub-element is used to configured one Keyword Type to display for the Data Set in the **Available Data Sets** list.

Enter the name of the Keyword Type whose values you would like displayed in the **Available Data Sets** list directly between the **Column** tags.

The SharePath Element

The **SharePath** element is used to specify the location where the Front Office Scanning client will find Data Set XML files.

```
<SharePath>C:\Program Files\Hyland\Front Office Scanning\Patients
</SharePath>
```

The path to the sharepath folder should be entered directly between the **SharePath** tags.

Only one **SharePath** element should exist in the configuration file, and only one path should be placed in this **SharePath** element.

Note: If the value for the **SharePath** element is a local path, it can also be set through the Hyland Front Office Scanning installer. See the **Installation** chapter of the module reference guide for more information.

Note: If you are configuring a Front Office Scanning solution where the Data Set XML files are stored in a network location accessible by the Application Server and then made available to the Front Office Scanning client via a web service, then the **SharePath** element is ignored.

Note: If you are configuring a Front Office Scanning solution to allow users to filter the Data Sets displayed in the **Available Data Sets** list by allowing users to display only the Data Sets from selected sub-folders of the sharepath folder, you would only enter the path to the parent sharepath folder in the SharePath element, not the path(s) to the sub-folders of the sharepath folder. For more information on configuring this feature, see Configuring Data Set Sub-Categories on page 153.

The DataSetSourceURL Element

Note: The **DataSetSourceURL** element is only used by Front Office Scanning solutions configured to store Data Set XML files in a network location accessible by the Application Server and provided to Front Office Scanning workstations via a web service.

The **DataSetSourceURL** element is used to specify that Data Set XML files are stored in a network location instead of a local shared folder (i.e., the sharepath).

```
<DataSetSourceURL>True</DataSetSourceURL>
```

When the **DataSetSourceURL** element is set to true, the Front Office Scanning client is instructed to ignore the **SharePath** element and to query the Application Server for any available Data Sets.

When the **DataSetSourceURL** element is set to false, or is not present in the configuration file, the Front Office Scanning client automatically looks for Data Sets in the local shared folder specified by the **SharePath** element of the configuration file.

In order to use the functionality offered by this element, additional configuration is required. For more information, see Configuring a Network Location on page 147.

The SiteID Element

Note: The **SiteID** element is only used by Front Office Scanning solutions configured to store Data Set XML files in a network location accessible by the Application Server and provided to Front Office Scanning workstations via a web service.

The **SiteID** element is used to identify the site (e.g., a physical location, floor, or department) of the Front Office Scanning workstation(s) using the Front Office Scanning configuration file.

The value contained in the **SiteID** element allows the Application Server to ensure that it provides Data Sets only to the Front Office Scanning workstations associated with the site where the Data Sets were created.

```
<SiteID>MainCampus</SiteID>
```

The unique Keyword Value that is used to identify the site is entered directly between the **SiteID** tags.

In order to use the functionality offered by this element, additional configuration is required. For more information, see Configuring a Network Location on page 147.

The MaintainLocalCopyPath Element

The **MaintainLocalCopyPath** element is used to specify the location where a local backup copy of each document can be saved before the document is uploaded to OnBase. This is an optional feature that requires additional configuration.

```
<MaintainLocalCopyPath>C:\Program Files\Hyland\Front Office
Scanning\LocalCopy</MaintainLocalCopyPath>
```

Backup local copies of image files are saved as TIFF files, and PDF files are saved as PDF files. If the original image document consists of multiple pages, the backup local copy is a single multi-page TIFF file.

The file name of each local copy is based on the document's OnBase document handle, the data source name of the OnBase database, and the date and time at which the backup copy was created. For example:

<document handle>(<data source>)(<yyyy-mm-dd_hh-mm-ss>).tif

To save local copies of documents to the location specified in this element, the **maintainLocalCopy** setting in the **FOSCONFIGURATION** parent element must also be set to **true**. For more information on configuring local backup copies, see Saving a Local Backup Copy Upon Upload on page 140.

The Application Element

The **Application** element is used to configure an external application to open from within the Front Office Scanning client. This external application is launched by clicking the **Launch Application** toolbar button in the Front Office Scanning toolbar.

```
<Application>
<Command>"C:\Program Files\Hyland\Disconnected Scanning\
disconnectedscan.exe"</Command>
<Tooltip>Click to launch OnBase Disconnected Scanning</Tooltip>
</Application>
```

Only one external application can be configured to open from within Front Office Scanning (i.e., only one **Application** element can be present in any given Front Office Scanning configuration file).

For more information on this feature, see Configuring Front Office Scanning to Launch Another Application on page 133.

The following settings are found in the **Application** element:

Application Element Settings	Description

Command	This setting allows you to specify the command line for the application that is to be opened from within Front Office Scanning.
	Note: When the Application element is present in the Front Office Scanning configuration file, a valid **Command** setting is required.
	The command line is entered directly between the **Command** tags and it must be enclosed in quotation marks. For example:
	`<Command>"C:\Program Files\Hyland\Disconnected Scanning\disconnectedscan.exe"</Command>`
	Additionally, the **Command** setting can contain the **%username%** and **%password%** variables to pass user credentials from the Front Office Scanning client to the external application
	For example, the **Command** setting demonstrated below will automatically launch OnBase Disconnected Scanning using the same user name and password credentials that were used to log onto the Front Office Scanning client.
	`<Command>"C:\Program Files\Hyland\Disconnected Scanning\disconnectedscan.exe -AL UN=%username% -PW=%password%"</Command>`

Tooltip	This setting allows you to specify the tooltip text that is displayed when a user holds the pointer over the **Launch Application** toolbar button on the Front Office Scanning toolbar. The tooltip text that you would like displayed to the user is entered directly between the **tooltip** tags.

The DataSetListText Element

The **DataSetListText** element is used to specify the name of the **Available Data Sets** list within the Front Office Scanning client.

```
<DataSetListText>Available Patients</DataSetListText>
```

The text that is to be used as the label for the **Available Data Sets** list is entered directly between the **DataSetListText** tags. If no value is entered, or if the **DataSetListText** element is not present in the Front Office Scanning configuration file, then the Available Data Sets list is labeled **Available Data Sets** by default.

The DataSetLifeSpan Element

The **DataSetLifeSpan** element is used to configure the amount of time Data Sets are available to the Front Office Scanning workstation before they expire and are deleted.

```
<DataSetLifeSpan>12</DataSetLifeSpan>
```

Tip: This feature allows unused Data Sets to be automatically deleted from the system or it prevents Data Sets from accruing indefinitely if your solution is configured to allows Data Sets to be reused (i.e., the **reusedatasets** setting in the **FOSCONFIGURATION** parent element is set to **true**).

Enter the amount of time (in hours) that Data Sets are to be available to the Front Office Scanning client directly between the **DataSetLifeSpan** tags. If the **DataSetLifeSpan** setting is not present, or is set to **0**, this feature is disabled.

When this feature is enabled, the Front Office Scanning client will check the difference between the current time on the Front Office Scanning workstation and the time that the Data Set XML files were created each time the **Available Data Sets** list is refreshed. If a Data Set has not been used by the time its lifespan expires, the Data Set XML file associated with it is deleted from the sharepath and the Data Set is no longer available to the Front Office Scanning client.

Tip: When this feature is enabled, you can prevent a Data Set from being deleted by marking its Data Set XML file as read-only.

Caution: If a user manually changes the clock on the Front Office Scanning workstation, Data Sets may be deleted even if they have not existed for the amount of time specified by the configuration setting.

Caution: NTFS file systems store the file times in Coordinated Universal Time (UTC) whereas FAT file systems store the file times in local time. Therefore, time changes due to Daylight Savings do not affect Data Sets on NTFS systems but could shorten or lengthen the time a Data Set is considered valid on a FAT system.

For more information on this feature, see Configuring a Data Set Lifespan on page 152.

The DataSetForm Element

The **DataSetForm** element is used to configure the Front Office Scanning client to allow users to enter Keyword Values into a custom HTML form instead of directly into the **Selected Data Set** window when manually creating a Data Set inside of the Front Office Scanning client.

If the **DataSetForm** element is not present in the Front Office Scanning configuration file, then users enter Keyword Values directly into the **Selected Data Sets** window when manually creating Data Sets in the Front Office Scanning client.

```
<DataSetForm file="C:\Program Files\Hyland\Front Office
Scanning\PatientDataSet.htm" width="" height="" />
```

DataSetForm Element Setting	Description
file	This setting allows you to specify the path to the HTML form that is displayed to users when manually creating a Data Set in the Front Office Scanning client. The HTML form must either be stored locally on the Front Office Scanning workstation, available to the Front Office Scanning workstation via a UNC path, or be stored on a web server that can be browsed to via normal HTTP (i.e. via a URL that begins with `http:` or `https:`). Set the **file** setting to the file path, UNC path, or URL of the HTML form.
width	This setting allows you to specify, in pixels, the width of the window containing the HTML form that is displayed to users when manually creating a Data Set in the Front Office Scanning client. Set the **width** setting to the desired width of the window, in pixels. If no value is specified for the **width** setting, the HTML form is displayed using the form’s default width.
height	This setting allows you to specify, in pixels, the height of the window containing the HTML form that is displayed to users when manually creating a Data Set in the Front Office Scanning client. Set the **height** setting to the desired height of the window, in pixels. If no value is specified for the **height** setting, the HTML form is displayed using the form’s default height.

In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring an HTML Form for Manually Creating Data Sets on page 144.

The Printer Element

The **Printer** element is used to automatically specify the printer(s) to be used when documents are printed from within the Front Office Scanning client:

```
<Printer>ER_Registration</Printer>
```

Specify the printer name directly between the **Printer** tags (e.g., ER_Registration).

If the printer will be accessed via a network location, you must also specify a valid UNC path to the printer (e.g., \\SRV-PRN) before the printer name:

```
<Printer>\\SRV-PRN\ER_Registration</Printer>
```

Alternatively, the default Windows printer may be specified by setting the printer name to **default**:

```
<Printer>default</Printer>
```

Tip: When used in conjunction with other settings (i.e., when the **autoprint** or **preprint** settings in the **DocType** element are set to **true**), a document can be automatically printed when it is scanned/created, allowing users to print documents without the **Print** dialog box being displayed (if you do not want the user to have to select a printer or be able to make changes to printing options in the **Print** dialog box).

The CommParams Element

The **CommParams** element contains the information needed to configure your Front Office Scanning client to connect to your OnBase Application Server.

```
<CommParams domain="" username="" password="" credentials=""
dbname="HylandHospital" url="http://ServerName/appserver/
service.asmx" ntsecurity="" automaticClientTimeout="" />
```

The following settings are found in the **CommParams** element. If your Front Office Scanning solution is configured to use Identity Provider (IdP) authentication, additional settings apply. For more information on configuring Front Office Scanning for use with IdP authentication, see the **Identity and Access Management Services** module reference guide.

<table>
<tr><th>CommParams Element Settings</th><th>Description</th></tr>
<tr><td>domain</td><td> Note: This option is only used if your Front Office Scanning solution is configured to use Active Directory or LDAP authentication. This setting allows you to specify a default domain to be used when a user logs on to the Front Office Scanning client. For example, if all users that are to be performing Front Office Scanning belong to the Clinical domain, you could specify it as the default domain to be used by all users that log onto the Front Office Scanning client using this configuration file. Set the domain setting to contain the name of the default domain to be used. If a value is supplied for the domain setting, when a user launches Front Office Scanning, the Front Office Scanning User Log On dialog box is displayed with the domain value pre-populated in the Domain field. This value can be modified by users as needed. Note: When using interactive Active Directory or LDAP authentication, values for the User Name and Password fields are not pre-populated, even if a default username and password are specified in the Front Office Scanning configuration file. If no value is supplied for the domain setting, when a user launches Front Office Scanning, the Front Office Scanning User Log On dialog box is displayed and the user must enter a valid domain value into the Domain field.</td></tr>
</table>

CommParams Element Settings	Description
username	This setting allows you to specify a default user account to be used when a user logs on to the Front Office Scanning client. For example, if all users that are to be performing Front Office Scanning do not need their own OnBase user account, you could create a default account (e.g., **ER_Registration**) to be used by all users that log onto the Front Office Scanning client using this configuration file. Set the **username** setting to contain the OnBase user name of the default OnBase user account to be used. • If a value is supplied for the **username** setting, but no value is supplied for the password setting, when a user launches Front Office Scanning, the **Front Office Scanning User Log On** dialog box is displayed with the **username** value pre-populated in the **User Name** field. This value can be modified by users as needed. If a value is supplied for both the **username** and **password** settings, the log on process is automated using these credentials; the **Front Office Scanning User Log On** dialog box is not displayed and the Front Office Scanning client is automatically displayed. • If no value is supplied for the **username** setting, when a user launches Front Office Scanning, the **Front Office Scanning User Log On** dialog box is displayed and the user must enter a valid OnBase user name into the **User Name** field. **Note:** If a default user account is used to log on to the Front Office Scanning client, this user account is recorded as the creator for all documents scanned/created in the Front Office Scanning client in the documents’ document history. **Note:** If your Front Office Scanning solution is configured to use IdP authentication, the **username** setting is ignored.

CommParams Element Settings	Description
password	This setting is used in conjunction with the **username** setting. It allows you to specify the password for the default user account identified by the username setting. **Tip:** The **password** setting is optional, even when using the **username** setting. To add a measure of security, a default user name can be specified without supplying the password for the account. Set the **password** setting to contain the password associated with the OnBase user account being used. Once the Front Office Scanning client is launched for the first time with the Front Office Scanning configuration file, the **password** setting is removed and is stored as an encrypted value in the **credentials** setting. It can no longer be viewed in the Front Office Scanning configuration file. To modify the stored password, delete the **Credentials** setting from the Front Office Scanning configuration file and enter a new value for the **password** setting. **Note:** If your Front Office Scanning solution is configured to use IdP authentication, the **password** setting is ignored.
credentials	This setting is used in conjunction with the **username** and **password** settings. It is automatically added to the Front Office Scanning configuration file after a default password has been specified and the Front Office Scanning client has been launched. The **credentials** setting contains the encrypted value representing the default password that was specified in the configuration file. To modify the default password, delete the **Credentials** setting from the Front Office Scanning configuration file. **Note:** If your Front Office Scanning solution is configured to use IdP authentication, the **credentials** setting is ignored.
dbname	This setting is used to specify the name of the data source used to connect to the OnBase database. This setting is required. Set the **dbname** setting to the name of the data source used to connect to the OnBase database.
url	This setting is used to specify the URL of the OnBase Application Server. This setting is required. Set the **url** setting to the URL of the OnBase Application Server to which the Front Office Scanning client connects. This value should include the full path to the Application Server’s service page (for example, **url="http://ServerName/appserver/service.asmx"**).

CommParams Element Settings	Description
ntsecurity	This setting is used to configure the Front Office Scanning client to validate users via Active Directory or LDAP authentication. **Note:** In order for Front Office Scanning to be able to use Active Directory or LDAP authentication, your OnBase solution must first be configured to use Active Directory - Enhanced or LDAP authentication. See the **Legacy Authentication Methods** module reference guide for more information. • If **ntsecurity** is set to **true**, then the Front Office Scanning client is configured to authenticate users using Active Directory or LDAP authentication. • If **ntsecurity** is set to **false**, or if no value is present, then the Front Office Scanning client is configured to authenticate users using standard OnBase security, and a valid OnBase user name and password is required to access the Front Office Scanning client. **Note:** If your Front Office Scanning solution is configured to use IdP authentication, the **ntsecurity** setting is ignored.
automaticClientTimeout	The **automaticClientTimeout** setting is used to specify the number of minutes of inactivity after which the Front Office Scanning client's current user is automatically logged out. Once logged out, the user can log back in to resume the session or cancel to end the session. If the user cancels the session, the Front Office Scanning client is closed and any pending documents from the session are discarded. If **automaticClientTimeout** is set to **5**, for example, then the current user is automatically logged out after five minutes of inactivity. If **automaticClientTimeout** is set to a value less than or equal to **0**, or if no value is present, then the current user is not automatically logged out after any period of inactivity.

The ScanOptions Element

The **ScanOptions** element contains advanced configuration options for configuring the scanner(s) used by the Front Office Scanning client.

```
<ScanOptions promptForFirstDevice="true" promptForPrintMon="prompt"
scanner="" multiplebuttons="true" onestep="false" batchscan="false"
imagescale="" nativemode="" hardwarecompress="" bitdepth="8" />
```

The following settings are found in the **ScanOptions** element:

ScanOptions Element Settings	**Description**
promptForFirstDevice	This setting allows you to specify if users are prompted to select a scanner when the **Scan** button is clicked. • If **promptForFirstDevice** is set to **true**, then the **Select Scanner** dialog box is displayed each time a user clicks the Scan button. • If **promptForFirstDevice** is set to **false**, then the scanner specified by the **scanner** setting is automatically selected. If no scanner is specified by the **scanner** setting, then the default scanner is selected.

ScanOptions Element Settings	Description
promptForPrintMon	**Note:** This setting requires that at least one Document Type is configured to use the Virtual Print Driver as a source of image templates (i.e., the **templatesource** setting in the **DocType** sub-element is set to **printmon**). This setting allows you to specify which action will be taken when a document is awaiting Document Type assignment in the Working window and a new document is printed using the Virtual Print Driver. • If **promptForPrintMon** is set to **appendDoc** and a document awaiting Document Type assignment is in the Working window, then the virtually printed document is automatically appended to the document in the Working window. This is the default setting. **Note:** If **promptForPrintMon** is set to **appendDoc** and there is no document in the Working window, you are prompted to choose whether to use the virtually printed document to create a new document for upload or to save the virtually printed document as a template for another Document Type. • If **promptForPrintMon** is set to **newDoc**, then the virtually printed document is automatically saved as a template for another Document Type. • If **promptForPrintMon** is set to **prompt**, then you are prompted to choose whether to use the virtually printed document to create a new document for upload or save the virtually printed document as a template for another Document Type. **Note:** Setting **promptForPrintMon** to **newDoc** or **prompt** requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). **Note:** If a PDF document is awaiting Document Type assignment in the Working window, then the virtually printed document is automatically saved as a template for another Document Type, regardless of the value set for the **promptForPrintMon** setting.

ScanOptions Element Settings	Description
scanner	This setting allows you to specify a default scanner to use when a user is not prompted to select a scanner when scanning a document (i.e., the **promptForFirstDevice** setting is set to **false**). Set the **scanner** setting to the name of the scanner or TOPAZ device that should be automatically used when a user clicks the **Scan** button. Alternatively, to allow signatures to be created using a mouse pointer on workstations or a stylus on tablets, set the **scanner** setting to **touchscreen**. If no value is present for the **scanner** setting, then the workstation's default TWAIN scanner is selected by default. **Note:** For individual Document Types, unless this setting's value is set to the name of a TOPAZ device to be used for a signature on file, this setting is overridden by the **scanner** setting in the **DocTypes** element.
multiplebuttons	This setting allows you display multiple input buttons in the **Scan/ Create Document** window. **Note:** In order to create documents from image templates or to create an E-Form, the **multiplebuttons** setting must be set to **true**. • If **multiplebuttons** is set to **false**, the only available input button is the **Scan** button. • If **multiplebuttons** is set to **true**, multiple input buttons are displayed in t he **Scan/Create Document** window. When set to **true**, one input button is displayed for each Document Type button. When multiple input buttons are configured to be displayed, each input button is configured individually to use the settings needed for the specific document it is being used to scan/create. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Input Buttons on page 161.

ScanOptions Element Settings	Description
onestep	**Note:** This setting is used only when the Front Office Scanning client is configured to use multiple input buttons (i.e., the **multiplebuttons** setting is set to true). When multiple input buttons are displayed in the **Scan/Create Document** window, an input button is displayed for each corresponding Document Type button. • If **onestep** is set to **false**, or if no value is present, a user clicks the input button to scan/create a document and then clicks a Document Type button to assign the document to the proper Document Type. • If **onestep** is set to **true**, the user clicks the input button to scan/ create a document, and, once the document is scanned/created, the document is automatically assigned to the Document Type associated with the Document Type button that corresponds to the input button (i.e., the user does not have to click a Document Type button to assign the document to a Document Type). The **onestep** setting in the **ScanOptions** element affects all input buttons on a global level. To configure the onestep function on an individual input button level, use the **onestep** setting in the **DocType** sub-element. For more information, see The DocTypes Element on page 89. **Note:** When this option is enabled, documents cannot be assigned to a Document Type other than the Document Type associated with the Document Type button that corresponds to the input button that was used to create the document. **Note:** The **batchscan** and **onestep** settings should not both be enabled. If both settings are enabled, the **batchscan** setting overrides the **onestep** setting. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Input Buttons on page 161.

ScanOptions Element Settings	Description
batchscan	This setting allows you to enable batch scanning or the ability to create multiple documents from a single, multi-page image document. **Tip:** See Scanning Documents Using Batch Scanning on page 289 and/or Importing a Multi-Page Image or PDF Document to Create Multiple Documents on page 297 for more information on these features. • If **batchscan** is set to **true**, then batch scanning and the ability to create multiple documents from an imported multi-page image is enabled. • If **batchscan** is set to **false**, then standard scanning/importing is used (i.e., each document that is scanned/imported, regardless of the number of pages, is treated as an individual document. **Note:** The **batchscan** and **onestep** settings should not both be enabled. If both settings are enabled, the **batchscan** setting overrides the **onestep** setting.
imagescale	This setting allows you to specify how pages are displayed, by default, in the Working window. • If **imagescale** is set to **fitwidth**, then documents in the Working window are displayed as **Fit to Width** by default. • If **imagescale** is set to **fitheight**, then documents in the Working window are displayed as **Fit to Height** by default. • If **imagescale** is set to **fitimage**, then documents in the Working window are displayed as **Fit in Window** by default. • If **imagescale** is set to **fullsize**, then documents in the Working window are displayed as their actual size. **Tip:** At any time documents can be displayed differently by clicking one of the **Fit to...** toolbar buttons or by selecting one of the **View | Scale to...** option in the Main Menu. For more information on these display options, see The Front Office Scanning Toolbar on page 265. **Note:** The **imagescale** setting in the **ScanOptions** element sets the default behavior for how pages are displayed in the Working window for all pages/documents in the Front Office Scanning client. The **imagescale** setting can also be specified in the **DocType** element to determine how pages are displayed in the **Working** window once they are assigned to a Document Type. The **imagescale** setting in the **DocType** element overrides the **imagescale** setting in the **ScanOptions** element.

ScanOptions Element Settings	Description
nativemode	**Note:** This option requires that documents are being scanned into the Front Office Scanning client and that the **scanner** setting in the **ScanOptions** element is set to the name of the scanner used by the workstation. This setting is used to control how information is passed from the scanner to the Front Office Scanning client. By default, it is set to **false**. This allows the scanner to transfer data to the Front Office Scanning client using buffered transfer mode. **Tip:** Buffered transfer mode is the preferred method of transferring data from the scanner to the Front Office Scanning client. Setting the **nativemode** setting to **true** allows the scanner to transfer data to the Front Office Scanning client using native transfer mode. While not the preferred method of transferring data, native transfer mode is required for some older TWAIN devices. **Note:** If your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**), then this option may be overridden at the Document Type level if the **nativemode** setting is set for the Document Type button.

ScanOptions Element Settings	Description
hardwarecompress	**Note:** This option requires that documents are being scanned into the Front Office Scanning client and that the **scanner** setting in the **ScanOptions** element is set to the name of the scanner used by the workstation. It is only used when the scanner is configured to transfer data to the Front Office Scanning client in native transfer mode (when the **nativemode** setting is set to **true**). This setting is used to control how the scanner formats data when transferring it to the Front Office Scanning client in native transfer mode. By default, the **hardwarecompress** setting is set to **true**. This allows the scanner to compress data before transferring it to the Front Office Scanning client. If the **hardwarecompress** setting is set to **true**, but the scanner is not capable of compressing data, then the setting is ignored (i.e., it is treated as if it is set to **false**). Setting the **hardwarecompress** setting to **false** prevents the scanner from compressing data; uncompressed data is passed from the scanner to the Front Office Scanning client. **Note:** If your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**), then this option may be overridden at the Document Type level if the **hardwarecompress** setting is set for the Document Type button.
bitdepth	**Note:** This option requires that documents are being scanned into the Front Office Scanning client and that the **scanner** setting in the **ScanOptions** element is set to the name of the scanner used by the workstation. This setting sets the number of bits per pixel for each color plane (specified by the **pixeltype** setting) when scanning is initiated by clicking the input button associated with this Document Type button. Acceptable values for the **bitdepth** setting are **1**, **4**, or **8**. **Tip:** The higher the **bitdepth**, the more accurate the images will be. **Note:** If your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**), then this option may be overridden at the Document Type level if the **bitdepth** setting is set for the Document Type button.

The TempPath Element

The **TempPath** element specifies the temporary location where documents scanned/created in the Front Office Scanning client are stored before they are uploaded to OnBase.

```
<TempPath>C:\Program Files\Hyland\Front Office Scanning\
Patient Documents\</TempPath>
```

The path to the temporary storage location should be entered directly between the **TempPath** tags.

Note: If the **imagepng** setting of the **FOSCONFIGURTATION** parent element in the Front Office Scanning configuration file is set to **true**, temporary image files are stored as uncompressed PNG files. Uncompressed PNG images require more space than the default temporary image formats. See The FOSCONFIGURATION Parent Element on page 40 for more information.

Only one **TempPath** element should exist in the configuration file, and only one path should be placed in this **TempPath** element.

The Keywords Element

The **Keywords** element specifies required Keyword Types associated with a Front Office Scanning Data Set.

```
<Keywords>
<Keyword>Name</Keyword>
<Keyword KeywordAutofill="true" id="102" type="numeric20"
minLength="10" maxLength="30">State</Keyword>
</Keywords>
```

The **Keywords** element is composed of one or more **Keyword** sub-elements. Each **Keyword** sub-element represents one Keyword Value that is required for the Data Set.

Enter the name of the Keyword Type of the required Keyword directly between the **Keyword** tags.

Additionally, to ensure that valid data is stored in the Data Set, the following validation options can be optionally included in the **Keyword** sub-element. These options ensure that the Keyword Value in the Data Set contains only allowable data (e.g., alphanumeric, numeric, currency, etc.) and/or that the length of the Keyword Value does not fall short of the specified minimum length or exceed the maximum allowable length configured for the Keyword Type.

Note: Keyword Values obtained via an Application Enabler screen scrape event are never validated, even when these settings are used.

Keyword Sub-Element Settings	Description
KeywordAutofill	This setting allows you to expand an AutoFill Keyword Set when entering a value for the configured Keyword Type during manual Data Set creation. • If **KeywordAutofill** is set to **true**, when you enter a primary Keyword Value of an AutoFill Keyword Set for the configured Keyword Type while manually creating a Data Set, the AutoFill is expanded in the **Selected Data Set** window. • If **KeywordAutofill** is set to **false**, or if no value is present, then AutoFill Keyword Sets will not be expanded during manual Data Set creation. **Note:** This setting is only respected for Keyword Type level AutoFill Keyword Sets; it is not respected for Document Type level AutoFill Keyword Sets. **Note:** This setting can only be configured for one **Keyword** sub-element. **Note:** When the **KeywordAutofill** setting is set to **true**, the **PreventAutofillOnUpload** setting must also be set to **true** (i.e., to prevent the AutoFill Keyword Set from being expanded again when the corresponding document is uploaded to OnBase).

Keyword Sub-Element Settings	Description
ID	This setting allows you to specify the Keyword Type Number for the Keyword Type being configured. **Tip:** A Keyword Type's Keyword Type Number can be found in the upper-right corner of the **Keyword Type Configuration** dialog box when a Keyword Type is selected. From the OnBase Configuration module, click **Keyword | Keyword Types** and then select the desired Keyword Type from the Defined Keyword Types list. This setting is used when configuring your Front Office Scanning solution to work with E-Forms; depending on the configuration of your E-Forms, it may or may not be required. For more information, see Configuring an Input Button to Create an E-Form on page 173.
type	This setting allows you to perform data validation on a Keyword Value to ensure that it contains only data allowable for its associated Keyword Type. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if the **MRN** Keyword Type is configured as a **Numeric 20** Keyword, but the registrar accidentally entered a value containing a non-numeric character (e.g., **123X56789**), the validation test fails and an error message is displayed. **Note:** For a list of all valid settings for this option, see Configuring Keyword Value Validation on page 155.
minLength	This setting allows you to specify a minimum character length for a Keyword Value to ensure that enough, if not all, of the value is captured to allow for retrieval. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if **minLength="6"** for an alphanumeric **ID Number** Keyword Type, but the registrar accidentally entered a value containing only five characters, the validation test fails and an error message is displayed.

Keyword Sub-Element Settings	Description
maxLength	This setting allows you to specify a maximum character length for a Keyword Value to ensure that it does not exceed the maximum allowable length for its associated Keyword Type. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if the **Social Security Number** Keyword Type is configured as a **Numeric 9** Keyword, but the registrar accidentally entered a value containing ten characters, the validation test fails and an error message is displayed. **Note:** If the **maxLength** setting is set to a value different than the value configured for the Keyword Type's **Maximum Length** setting, the setting with the smaller value prevails. For more information on general Keyword Type configuration, see the **System Administration** module reference guide or help file.

Note: If Data Sets are only being generated from an HL7 message or from data captured by Application Enabler (i.e., Data Sets are never being manually created), the **Keywords** and **DataSet** elements are recommended, but not required. The Keyword Values (and their corresponding Keyword Types) for Data Sets created via HL7 and Application Enabler are specified in the Data Set XML file. Be aware, however, that the order in which Keyword Values are displayed in the **Selected Data Set** window for the Data Set can be controlled by the **Keywords** and **DataSet** elements (see Ordering Keyword Values in a Data Set on page 145), and, if these elements are not included in the configuration file, users will not be able to manually create Data Sets.

The DataSet Element

The **DataSet** element specifies non-required Keyword Types associated with a Front Office Scanning Data Set.

```
<DataSet>
<Keyword>Address</Keyword>
<Keyword KeywordAutoFill="true" id="104" type="alpha" minLength="10"
maxLength="40">City
</Keyword>
</DataSet>
```

The **DataSet** element is composed of one or more **Keyword** sub-elements. Each **Keyword** sub-element represents one Keyword Value that can, but is not required to be, included in a Front Office Scanning Data Set.

Enter the name of the Keyword Type of the non-required Keyword directly between the **Keyword** tags.

To ensure that valid data is stored in the Data Set, the following validation options can be optionally included in the **Keyword** sub-element. These options ensure that the Keyword Value in the Data Set contains only allowable data (e.g., alphanumeric, numeric, currency, etc.) and/or that the length of the Keyword Value does not fall short of the specified minimum length or exceed the maximum allowable length configured for the Keyword Type.

Keyword Sub-Element Settings	Description
KeywordAutofill	This setting allows you to expand an AutoFill Keyword Set when entering a value for the configured Keyword Type during manual Data Set creation. • If **KeywordAutofill** is set to **true**, when you enter a primary Keyword Value of an AutoFill Keyword Set for the configured Keyword Type while manually creating a Data Set, the AutoFill is expanded in the **Selected Data Set** window. • If **KeywordAutofill** is set to **false**, or if no value is present, then AutoFill Keyword Sets will not be expanded during manual Data Set creation. **Note:** This setting is only respected for Keyword Type level AutoFill Keyword Sets; it is not respected for Document Type level AutoFill Keyword Sets. **Note:** This setting can only be configured for one **Keyword** sub-element. **Note:** When the **KeywordAutofill** setting is set to **true**, the **PreventAutofillOnUpload** setting must also be set to **true** (i.e., to prevent the AutoFill Keyword Set from being expanded again when the corresponding document is uploaded to OnBase).
ID	This setting allows you to specify the Keyword Type Number for the Keyword Type being configured. **Tip:** A Keyword Type's Keyword Type Number can be found in the upper-right corner of the **Keyword Type Configuration** dialog box when a Keyword Type is selected. From the OnBase Configuration module, click **Keyword | Keyword Types** and then select the desired Keyword Type from the Defined Keyword Types list). This setting is used when configuring your Front Office Scanning solution to work with E-Forms; depending on the configuration of your E-Forms, it may or may not be required. For more information, see Configuring an Input Button to Create an E-Form on page 173.

Keyword Sub-Element Settings	Description
type	This setting allows you to perform data validation on a Keyword Value to ensure that it contains only data allowable for its associated Keyword Type. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if the **MRN** Keyword Type is configured as a **Numeric 20** Keyword, but the registrar accidentally entered a value containing an alphabetic character (e.g., **123X56789**), the validation test fails and an error message is displayed.
minLength	This setting allows you to specify a minimum character length for a Keyword Value to ensure that enough, if not all, of the value is captured to allow for retrieval. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if **minLength="6"** for an alphanumeric **ID Number** Keyword Type, but the registrar accidentally entered a value containing only five characters, the validation test fails and an error message is displayed.
maxLength	This setting allows you to specify a maximum character length for a Keyword Value to ensure that it does not exceed the maximum allowable length for its associated Keyword Type. If the Keyword Value does not pass this validation test, an error message is displayed. For example, if the **Social Security Number** Keyword Type is configured as a **Numeric 9** Keyword, but the registrar accidentally entered a value containing ten characters, the validation test fails and an error message is displayed. **Note:** If the **maxLength** setting is set to a value different than the value configured for the Keyword Type's **Maximum Length** setting, the setting with the smaller value prevails. For more information on general Keyword Type configuration, see the **System Administration** module reference guide or help file.

Note: If Data Sets are only being generated from an HL7 message or from data captured by Application Enabler (i.e., Data Sets are never being manually created), the **Keywords** and **DataSet** elements are recommended, but not required. The Keyword Values (and their corresponding Keyword Types) for Data Sets created via HL7 and Application Enabler are specified in the Data Set XML file. Be aware, however, that the order in which Keyword Values are displayed in the **Selected Data Set** window for the Data Set can be controlled by the **Keywords** and **DataSet** elements (see Ordering Keyword Values in a Data Set on page 145), and, if these elements are not included in the configuration file, users will not be able to manually create Data Sets.

The Retrieval Element

The **Retrieval** element specifies the Keyword Types whose Keyword Values are used to determine if an existing OnBase document is a match to the selected Data Set.

Note: The **Retrieval** element is only needed if your solution is configured to allow users to view/retrieve existing documents matching the selected Data Set (i.e., if the **DocHitList** setting in the **Display** element is set to **true**).

```
<Retrieval>
<Keyword>MRN</Keyword>
</Retrieval>
```

The **Retrieval** element is composed of one or more **Keyword** sub-elements. Each **Keyword** sub-element represents one Keyword Value that is used to determine if an existing document matches the selected Data Set.

If multiple **Keyword** sub-elements are present in the **Retrieval** element, then the Front Office Scanning client treats them as if they are joined by an **AND** boolean operator (i.e., in order for an existing document to match the selected Data Set, the document must have the same Keyword Values as selected Data Set for all specified Keyword Types).

Enter the name of the Keyword Type of the non-required Keyword directly between the **Keyword** tags.

In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

The RetrievalDocTypes Element

The **RetrievalDocTypes** element specifies Document Types that have not been configured for a Document Type button but may still be used to retrieve existing OnBase documents whose Keyword Values match those of the selected Data Set.

Note: The **RetrievalDocTypes** element is only needed if your solution is configured to allow users to view/retrieve existing documents matching the selected Data Set (i.e., if the **DocHitList** setting in the **Display** element is set to **true**).

```
<RetrievalDocTypes>
<DocType>MED - Pre-Admission Survey</DocType>
<DocType>MED - Intake Form</DocType>
</RetrievalDocTypes>
```

The **RetrievalDocTypes** element is composed of one or more **DocType** sub-elements. Each **DocType** sub-element represents one Document Type that can be used to retrieve existing documents with Keyword Values that match those of the selected Data Set. Each Document Type included here supplements the Document Types that have been configured for a Document Type button; this allows documents to be retrieved in the Front Office Scanning client without the need to scan.

Enter the name of the Document Type directly between the **DocType** tags.

In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

The Filter Element

The **Filter** element allows you to filter the Document Type buttons displayed in the **Scan/Create Document** window based on a specified Keyword Value in the selected Data Set.

```
<Filter>
<Keyword name="Smoker/Nonsmoker" value="Smoker" default="false">
<DocType>1</DocType>
</Keyword>
<Keyword name="Smoker/Nonsmoker" value="Nonsmoker" default="true">
<DocType>2</DocType>
</Keyword>
</Filter>
```

Tip: Filters can be "stacked" (i.e., multiple Keyword Value conditions must be met for a Document Type button to be displayed) so that they are even more restrictive. See Configuring a Document Type Button Filter on page 184 for more information.

The **Filter** element is composed of one or more **Keyword** sub-elements. Each **Keyword** sub-element represents one Keyword Value that is used to filter the displayed Document Type buttons.

Tip: Typically, Keyword sub-elements are created in pairs or other multiples to represent multiple potential values of the same Keyword Type (e.g., **Status=Smoker/Nonsmoker**, **Gender=Male/Female**, **Age=Under 18/18-29/30-39/40-49**, etc.).

Each **Keyword** sub-element contains the following settings:

Keyword Sub-Element Settings	Description
name	This setting is used to specify the Keyword Type that is used to filter the available Document Type buttons. Set the **name** setting to the name of the Keyword Type.
value	This setting is used to specify the Keyword Value of the specified Keyword Type used to filter the Document Type buttons. Data Sets with this Keyword Value will satisfy the parameters of the filter. Set the **value** setting to the desired Keyword Value of the Keyword Type. **Note:** If a Data Set contains a Keyword Value for the specified Keyword Type that does not have a corresponding **value** setting, then the Document Type buttons are not filtered (i.e., all Document Type buttons are displayed).
default	This setting is used to specify whether the Keyword Value specified in the **value** setting is to be used as the default value for the filter Keyword Type. • If **default** is set to **true**, then the Keyword Value specified in the value setting is displayed by default for the filter Keyword Type, even if the selected Data Set does not contain a Keyword Value for the filter Keyword Type. • If **default** is set to **false**, or if no value is present, then no Keyword Value is set as the default.

Keyword Sub-Element Settings	Description
<DocType></DocType>	The **DocType** sub-element specifies one or more Document Type button identifier(s) to associate with the **Keyword** sub-element. This allows the Document Type buttons to be filtered based on Keyword Values in the selected Data Set. Enter the **filterid** from the **DocType** element that corresponds to the Document Type button you would like to associate the filter with. ID for the specified Keyword Type/Keyword Value pairing. This filter ID is also assigned to one or more **DocType** elements. Enter a numeric value for the filter ID. **Tip:** It is recommended that the first **Keyword** sub-element have a filter ID of **1**, the second **Keyword** sub-element have a filter ID of **2**, etc. If the parameters of the filter are met (i.e., if the selected Data Set contains a Keyword Value that matches the **value** setting in the **Keyword** sub-element): • Document Type buttons associated with **DocType** elements also containing the filter ID are displayed. • Document Type buttons associated with **DocType** elements not containing the filter ID are not displayed. **Tip:** This setting can also be written as: `<DocType filterid="" />`.

In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Document Type Button Filter on page 184.

The MergeItems Element

The **MergeItems** element allows you to configure Data Set Keyword Merges and Image Merges for the existing templates in the Front Office Scanning client.

A Data Set Keyword Merge is an automated process that "stamps" a Keyword Value onto a template.

An Image Merge is a similar automated process that stamps an image captured by a webcam onto a template.

Note: Data Set Keyword Merges and Image Merges are not supported on scanned images.

```
<MergeItems>
<MergeItem MergeID="1">
<Font>Times New Roman</Font>
```

```
<FontSize>16</FontSize>
<Page>1</Page>
<Keywords>
<Keyword>
<Page>3</Page>
<Name>MRN</Name>
<KeyLeft>0.25</KeyLeft>
<KeyTop>0.25</KeyTop>
<BarCode>True</BarCode>
<BarCodeType>Code39</BarCodeType>
<BarText>true</BarText>
<BarHeight>25</BarHeight>
<BarWidth>100</BarWidth>
</Keyword>
</Keywords>
<Image>
<ImgLeft>1.1</ImgLeft>
<ImgTop>2.5</ImgTop>
<XMax>5000</XMax>
<YMax>3000</YMax>
<Scale>1.0</Scale>
</Image>
</MergeItem>
</MergeItems>
```

The **MergeItems** element is composed of one or more **MergeItem** sub-elements. Each **MergeItem** sub-element represents one Data Set Keyword Merge or Image Merge configured for your Front Office Scanning solution. Multiple Keyword Value stamps can be configured as part of each Data Set Keyword Merge. Similarly, multiple webcam images can be configured as part of each Image Merge.

Each **MergeItem** sub-element contains the following settings:

MergeItem Sub-Element Settings	Description
MergeID	This setting specifies a unique identification number for the Data Set Keyword Merge represented by this **MergeItem** sub-element. This identification number is known as the merge ID. Enter a numeric value for the merge ID. **Tip:** It is recommended that the first **MergeItem** sub-element have a **MergeID** of **1**, the second **MergeItem** sub-element have a **MergeID** of **2**, etc. The merge ID is also assigned to one or more **DocType** elements. Once the merge ID is assigned to a **DocType** element, the Data Set Keyword Merge is configured for that **DocType** element (i.e.,each time a document is assigned to a Document Type via the Document Type button associated with the **DocType** element, the Keyword Value stamp configured by the Data Set Keyword Merge is added to the document).
Font	This setting allows you to specify the font used to display Keyword Values when they are stamped on the document as part of the Data Set Keyword Merge. Enter the name of the font directly between the **Font** tags. If no value is entered for the **Font** setting, or if the **Font** setting is not present, **Arial** is selected by default.
FontSize	This setting allows you to specify the size of the font used to display Keyword Values when they are stamped on the document as part of the Data Set Keyword Merge. Enter the size of the font (in points) directly between the **FontSize** tags. If no value is entered for the **FontSize** setting, or if the **FontSize** setting is not present, **12** is selected by default.
Page	This setting, when used outside a **Keyword** tag, allows you to specify which page of the document you would like Keyword Values to be stamped on by default as part of the Data Set Keyword Merge. Enter the page number directly between the **Page** tags. To stamp the Keyword Value on all pages of the document, enter **-1** for the **Page** setting. You can also use the **Page** setting inside a **Keyword** tag to specify a different page of the document to stamp the Keyword Value specified in the **Keyword** tag. For this Keyword Value only, the **Page** setting specified inside the **Keyword** tag overrides the default **Page** setting specified outside the **Keyword** tag.

MergeItem Sub-Element Settings	Description
<Keywords>	The **Keywords** sub-element allows you to specify the Keyword Values that you would like to be stamped on the document as part of the Data Set Keyword Merge. The **Keywords** sub-element is composed of one or more **Keyword** sub-elements.
<Keyword>	Each **Keyword** sub-element represents one Keyword Value that is stamped on the document as part of the Data Set Keyword Merge. Each **Keyword** sub-element contains the following settings: **Name**, **KeyLeft**, **KeyTop**, and **BarCode**.
Name	This setting allows you to specify the Keyword Type associated with the Keyword Value from the selected Data Set that is stamped on the document. Enter the name of the Keyword Type directly between the **Name** tags.
KeyLeft	This setting allows you to determine the horizontal positioning of the Keyword Value stamp on the document. Enter the distance (in inches) between the left edge of the page and the beginning of the Keyword Value stamp directly between the **KeyLeft** tags.
KeyTop	This setting allows you to determine the vertical positioning of the Keyword Value stamp on the document. Enter the distance (in inches) between the top of the page and the top of the Keyword Value stamp directly between the **KeyTop** tags.
BarCode	This setting allows you to display the Keyword Value as a bar code, rather than text, when it is stamped on the document as part of the Data Set Keyword Merge. • If **BarCode** is set to **false**, or if the **BarCode** setting is not present, then the Keyword Value is displayed as text when it is stamped on the document. • If **BarCode** is set to **true**, then the Keyword Value is displayed as a bar code instead of as a text value when it is stamped on the document.

MergeItem Sub-Element Settings	Description
BarCodeType	This setting allows you to set the type of bar code that the Keyword Value is displayed as when the **BarCode** setting is set to **true**. • If **BarCodeType** is set to **Code39**, or if the setting is not specified, then the Keyword Value is displayed as a Code 39 (3 of 9) bar code. • If **BarCodeType** is set to **Code128**, then the Keyword Value is displayed as a Code 128 bar code. • If **BarCodeType** is set to **DataMatrix**, then the Keyword Value is displayed as a DataMatrix bar code. • If **BarCodeType** is set to **PDF417**, then the Keyword Value is displayed as a PDF417 bar code. • If **BarCodeType** is set to **QRCode**, then the Keyword Value is displayed as a QR code. **Note:** To create Code 128, DataMatrix, PDF417, or QR code bar codes, the Hyland Bar Code Recognition software for OnBase version 12 or later is required.
BarText	This setting allows you to display or hide the Keyword Value in plain text beneath the bar code that is stamped on the document as part of the Data Set Keyword Merge. • If **BarText** is set to **true**, or if the setting is not specified, the plain text Keyword Value is displayed beneath Code 3 of 9 and Code 128 bar codes. The plain text value is not displayed beneath DataMatrix, PDF417, or QR code bar codes. • If **BarText** is set to **false**, the plain text Keyword Value is not displayed beneath any of the bar code types.
BarHeight	This setting allows you to specify the height of the bar codes used to display Keyword Values. Enter the desired height size in hundredths of inches. If the setting is not specified, the default values are **25** (0.25 inches) for Code 3 of 9 and Code 128 bar codes, and **100** (1.00 inches) for DataMatrix, PDF417, and QR code bar codes. **Note:** If you enter a value that is too small for the data to be encoded, an error message will be displayed when the Data Set Keyword Merge process is run.

MergeItem Sub-Element Settings	Description
BarWidth	This setting allows you to specify the width of DataMatrix, PDF417, and QR code bar codes used to display Keyword Values. Enter the desired width size in hundredths of inches. If the setting is not specified, the default value is **100** (1.00 inches) for DataMatrix, PDF417, and QR code bar codes. **Note:** This setting does not affect the width of Code 3 of 9 or Code 128 bar codes. The widths of these bar code types are determined by the data to be encoded. **Note:** If you enter a value that is too small for the data to be encoded, an error message will be displayed when the Data Set Keyword Merge process is run.
<Image>	The **Image** sub-element allows you to capture an image and stamp it onto the document as part of the Data Set Keyword Merge. Each **Image** sub-element contains the following settings: **ImgLeft**, **ImgTop**, **XMax**, **YMax**, and **Scale**.
ImgLeft	This setting allows you to specify the horizontal positioning of the stamped image on the document. Enter the distance (in inches) between the left edge of the page and the left edge of the stamped image.
ImgTop	This setting allows you to specify the vertical positioning of the stamped image on the document. Enter the distance (in inches) between the top edge of the page and the top edge of the stamped image.
XMax	This setting allows you to specify the maximum width (in pixels) of the stamped image.
YMax	This setting allows you to specify the maximum height (in pixels) of the stamped image.
Scale	This setting allows you to specify the scale of the stamped image. For example, **1.0** is the original size of the image, **0.5** is half of the original size, and **2.0** is double the original size. **Note:** The **Scale** setting respects the original aspect ratio of the image, but the aspect ratio can be altered if **XMax** and **YMax** do not also respect the original aspect ratio.

In order to use the functionality offered by these settings, additional configuration is required. For more information on merging Keyword Values on a document, see Configuring a Data Set Keyword Merge on page 207. For more information on merging a webcam image on a document, see Configuring an Image Merge on page 210.

The SignatureItems Element

The **SignatureItems** element allows you to configure Signature Merges for the documents scanned/created in the Front Office Scanning client.

Signature Merges allow signatures captured from a signature device to be "stamped" onto a document.

Note: A Signature Merge is not used if a captured signature is to be added as a markup to a document. For more information on adding a signature as a markup to a document, as opposed to stamping it on a document, see Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device on page 189.

```
<SignatureItems>
<SignatureItem SignatureID="1" SigOnFile="False" Skippable="False">
<Page>1</Page>
<Left>2.5</Left>
<Top>7.0</Top>
<Width>3.0</Width>
<Height>1.0</Height>
</SignatureItem>
</SignatureItems>
```

The **SignatureItems** element is composed of one or more **SignatureItem** sub-elements. Each **SignatureItem** sub-element represents one captured signature configured for your Front Office Scanning solution.

Each **SignatureItem** sub-element contains the following settings:

SignatureItem Sub-Element Settings	Description
SignatureID	This setting specifies a unique identification number for the Signature Merge represented by this **SignatureItem** sub-element. This identification number is known as the signature ID. Enter a numeric value for the signature ID. **Tip:** It is recommended that the first **SignatureItem** sub-element have a **SignatureID** of **1**, the second **SignatureItem** sub-element have a **SignatureID** of **2**, etc. The signature ID is also assigned to one or more **DocType** elements. Once the signature ID is assigned to a **DocType** element, the Signature Merge is configured for that **DocType** element (i.e.,each time a document is assigned to a Document Type via the Document Type button associated with the **DocType** element, the captured signature is stamped on the document).
SigOnFile	This setting allows you to specify if the signature being stamped on the document is captured from the signature device or if it is a signature that is stored on disk. Set the **SigOnFile** setting to **False** to capture a signature from the signature device and immediately stamp it on the document. Set the **SigOnFile** setting to **True** to store a signature captured from the signature device on disk so that it can be repeatedly applied to documents without requiring the user to sign the signature device. By default, this setting is set to **False**.
Skippable	This setting allows you to skip a particular signature on the document. Set the **Skippable** setting to **False** to force all signatures to be stamped on the document. Set the **Skippable** setting to **True** to enable the **Skip Signing** button when stamping signatures on the document. Clicking this button allows you to bypass the signature. By default, this setting is set to **False**.
Page	This setting allows you to specify which page of the document you would like the signature to be stamped on as part of the Signature Merge. Enter the page number directly between the **Page** tags.
Left	This setting allows you to determine the horizontal positioning of the signature stamp on the document. Enter the distance (in inches) between the left edge of the page and the beginning of the signature stamp directly between the **Left** tags.

SignatureItem Sub-Element Settings	Description
Top	This setting allows you to determine the vertical positioning of the signature stamp on the document. Enter the distance (in inches) between the top of the page and the top of the signature stamp directly between the **Top** tags.
Width	This setting allows you to determine the width of the signature stamp once it is added to the page. Enter (in inches) the width of the signature stamp directly between the **Width** tags. **Tip:** It is likely that the document has a signature box or signature line that you can easily obtain this measurement from.
Height	This setting allows you to determine the height of the signature stamp once it is added to the page. Enter (in inches) the height of the signature stamp directly between the **Height** tags. **Tip:** It is likely that the document has a signature box or signature line that you can easily obtain this measurement from.

In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Signature Merge on page 214.

The SignatureOnFilePath Element

The **SignatureOnFilePath** element specifies the location where signatures are stored when your solution is configured to stamp signatures stored on disk on documents.

```
<SignatureOnFilePath>C:\Program Files\Hyland\Front Office Scan-
ning\Signature</SignatureOnFilePath>
```

The path to the storage location should be entered directly between the **SignatureOnFilePath** tags. Once a signature is captured and stored in the location specified by the file path, it is saved as an encrypted bitmap.

Note: The signature is only available to the user who created it, and only one signature can be stored per user. When stored on disk, the signature is encrypted to prevent unauthorized use/ access of the signature.

In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Signature Merge on page 214.

The DocTypes Element

The **DocTypes** element allows you to configure the Document Types available to the Front Office Scanning client.

```
<DocTypes>
<DocType name="MED - ID Card" onestep="" onestepform=""
onlycorresponding="" filterid="" mergeid="" signatureid="" display-
name="" bitmap="C:\Program Files\Hyland\Front Office Scanning
\Icons\DriversLicense.bmp" warnIfNotPresent="true" displayscanner=""
scanner="" camera="true" cameradevice="Logitech WebCam C525"
shutterdelay="5" nativemode="true" hardwarecompress="true" penwidth=""
required="" multipledocs="" copy="" imagescale=""
filtersingledoctype="" daterangedays="" skipadfcheck="" autofeed=""
showui="" duplex="" preprint="" autoprint="" scanqueueid=""
unindexed="" brightness="" contrast="" orientation="" rotation=""
backrotation="" pixeltype="bw" bitdepth="8" ForceRenderWidth="300"
xresolution="200" yresolution="200" threshold="0" blankthreshold="100"
papersize="letter" template="" templatesource="" displaypage=""
autodiscard="" skipmarkup="" />
</DocTypes>
```

The **DocTypes** element is composed of one or more **DocType** sub-elements. Each **DocType** sub-element represents one OnBase Document Type configured to be available to your Front Office Scanning solution.

The Document Types that are configured to be available to the Front Office Scanning client are represented by Document Type buttons in the **Scan/Create Document** window.

Note: Additionally, if your solution is configured to allow users to view/retrieve existing documents related to the selected Data Set (i.e., if the **dochitlist** setting in the **Display** element is set to **true**), in order for documents to be displayed in the **Related Documents** window, they must belong to a Document Type that has been specified in a **DocType** element.

Each **DocType** sub-element can contains the following settings, although it is likely that each **DocType** element will require only a fraction of all possible settings. Required settings are indicated in the descriptions below:

DocType Sub-Element Settings	Description
name	This setting specifies the OnBase Document Type that the Document Type button is being configured for. This setting is required. Set the **name** setting to the name of the OnBase Document Type that the Document Type button is being configured for. You can configure multiple OnBase Document Types for a single Document Type button. Set the **name** setting to the names of all desired OnBase Document Types with a single comma between each name (e.g., **name="MED - ID Card,MED - Insurance Card,MED - Intake Form**"). For Document Type names that include commas, use a double-comma (**,,**) to represent each comma in the Document Type name. For example, the Document Type name **Intake Form, Clinical** would be specified as **name="Intake Form,, Clinical**".

DocType Sub-Element Settings	Description
onestep	**Note:** This setting is used only when the Front Office Scanning client is configured to use multiple input buttons (i.e., the **multiplebuttons** setting is set to true). This setting allows a user to automatically assign a Document Type to a document when the user scans/creates the document. • If **onestep** is set to **false**, or if no value is present, a user clicks the input button to scan/create a document and then clicks a Document Type button to assign the document to the proper Document Type. • If **onestep** is set to **true**, the user clicks the input button to scan/create a document, and, once the document is scanned/created, the document is automatically assigned to the Document Type associated with the Document Type button that corresponds to the input button (i.e., the user does not have to click a Document Type button to assign the document to a Document Type). This setting functions similarly to the **onestep** setting in the **ScanOptions** element, except this setting can be configured on the individual input button level instead of a global level. For more information, see The ScanOptions Element on page 63. **Note:** When this option is enabled, documents cannot be assigned to a Document Type other than the Document Type associated with the Document Type button that corresponds to the input button that was used to create the document. **Note:** The **batchscan** and **onestep** settings should not both be enabled. If both settings are enabled, the **batchscan** setting overrides the **onestep** setting. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Input Buttons on page 161.

DocType Sub-Element Settings	Description
onestepform	**Note:** This setting is only used with E-Forms on which signatures are not required. This setting allows a user to automatically assign a Document Type to an E-Form document when the user creates the E-Form document. • If **onestepform** is set to **false**, or if no value is present, a user clicks the input button to create an E-Form document and then clicks a Document Type button to assign the document to the proper Document Type. • If **onestepform** is set to **true**, the user clicks the input button to create an E-Form document, and the E-Form document is created and automatically assigned to the Document Type associated with the Document Type button that corresponds to the input button (i.e., the user does not have to click a Document Type button to assign the document to a Document Type). This setting functions similarly to the **onestep** setting in the **DocType** sub-element, except the **onestepform** setting is used specifically for E-Forms. **Note:** When this option is enabled, documents cannot be assigned to a Document Type other than the Document Type associated with the Document Type button that corresponds to the input button that was used to create the document. **Note:** The **batchscan** and **onestep** settings should not both be enabled. If both settings are enabled, the **batchscan** setting overrides the **onestep** setting. In order to use the functionality offered by this setting, additional configuration is required. For more information, see Configuring Input Buttons on page 161.

DocType Sub-Element Settings	Description
onlycorresponding	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting allows you to configure an input button so that only the corresponding Document Type button can be used to assign a Document Type to the document scanned/created by that input button. • If **onlycorresponding** is set to **true**, then the user can only use the corresponding Document Type button next to the input button used to scan/create the document. • If **onlycorresponding** is set to **false**, or if no value is present, then the user can use any Document Type button to assign a Document Type to the document. **Note:** If the **onlycorresponding** and **onestep** settings are both enabled, the **onestep** setting overrides the **onlycorresponding** setting. The document is automatically assigned to the Document Type associated with the input button, and the user is not able to manually select the corresponding Document Type button.
filterid	This setting specifies a unique identifier for the Document Type button so that it can be filtered based upon Keyword Values in the selected Data Set. This is identifier is known as the **filterid**. Enter a numeric value for the **filterid**. **Tip:** It is recommended that the first **DocType** sub-element have a **filterid** of **1**, the second **DocType** sub-element have a **filterid** of **2**, etc. If the parameters of the filter are met (i.e., if the selected Data Set contains a Keyword Value that matches the value setting in the **Keyword** sub-element of the **Filter** element): • Document Type buttons associated with **DocType** elements also containing the filter ID are displayed. • Document Type buttons associated with **DocType** elements not containing the filter ID are not displayed. **Note:** In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Document Type Button Filter on page 184.

DocType Sub-Element Settings	Description
mergeid	This setting identifies a Data Set Keyword Merge to associate with the Document Type button by specifying a merge ID for the Document Type button. Enter the merge ID from the **MergeItem** sub-element that corresponds to the Data Set Keyword Merge that you would like to associate with the Document Type button. Once a merge ID is assigned to a **DocType** element, the Data Set Keyword Merge associated with that merge ID is set for the Document Type button (i.e., Keyword Values are stamped onto a document when it is assigned to a Document Type via the Document Type button). **Note:** In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Data Set Keyword Merge on page 207.
signatureid	This setting identifies one or more Signature Merge Items to associate with the Document Type button by specifying signature IDs for the Document Type button. Enter the signature IDs from the **SignatureItem** sub-elements that correspond to the Signature Merges that you would like to associate with the Document Type button. Each signature ID corresponds to one captured signature; multiple signature IDs can be specified for this setting by separating them by commas (i.e., **signatureid="1,2,3,4"**). Once one or more signature IDs are assigned to a **DocType** element, the Signature Merges associated with those signature IDs are set for the Document Type button (i.e., captured signatures are stamped onto a document when it is assigned to a Document Type via the Document Type button). **Note:** In order to use the functionality offered by these settings, additional configuration is required. For more information, see Configuring a Signature Merge on page 214.

DocType Sub-Element Settings	Description
displayname	The setting allows you to specify the text used to label the Document Type button. Set the **displayname** setting to contain the text that you would like to be displayed on the Document Type button. The text is limited to one line for each Document Type button. **Tip:** If special characters are needed in the Document Type button's label, be sure to use proper XML syntax. If no value is configured for the **displayname** setting, the Document Type's name is used by default.
bitmap	This setting allows you to specify a graphic to be displayed on the Document Type button. Set the **bitmap** setting to contain the path to the image to be displayed on the Document Type button. **Note:** This option can be used regardless of the value of the **smallbuttons** setting.
warnIfNotPresent	This setting allows you to warn a user when he or she attempts to upload a document that has not been assigned a Document Type. • If **warnIfNotPresent** is set to **true**, then a warning message is displayed when uploading a document that has not been assigned a Document Type. • If **warnIfNotPresent** is set to **false**, or if no value is present, then no warning message is displayed for attempting to upload a document without a Document Type. **Note:** This setting cannot be enabled on a Document Type button that has multiple Document Types configured (i.e., when the **name** setting is set to multiple Document Type names).

DocType Sub-Element Settings	Description
displayscanner	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting allows you to specify the text used to label the input button associated with the Document Type button. Set the **displayscanner** setting to contain the text that you would like to be displayed on the input button associated with the Document Type button. **Tip:** If special characters are needed in the input button's label, be sure to use proper XML syntax. If no value is configured for the **displayscanner** setting: • If the input button is configured to scan documents, it is labeled **Scan using: <Scanner Name>**. If no scanner name is specified, it is labeled **Scan using: Default TWAIN**. • If the input button is configured to create a document from an image template or create an E-Form, it is labeled **Template Form**.
scanner	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting allows you to configure a default scanner or piece of TOPAZ hardware to use when scanning/creating a document associated with this Document Type (i.e., when clicking the input button associated with this Document Type button). Set the **scanner** setting to the name of the scanner or TOPAZ hardware. Alternatively, to allow signatures to be created using a mouse pointer on workstations or a stylus on tablets, set the **scanner** setting to **touchscreen**. **Note:** This setting overrides the **scanner** setting in the **ScanOptions** section, unless the latter setting is set to the name of a TOPAZ device to be used for a signature on file.
camera	This setting allows you to capture still images from a webcam. • If **camera** is set to **true**, then images are acquired from an attached webcam. • If **camera** is set to **false**, or if no value is present, then webcam support is disabled.

<table>
<tr><th>DocType Sub-Element Settings</th><th>Description</th></tr>
<tr><td>cameradevice</td><td>This setting allows you to specify the name of the webcam to be used for acquiring still images when the desired webcam is not the default streaming video device (e.g., cameradevice="Logitech WebCam C525").</td></tr>
<tr><td>shutterdelay</td><td>This setting allows you to adjust the number of seconds the Front Office Scanning client waits before capturing a still image from a webcam. You can set this delay interval between one and ten seconds (e.g., shutterdelay="5"). The default interval is two seconds.</td></tr>
<tr><td>nativemode</td><td>Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true).

This setting is used to control how information is passed from the scanner to the Front Office Scanning client.

By default, it is set to true. This allows the scanner to transfer data to the Front Office Scanning client using native transfer mode.

Tip: Buffered transfer mode is the preferred method of transferring data from the scanner to the Front Office Scanning client.

Set this setting to false to allow the scanner to transfer data to the Front Office Scanning client using buffered transfer mode.

While not the preferred method of transferring data, native transfer mode is required for some older TWAIN devices.

Note: This setting overrides the nativemode setting in the ScanOptions section.

Note: When upgrading from an older database, existing scan formats will default to native transfer mode to ensure forward compatibility. Newly created scan formats will default to buffered transfer mode, which should be used unless it causes problems with your scanner.</td></tr>
</table>

DocType Sub-Element Settings	Description
hardwarecompress	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). It is only used when the scanner is configured to transfer data to the Front Office Scanning client in native transfer mode (when the **nativemode** setting is set to **true**). This setting is used to control how the scanner formats data when transferring it to the Front Office Scanning client in native transfer mode. By default, the **hardwarecompress** setting is set to **true**. This allows the scanner to compress data before transferring it to the Front Office Scanning client. If the **hardwarecompress** setting is set to **true**, but the scanner is not capable of compressing data, then the setting is ignored (i.e., it is treated as if it is set to **false**). Setting the **hardwarecompress** setting to **false** prevents the scanner from compressing data; uncompressed data is passed from the scanner to the Front Office Scanning client. **Note:** This setting overrides the **hardwarecompress** setting in the **ScanOptions** section.
penwidth	This setting is used to set the width of the line created by the drawing tool when marking up a template document or the width of the pen stroke used when signing a document via a signature device. The default value is **8**; a thinner pen stroke can be configured by setting the **penwidth** setting to a value between **1** and **7**, and a wider pen stroke can be used by setting the **penwidth** setting to **9** or larger. Setting the **penwidth** setting to **8** will leave the width of the drawing tool at the pre-determined width based on the image's resolution. **Note:** If the **Signature on File Capture** dialog box is opened before any documents are signed, it respects the value of the **penwidth** setting for the first configured Document Type.

DocType Sub-Element Settings	Description
required	This setting determines if a document must be associated with this Document Type in order to upload documents associated with the selected Data Set to OnBase. • If the **required** setting is set to **true**, then a document is required for this Document Type before documents associated with the selected Data Set can be uploaded to OnBase. The label on a required Document Type button is displayed in red instead of black. • If the **required** setting is set to **false**, or if no value is present, then a document is not required for this Document Type.
multipledocs	This setting enables users to assign multiple documents to one Document Type from the same Data Set. • If **multipledocs** is set to **true**, then the Document Type button is not disabled once a user uses it to assign a document to a Document Type. It can be reused to assign another document to the Document Type from the same selected Data Set. • If **multipledocs** is set to **false**, or if no value is present, then the Document Type button is disabled once a user uses it to assign a document to a Document Type. A user can assign only one document to the Document Type per Data Set.
copy	**Note:** This setting requires that users be able to view/retrieve existing documents related to the selected Data Set from the Front Office Scanning client (i.e., the **dochitlist** setting in the **Display** element is set to **true**). This setting gives users the ability to copy an existing document being viewed in the Front Office Scanning client and create a new document. This document can be assigned to the same or another Document Type. • If **copy** is set to true, the Document Type buttons are enabled when an existing document is displayed in the **Working** window. This allows the user to click a Document Type button, creating a new document that is a copy of the existing document. • If **copy** is set to the **false**, or if no value is present, the Document Type buttons are disabled when the Document is viewed. Users are unable to create a new document from the document being displayed.

DocType Sub-Element Settings	Description
imagescale	This setting allows you to specify how documents assigned to the Document Type associated with this Document Type button are displayed, by default, in the **Working** window. • If **imagescale** is set to **fitwidth**, then documents in the Working window are displayed as Fit to Width by default. • If **imagescale** is set to **fitheight**, then documents in the Working window are displayed as **Fit to Height** by default. • If **imagescale** is set to **fitimage**, then documents in the Working window are displayed as **Fit in Window** by default. • If **imagescale** is set to **fullsize**, then documents in the Working window are displayed as their actual size. **Tip:** At any time documents can be displayed differently by clicking one of the **Fit to...** toolbar buttons or by selecting one of the **View | Scale to...** option in the Main Menu. For more information on these display options, see The Front Office Scanning Toolbar on page 3. This setting takes precedence over the **imagescale** setting in the **ScanOptions** element. That setting sets the default behavior for how all pages are displayed in the **Working** window.
filtersingledoctype	**Note:** This setting requires that users be able to view/retrieve existing documents related to the selected Data Set from the Front Office Scanning client (i.e., the **dochitlist** setting in the **Display** element is set to **true**). This setting allows you to configure the Front Office Scanning client to display only the most recent document (by date) from the Document Type associated with this DocType element in the **Related Documents** window. • If **filtersingledoctype** is set to **true**, then only the most recent document from this Document Type that matches the selected Data Set is displayed in the **Related Documents** window. **Caution:** The Front Office Scanning client looks only at the date the documents were uploaded to OnBase, not the time. If multiple matching documents were uploaded on the same date, the most recent document (based on the time it was stored) may not be returned. • If **filtersingledoctype** is set to **false**, or if no value is present, all documents stored in OnBase that are related to the selected Data Set are displayed in the **Related Documents** window.

DocType Sub-Element Settings	Description
daterangedays	**Note:** This setting requires that users be able to view/retrieve existing documents related to the selected Data Set from the Front Office Scanning client (i.e., the **dochitlist** setting in the **Display** element is set to **true**). This setting allows you to specify a date range for the existing documents from the Document Type associated with this **DocType** element that are displayed in the **Related Documents** window. Set the **daterangedays** setting to the number of days from the current date OnBase should search for matching documents. If **daterangedays** is set to **0**, only documents from the current date are returned. **Note:** If the configuration file contains more than one entry for a Document Type, the **daterangedays** option value will be taken from the first occurrence of the Document Type. For more information on the functionality offered by this setting, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.
skipadfcheck	This setting enables the Front Office Scanning client to ignore the error message that is displayed when no documents are loaded into the scanner's ADF. • When **skipadfcheck** is set to **true**, the error message is ignored. • When **skipadfcheck** is set to **false**, or if no value is present, an error message is displayed when no documents are loaded into the scanner's ADF. **Note:** This setting must be set to **true** when using a Kofax VRS TWAIN driver. **Note:** This option must be set to **false** when using a single scan button (i.e., when the **multiplebuttons** setting in the **Display** element is set to **false**).

DocType Sub-Element Settings	Description
autofeed	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting allows you to enable autofeed mode for your scanner (if it is not automatically enabled) when scanning is initiated by clicking the input button associated with this Document Type button. • If **autofeed** is set to **true**, autofeed mode is enabled for your scanner. • If **autofeed** is set to **false**, autofeed mode is not enabled for your scanner.
showui	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting determines if the TWAIN driver user interface is displayed at the time of scanning when scanning is initiated by clicking the input button associated with this Document Type button. • If **showui** is set to **true**, then the TWAIN driver user interface is displayed when a document is scanned. • If **showui** is set to **false**, or no value is present, then the TWAIN driver user interface is not displayed when a document is scanned.
duplex	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting determines if duplex or simplex scanning is used when scanning is initiated by clicking the input button associated with this Document Type button. • If **duplex** is set to **true**, this input button scans documents using duplex scanning. • If **duplex** is set to **false**, this input button scans documents using simplex scanning.

<table>
<tr><th>DocType Sub-Element Settings</th><th>Description</th></tr>
<tr><td>preprint</td><td> Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true).
This setting enables a copy of the document to be printed as soon as the input button associated with the Document Type button is clicked.
If preprint is set to true, then the document is printed when the input button is clicked.
If a default printer is specified in the Printer element, the document is automatically printed. If a default printer is not specified, the Print dialog box is displayed.
If preprint is set to false, or if the setting is not present, then the document is not automatically printed when the input button is clicked.
Tip: This feature is intended to be used with documents that are to be completed using a TOPAZ clipboard. </td></tr>
<tr><td>autoprint</td><td> Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true).
This setting enables a copy of the document to be printed as soon as the document is assigned to a Document Type (i.e., as soon as the Document Type button is clicked).
If autoprint is set to true, then the document is printed when the Document Type button is clicked.
If a default printer is specified in the Printer element, the document is automatically printed. If a default printer is not specified, the Print dialog box is displayed.
If autoprint is set to false, or if the setting is not present, then the document is not automatically printed when the Document Type button is clicked.
Tip: This feature is intended to be used to give a third-party (e.g., a patient) a copy of the document. </td></tr>
</table>

<table>
<tr><th>DocType Sub-Element Settings</th><th>Description</th></tr>
<tr><td>scanqueueid</td><td>This setting allows you to upload documents to OnBase as a batch associated with a Document Imaging scan queue instead of ad hoc importing them into OnBase.

Note: An E-Form cannot be uploaded to a scan queue unless it is first converted to an image.

• Set the scanqueueid setting to the Queue # of the scan queue you would like to route the document(s) to. The Queue # can be found in the Scan Queue Configuration dialog box by clicking Import | Scan Queues in the OnBase Configuration module.
• If no value is specified for the scanqueueid setting, or if the setting is not present, then documents uploaded from the Front Office Scanning client are ad hoc imported into OnBase.</td></tr>
<tr><td>unindexed</td><td>Note: This setting is only used when the Front Office Scanning client is configured to upload documents as a batch associated with an Document Imaging scan queue (i.e., when a value has been configured for the scanqueueid setting).

This setting allows you to specify the indexing status of documents uploaded as a batch associated with a Document Imaging scan queue.
• If unindexed is set to true, the batch is marked as unindexed and is routed to the Awaiting Index batch status queue, although, depending on the configuration of the scan queue, the batch may be routed to one or more batch status queues prior to the Awaiting Indexing batch status queue.
• If unindexed is set to false, then the batch will be marked as indexed and bypasses the indexing batch status queues.</td></tr>
<tr><td>brightness</td><td>Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document.

This setting controls the brightness level of the scanner when scanning is initiated by clicking the input button associated with this Document Type button.
Set the brightness setting to a value between -1000 and 1000. The value is scaled by the scanner to fit within its supported range.</td></tr>
</table>

DocType Sub-Element Settings	Description
contrast	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting controls the contrast level of the scanner when scanning is initiated by clicking the input button associated with this Document Type button. Set the **contrast** setting to a value between **-1000** and **1000**. The value is scaled by the scanner to fit within its supported range.
orientation	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting controls the angle to which the scanner will rotate pages when scanning is initiated by clicking the input button associated with this Document Type button. Acceptable values for the **orientation** setting are **0**, **90**, **180**, or **270**. **Tip:** The values for **orientation** and **rotation** are cumulative. For example, if you set both **orientation** and **rotation** to **90**, pages are rotated a total of 180 degrees.

DocType Sub-Element Settings	Description
rotation	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting controls the how much the scanner automatically rotates pages when scanning is initiated by clicking the input button associated with this Document Type button. The value entered for the **rotation** setting works in addition to the value specified for **orientation** setting and allows you to rotate images using smaller degree units. Acceptable values for the **rotation** setting are between -**360** and **360**. **Tip:** The values for **orientation** and **rotation** are cumulative. For example, if you set both **orientation** and **rotation** to **90**, pages are rotated a total of 180 degrees.
backrotation	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting controls the how much the scanner automatically rotates the reverse side of pages when duplex scanning is initiated by clicking the input button associated with this Document Type button. The **backrotation** setting is used when the back of an page scanned in duplex needs to be rotated in the differently than the front of the page. Acceptable values for the **backrotation** setting are between -**360** and **360**. If the **Backrotation** setting is not configured for a document scanned in duplex, the **rotation** setting controls how the reverse side of the image is rotated. **Note:** If the **duplex** setting is not set or is set to **false**, the **backrotation** setting is ignored. **Note:** If the **duplex** setting does not match the duplex setting in the TWAIN user interface, the **backrotation** setting does not operate as expected.

DocType Sub-Element Settings	Description
pixeltype	**Note:** This setting requires that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting is used to determine the color of the document that is scanned or converted to an image when scanning documents or when converting E-Forms to images. • If **pixeltype** is set to **BW**, the resulting images will be black and white. • If **pixeltype** is set to **GRAY**, the resulting images will be grayscale. • If **pixeltype** is set to **RGB**, the resulting images will be color. **Tip:** When converting E-Forms to images, it is considered a best practice to create bi-tonal (black and white) images.
bitdepth	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting sets the number of bits per pixel for each color plane (specified by the **pixeltype** setting) when scanning is initiated by clicking the input button associated with this Document Type button. Acceptable values for the **bitdepth** setting are **1**, **4**, or **8**. **Tip:** The higher the **bitdepth**, the more accurate the images will be. **Note:** This setting overrides the **bitdepth** setting in the **ScanOptions** section.

DocType Sub-Element Settings	Description
ForceRenderWidth	**Note:** This setting is only used when your Front Office Scanning solution is licensed and configured to create E-Forms. In order to create E-Forms, your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting allows you to specify the width (in pixels) of the image that is created when an E-Form is converted to an image document using this Document Type button. By default, the Front Office Scanning client allows the web browser to automatically determine the size of the image that should be created from the E-Form. When a value is specified for the **ForceRenderWidth** setting, Front Office Scanning will automatically create an image of the specified size when the E-Form is converted for this Document Type. **Tip:** This setting can be helpful when your web browser has difficulty creating a correctly-sized image due to the layout of the E-Form.
xresolution	**Note:** This setting requires that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting sets the horizontal resolution for documents scanned/ created by clicking the input button associated with this Document Type button. Set the **xresolution** setting to a value greater than zero. A typical document's resolution is 200 DPI. If a value is specified for the **yresolution** setting, but not for the **xresolution** setting, the **yresolution** value is used for the **xresolution** setting as well. This setting is used when scanning documents or when converting E-Forms to images. **Tip:** It is considered a best practice to ensure that a document's resolution is always square (e.g., 100x100, 200x200, 300x300, etc.), meaning the **xresolution** and **yresolution** settings should always be the same.

DocType Sub-Element Settings	Description
yresolution	**Note:** This setting requires that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting sets the vertical resolution for documents scanned/ created by clicking the input button associated with this Document Type button. Set the **yresolution** setting to a value greater than zero. A typical document's resolution is 200 DPI. If a value is specified for the **xresolution** setting, but not for the **yresolution** setting, the **xresolution** value is used for the **yresolution** setting as well. This setting is used when scanning documents or when converting E-Forms to images. **Tip:** It is considered a best practice to ensure that a document's resolution is always square (e.g., 100x100, 200x200, 300x300, etc.), meaning the **xresolution** and **yresolution** settings should always be the same.
threshold	**Note:** This setting requires that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting sets the threshold level of the scanner. Set the **threshold** setting to a value between **0** and **255**. The value is scaled by the scanner to fit within its supported range. This setting can be used for scanning documents or when converting E-Forms to images if the resulting images are configured to be bi-tonal (i.e., the **pixeltype** setting is set to **bw**).

DocType Sub-Element Settings	Description
blankthreshold	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting allows you to specify the minimum file size an image must be in order not to be considered blank. Set the **blankthreshold** setting to the number of bytes a page must be in order not to be considered blank. By default, this setting is set to **0**, which indicates that no images are discarded. • If the file size of the page is equal to or greater than the **blankthreshold** value, it is recognized as a valid page. • If the file size of the page is less than the **blankthreshold** value, it is discarded. **Note:** This setting does not apply to imported images or rescanned pages.
papersize	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**) and is only used if documents to be assigned to a Document Type via this Document Type button are created by scanning a paper document. This setting sets the size of the page being scanned for the Front Office Scanning client. Acceptable values are **Legal**, **Letter**, **Card**, **A3**, **A4**, **A5**, **A6** and **B5**.

DocType Sub-Element Settings	Description
template	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). This setting allows you to configure an input button to create a document from an image template or to create an E-Form instead of scanning a document. This setting is required if you are creating a document from an image template or creating an E-Form. **Note:** Additional licensing is required to create E-Forms from within the Front Office Scanning client. See Licensing on page 5 for more information. Set the **template** setting to the path to the image template or the HTML form used to create the E-Form. If the image template or HTML form is being retrieved from OnBase, set the **template** setting to the name of the OnBase Document Type that the document is associated with. **Tip:** If configuring the button to create an E-Form, ensure that the path points to a file with an extension of **.htm** or **.html**.
templatesource	**Note:** This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**). By default, the Front Office Scanning client is configured to obtain image templates and the HTML forms used to create E-Forms from a local path. This setting allows you to configure the Front Office Scanning client to obtain image templates and HTML forms from other sources. • If the **templatesource** setting is set to **printmon**, the Front Office Scanning client uses images captured by the Hyland Virtual Print Driver as an image template forms. • If the **templatesource** setting is set to **onbase**, the Front Office Scanning client obtains the image template or HTML form used to create an E-Form from OnBase. The functionality offered by these settings requires additional configuration. See Configuring an Input Button to Create Documents from Image Templates on page 169 or Configuring an Input Button to Create an E-Form on page 173.

<table>
<tr><th>DocType Sub-Element Settings</th><th>Description</th></tr>
<tr><td>displaypage</td><td>Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true).

This setting is only used when creating a document from a multi-page image template. It allows you to specify which page of the image template to display first

Note: If a TOPAZ device is being used to mark up an image template, this setting is used to determine the page that is displayed on the device.

Set the displaypage setting to contain the page number of the image template page that is to be displayed first.
To display the last page of the template form, set the displaypage setting to 0.
If no value is set for the displaypage setting, or if the setting is not present, the first page of the image template is displayed by default.</td></tr>
<tr><td>autodiscard</td><td>Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true).

This setting configures the Front Office Scanning client to automatically discard images once they are scanned/created in the Front Office Scanning client (e.g., once they are scanned or once the image template or E-Form is displayed in the Working window).
• If autodiscard is set to true, documents are automatically discarded once it is scanned/created.
• If autodiscard is set to false, documents remain in the Working window once they are scanned/created.

Tip: The autodiscard setting is often used in conjunction with the preprint setting to print a document without storing it in OnBase.</td></tr>
</table>

<table>
<tr><th>DocType Sub-Element Settings</th><th>Description</th></tr>
<tr><td>skipmarkup</td><td> Note: This setting requires that your Front Office Scanning client is configured to have multiple input buttons (i.e., the multiplebuttons setting in the ScanOptions element is set to true) and is only used when creating a document from an image template. This setting configures the Front Office Scanning client to automatically assign a document created from an image template to the associated Document Type without displaying the image template for markups and without requiring the user to click the Document Type button. If skipmarkup is set to true, when the input button is clicked the image template is briefly displayed in the Working window, but is cleared without being displayed for markups and is automatically assigned to the associated Document Type without requiring users to click the Document Type button.
If skipmarkup is set to false, or if no value is present, image templates are displayed for markups and are assigned to a Document Type by clicking a Document Type button. Note: If skipmarkup is set to true for an input button that also has templatesource set to printmon (to use images captured by the Hyland Virtual Print Driver), the Front Office Scanning client still displays the image template and requires the user to click the Document Type button to assign the Document Type, but the user cannot add markups to the image. </td></tr>
<tr><td>referrallocation</td><td> This setting configures the Front Office Scanning client to import referral documents from a network location. Upon import, the documents are linked with the referral in an Electronic Medical Records system. The value of the referrallocation attribute must provide the path to the network location where referral documents are stored. The following variables can be included in the path: %fosuser%: Represents the current user’s Front Office Scanning user name.
%winuser%: Represents the Windows user name of the user running Front Office Scanning. For example: <code>referrallocation="\\server\referral\%winuser%"</code> </td></tr>
</table>

For an overview of all functionality offered by these settings and a guide for configuring Document Types to be available to your Front Office Scanning solution, see Configuring Document Type Buttons on page 180.

Configuring an Application Enabler/Front Office Scanning Solution

To create a Front Office Scanning solution that uses Application Enabler to capture data from a line-of-business application to create Front Office Scanning Data Sets, you must first ensure that both the Front Office Scanning client and Application Enabler are installed on the Front Office Scanning workstation.

Once the installation of both modules is completed, the following steps must be taken to configure your Front Office Scanning solution:

1. **Configure Application Enabler to capture data from the line-of-business application**. See Configuring Application Enabler to Capture Data on page 114.
2. **Configure the FOS Enabler Service**. See Configuring Front Office Scanning to Interact with Application Enabler on page 115.
3. **Determine How the Front Office Scanning Client Responds When Data Sets are Created By Application Enabler**. Determining how the Front Office Scanning Client Responds to Application Enabler on page 117.

Tip: For information on using Application Enabler on the data entry workstation, see Using Application Enabler on the Data Entry Workstation on page 271.

Configuring Application Enabler to Capture Data

Application Enabler must be configured to capture data from your line-of-business application.

Generally, the following steps need to be taken in order to configure Application Enabler to capture data from your line-of-business application:

- **Create the Application Enabler Configuration File**. An Application Enabler configuration file must be created to configure Application Enabler to capture data from the line-of-business application.
- **Configure Application Enabler to Launch Automatically** (Recommended). Application Enabler can be configured to launch automatically using a specified configuration file during startup.

For more detailed information on how to configure Application Enabler, see the Application Enabler documentation.

Configuring Front Office Scanning to Interact with Application Enabler

Your Front Office Scanning solution uses a specialized application, the Front Office Scanning Enabler Service, to allow it to interact with Application Enabler and obtain Data Sets created by the Application Enabler screen scrape event.

Note: If Application Enabler is being used to select an existing Data Set, rather than to create a new Data Set, the Front Office Scanning Enabler Service is not required.

The Front Office Scanning Enabler Service consists of two files:

- An executable (**FOSEnabler.exe**)
- A configuration file (**FOSEnabler.ini**).

The executable is installed and registered during installation, but the **FOSEnabler.ini** file must be manually created and placed in the Front Office Scanning workstation's **C:\ProgramData\Hyland Software** folder.

Creating the FOSEnabler.ini File

Note: After making any changes to your **FOSEnabler.ini** file, you must relaunch both the Front Office Scanning Enabler Service and Application Enabler for those changes to take effect.

The **FOSEnabler.ini** file must contain the following settings. A detailed description of the settings in the **FOSEnabler.ini** file is given below.

Note: While it is recommended that you use the following sample configuration file as a guide, a less comprehensive configuration file template is also created when you install the Front Office Scanning client using the Hyland Front Office Scanning installer. By default, this file template is stored in **C:\Program Files\Hyland\Front Office Scanning\Template\FOS** or **C:\Program Files(x86)\Hyland\Front Office Scanning\Template\FOS**. If you use this file template as a starting point, be aware that you must still edit, add, or remove settings as necessary to accommodate your Front Office Scanning solution.

```
[FOSEnabler]
SharePath=C:\Program Files\Hyland\Front Office Scanning\Patients
ActivateConsole=false
EncryptKeywords=true
ScrapeMsgDuration=2
ScrapeMsgText=Capture Successful!
```

```
ActiveKeywords=True
```

FOSEnabler.ini File Settings	Description
SharePath	This setting identifies the sharepath, or the shared location where Data Set XML files are stored. Set it to the path to the sharepath folder. If your Front Office Scanning solution is configured to organize Data Sets by category, then this setting should be set to the path of the appropriate sub-folder of the sharepath folder instead of the path to the sharepath folder. **Note:** If you are configuring a Front Office Scanning solution where the Data Set XML files are stored in a network location accessible by the Application Server and then made available to the Front Office Scanning client via a web service, this setting is not needed.
ActivateConsole	This setting allows you to enable/disable Automated Console Mode for the Front Office Scanning client. • If **ActivateConsole** is set to **true**, then Automated Console mode is enabled. When Automated Console mode is enabled, the Front Office Scanning client is automatically launched when an Application Enabler screen scrape event is performed, and the Data Set captured by the screen scrape event is automatically used as the selected Data Set. • If **ActivateConsole** is set to **false**, then Automated Console mode is not enabled and the screen scrape event will not automatically launch the Front Office Scanning client. **Tip:** For more information on Automated Console mode, see Automated Console Mode on page 119.

FOSEnabler.ini File Settings	Description
EncryptKeywords	This setting controls if the Keyword Values captured by Application Enabler for Front Office Scanning Data Sets are encrypted or stored as plain text. • If **EncryptKeywords** is set to **true**, Keyword Values captured by Application Enabler and stored as Front Office Scanning Data Sets are encrypted and cannot be viewed outside of the Front Office Scanning client. • If **EncryptKeywords** is set to **false**, Keyword Values captured by Application Enabler and stored as Front Office Scanning Data Sets are stored as plain text and can be viewed outside of the Front Office Scanning client. **Tip:** In a production environment, the **EncryptKeywords** setting should always be set to **true**. The ability to disable Keyword Value encryption is included solely for installation/configuration and troubleshooting purposes.
ScrapeMsgDuration	This setting controls the amount of time (in seconds) that the successful capture message (i.e., the message represented by the **ScrapeMsgText** setting) is displayed. By default, this setting is set to 1.5 seconds.
ScrapeMsgText	This setting allows you to customize the message displayed when a screen scrape event is performed and Data Set Keyword Values are successfully captured. By default, the message is **FOSEnabler – Capturing Keywords…**.
ActiveKeywords	This setting allows you to capture individual Keyword Values configured in conjunction with Application Enabler hotspots separately from the rest of the Keyword Values present in the line-of-business application. For more information on configuring Application Enabler hot spots, see the Application Enabler documentation.

Determining how the Front Office Scanning Client Responds to Application Enabler

Keyword Values captured by an Application Enabler screen scrape event can be used to create a Front Office Scanning Data Set, or the values obtained by a screen scrape event can be used to select an existing Data Set.

You can configure how the Front Office Scanning responds when it recognizes that a screen scrape event is performed.

A Data Set is Created But Not Selected

By default, when Keyword Values are captured by Application Enabler and a Front Office Scanning Data Set is created, the Data Set XML file is saved in the sharepath folder and the Data Set is displayed in the **Available Data Sets** list. The Data Set remains in the **Available Data Sets** list until:

- The Data Set is selected by a user and is associated with documents that are uploaded to OnBase.
- The Data Set is manually deleted.
- The Data Set expires and is automatically deleted. This feature requires additional configuration; see Configuring a Data Set Lifespan on page 152.

This behavior is displayed by default; no additional configuration is required.

An Existing Data Set is Selected (No Data Set Creation)

You can configure the Front Office Scanning client to automatically select a Data Set in the Front Office Scanning client that matches the values captured by the screen scrape event.

Note: This feature requires that the Front Office Scanning client, Application Enabler and the line-of-business application that Data Set values are being captured from are all installed and running at the same time on the Front Office Scanning workstation. It does not, however, require the Front Office Scanning Enabler Service to be running on the Front Office Scanning workstation.

Note: In order for this feature to function as expected, there must be a Data Set available to the Front Office Scanning workstation that matches the values captured by Application Enabler. If no existing Data Set matches the captured values, then no Data Set is selected.

To enable this feature, set the **aedatasetselect** setting in the **FOSCONFIGURATION** parent element of the configuration file to **true**.

Automated Console Mode

You can configure the Front Office Scanning client to automatically launch and select the Data Set generated by an Application Enabler screen scrape event.

Note: This feature requires that the Front Office Scanning client, Application Enabler, and the line-of-business application that Data Set values are being captured from are all installed and on the Front Office Scanning workstation. However, it only requires that the line-of-business application and Application Enabler are running because the Front Office Scanning client is automatically launched by the screen scrape event.

Note: In order to allow the Front Office Scanning client to be automatically launched, user credentials must be automatically supplied. This means specifying a default user name and password in the configuration file or enabling Active Directory or LDAP authentication.

Tip: This feature is helpful when a single workstation is being used as both the data entry workstation and the Front Office Scanning workstation.

To configure your Front Office Scanning client to operate in Automated Console mode:

1. In the **FOSEnabler.ini** file, set the **ActivateConsole** setting to **true**.
2. From the Front Office Scanning workstation, create a shortcut to the Front Office Scanning executable (**FrontOfficeScanning.exe**) on the desktop if one has not already been created.

   By default, **FrontOfficeScanning.exe** is located in **C:\Program Files\Hyland\Front Office Scanning** for 32-bit systems and **C:\Program Files (x86)\Hyland\Front Office Scanning** for 64-bit systems.
3. Specify a default Front Office Scanning configuration file for the Front Office Scanning shortcut created in Step 2.

   For information on how to specify a default configuration file for the Front Office Scanning client, see Specifying a Default Configuration File for the Front Office Scanning Workstation on page 122.
4. Launch the Front Office Scanning client via the shortcut you created and configured. The appropriate registry settings are automatically created once the Front Office Scanning client is successfully opened.

   The Front Office Scanning client is now running in Automated Console mode.

Note: If your Front Office Scanning workstation is running Windows with the User Access Controls (UAC) enabled, the user who launches the Front Office Scanning client to create the appropriate registry settings must have Windows administrative rights. For more information, contact your system administrator.

Optionally:

If your Front Office Scanning solution is configured to contain only one input button (i.e., the **multiplebuttons** setting in the **ScanOptions** element of the Front Office Scanning configuration file is set to **false**), you can configure a document to be automatically be scanned by setting the following settings in the ScanOptions element of the Front Office Scanning configuration file:

- Set the **promptForFirstDevice** setting to **false**.
- Using the **scanner** setting, specify a default scanner for the Front Office Scanning client.

Note: For more information on these settings, see The ScanOptions Element on page 63.

Configuring an HL7 Import Processor/Front Office Scanning Solution

The following information is a general overview of the HL7 import processor settings used to create Front Office Scanning Data Sets. For more specific information on configuring an HL7 import process, see the HL7 documentation.

Considerations for Configuring HL7

There are several items that you should take under consideration when configuring your Front Office Scanning solution to integrate with the OnBase HL7 module.

Message Templates

Message Templates should have fields mapped to Keyword Types that are associated with documents that will be scanned/created in the Front Office Scanning client.

Process Settings

In order for HL7 data to be processed into Front Office Scanning Data Sets, you configure the HL7 Import Process to use the **Generate Front Office Scanning Data Set** message action option.

Once **Generate Front Office Scanning Data Set** is selected in the **Message Action** drop-down list, click **Browse for SharePath** and navigate to the sharepath folder as specified in the Front Office Scanning configuration file.

To include the processed HL7 message in the Data Set file, select **Include hl7 message in Data Set file**.

Encrypting Keyword Values

Select the **Encrypt Keyword Values** option if HL7 should encrypt the Keyword Values in Data Set files. This option helps protect Keyword Values from being viewed outside of the Front Office Scanning client.

Clear the **Encrypt Keyword Values** option if Keyword Values should not be encrypted in Data Set files.

Creating a Directory Structure

Select the **Expand User Names** option if you would like to create a sub-folder within the sharepath for each unique value that is received from an HL7 message. This creates a directory structure within the sharepath folder where Data Sets reside in folders relevant to the data that they contain (i.e., Data Sets are automatically categorized within the sharepath).

For more information on organizing Data Sets by category, see Configuring Data Set Sub-Categories on page 153.

The **Expand User Names** option is supported only for the following message types:

- ADT
- ORU
- ORM

Values from certain fields within certain segments will be used to create the directory structure where Data Sets will be created and stored for use with Front Office Scanning.

- For the **ADT** message template types, the **EVN** segment, field 5 (Operator ID) will be used.
- For the **ORU** message template types, the **ORC** segment, field 10 (Entered By) will be used.
- For the **ORM** message template types, the **ORC** segment, field 10 (Entered By) will be used.

This type of configuration would require user to select Data Sets for display before the Data Sets would be available for selection. See the “Selecting the Data Set Category” section in the Front Office Scanning documentation for more information.

Configuring the Front Office Scanning Client

All configuration required for your Front Office Scanning solution is done by specifying the options in the Front Office Scanning configuration file to create a unique solution that meets your needs.

The following information is intended to give you an overview of configuring the Front Office Scanning client and a guideline for configuring commonly-used Front Office Scanning features.

For a complete list of all possible configuration options, see The Front Office Scanning Configuration File on page 36.

Configure User Groups Rights for Front Office Scanning

In order to use the Front Office Scanning client, a user must belong to a User Group with the following rights or privileges, at a minimum. Depending on your solution, users may need to belong to a User Group with greater rights or privileges.

- Document Types rights to all Document Types represented in the Front Office Scanning client (i.e., all Document Types that have a Document Type button in the Front Office Scanning client).
- The **Create** privilege.
- (Optional) If your Front Office Scanning solution is configured to upload documents to a scan queue, the user must have rights to that scan queue.

In order to launch Front Office Scanning from the OnBase Client, a user must also belong to a User Group with the **Client** product right.

Configuring Front Office Scanning Startup Options

The following startup features can be configured for Front Office Scanning client.

- **A Default Configuration File**. See Specifying a Default Configuration File for the Front Office Scanning Workstation on page 122.
- **A Default User Account**. See Specifying a Default User Account for the Front Office Scanning Client on page 123.
- **Active Directory or LDAP Authentication**. See Enabling Active Directory or LDAP Authentication for the Front Office Scanning Client on page 124.
- **Configuring the Front Office Scanning Client to Automatically Close after Upload**. See Configuring the FOS Client to Automatically Close After Upload on page 125.

Specifying a Default Configuration File for the Front Office Scanning Workstation

A default Front Office Scanning configuration file can be specified at the workstation level, allow users to launch the Front Office Scanning client without being prompted to select a configuration file.

Despite the fact that a configuration file is selected by default, a user can opt to re-load the Front Office Scanning client with a different configuration file at any time by clicking **File | Select Configuration**.

To set a default configuration file that automatically loads each time Front Office Scanning is launched from the following locations:

When Launching from the Windows Desktop

1. On the Front Office Scanning workstation, right-click on the Front Office Scanning shortcut and select **Properties**. The **Front Office Scanning Properties** dialog box is displayed.
2. In the **Target:** field, append the path to the default Front Office Scanning configuration file in quotation marks to the path that points to **FrontOfficeScanning.exe**. For example:
   `"C:\Program Files\Hyland\Front Office Scanning\FrontOfficeScanning.exe" "C:\Program Files\Hyland\Front Office Scanning\Config \OutpatientRegistration.xml"`
3. Click **OK** to close the **Front Office Scanning Properties** dialog box.

   The next time that shortcut is used, the user is not prompted to select a configuration file and the specified configuration file is automatically selected.

When Launching from the OnBase Client

1. On the Front Office Scanning workstation, browse to the **onbase32.ini** file. By default, it is located in **C:\ProgramData\Hyland Software**.
2. Open the **onbase32.ini** file in a text editor, such as Notepad, and browse to the **ConfigFile** setting.
3. Set the **ConfigFile** setting to contain the path of the desired configuration file (e.g., `ConfigFile="C:\Program Files\Hyland\Front Office Scanning\Config \OutpatientRegistration.xml"`).
4. Save and close the **onbase32.ini** file.

   The next time that the Front Office Scanning client is launched from the OnBase Client, the user is not prompted to select a configuration file and the specified configuration file is automatically selected.

Specifying a Default User Account for the Front Office Scanning Client

By default, Front Office Scanning requires users to enter their OnBase user name and password when logging on. It can, however, be configured to use a default OnBase user account to prevent users from having to enter their OnBase user name and password when logging on to the Front Office Scanning client.

Tip: Because the ability to enter default user credentials is set in the Front Office Scanning configuration file, you are able to configure some users to use the default user account to log on and others to use their own OnBase user name and password, even when users are using the same workstation, by making different configuration files available to them.

Tip: If users already require their own OnBase user account, or if it is important to your organization to be able to identify and track users that create or upload documents, then a default user account should not be used to access the Front Office Scanning client.

To specify a default user account for the Front Office Scanning client:

1. In the Front Office Scanning configuration file, browse to the **CommParams** element.
2. Set the **username** setting to the OnBase user name of the default user account to be used by Front Office Scanning when connecting to OnBase. For example:
   `username="MANAGER"`
3. Optionally, you may also supply a password for this user account, although you may supply a user name without the password if desired. To supply the password for the user account, set the **password** setting to the password of the default user account to be used by Front Office Scanning when connecting to OnBase. For example:
   `password="PASSWORD"`

   Once the configuration file is accessed by the Front Office Scanning client, the value for the **password** setting is no longer displayed in the configuration file. The password is stored as an encrypted value in the **Credentials** setting, and it cannot be viewed simply by opening the configuration file.

   To change the value of the **password** setting, delete the **Credentials** setting and enter a new value for the **password** setting.
4. Save and close the configuration file.

Note: When a default user account is used, that user account is specified as the creator of all documents uploaded to OnBase via the Front Office Scanning client.

Enabling Active Directory or LDAP Authentication for the Front Office Scanning Client

The Front Office Scanning client can also be configured to use Active Directory or LDAP Authentication to validate users credentials, provided that your OnBase solution is configured to use Active Directory or LDAP authentication.

Note: For more information on configuring OnBase to use Active Directory or LDAP Authentication, see the **Legacy Authentication Methods** module reference guide.

To enable the Front Office Scanning client to use Active Directory authentication:

1. In the Front Office Scanning configuration file, browse to the **CommParams** element.
2. Set the **NTSecurity** setting to **true**. For example: `NTSecurity="true"`
3. Save and close the configuration file.

Enabling IdP Authentication for the Front Office Scanning Client

Front Office Scanning can be configured to use Identity Provider (IdP) authentication to validate user credentials, provided that your OnBase solution is configured to use IdP authentication. For more information on configuring OnBase to use IdP authentication, see the **Identity and Access Management Services** module reference guide.

Configuring the FOS Client to Automatically Close After Upload

The Front Office Scanning client can be configured to automatically close after you upload a document to OnBase.

Tip: This functionality is often used when Front Office Scanning is used to support another application (e.g., a patient is being registered in an EMR application and Front Office Scanning is being used to capture supporting documentation, such as an insurance card, during the process), especially if Front Office Scanning is automatically launched by an external event (such as an Application Enabler screen scrape event).

Note: In order to use the **closeafterupload** setting with the Front Office Scanning client, Front Office Scanning must be configured to upload documents in the foreground (i.e., the configuration file's **foregroundupload** setting must be set to **true**). This prevents the Front Office Scanning client from closing before background uploads are completed and prevents users from performing additional actions in the Front Office Scanning client before it is closed. For more information on specifying the Front Office Scanning upload method, see Specifying an Upload Method on page 138.

To enable the Front Office Scanning client to automatically close after uploading documents:

1. In the Front Office Scanning configuration file, browse to the **FOSCONFIGURATION** element.
2. Set the **closeafterupload** setting to **true**. For example: `closeafterupload="true"`
3. Save and close the configuration file.

Configuring Multiple Monitors for Front Office Scanning

Depending on your solution, you may need to configure multiple monitors for your Front Office Scanning workstation. Front Office Scanning offers two unique multiple monitor configurations;

- **Full Screen Swapping**. This feature “swaps” the Front Office Scanning client from the primary monitor to a secondary monitor or TOPAZ device whenever a document is displayed in Full Screen View (see Full Screen View on page 322 for more information). Exiting Full Screen View returns the Front Office Scanning client to the primary monitor.

  For example:

  > When registering a patient in the Emergency Department, the registrar takes some information from the patient and asks him to sign a consent form. When the registrar has finished entering the patient’s information, she presses the **F11** key to display the document in Full Screen View and the consent form is displayed on the TOPAZ device in front of the patient for his signature. Once he signs the form and clicks **Done**, the Front Office Scanning client is no longer displayed in Full Screen View and the Front Office Scanning client is returned to the registrar’s monitor.

- **Cloning**. This feature allows the Front Office Scanning client to be displayed on both the primary and secondary monitor when a document is viewed in Full Screen View.

  For example:

  > When registering a patient for an outpatient laboratory procedure, the registrar wants to review a list of instructions the patient must follow on the day of the test. These instructions are displayed as an image template in the Front Office Scanning client; when the document is viewed in Full Screen View and the cloning feature is initiated by the registrar, she is able to view the document on her monitor while the patient is able to review the document on his second monitor or TOPAZ device at the same time.

Configuring Full Screen Swapping

Note: E-Forms cannot be viewed in Full Screen View.

To enable full screen swapping:

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **FullScreenSwap** setting. If this value is not present, add it to the **Display** element.
3. Set the **FullScreenSwap** setting to **true**. For example:

   ```
   FullScreenSwap="True"
   ```

Tip: For more information on the Front Office Scanning configuration file’s **Display** element and the **FullScreenSwap** setting, see The Display Element on page 49.

4. Save and close the configuration file.

Tip: For information on how to display a document in Full Screen View, see Full Screen View on page 322.

Configuring Cloning

Note: E-Forms cannot be viewed in Full Screen View.

Monitor cloning is initiated and exited by the Front Office Scanning user; however, monitor cloning can only be initiated while a document is being viewed in Full Screen View.

Tip: For information on how to display a document in Full Screen View, see Full Screen View on page 322.

In order to use monitor cloning, the Front Office Scanning workstation must meet the following requirements:

- The video card must support cloning and allow a hotkey combination to initiate and exit clone mode.
- The hotkey combination specified for the **CloneStart** and **CloneStop** settings in the Front Office Scanning configuration file must be configured for the video card to switch between the display modes.

  See the video card's documentation for further information.
- The video card's software needs to be running in order to detect when the user presses the hotkey combination to enter/exit monitor cloning.

Tip: For optimal operation, use monitors with the same resolution.

Some video cards require two different hotkey combinations to enter and exit monitor cloning, whereas some require only one to toggle monitor cloning on/off. For video cards that use one hotkey combination to toggle monitor cloning on/off, the same hotkey sequence should be specified for both the **CloneStart** and **CloneStop** settings.

To enable cloning:

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **CloneStart** setting. If this value is not present, add it to the **Display** element.

3. Set the **CloneStart** setting to the hotkey combination used to initiate monitor cloning. For example:

   `CloneStart="CTRL+ALT+F7"`

   The keys are case-insensitive and a maximum combination of 4 keys can be specified per hotkey sequence. The individual keys need to be separated by a plus sign (**+**) sign. For a list of supported keys for hotkey combinations, see Supported Hot Keys on page 128.

Note: Front Office Scanning does not support multiple hot key sequences (i.e., where a sequence of keys are pressed and released and then another set of keys are pressed and released).

4. Set the **CloneStop** setting to the hotkey combination used to exit monitor cloning. For example:

   `CloneStop="CTRL+ALT+F8"`

   The keys are case-insensitive and a maximum combination of 4 keys can be specified per hotkey sequence. The individual keys need to be separated by a plus sign (**+**) sign. For a list of supported keys for hotkey combinations, see Supported Hot Keys on page 128.

Note: Front Office Scanning does not support multiple hot key sequences (i.e., where a sequence of keys are pressed and released and then another set of keys are pressed and released).

Tip: For more information on the Front Office Scanning configuration file's **Display** element and the **CloneStart** and **CloneStop** settings, see The Display Element on page 49.

5. Save and close the configuration file.

Supported Hot Keys

The following hot keys are supported for FOS:

- CTRL
- ALT
- SHIFT
- HOME
- END
- LEFT ARROW
- UP ARROW
- RIGHT ARROW
- DOWN ARROW
- F1 through F12
- 0 through 9
- A through Z

Specifying Scanners, TOPAZ Devices, or Touchscreen Devices

You have several options for specifying a scanner, TOPAZ device, or touchscreen device (for example, tablets) for the Front Office Scanning client:

- You can specify a default scanner, TOPAZ device, or touchscreen device to be used to scan or markup all documents in the Front Office Scanning client.
- If your Front Office Scanning solution is configured to allow multiple input buttons, you can specify a scanner, TOPAZ device, or touchscreen device at the Document Type level.
- You can prompt users to select a scanner before scanning a document in the Front Office Scanning client.

Additionally, if you are scanning documents, you may configure some general scanning options at the Front Office Scanning client level. These settings are respected regardless of how the scanner used to scan the documents was selected.

Other general scanning options are set at the Document Type level. For more information, see Configuring General Document Options at the Document Type Level on page 195.

Specifying a Default Scanner, TOPAZ Device, or Touchscreen Device

To specify a default scanner, TOPAZ device, or touchscreen to be used each time a user scans/creates a document:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, ensure that the **promptForFirstDevice** setting is set to **false**.
3. Within the **ScanOptions** element, locate the **scanner** setting. If this value is not present, add it to the **ScanOptions** element.
4. Depending on the device you wish to specify as the default scanner, TOPAZ device, or touchscreen device:
   - Set the **scanner** setting to name of the scanner you wish to set as the Front Office Scanning client's default scanner.

     For example: `scanner="Panasonic KV-S1025C"`
   - To specify the workstation's default TWAIN scanner as the Front Office Scanning client's default scanner, set the **scanner** setting to **default**.
   - To specify a TOPAZ device as the Front Office Scanning client default device, set the **scanner** setting to **TOPAZ**.
   - To specify a touchscreen device (for example, a tablet) as the Front Office Scanning client default device, set the **scanner** setting to **touchscreen**.

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **scanner** setting, see The ScanOptions Element on page 63.

5. Save and close the configuration file.

Specifying a Scanner, TOPAZ Device, or Touchscreen Device at the Document Type Level

The ability to specify a scanner, TOPAZ device, or touchscreen device at the Document Type level allows you to use a different device to scan or markup each document that you scan/create for the selected Data Set.

For example:

> When registering patients in the Emergency Room, the registrar needs to obtain a copy of the patient's driver's license, insurance card, and have the patient sign a consent form.
>
> To simplify the registration process, the hospital's Front Office Scanning solution has multiple input buttons configured:
>
> - The first input button allows the registrar to scan the patient's driver's license using a desktop flatbed scanner.
> - The second input button allows the registrar to scan the patient's insurance card using a small document ADF scanner.
> - The third input button displays a template form that the user can sign using a TOPAZ signature pad or a tablet signature device.

To specify a scanner at the Document Type level:

1. **Configure Your Front Office Scanning Solution to Allow Multiple Input Buttons**.

   For more information, see Configuring Input Buttons on page 161.
2. **Assign a Scanner, TOPAZ Device, or Touchscreen Device to the Document Type Button**.
   a. In the Front Office Scanning configuration file, locate the **DocTypes** element.
   b. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
   c. Within the **DocType** sub-element, locate the **scanner** setting. If this value is not present, add it to the **DocType** sub-element.

d. Depending on the device you wish to specify as the default scanner, TOPAZ device, or touchscreen device:
   - Set the **scanner** setting to name of the scanner you wish to set as the Document Type button's default scanner.
     For example: `scanner="Panasonic KV-S1025C"`
   - To specify the workstation's default TWAIN scanner as the Document Type button's default scanner, set the **scanner** setting to **default**.
   - To specify a TOPAZ device as the Document Type button's default device, set the **scanner** setting to **TOPAZ**.
   - To specify a touchscreen device (for example, a tablet) as the Document Type button's default device, set the **scanner** setting to **touchscreen**.

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its DocType sub-elements' settings, including the **scanner** setting, see The DocTypes Element on page 89.

e. Save and close the configuration file.

Configuring the Front Office Scanning Client to Prompt Users to Select a Scanner, TOPAZ Device, or Touchscreen Device

To require users to select a scanner, TOPAZ device, or touchscreen devices to use each time that they scan/create a document:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **promptForFirstDevice** setting. If this value is not present, add it to the **ScanOptions** element.
3. Set the **promptForFirstDevice** setting to **true**. For example:
   `promptForFirstDevice="true"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **promptForFirstDevice** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Configuring General Scanning Options at the Front Office Scanning Client Level

You can configure some general scanning settings at the Front Office Scanning client level. These settings are respected regardless of how the scanner used to scan the documents was selected.

Other general scanning settings can be set at the Document Type level. For more information, see Configuring General Document Options at the Document Type Level on page 195.

Enabling Batch Scanning

By default, your Front Office Scanning scanning solution is configured to allow you to scan/create one document at a time and then assign it to a Document Type.

However, you can configure your Front Office Scanning solution to use batch scanning. Batch scanning allows you to scan all pages of all documents associated with the selected Data Set at once and then organize them into individual documents in the Front Office Scanning client.

Note: Batch scanning is NOT the ability to import documents scanned/created into a batch of an OnBase scan queue. Front Office Scanning does offer the ability to upload a document as a batch of a scan queue; this feature is controlled at the Document Type level. For more information, see Configuring Documents to Be Uploaded as a Batch of a Scan Queue on page 194.

To enable batch scanning:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **batchscan** setting. If this value is not present, add it to the **ScanOptions** element.
3. Set the **batchscan** setting to **true**. For example: `batchscan="true"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **batchscan** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Specifying the Default Image Scale

You can specify how all documents are displayed, by default, in the Working window:

Note: The default display behavior can be overridden at the Document Type level. For more information, see Configuring General Document Options at the Document Type Level on page 195.

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **imagescale** setting. If this value is not present, add it to the **ScanOptions** element.
3. Depending on how you want the documents to be displayed, set the **imagescale** setting to one of the following value:
   - **FitWidth**. Documents in the Working window are displayed as **Fit to Width** by default.
   - **FitHeight**. Documents in the Working window are displayed as **Fit to Height** by default.
   - **FitImage**. Documents in the Working window are displayed as **Fit in Window** by default.

- **FullSize**. Document in the Working window are displayed as their actual size.

For example: `imagescale="fitwidth"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **imagescale** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Specifying a Default Printer

You can specify a default printer for documents scanned/created in the Front Office Scanning client.

Tip: When used in conjunction with other settings (i.e., when the **autoprint** or **preprint** settings in the **DocType** element are set to **true**), a document can be automatically printed when it is scanned/created, allowing users to print documents without the **Print** dialog box being displayed (if you do not want the user to have to select a printer or be able to make changes to printing options in the **Print** dialog box).

1. In the Front Office Scanning configuration file, locate the **Printer** element.
2. Between the **<Printer>** tags, specify the appropriate printer by doing one of the following:
   - If the printer will not be accessed via a network location, simply enter the printer name between the tags.

     For example: `<Printer>ER_Registration</Printer>`
   - If the printer will be accessed via a network location, enter both the UNC path to the printer and the printer name between the tags.

     For example: `<Printer>\\SRV-PRN\ER_Registration</Printer>`
   - To specify the default Windows printer, enter **default** between the tags.

     For example: `<Printer>default</Printer>`
3. Save and close the configuration file.

Configuring Front Office Scanning to Launch Another Application

You can configure the Front Office Scanning client to be able to launch another application from a button in the Front Office Scanning toolbar. The toolbar button will contain the graphic of whatever application it is configured to launch.

Note: Only one application can be configured to launch from within the Front Office Scanning client.

To configure a Front Office Scanning toolbar button to launch another application:

1. In the Front Office Scanning configuration file, locate the **Application** element.
2. Within the **Application** element, locate the **Command** setting. If this value is not present, add it to the **Application** element.
3. Set the **Command** setting to the path to the application's executable. For example:
   ```
   <Command>="C:\Program Files\Hyland\Disconnected
   Scanning\disconnectedscan.exe"
   ```

Tip: For more information on the Front Office Scanning configuration file's **Application** element and the **Command** setting, see The Application Element on page 56.

4. Save and close the configuration file.

Launching OnBase Disconnected Scanning from within Front Office Scanning

Note: A Disconnected Scanning license is required to access Disconnected Scanning from the Front Office Scanning client. For more information, see the Disconnected Scanning documentation.

If you would like to configure OnBase Disconnected Scanning to launch from within Front Office Scanning and Disconnected Scanning is configured to use Active Directory or LDAP authentication, (i.e., the auto-logon command line switch,**-AL**, is configured for the Disconnected Scanning shortcut), you may use the **-EMBEDDED** switch with the Disconnected Scanning executable.

The -**EMBEDDED** switch disables Disconnected Scanning's continuous background upload feature and forces the Disconnected Scanning client to automatically close after a batch is uploaded.

If the -**EMBEDDED** switch is used, the **-SCANQUEUE=<Scan queue name or Scan Queue #>** switch may also be used to specify the scan queue that is used, rather than defaulting to the last scan queue used by Disconnected Scanning.

Additionally, the **-SERVER** and -**LOCALCONNECT** switches may be used to determine if the Disconnected Scanning client should be launched using a **Local** or a **Server** logon.

- If the **-LOCALCONNECT** switch is used and no local configuration information is available, the user is prompted to create a local Disk Group and the Disconnected Scanning client connects to the Application Server on the first log on.
- If neither the -**SERVER** or the -**LOCALCONNECT** switches are used in conjunction with the auto-logon switch, the Disconnected Scanning client will, by default, attempt to launch using local configuration information.

Configuring Scanner Settings

Buffered Transfer Mode vs. Native Transfer Mode

Note: This setting can be applied globally (i.e., to all documents scanned via the Front Office Scanning client) or at the Document Type level. The following information applies to setting this setting globally; for more information on specifying this setting at the Document Type level, see Configuring Scanning Options at the Document Type Level on page 163.

Depending on the needs of your scanner, data can be transmitted between the scanner using buffered transfer mode or native transfer mode.

Tip: Buffered transfer mode is the preferred method of transferring data from the scanner to the Front Office Scanning client. Native transfer mode is required for some older TWAIN devices.

By default, data is transferred to the Front Office Scanning client using buffered transfer mode. To configure the Front Office Scanning client to use native transfer mode:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **NativeMode** setting. If this value is not present, add it to the **ScanOptions** element.
3. Set the **NativeMode** setting to **true**. For example:
   `NativeMode="True"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **NativeMode** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

To configure the Front Office Scanning client to use buffered transfer mode, set the **NativeMode** setting to **false** (i.e., `NativeMode="False"`).

Compressed Scanner Data vs. Uncompressed Scanner Data

Note: This setting is used only when the scanner is transferring data to the Front Office Scanning client using native transfer mode (i.e., the **NativeMode** setting in the **ScanOptions** element of the configuration file is set to **true**). Like the **NativeMode** setting it is dependent on, it can be applied globally (i.e., to all documents scanned via the Front Office Scanning client) or at the Document Type level. The following information applies to setting these settings globally; for more information on specifying this setting at the Document Type level, see Configuring Scanning Options at the Document Type Level on page 163.

When the scanner is transferring data to the Front Office Scanning client in native transfer mode, the data is compressed by the scanner by default.

To configure the scanner to send uncompressed data to the Front Office Scanning client:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **NativeMode** setting and ensure that it is set to **true**.
3. Within the ScanOptions element, locate the **HardwareCompress** setting. If this value is not present, add it to the **ScanOptions** element.
4. Set the **HardwareCompress** setting to **false**. For example:
   `HardwareCompress="false"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **NativeMode** and **HardwareCompress** settings, see The ScanOptions Element on page 63.

5. Save and close the configuration file.

Note: If the **HardwareCompress** setting is set to **true**, but the scanner is not capable of compressing data, then this setting is ignored.

To configure the Front Office Scanning client to receive compressed data from the scanner, set the **HardwareCompress** setting to **false** (i.e., `HardwareCompress="False"`).

Specifying the Number of Pixels Per Color Plane

Note: The following setting can be applied globally (i.e., to all documents scanned via the Front Office Scanning client) or at the Document Type level. The following information applies to setting this setting globally; for more information on specifying this setting at the Document Type level, see Configuring General Document Options at the Document Type Level on page 195.

You can specify the number of bits per pixel for each color plane when documents are scanned into the Front Office Scanning client. Potential values for this settings are **1**, **4**, and **8**.

Tip: The higher the **bitdepth** setting, the more accurate the images will be. Be aware, however, that the file sizes will also be larger.

To specify the number of bits used per pixel for a scanned image:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **BitDepth** setting.
3. Set the BitDepth setting to the number of bits to be used for each pixel of the scanned image (**1**, **4**, or **8**). For example:
   `BitDepth="8"`

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element and its settings, including the **BitDepth** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Configuring Upload Settings

Once documents are created/scanned in the Front Office Scanning client and assigned to a Document Type, the documents and their indexing information are temporarily stored in a folder specified in the Front Office Scanning configuration file.

Once the user clicks **Upload Images**, the Front Office Scanning client connects to the OnBase Application Server using the connection information specified in the configuration file and uploads the documents and their indexing information to OnBase. Front Office Scanning can also be configured to save a backup copy of any document to the local workstation before it is uploaded to OnBase. For more information, see Saving a Local Backup Copy Upon Upload on page 140.

By default, documents are uploaded using a background upload process (i.e., users are still able to work in the Front Office Scanning client during the upload). However, you can configure the Front Office Scanning client to upload documents using a foreground upload process (i.e., the Front Office Scanning client becomes unresponsive until the upload is complete). For more information on specifying an upload method, see Specifying an Upload Method on page 138.

By default, a user must upload all documents scanned/created for the selected Data Set before he/she can select another Data Set and scan/create documents for it. However, you may configure your Front Office Scanning solution to run in Disconnected mode. Disconnected mode allows users to scan/create documents for multiple Data Sets using the Front Office Scanning client (i.e., select the first Data Set, scan/create documents for that Data Set, select a second Data Set, scan/create documents for that Data Set, etc.) and queue them locally on the workstation until they can all be uploaded to OnBase at a later time.

Note: If your Front Office Scanning client is configured to run in Disconnected mode and your Front Office Scanning solution is configured to allow document retrieval, only documents that are pending upload are available for retrieval. Documents stored in OnBase are not available. For more information on configuring your Front Office Scanning solution to perform document retrieval, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

To configure the connection to your OnBase Application Server so that documents can be uploaded from the Front Office Scanning client to OnBase:

1. In the Front Office Scanning configuration file, locate the **TempPath** element.
2. Set the **TempPath** element to the path of the folder where documents and their indexing information are temporarily stored while awaiting upload to OnBase. For example:
   ```
   <TempPath>C:\Program Files\Hyland\Front Office Scanning\Patient Documents</TempPath>
   ```

Note: Documents and indexing information can be encrypted so that the data cannot be accessed or viewed by others while it is stored awaiting upload to OnBase and during the upload process. For more information, see Encrypting Documents Awaiting Upload on page 139.

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3. In the configuration file, locate the **CommParams** element.

4. Within the **CommParams** element:
   a. Set the **DBName** setting to the name of the data source used to connect to your OnBase database.
   b. Set the **URL** setting to the URL to your OnBase Application Server.

Tip: For more information on the Front Office Scanning configuration file’s **TempPath** element, see The TempPath Element on page 71. For more information on the **CommParams** element and its settings, including the **DBName** and **URL** settings, see The CommParams Element on page 59.

5. Save and close the configuration file.

Specifying an Upload Method

By default, documents are uploaded using a background upload process (i.e., users are still able to work in the Front Office Scanning client during the upload). However, you can configure the Front Office Scanning client to upload documents using a foreground upload process (i.e., the Front Office Scanning client becomes unresponsive until the upload is complete).

Note: In order to configure the Front Office Scanning client to automatically close after uploading a document, you must configure the Front Office Scanning client to perform foreground uploads. For more information configuring the Front Office Scanning client to automatically close after uploading documents, see Configuring the FOS Client to Automatically Close After Upload on page 125.

To specify the upload method used by the Front Office Scanning client:

1. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
2. Within the **FOSCONFIGURATION** parent element, locate the **ForegroundUpload** setting. If this value is not present, add it to the **FOSCONFIGURATION** parent element.
3. Specify your desired upload method:
   - To configure the Front Office Scanning client to perform background uploads, set the **foregroundupload** setting to **false**.

     ```
     ForegroundUpload="false"
     ```

     To configure the Front Office Scanning client to perform foreground uploads, set the **foregroundupload** setting to **true**.

     ```
     ForegroundUpload="true"
     ```

Tip: For more information on the Front Office Scanning configuration file’s **FOSCONFIGURATION** parent element and its settings, including the **foregroundupload** setting, see The FOSCONFIGURATION Parent Element on page 40.

4. Save and close the configuration file.

Encrypting Documents Awaiting Upload

Documents and indexing information can be encrypted so that the data cannot be accessed or viewed by others while it is awaiting upload to OnBase and during the upload process.

To encrypt document data:

1. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
2. Within the **FOSCONFIGURATION** parent element, locate the **EncryptFiles** setting. If this value is not present, add it to the **FOSCONFIGURATION** parent element.
3. Set the **EncryptFiles** setting to **true**. For example;
   `EncryptFiles="True"`

Tip: For more information on the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element and its settings, including the **encryptfiles** setting, see The FOSCONFIGURATION Parent Element on page 40.

4. Save and close the configuration file.

Enabling Disconnected Mode for the Front Office Scanning Client

By default, your Front Office Scanning solution is configured to load a Data Set, scan/create documents associated with that Data Set, and then upload those documents to OnBase before another Data Set is selected.

However, it is possible to configure your Front Office Scanning solution to run in Disconnected mode. In Disconnected mode, you can scan/create documents for multiple Data Sets using the Front Office Scanning client and queue them locally on the workstation until they can all be uploaded to OnBase at a later time.

For example:

> Hyland Hospital is sponsoring a health and wellness event where patients can walk-in and have a variety of tests performed (e.g., height/weight checks, vision testing, blood pressure screening, etc.). Because the event is held-off site, the hospital employees registering the patients cannot connect to the hospital's network to upload the registration documents to OnBase.
>
> Instead, the Front Office Scanning workstations were configured to run in Disconnected mode. Patient information (i.e., Data Sets) was pre-loaded on each machine for the registered participants and Data Sets were manually created for those patients who did not pre-register. Documents were scanned/created for each patient at the Front Office Scanning workstations and then were uploaded to OnBase after the even, when each workstation was returned to the hospital and connected to the network.

Be aware, that if the Front Office Scanning client is running in Disconnected mode and your solution is configured to allow you to retrieve documents related to the selected Data Set, you will be able to retrieve only documents that are pending upload; you will not be able to retrieve documents stored in OnBase.

To configure your Front Office Scanning solution to run in Disconnected mode:

1. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
2. Within the **FOSCONFIGURATION** parent element, locate the **Disconnected** setting. If this setting is not present, add it to the **FOSCONFIGURATION** parent element.
3. Set the **Disconnected** setting to **true**. For example:

   `Disconnected="true"`

Tip: For more information on the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element and its **Disconnected** setting, see The FOSCONFIGURATION Parent Element on page 40.

4. Save and close the configuration file.

Saving a Local Backup Copy Upon Upload

By default, no copies of documents are saved on the local workstation once documents are uploaded to OnBase. However, you can configure Front Office Scanning to save a local backup copy of each document to the workstation upon upload.

Backup local copies of image files are saved as TIFF files, and PDF files are saved as PDF files. If the original image document consists of multiple pages, the backup local copy is a single multi-page TIFF file.

The file name of each local copy is based on the document's OnBase document handle, the data source name of the OnBase database, and the date and time at which the backup copy was created. For example:

<document handle>(<data source>)(<yyyy-mm-dd_hh-mm-ss>).tif

To configure Front Office Scanning to save local backup copies upon upload:

1. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
2. Within the **FOSCONFIGURATION** parent element, locate the **maintainLocalCopy** setting. If this setting is not present, add it to the **FOSCONFIGURATION** parent element.
3. Set the **maintainLocalCopy** setting to **true**. For example:

   `maintainLocalCopy="true"`

Tip: For more information on the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element and its **maintainLocalCopy** setting, see The FOSCONFIGURATION Parent Element on page 40.

4. Locate the **MaintainLocalCopyPath** element. If this element is not present, add it to the Front Office Scanning configuration file.
5. Enter the full path of the folder in which you want to save local backup copies of documents.

6. Set the **MaintainLocalCopyPath** element to the path of the folder where you want to save local backup copies of documents. For example:
   `<MaintainLocalCopyPath>C:\Program Files\Hyland\Front Office Scanning\LocalCopy</MaintainLocalCopyPath>`
7. Save and close the configuration file.

Configuring Data Sets

A Data Set is a collection of Keyword Values that are used to index documents scanned/created in the Front Office Scanning client.

The Keyword Values that compose a Data Set are stored in an XML file (called the Data Set XML file). One Data Set XML file is created for each Data Set, and these Data Set XML files are stored in a designated location available to the Front Office Scanning workstation known as the sharepath. Data Sets can be categorized within the sharepath for easy retrieval and use.

Note: Data Set can also be stored in a network location accessible by the OnBase Application Server and be made available to the Front Office Workstation(s) via a web service.

Creating Data Sets

Data Sets can be created in four ways:

- **Via an Application Enabler Screen Scrape Event**. When Data Sets are created via Application Enabler, Keyword Values are captured from a line-of-business application and are stored in a Data Set XML file in the sharepath. Each Data Set XML file represents one dataaset that is available to the Front Office Scanning client and is displayed in the **Available Data Sets** list.

Note: Once Data Sets are created by Application Enabler, the Front Office Scanning client can respond to them in different ways. See Determining how the Front Office Scanning Client Responds to Application Enabler on page 117.

For information on configuring an Application Enabler/Front Office Scanning solution, see Configuring an Application Enabler/Front Office Scanning Solution on page 114.

- **Via an HL7 Message**. When Data Sets are created via HL7, an HL7 message is processed to identify Keyword Values. These Keyword Values are stored in a Data Set XML file in the sharepath. Each Data Set XML file represents one dataaset that is available to the Front Office Scanning client and is displayed in the **Available Data Sets** list.

  For more information on configuring HL7 to create Front Office Scanning Data Sets, see Configuring an HL7 Import Processor/Front Office Scanning Solution on page 120.

- **Automatically, via a line of business application**. When a data is created automatically by a line of business application, the application outputs a Data Set XML file containing Keyword Values in the sharepath. Each Data Set XML file represents one Data Set that is available to the Front Office Scanning client and is displayed in the **Available Data Sets** list.

  In order to make the Data Set available to the Front Office Scanning client, the Data Set XML file must be formatted in a specific way. For more information on how the Data Set XML file must be formatted, see The Front Office Scanning Data Set File on page 223.
- **Manually in the Front Office Scanning Client**. Data Sets can also be created manually by a user in the Front Office Scanning client. Users may enter Keyword Values for any Keyword Types specified by the **Data Set** (non-required Keywords) or **Keywords** (required Keywords) element of the Front Office Scanning configuration file. For more information, see Configuring Data Set Keyword Types on page 142.

  By default, when manually creating a Data Set, users enter Keyword Values directly into the **Selected Data Set** window. However, you may create a custom HTML form and configure the Front Office Scanning client to allow users to use it to enter Keyword Values for a manually created Data Set. For more information on configuring an HTML form for manual Data Set creation, see Configuring an HTML Form for Manually Creating Data Sets on page 144.

Note: For information on how to manually create a Data Set in the Front Office Scanning client, see Manually Creating a Data Set on page 279.

Configuring Data Set Keyword Types

The Keyword Types whose associated Keyword Values compose the Data Set are specified in the **Keywords** and **DataSet** elements of the Front Office Scanning configuration file.

- Required Keywords (i.e., Keyword Types that must have a Keyword Value associated with them in order to be able to assign a document to a Document Type for the selected Data Set) are specified in the **Keywords** element.
- Non-required Keywords (i.e.,Keyword Types that can, but are not required to have, Keyword Values associated with them in order to be able to assign a document to a Document Type for the selected Data Set) are specified in the **DataSet** element.

Note: If Data Sets are only being generated from an HL7 message or from data captured by Application Enabler (i.e., Data Sets are never being manually created), the **Keywords** and **DataSet** elements are recommended, but not required. The Keyword Values (and their corresponding Keyword Types) for Data Sets created via HL7 and Application Enabler are specified in the Data Set XML file. Be aware, however, that the order in which Keyword Values are displayed in the **Selected Data Set** window for the Data Set can be controlled by the **Keywords** and **DataSet** elements (see Ordering Keyword Values in a Data Set on page 145), and, if these elements are not included in the configuration file, users will not be able to manually create Data Sets.

Both the **Keywords** and **DataSet** elements are composed of one or more Keyword sub-elements. Each **Keyword** sub-element represents one Keyword Type that is included in the Data Set.

Configuring Required Keywords

To specify a Data Set's required Keyword Types:

1. In the Front Office Scanning configuration file, locate the **Keywords** element. If this element is not present, add it to the configuration file.
2. Add a **Keyword** sub-element to **Keywords** element.
3. Enter the name of the Keyword Type of the required Keyword directly between the **Keyword** tags.
4. Optionally, the **type**, **minLength**, and **maxLength** settings can be added to the **Keyword** sub-element to perform Keyword Value validation:
   - **Type**. This setting allows you to perform data validation on a Keyword Value to ensure that it contains only data allowable for its associated Keyword Type.

     If the Keyword Value does not pass this validation test, an error message is displayed.
   - **minLength**. This setting allows you to specify a minimum character length for a Keyword Value to ensure that enough, if not all, of the value is captured to allow for retrieval.

     If the Keyword Value does not pass this validation test, an error message is displayed.
   - **maxLength**. This setting allows you to specify a maximum character length for a Keyword Value to ensure that it does not exceed the maximum allowable length for its associated Keyword Type.

     If the Keyword Value does not pass this validation test, an error message is displayed.

Tip: For more information on the Front Office Scanning configuration file's **Keywords** element and its settings, see The Keywords Element on page 71.

5. Repeat Steps 2-4 for each of the Data Set's required Keywords.
6. Save and close the configuration file.

Configuring Non-Required Keywords

To specify a Data Set's non-required Keyword Types:

1. In the Front Office Scanning configuration file, locate the **DataSet** element. If this element is not present, add it to the configuration file.
2. Add a **Keyword** sub-element to **DataSet** element.
3. Enter the name of the Keyword Type of the non-required Keyword directly between the **Keyword** tags.

4. Optionally, the **type**, **minLength**, and **maxLength** settings can be added to the **Keyword** sub-element to perform Keyword Value validation:
   - **Type**. This setting allows you to perform data validation on a Keyword Value to ensure that it contains only data allowable for its associated Keyword Type.

     If the Keyword Value does not pass this validation test, an error message is displayed.
   - **minLength**. This setting allows you to specify a minimum character length for a Keyword Value to ensure that enough, if not all, of the value is captured to allow for retrieval.

     If the Keyword Value does not pass this validation test, an error message is displayed.
   - **maxLength**. This setting allows you to specify a maximum character length for a Keyword Value to ensure that it does not exceed the maximum allowable length for its associated Keyword Type.

     If the Keyword Value does not pass this validation test, an error message is displayed.

Tip: For more information on the Front Office Scanning configuration file's **DataSet** element and its settings, see The DataSet Element on page 74.

5. Repeat Steps 2-4 for each of the Data Set's non-required Keywords.
6. Save and close the configuration file.

Configuring an HTML Form for Manually Creating Data Sets

When users manually create Data Sets in the Front Office Scanning client, they enter Keyword Values directly in the **Selected Data Set** window by default.

However, it is also possible to create a custom HTML form to allow users to enter Keyword Values into a more visually appealing and feature-rich interface when manually creating Data Sets.

There are two steps required for configuring an HTML form for manual Data Set creation:

- **Creating/Configuring the HTML Form**. See Creating/Configuring the HTML Form on page 144.
- **Modifying the Front Office Scanning configuration file to specify the HTML form to be used for manual Data Set creation**. Modifying the Front Office Scanning Configuration File on page 145.

Creating/Configuring the HTML Form

An HTML form used for manual Data Set creation is configured similarly to an E-Form template, although an E-Forms license is not required

HTML forms in Front Office Scanning support radio buttons, drop-down list boxes, and text fields for adding Keyword Values. See the E-Forms documentation for information on how to create/configure an HTML form.

The following exceptions to E-Forms configuration apply to configuring an HTML form for Front Office Scanning:

- HTML Forms must use Keyword Type Name mapping
- The **OK** button should be mapped to **OBBtn_Yes** or **OBBtn_Save**.
- The **Cancel** button should be mapped to **OBBtn_Cancel**.
- The type of button (submit or reset) for the **OK** and **Cancel** buttons is ignored.
- Buttons that display calendars are supported.
- If a title is specified in the HTML form, it is displayed in the title bar of the HTML Form window. If no title is specified, **Keywords** is displayed in the title bar of the HTML Form window.
- Any option for E-Forms (hidden fields, check boxes, etc.) other than radio buttons, drop-down list boxes, and text fields for adding Keyword Values is NOT supported for Front Office Scanning.

Once the HTML form has been created, it must be placed in a location accessible to the Front Office Scanning workstation.

Modifying the Front Office Scanning Configuration File

Once the HTML form has been created, you must specify the location of the HTML form in the Front Office Scanning configuration file.

1. In the Front Office Scanning configuration file, locate the **DataSetForm** element. If this element is not present, add it to the configuration file.
2. Set the **file** setting in the **DataSetForm** element to the path to the HTML form to be used when manually creating Data Sets.
3. If desired, set **width** and **height** settings to specify the size (in pixels) of the window the HTML form is displayed in.

Tip: For more information on the Front Office Scanning configuration file's **DataSetForm** element and its settings, see The DataSetForm Element on page 58.

4. Save and close the configuration file.

Ordering Keyword Values in a Data Set

The order of the Keyword Values in the Data Set, as displayed in the **Selected Data Sets** window when the Data Set is selected, is determined by a set of rules based on how the Data Set was created.

A Data Set created via HL7, an Application Enabler screen-scrape event, or Automatically by a Line of Business Application

1. Non-required Keyword Types (i.e., Keyword Types specified in the **Data Set** element of the Front Office Scanning Configuration file).

   If multiple Keyword Types are specified in the **Data Set** element, then they are listed in the order in which they appear in the Front Office Scanning configuration file.

Note: If no Keyword Value is captured via HL7 or an Application Enabler screen scrape event for a Keyword Type listed in the **Data Set** element, that Keyword Type is not displayed in the **Selected Data Set** window.

2. Required Keyword Types (i.e., Keyword Types specified in the **Keywords** element of the Front Office Scanning Configuration file).

   If multiple Keyword Types are specified in the **Keywords** element, then they are listed in the order in which they appear in the Front Office Scanning configuration file.

Note: If no Keyword Value is captured via HL7 or an Application Enabler screen scrape event for a Keyword Type listed in the **Keywords** element, that Keyword Type is displayed in the **Selected Data Set** window with a **?** displayed where its associated Keyword Value would be displayed.

3. Keyword Values captured via HL7 or the Application Enabler screen scrape event or generated by the line of business application associated with Keyword Types not specified in either the **Data Set** or **Keywords** element of the Front Office Scanning configuration file.

A Manually Created Data Set

1. Non-required Keyword Types (i.e., Keyword Types specified in the **Data Set** element of the Front Office Scanning Configuration file).

   If multiple Keyword Types are specified in the **Data Set** element, then they are listed in the order in which they appear in the configuration file.
2. Required Keyword Types (i.e., Keyword Types specified in the **Keywords** element of the Front Office Scanning Configuration file).

   If multiple Keyword Types are specified in the **Keywords** element, then they are listed in the order in which they appear in the configuration file.

Specifying the Location of the Data Set XML Files

Once Data Set XML files are generated by the data entry workstations, they are stored centrally and made available to the Front Office Scanning workstation.

Depending on your configuration, Data Set XML files can be stored either in a local shared folder or a network location.

- **Local Shared Folder**. When this option is used, the Data Set XML files are stored in a shared folder accessible locally by all of the data entry workstations and the Front Office Scanning workstation.

- **Network Location**. When this option is used, the Data Set XML files are stored in a location accessible by the data entry workstations and the OnBase Application Server, but not locally accessible by the Front Office Scanning workstation(s). Data Sets are made available to the Front Office Scanning workstation via a web service.

Tip: The network location option is recommended when either your Front Office Scanning solution consists of a large number of data entry workstations and several Front Office Scanning workstations or if your data entry workstations and Front Office Scanning workstations are not connected to the same wide-area network (WAN).

Configuring a Local Shared Folder

Data Sets can be saved in a local, shared folder available to both the data entry workstations and the Front Office Scanning workstation. This folder is called the sharepath.

The path to the sharepath is specified in the **SharePath** element of the Front Office Scanning configuration file.

To set the location of the sharepath:

1. In the Front Office Scanning configuration file, locate the **SharePath** element. If this element is not present, add it to the configuration file.
2. Enter the path to the sharepath folder directly between the SharePath tags.

   Only one **SharePath** element should exist in the configuration file, and only one path should be placed in this **SharePath** element.

Tip: For more information on the Front Office Scanning configuration file's **SharePath** element and its settings, see The SharePath Element on page 54.

3. Save and close the configuration file.

Configuring a Network Location

Data Sets can be saved in a network location accessible by the Application Server (not the Front Office Scanning workstations), and then provided to the Front Office Scanning workstations via a web service.

To use a network location to store Data Set XML files, you must complete the following steps:

1. **Configure the Application Server to Use the Data Set Service**. See Configuring the Application Server To Use the Data Set Service on page 147.
2. **Enable Data Set Retrieval in the Front Office Scanning Configuration File**. See Configuring the Configuration File To Allow Data Set Retrieval from a Network Location on page 149.
3. (Optional) **Configure Site-Based Data Set Filtering**. See Configuring Site-Based Data Set Filtering on page 149.

Configuring the Application Server To Use the Data Set Service

1. Navigate to your OnBase Application Server's web.config file.
2. Open the web.config file in a text editor, such as Notepad.

3. In the **<appSettings>** section, find the **FOS Admittance Monitoring** settings:

```
- <appSettings>
    <add key="dmsdatasource" value="DocumentImaging" />
    <!-- Settings for Document Composition Automated Document (
    <add key="ManagerService" value="[hostname]" />
    <add key="ServicePort" value="5236" />
    <add key="SynchronousTimeout" value="3" />
    <!-- The number of seconds an item will exist within the it
    <add key="ItemCacheTimeout" value="60" />
    <!-- Settings for image rendering and image quality  -->
    <add key="RawImagesAllowed" value="true" />
    <add key="CompressionQuality" value="80" />
    <!-- Settings for DocPop  -->
    <add key="DPChecksum" value="" />
    <!-- Settings for FileMonitoring Engine  -->
    <add key="DefaultStoragePath" value="" />
    <!-- Settings for FOS Admittance Monitoring  -->
    <add key="watchFolder" value="" />
    <add key="siteIDKeywordType" value="Site ID" />
    <add key="cleanupTimerInterval" value="15" />
    <add key="maxFileAgeInHours" value="4" />
```

Application Server Setting	Description
watchFolder	This setting contains the path to the folder containing the Data Set XML files. **Note:** The location specified by this path must be accessible from the Application Server and the data entry workstations, but does not need to be accessible from the Front Office Scanning workstations.
siteIDKeywordType	This setting specifies the Keyword Type whose Keyword Values are used for site-based Data Set filtering. For more information on this setting, see Configuring Site-Based Data Set Filtering on page 149.

Application Server Setting	Description
cleanupTimerInterval	To prevent unused and unneeded Data Sets from accruing in the network location, unused Data Sets stored in the network location are automatically configured to expire after a specified number of hours. The Application Server is configured to poll the network location (i.e., the folder specified by the **watchFolder** setting) at regular intervals to delete expired Data Sets. By default, the Application Server polls the network location every 15 minutes. To increase or decrease this amount of time, set the cleanupTimerInterval setting to the amount of time (in minutes) allowed to pass before the Application Server polls the network location for expired Data Sets. **Note:** Ensure that this setting is set to an appropriate length of time. Be aware that a Data Set is still be available to the Front Office Scanning workstation after it expires if the Application Server has not yet polled the network location and deleted its Data Set XML file.
maxFileAgeinHours	This setting specifies the lifespan of Data Sets (in hours) stored in the network location. After a Data Set's lifespan expires, the Data Set XML file will be deleted the next time the Application Server polls the network location where the Data Sets are stored. Once the Data Set XML file is deleted, the Data Set is no longer available to the Front Office Scanning workstations. **Note:** A Data Set is still be available to the Front Office Scanning workstation after it expires if the Application Server has not yet polled the network location and deleted its Data Set XML file.

4. Set the **watchFolder**, **cleanupTimerInterval**, and **maxFileAgeinHours** settings as needed.
5. Save and close the Application Server's web.config file.

Configuring the Configuration File To Allow Data Set Retrieval from a Network Location

1. In the Front Office Scanning configuration file, locate the **DataSetSourceURL** element. If this element is not present, add it to the configuration file.
2. Enter **True** directly between the **DataSetSourceURL** tags.

   For example: `<DataSetSourceURL>True</DataSetSourceURL>`
3. Save and close the configuration file.

Configuring Site-Based Data Set Filtering

The ability to store Data Sets in a network location and provide them to Front Office Scanning workstations via a web service is intended for large Front Office Scanning solutions (i.e., a large number of data entry workstations and multiple Front Office Scanning workstations).

To prevent a large number of Data Sets from being provided to every Front Office Scanning workstation, you have the ability to configure site-based Data Set filter to ensure that Data Sets are only made available to the Front Office Scanning workstations associated with the data entry workstations used to create them.

For example:

> Hyland Hospital consists of three campuses: the Main Campus, the Cancer Hospital, and the Mental Health Outpatient Clinic. Each campus has at least 10 data entry workstations and multiple Front Office Scanning workstations.
>
> For security purposes, the Data Sets are stored in a network location accessible by the Application Server. They are provided to the Front Office Scanning workstations via a web service.
>
> At any given time, Hyland Hospital may have anywhere from 50-100 active Data Sets; providing every Data Set to all of the Front Office Scanning workstations (including Front Office Scanning workstations at other campuses) not only consumes network resources, it also creates a potential security risk.
>
> To reduce network traffic and ensure that datastes are only made available to the Front Office Scanning workstations associated with the data entry workstation that created them, Hyland Hospital has enabled site-based Data Set filtering.
>
> Data Sets created at the Main Campus are only available to Front Office Scanning workstations at the Main Campus, Data Sets crated at the Cancer Hospital are only available to Front Office Scanning workstations at the Cancer Hospital, and Data Sets created at the Mental Health Outpatient Clinic are only available to Front Office Scanning workstations at the clinic.

Data Sets are filtering based on the value of a specified Keyword Type (i.e., the Site ID Keyword Type). This Keyword Type is identified in the Application Server's web.config file and must be included as one of the Keyword Types configured for the Data Sets used by your solution.

For a Data Set to be available to a Front Office Scanning workstation, the Data Set's Site ID Keyword Value must match the value specified in the **SiteID** element of the Front Office Scanning configuration file used by that Front Office Scanning workstation.

If the value for the Front Office Scanning configuration file's **SiteID** element does not match the Data Set's Site ID Keyword Value, or if the Front Office Scanning configuration file does not contain a value for the **SiteID** element, then the Data Set will not be available to Front Office Scanning workstations that use this configuration file.

For example:

> John Adams is registering at Hyland Hospital's Main Campus for routine outpatient testing. A registrar takes his information at one of several data entry workstations; the Data Set containing his information is created and the Data Set XML file is stored in the network location accessible by the Application Server.
>
> The **Site** Keyword Type is configured for Hyland Hospital's patient Data Sets, and **MainCampus** is automatically assigned as the **Site** Keyword Value in John Adams' Data Set.
>
> The Front Office Scanning workstation used by the outpatient laboratory at the Main Campus accesses a Front Office Scanning configuration file that specifies **MainCampus** as the value for its **SiteID** element.

Because John Adams' Data Set contains **MainCampus** as its **Site** Keyword Value, and **MainCampus** is specified as the outpatient laboratory's **SiteID** value in the configuration file, John Adams' Data Set is available to the outpatient laboratory's Front Office Scanning workstation (and other Front Office Scanning workstations that access the same configuration file).

John Adams' Data Set would NOT be available to Front Office Scanning workstations configured to use a configuration file that did not contain **MainCampus** as the value for its **SiteID** element.

Note: This feature will require you to create and use multiple Front Office Scanning configuration files (i.e., one configuration file for each site) in your Front Office Scanning solution.

To configure site-based Data Set filtering, you must complete the following steps:

1. **Identify the Site ID Keyword Type**
   a. Navigate to your OnBase Application Server's web.config file.
   b. Open the web.config file in a text editor, such as Notepad.
   c. In the **<appSettings>** section, find the **FOS Admittance Monitoring** settings.
   d. Set the **siteIDKeywordType** setting to the name of the Keyword Type that will be used as the Site ID Keyword. For example:
      `<add key="siteIDKeywordType" value="`**<Keyword Type Name>**`" />`
   e. Save and close the Application Server's web.config file.
2. **Configure Data Sets to Include the Site ID Keyword Type**
   a. Ensure that you are generating a Keyword Value for the Site ID Keyword Type specified in the Application Server's web.config file.
   b. Ensure that the Site ID Keyword Value is properly formatted in the Data Set XML file (like other Keyword Values contained in the Data Set).
      For information on how to properly create and format a Data Set XML file, see The Front Office Scanning Data Set File on page 223.
   c. Ensure that the Keyword Values being generated for the Site ID Keyword Type correctly correspond to the values that will be used for the **SiteID** element in the Front Office Scanning configuration files used by the Front Office Scanning workstations.
3. **Specify a SiteID Value in the Front Office Scanning Configuration File**
   a. In the Front Office Scanning configuration file, locate the **SiteID** element. If this element is not present, add it to the configuration file.
   b. Enter the Site ID Keyword Value that is to be used to identify the site directly between the SiteID tags.
      For example: `<SiteID>MainCampus</SiteID>`
   c. Save and close the configuration file.
   d. Repeat Steps a-c for each site's configuration file, ensuring that you enter the Site ID Keyword Value that correctly identifies the site.

Configuring a Data Set Lifespan

Depending on your configuration, it may be necessary to manage the Data Set XML files located in the sharepath folder. This may be particularly important to your solution if:

- Data Sets are created, but not be used, leaving the outdated and unneeded Data Set XML files associated with unused Data Sets in the sharepath.
- If your solution is configured to allow Data Sets to be reused (i.e., the **reusedatasets** setting in the **FOSCONFIGURATION** parent element is set to **true**), the Data Set XML files associated with Data Sets that are no longer needed to will remain in the sharepath.

If the sharepath is not properly managed, a large number of no-longer-needed and/or out-of-date Data Set XML files may be left in the sharepath. To help manage the sharepath folder, you can configure Data Sets to have a lifespan; a Data Set expires at the end of its specified lifespan and its Data Set XML file is automatically deleted.

The Data Set lifespan is specified in the **DataSetLifeSpan** element of the Front Office Scanning configuration file.

To configure a Data Set lifespan for your solution:

1. In the Front Office Scanning configuration file, locate the **DataSetLifeSpan** element. If this element is not present, add it to the configuration file.
2. Enter the amount of time (in hours) that Data Sets are to be available to the Front Office Scanning client directly between the **DataSetLifeSpan** tags.

   The Front Office Scanning client checks the difference between the current time on the Front Office Scanning workstation and the time that the Data Set XML files were created each time the **Available Data Sets** list is refreshed. Once the Data Set expires, the Data Set XML file associated with it is deleted from the sharepath and the Data Set is no longer available to the Front Office Scanning client.

   If the **DataSetLifeSpan** setting is not present, or is set to **0**, the Data Set lifespan feature is disabled.

Tip: When this feature is enabled, you can prevent a Data Set from being deleted by marking its Data Set XML file as read-only.

Caution: If a user manually changes the clock on the Front Office Scanning workstation, Data Sets may be deleted even if they have not existed for the amount of time specified by the configuration setting.

Caution: NTFS file systems store the file times in Coordinated Universal Time (UTC) whereas FAT file systems store the file times in local time. Therefore, time changes due to Daylight Savings do not affect Data Sets on NTFS systems but could shorten or lengthen the time a Data Set is considered valid on a FAT system.

Tip: For more information on the Front Office Scanning configuration file's **DataSetLifeSpan** element and its settings, see The DataSetLifeSpan Element on page 57.

3. Save and close the configuration file.

Configuring Data Sets to Be Reusable

By default, Data Sets are deleted from the sharepath once they are associated with a document and the document is uploaded to OnBase. However, you may configure your Front Office Scanning allow Data Sets to be reusable; Data Sets will remain available to the Front Office Scanning workstation and their associated Data Set XML files remain in the sharepath.

Note: Manually entered Data Sets are always deleted after they have been associated with a document that has been uploaded to OnBase.

Tip: If your solution is configured to allow Data Sets to be reusable, then you should always have a Data Set lifespan configured to ensure that the Data Set XML files associated with outdated or no-longer-needed Data Sets do not remain in the sharepath indefinitely. For more information on configuring a Data Set lifespan, see Configuring a Data Set Lifespan on page 152.

To configure your solution to use reusable Data Sets:

1. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
2. Within the **FOSCONFIGURATION** parent element, located the **reusedatasets** setting. If this value is not present, add it to the **FOSCONFIGURATION** parent element.
3. Set the **reusedatasets** setting to **true**. `For example: reusedatasets="true"`

Tip: For more information on the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element and its settings, including the **reusedatasets** setting, see The FOSCONFIGURATION Parent Element on page 40.

4. Save and close the configuration file.

Configuring Data Set Sub-Categories

Note: This feature only applies to Data Sets accessed from a local shared folder (i.e., the sharepath). For information on filtering or categorizing Data Sets accessed from a network location, see Configuring Site-Based Data Set Filtering on page 149.

By default, a Front Office Scanning solution is configured to access all Data Sets from one location (i.e., the sharepath). In this scenario, all Data Sets are placed into one folder and all users have access to the available pool of Data Sets.

Based on the scope and design of your solution, it may be desirable to organize Data Sets by sub-sets or categories. For example, in a hospital, patient information Data Sets may be categorized by the department that the patient is registered in (e.g., Emergency Medicine, Radiology, Oncology, Outpatient Laboratory, etc.).

When Data Sets are organized by sub-categories, users may be able to work more efficiently (i.e., users are not searching through a large number of Data Sets in the **Available Data Sets** list to find the one they need) and data may be more secure (i.e., users are only able to access Data Sets that are relevant to the work they need to complete).

To organize Data Sets by sub-categories, you must follow the steps below

1. **Create Sub-Folders of the Sharepath Folder**. In order to organize Data Sets by sub-categories, you must create one or more sub-folders in the sharepath folder (i.e., one sub-folder for each Data Set sub-category). The name of the sub-category as displayed in the Front Office Scanning client is the same as the name of the sub-folder of the sharepath folder.

   For example, if your sharepath folder is **C:\Program Files\Hyland\Front Office Scanning\Patients** and you would like to categorize patients by the department they are registered in (e.g., **Emergency Medicine**, **Oncology**, and **Radiology**), then you would create three sub-folders of the **Patients** folder:
   - **Emergency Medicine** (C:\Program Files\Hyland\Front Office Scanning\Patients\Emergency Medicine)
   - **Oncology** (C:\Program Files\Hyland\Front Office Scanning\Patients\Oncology)
   - **Radiology** (C:\Program Files\Hyland\Front Office Scanning\Patients\Radiology)

Note: If you are using the HL7 module to create Data Sets, folders can be automatically created and populated with Data Set XML files. See Configuring an HL7 Import Processor/Front Office Scanning Solution on page 120 for more information.

2. **Ensure that Data Set XML files are Stored in the Proper Sub-Folder of the Sharepath**. Once sub-folders of the sharepath folder have been created to represent each Data Set category, you must ensure that the Data Set XML files are being stored in the proper location (i.e., the specified sub-folder of the sharepath) when they are created.

   For example, if you are using Application Enabler to generate Data Set XML files via a screen scrape event of a line-of-business application, the **SharePath** setting in the **FOSEnabler.ini** file would be set to the path of a sub-folder of the sharepath folder, not to the path of the sharepath folder.
3. **Set the MultiplePaths setting in the Front Office Scanning configuration file to true.**
   a. In the Front Office Scanning configuration file, locate the **FOSCONFIGURATION** parent element.
   b. Within the **FOSCONFIGURATION** parent element, located the **multiplepaths** setting. If this value is not present, add it to the **FOSCONFIGURATION** parent element.
   c. Set the **multiplepaths** setting to **true**. `For example: multiplepaths="true"`

Tip: For more information on the Front Office Scanning configuration file's **FOSCONFIGURATION** parent element and its settings, including the **multiplepaths** setting, see The FOSCONFIGURATION Parent Element on page 40.

   d. Save and close the configuration file.

Once Data Sets are organized by category, users can select, from within the Front Office Scanning client, which categories that they would like to show the Data Sets for. For more information, see Selecting the Data Set Category on page 278.

Configuring Keyword Value Validation

You can configure validation for some or all of the Keyword Values that are manually entered in a Data Set to ensure they meet the following requirements:

- The Keyword Values meet the minimum and maximum length requirements for their associated Keyword Types.
- Only data allowable for the Keyword Types can be assigned as Keyword Values (for example, only numerals can be entered for Keyword Values assigned to **Numeric 9** or **Numeric 20** Keyword Types).

To configure Keyword Value validation:

1. Open the Front Office Scanning configuration file you created or edited for your solution.

Tip: If you are editing the configuration file template generated by the Hyland Front Office Scanning installer, this file template is stored in **C:\Program Files (x86)\Hyland\Front Office Scanning\Template\FOS** by default.

2. Locate one of the following elements:
   - For required Keyword Types for Data Sets, locate the **Keywords** element.
   - For optional Keyword Types for Data Sets, locate the **DataSet** element.
3. Within the element you located, identify the **Keyword** child element associated with the Keyword Value to be validated. For example:

```
<Keywords>
    <Keyword KeywordAutofill="false" id="133">City</Keyword>
</Keywords>
```

Tip: For more information on the **Keywords** and **DataSet** elements and their child elements' settings, see The Keywords Element on page 71 and The DataSet Element on page 74.

4. To validate by the data type of the Keyword Value, add the **type** attribute to the **Keyword** child element and set it to one of the following values:

Value	Description
numeric9	Numeric Keyword Values up to 9 digits
numeric20	Numeric Keyword Values up to 20 digits
date	Date Keyword Values
datetime	Date & Time Keyword Values
currency	Currency Keyword Values **Note:** Currency values should respect the currency format assigned to the Keyword Type. The only allowable currency symbol is **$**.
float	Floating Point Keyword Values
alpha	Alphanumeric and Alphanumeric Single Table Keyword Values **Note:** If the **alpha** setting is used, the **maxLength** setting is also required.

For example, to allow only currency Keyword Values, set **type="currency"**.

5. To validate by a minimum length, add the **minLength** attribute to the **Keyword** child element and set its value to the minimum number of characters you want to require for alphanumeric or numeric Keyword Values. For example, to require values to be five or more characters, set **minLength="5"**.
6. To validate by a maximum length, add the **maxLength** attribute to the **Keyword** child element and set its value to the maximum number of characters you want to allow for alphanumeric or numeric Keyword Values. For example, to require values to be nine or fewer characters, set **maxLength="9"**.

Note: The **maxLength** setting does not override the maximum length configured for the Keyword Type. Any Keyword Value that exceeds the maximum length configured for its Keyword Type is truncated in the Data Set, even if the **maxLength** setting's value is longer.

7. Save the configuration file.

Note: To apply your configuration changes to an open Front Office Scanning client, a user must close and reopen the client.

Configuring the Document Date To Be Editable

By default, the Document Date for documents scanned/created in the Front Office Scanning client is automatically set to the current date.

However, you can configure the Document Date field to be editable, allowing users to set the Document Date for documents that they scan/create.

When the Document Date field is editable, users must select a Document Date before they are able to assign the current document to a Document Type. Once the document is assigned to a Document Type, the Document Date field is disabled and its value can no longer be modified.

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **Interface** setting. If this value is not present, add it to the **Display** element.
3. Set the **Interface** setting to **Advanced**.

   For example: `Interface="Advanced"`

   If the **Interface** setting is set to **Standard** or if it is not present in the **Display** element, then the Document Date will automatically be set to the current date.

Tip: For more information on the Front Office Scanning configuration file's **Display** element, including the **Interface** setting, see The Display Element on page 49.

4. Save and close the configuration file.

Configuring Front Office Scanning to Allow Document Retrieval

You can configure your Front Office Scanning solution to allow users to retrieve and view documents related to the selected Data Set (i.e., documents stored in OnBase or documents pending upload to OnBase).

In order to be able to retrieve documents in the Front Office Scanning client:

- **Document Retrieval Must Be Enabled for Your Front Office Scanning Solution**. See Enabling Front Office Scanning to Allow Document Retrieval on page 158.
- **Documents to be Retrieved Must Belong to a Document Type with a Corresponding 'DocType' Element in the Front Office Scanning Configuration File**. In order for documents to be retrieved, they must belong to a Document Type that fulfills one of the following:
  - The Document Type has a Document Type button configured for it in the Front Office Scanning client. For information on creating a Document Type button for a Document Type, see Configuring Document Type Buttons on page 180.
  - The Document Type has been specifically configured for document retrieval in the configuration file. See Specifying Retrieval Document Types on page 158.
- **Documents Must Share One or More Specified Keyword Values with the Selected Data Set**. See Specifying Retrieval Keyword Types on page 159.

Additionally, you may configure Front Office Scanning to retrieve only documents archived in OnBase within a specified number of days of the current date or to retrieve only the most recent documents archived in OnBase.

Note: If your Front Office Scanning client is configured to run in disconnected mode (i.e., you are able to collect several Data Sets' documents before performing an upload), only documents that are pending upload are available for retrieval. Documents stored in OnBase are not available.

Note: Be aware that the **Related Documents** list is not populated with documents related to a manually created Data Set (i.e., related documents cannot be retrieved for manually created Data Sets). The **Related Documents** list is only populated when a Data Set is selected from the **Available Data Sets** list.

Enabling Front Office Scanning to Allow Document Retrieval

To configure your Front Office Scanning solution to allow document retrieval:

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **DocHitList** setting. If this value is not present, add it to the **Display** element.
3. Set the **DocHitList** setting to **true**. `For example: DocHitList="true"`

Tip: For more information on the Front Office Scanning configuration file's **Display** element and its settings, including the **DocHitList** setting, see The Display Element on page 49.

4. Save and close the configuration file.

Specifying Retrieval Document Types

In order to make documents of a certain Document Type eligible for retrieval without configuring a Document Type button, you must otherwise specify this Document Type for retrieval in the Front Office Scanning configuration file.

To specify the retrieval Document Types:

1. In the Front Office Scanning configuration file, locate the **RetrievalDocTypes** element. If the **RetrievalDocTypes** element is not present, add it to the configuration file.
2. Within the **RetrievalDocTypes** element, locate the **DocType** setting. If the **DocType** setting is not present, add it to the **RetrievalDocTypes** element.
3. Set the **DocType** setting to the name of the Document Type to be used as a retrieval Document Type. For example:

   `<Doc Type>MED - Pre-Admission Survey</Doc Type>`
4. Repeat Steps 2 and 3 for each Document Type that you would like to use as retrieval Document Types.
5. Save and close the configuration file.

Specifying Retrieval Keyword Types

In order to be available for retrieval in the Front Office Scanning client, a document must share one or more Keyword Values with the selected Data Set. The Keyword Values that the Front Office Scanning client uses to determine if a document is eligible for retrieval are specified in the Front Office Scanning configuration file.

For example:

Both **MRN** and **Patient Name** are configured as retrieval Keyword Types for a hospital's Front Office Scanning solution. In order for documents stored in OnBase to be available for retrieval in the Front Office Scanning client, those documents must be assigned the same **MRN** Keyword Value and the same **Patient Name** Keyword Value as the values in the selected Data Set.

To specify the retrieval Keyword Types:

1. In the Front Office Scanning configuration file, locate the **Retrieval** element. If the **Retrieval** element is not present, add it to the configuration file.
2. Within the **Retrieval** element, locate the **Keyword** setting. If the **Keyword** setting is not present, add it to the **Retrieval** element.
3. Set the **Keyword** setting to the name of the Keyword Type to be used as a retrieval Keyword Type. For example:

   ```
   <Keyword>MRN</Keyword>
   ```
4. Repeat Steps 2 and 3 for each Keyword Type that you would like to use as retrieval Keyword Types.

Tip: For each additional retrieval Keyword Type that is added, document retrieval becomes more restrictive.

Tip: For more information on the Front Office Scanning configuration file's **Retrieval** element, see The Retrieval Element on page 77.

---

5. Save and close the configuration file.

Specifying a Date Range for Document Retrieval

You can specify a date range that allows users to only retrieve documents that were archived within a specified number of days from the current day.

The document retrieval date range is configured at the Document Type level; this allows you to specify a different retrieval date range for Document Types or to specify a retrieval date range for some Document Types and not others.

To configure a document retrieval date range:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type you are configuring the retrieval date range for.
3. Within the **DocType** sub-element, locate the **DateRangeDays** setting. If this value is not present, add it to the **DocType** sub-element.

4. Set the **DateRangeDays** setting to the number of days prior to the present day that document retrieval is allowed for. For example:
   ```
   DateRangeDays="30"
   ```
   In this example, only documents archived in OnBase in the last 30 days can be retrieved from the Front Office Scanning client.

   If **DateRangeDays** is set to **0**, then only documents archived during the present day are available for retrieval. For example:

Tip: For more information on the Front Office Scanning configuration file's **DocType** element, including the **DateRangeDays** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Retrieving Only the Most Recently Archived Documents

By default, all documents belonging to configured Document Types with Keyword Values in common with the selected Data Set are available for retrieval. However, you can limit this available to only the most recent matching document for each Document Type.

This feature is configured at the Document Type level; this enables you to allow users to retrieve all matching documents for some Document Types and only the most recent matching documents for others.

To configure a Document Type to only allow the most recent matching document to be available for retrieval:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type you are configuring the retrieval date range for.
3. Within the **DocType** sub-element, locate the **FilterSingleDocType** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **FilterSingleDocType** setting to the **true**. For example:
   ```
   FilterSingleDocType="true"
   ```

Tip: For more information on the Front Office Scanning configuration file's **DocType** element, including the **FilterSingleDocType** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Caution: When **filtersingledoctype** is set to **true**, the Front Office Scanning client looks only at the date the documents were uploaded to OnBase, not the time. If multiple matching documents were uploaded on the same date, the most recent document (based on the time it was stored) may not be returned.

Printing Documents from the Related Documents List

If a Front Office Scanning solution is configured to allow document retrieval, users are able to print documents from the **Related Documents** list and using the **Print** right-click option.

Some considerations about printing documents from the **Related Documents** list:

- When printing E-Forms, they are converted to images before printing for security purposes.
- Because documents in the Related Documents list may have different file formats, each document is treated a a separate print job.
- The default workstation printer, using its default settings, is used to print the documents unless a printer has been specified in the **Printer** element of the Front Office Scanning configuration file. If a printer has been specified in the configuration file, it is used instead.
- All pages of the selected documents are automatically printed.

Configuring Input Buttons

By default, only a single Scan button is displayed in the **Scan/Create Document** window. Documents can only be created by scanning them into the Front Office Scanning client.

However, you can configure the Front Office Scanning client to display multiple input buttons instead of a single Scan button; this allows you to scan documents from the same device using multiple settings, scan documents using multiple devices, append virtually printed documents to documents in the Working window, create documents from image templates, or create E-Forms.

When multiple input buttons are enabled, an input button is displayed for each Document Type button that is displayed.

For example:

When registering patients in the Emergency Room, the registrar needs to obtain a copy of the patient's driver's license, insurance card, and have the patient sign a consent form.

To simplify the registration process, the hospital's Front Office Scanning solution has multiple input buttons configured:

- The first input button allows the registrar to scan the patient's driver's license using a desktop flatbed scanner.
- The second input button allows the registrar to scan the patient's insurance card using a small document ADF scanner.
- The third input button displays a template form that the user can sign using a TOPAZ signature pad or a general signature device (for example, a touchscreen tablet).

Enabling the Front Office Scanning Client to Display Multiple Input Buttons

Note: In order to create documents from image templates or to create E-Forms, your Front Office Scanning solution must be configured to allow multiple input buttons.

To enable multiple input buttons for your Front Office Scanning solution:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **MultipleButtons** setting. If the **MultipleButtons** setting is not present, add it to the **ScanOptions** element.
3. Set the **MultipleButtons** setting to **true**. For example:

```
MultipleButtons="True"
```

Tip: For more information on the Front Office Scanning configuration file's **ScanOptions** element, including information on the **MultipleButtons** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Once multiple input buttons have been configured for your solution, they are individually configured using the settings specified for their associated Document Type buttons.

- For information on configuring an input button to use a specific device and/or specialized scanner settings, see Configuring General Document Options at the Document Type Level on page 195.

Configuring an Input Button to Restrict Document Type Assignments

If your solution is configured to enable multiple input buttons, then by default all Document Type buttons are available to assign the Document Type to an document, regardless of which input button is used to scan/create the document.

You can configure an input button to restrict Document Type assignments and only allow the user to use the corresponding Document Type button next to the input button used to scan/create the document.

This setting requires that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

To configure an input button to restrict Document Type assignments:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **onlycorresponding** setting. If this setting is not present, add it to the **DocType** sub-element.
4. Set the **onlycorresponding** setting to **true**. For example:

```
onlycorresponding="true"
```

Tip: For more information on the **DocType** sub-element and its settings, including the onlycorresponding setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Configuring an Input Button to Scan Documents

Input buttons are configured to scan documents by default. However, you can configure the input button to automatically scan using a specific device (the default scanner or TOPAZ device or another scanner or TOPAZ device) and/or to use specific scanner settings.

To associate a specific scanner or TOPAZ device with an input button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **Scanner** setting. If this setting is not present, add it to the **DocType** sub-element.
4. Depending on the device you wish to specify as the default scanner or TOPAZ device:
   - Set the **scanner** setting to name of the scanner you wish to set as the Document Type button's default scanner.

     For example: `scanner="Panasonic KV-S1025C"`
   - To specify the workstation's default TWAIN scanner as the Document Type button's default scanner, set the **scanner** setting to **default**.
   - To specify a TOPAZ device as the Document Type button's default device, set the **scanner** setting to **TOPAZ**.

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its DocType sub-elements' settings, including the **scanner** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

If no specific scanner or TOPAZ device is associated with the input button, then, depending on your configuration, the user is prompted to select a device or the Front Office Scanning client's is automatically selected.

If the user is not prompted to select a device and no default scanner or TOPAZ device is specified for the Front Office Scanning client, then the workstation's default scanner is selected.

Tip: For information on how to configure the Front Office Scanning client to prompt a user to select a scanner or TOPAZ device or to specify a default scanner or TOPAZ device for the Front Office Scanning client, see Specifying Scanners, TOPAZ Devices, or Touchscreen Devices on page 129.

Configuring Scanning Options at the Document Type Level

Several scanning-specific options can be configured at the Document Type level using settings in the **DocType** sub-element of the Front Office Scanning configuration file. They only affect documents that are scanned (not documents that are created from an image template or E-Forms).

These settings require that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

A brief summary of the options is displayed below. For specific information on the options, see The DocTypes Element on page 89.

Setting	Description	Potential Values
SkipADF	This setting enables the Front Office Scanning client to ignore the error message that is displayed when no documents are loaded into the scanner's ADF.	When **skipadfcheck** is set to **true**, the error message is ignored. When **skipadfcheck** is set to **false**, or if no value is present, an error message is displayed when no documents are loaded into the scanner's ADF. **Note:** This setting must be set to **true** when using a Kofax VRS TWAIN driver.
AutoFeed	This setting allows you to enable autofeed mode for your scanner (if it is not automatically enabled) when scanning is initiated by clicking the input button associated with this Document Type button.	If **autofeed** is set to **true**, autofeed mode is enabled for your scanner. If **autofeed** is set to **false**, autofeed mode is not enabled for your scanner.
ShowUI	This setting determines if the TWAIN driver user interface is displayed at the time of scanning when scanning is initiated by clicking the input button associated with this Document Type button.	If **showui** is set to **true**, then the TWAIN driver user interface is displayed when a document is scanned. If **showui** is set to **false**, or no value is present, then the TWAIN driver user interface is not displayed when a document is scanned.
Duplex	This setting determines if duplex or simplex scanning is used when scanning is initiated by clicking the input button associated with this Document Type button.	If **duplex** is set to **true**, this input button scans documents using duplex scanning. If **duplex** is set to **false**, this input button scans documents using simplex scanning.
PaperSize	This setting sets the size of the page being scanned for the Front Office Scanning client.	Acceptable values are **Legal**, **Letter**, **Card**, **A3**, **A4**, **A5**, **A6** and **B5**.

Setting	Description	Potential Values
Brightness	This setting controls the brightness level of the scanner when scanning is initiated by clicking the input button associated with this Document Type button.	Set the **brightness** setting to a value between **-1000** and **1000**. The value is scaled by the scanner to fit within its supported range.
Contrast	This setting controls the contrast level of the scanner when scanning is initiated by clicking the input button associated with this Document Type button.	Set the **contrast** setting to a value between **-1000** and **1000**. The value is scaled by the scanner to fit within its supported range.
Orientation	This setting controls the angle to which the scanner will rotate pages when scanning is initiated by clicking the input button associated with this Document Type button.	Acceptable values for the **orientation** setting are **0**, **90**, **180**, or **270**. **Tip:** The values for **orientation** and **rotation** are cumulative. For example, if you set both **orientation** and **rotation** to **90**, pages are rotated a total of 180 degrees.
Rotation	This setting controls the how much the scanner automatically rotates pages when scanning is initiated by clicking the input button associated with this Document Type button	The value entered for the **rotation** setting works in addition to the value specified for **orientation** setting and allows you to rotate images using smaller degree units. Acceptable values for the **rotation** setting are between -**360** and **360**. **Tip:** The values for **orientation** and **rotation** are cumulative. For example, if you set both **orientation** and **rotation** to **90**, pages are rotated a total of 180 degrees.

Setting	Description	Potential Values
BackRotation	This setting controls the how much the scanner automatically rotates the reverse side of pages when duplex scanning is initiated by clicking the input button associated with this Document Type button The **backrotation** setting is used when the back of an page scanned in duplex needs to be rotated in the differently than the front of the page.	Acceptable values for the **backrotation** setting are between -**360** and **360**. If the **Backrotation** setting is not configured for a document scanned in duplex, the **rotation** setting controls how the reverse side of the image is rotated. **Note:** If the **duplex** setting is not set or is set to **false**, the **backrotation** setting is ignored. **Note:** If the **duplex** setting does not match the duplex setting in the TWAIN user interface, the **backrotation** setting does not operate as expected.
Threshold	This setting sets the threshold level of the scanner. This setting can be used for scanning documents or when converting E-Forms to images if the resulting images are configured to be bi-tonal (i.e., the **pixeltype** setting is set to **bw**.)	Set the **threshold** setting to a value between **0** and **255**. The value is scaled by the scanner to fit within its supported range.
BlankThreshold	This setting allows you to specify the minimum file size an image must be in order not to be considered blank.	Set the **blankthreshold** setting to the number of bytes a page must be in order not to be considered blank. By default, this setting is set to **0**, which indicates that no images are discarded. • If the file size of the page is equal to or greater than the **blankthreshold** value, it is recognized as a valid page. • If the file size of the page is less than the **blankthreshold** value, it is discarded.

Setting	Description	Potential Values
NativeMode	This setting is used to control how information is passed from the scanner to the Front Office Scanning client. **Note:** This setting overrides the **NativeMode** setting in the **ScanOptions** section of the configuration file.	By default, the **NativeMode** setting is set to **false**. This allows the scanner to transfer data to the Front Office Scanning client using buffered transfer mode. **Tip:** Buffered transfer mode is the preferred method of transferring data from the scanner to the Front Office Scanning client. Setting the **NativeMode** setting to **true** allows the scanner to transfer data to the Front Office Scanning client using native transfer mode. While not the preferred method of transferring data, native transfer mode is required for some older TWAIN devices.
HardwareCompress	This setting is used to control how the scanner formats data when transferring it to the Front Office Scanning client in native transfer mode (i.e., when the **nativemode** setting is set to **true**). **Note:** This setting overrides the **HardwareCompress** setting in the **ScanOptions** section of the configuration file.	By default, the **hardwarecompress** setting is set to **true**. This allows the scanner to compress data before transferring it to the Front Office Scanning client. If the **hardwarecompress** setting is set to **true**, but the scanner is not capable of compressing data, then the setting is ignored (i.e., it is treated as if it is set to **false**). Setting the **hardwarecompress** setting to **false** prevents the scanner from compressing data; uncompressed data is passed from the scanner to the Front Office Scanning client.

For information on additional options that affect scanned documents that can be set at the Document Type level, see Configuring General Document Options at the Document Type Level on page 195.

Configuring an Input Button to Acquire Still Images from a Webcam

To configure an input button to acquire still images from a webcam:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **camera** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **camera** setting to **true**.

   For example: `camera="true"`

Tip: For more information on the **DocType** sub-element and its settings, including the **camera** setting, see The DocTypes Element on page 89.

4. If you wish to use a webcam that is not set as your workstation's default streaming video device, specify the webcam by name using the **cameradevice** setting:
   - Within the **DocType** sub-element, locate the **cameradevice** setting. If this value is not present, add it to the **DocType** sub-element.
   - Set the **cameradevice** setting to the name of the webcam.

     For example: `cameradevice="Logitech WebCam C525"`
5. If you wish to adjust the number of seconds the Front Office Scanning client waits before capturing a still image from a webcam, specify this delay interval using the **shutterdelay** setting:
   - Within the **DocType** sub-element, locate the **shutterdelay** setting. If this value is not present, add it to the **DocType** sub-element.
   - Set the **shutterdelay** setting to the desired interval, between one and ten seconds.

     For example: `shutterdelay="5"`

Note: The default delay interval is two seconds.

6. Save and close the configuration file.

Tip: For more information on merging a webcam image onto a document, see Configuring an Image Merge on page 210.

Configuring an Input Button to Append Virtually Printed Documents to Documents in the Working Window

Note: This option requires that your OnBase solution be licensed for the Virtual Print Driver and that the Virtual Print Driver is properly installed and configured on the Front Office Scanning workstation.

If you use the Hyland Virtual Print Driver to virtually print a document when another document is displayed in the Working window, you can configure an input button to append the virtually printed document to the displayed document.

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **Templatesource** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **Templatesource** setting to **PrintMon**.

   For example: `Templatesource="PrintMon"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** and **Templatesource** settings, see The DocTypes Element on page 89.

4. Within the **ScanOption** element, locate the **promptForPrintMon** setting. If this value is not present, add it to the **ScanOption** element.
5. Set the **promptForPrintMon** setting to **appendDoc**.

   For example: `promptForPrintMon="appendDoc"`

   This ensures that the virtually printed document will be appended to the document displayed in the Working window (rather than being saved as an image template).

Tip: For more information on the **ScanOptions** element and its settings, including the **promptForPrintMon** setting, see The ScanOptions Element on page 63.

6. Save and close the configuration file.

Configuring an Input Button to Create Documents from Image Templates

In some instances, users may need access to the same document numerous times. For example:

> When registering patients in a hospital emergency room, each patient needs to sign a privacy policy notification. Rather than print a copy of this document for every patient, the document can be displayed as an image template in the Front Office Scanning client.

Image templates are a way to make the same “stock” or pre-printed form available without requiring users to import or scan the same form into the Front Office Scanning client every time they need it.

Users are able to create documents from an image template in much the same way that they scan documents. To create a document from an image template, users select a Data Set, select an image template using an input button, add markups (e.g., signatures, highlights, notes, arrows, etc.) to the image template as needed, and then upload the marked-up document to OnBase. The marked-up image is indexed with the Keyword Values from the Data Set in the same way that scanned documents are.

Caution: If a note, redaction, burned markup, or deficiency is not in the location you expect, do not save or sign the document until the location has been corrected by your system administrator. When the document is saved or signed, the pending redaction, burned markup, or deficiency is permanently placed in the shifted location. The shifting of notes that do not permanently alter the document can be corrected any time by your system administrator.

The images used for an image template must be stored locally on the Front Office Scanning workstation, stored in a location available to the Front Office Scanning via a UNC path, stored in OnBase, or captured via the Hyland Virtual Print Driver.

There are two steps needed to create documents from image templates in the Front Office Scanning client:

1. **Configure Your Front Office Scanning Solution to Allow Multiple Input Buttons**.

   For more information, see Enabling the Front Office Scanning Client to Display Multiple Input Buttons on page 161.
2. **Specify the Location of the Image File To Be Used as the Image Template to the Document Type Button**.
   - **If the Image Is Stored Locally on the Front Office Scanning Workstation or Is Accessible to the Front Office Scanning Workstation via a UNC Path**. See The Image Is Stored Locally or Is Accessible via a UNC Path on page 170.
   - **If the Image Is Stored in OnBase**. See The Image Is Stored in OnBase on page 171.
   - **If the Image Is Captured by the Hyland Virtual Print Driver**. See The Image Is Captured by the Hyland Virtual Print Driver on page 172

If the image template consists of multiple-pages, you can configure which page of the is displayed first (or the page of the document that is displayed on a TOPAZ device for markups or signatures). For more information, see Specifying The Page of the Image Template To Be Displayed on page 173.

For information on additional options that affect documents created from image templates that can be set at the Document Type level, see Configuring General Document Options at the Document Type Level on page 195.

Specifying the Location of the Image Used as an Image Template

The Image Is Stored Locally or Is Accessible via a UNC Path

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **Template** setting. If this value is not present, add it to the **DocType** sub-element.

4. Set the **Template** setting to the file path or UNC path to the image file.

   For example: `Template="C:\Templates\PrivacyPolicy.tif"` or `Template="\\ER-Registrar1\Templates\PrivacyPolicy.tif"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

The Image Is Stored in OnBase

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **DocHitList** setting. If this setting is not present, add it to the **Display** element.
3. Enable document retrieval for your Front Office Scanning solution by setting **DocHitList** to **true**.

   For example: `DocHitList="True"`

Note: Setting the **DocHitList** option to **true** will not, on its own, allow you to retrieve documents within the Front Office Scanning client; it only enables the Front Office Scanning client to connect to OnBase with the purpose of retrieving documents. For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

4. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
5. Within the **DocType** sub-element, locate the **Templatesource** setting. If this value is not present, add it to the **DocType** sub-element.

   Set the **Templatesource** setting to **OnBase**.
6. For example: `Templatesource="OnBase"`
7. Within the **DocType** sub-element, locate the **Template** setting. If this value is not present, add it to the **DocType** sub-element.
8. Set the **Template** setting to the name the of the OnBase Document Type that the image is stored as.

   For example: `Template="ER-Privacy Policy"`

Note: If more than one image document is stored in the specified Document Type, the most recent document (based on Document Date) is displayed as the image template in the Front Office Scanning client.

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** and **Templatesource** settings, see The DocTypes Element on page 89.

9. Save and close the configuration file.

The Image Is Captured by the Hyland Virtual Print Driver

Note: This option requires that your OnBase solution be licensed for the Virtual Print Driver and that the Virtual Print Driver is properly installed and configured on the Front Office Scanning workstation.

An image captured by the Hyland Virtual Print Driver on the Front Office Scanning workstation can be used as an image template. Images captured by the Virtual Print Driver are saved in the location specified by the **TempPath** element (see The TempPath Element on page 71) and can be encrypted if the **EncryptFiles** setting in the FOSConfig parent element is set to **true** (see The FOSCONFIGURATION Parent Element on page 40).

Images captured by the Virtual Print Driver can be used once as an image template; once the image is used, it is discarded. If multiple images are captured, they are used in the order in which they were captured.

Images can be captured as image templates as long as the Front Office Scanning client is running (a Data Set does not need to be selected), but be aware that the queue of available images in the location specified by the **TempPath** element is cleared each time a new Data Set is selected.

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **Templatesource** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **Templatesource** setting to **PrintMon**.

   For example: `Templatesource="PrintMon"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** and **Templatesource** settings, see The DocTypes Element on page 89.

4. Within the **ScanOption** element, locate the **promptForPrintMon** setting. If this value is not present, add it to the **ScanOption** element.
5. Set the **promptForPrintMon** setting to **newDoc**.

   For example: `promptForPrintMon="newDoc"`

   This ensures that the image will be saved as a template if the image is captured by the Hyland Virtual Print Driver when another document is displayed in the Working window (rather than being appended to this displayed document).

Note: If the **promptForPrintMon** setting is not present, or if it is set to **appendDoc**, the image is automatically appended to the document in the Working window.

Tip: For more information on the **ScanOptions** element and its settings, including the **promptForPrintMon** setting, see The ScanOptions Element on page 63.

6. Save and close the configuration file.

Specifying The Page of the Image Template To Be Displayed

If an image template contains multiple pages, you can specify which page of the document you would like to be displayed first when the document is displayed in the Front Office Scanning client.

If the Document Type is configured to allow the document to be marked-up or signed using TOPAZ hardware, then the page that is configured to be displayed first is also the page that is displayed on the TOPAZ device, as only one page of a multi-page image template can be displayed on a TOPAZ device.

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **DisplayPage** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **DisplayPage** setting to the page number of the page that you would like displayed first (or displayed on the TOPAZ device).

   For example: `DisplayPage="3"`

   To display the last page of the image template, set **DisplayPage** to **0**.
4. Save and close the configuration file.

Configuring an Input Button to Create an E-Form

Note: In order for this functionality to be available, your solution must be licensed for E-Forms.

Front Office Scanning can be configured to allow a user to create an E-Form instead of scanning a paper document or marking up an image template.

E-Forms are created in much the same way that documents created from image templates are created; however, markups cannot be added to an E-Form document. E-Forms, however, can have signatures applied to them via a Signature Merge; the E-Forms are first converted to images within the Front Office Scanning client, and then the signature is stamped on the image document. For more information, see Configuring a Signature Merge on page 214.

Once a user clicks the input button to create an E-Form, Keyword Values from the selected Data Set automatically populate form fields on the E-Form. Form fields populated by Keyword Values from the Data Set are disabled and their values cannot be modified by the user.

Caution: Although form fields not automatically filled by Keyword Values from the Data Set are enabled, and users can enter data into them from within the Front Office Scanning client, be aware that this data is not retained for the E-Form once it is uploaded to OnBase (i.e., the data will not be displayed in the form field when the document is viewed in OnBase and, if the form field is mapped to an OnBase Keyword Type, it is not retained as a Keyword Value).

Tip: It is considered a best practice to ensure that all Keyword Types associated with an E-Form’s Document Type are mapped to Keyword Values contained in the Data Set.

There are two steps needed to create E-Forms in the Front Office Scanning client:

1. **Configure Your Front Office Scanning Solution to Allow Multiple Input Buttons**.

   For more information, see Enabling the Front Office Scanning Client to Display Multiple Input Buttons on page 161.
2. **Specify the Location of the HTML File To Be Used as the HTML Form for the Document Type Button**.
   - **If the HTML Form Is Stored Locally on the Front Office Scanning Workstation or Is Accessible to the Front Office Scanning Workstation via a UNC Path**. See The HTML Form Is Stored Locally or Is Accessible via a UNC Path on page 174.
   - **If the HTML Form Is Stored in OnBase**. See The HTML Form Is Stored in OnBase on page 174.

E-Forms have some limitations when used in conjunction with Front Office Scanning. For more information on these limitations, see E-Form Limitations on page 176.

Specifying the Location of the HTML Form To Be Used To Create E-Forms

The HTML Form Is Stored Locally or Is Accessible via a UNC Path

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **Template** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **Template** setting to the file path or UNC path to the HTML form.

   For example: `Template="C:\Templates\Patient_Survey.htm"` or `Template="\\ER-Registrar1\Templates\Patient_Survey.htm"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

The HTML Form Is Stored in OnBase

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **DocHitList** setting. If this setting is not present, add it to the **Display** element.
3. Enable document retrieval for your Front Office Scanning solution by setting **DocHitList** to **true**.

   For example: `DocHitList="True"`

Note: Setting the **DocHitList** option to **true** will not, on its own, allow you to retrieve documents within the Front Office Scanning client; it only enables the Front Office Scanning client to connect to OnBase with the purpose of retrieving documents. For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

4. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.

5. Within the **DocType** sub-element, locate the **Templatesource** setting. If this value is not present, add it to the **DocType** sub-element.

   Set the **Templatesource** setting to **OnBase**.
6. For example: `Templatesource="OnBase"`
7. Within the **DocType** sub-element, locate the **Template** setting. If this value is not present, add it to the **DocType** sub-element.
8. Set the **Template** setting to the name the of the OnBase Document Type that the HTML form is stored as.

   For example: `Template="ER-Patient Survey"`

Note: If more than one HTML form is stored in the specified Document Type, the most recent document (based on Document Date) is displayed as the HTML form in the Front Office Scanning client.

Tip: For more information on the **DocType** sub-element and its settings, including the **Template** and **Templatesource** settings, see The DocTypes Element on page 89.

9. Save and close the configuration file.

Configuring E-Form Options at the Document Type Level

Several options specific to creating E-Forms can be configured at the Document Type level using settings in the DocType sub-element of the Front Office Scanning configuration file. They affect only E-Form documents (not scanned documents or documents created from an image template).

These settings require that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

A brief summary of the options is displayed below. For specific information on the options, see The DocTypes Element on page 89.

Setting	Description	Potential Values
ForceRenderWidth	This setting allows you to specify the width (in pixels) of the image that is created when an E-Form is converted to an image document.	By default, the Front Office Scanning client allows the web browser to automatically determine the size of the image that should be created from the E-Form. When a value is specified for the **ForceRenderWidth** setting, Front Office Scanning will automatically create an image of the specified size (in pixels) when the E-Form is converted for this Document Type. **Tip:** This setting can be helpful when your web browser has difficulty creating a correctly-sized image due to the layout of the E-Form.

Setting	Description	Potential Values
onestepform	This setting allows a user to automatically assign a Document Type to an E-Form document when the user creates the E-Form document.	If **onestepform** is set to **true**, the user clicks the input button to create an E-Form document, and the E-Form document is created and automatically assigned to the Document Type associated with the Document Type button that corresponds to the input button.

For information on additional options that affect E-Forms that can be set at the Document Type level, see Configuring General Document Options at the Document Type Level on page 195.

E-Form Limitations

Note: To ensure proper viewing, it is recommended that the following directive be placed at the top of the HTML file to be used as the HTML form for the Document Type button:

```
<!DOCTYPE html>
```

The following configuration limitations exist when configuring E-Forms for use with Front Office Scanning:

- Virtual E-Forms are not supported.
- **Submit** and **Reset** buttons on the E-Form are automatically disabled. E-Forms must be imported or cleared using the Front Office Scanning controls.

- For an E-Form to be used in Front Office Scanning, form fields on the E-Form can be mapped to Keyword Types via Keyword Type Names or Keyword Type Numbers.

  Be aware that if you are using the Front Office Scanning client in Disconnected mode and fields on your E-Form documents are mapped to Keyword Types by Keyword Type Number, the Keyword Types must:
  - Have a corresponding entry (i.e., a **Keyword** sub-element) in either the **Keywords** or **DataSet** element of the Front Office Scanning configuration file.
  - Each Keyword Type's corresponding **Keyword** sub-element must contain the **ID** setting to map the Keyword Type's Keyword Type Number to its Keyword Type Name in the Front Office Scanning configuration file.

Tip: If you are using the Front Office Scanning client in Disconnected mode, it is considered a best practice to map the fields on your E-Form documents to Keyword Types by Keyword Type Name rather than Keyword Type Number. Mapping these fields to the Keyword Type Names allows you to avoid the above limitation.

Tip: For more information on running the Front Office Scanning client in Disconnected mode, see Enabling Disconnected Mode for the Front Office Scanning Client on page 139.

Tip: For more information on the **Keywords** and **DataSet** elements of the Front Office Scanning configuration file, including information about the **Keyword** sub-element and its **ID** setting, see The Keywords Element on page 71 or The DataSet Element on page 74.

- Each Keyword Value in the selected Data Set can be mapped to up to three separate fields on an E-Form. The Keyword Value should be mapped to the first field using **OBKEY_<Keyword Type Name>_1**, the Keyword Value should be mapped to the second field using **OBKEY_<Keyword Type Name>_2**, and the Keyword Value should be mapped to the third field using **OBKEY_<Keyword Type Name>_3**.

For more information on configuring an E-Form, including information on mapping OnBase Keyword Values to form fields on the E-Form, see the E-Forms documentation.

Customizing the Text Labels on Your Input Buttons

By default, if an input button is configured to scan documents, it is labeled **Scan using: <Scanner Name>**. If no scanner name is specified, it is labeled **Scan using: Default TWAIN**. And, if the input button is configured to create a document from an image template or to create an E-Form, it is labeled **Template Form**.

Users may find it more convenient if the input buttons are given more descriptive labels to help them understand which device, image template, or E-Form is associated with the input button.

To customize the label on an input button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **DisplayScanner** setting. If this value is not present, add it to the **DocType** sub-element.

3. Set the **DisplayScanner** setting to the text that you would like to label the input button with.

   For example: `DisplayScanner="Driver’s License Scanner"` or `DisplayScanner="Privacy Policy Form"`

Tip: If special characters are needed in the input button’s label, be sure to use proper XML syntax.

Tip: For more information on the **DocType** sub-element and its settings, including the **DisplayScanner** setting, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Automatically Printing a Document Once It Is Created

You can configure the Front Office Scanning client to automatically print a copy of a document created from an image template or E-Form once it is created (i.e., once the input button is selected in the Front Office Scanning client).

Tip: This feature is intended to be used with documents that are to be completed using a TOPAZ clipboard.

This feature is set at the input-button level; it can be enabled or disable for any input button in your Front Office Scanning solution.

Tip: If a default printer is configured for your Front Office Scanning solution, the document is automatically printed on the default printer without a **Print** dialog being displayed to the user. For more information on specifying a default printer, see The Printer Element on page 58.

To automatically print a document once it is created in the Front Office Scanning client:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **PrePrint** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **PrePrint** setting to **true**.

   For example: `PrePrint="True"`

Tip: For more information on the **DocType** sub-element and its settings, including the **PrePrint** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Automating Document Type Assignments

Although an input button shares configuration information and is generally associated with the Document Type button it is displayed next to, users can, by default, scan or create a document by clicking an input button and assign it to any available Document Type by clicking any available Document Type button.

However, you can configure the Front Office Scanning client to automate the Document Type assignment process using a “one step” process. Users need only to click an input button to scan or create a document; once scanned/created, the Document Type button adjacent to the input button is automatically selected for the document.

This "one step" process can be configured on a global level (affecting all input buttons) or an individual input button level. Additionally, E-Form documents can be automatically assigned a Document Type as long as the E-Form document does not require a signature.

Note: This feature should not be used in conjunction with the batch scanning feature (i.e., the ability to create multiple documents from a single, multi-page image document). Batch scanning will override the automated Document Type selection feature if both are enabled. For more information on batch scanning, see Enabling Batch Scanning on page 132.

- **To automate assigning Document Types on a global level**. See Automating Document Type Assignments on a Global Level on page 179.
- **To automate assigning a Document Type for an individual input button**. See Automating Document Type Assignments for an Individual Input Button on page 180.
- **To automate assigning a Document Type to an E-Form for an individual input button**. See Automating Document Type Assignments to an E-Form for an Individual Input Button on page 180.

Automating Document Type Assignments on a Global Level

To automate the Document Type assignment process on a global level:

1. In the Front Office Scanning configuration file, locate the **ScanOptions** element.
2. Within the **ScanOptions** element, locate the **OneStep** setting. If this value is not present, add it to the **ScanOptions** element.
3. Set the **OneStep** setting to **true**.

   For example: `OneStep="true"`

Tip: For more information on the **ScanOptions** element and its settings, including the **OneStep** setting, see The ScanOptions Element on page 63.

4. Save and close the configuration file.

Automating Document Type Assignments for an Individual Input Button

To automate the Document Type assignment process for an individual input button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **onestep** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the onestep setting to true.

   For example: `onestep="true"`

Tip: For more information on the **DocTypes** element and its **DocType** sub-elements' settings, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Automating Document Type Assignments to an E-Form for an Individual Input Button

Automating the Document Type assignment process for an E-Form can only be configured for E-Forms that do not require signatures.

To automate the Document Type assignment process for an E-Form document for an individual input button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the input button you are configuring.
2. Within the **DocType** sub-element, locate the **onestepform** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the onestep setting to true.

   For example: `onestepform="true"`

Tip: For more information on the **DocTypes** element and its **DocType** sub-elements' settings, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Configuring Document Type Buttons

Within the Front Office Scanning client, documents are scanned/created and then are assigned to a Document Type by clicking a Document Type button. At least one Document Type button must be configured for your Front Office Scanning solution.

For each Document Type button you would like to add to the Front Office Scanning client, you must create a **DocType** sub-element of the **DocTypes** element in the Front Office Scanning configuration file.

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its **DocType** sub-elements, see The DocTypes Element on page 89.

In addition to configuring Document Type buttons for Document Type assignment, the DocType element is also used to:

- Configure button-specific information for the input button associated with a Document Type button (if your Front Office Scanning solution is configured to allow multiple input buttons).

  For more information, see Configuring Input Buttons on page 161.
- Specify which Document Types are to be made available for Document Retrieval when your Front Office Scanning solution is configured to allow document retrieval.

  For more information, see Configuring Front Office Scanning to Allow Document Retrieval on page 157.

You must have at least one Document Type button configured for your Front Office Scanning solution.

Assigning a Document Type to a Document Type Button

Note: This configuration step is required for each Document Type button.

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **Name** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **Name** setting to the name of the OnBase Document Type the button is to be associated with.

   For example: `Name="MED - Insurance Card"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Name** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Customizing the Text Labels on a Document Type Button

By default, a Document Type button is configured to be labeled with its OnBase Document Type name; however, users may find it more convenient if the Document Type buttons are given more descriptive labels to help them understand which document is associated with the Document Type button.

To customize the label on a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the Document Type button you are configuring.
2. Within the **DocType** sub-element, locate the **DisplayName** setting. If this value is not present, add it to the **DocType** sub-element.

3. Set the **DisplayName** setting to the text that you would like to label the Document Type button with.

   For example: `DisplayName="Insurance Card"`

Tip: If special characters are needed in the input button's label, be sure to use proper XML syntax.

Tip: For more information on the **DocType** sub-element and its settings, including the **DisplayName** setting, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Adding a Graphic to a Document Type Button

In addition to adding a customized text label to your Document Type button, you can also add a bitmap graphic to help users identify the button.

The image file must either be stored locally on the Front Office Scanning workstation, be available to the Front Office Scanning workstation via a UNC path, or be stored on a web server that can be browsed to via normal HTTP (i.e., via a URL that begins with `http:` or `https:`).

Tip: Although multiple image file formats are supported, it is recommended that a bitmap image (.bmp) be used when adding a graphic to a Document Type button.

This feature is available regardless of if your solution is configured to use the small input and Document Type buttons or the standard, larger input and Document Type buttons. For more information on configuring the size of your Document Type buttons, see Specifying the Size of the Document Type Buttons on page 183.

To add a bitmap graphic to a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the Document Type button you are configuring.
2. Within the **DocType** sub-element, locate the **Bitmap** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **Bitmap** setting to the file path, UNC path, or URL of the image file you are adding to the Document Type button.

   For example: `Bitmap="C:\Icons\InsuranceCard.bmp"` or `Bitmap="\\ER-Registrar1\Icons\InsuranceCard.bmp"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Bitmap** setting, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Specifying the Size of the Document Type Buttons

By default, your Front Office Scanning client is configured to be able to display up to five Document Type buttons (and, depending on your configuration, their associated input buttons) on the screen at once, without scrolling.

However, if your solution uses a large number of Document Types, and you would like to be able to display more than five Document Type buttons (and their associated input buttons) on the screen at once, you can configure your Front Office Scanning solution to display smaller Document Type and input buttons.

When configured to use small buttons, up to 32 Document Type and input button combinations can be displayed in the Front Office Scanning client without scrolling.

To configure your Front Office Scanning client to display small Document Type and input button combinations:

1. In the Front Office Scanning configuration file, locate the **Display** element.
2. Within the **Display** element, locate the **SmallButtons** setting. If this value is not present, add it to the **Display** element.
3. Set the **SmallButtons** setting to **true**.

   For example: `SmallButtons="True"`

Tip: For more information on the **Display** element and its settings, including the **SmallButtons** setting, see The Display Element on page 49.

---

4. Save and close the configuration file.

Configuring a Required Document Type

To ensure that a specific document is being scanned/created for each Data Set, you can configure a Document Type to be required.

When a Document Type is configured to be required, a document must be assigned to that Document Type for the selected Data Set before any documents associated with that Data Set can be uploaded to OnBase.

To configure a Document Type to be required;

1. In the Front Office Scanning configuration file, locate the **DocTypes** element and identify the **DocType** sub-element associated with the Document Type button you are configuring.
2. Within the **DocType** sub-element, locate the **Required** setting. If this value is not present, add it to the **DocType** sub-element.
3. Set the **Required** setting to **true**.

   For example: `Required="True"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Required** setting, see The DocTypes Element on page 89.

---

4. Save and close the configuration file.

Configuring a Document Type Button Filter

By default, all Document Type buttons configured for your Front Office Scanning solution are available to users after a Data Set is selected and a document is scanned/created.

However, you may configure a Document Type button filter so that the availability of some Document Type buttons is controlled by one or more Keyword Values for specified filter Keyword Types in the selected Data Set.

Tip: Typically, Document Type button filters are created for Keywords associated with definite Keyword Values or Keyword Values that come in pairs or other known multiples (e.g., **Status=Smoker/Non-Smoker**, **Gender=Male/Female**, **Age=Under 18/18-29/30-39/40-49**, etc).

For example:

> When a patient is registered at Hyland Hospital, the registrar needs to record the patient's history. One of the questions the patient is asked is about his history of tobacco use; this answer is recorded as a Keyword Value for the **Tobacco User** Keyword Type (e.g., **Smoker**, **Non-Smoker**, or **Former Smoker**).
>
> The patient is required to complete a brief survey based on his history of tobacco use; the survey questions differ for smokers, non-smokers, and former smokers.
>
> By configuring each survey as its own Document Type, you can configure a Document Type button filter to ensure that only the image template and Document Type button that correspond to the patient's **Tobacco User** Keyword Value are displayed. This ensures that the surveys that do not correspond to his history of tobacco use are not made available to him, allowing him to complete and submit only the correct survey.

Filters can also be "stacked" (i.e., multiple Keyword Value conditions must be met for a Document Type button to be displayed) so that they are even more restrictive. For example, in order for a Document Type button to be displayed, the selected Data Set must contain both the **Tobacco User=Non-Smoker** Keyword and the **Gender=Male** Keyword.

Based on the configuration of your Document Type button filter, if no Document Type buttons match the selected Data Set (e.g., if the selected Data Set contains Keyword Values have not been specified for filter Keyword Types in the configuration file or if the selected Data Set is missing Keyword Values for filter Keyword Types), then all configured Document Type buttons are displayed.

Unlike other configuration file errors encountered when launching the Front Office Scanning client, if an error is present in the **Filter** element of the configuration file, the Front Office Scanning client is still opened. However, Document Type button filtering is disabled.

It is easy to determine if the Front Office Scanning client is filtering Document Type buttons:

- If Document Type buttons are displayed before the Data Set is selected, then Document Type button filtering is not enabled.
- If no Document Type buttons are displayed before the Data Set is selected, then Document Type button filtering is enabled.

There are two steps needed to configure a Document Type button filter:

1. **Configure the Filter's Settings in the Front Office Scanning Configuration File**. See Configuring the Settings of a Filter on page 185.
2. **Assign a Filter to One or More Document Type Button**. See Assigning a Filter ID to a Document Type Button on page 187.

The presence of a Document Type button filter configuration slightly modifies the user experience when manually creating Data Sets in the Front Office Scanning configuration file. See Considerations for Manually Creating Data Sets on page 188 for more information.

Configuring the Settings of a Filter

Document Type button filters are configured in the Front Office Scanning configuration file. All Document Type button filter information is contained in the **Filter** element; the configuration information for each individual filter is contained in a **Keyword** sub-element of the **Filter** element.

The Document Type button filters are based on Keyword Values; for each specified filter Keyword Value, you assign a Filter ID. When the specified filter Keyword Value is present in the selected Data Set, only the Document Type buttons that have been assigned a matching corresponding Filter ID are displayed.

For example:

> **Gender** is specified as a filter Keyword Type with two potential Keyword Values, **Male** and **Female**,. In the Front Office Scanning configuration file, the **Male** Keyword Value is assigned a Filter ID of **1** and the **Female** Keyword Value is assigned a Filter ID of **2**.
>
> - If the selected Data Set contains the **Male** Keyword Value, then only Document Type buttons that have been assigned a Filter ID of **1** in their corresponding **DocType** sub-element are displayed.
> - If the selected Data Set contains the **Female** Keyword Value, then only Document Type buttons that have been assigned a Filter ID of **2** in their corresponding **DocType** sub-element are displayed.
> - If the selected Data Set contains no Keyword Value or another Keyword Value for the **Gender** Keyword (e.g., **Unknown**, **Unspecified**, etc.), then all Document Type buttons are displayed.

Multiple Filter ID values can be assigned to each Document Type button, making the Document Type button filters more restrictive. If the selected Data Set contains no Keyword Value that satisfies one of the filters, then that filter is discarded but any other filters may be applied.

For example:

Gender is specified as a filter Keyword Type with two potential Keyword Values, **Male** and **Female**. In the Front Office Scanning configuration file, **Male** Keyword Value is assigned a Filter ID of **1** and the **Female** Keyword Value is assigned a Filter ID of **2**.

Additionally, **Insurance Status** is specified filter Keyword Type with two potential Keyword Values, **Insured** and **Uninsured**. In the Front Office Scanning configuration file, the **Insured** Keyword Value is assigned a Filter ID of **3** and the **Uninsured** Keyword Value is assigned a Filter ID of **4**.

- If the selected Data Set contains the **Male** and **Insured** Keyword Values, then only the Document Type buttons that have been assigned **1** and **3** as their Filter ID values are displayed.
- If the selected Data Set contains the **Female** and **Insured** Keyword Values, then only the Document Type buttons that have been assigned **2** and **3** as their Filter ID values are displayed.
- If the selected Data Set contains the **Male** and **Uninsured** Keyword Values, then only the Document Type buttons that have been assigned **1** and **4** as their Filter ID values are displayed.
- If the selected Data Set contains the **Female** and **Uninsured** Keyword Values, then only the Document Type buttons that have been assigned **2** and **4** as their Filter ID values are displayed.
- If the selected Data Set contains no value for the **Gender** Keyword Value and the **Insured** Keyword Value, then only Document Type buttons that been assigned a Filter ID of **3** are displayed (the **Gender** filter Keyword is ignored because no matching Keyword Value was found, but the filter for the **Insurance Status** Keyword Type was still applied).

To configure a filter Keyword:

1. In the Front Office Scanning configuration file, locate the **Filter** element. If this element is not present, add it to the configuration file.
2. Add a **Keyword** sub-element to the **Filter** element. Each **Keyword** sub-element specifies the one filter Keyword Value and its associated Filter ID.

Note: Multiple **Keyword** sub-elements are needed for each filter Keyword Type (i.e., one Keyword sub-element is needed for each potential Keyword Value for a filter Keyword Type). For example, if **Gender** is your Keyword Type then you would need two **Keyword** sub-elements: one for **Male** and the other for **Female**.

---

3. Add the **Name** setting to the **Keyword** sub-element and set it to the name of the filter Keyword Type being configured.

   For example: `<Keyword name="Gender">`
4. Add the **Value** setting to the **Keyword** sub-element and set it to the filter Keyword Value being configured.

   For example: `<Keyword name="Gender" value="Male">`

Note: If the selected Data Set contains a Keyword Value for a filter Keyword Type that is not specified in the configuration file (e.g., **Gender=Unknown**, **Unspecified**, etc.), or if the selected Data Set does not contain a Keyword Value for the filter Keyword Type, then Document Type buttons are not filtered based on this filter Keyword.

---

5. If you wish to set the Keyword Value specified in the **Value** setting as the default, add the **Default** setting to the **Keyword** sub-element and set it to **true**.

   For example: `<Keyword name="Gender" value="Male" default="true">`

   This ensures that the Keyword Value specified in the **Value** setting is displayed by default for the filter Keyword Type, even if the selected Data Set does not contain a Keyword Value for the filter Keyword Type.

Note: If the **Default** setting is set to **false**, or if it is not present, no Keyword Value is set as the default.

6. Add the **DocType** sub-element to the Keyword element and set it to the Filter ID for the filter Keyword Value being configured. For example:

```
<Keyword name="Gender" value="Male">
    <DocType>1</DocType>
```

Note: The Filter ID can be specified in either of the following ways: **<DocType>1</DocType>** or **<DocType> filterid="1"/>**

Tip: It is recommended that the first **DocType** sub-element have a value of **1**, the second **DocType** sub-element have a value of **2**, etc.

Note: The Filter ID value is also assigned to one or more Document Type buttons as the **FilterID** value; for more information, see Assigning a Filter ID to a Document Type Button on page 187.

7. Once the filter has been configured, ensure that you add the end tag (i.e., **</Keyword>**) to close the **Keyword** sub-element.
8. Repeat Steps 2-6 to create a **Keyword** sub-element for each filter Keyword Value for this filter Keyword Type.
9. Repeat Steps 2-7 to create Document Type button filters for each filter Keyword Type you would like to configure for your Front Office Scanning solution.

Tip: For more information on the Front Office Scanning configuration file's **Filter** element, its **Keyword** sub-element, and its settings, see The Filter Element on page 78.

10. Save and close the configuration file.

Assigning a Filter ID to a Document Type Button

In order to apply a filter to a Document Type button, you must assign its corresponding Filter ID to the Document Type button. Only when the selected Data Set contains the same Keyword Values as the specified filters is the Document Type button displayed.

Multiple Filter IDs can be assigned to a single Document Type button to make the filter more restrictive. The same Filter ID value can also be assigned to multiple Document Type buttons, applying the same filter to more than one button.

To assign a Filter ID to a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **FilterID** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **FilterID** setting to the Filter ID value associated with the filter you would like to assign to the Document Type button (i.e., the Filter ID value setting assigned to the configured filter Keyword Value's **Keyword** sub-element of the **Filter** element).

   For example: `FilterID="1"`

   If a **FilterID** value is not specified for a Document Type button or if it is set to **0**, then the Document Type button is always displayed.

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its DocType sub-elements' settings, including the **FilterID** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Considerations for Manually Creating Data Sets

If Keyword Types are specified in the **<DataSet>** section and the **<Filter>** section of the configuration file, the user will be prompted to use a value for those Keyword Types when manually creating Data Sets. Upon selection, the appropriate Document Type button(s) are displayed. The list of values includes all of the values that are filtered for and **<None>**.

If the filter Keyword Types are not in the **<DataSet>** section, the user will not be prompted to select a value and all of the configured Document Type buttons are displayed.

Note: It is possible to configure a filter for an empty (missing) value for a filter Keyword Type for manually created Data Sets. This will be used when **<None>** is selected for a manually created Data Set.

Configuring a Document Type Button to Allow Signatures To Be Applied to a Document

A document that is created in the Front Office Scanning client may need to be signed for acknowledgment or compliance purposes.

Depending on your needs and your configuration, there are multiple ways to apply a signature to a document that is scanned/created in the Front Office Scanning client:

- **Capturing a Signature as a Markup from a Signature Device**. In this scenario, a signature is captured for the document on a signature device (for example, a tablet or a TOPAZ signature pad) and is saved separately, as its own document, or it is added directly to the document as a markup.

  For more information, see Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device on page 189.

- **Using a Signature Merge to Stamp a Signature Captured from a Signature Device Directly on the Document**. In this scenario, one or more signatures are captured from a signature device and are "stamped" directly on a pre-configured area of the document.

  For more information, see Configuring a Signature Merge on page 214.
- **Using a Signature Merge to Stamp a Signature on File Directly on the Document**. In this scenario, a Front Office Scanning user's signature is captured from a signature device and is saved on disk. The signature can be repeatedly applied to documents as-needed without requiring the user to sign the signature device.

  For more information, see Configuring a Document Type Button to Use a Signature on File on page 190.

Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device

Depending on your configuration, it may be necessary for you to capture a signature via a signature device (for example, a tablet or a TOPAZ signature pad) as a markup on an existing image template or as its own document.

The ability to capture a signature is controlled at the Document Type level. This allows you to apply signatures to some documents but not others, or to use different methods to apply signatures to documents (for example, capturing a signature as its own document, applying a signature as a markup to a document, and/or applying a Signature Merge "stamp" to another document) within the same Front Office Scanning solution.

To configure a Document Type button to capture a signature:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element:
   a. Ensure that no value is set for the **SignatureID** setting or that the **SignatureID** setting is not present.
   b. If you are applying a signature as a markup to an existing image template, use the **template** setting to specify the path to the image template (for example, `template="C:\Templates\Acknowledgement.tif"`)

Tip: For more information on specifying the location of an image template, see Configuring an Input Button to Create Documents from Image Templates on page 169.

   If you are capturing the signature as its own document, ensure that the **template** setting is present, but no value is set for it (i.e., `template=""`)

   c. Set the **Scanner** setting to a value appropriate for the type of signature device you are using (for example, **Scanner="TOPAZ"** for a TOPAZ signature pad or **Scanner="touchscreen"** for a tablet).
4. Save and close the configuration file.

Configuring a Document Type Button to Use a Signature on File

In addition to being able to configure a Signature Merge to immediately stamp a signature captured from a signature device on a document, you can configure a Signature Merge to capture a signature, store it on disk, and then apply it to documents within the Front Office Scanning client as needed.

For security purposes, a signature on file can only be applied to a document after one or more other signatures have been captured by a signature device and immediately stamped on a document.

Tip: Typically, when a Signature Merge is used to stamp a signature on a document, it is used to stamp a third-party's signature (e.g., a patient's signature) on the document. However, the signature on file is intended to be used to stamp the Front Office Scanning user's signature on a document (e.g., as a witness to the third party's signature).

Caution: A signature on file is stored as an encrypted bitmap, and is only available to the user that created it in the Front Office Scanning client. However, before implementing this feature in a production environment, be aware that there are potential security risks involved with storing a signature on disk. The decision to use this feature should be carefully considered before it is implemented.

While a user can capture and store only one signature, that signature can be applied to multiple locations in the same document, or to other documents, by creating a Signature Merge Item for each document the signature is applied to.

To configure a Document Type button to stamp a signature on file, you must complete the following steps:

1. **Specify the Folder Where the Signature(s) on File Are To Be Stored**. Each signature is stored as an encrypted bitmap file in a local folder, available by file path or UNC path to the Front Office Scanning workstation.

   This location is specified in the **SignatureOnFilePath** element of the Front Office Scanning configuration file. If no location is specified, or the **SignatureOnFilePath** element is not present in the configuration file, the signatures will be saved in the same folder as the Front Office Scanning configuration file.

   To specify the folder where the signatures are to be stored:

   a. In the Front Office Scanning configuration file, locate the **SignatureOnFilePath** element. If this element is not present, add it to the configuration file.

   b. Enter the path to the folder where the signatures are to be stored directly between the **SignatureOnFilePath** tags.

   For example:

   ```
   <SignatureOnFilePath>C:\Program Files\Hyland\Front Office
   Scanning\Signatures</SignatureOnFilePath>
   ```

Tip: For more information on the Front Office Scanning configuration file's **SignatureOnFilePath** element, see The SignatureOnFilePath Element on page 88.

   c. Save and close the Front Office Scanning configuration file.

2. **Create a Signature Merge Item for the Signature Being Stored on Disk**. Like other signatures being stamped on documents, a Signature Merge Item is required for a signature on file to be stamped on a document in order to identify the placement of the signature on the document.

Tip: If you are applying a signature on file to multiple locations in the same document or to multiple documents: unless the signature is to be stamped on exactly the same place, a separate Signature Merge Item must be configured for each signature “stamp” to indicate the page and location where the signature is to be stamped.

For more information, see Configuring a Signature Merge Item on page 214.

3. **Configure the Signature Merge Item To Use a Signature on File**. A Signature Merge Item must be configured to capture a signature and immediately stamp it on the document OR to use a signature on file.

   To configure a Signature Merge Item to use a signature on file:

   a. In the Front Office Scanning configuration file, locate the **SignatureItem** sub-element that corresponds to the signature Merge Item you created in Step 1.
   b. Set the **SigOnFile** setting to **True**.

      For example:

```
<SignatureItem SignatureID="1" SigOnFile="True">
```

Tip: For more information on the Front Office Scanning configuration file’s **SignatureItems** element and its **SignatureItem** sub-elements, including a detailed description of all its settings, see The SignatureItems Element on page 86.

   c. Save and close the Front Office Scanning configuration file.

4. **Assign the Signature Merge Item to the Document Type Button.** Once a Signature Merge Item has been created for the signature on file, it must be assigned to the Document Type(s) it is to be used with.

   For more information, see Assigning a Signature Merge Item to a Document Type Button on page 216.

Specifying a Default Scanner, TOPAZ Device, or Touchscreen Device for a Document Type Button

The ability to specify a scanner, TOPAZ device, or touchscreen device at the Document Type level allows you to use a different device to scan or markup each document that you scan/create for the selected Data Set.

For example:

> When registering patients in the Emergency Room, the registrar needs to obtain a copy of the patient’s driver’s license, insurance card, and have the patient sign a consent form.
>
> To simplify the registration process, the hospital’s Front Office Scanning solution has multiple input buttons configured:
>
> - The first input button allows the registrar to scan the patient’s driver’s license using a desktop flatbed scanner.

- The second input button allows the registrar to scan the patient's insurance card using a desktop small document ADF scanner.
- The third input button displays a template form that the user can sign using a signature device (for example, a tablet or a TOPAZ signature pad).

For information on specifying a default scanner/TOPAZ device/touchscreen device for a Document Type button, see Specifying a Scanner, TOPAZ Device, or Touchscreen Device at the Document Type Level on page 130.

Automatically Printing Documents After Document Type Assignment

You can configure the Front Office Scanning client to automatically print a copy of a document once it is assigned to a Document Type (i.e., once the Document Type button is selected in the Front Office Scanning client).

Tip: This feature is intended to allow users to give a third party (e.g., a patient) a copy of a document.

This feature is set at the input-button level; it can be enabled or disable for any Document Type button in your Front Office Scanning solution.

Tip: If a default printer is configured for your Front Office Scanning solution, the document is automatically printed on the default printer without a **Print** dialog being displayed to the user. For more information on specifying a default printer, see The Printer Element on page 58.

To automatically print a document once it is assigned to a Document Type:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **AutoPrint** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **AutoPrint** setting to **true**.

   For example: `AutoPrint="True"`

Tip: For more information on the **DocType** sub-element and its settings, including the **AutoPrint** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Configuring a Document Type Button to Allow Documents To Be Copied

By default, a document can only be assigned to a Document Type if it is scanned, created from an image template, or if it is created as an E-Form.

However, you may also configure a Document Type button to allow documents belonging to its associated Document Type to be copied in order to create new documents.

For example:

> When registering a patient for outpatient laboratory services, the registrar realizes that the patient was recently registered in the Emergency Room and his insurance card has already been scanned and stored in OnBase.
>
> The registrar is able to retrieve the image of the patient's insurance card previously stored in OnBase from the Front Office Scanning client, copy it and assign the newly-created image to the **MED - Insurance Card** Document Type for the currently-selected Data Set in the Front Office Scanning client.

Documents can only be copied from Document Types that have been configured for your Front Office Scanning solution (i.e., Document Types that have a corresponding **DocType** sub-element in the Front Office Scanning configuration file).

There are two steps needed to copy existing documents in the Front Office Scanning client:

1. **Enable Document Retrieval For Your Front Office Scanning Solution**. See Configuring Front Office Scanning to Allow Document Retrieval on page 157.
2. **The Document To Be Copied Must Belong to a Document Type That Has Been Configured To Allow Documents To Be Copied**. See Enabling Document Copying for a Document Type Button on page 193.

Note: No additional configuration is required for a Document Type button that the newly-copied document is assigned to.

Enabling Document Copying for a Document Type Button

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the input button you are configuring.
3. Within the **DocType** sub-element, locate the **Copy** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **Copy** setting to **true**.

   For example: `Copy="True"`

Tip: For more information on the **DocType** sub-element and its settings, including the **Copy** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Allowing Multiple Documents to be Assigned to a Document Type

By default, only one document can be assigned to each Document Type for the selected Data Set.

However, you may configure your solution to allow users to assign multiple documents to the same Document Type for the selected Data Set. This feature is controlled by the **multipledocs** setting in the **DocType** element of the Front Office Scanning configuration file.

To allow users to assign multiple documents to a Document Type for the selected Data Set:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **MultipleDocs** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **MultipleDocs** setting to **true**. `For example: MultipleDocs="true"`

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its DocType sub-elements' settings, including the **MultipleDocs** setting, see The DocTypes Element on page 89.

5. Save and close the configuration file.

Configuring Documents to Be Uploaded as a Batch of a Scan Queue

By default, documents scanned/created in the Front Office Scanning client are individually ad hoc imported into OnBase.

However, you can also configure Front Office Scanning to treat documents scanned/created in the Front Office Scanning client as a batch of a scan queue. Instead of being ad hoc imported into OnBase, the batch is routed through the batch status queues for the configured scan queue, allowing the document(s) to undergo additional indexing, quality assurance reviews, and/or processing (i.e., Advanced Capture, Full-Page OCR, Bar Code Processing, etc.).

Note: E-Forms can only be assigned to a scan queue if they are first converted to an image. E-Forms are converted to images before a signature is applied to them.

Documents that are uploaded into scan queue batches are scanned in the same way that documents that are ad hoc imported are scanned; no additional user action is required.

To enable a document to be uploaded to a scan queue:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **ScanQueueID** setting. If this value is not present, add it to the **DocType** sub-element.
4. Set the **ScanQueueID** setting to Queue # of the scan queue you are uploading it to.

   For example: `ScanQueueID="101"`

Tip: A scan queue's **Queue #** can be found in the **Scan Queue Configuration** dialog box in the OnBase Configuration module.

5. Within the **DocType** sub-element, locate the **Unindexed** setting. If this value is not present, add it to the **DocType** sub-element.

6. Determine the indexing status of the document being uploaded:
   - To treat the document as fully indexed (i.e., the document will not be routed to the "indexing" batch status queues), set **Unindexed** to **False**.
   - To treat the document as unindexed (the document will be routed to the "indexing" batch status queues), set **Unindexed** to **True**.

     For example: `Unindexed="False"` or `Unindexed="True"`

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its **DocType** sub-elements' settings, including the **ScanQueueID** and **Unindexed** settings, see The DocTypes Element on page 89.

7. Save and close the configuration file.

Configuring General Document Options at the Document Type Level

Several general document options can be configured at the Document Type level using settings in the **DocType** sub-element of the Front Office Scanning configuration file.

These settings require that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

A brief summary of the options is displayed below. For specific information on the options, see The DocTypes Element on page 89.

Setting	Description	Potential Values
ImageScale	This setting allows you to specify how documents assigned to the Document Type associated with this Document Type button are displayed, by default, in the **Working** window. **Tip:** At any time documents can be displayed differently by clicking one of the **Fit to...** toolbar buttons or by selecting one of the **View | Scale to...** option in the Main Menu. This setting takes precedence over the **imagescale** setting in the **ScanOptions** element. That setting sets the default behavior for how all pages are displayed in the **Working** window.	If **imagescale** is set to **fitwidth**, then documents in the Working window are displayed as Fit to Width by default. If **imagescale** is set to **fitheight**, then documents in the Working window are displayed as **Fit to Height** by default. If **imagescale** is set to **fitimage**, then documents in the Working window are displayed as **Fit in Window** by default. If **imagescale** is set to **fullsize**, then documents in the Working window are displayed as their actual size. **Tip:** For more information on these display options, see The Front Office Scanning Toolbar on page 265.

Setting	Description	Potential Values
PixelType	This setting is used to determine the color of the document that is scanned or converted to an image when scanning documents or when converting E-Forms to images. **Tip:** When converting E-Forms to images, it is considered a best practice to create bi-tonal (black and white) images.	If **pixeltype** is set to **BW**, the resulting images will be black and white. If **pixeltype** is set to **GRAY**, the resulting images will be grayscale. If **pixeltype** is set to **RGB**, the resulting images will be color.
BitDepth	This setting sets the number of bits per pixel for each color plane (specified by the **pixeltype** setting) when scanning is initiated by clicking the input button associated with this Document Type button. **Note:** This setting is only used when scanning documents. **Note:** This setting overrides the **BitDepth** setting in the **ScanOptions** section of the configuration file.	Acceptable values for the **bitdepth** setting are **1**, **4**, or **8**. **Tip:** The higher the **bitdepth**, the more accurate the images will be.
XResolution	This setting sets the horizontal resolution for documents scanned/ created by clicking the input button associated with this Document Type button. This setting is used when scanning documents or when converting E-Forms to images.	Set the **xresolution** setting to a value greater than zero. A typical document's resolution is 200 DPI. If a value is specified for the **yresolution** setting, but not for the **xresolution** setting, the **yresolution** value is used for the **xresolution** setting as well. **Tip:** It is considered a best practice to ensure that a document's resolution is always square (e.g., 100x100, 200x200, 300x300, etc.), meaning the **xresolution** and **yresolution** settings should always be the same.

Setting	Description	Potential Values
YResolution	This setting sets the vertical resolution for documents scanned/created by clicking the input button associated with this Document Type button. This setting is used when scanning documents or when converting E-Forms to images.	Set the **yresolution** setting to a value greater than zero. A typical document's resolution is 200 DPI. If a value is specified for the **xresolution** setting, but not for the **yresolution** setting, the **xresolution** value is used for the **yresolution** setting as well. **Tip:** It is considered a best practice to ensure that a document's resolution is always square (e.g., 100x100, 200x200, 300x300, etc.), meaning the **xresolution** and **yresolution** settings should always be the same.
DisplayPage	This setting is only used when creating a document from a multi-page image template. It allows you to specify which page of the image template to display first **Note:** If a TOPAZ device is being used to mark up an image template, this setting is used to determine the page that is displayed on the device.	Set the **displaypage** setting to contain the page number of the of the image template page that is to be displayed first. To display the last page of the template form, set the **displaypage** setting to **0**. If no value is set for the **displaypage** setting, or if the setting is not present, the first page of the image template is displayed by default.
AutoDiscard	This setting configures the Front Office Scanning client to automatically discard images once they are scanned/created in the Front Office Scanning client (e.g., once they are scanned or once the image template or E-Form is displayed in the **Working** window). **Tip:** The **autodiscard** setting is often used in conjunction with the **preprint** setting to print a document without storing it in OnBase.	If **autodiscard** is set to **true**, documents are automatically discarded once it is scanned/created. If **autodiscard** is set to **false**, documents remain in the Working window once they are scanned/created.

Configuring Markup Options at the Document Type Level

Several markup options can be configured at the Document Type level using settings in the **DocType** sub-element of the Front Office Scanning configuration file.

These settings require that your Front Office Scanning client be configured to have multiple input buttons (i.e., the **multiplebuttons** setting in the **ScanOptions** element is set to **true**).

A brief summary of the options is displayed below. For specific information on the options, see The DocTypes Element on page 89.

Setting	Description	Potential Values
PenWidth	This setting is used to set the width of the line created by the drawing tool when marking up a template document or the width of the pen stroke used when signing a document via a signature device (e.g., a tablet or a TOPAZ signature pad).	The default value is **8**; a thinner pen stroke can be configured by setting the **penwidth** setting to a value between **1** and **7**, and a wider pen stroke can be used by setting the **penwidth** setting to **9** or larger. Setting the **penwidth** setting to **8** will leave the width of the drawing tool at the pre-determined width based on the image's resolution.
SkipMarkup	This setting configures the Front Office Scanning client to automatically assign a document created from an image template to the associated Document Type without displaying the image template for markups and without requiring the user to click the Document Type button.	If **skipmarkup** is set to **true**, when the input button is clicked the image template is briefly displayed in the **Working** window, but is cleared without being displayed for markups and is automatically assigned to the associated Document Type without requiring users to click the Document Type button. If **skipmarkup** is set to **false**, or if no value is present, image templates are displayed for markups and are assigned to a Document Type by clicking a Document Type button. **Note:** If **skipmarkup** is set to **true** for an input button that also has **templatesource** set to **printmon** (to use images captured by the Hyland Virtual Print Driver), the Front Office Scanning client still displays the image template and requires the user to click the Document Type button to assign the Document Type, but the user cannot add markups to the image

Configuring Merge Items

A merge item is a way to stamp data (e.g., text, bar codes, a signature, a webcam image, etc.) onto a document that is created/scanned in the Front Office Scanning client.

There are four types of merge items available for documents created in the Front Office Scanning client:

- **Document Merge Items**. A Document Merge Item is a pre-configured layout that is independently created and configured and can be assigned to one or more Document types.

  A Document Merge Item may consist of an overlay, a font, and/or Keyword Values that are stamped onto the document.
- **Data Set Keyword Merge Items**. A Data Set Keyword Merge is a Front Office Scanning-only configuration that is assigned at the Document Type button-level.

  When a document is assigned to a Document Type in the Front Office Scanning client by clicking the associated Document Type button, one or more Keyword Values from the selected Data Set are stamped onto the document. These Keyword Values may be represented by text or a Code 3 of 9, Code 128, DataMatrix, PDF417, or QR code bar code.
- **Image Merge Items**. An Image Merge is a Front Office Scanning-only configuration that is assigned at the Document Type button-level.

  When a document template is selected by clicking the input button associated with the Document Type, a webcam captures a still image and stamps it onto the document.
- **Signature Merge Items**. A Signature Merge Item is a Front Office Scanning-only configuration that allows signatures captured from a signature device (for example, a tablet or a TOPAZ signature pad) to be stamped directly on a document.

Note: Signatures may also be added as a markup to a document, as opposed to stamping them on a document. For more information on adding a signature as a markup, see Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device on page 189.

Configuring Document Merge Items

There are two steps needed to configure a Document Merge Item for use with Front Office Scanning:

1. **Create the Document Merge Item**. See Creating a Document Merge Item on page 200.
2. **Assign the Document Merge Item to a Document Type**. See Assigning a Document Merge Item to a Document Type on page 204.

Creating a Document Merge Item

A Document Merge Item is a pre-configured layout comprised of an overlay, font, and, optionally, data (e.g., Keyword Values, the user name of the current user, etc.). When a Document Merge Item is applied, the specified overlay and data is redacted onto the document (i.e., the Document Merge Item information is stamped onto the original document).

Document Merge Items are created in the OnBase Configuration module; once configured, Document Type Merge Items can be assigned to one or more Document Types.

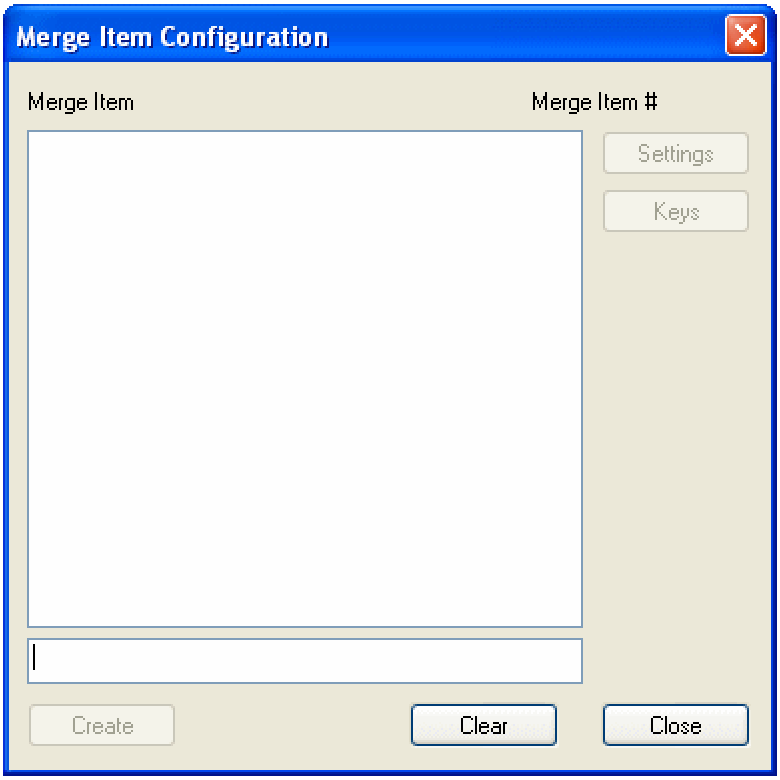
In order to configure merge items, you must belong to a User Group with the **Document Configuration** configuration right. For more information on User Group rights, contact your system administrator.

There are two types of Document Merge Items you can create:

- **Front Office Scanning Indexing**. The Document Merge Item is automatically assigned to the document (i.e., it is stamped on the document) when a document is assigned to a Document Type in the Front Office Scanning client.
- **HL7 Document Merge Item**.The Document Merge Item automatically creates a document from data from an HL7 message detected by the HL7 Listener and the Document Merge Item.

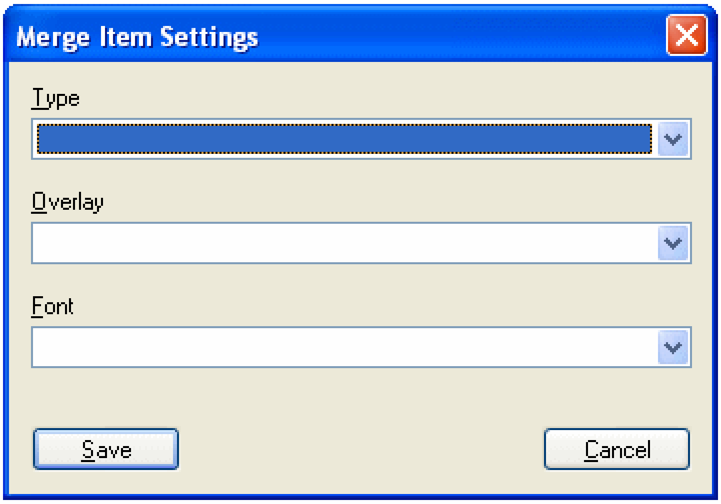
To configure a Document Merge Item:

1. From the OnBase Configuration module, click **Document | Document Merge Items**. The **Merge Item Configuration** dialog box is displayed.



2. Enter a name for the Document Merge Item you are creating in the **Merge Item** field.

3. Click **Create**. The **Merge Item Settings** dialog box is displayed.



Note: To modify an existing Document Merge Item, select it from the Merge Item list and click **Settings** to display the **Merge Item Settings** dialog box.

4. Use the **Type** drop-down list to select the type of Document Item Merge that you are creating (i.e., **Front Office Scanning Digital Signing**, **Front Office Scanning Indexing**, or **HL7 Document Merge Item**).

   The Document Merge Item type determines when the Document Merge Item is applied to the document.
5. Use the **Overlay** drop-down list to specify the overlay that is applied to the document as part of the Document Merge Item.

   The image to be used as the overlay must be stored in OnBase in the **SYS Overlay Images** Document Type. All documents stored in the **SYS Overlay Images** Document Type are available to be selected from the **Overlay** drop-down list.

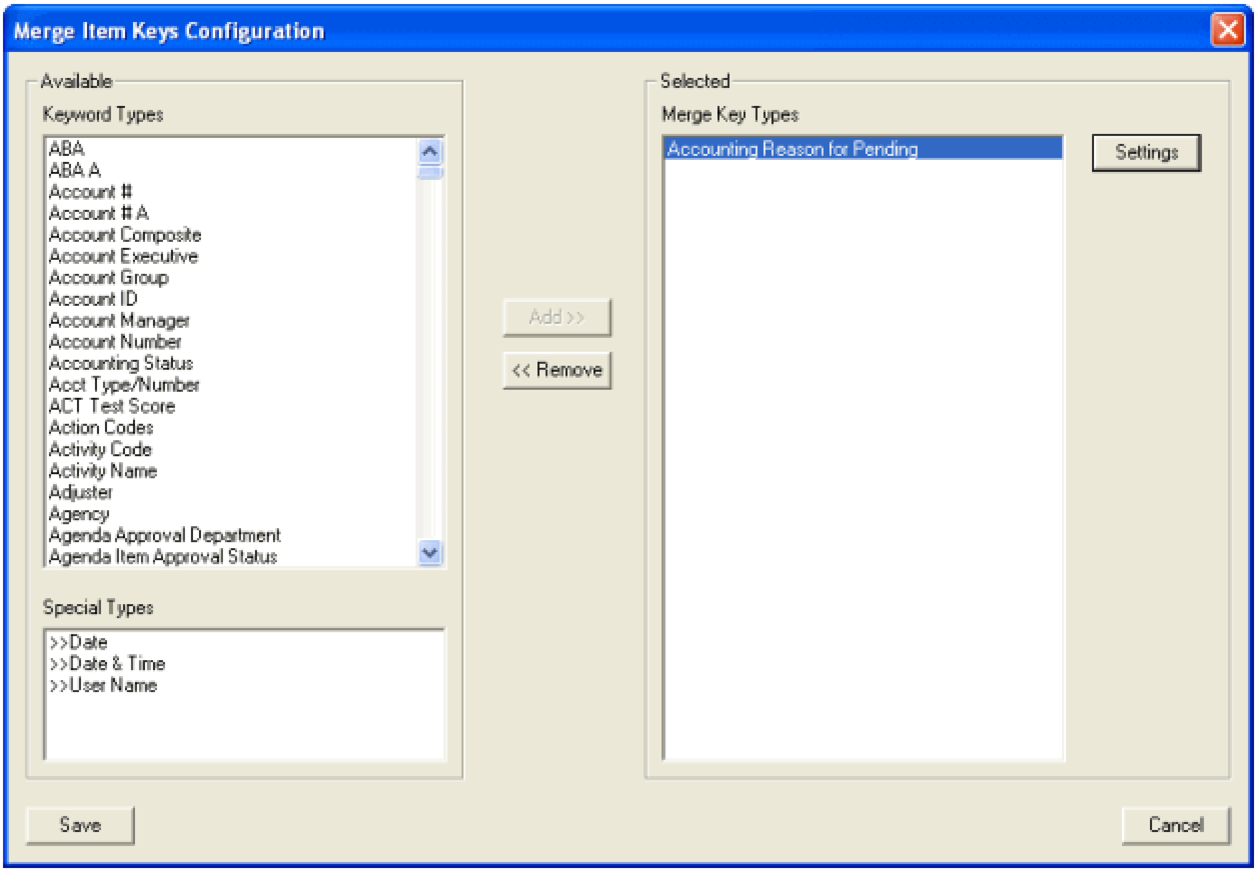
Note: If a multi-page overlay is used as part of a merge item for Front Office Scanning, the first page of the overlay is used and all subsequent pages are ignored.

6. Use the **Font** drop-down list to specify the font to be used by the Document Merge Item. The selected font is used to stamp data (e.g., Keyword Values, the user name of the current user, etc.) configured as part of the Document Merge Item on the document(s).

   All fonts configured in OnBase are displayed in the **Font** drop-down list.
7. Click **Save**. The **Merge Item Settings** dialog box is closed and you are returned to the **Merge Item Configuration** dialog box.

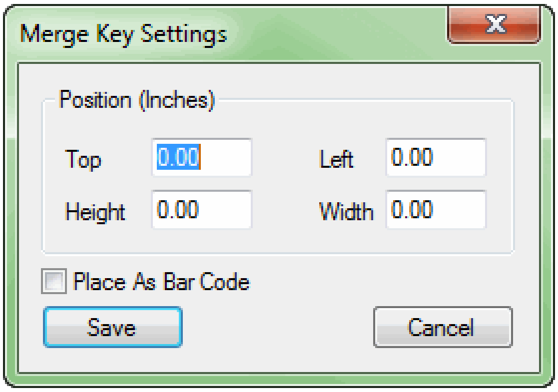
8. To add data (e.g., Keyword Values, the user name of the current user, etc.) to the Document Merge Item, click **Keys**. The **Merge Item Keys Configuration** dialog box is displayed.

Note: This step is not required. A Document Merge Item can be configured with only an overlay.



9. From the **Available** section lists, select a Keyword Type or Special Type (i.e., metadata about the document being created, such as the date or the date and time the Document Merge Item is applied to the document or the user name of the current user).

10. Click **Add>>**. The **Merge Key Settings** dialog box displays.



11. Using the **Top** and **Left** fields, specify the desired position of the data value on the document with respect to the overlay being applied.

    For example, entering **0.5** in the **Top** field and **1.0** in the **Left** field would place the Keyword Value 0.5 inches from the top and one inch from the left edge of the overlay once the Document Merge Item is applied to the document.
12. Using the Height and Width fields, specify the size of the text area that the Keyword Value is to be stamped in.

    If the length of the Keyword Value is too long for the specified text area, the Keyword Value is truncated to fit in the area.

Note: Only one instance of a Keyword Value can be applied to a document via a Document Merge Item.

13. To represent the Keyword Value as a Code 3 of 9, Code 128, DataMatrix, PDF417, or QR code bar code instead of text, select the **Place As Bar Code** check box.

    When this option is selected, the **Height** and **Width** values are discarded.
14. Click **Save**. The **Merge Key Setting** dialog box is closed and you are returned to the **Merge Item Keys Configuration** dialog box.

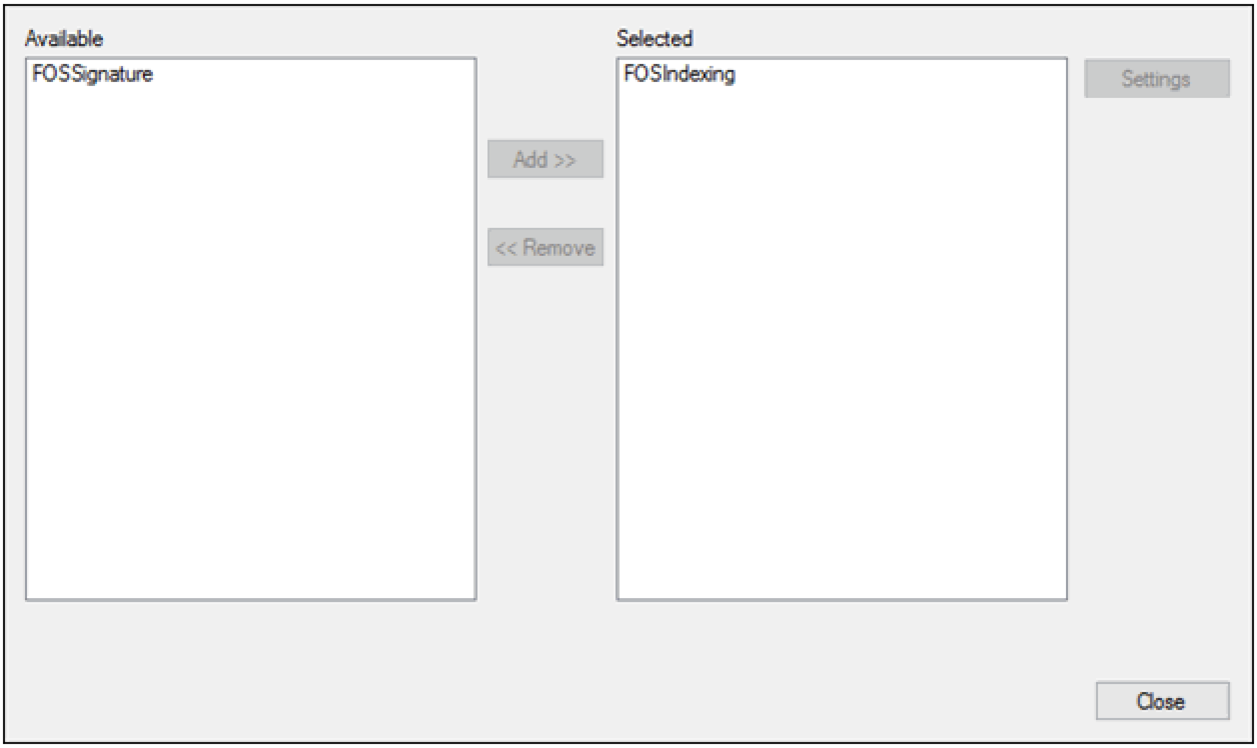
    Note that the Keyword Type you selected in Step 9 has been moved from the Available section to the Selected section.
15. Repeat Steps 9-14 for any additional data values you would like to add to the Document Merge Item.

    To remove a Keyword Type from the Selected list and return it to the available list (i.e., to remove the Keyword Type from the Document Merge Item), select it in the Selected list and click **<<Remove**.
16. When all data values have been configured for the Document Merge Item, click **Save** to save your setting and close the **Merge Item Keys Configuration** dialog box.

Assigning a Document Merge Item to a Document Type

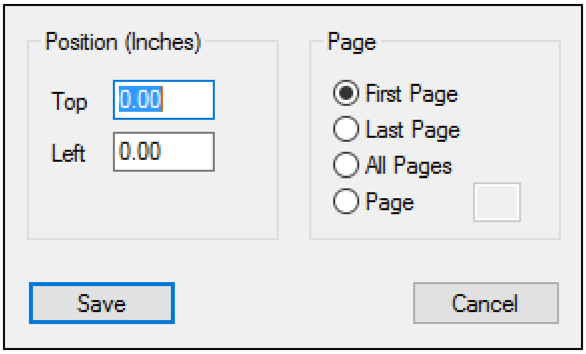
Once a Document Merge Item has been configured, it must be assigned to the Document Type(s) that will use it.

1. From the OnBase Configuration module, click **Document | Document Types**. The **Document Types** dialog box is displayed.
2. From the Document Type list, select the Document Type that you are assigning the Document Merge Item to.
3. Click **Merge**. The **Merge Items Configuration** dialog box is displayed.



4. From the Available list, select the Document Merge Item you want to assign to the selected Document Type.

5. Click **Add>>** to assign the selected Document Merge Item(s) to Document Type. The **Document Type Merge Item Settings** dialog box is displayed.



Note: These settings apply only to Front Office Scanning Indexing and Front Office Scanning Digital Signing Document Merge Items types.

6. The options in the **Position** field allow you to specify the position of the Document Merge Item “stamp” on the on the document.

   In the **Top** and **Left** fields, enter the distance (in inches) you would like the top, left corner of the Document Merge Item “stamp” to be displayed from the top, left corner of the document.

7. In the Page section, select the radio button that specifies which page(s) of the document you would like the Document Merge Item “stamp” to be applied to.

Page Option	Description
First Page	The Document Merge Item is displayed only on the first page of the document.
Last Page	The Document Merge Item is displayed only on the last page of the document.
All Pages	The Document Merge Item is displayed on all pages of the document.
Page	The Document Merge Item is displayed only on the specified page. **Note:** If there are fewer pages in the document than the selected page (e.g., the document contains two pages and the Document Merge Item is configured to display on the third page), the Document Merge Item is not applied to the document.

8. When finished, click **Save**. The **Document Type Merge Item Settings** dialog box is closed and you are returned to the **Merge Items Configuration** dialog box.

   Note that the Document Merge Item that you selected in Step 4 has been moved from the Available list to the Selected list.
9. Repeat Steps 4-8 for each Document Merge Item that you would like to assign to the Document Type.

Note: Multiple Document Merge Items may be assigned to the same Document Type; however, only one of each type (e.g., Front Office Scanning Indexing, Front Office Scanning Digital Signing, HL7 Document Merge Item) can be assigned to each Document Type.

   To remove a Document Merge Item from the Selected list and return it to the available list (i.e., to remove the Document Merge Item from the Document Type), select it in the Selected list and click **<<Remove**.
10. When all Document Merge Items have been configured for the Document Type, click **Save** to save your setting and close the **Merge Items Configuration** dialog box.

    The Document Merge Item "stamp" is automatically applied to the document when the user clicks a Document Type button and assigns the document to a Document Type configured to use the Document Merge Item.

Configuring a Data Set Keyword Merge

A Data Set Keyword Merge is a feature that allows Keyword Values to be applied (i.e., "stamped") onto a document when it is assigned to a Document Type. The Keyword Values can be stamped on the document as text or as a Code 3 of 9, Code 128, DataMatrix, PDF417, or QR code bar code.

A Data Set Keyword Merge is similar to a Document Merge Item, but they differ in several significant ways:

- A Data Set Keyword Merge is specific to Front Office Scanning; it is configured in the Front Office Scanning configuration file, not the OnBase Configuration module.
- A Data Set Keyword Merge can only "stamp" Keyword Values on the document, whereas a Document Merge Item can "stamp" an overlay and data values (Keyword Values and metadata about the time the Document Merge Item was applied to the document).

Nearly every aspect of a Data Set Keyword Merge is configurable, from the Keyword Types whose values are displayed on the document; to the location where the Keyword Values are stamped on the document; to whether the Keyword Values are displayed as Code 3 of 9, Code 128, DataMatrix, PDF417, or QR code bar codes, or as text (and the font and size of the text used to display the Keyword Values).

The ability to apply a Data Set Keyword Merge to a document is controlled at the Document Type level. This allows you to apply a different Data Set Keyword Merge to each Document Type, or to decide not to apply a Data Set Keyword Merge to Document Type at all.

Any number of Data Set Keyword Merges can be configured for your Front Office Scanning solution, but only one Data Set Keyword Merge can be configured per Document Type button.

There are two steps needed to configure a Data Set Keyword Merge:

1. **Configure the Data Set Keyword Merge Item in the Front Office Scanning Configuration File**. See Configuring a Data Set Keyword Merge Item on page 207.
2. **Assign the Data Set Keyword Merge Item to One or More Document Type Buttons**. See Assigning a Data Set Keyword Merge to a Document Type Button on page 210.

Configuring a Data Set Keyword Merge Item

Data Set Keyword Merges are configured in the Front Office Scanning configuration file. All Data Set Keyword Merge information is contained in the **MergeItems** element of configuration file; the configuration information for each individual Data Set Keyword Merge is contained in a **MergeItem** sub-element of the **MergeItems** element.

To configure a Data Set Keyword Merge:

1. In the Front Office Scanning configuration file, locate the **MergeItems** element. If this element is not present, add it to the configuration file.

Tip: For more information on the Front Office Scanning configuration file’s **MergeItems** element and the **MergeItem** sub-element, including a detailed description of its format and settings, see The MergeItems Element on page 80.

2. Add a **MergeItem** sub-element to the **MergeItems** element.

   Each **MergeItem** sub-element contains the data associated with one Data Set Keyword Merge.
3. Add the **MergeID** setting to the **MergeItem** sub-element. The **MergeID** setting is a unique, numeric identifier for the Data Set Keyword Merge represented by this **MergeItem** sub-element.

   For example:

   ```
   <MergeItem MergeID="1">
   ```

Tip: It is recommended that the first **MergeItem** sub-element has a **MergeID** of **1**, the second **MergeItem** sub-element has a **MergeID** of **2**, etc.

Note: The **MergeID** value is also assigned to one or more Document Type buttons; for more information, see Assigning a Data Set Keyword Merge to a Document Type Button on page 210.

4. Add the **Font** setting to the **MergeItem** sub-element. The **Font** setting allows you to specify the font used to displayed Keyword Values when they are stamped on the document as part of the Data Set Keyword Merge.

   For example:

   ```
   <Font>Times New Roman</Font>
   ```

   If the **Font** setting is missing or no value is specified, **Arial** is selected by default.
5. Add the **FontSize** setting to the **MergeItem** sub-element. The **FontSize** setting allows you to specify the size of the font used to displayed Keyword Values when they are stamped on the document as part of the Data Set Keyword Merge.

   For example:

   ```
   <FontSize>12</FontSize>
   ```

   If the **FontSize** setting is missing or no value is specified, **12** is selected by default.
6. Add the **Page** setting to the **MergeItem** sub-element, outside any **Keyword** tags. The **Page** setting allows you to specify the default page of the document the Data Set Keyword Merge is applied to.

   For example:

   ```
   <Page>1</Page>
   ```

   To apply the Data Set Keyword Merge to all pages of the document, set the **Page** setting to **-1**.

Note: You can also add the **Page** setting to a **Keyword** sub-element to specify a different page of the document to which to apply the Data Set Keyword Merge for just the Keyword Value specified in this **Keyword** sub-element (see the following step).

7. Add the **Keywords** sub-element to the **MergeItem** element. The **Keywords** sub-element allows you to configure all Keyword Types whose values are "stamped" on the document as part of a Data Set Keyword Merge.

   The **Keywords** element consists of one or more **Keyword** sub-elements. Each **Keyword** sub-element represents the data associated with one Keyword Value that is part of the Data Set Keyword Merge.

   To configure a **Keyword** sub-element:

   a. Add the **Keyword** sub-element to the **Keywords** element.
   b. Add the **Name** setting to the **Keyword** sub-element. The **Name** setting allows you to specify the Keyword Type whose associated Keyword Value from the selected Data Set is “stamped” on the document as part of the Data Set Keyword Merge.

      For example:

      ```
      <Name>MRN</Name>
      ```
   c. Add the **KeyLeft** setting to the **Keyword** sub-element. The **KeyLeft** setting allows you to specify horizontal position of the Keyword Value on the document; enter the distance (in inches) between the left edge of the page and the beginning (left edge) of the Keyword Value stamp.

      For example:

      ```
      <KeyLeft>1.5</KeyLeft>
      ```
   d. Add the **KeyTop** setting to the **Keyword** sub-element. The **KeyTop** setting allows you to specify vertical position of the Keyword Value on the document; enter the distance (in inches) between the top of the page and the top of the Keyword Value stamp.

      For example:

      ```
      <KeyTop>1.5</KeyTop>
      ```
   e. Add the **BarCode** setting to the **Keyword** sub-element. The **BarCode** setting allows you to display the Keyword Value as a Code 3 of 9, Code 128, DataMatrix, PDF417, or QR code bar code instead of text.

      To display the Keyword Value as a bar code, set **BarCode** to **True**. For example:

      ```
      <BarCode>True</BarCode>
      ```

      To display the Keyword Value as text, set the **BarCode** setting to **False**. For example:

      ```
      <BarCode>False</BarCode>
      ```

      If the **BarCode** setting is missing or no value is specified, the Keyword Value is displayed as text by default.

Note: Once the **Keyword** sub-element is configured, ensure that you add the end tag (i.e., **</Keyword>**) to close it.

   f. Repeat Steps 7a-7e to create a **Keyword** sub-element for each Keyword Value that is to be included in the “stamp” applied by the Data Set Keyword Merge.

8. Once all Keyword Values have been configured for the Data Set Keyword Merge, ensure that you add the end tag (i.e., **</Keywords>**) to close the **Keywords** sub-element of the **MergeItem** element.
9. Once the Data Set Keyword Merge has been configured, ensure that you add the end tag (i.e., **</MergeItem>**) to close the **MergeItem** sub-element.

10. Repeat Steps 2-9 to create a **MergeItem** sub-element for each Data Set Keyword Merge that you would like to create for your Front Office Scanning solution.

Assigning a Data Set Keyword Merge to a Document Type Button

The ability to apply a Data Set Keyword Merge to a document is controlled at the Document Type level. This allows you to apply a different Data Set Keyword Merge to each Document Type, or to decide not to apply a Data Set Keyword Merge to a Document Type at all.

Once a Data Set Keyword Merge has been configured (i.e., its **MergeItem** sub-element has been added to the Front Office Scanning configuration file), you must assign it to the Document Type button(s) that the “stamp” is associated with.

To assign a Data Set Keyword Merge to a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **MergeID** setting. If this value is not present, add it to the **DocType** sub-element.

   Set the **MergeID** setting to the **MergeID** value associated with the Data Set Keyword Merge you would like to assign to the Document Type button (i.e., the **MergeID** setting assigned to the Data Set Keyword Merge’s associated **MergeItem** sub-element).

   For example: `MergeID="1"`

Tip: For more information on the Front Office Scanning configuration file’s **DocTypes** element and its DocType sub-elements’ settings, including the **MergeID** setting, see The DocTypes Element on page 89.

4. Save and close the configuration file.

Configuring an Image Merge

An Image Merge is a feature that allows you to capture an image using a webcam and stamp the image on a document.

An Image Merge can be configured along with a Data Set Keyword Merge to stamp both the webcam image and data values (document metadata or Keyword Values) on the document.

Like a Data Set Keyword Merge, an Image Merge is specific to Front Office Scanning and is configured in the Front Office Scanning configuration file, not the OnBase Configuration module.

The Image Merge is configurable; you can configure the location of the merged image and the size and scale of the image.

The ability to apply an Image Merge is controlled at the Document Type level. This allows you to apply multiple Image Merge Items to a single document, to apply different Image Merge Items to each Document Type, or to decide not to apply an Image Merge to a Document Type at all.

There are two steps needed to configure an Image Merge:

1. **Configure the Image Merge Item in the Front Office Scanning Configuration File**. See Configuring an Image Merge Item on page 211.
2. **Assign the Image Merge Item to One or More Document Type Buttons**. See Assigning an Image Merge to a Document Type Button on page 212.

Configuring an Image Merge Item

Image Merges are configured in the Front Office Scanning configuration file. All Image Merge information is contained in the **MergeItems** element of configuration file; the configuration information for each individual Image Merge is contained in a **MergeItem** sub-element of the **MergeItems** element.

Each **MergeItem** sub-element can have only one **Image** sub-element configured for it. To configure your solution for more than one Image Merge, you must create and configure a separate **MergeItem** sub-element for each Image Merge.

If you wish to configure a Document Type to perform both an Image Merge and a Data Set Keyword Merge, you can configure the **Image** sub-element and the **Keywords** sub-element within the same **MergeItem** sub-element. Alternatively, if you only wish to perform an Image Merge without stamping any Keyword Values onto the document, you can configure the **Image** sub-element within its own **MergeItem** sub-element and omit the **Keywords** sub-element.

To configure an Image Merge:

1. In the Front Office Scanning configuration file, locate the **MergeItems** element. If this element is not present, add it to the configuration file.

Tip: For more information on the Front Office Scanning configuration file's **MergeItems** element and the **MergeItem** sub-element, including a detailed description of its format and settings, see The MergeItems Element on page 80.

2. Add a **MergeItem** sub-element to the **MergeItems** element.

   Each **MergeItem** sub-element contains the data associated with one Image Merge.
3. Add the **MergeID** setting to the **MergeItem** sub-element. The **MergeID** setting is a unique, numeric identifier for the Image Merge represented by this **MergeItem** sub-element.

   For example:

   ```
   <MergeItem MergeID="1">
   ```

Tip: It is recommended that the first **MergeItem** sub-element has a **MergeID** of **1**, the second **MergeItem** sub-element has a **MergeID** of **2**, etc.

Note: The **MergeID** value is also assigned to one or more Document Type buttons; for more information, see Assigning an Image Merge to a Document Type Button on page 212.

4. Add an **Image** sub-element to the **MergeItem** sub-element. The Image sub-element allows you to configure the settings for the image to be captured and stamped on the document.

   To configure an **Image** sub-element:

   a. Add the **ImgLeft** setting to the **Image** sub-element. The **ImgLeft** setting allows you to specify the horizontal positioning of the stamped image on the document. Enter the distance (in inches) between the left edge of the page and the left edge of the stamped image.

      For example:

      ```
      <ImgLeft>1.1</ImgLeft>
      ```

   b. Add the **ImgTop** setting to the **Image** sub-element. The **ImgTop** setting allows you to specify the vertical positioning of the stamped image on the document. Enter the distance (in inches) between the top edge of the page and the top edge of the stamped image.

      For example:

      ```
      <ImgTop>2.5</ImgTop>
      ```

   c. Add the **XMax** setting to the **Image** sub-element. The **XMax** setting allows you to specify the maximum width (in pixels) of the stamped image.

      For example:

      ```
      <XMax>5000</XMax>
      ```

   d. Add the **YMax** setting to the **Image** sub-element. The **YMax** setting allows you to specify the maximum height (in pixels) of the stamped image.

      For example:

      ```
      <YMax>3000</YMax>
      ```

   e. Add the **Scale** setting to the **Image** sub-element. The **Scale** setting allows you to specify the scale of the stamped image. For example, **1.0** is the original size of the image, **0.5** is half of the original size, and **2.0** is double the original size.

      For example:

      ```
      <Scale>1.0</Scale>
      ```

Note: The **Scale** setting respects the original aspect ratio of the image, but the aspect ratio can be altered if **XMax** and **YMax** do not also respect the original aspect ratio.

   f. Once all settings have been configured for the **Image** sub-element, ensure that you add the end tag (i.e., **</Image>**) to close the **Image** sub-element in the **MergeItem** sub-element.

5. Once the Image Merge has been configured, ensure that you add the end tag (i.e., **</MergeItem>**) to close the **MergeItem** sub-element.
6. Repeat Steps 2-7 to create a **MergeItem** sub-element for each Image Merge that you would like to create for your Front Office Scanning solution.

Assigning an Image Merge to a Document Type Button

The ability to apply an Image Merge to a document is controlled at the Document Type level. This allows you to apply a different Image Merge to each Document Type, or to decide not to apply an Image Merge to a Document Type at all.

Once an Image Merge has been configured (i.e., its **MergeItem** sub-element and **Image** sub-element have been added to the Front Office Scanning configuration file), you must assign it to the Document Type button(s) that the “stamp” is associated with.

In addition, you must also configure the input button associated with the Document Type to use a webcam to acquire images for the Image Merge.

To assign an Image Merge to a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **MergeID** setting. If this value is not present, add it to the **DocType** sub-element.

   Set the **MergeID** setting to the **MergeID** value associated with the Image Merge you would like to assign to the Document Type button (i.e., the **MergeID** setting assigned to the Image Merge’s associated **MergeItem** and **Image** sub-elements).

   For example: `MergeID="1"`
4. Within the same **DocType** sub-element, locate the **camera** setting. If this value is not present, add it to the **DocType** sub-element.
5. Set the **camera** setting to **true**.

   For example: `camera="true"`
6. If you wish to use a webcam that is not set as your workstation’s default streaming video device, specify the webcam by name using the **cameradevice** setting:
   - Within the **DocType** sub-element, locate the **cameradevice** setting. If this value is not present, add it to the **DocType** sub-element.
   - Set the **cameradevice** setting to the name of the webcam.

     For example: `cameradevice="Logitech WebCam C525"`
7. If you wish to adjust the number of seconds the Front Office Scanning client waits before capturing a still image from a webcam, specify this delay interval using the **shutterdelay** setting:
   - Within the **DocType** sub-element, locate the **shutterdelay** setting. If this value is not present, add it to the **DocType** sub-element.
   - Set the **shutterdelay** setting to the desired interval, between one and ten seconds. The default delay interval is two seconds.

     For example: `shutterdelay="5"`
8. Save and close the configuration file.

Tip: For more information on the Front Office Scanning configuration file’s **DocTypes** element and its DocType sub-elements’ settings, including the **MergeID** setting and **Image** sub-element, see The DocTypes Element on page 89.

Configuring a Signature Merge

A Signature Merge is a feature that allows signatures captured by a TOPAZ device to be stamped on a document scanned/created in the Front Office Scanning client.

Note: Signatures may also be added as a markup to a document, as opposed to stamping them on a document. For more information on adding a signature as a markup, see Configuring a Document Type Button to Capture a Signature as a Markup from a Signature Device on page 189.

Unlike a Document Merge Item or a Data Set Keyword Merge, a Signature Merge allows you to only stamp the signatures captured from a TOPAZ device on a document; overlays and/or data values (document metadata or Keyword Values) cannot be stamped onto a document using a Signature Merge.

Like a Data Set Keyword Merge, a Signature Merge is specific to Front Office Scanning and is configured in the Front Office Scanning configuration file, not the OnBase Configuration module.

The Signature Merge is completely configurable; you can configure the page and the location that the signatures are applied to. You can even configure a Front Office Scanning user's signature to be captured, stored on disk, and stamped on documents as needed.

Note: Capturing a signature on file requires additional configuration. See Configuring a Document Type Button to Use a Signature on File on page 190.

The ability to apply a Signature Merge is controlled at the Document Type level. This allows you to apply multiple Signature Merge Items to a single document, to apply different Signature Merge Items to each Document Type, or to decide not to apply a Signature Merge to a Document Type at all.

There are two steps needed to configure a Signature Merge:

1. **Configure the Signature Merge Item in the Front Office Scanning Configuration File**. See Configuring a Signature Merge Item on page 214.
2. **Assign the Signature Merge Item to One or More Document Type Buttons**. See Assigning a Signature Merge Item to a Document Type Button on page 216.

Configuring a Signature Merge Item

Signature Merges are configured in the Front Office Scanning configuration file. All Signature Merge information is contained in the **SignatureItems** element of the configuration file; the configuration information for each individual Signature Merge is contained in a **SignatureItem** sub-element of the **SignatureItems** element. Each Signature Merge Item represents one captured signature.

To configure a Signature Merge Item:

1. In the Front Office Scanning configuration file, locate the **SignatureItems** element. If this element is not present, add it to the configuration file.

Tip: For more information on the Front Office Scanning configuration file's **SignatureItems** element and the **SignatureItem** sub-element, including a detailed description of its format and settings, see The SignatureItems Element on page 86.

2. Add a **SignatureItem** sub-element to the **SignatureItems** element.

   Each **SignatureItem** sub-element contains the data associated with one captured signature.
3. Add the **SignatureID** setting to the **SignatureItem** sub-element. The **SignatureID** setting is a unique, numeric identifier for the Signature Merge Item.

   For example:

   ```
   <SignatureItem SignatureID="1">
   ```

Tip: It is recommended that the first **SignatureItem** sub-element has a **SignatureID** of **1**, the second **SignatureItem** sub-element has a **SignatureID** of **2**, etc.

Note: The **SignatureID** value is also assigned to one or more Document Type buttons; for more information, see Assigning a Signature Merge Item to a Document Type Button on page 216.

4. Add the **SigOnFile** setting to the **SignatureItem** sub-element. This setting allows you to specify the if the signature is to be captured and stamped on the document or if the signature on file is to be stamped on the document as part of the Signature Merge.

   To immediately stamp on a document a signature captured by the signature device, set **SigOnFile** to **False**. To stamp on a document a signature stored on disk, set **SigOnFile** to **True**.

   For example:

   ```
   <SignatureItem SignatureID="1" SigOnFile="False">
   ```

Note: The ability to stamp a signature on file on a document requires additional configuration. For more information, see Configuring a Document Type Button to Use a Signature on File on page 190.

5. Add the **Page** setting to the **SignatureItem** sub-element. The **Page** setting allows you to specify the page of the document that the signature is stamped on as part of the Signature Merge Item.

   For example:

   ```
   <Page>1</Page>
   ```
6. Add the **Left** setting to the **SignatureItem** sub-element. The **Left** setting allows you to determine the horizontal position of the signature stamp on the document; enter the distance (in inches) between the left edge of the page and the beginning (left edge) of the signature stamp.

   For example:

   ```
   <Left>0.25</Left>
   ```

7. Add the **Top** setting to the **SignatureItem** sub-element. The **Top** setting allows you to determine the vertical position of the signature stamp on the document; enter the distance (in inches) between the top of the page and the top of the signature stamp.

   For example:

   ```
   <Top>0.25</Top>
   ```
8. Add the **Width** setting to the **SignatureItem** sub-element. The **Width** setting allows you to determine the width of the signature stamp once it is applied to the page; enter the width (in inches) of the signature stamp.

   For example:

   ```
   <Width>2.0</Width>
   ```

Tip: It is likely that the document has a signature box or signature line that you can easily obtain this measurement from.

9. Add the **Height** setting to the **SignatureItem** sub-element. The **Height** setting allows you to determine the height of the signature stamp once it is applied to the page; enter the height (in inches) of the signature stamp.

   For example:

   ```
   <Height>1.0</Height>
   ```

Tip: It is likely that the document has a signature box or signature line that you can easily obtain this measurement from.

10. Once the Signature Merge Item has been configured, ensure that you add the end tag (i.e., **</SignatureItem>**) to close the **SignatureItem** sub-element.
11. Repeat Steps 2-10 to create a **SignatureItem** sub-element for each Signature Merge Item that you would like to create for your Front Office Scanning solution. Each Signature Merge Item represents one captured signature.

Assigning a Signature Merge Item to a Document Type Button

The ability to apply one or more Signature Merges to a document is controlled at the Document Type level. This allows you to apply a one or more signatures to a document, apply different signatures to each Document Type, or to not to apply a signature to a Document Type at all.

Once one or more Signature Merges have been configured (i.e., their **SignatureItem** sub-elements have been added to the Front Office Scanning configuration file), you must assign it to the Document Type button(s) that the “stamp” is associated with.

To assign a Signature Merge to a Document Type button:

1. In the Front Office Scanning configuration file, locate the **DocTypes** element.
2. Identify the **DocType** sub-element associated with the Document Type button you are configuring.
3. Within the **DocType** sub-element, locate the **SignatureID** setting. If this value is not present, add it to the **DocType** sub-element.

4. Set the **SignatureID** setting to the **SignatureID** values associated with the Signature Merges you would like to assign to the Document Type button (i.e., the **SignatureID** setting assigned to the Signature Merges' associated **SignatureItem** sub-elements).

   For example: `SignatureID="1,2,3"`
5. Optionally, the **penwidth** attribute in the **DocType** element can be used to control the width of the pen stroke used for the signature if the default pen stroke is too thin or too wide.

   By default, the **penwidth** setting is set to **8**. To decrease the width of the pen stroke, set penwidth setting to a value between **1** and **7**. To increase the width of the pen stroke, set the penwidth setting to a value of **8** or higher.

   For example: `Penwidth="10"`

Tip: For more information on the Front Office Scanning configuration file's **DocTypes** element and its DocType sub-elements' settings, including the **SignatureID** and **Penwidth** settings, see The DocTypes Element on page 89.

6. Save and close the configuration file.

The Front Office Scanning Configuration File

Overview

The Front Office Scanning configuration file is an XML file that contains all of the configuration information used by the Front Office Scanning client. For example, the Front Office Scanning configuration file contains information on scanner settings, OnBase Document Types and Keyword Types, the paths to image templates and E-Forms, and connection information to the OnBase Application Server.

A properly formatted Front Office Scanning configuration file is required to launch the Front Office Scanning client. If the configuration file cannot be opened (e.g., it contains incorrectly formatted XML) or if contains a misspelled or invalid OnBase Document Type, an error message is displayed and the Front Office Scanning client is not launched.

Tip: After making a change to your Front Office Scanning configuration file, try to open it using a web browser. If an error is displayed and the file cannot be opened, there is an XML formatting error that must be corrected before the configuration file can be used with the Front Office Scanning client.

For a detailed description of the settings displayed in the following sample configuration file, see The Front Office Scanning Configuration File on page 36.

Sample Front Office Scanning Configuration File

The following is an example of a Front Office Scanning configuration file. This sample illustrates all possible settings that can be used in a Front Office Scanning configuration; it is unlikely that all of the elements included below would be needed or used in your solution.

It is recommended that you use the following sample configuration file as a guide when creating a configuration file for an actual Front Office Scanning solution; due to the number of configuration options and the sample data contained in the following example that may or may not be applicable to the Front Office Scanning solution you are configuring, it is not recommended that you copy this file for use in a production environment.

Note: While it is recommended that you use the following sample configuration file as a guide, a less comprehensive configuration file template is also created when you install the Front Office Scanning client using the Hyland Front Office Scanning installer. By default, this file template is stored in **C:\Program Files\Hyland\Front Office Scanning\Template\FOS** or **C:\Program Files(x86)\Hyland\Front Office Scanning\Template\FOS**. If you use this file template as a starting point, be aware that you must still edit, add, or remove settings as necessary to accommodate your Front Office Scanning solution.

Tip: If you would like the Front Office Scanning configuration file's settings to be applied to multiple workstations at the same time, consider storing the file on a UNC path.

```
<?xml version="1.0"?>

<FOSCONFIGURATION FileImportPath="C:\FOS\Default Image Import"
PreventAutofillOnUpload="true" encryptfiles="true" multiplepaths="true"
aedatasetselect="false" reusedatasets="false" foregroundupload="false"
disconnected="false" deleteafterimport="true" closeafterupload="false"
UseSOAPUpload="false" UseSOAPDownload="false" maintainLocalCopy="true"
allowmodifykeywords="false" RemoveSharePathDataSetsOnClose="false"
imagepng="false" DisableFileImport="false">

<Display aliasing="Scale to Gray" largetoolbar="true" interface="advanced"
disableprint="true" smallbuttons="true" dochitlist="true" fullscreenswap="true"
clonestart="CTRL+ALT+F7" clonestop="CTRL+ALT+F8"></Display>

<ScreenName>Hyland Hospital - Registration Desk</ScreenName>

<Columns>

<Column>MRN</Column>

<Column>Patient Name</Column>

<Column>Address</Column>

<Column>City</Column>

<Column>State</Column>

</Columns>

<SharePath>C:\Program Files\Hyland\Front Office Scanning\Data</SharePath>

<DataSetSourceURL>False</DataSetSourceURL>

<SiteID>10915</SiteID>

<MaintainLocalCopyPath>C:\Program Files\Hyland\Front Office Scanning\LocalCopy</
MaintainLocalCopyPath>
```

```xml
<Application>
<Command>"C:\Program Files\Hyland\Disconnected Scanning\disconnectedscan.exe"</
Command>
<Tooltip>Click to launch OnBase Disconnected Scanning</Tooltip>
</Application>
<DataSetListText>Available Data Sets</DataSetListText>
<DataSetLifeSpan>12</DataSetLifeSpan>
<DataSetForm file="C:\Program Files\Hyland\Front Office Scanning\Patient_Data.htm"
width="400" height="200"></DataSetForm>
<Printer>\\SRV-PRN\PRN-PS</Printer>
<CommParams domain="" username="DMadison" password="password" credentials=""
dbname="DATASOURCE" url="http://ServerName/appserver/service.asmx"
ntsecurity="false"> automaticClientTimeout="5"</CommParams>
<ScanOptions promptForFirstDevice="false" promptForPrintMon="prompt"
scanner="FUJITSU fi-4110CUd" multiplebuttons="true" onestep="false"
batchscan="false" imagescale="" nativemode="" hardwarecompress="" bitdepth=""></
ScanOptions>
<TempPath>C:\Program Files\Hyland\Front Office Scanning\Temp</TempPath>
<Keywords>
<Keyword KeywordAutofill="true" ID="" type="alpha" minLength="12"
maxLength="24">Patient Name</Keyword>
<Keyword>Address</Keyword>
<Keyword>City</Keyword>
</Keywords>
<DataSet>
<Keyword KeywordAutofill="true" ID="" type="alpha" minLength="10"
maxLength="30">Medical Record Number</Keyword>
<Keyword>State</Keyword>
</DataSet>
<Retrieval>
<Keyword>Account #</Keyword>
</Retrieval>
<RetrievalDocTypes>
<DocType>MED - Pre-Admission Survey</DocType>
<DocType>MED - Intake Form</DocType>
</RetrievalDocTypes>
```

```
<Filter>
<Keyword name="Account Number" value="123456" default="true">
<DocType filterid="1"/>
</Keyword>
<Keyword name="Name" value="Woodrow Wilson" default="false">
<DocType filterid="1"/>
</Keyword>
</Filter>
<MergeItems>
<MergeItem MergeID="1">
<Font>Garamond</Font>
<FontSize>16</FontSize>
<Page>1</Page>
<Keywords>
<Keyword>
<Page>2</Page>
<Name>Account Number</Name>
<KeyLeft>0.25</KeyLeft>
<KeyTop>0.25</KeyTop>
<BarCode>True</BarCode>
<BarCodeType>Code39</BarCodeType>
<BarText>true</BarText>
<BarHeight>25</BarHeight>
<BarWidth>100</BarWidth>
</Keyword>
</Keywords>
</MergeItem>
</MergeItems>
<SignatureItems>
<SignatureItem SignatureID="1" SigOnFile="False" Skippable="False">
<Page>1</Page>
<Left>2.5</Left>
<Top>7.0</Top>
```

```
<Width>3.0</Width>

<Height>1.0</Height>

</SignatureItem>

</SignatureItems>

<SignatureOnFilePath>C:\Program Files\Hyland\Front Office Scanning\Signature</
SignatureOnFilePath>

<DocTypes>

<DocType name="MED - ID Card" onestep="false" filterid="1" mergeid="1"
signatureid="1" displayname="ID Card" bitmap="C:\FOS\images\buttons\IDCard.bmp"
warnIfNotPresent="true" displayscanner="" scanner="FUJITSU fi-4110CUd"
camera="true" cameradevice="Logitech WebCam C525" shutterdelay="5"
nativemode="false" hardwarecompress="true" penwidth="8" required="false"
multipledocs="true" copy="true" imagescale="fitwidth" filtersingledoctype="false"
daterangedays="" SkipADFCheck="false" Autofeed="true" Showui="false" Duplex="true"
preprint="false" autoprint="false" scanqueueid="" unindexed="" Brightness="0"
Contrast="0" Orientation="0" Rotation="0" Backrotation="0" Pixeltype="BW"
Bitdepth="8" ForceRenderWidth="" Xresolution="300" Yresolution="300"
Threshold="0" Blankthreshold="100" Papersize="Letter" template=""
templatesource="" displaypage="" autodiscard="false" skipmarkup="" />

</DocTypes>

</FOSCONFIGURATION>
```

Overview

When a Data Set is created via an Application Enabler screen scrape event, an HL7 message, or directly from a line-of-business application, the information that composes the Data Set is stored in an XML file.

This XML file contains, at minimum, the values captured from the line-of-business application or HL7 message and the OnBase Keyword Types that these values are to be assigned to.

Optionally, the XML file can also contain other information, such as information about the workstation and application that was used to create the Data Set and generate the XML file. However, this information is not required.

Sample Front Office Scanning Data Set XML File

A basic Data Set XML file consists of at least three elements: one parent element (**FOSDataSet**), one **Keywords** element, and one or more **Keyword** sub-elements.

- The **FOSDataSet** parent element is used to indicate the beginning and end of the Data Set XML file.

  In some Data Set XML files, additional information (e.g., information about the workstation or application used to create the Data Set and generate the Data Set XML file) is stored in the **FOSDataSet** element.
- The **Keywords** element contains information about all of the Keyword Values that compose the Data Set. It is composed of one or more **Keyword** sub-elements.
- Each **Keyword** sub-element is used to contain information about one Keyword Value in the Data Set.

  Two data values are stored in each Keyword sub-element: the name of the OnBase Keyword Type the captured data is being assigned to and the captured data value itself.

  For example, in the sample file below, the first **Keyword** sub-element contains the patient's name (**Woodrow Wilson**) and the OnBase Keyword Type that this value is to be mapped to (**Name**).

Note: If you wish to include a duplicate Keyword Type in the Data Set (e.g., you wish to include two **Phone Number** Keyword Types because a patient uses two different phones), add a **Keyword** sub-element with a **Keyword Name** of **keywordname (n)** to the Data Set XML File, where **keywordname** is the name of the Keyword Type you wish to duplicate and **n** is a unique integer. A leading zero must be included in front of any unique integer that is less than 10 (e.g., **07**). A maximum of 99 duplicates can be created for each Keyword Type.

The following is an example of a basic Front Office Scanning Data Set XML file. The following example would generate a Data Set consisting of four Keyword Values (i.e., a patient's name, address, city, and state).

```
<FOSDataSet>
<Keywords>
<Keyword name="Name">Woodrow Wilson</Keyword>
<Keyword name="Address">27563 Main Street</Keyword>
<Keyword name="City">Peoria</Keyword>
<Keyword name="State">IL</Keyword>
</Keywords>
</FOSDataSet>
```

The following tables highlight many of the similarities and differences among the features available in several OnBase imaging modules. Use the information provided to help determine which modules best suit your organization's imaging needs.

Scanning

Scan Methods

TWAIN scanning is supported by all scanning modules. ISIS and Kofax scanning are not currently supported by Desktop Document Imaging for the OnBase Client, Front Office Scanning, or Web Scanning. Fujitsu PaperStream IP scanning is only supported by Document Imaging for the Unity Client and Disconnected Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
TWAIN	X	X	X	X	X	X	X[a]
ISIS	X		X	X		X	
Kofax	X		X	X		X	
Fujitsu PaperStream IP			X	X			

a. This feature is only available in the ActiveX Web Client on Internet Explorer.

Scan Formats

Scan Formats are not used by Front Office Scanning, Express Scanning, or Web Scanning. FOS and Express Scanning allow users to configure scan format-like settings (including specifying a scan device) at the button level.

Scan Formats cannot be exported between Document Imaging for the OnBase Client and Disconnected Scanning workstations.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Creating a Scan Format	X	X	X	X			
Editing a Scan Format	X	X	X	X			
Deleting a Scan Format	X	X	X	X			
Importing/ Exporting Scan Formats	X	X	X	X			
Selecting a Scan Source	X	X	X	X			X

Scanning Complete Dialog Box Options

The **Scanning Complete** dialog box is not displayed when scanning documents with Front Office Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Scan More Pages into Current Document/ Batch	X	X	X	X		X	
Scan a New Document into Current Batch	X	X	X	X			
Scan a Document Using a Different Scan Format	X	X	X	X			
Discard All Scanned Pages	X	X	X	X			
Delete Last Scanned Image			X				
Discard Last Scanned Page	X	X	X				X

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Delete Last Scanned Document	X	X	X			X	X

Sweeping

All scanning modules allow sweeping documents into OnBase.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Multiple Documents (Folders) Can Be Swept into OnBase	X	X	X	X		X	X
Individual Files Can Be Swept into OnBase	X	X	X	X	X	X	X

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users To Browse to the Location Being Swept	X	X	X	X	X	X	X
Supports Assigning Documents to a Document Type prior to Sweep	X	X	X	X		X	X
Supports Pre-Indexing Documents prior to Sweep			X				X
Allows Users To Delete Files After Sweep	X	X	X	X		X	
Allows Users To Sweep Images Only	X	X	X	X		X	
Allows Users to Specify Image Rotation Prior to Sweep	X	X	X	X		X	X

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Flip Images Prior to Sweep	X	X	X	X		X	X

Scanning from Disk

Scan from Disk operations are not available in Desktop Document Imaging for the OnBase Client, Front Office Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Single Documents Can Be Scanned from Disk	X		X	X		X	
Multiple Documents Can Be Scanned from Disk	X		X	X			

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports Pre-Indexing Prior to Scanning from Disk	X		X	X			

Batch vs. Ad Hoc Import

Batch import of documents through a scan queue is not available in the Web Scanning module. Ad hoc, single-document import is not available in Document Imaging for the OnBase Client or Disconnected Scanning.

Both batch import and ad hoc import are available in Document Imaging for the Unity Client, Front Office Scanning, and Express Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Imports Documents as a Batch of a Scan Queue	X	X	X	X	X	X	

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Batches are Auto-Named Using the Scan Queue's Auto-Name String	X	X	X	X		X	
Allows Documents To Be Ad Hoc Imported			X		X	X	X

Viewing Documents

Image Document Options

Image documents can be rotated and zoomed in all scanning modules. Additional options are available in Document Imaging for the OnBase Client and Document Imaging for the Unity Client.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Rotate Image Documents	X	X	X	X	X	X	X
Flip Image Documents	X	X	X				
Invert Image Documents	X	X					
Zoom In/Out on Image Documents	X	X	X	X	X	X	X

Deleting/Reordering Pages

The abilities to delete, reorder, and rotate pages are not available in Express Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Delete Pages	X	X	X	X	X		X
Reorder Pages	X	X	X	X			
Rotate Pages	X	X	X	X	X		X

Rubber Band

Rubber Band features are not available in Disconnected Scanning, Front Office Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Print the Rubber-Banded Area of a Document	X	X					

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Zoom in on the Rubber-Banded Area of a Document	X	X	X				
Copy the Rubber-Banded Area of a Document to the Clipboard	X	X					
Copy the Rubber-Banded Area of a Document to a Window	X	X					
Save the Rubber-Banded Area of a Document	X	X					
Create a New Document	X	X					

Image Markups

Image markups are not available in Disconnected Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Add Notes to Documents	X	X	X				
Allows Users to Add Annotations to Documents	X	X	X				
Allows Users to Use the Draw/ Erase Tools on Documents	X	X			X		
Allows Users to Digitally Sign Documents	X	X	X		X		

Indexing Documents

Keywords

Full Keyword functionality and features are available in Document Imaging for the OnBase Client, Document Imaging for the Unity Client, and Disconnected Scanning. Select Keyword features are available in Front Office Scanning, Express Scanning, and Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Clear Keyword Values from the Keyword Panel	X	X	X	X			X
Allows Users to Keep Keyword Values from the Previously Indexed Document	X	X	X	X			X
Allows Users to Keep Common Keywords from the Previously Indexed Document	X	X	X	X			X

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Add Instances of an Existing Keyword Type	**X**	**X**	**X**	**X**			**X**
Supports AutoFill Keyword Sets	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Supports the Automatic Addition of Keywords to an Existing AutoFill Keyword Set	**X**	**X**	**X**	**X**	**X**		
Supports Reverse AutoFill Keyword Set Lookups	X	X	X				X
Supports Unique Keywords	**X**	**X**	**X**	**X**	**X**		

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports Encrypted Keywords	X	X	X	X	X	X	
Supports Multi-Instance Keyword Groups	X	X	X	X			X

Batch Processing

Although some batch processes (e.g., image processing, Advanced Capture, etc.) can only be performed on a Document Imaging OnBase Client workstation, be aware that batches can be scanned from other scanning modules and routed for processing on the Document Imaging OnBase Client workstation.

Bar code processing at the time of scanning can only be performed when using Production Document Imaging for the OnBase Client, Document Imaging for the Unity Client, and Disconnected Scanning, but batches scanned from other scanning modules can be routed to any Document Imaging OnBase Client workstation for centralized, batch bar code processing using a Bar Code Recognition Server license.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Bar Code Processing at Scanning	X		X	X			
Centralized Batch Bar Code Processing	X	X	X				
Image Processing	X						
Document Separation - Document Splitter	X	X		X			
Document Separation - Advanced Document Separation Interface	X	X	X				

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Advanced Capture	X	X					
Intelligent Capture for AP	X	X	X				
Double-Blind Indexing	X	X	X				X
Image Segment Archiver	X	X					
Full-Page OCR	X	X					
PDF Conversion	X	X					

QA Processes

QA processes are not supported in Disconnected Scanning, Front Office Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports QA Image Quality Process	X	X	X				
Supports QA Review Process	X	X	X				

Scripting

Scripting is not supported in Front Office Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports VB Scripting	X	X		X			
Supports Unity Scripting			X				

HL7

The HL7 Module does not interact with Document Imaging for the Unity Client, Disconnected Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Interacts with HL7	X	X			X		

Application Enabler

The Application Enabler module does not interact with Express Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Interacts with the Application Enabler	X	X	X	X	X		X

Virtual Print Driver

The Virtual Print Driver does not interact with Document Imaging for the Unity Client.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Interacts with the Virtual Print Driver	X	X		X	X	X	X

E-Forms

E-forms are not supported in Disconnected Scanning or Express Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports E-Forms	X	X	X		X		X

Unity Forms

Unity Forms are only supported in Document Imaging for the Unity Client.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Supports Unity Forms			X				

Scheduling

Scanning processes cannot be scheduled in Document Imaging for the Unity Client, Disconnected Scanning, Front Office Scanning, Express Scanning, or Web Scanning.

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Schedule a Sweep/Scan From Disk Process	X	X					

	Production Document Imaging for the OnBase Client	Desktop Document Imaging for the OnBase Client	Document Imaging for the Unity Client	Disconnected Scanning	Front Office Scanning	Express Scanning	Web Scanning
Allows Users to Schedule a Commit Process	X	X					
Allows Users to Schedule an OCR Process	X	X					
Allows Users to Schedule an AutoFill Keyword Download	N/A	N/A					
Allows Users to Schedule a PDF Conversion	X	X					

The licenses listed in the following sections are applicable if you are upgrading from a version of OnBase prior to OnBase Foundation EP5.

Overview

One of the following licenses is required:

- Front Office Scanning
- Front Office Scanning (Concurrent)
- Enterprise Front Office Scanning

If Front Office Scanning is accessed through the OnBase Client, an OnBase Client license is also required.

Additional Licensing

Depending on the design of your Front Office Scanning solution, the following licenses may also be required:

- If Data Sets are to be captured from a third-party application via Application Enabler, an Application Enabler license is required.

  For more information, see the **Application Enabler** module reference guide or help file.
- If Data Sets are to be captured and created from an HL7 message, your solution must be licensed for the HL7 module. This requires a valid OnBase Client license, an HL7 Processor license, and a Basic HL7 Listener license.

  For more information, see the **HL7 Module** module reference guide or help files.
- To create E-Form documents from within the Front Office Scanning client, an E-Forms license is required.

  For more information, see the **E-Forms** module reference guide or help files.
- If images captured by the Virtual Print Driver are to be appended to documents in the Working window, used to create image templates in the Front Office Scanning client, or used to create new documents in the Front Office Scanning client, a Virtual Print Driver license is required.

  For more information, see the **Virtual Print Driver** module reference guide.

Check your current licensing status by selecting **Utils | Product Licenses** from the Configuration module.

Front Office Scanning Best Practices

The following best practice recommendations were assembled by a team of OnBase subject matter experts. They represent the accumulation of years of experience installing and configuring OnBase solutions.

The following recommendations are general in nature, and are applicable to most OnBase solutions and network environments. Depending on your solution design and your organization's needs, not all of the best practice recommendations listed below may apply to, or be recommended for, your OnBase solution.

Carefully consider the impact of making any changes, including those listed below, to your OnBase solution prior to implementing them in a production environment.

Solution Design

- When designing your Front Office Scanning solution, you must consider where the Data Sets created by your data entry workstations will reside so that they are readily available to your Front Office Scanning workstation(s).

  It is easier, and more common, to store Data Sets in a local, shared folder (i.e., the SharePath) accessible by all data entry and Front Office Scanning workstations.

  However, it is considered a best practice to store your Data Sets in a network location accessible by the Application Server when your Front Office Scanning solution consists of a large number of data entry workstations and several Front Office Scanning workstation or if your data entry workstations and your Front Office Scanning workstations are not connected to the same wide-area network (WAN).
- Due to architectural changes made to Front Office Scanning in OnBase 11.0, you must ensure that the version of your OnBase database is compatible with the version/build of OnBase installed on your OnBase Application Server, and that your Application Server and your Front Office Scanning clients are BOTH running either OnBase 11.0.0 (or later) OR OnBase 10.0.1 or earlier.

  Attempting to run mismatched or incompatible versions/builds of your OnBase database, OnBase Application Server, and the Front Office Scanning clients may result in errors or unexpected behavior for your Front Office Scanning solution.

  It is considered a best practice to for your Front Office Scanning clients to always be running the same version (and, if possible, the same or a corresponding build) of OnBase as your Application Server.

Usage

Registering Front Office Scanning in the OnBase Client

If you intend to launch Front Office Scanning from the OnBase Client, it is considered a best practice to register a Front Office Scanning workstation as a Named Client rather than a Concurrent Client. This ensures that the Front Office Scanning workstation always has access to Front Office Scanning; a workstation registered as a Concurrent Client cannot access Front Office Scanning if another workstation is currently registered for it.

Removing Old/Outdated Data Sets

It is a best practice to monitor the shared folder (i.e., the SharePath) or the network location accessible to the Application Server used to store unused Data Sets, and to ensure that unneeded/outdated Data Sets are routinely deleted.

This process can be automated by configuring Data Sets to expire after a period of time.

Printing Documents Scanned/Created in the Front Office Scanning Client

If it is necessary to print copies of documents scanned/created in the Front Office Scanning client, you can configure a document to automatically print after it is scanned/created or after it is assigned to a Document Type to simplify the users' experience.

Furthermore, you can specify a default printer in the Front Office Scanning configuration file so users are not presented with a **Print** dialog box or the opportunity to change printer settings.

Configuration

Configuring the Front Office Scanning Enabler Service

When integrating your Front Office Scanning solution with Application Enabler, the Front Office Scanning Enabler Service should always be configured to encrypt Keyword Values in a production environment for security purposes.

The ability to disable Keyword Value encryption is intended solely for installation/configuration and troubleshooting purposes.

Configuring Data Set Settings

When configuring Data Sets to be reusable in the Front Office Scanning client, it is considered a best practice to always configure a Data Set lifespan so that Data Sets are automatically deleted after a period of time and do not accrue indefinitely in your local shared folder or network location.

When configuring Keyword Value validation for Keyword Values included in the Data Set, it is a best practice to configure the Keyword Value **maxLength** validation value to match the maximum number of characters allowed for the Keyword Type.

Configuring Input & Document Type Buttons

It is considered a best practice to apply custom, user-friendly text labels and bitmap graphics to your Document Type buttons to make the Front Office Scanning client easier for users to navigate.

Custom, user-friendly text labels should also be applied to input buttons, if your Front Office Scanning solution is configured to allow multiple input buttons.

When configuring graphics to be displayed on Document Type buttons, it is considered a best practice that the images be saved using the bitmap (.bmp) file format.

Creating E-Forms in the Front Office Scanning Client

Keyword Values

It is considered a best practice to ensure that all Keyword Types associated with an E-Form's Document Type are mapped to Keyword Values that are contained in the Data Set.

Keyword Type Mapping in Disconnected Mode

If you are using the Front Office Scanning client in Disconnected mode, it is considered a best practice to map the fields on your E-Form documents to Keyword Types by Keyword Type Name rather than Keyword Type Number. Mapping these fields to the Keyword Type Names allows you to avoid having to configure a matching **ID** setting for each Keyword Type's corresponding **Keyword** sub-element in the Front Office Scanning configuration file.

Converting E-Forms to Images

When converting E-Form documents to images in Front Office Scanning, it is considered a best practice to configure the image as bi-tonal (black and white) as opposed to grayscale or color. The color format of the image is controlled by the pixeltype setting in the DocType node of the configuration file.

Specifying the Resolution of an Image

When specifying the resolution of an image at the Document Type level using the **XResolution** and **YResolution** settings in the **DocType** sub-element of the Front Office Scanning configuration file, it is considered a best practice to ensure that a document's resolution is always square (e.g., 100x100, 200x200, etc.), meaning the **XResolution** and **YResolution** settings are always the same.

Installation

The Front Office Scanning Client

It is considered a best practice to always install the Front Office Scanning client using the Hyland Front Office Scanning installer.

OnBase®

Foundation EP5

Front Office Scanning

User Guide

Foundation EP5

General Usage

Front Office Scanning is a customizable scanning application that provides an easy way to associate indexing information from any number of data entry workstations with documents scanned using one or more centralized scanning workstations.

The Front Office Scanning client is a standalone application that can be launched from any workstation with a network connection to the OnBase Application Server. Depending on your licensing and configuration, the Front Office Scanning client may also be launched from within the OnBase Client.

Note: Only one instance of the Front Office Scanning client can be open at a time on a workstation.

Workstation Registration

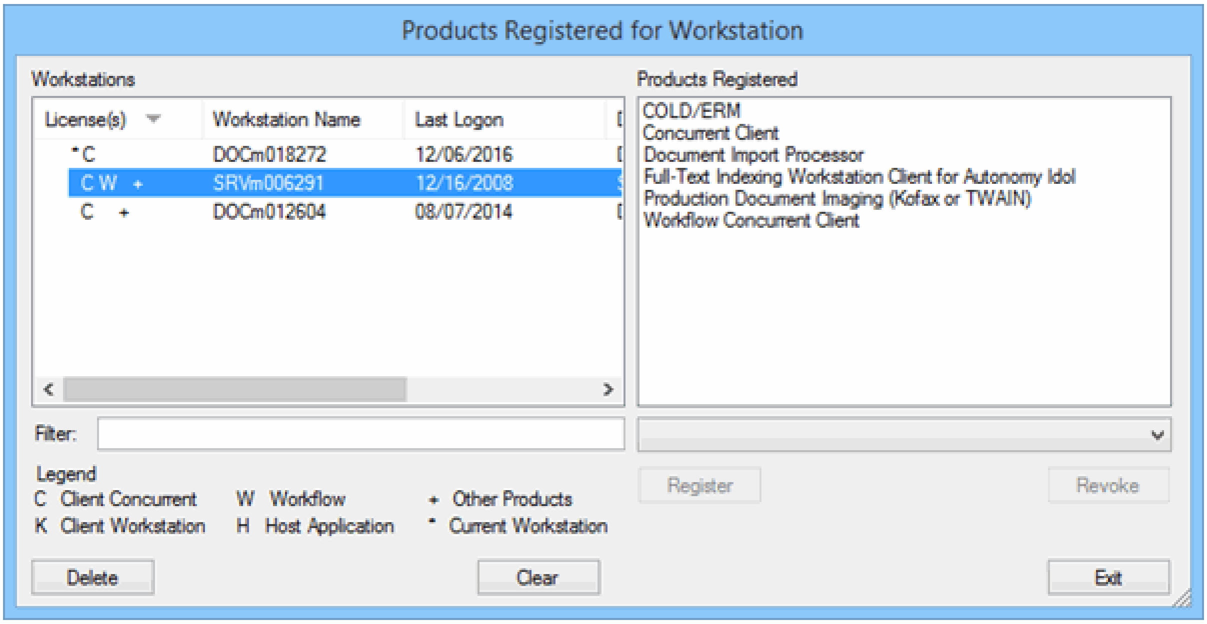
If you are accessing Front Office Scanning from within the OnBase Client, you must ensure that the appropriate Front Office Scanning license is registered on the client you are accessing. Alternatively, when you access the Front Office Scanning client from outside the OnBase Client, the appropriate Front Office Scanning license is registered automatically. To manually register the workstation, see the sections below.

Registering a Workstation

Tip: It is considered a best practice to register a processing workstation as a Named Client rather than a Concurrent Client. This ensures that the processing workstation always has access to the processing module. A workstation registered as a Concurrent Client cannot access the processing module if another workstation is currently registered for it.

To register a workstation to use licensed products:

1. In the OnBase Client, select **Workstation Registration** from the **Admin | User Management** menu. The **Products Registered for Workstation** dialog box is displayed.



The left pane of the dialog box displays a list of the workstations that have, at any time, been logged in to OnBase. The columns in the left pane contain the following information:
   - **License(s):** Displays the symbols of the products registered for that workstation. The legend for the symbols is located below the list of workstations.
   - **Registered:** Displays the name of each workstation that has ever been logged in to OnBase.
   - **Last Logon:** Displays the date that the workstation was last logged on.
   - **Description:** Displays a short description of the individual workstation.

2. Select the workstation to register products for in the left **Workstations** pane. The current workstation is shown at the top of the list and is marked with an asterisk (*).

Tip: To filter the workstations displayed in the left **Workstations** pane, type the first few letters of the **Workstation Name** in the **Filter** field. The list is filtered to show only those workstations with a name that begins with the letters typed.

3. Select the license to register from the **Products Registered** drop-down list.

   If you are properly licensed for a product and it is not available from the drop-down list, it may be registered on another workstation.

   To view the products registered for other workstations and revoke those licenses:

   a. In the left pane, select the workstation to view the products registered for. A workstation with a **+** in the **License(s)** column is registered for one or more products.

      The right **Products Registered** pane displays all products registered for the selected workstation.

   b. Select the product registration to revoke in the right **Products Registered** pane.

   c. Click **Revoke**.

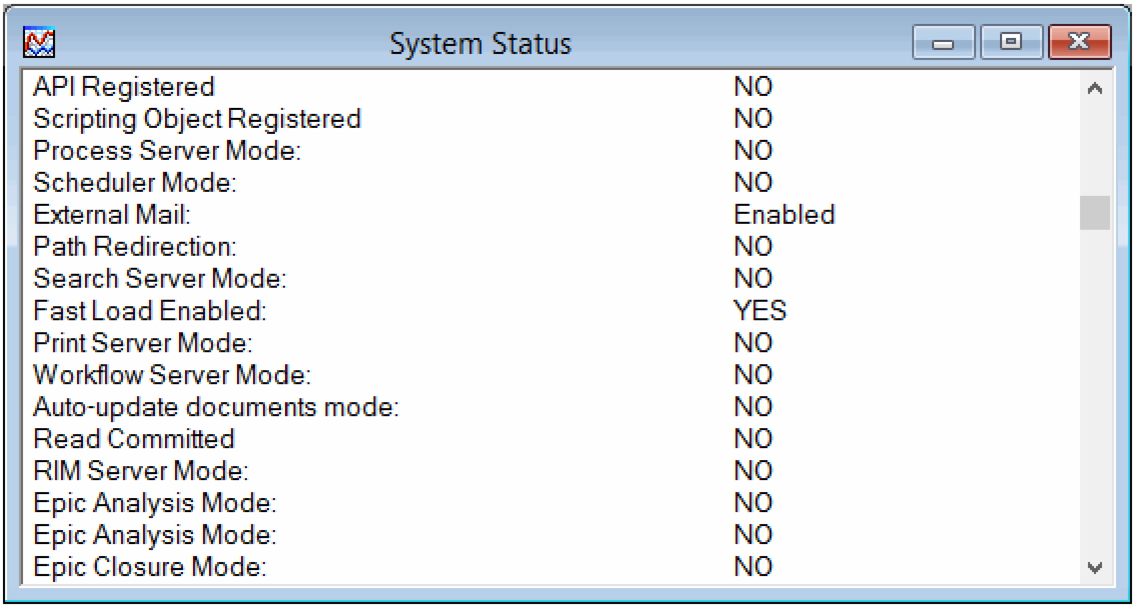
   If the license is not available in the drop-down list and it is not registered to any other workstation, it is possible that the module may not be licensed. Contact your system administrator to help determine the licenses that should be available.

4. After selecting the license to register the selected workstation for, click **Register**.
5. When you have finished registering workstations, click **Exit**.

Verifying and Revoking Workstation Registrations

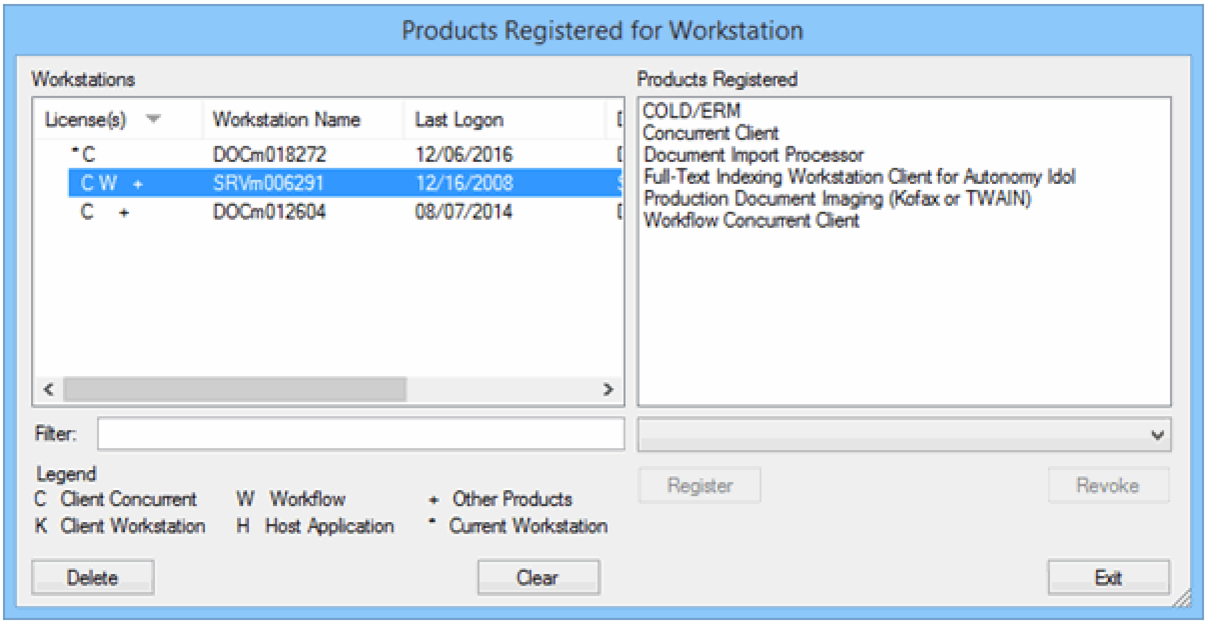
To view the products registered for the current workstation only, maximize the **System Status** dialog box. The **System Status** dialog box is always available in the main Client window. If it is minimized, it is displayed in the lower left corner of the main Client window.

At the bottom of the **System Status** window is a list of all products registered on the workstation and a status message for each.



To view the products registered for any workstations that have logged in to OnBase and revoke product registrations:

1. In the OnBase Client, select **Workstation Registration** from the **Admin | User Management** menu. The **Products Registered for Workstation** dialog box is displayed.



The left pane of the screen displays a list of the workstations that have, at any time, been logged on to OnBase. The current workstation is shown at the top of the list and marked with an asterisk (*).

2. In the left pane, select the workstation to view the products registered for.

Tip: To filter the workstations displayed in the left pane, type the first few letters of the **Workstation Name** in the **Filter** field. The list is filtered to show only those workstations with a name that begins with the letters typed.

The right **Products Registered** pane displays all products registered for the selected workstation.

3. To revoke a product registration, select the product registration to revoke in the right **Products Registered** pane and click **Revoke**.
4. To re-register a workstation, delete the old workstation by selecting it in the left **Workstations** pane and clicking **Delete**. All product rights held by the deleted workstation are returned to the list of available licenses found in the **Products Registered** drop-down list. This forces the user logging on from that workstation to register the workstation the next time they attempt to log on.

Clearing Excess Workstation Registrations

The number of workstations you can register for a given module is dependent upon the number of licenses you have purchased for that module. If you attempt to register a specific module on more workstations than you have licenses for, the excess workstations will be unable to use the module. When a user logs on to a workstation with one or more excess product registrations, a warning will be displayed to inform them what modules will not work on that workstation.

You can remove excess product registrations the same way you would remove a functional product registration. From the **Workstation Registration** dialog box, select the workstation that has excess product registrations.

To filter the workstations displayed in the left pane of the **Workstation Registration** dialog box, type the first few letters of the **Workstation Name** in the **Filter** field. The list is filtered to show only those workstations with a name that begins with the letters typed.

Any products that are registered in excess of the licensing limit will contain the **[Excess Registration]** string. Select the necessary products and click **Revoke** to remove the excess registration from the workstation.

To re-register a workstation, delete the old workstation by selecting it in the left **Workstations** pane and clicking **Delete**. All product rights held by the deleted workstation are returned to the list of available licenses found in the **Products Registered** drop-down list. This forces the user logging on from that workstation to register the workstation the next time they attempt to log on.

Workstation Cleanup

At some point, it may be necessary to delete workstations from the list in the **Products Registered for Workstation** dialog box. This may be necessary if there are many workstations on the list that are no longer accessing OnBase. One method of cleanup is to delete all of them and allow the list to regenerate as workstations are logged back on to OnBase. Alternatively, you can select the desired workstations and delete them in groups. If workstations are deleted inadvertently, they will be added back when the workstation is logged onto OnBase. If the current workstation is selected, an error message is displayed and it is not removed from the list.

To delete a workstation from the **Products Registered for Workstation**:

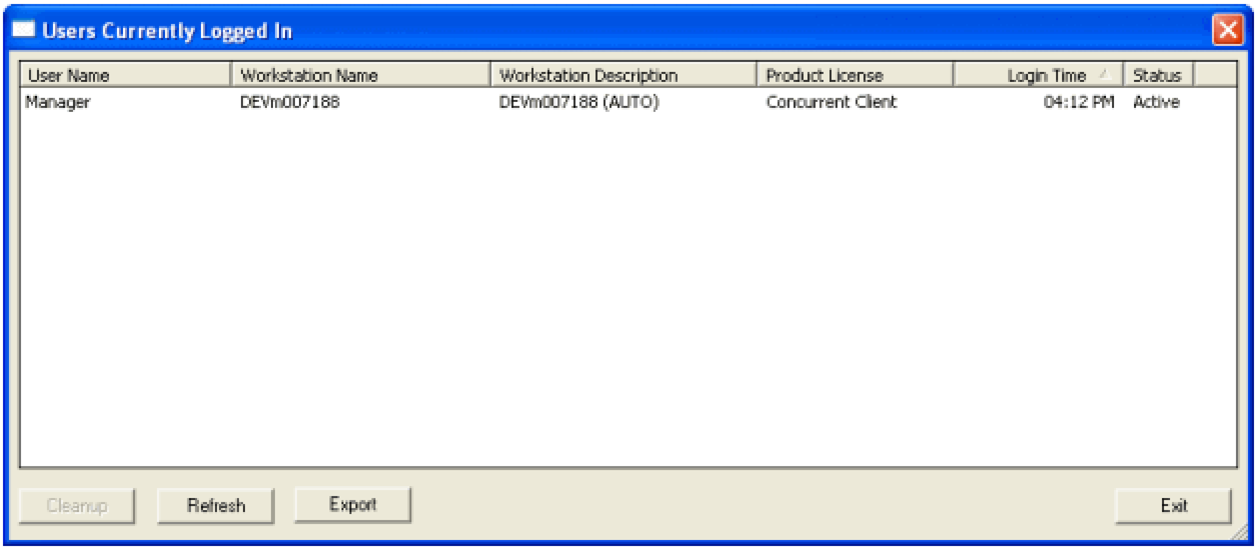
1. From the OnBase Client, click **Admin | User Management | Workstation Registration**. The **Products Registered for Workstation** dialog box is displayed.
2. The left side of the dialog box contains four sortable columns. The **Last Logon** column allows the user to delete all workstations that have not been logged on to OnBase during a specified period of time.
3. Select the desired workstations and click the **Delete** button.
4. Select **Exit** when finished.

View Current Users

View Current Users allows a user to view information about other OnBase users, including the time a user logged onto the system and the type of license being consumed by that user's workstation.

User entries can be removed, or cleaned up, from the **Users Currently Logged In** dialog box provided that the user is not trying to remove his or her own session and the session being cleaned up is not displaying an **Active** status.

To view current user information, select **Admin | User Management | View Current Users**. The **Users Currently Logged In** dialog box is displayed.



The Front Office Scanning Client Overview

Opening the Front Office Scanning Client

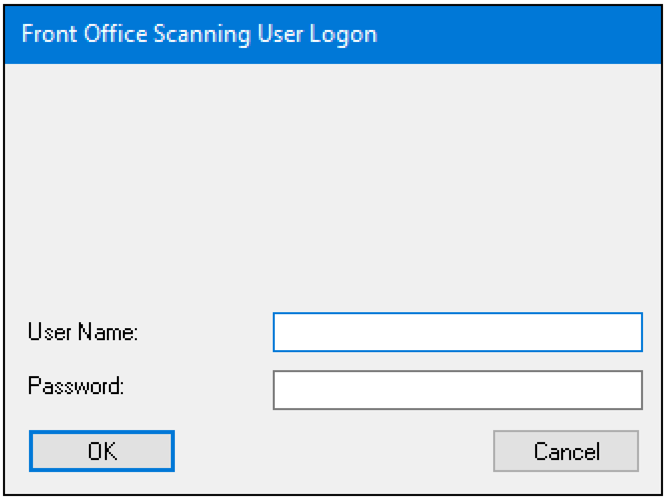
To open the Front Office Scanning client:

1. Do one of the following:
   - Double-click the Front Office Scanning executable or a desktop shortcut to it. In a default installation, the executable is located in **C:\Program Files (x86)\Hyland\Front Office Scanning**.
   - From the OnBase Client, select **Processing | Front Office Scanning**.

Tip: The Front Office Scanning client can be configured to open automatically when the OnBase Client is opened or when Application Enabler is configured for Automated Console mode. To configure the OnBase Client to open the Front Office Scanning client automatically, see Configuring the Front Office Scanning Client to Open Automatically on page 260. To configure Application Enabler for Automated Console mode, contact your system administrator.

2. If you are prompted to select a Front Office Scanning configuration file, browse to the XML file provided by your system administrator and click **Open**.

3. If user credentials have not been pre-configured, the **Front Office Scanning User Logon** dialog box is displayed.



Enter your user name and password in the fields provided and click **OK**.

Note: Depending on your configuration, you may be required to enter either your OnBase credentials or your domain credentials. For more information, contact your system administrator.

4. The Front Office Scanning client is displayed. For an overview of the main sections and features of the Front Office Scanning client, see The Front Office Scanning Client on page 261.

Configuring the Front Office Scanning Client to Open Automatically

If you are using Front Office Scanning in conjunction with the OnBase Client, you can configure the Front Office Scanning client to open automatically when you open the OnBase Client.

To configure the Front Office Scanning client to open automatically when you open the OnBase Client:

1. In the OnBase Client, do one of the following:
   - Select **User | User Options**.
   - Right-click the OnBase Client desktop and select **User Options**.
   - Click the **User Options** toolbar button.

   The **User Options** dialog box is displayed.
2. Select the **Startup** tab.
3. In the **Launch on Startup** section, select **Front Office Scanning**.
4. Click **Save**.

Resolving Session Interruption

Your Front Office Scanning client session might be interrupted under any of the following conditions:

- A specified period of inactivity is met. See Resolving Session Timeout on page 261 for more information.
- A system administrator invalidates your session. See Resolving Session Invalidation on page 261 for more information.

Resolving Session Timeout

If your Front Office Scanning client session is interrupted after reaching a specified period of inactivity, the client is closed and the **Front Office Scanning User Logon** dialog box is automatically displayed.

Do one of the following:

- To resume your session, enter your user credentials and click **OK**. Any pending documents are retained.
- To cancel your session, click **Cancel**. Any pending documents are discarded.

Resolving Session Invalidation

If your Front Office Scanning client session is interrupted after a system administrator invalidates your session, the client is automatically closed. Any pending documents are discarded.

To begin a new session, open the Front Office Scanning client and log on again.

The Front Office Scanning Client

The Front Office Scanning client is displayed in the Front Office Scanning client window.

By default, you can open the Front Office Scanning client window and then select any other window without closing it, but you can configure the Front Office Scanning window to always remain the topmost window as long as it is open by clicking **Window | Always on Top**.

The dimensions and the position of the Front Office Scanning client window are automatically stored to ensure that the Front Office Scanning client is displayed exactly the way as it looked the last time the user used it.

Note: These settings are based on the user of the workstation, not the workstation itself.

The elements that compose the Front Office Scanning client (e.g., the **Available Data Sets** list, the **Selected Data Set** window, the **Scan/Create Document** window, the **Working** window, and/or the **Related Documents** list) can be resized within the Front Office Scanning client. The relative sizes and positions of these elements are also automatically stored to ensure the Front Office Scanning client looks the same when it is launched as it did the last time the user used it.

To lock these elements to prevent them from being resized, click **Window | Lock Windows**. To reset these elements to their default sized, click **Window | Reset Windows**.

Front Office Scanning Client Layout

The Front Office Scanning client consists of several unique areas, as indicated below:

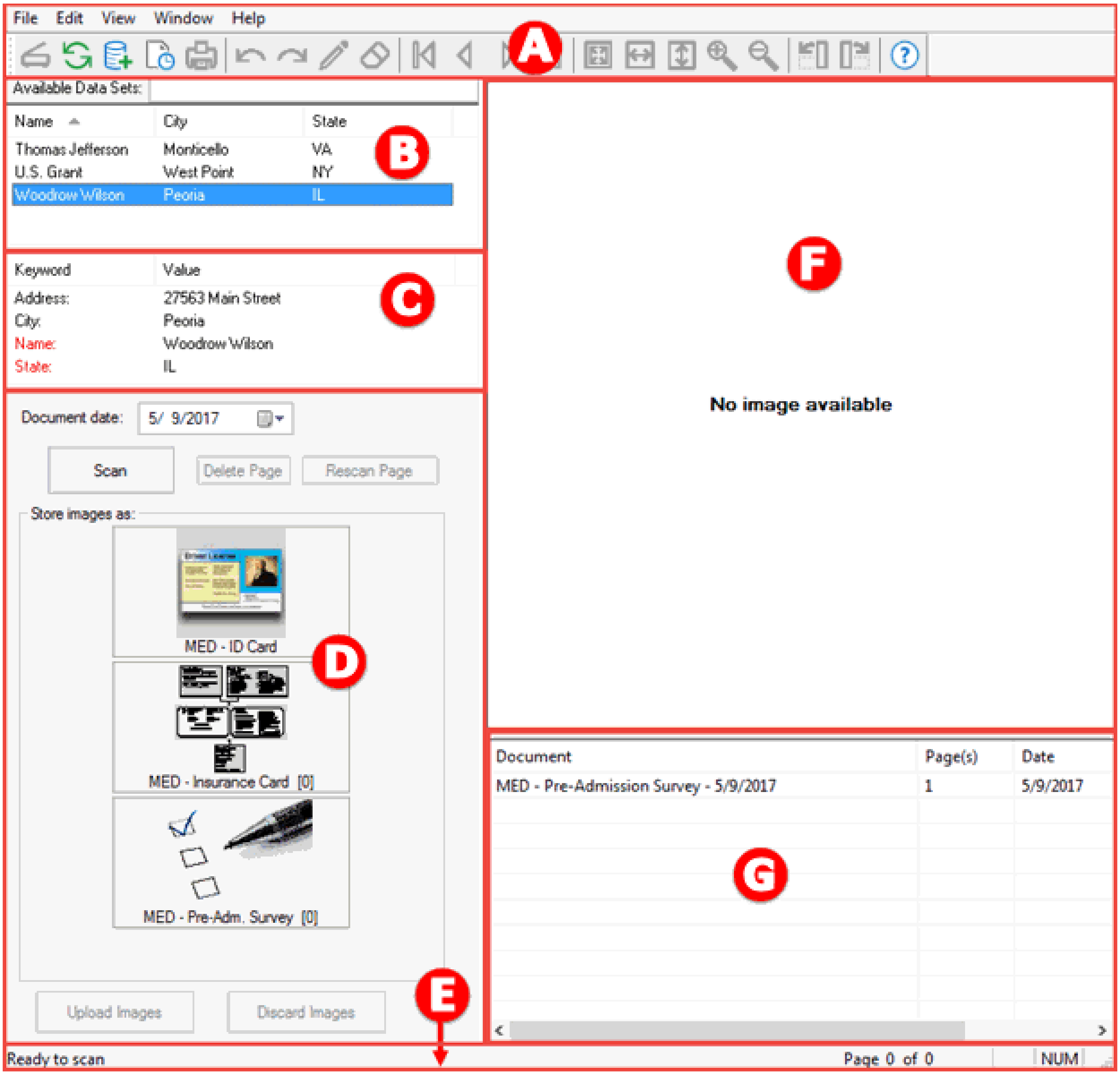


Diagram Section	Section Name	Description
A	**Main Menu/Front Office Scanning Toolbar**	The Main Menu and Front Office Scanning toolbar contain general commands and options needed to work in the Front Office Scanning client. For a list of the specific options available in the Front Office Scanning toolbar, see The Front Office Scanning Toolbar on page 265. **Tip:** To toggle the Front Office Scanning toolbar to be displayed or hidden, click **View | Toolbar**.
B	**Available Data Sets List**	The **Available Data Sets** list displays all data sets available to the Front Office Scanning workstation. In the Front Office Scanning client, a Data Set filtering field is available above the listed Data Sets. When you begin typing into this field, the client attempts to find a match within the listed Data Sets. If a match is found, the client scrolls to the Data Set with the matching value and highlights it, allowing for quick and easy Data Set location.
C	**Selected Data Set Window**	The **Selected Data Set** window lists the Keyword Values that compose the currently selected Data Set.
D	**Scan/Create Document Window**	The **Scan/Create Document** window contains the options necessary to scan or create a document to associate with the currently selected Data Set.
E	**Status Bar**	The Status Bar displays information about the actions that the Front Office Scanning client is performing. It displays information about the function(s) a button will perform when the pointer is held over it and information about the currently-displayed page (e.g., **Page 3 of 4** indicates that the current document consists of four pages and Page 3 is currently being displayed). **Tip:** To toggle the Status Bar to be displayed or hidden, click **View | Status Bar**.
F	**Working Window**	Once a document is scanned, an image template is selected or an E-Form is created, it is displayed in the **Working** window before it is assigned to a Document Type.

Diagram Section	Section Name	Description
G	**Related Documents List (Optional)**	Depending on your configuration, the Related Documents list may be displayed below the Working window. If this feature is enabled for your Front Office Scanning solution, a list of documents that share Keyword Values with the currently selected data set is displayed in the Related Documents list. These documents can be retrieved and viewed in the Front Office Scanning client. **Note:** For more information, see Performing Document Retrieval in the Front Office Scanning Client on page 324.

The Front Office Scanning Toolbar

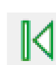
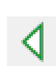
The following toolbar buttons are displayed in the Front Office Scanning toolbar:

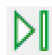
Tip: To toggle the Front Office Scanning toolbar to be displayed or hidden, click **View | Toolbar**.

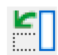
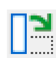
Tip: To toggle the size of the toolbar buttons displayed in the Front Office Scanning toolbar, press **Ctrl+Alt+T**.

Button Name	Toolbar Button	Description
TWAIN Source		Click to display the **Select Source** dialog box. From the **Select Source** dialog box, you can select the scanner to be used by the Front Office Scanning client. **Tip:** The **Select Source** dialog box can also be opened by clicking **File | Select Scanner**.
Rescan for Data Sets		Click to refresh the **Available Data Sets** list. Clicking this button with a Data Set selected will clear the selected Data Set. **Note:** In the Front Office Scanning client, when a document residing in the **Working** window has not yet been uploaded to OnBase, this button is not available. **Tip:** The **Available Data Sets** list can also be refreshed by clicking **File | Refresh Data Sets**.

Button Name	Toolbar Button	Description
Create Empty Data Set		Click to manually create an empty Data Set from within the Front Office Scanning client. Clicking this button with an existing Data Set selected will clear the selected Data Set. See Manually Creating a Data Set on page 279 for more information. **Note:** In the Front Office Scanning client, when a document residing in the **Working** window has not yet been uploaded to OnBase, this button is not available. **Tip:** An empty Data Set can also be created by selecting **File | Create Data Set** or pressing **Ctrl+Q**.
View Pending Uploads		Click to view documents waiting to be uploaded to OnBase. See Viewing Documents Pending Upload on page 331 for more information. **Tip:** Documents waiting to be uploaded to OnBase can also be viewed by clicking **File | View Pending Uploads**.
Print		Click to print the document currently displayed in the **Working** window. **Tip:** The current document can also be printed by clicking **File | Print** or by clicking **Print** from the Print Preview window.
Undo		Click to undo the last markup action (e.g., drawing, erasing) from the image template. **Note:** This button is only enabled after you have added a markup to the image template. **Tip:** You can also undo the last markup action by clicking **Edit | Undo**.

Button Name	Toolbar Button	Description
Redo		Click to redo the last action that was undone. **Note:** This button is only enabled after you click the **Undo** button. **Tip:** You can also undo the last markup action by clicking **Edit | Redo**.
Draw Tool		Click to enable the drawing tool. The drawing tool allows you to draw markups on an image template with the mouse or other pointer device. **Tip:** The drawing tool can also be enabled by clicking **Edit | Draw Tool**.
Erase Tool		Click to enable the eraser tool. The eraser tool allows you to delete markups, or parts of markups, from an image template. **Tip:** The drawing tool can also be enabled by clicking **Edit | Erase Tool**.
First Page		Click to display the first page of a multi-page document. **Note:** This button is only enabled if the currently displayed document contains multiple pages and the currently displayed page is not the first page. **Tip:** You can also display the first page of the document by clicking **View | First Page**.
Previous Page		Click to display the previous page of the currently displayed document. **Note:** This button is only enabled if the currently displayed document contains multiple pages and the currently displayed page is not the first page. **Tip:** You can also display the previous page of the document by clicking **View | Previous Page**.

Button Name	Toolbar Button	Description
Next Page		Click to display the next page of the currently displayed document. **Note:** This button is only enabled if the currently displayed document contains multiple pages and the currently displayed page is not the last page. **Tip:** You can also display the next page of the document by clicking **View | Next Page**.
Last Page		Click to display the last page of the currently displayed document. **Note:** This button is only enabled if the currently displayed document contains multiple pages and the currently displayed page is not the last page. **Tip:** You can also display the last page of the document by clicking **View | Last Page**.
Fit in Window		Click to display the entire currently displayed page in the **Working** window. **Tip:** You can also scale a page to fit in the **Working** window by clicking **View | Scale to Fit Image**. To display the page as its actual size in the **Working** window, click **View | Scale to Full Size**.
Fit to Width		Click to display the page to fit the width of the **Working** window. **Tip:** You can also scale a page to fit the width **Working** window by clicking **View | Scale to Fit Width**.
Fit to Height		Click to display the page to fit the height of the **Working** window. **Tip:** You can also scale a page to fit the height **Working** window by clicking **View | Scale to Fit Height**.

Button Name	Toolbar Button	Description
Zoom In		Click to zoom in on an area of the currently displayed page. **Tip:** You can also zoom in on a page by clicking **View | Zoom In**.
Zoom Out		Click to zoom out on the currently displayed page. **Tip:** You can also zoom out on a page by clicking **View | Zoom Out**.
Rotate Left		Click to rotate the currently displayed page 90 degrees to the left. **Tip:** You can also rotate an image to the left by clicking **View | Rotate Left**.
Rotate Right		Click to rotate the currently displayed page 90 degrees to the right. **Tip:** You can also rotate an image to the right by clicking **View | Rotate Right**.
Launch Application		**Note:** Depending on your configuration, this button may or may not be displayed. Click to launch another application (e.g., OnBase Disconnected Scanning) from within Front Office Scanning. If available, this button displays the logo for the application that it is configured to launch.
Help		Click to display the Front Office Scanning help file.

Exiting the Front Office Scanning Client

To exit the Front Office Scanning client, press **ALT+F4**, click **File | Exit,** or close the Front Office Scanning client window.

Depending on your configuration, the Front Office Scanning client may automatically close after uploading a document to OnBase.

General Setup

A Front Office Scanning solution typically consists of multiple data entry workstations used to create Data Sets and one Front Office Scanning workstation used to select a Data Set, scan or create a document, and then upload the document to OnBase.

In a typical Front Office Scanning solution, the creation of Data Sets on the data entry workstations often requires little or no user interaction; Data Sets are often automatically created by simply entering data into another software application.

Once a Data Set is created, it is available to the Front Office Scanning workstation so that it can be applied to the documents that are scanned or created within it.

The Data Entry Workstations

In a typical Front Office Scanning solution, the creation of Data Sets on the data entry workstations often requires little or no user interaction; Data Sets are often automatically created by simply entering data into another software application.

This line of business application has been configured by your administrator to automatically generate the Data Set and make it available to the Front Office Scanning workstation. This is typically done in one of three ways:

- **The Data Set is Automatically Generated by the Line of Business Application**. The application saves the Data Set information to a file that can be read by the Front Office Scanning workstation.

  This requires no user interaction.
- **The Data Set is Generated by an HL7 Message**. In a healthcare scenario, the line of business application (typically an Electronic Medical Record solution) generates an HL7 message that can be processed by OnBase into a Data Set file for the Front Office Scanning workstation.

  This requires no user interaction.
- **The Data Set is Generated by Application Enabler**. The Application Enabler module captures data entered into the line of business application and automatically generates the Data Set file for the Front Office Scanning workstation.

  Depending on how it is configured by your administrator, this may require some user interaction. See Using Application Enabler on the Data Entry Workstation on page 271.

Note: Data Sets can also be manually created within the Front Office Scanning client. For more information on this option, see Manually Creating a Data Set on page 279.

Using Application Enabler on the Data Entry Workstation

If your Front Office Scanning solution is designed to work in conjunction with Application Enabler, a user may be required to manually perform the following steps on the data entry workstation.

Note: Your administrator may have automated these steps. Contact him/her for more information.

Starting the FOSEnabler Service

In order to use Application Enabler to generate Data Sets from the line of business application, the Front Office Scanning Enabler Service must be running (along with the line of business application and Application Enabler) on the data entry workstation.

1. With the line of business application open, run the **FOSEnablerService.exe** file.

   The Front Office Scanning Enabler Service icon is displayed in the Windows System Tray.

Tip: If you would like to change the Front Office Scanning Enabler Service icon on your workstation's desktop (e.g., to an icon featuring the Rod of Asclepius medical symbol), right-click on the icon and select **Properties**. Then, from the **Shortcut** tab, click **Change Icon** and select one of the supplied icons from the **FrontOfficeScanning.exe** file (or browse to another file). Click **OK**, apply your changes, and click **OK** again to return to the desktop.

Note: The Front Office Scanning Enabler Service icon cannot be changed in the Windows System Tray.

2. If it is not already running, Application Enabler is launched. Depending on your configuration, an Application Enabler XML configuration file may have been specified for you by your administrator. If one was not, you are prompted to select one.

   The Application Enabler icon is displayed in the system tray.
3. To ensure that the Front Office Scanning Enabler Service is active, right-click on the Front Office Scanning Enabler Service icon in the Windows System Tray and ensure that a check box is displayed next to **Enable/Disable Scraping**.

Enabling/Disabling the Front Office Scanning Enabler Service to Create Data Sets

To temporarily enable/disable the Front Office Scanning Enabler Service from creating a Data Set via an Application Enabler screen scrape event, right-click on the Front Office Scanning Enabler Service icon in the Windows System tray and select **Enable/Disable Scraping**.

This allows you to temporarily disable Data Set creation without stopping the Front Office Scanning Enabler Service.

Stopping the Front Office Scanning Enabler Service

To stop the Front Office Scanning Enabler Service, right-click on the Front Office Scanning Enabler Service icon in the Windows System Tray and select **Exit**.

Initiating a Screen Scrape Event

Depending on how Application Enabler is configured to work with your line of business application, a user may be required to take an action (e.g., pressing the **F8** key, pressing **Shift** and double-clicking the left mouse button, etc.) to initiate the screen scrape event.

This action is unique to each solution and is determined by your administrator.

Note: In the Front Office Scanning client, when a document residing in the **Working** window has not yet been uploaded into OnBase, a screen scrape event cannot be performed.

While the screen scrape is being performed, a message is displayed above the Windows System Tray. The message text is configured by your administrator; by default, it states, **FOSEnabler – Capturing Keywords…**.

Note: Depending on your solution, the Front Office Scanning client may be configured to run in Automated Console mode (i.e., the Front Office Scanning client is automatically launched when a screen scrape event is performed).

For more information on Application Enabler, see the Application Enabler documentation.

The Front Office Scanning Workstation

Once Data Sets have been created and made available to the Front Office Scanning workstation, you can use the Front Office Scanning client to scan/create OnBase documents.

To use the Front Office Scanning client to create OnBase documents, you must perform the following steps:

1. **Select a Data Set**. See Selecting a Data Set on page 272 for more information.
2. **Scan/Create the Document Associated with the Selected Data Set**. See Scanning/ Creating Documents on page 284 for more information.
3. **Manage the Newly Created Document Prior to Uploading It to OnBase**. See Working with Documents in the Working Window on page 321.
4. **Upload the Document to OnBase**. See Uploading Documents to OnBase on page 329.

Selecting a Data Set

Unlike other OnBase scanning modules, you must select the indexing information to be associated with a document (i.e., the Data Set) before you scan or create the document from an image template or E-Form.

A Data Set can be selected in one of four ways:

- **Selecting a Data Set from the Available Data Sets list**. The Data Sets have been made available to the Front Office Scanning workstation by the data entry workstations.

  See Selecting a Data Set from the Data Set List on page 274 for more information.
- **Manually Creating a Data Set**. The Data Sets are manually created from within the Front Office Scanning client.

  See Manually Creating a Data Set on page 279 for more information.
- **Using a Data Set from the Previously Uploaded Document**. The Data Set from the last document that was uploaded can be used by clicking **File | Previous Data Set** so that additional documents can be indexed using this Data Set.

Note: The indexing values (i.e., Keyword Values and the Document Date) in the Data Set cannot be modified when using this option.

Note: This option does not reload the document(s) that have already been uploaded to OnBase using this Data Set in the Front Office Scanning client.

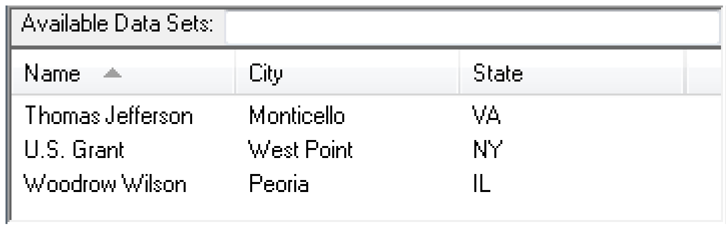
- **Automatically Selecting a Data Set Captured by Application Enabler**. If your enabled line of business application, Application Enabler, and the Front Office Scanning client are all running concurrently on the same workstation, your Front Office Scanning client may be configured to automatically create a Data Set using values obtained by a screen scrape event or to select an existing Data Set that matches values obtained by the screen scrape event.

Note: If a value obtained by a screen scrape event exceeds the allowable configured length for its assigned Keyword Type, the value will be automatically truncated in the Data Set.

Note: If a **Date & Time** value obtained by a screen scrape event is assigned to a **Date** Keyword Type, the time portion of the value is removed when the document is uploaded into OnBase.

Selecting a Data Set from the Data Set List

Data Sets that have been made available to the Front Office Scanning workstation from the data entry workstations are listed in the **Available Data Sets** list.



Note: The name of this list is configured by your administrator; by default, it is named **Available Data Sets**. If not all of the name is visible, you can resize the list as appropriate.

Note: The Keyword Values that are displayed in the **Available Data Sets** list for each Data Set are configured by your administrator. Not all Keyword Values that compose the Data Set may be displayed in the **Available Data Sets** list.

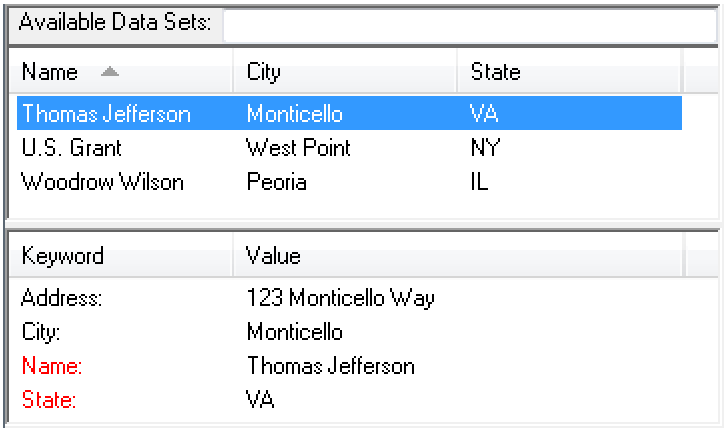
Typically, the **Available Data Sets** list is refreshed after most actions in the Front Office Scanning client (e.g., after documents have been uploaded to OnBase, after a document has been assigned to a Document Type, after documents are deleted by clicking the **Discard Images** button, after a Data Set is deleted, etc.).

Note: Depending on your configuration, the **Available Data Sets** list may not automatically be refreshed after these actions. See your system administrator for more information.

Tip: To refresh the Available Data Sets list, click **File | Refresh Data Sets**. However, note that when a document residing in the **Working** window has not yet been uploaded to OnBase, this option is not available.

In the Front Office Scanning client, a Data Set filtering field is available above the listed Data Sets. You can start to type into this field to attempt to find a match within the listed Data Sets. If a match is found, the client scrolls to the Data Set with the matching value and highlights it, allowing for quick and easy Data Set location.

Once you have located the Data Set you want in the **Available Data Sets** list, double-click the Data Set to select it. The Data Set is displayed in the **Selected Data Set** window below.



Note: If a Data Set is missing a Keyword Value, the Value is displayed as **?** in the **Available Data Sets** list.

Note: Any Keyword Value that exceeds the maximum length or the masking length configured for its Keyword Type will be truncated in the Data Set.

To clear the selected Data Set and select another Data Set, select another Data Set from the **Available Data Sets** list (or perform another screen-scrape event, if your Front Office Scanning solution is used in conjunction with Application Enabler).

The previously selected Data Set remains in the **Available Data Sets** list.

Manually Entering Keyword Values into an Existing Data Set

If any Keyword Values are missing from the Data Set, you can manually enter them into the **Selected Data Set Window**.

Note: Depending on your configuration, you may be able to edit existing Keyword Values that are already associated with the Data Set. See The FOSCONFIGURATION Parent Element on page 40 for more information.

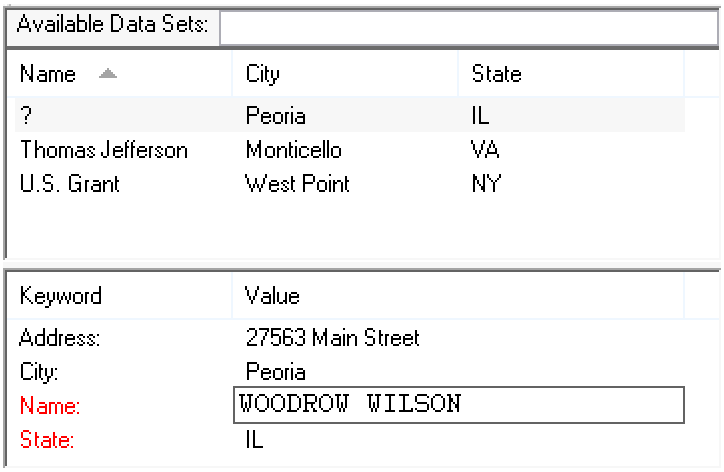
To manually enter a Keyword Value into an existing Data Set:

1. Double-click a Keyword Type that has no corresponding Keyword Value (or select the Keyword Type and press **Enter**).

Note: If you are able to edit existing Keyword Values that are already associated with the Data Set, you may double-click the Keyword Value you wish to edit (or select the Keyword Value and press **Enter**).

An editable text field or, depending on your configuration, a list of possible Keyword Values is displayed.

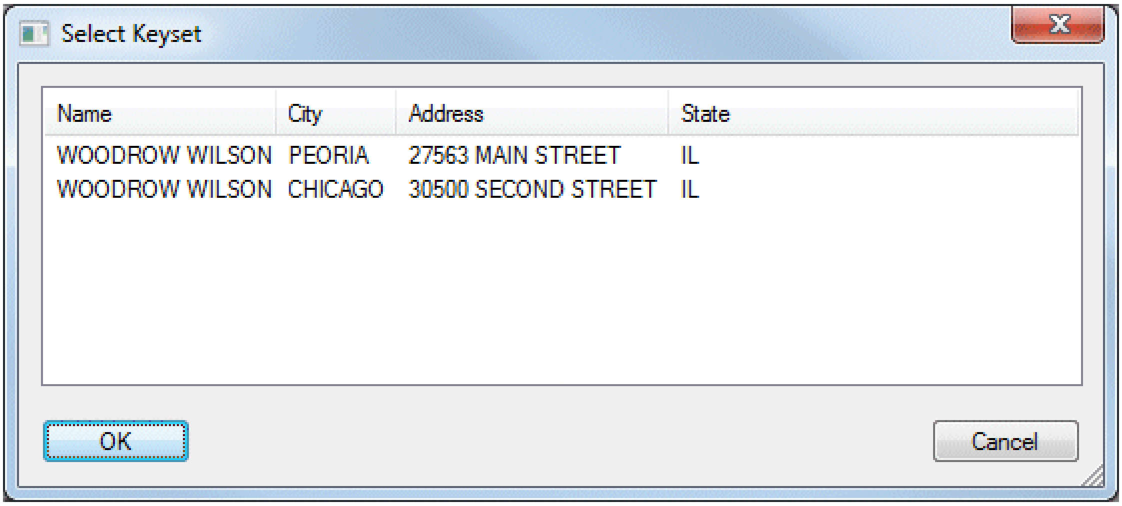
2. Enter a Keyword Value into the text field or select a Keyword Value from the list.



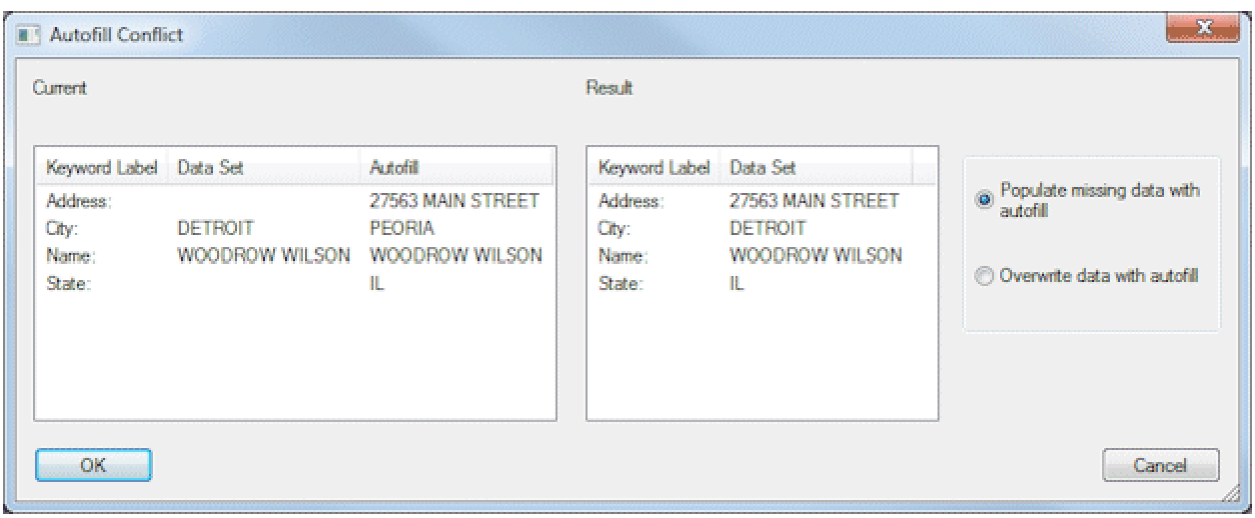
Note: When entering a Keyword Value, you cannot exceed the maximum length or the masking length configured for its Keyword Type. If a Keyword Type is configured for masking, and the Front Office Scanning client is connected to the Application Server at the time of Keyword Value entry, then the static mask characters configured for the Keyword Type appear in the text field.

Tip: When entering a Keyword Value, press **Esc** to revert back to the value that was present before you began editing the text field.

3. Repeat Steps 1-2 for each missing Keyword Value to be entered into the Data Set. As you perform these steps, note the following:
   - When using the keyboard, you can press **Tab** to navigate to the next Keyword Type or press **Shift + Tab** to navigate to the previous Keyword Type in the list.
   - When entering a value for a primary Keyword Type of an AutoFill Keyword Set, the secondary Keyword Values in the autofill are automatically displayed in the appropriate text fields and should not be edited.
     - If multiple instances of the AutoFill Keyword Set have the same primary Keyword Value, the **Select Keyset** dialog box is displayed, allowing you to select the instance of the autofill you wish to apply to the Data Set.



- If existing values in the Data Set conflict with any of the secondary values in the AutoFill Keyword Set, the **Autofill Conflict** dialog box is displayed. To retain the existing Data Set values and populate only the blank text fields with the autofill values, select **Populate missing data with autofill**. To overwrite the existing Data Set values and populate all text fields with the autofill values, select **Overwrite data with autofill**.



- To add a duplicate Keyword Type field, select the Keyword Type you wish to duplicate. Then, select **Edit | Duplicate Keyword**, press **F6**, or press **Ctrl+T**. A new entry for that Keyword Type is added to the Data Set. The Keyword Label will display as **keywordname (n)**, where **keywordname** is the name of the duplicated Keyword Type and **n** is a unique integer.

Note: A maximum of 99 duplicates can be created for each Keyword Type.

Note: Duplicate Keyword Types that are created in the Front Office Scanning client and applied to an E-Form will not be uploaded to OnBase unless the E-Form is first converted to an image. If the E-Form is not converted to an image, only the Keyword Values that populate the fields on the E-Form will be uploaded.

- Depending on your configuration, the Front Office Scanning client may check manually entered values to ensure that the data entered matches the data allowed for the assigned Keyword Type (for example, to ensure that only numeric data is entered for a numeric Keyword Type). If your configuration allows this check to be performed and the data entered is not allowed, an error message is displayed.
- Specific Currency Keyword Types respect the format assigned to them in the OnBase Configuration module. However, Currency Keyword Types only accept a **$** sign.

Sorting Data Sets

You can sort Data Sets by clicking on a column heading in the **Available Data Sets** list.

Once a column heading is clicked, the Data Sets are sorted in ascending order (i.e., 1-100, A-Z) for the Keyword Value in the column. To display the Data Sets in descending order (i.e., 100-1, Z-A), click the column heading a second time.

Once the Data Sets are sorted, you can find a specific Data Set by typing a few characters of the Keyword Value that is displayed in the first column in the **Selected Data Set** window.

Deleting a Data Set

To delete a Data Set, select it in the **Available Data Sets** list and click **File | Delete Data Set**.

Selecting the Data Set Category

By default, your Front Office Scanning solution is designed to store Data Sets from all data entry workstations in a single location to be accessed by one or more Front Office Scanning workstations. The Front Office Scanning workstations then display all available Data Sets in the **Available Data Sets** list.

However, depending on how your solution is designed, Data Sets may be organized into categories.

For example:

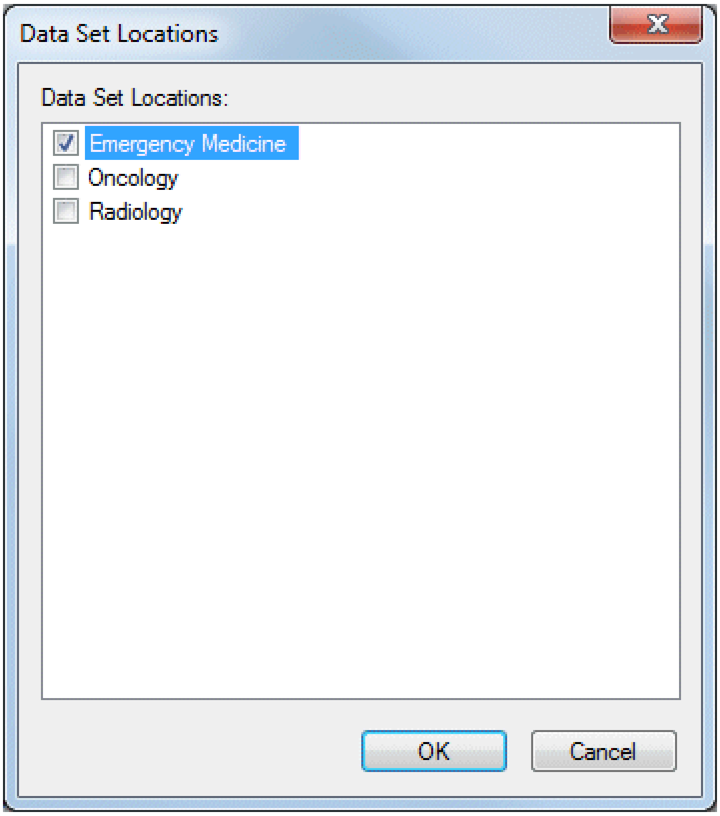
> A hospital uses a Front Office Scanning solution for its patient registration processes. Inside the hospital, patients can be registered in a number of different departments (e.g., Emergency Medicine, Radiology, Outpatient Laboratory, Surgery, Maternity, etc.). Each department has its own registration area with multiple registration desks; however, the

hospital has one centralized Front Office Scanning workstation on each floor to handle the needs of all the departments.

Because the overall number of Data Sets being created is quite large, it would be difficult and time-consuming for the user at the Front Office Scanning workstation to search through all available Data Sets (i.e., one Data Set for every patient being registered) when searching for the correct Data Set to associate with a document. To increase efficiently, each department's Data Sets are categorized so that when scanning, the user is able to select one or more departments to display only Data Sets created for patients in those departments.

If your Front Office Scanning workstation is configured to be able to organize Data Sets by category, you can select the Data Set location by clicking **File | Select Data Sets...**.

The **Data Set Locations** dialog box is displayed.



All available Data Set categories are listed. Select the check box next to the appropriate Data Set location and click **OK**. The Data Sets created for that category are displayed in the **Available Data Sets** list.

Manually Creating a Data Set

Data Sets can be created manually from within the Front Office Scanning client. Manually created Data Sets are not added to the **Available Data Sets** list; a manually created Data Set is automatically treated as the selected Data Set.

To manually create a Data Set:

1. In the Front Office Scanning client, do one of the following:
   - Select **File | Create Data Set**.
   - Click the **Create Empty Data Set** button on the toolbar.
   - Press **Ctrl+Q**.

   A list of Keyword Types is displayed in the **Selected Data Set** window.

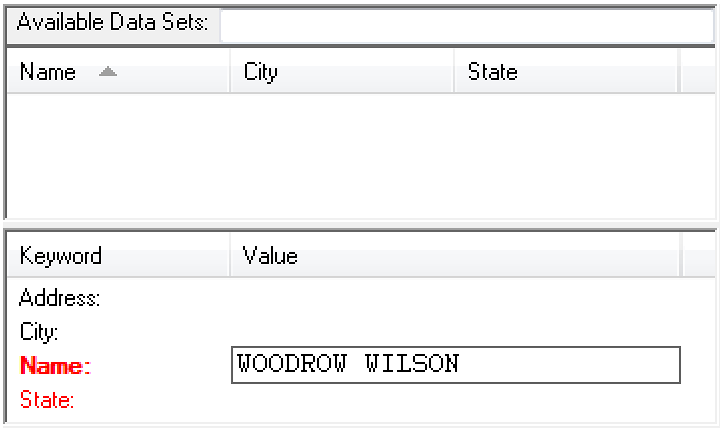
   - Required Keywords are displayed in red. Values must be entered for these Keyword Types in order to associate the Data Set with a document.
   - If your solution has been configured for an AutoFill Keyword Set, the primary Keyword Type of the autofill is displayed in bold.

Note: Depending on your solution design, an HTML form may be displayed when you click **File | Create Data Set**. In this case, you would enter values into the form instead of entering them into the **Selected Data Set** window.

2. Double-click the Keyword Type you would like to add a Keyword Value for (or select the Keyword Type and press **Enter**). Depending on your configuration, some Keyword Types may have default Keyword Values assigned to them.

   An editable text field or, depending on your configuration, a list of possible Keyword Values is displayed.

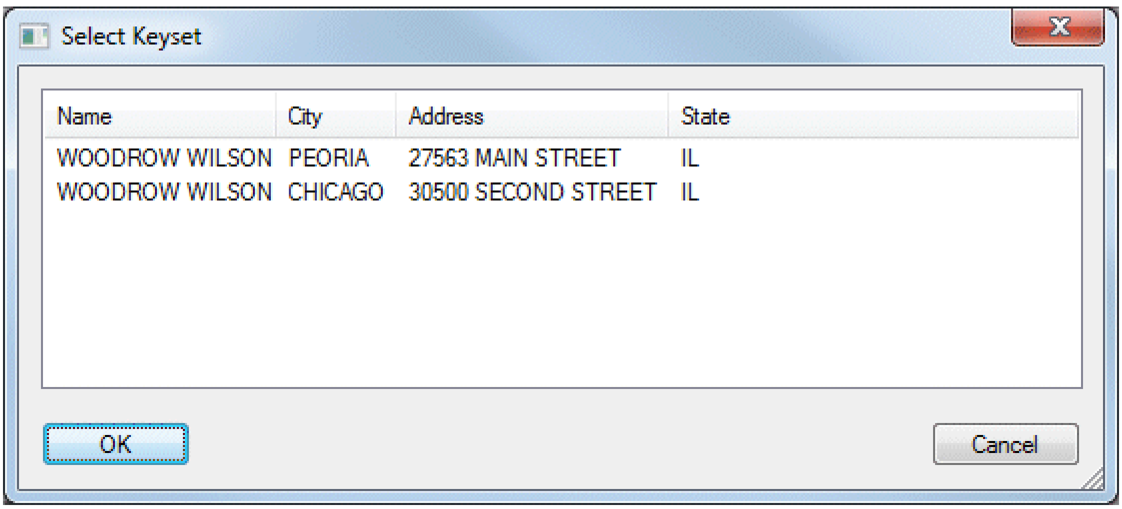
3. Enter a Keyword Value into the text field or select a Keyword Value from the list.



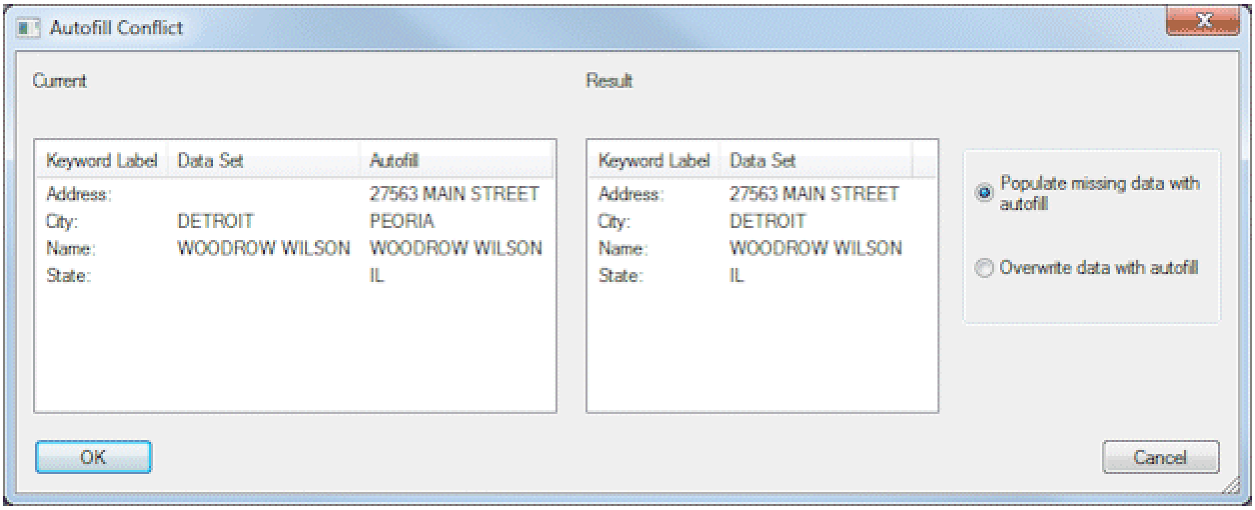
Note: When entering a Keyword Value, you cannot exceed the maximum length or the masking length configured for its Keyword Type. If a Keyword Type is configured for masking, and the Front Office Scanning client is connected to the Application Server at the time of Keyword Value entry, then the static mask characters configured for the Keyword Type appear in the text field.

Tip: When entering a Keyword Value, press **Esc** to revert back to the value that was present before you began editing the text field.

4. Repeat Steps 2-4 for each Keyword Value to be entered into the Data Set. As you perform these steps, note the following:
   - When using the keyboard, you can press **Tab** to navigate to the next Keyword Type or press **Shift + Tab** to navigate to the previous Keyword Type in the list.
   - When entering a value for a primary Keyword Type of an AutoFill Keyword Set, the secondary Keyword Values in the autofill are automatically displayed in the appropriate text fields and should not be edited.
     - If multiple instances of the AutoFill Keyword Set have the same primary Keyword Value, the **Select Keyset** dialog box is displayed, allowing you to select the instance of the autofill you wish to apply to the Data Set.



     - If existing values in the Data Set conflict with any of the secondary values in the AutoFill Keyword Set, the **Autofill Conflict** dialog box is displayed. To retain the existing Data Set values and populate only the blank text fields with the autofill values, select **Populate missing data with autofill**. To overwrite the existing Data Set values and populate all text fields with the autofill values, select **Overwrite data with autofill**.



- To add a duplicate Keyword Type field, select the Keyword Type you wish to duplicate. Then, select **Edit | Duplicate Keyword**, press **F6**, or press **Ctrl+T**. A new entry for that Keyword Type is added to the Data Set. The Keyword Label will display as **keywordname (n)**, where **keywordname** is the name of the duplicated Keyword Type and **n** is a unique integer.

Note: A maximum of 99 duplicates can be created for each Keyword Type.

Note: Duplicate Keyword Types that are created in the Front Office Scanning client and applied to an E-Form will not be uploaded to OnBase unless the E-Form is first converted to an image. If the E-Form is not converted to an image, only the Keyword Values that populate the fields on the E-Form will be uploaded.

- Depending on your configuration, the Front Office Scanning client may check manually entered values to ensure that the data entered matches the data allowed for the assigned Keyword Type (for example, to ensure that only numeric data is entered for a numeric Keyword Type). If your configuration allows this check to be performed and the data entered is not allowed, an error message is displayed.
- Specific Currency Keyword Types respect the format assigned to them in the OnBase Configuration module. However, Currency Keyword Types only accept a **$** sign.
- If your Front Office Scanning solution is configured to allow document retrieval, be aware that the **Related Documents** list is not populated with documents related to a manually created Data Set (i.e., related documents cannot be retrieved for manually created Data Sets). The **Related Documents** list is only populated when a Data Set is selected from the **Available Data Sets** list.

Scanning/Creating Documents

Once a Data Set has been selected, you must scan or create the documents associated with that Data Set.

Note: Once you have scanned or created a document in the Front Office Scanning client, you will not be able to exit the Front Office Scanning client, select a different configuration file, or upload documents until all documents and/or pages have been assigned to a Document Type or discarded.

You can create documents in the following ways:

- **Scanning a Document.** A paper document, such a driver's license, insurance card, or physician's order, can be scanned to create an image document.

  See Scanning a Document on page 284 for more information.
- **Creating a Document from an Electronic Image**. An electronic image available to the Front Office Scanning workstation to can be used create a new document.

  See Creating a New Document by Importing an Image or PDF Document on page 293 for more information.
- **Creating a Document from an Image Template**. An electronic image can be marked up (e.g., a notification of privacy practices can be signed, a diagram of the body can be drawn on to indicate what area of the body hurts or is injured, etc.) to create a new image document.

  See Creating a Document from an Image Template on page 303 for more information.
- **Creating an E-Form Document**. Keyword Values from the Data Set can be used to populate the fields on an E-Form.

  See Creating an E-Form on page 313 for more information.

Note: Additional licensing is required to create E-Forms in the Front Office Scanning client.

Scanning a Document

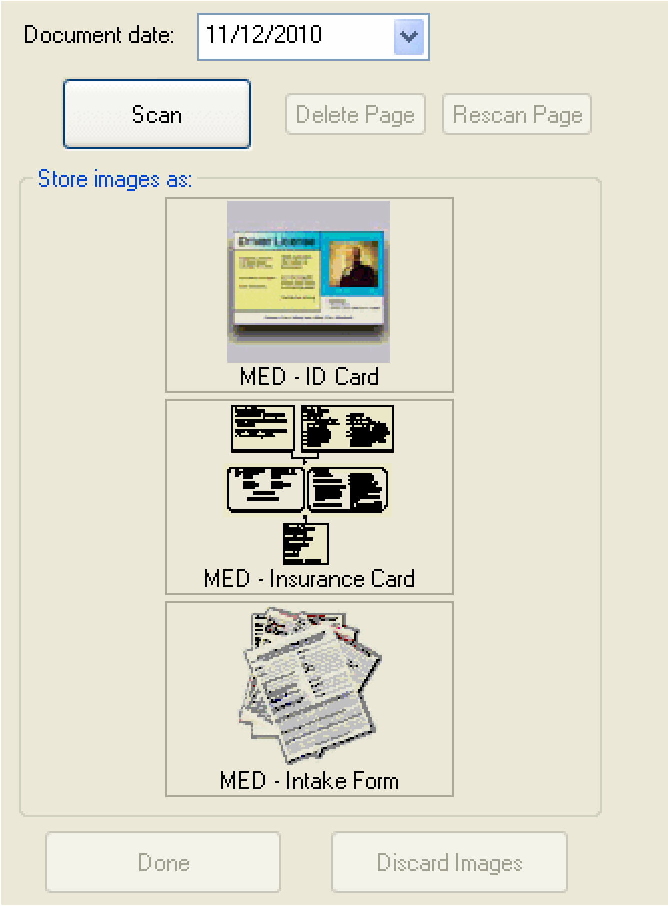
Paper documents are scanned to create an image document that can be stored in OnBase.

Once the document is scanned, select a Document Type button to assign the document to the correct Document Type. Depending on your configuration, the Document Type of the scanned document may automatically be selected for you.

By default, one document is scanned, it is assigned to a Document Type, another document is scanned, it is assigned to a Document Type, etc. until all documents for the selected Data Set have been scanned and assigned to a Document Type.

Depending on your configuration, however, you may be able to scan all pages of all documents associated with the selected Data Set at once, organize the pages into documents, and assign the documents to the proper Document Types. This configuration is known as Batch Scanning; for more information, see Scanning Documents Using Batch Scanning on page 289.

All scanning actions are performed in the **Scan/Create Document** window, located below the **Selected Data Set** window:



Note: The buttons in the **Store images as:** section are configured by your administrator; the buttons in your solution may be named or may be displayed differently.

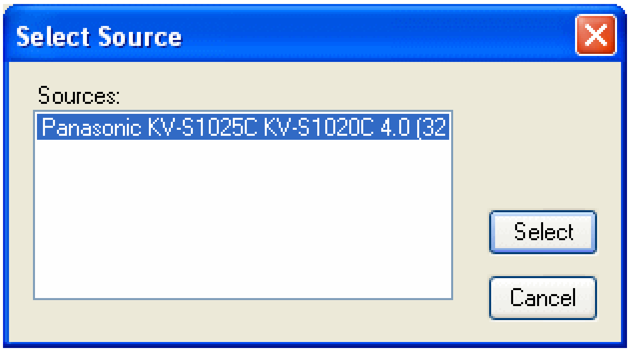
Note: Some Front Office Scanning solutions are designed to allow multiple input buttons (i.e., **Scan** buttons) to allow users to scan documents from multiple scanners, from a single scanner using different settings, or to create documents by marking up an image template or by creating an E-Form. The **Scan/Create Document** window for these solutions has a different appearance; examples of this **Scan/Create Document** window can be seen in Creating a Document from an Image Template on page 303 and Creating an E-Form on page 313.

To scan a document using the Front Office Scanning client:

1. Load the document to be scanned into the scanner.
2. Click the **Scan** button.

Note: Depending on your configuration, the **Scan** button may not be displayed; there may be multiple input buttons displayed next to the Document Type buttons. Typically, these buttons are labeled so you know which one to select for the document you are scanning. If you are unsure of which input button to select to scan a document, contact your administrator.

3. Depending on your configuration, you may need to select the scanner to use. The **Select Source** dialog box is displayed.

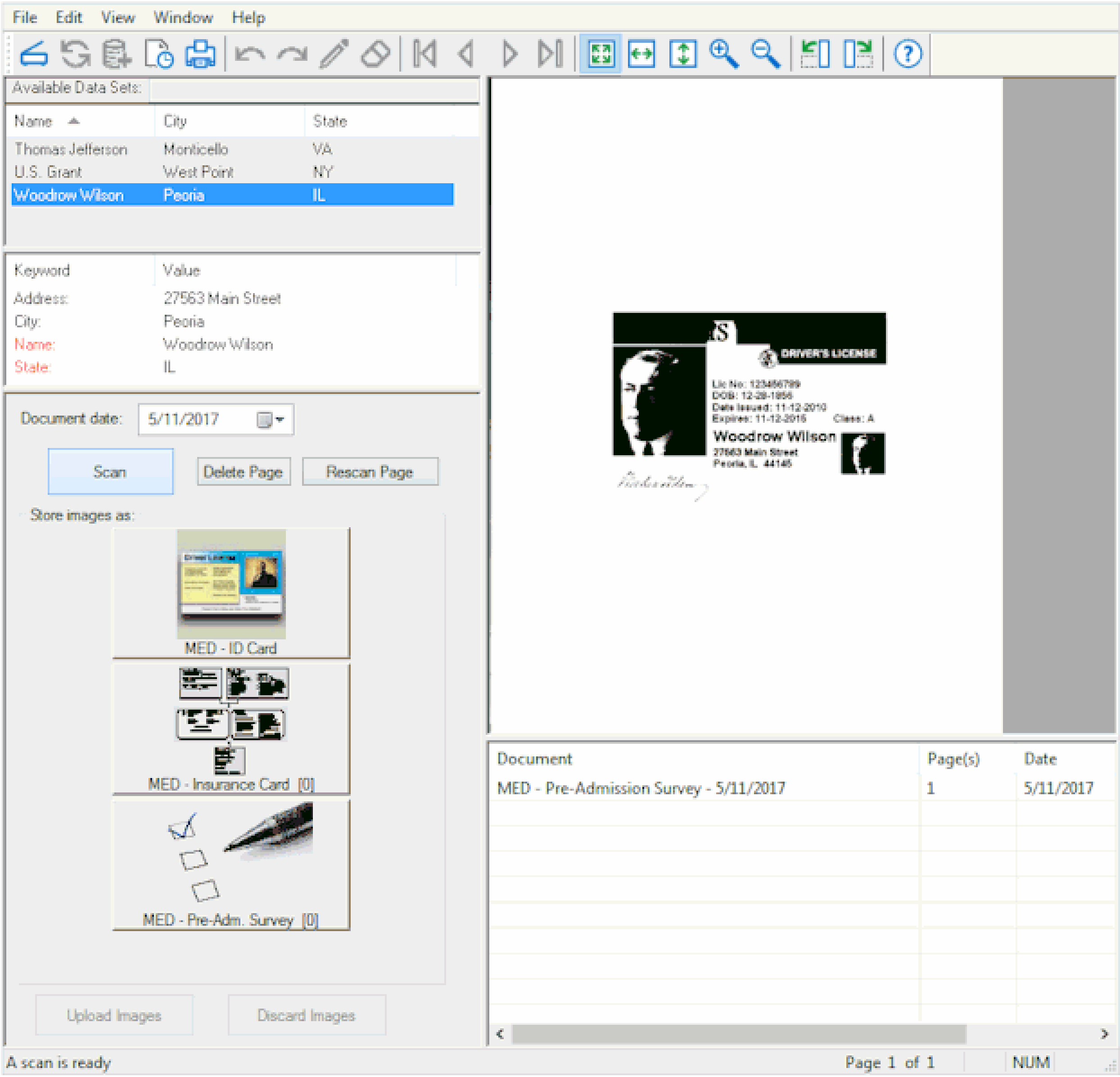


d. From the Source list, select the scanner to use.
e. Click **Select**.

Tip: To select a scanner at any time, click **File | Select Scanner**.

4. The document is scanned and an electronic image of the scanned document is displayed in the **Working** window.

Note: Depending on your configuration, after a document is scanned it may automatically be printed. This image may or may not be displayed in the Working window for Document Type assignment and upload to OnBase.



- By default, the document in the Working window is displayed in Single Page view.
- To view the document in Full Screen view, click **View | Full Screen** or press **F11**.

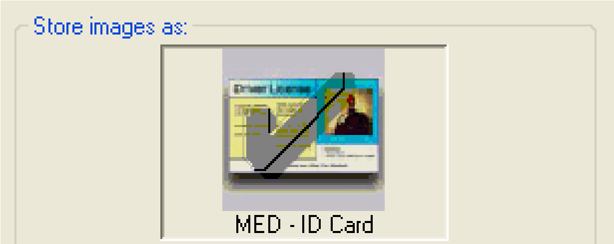
- If you are not satisfied with the currently displayed scanned image, click **Rescan Page** to delete the currently displayed page and rescan that page. To delete the currently displayed page, click **Delete Page** to delete the currently displayed page from the document.

5. Assign the scanned document to a Document Type by clicking its Document Type button.

   Some notes about assigning a document to a Document Type:

   - Depending on your configuration, the document may be automatically assigned to a Document Type after it is scanned. For more information, contact your administrator.
   - Depending on your configuration, if you have multiple input buttons for scanning, you may be able to use only the Document Type button next to the corresponding input button that you used to scan the document. For more information, contact your administrator.
   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.

6. Once the document has been assigned to a Document Type, the document is cleared from the Working window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



   If you are not satisfied with the currently-displayed scanned image, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

7. Repeat these steps for each document you would like to scan using the selected Data Set.

   For example:

   When registering a new patient in the Emergency Room, the registrar must obtain a copy of the patient's driver's license and insurance card. Once the patient information has been entered by the registrar to create a Data Set for that patient, the user at the Front Office Scanning workstation can select that patient's Data Set and scan the patient's driver's license.

Once the driver's license has been scanned and assigned to a Document Type, the patient's Data Set remains selected. The user at the Front Office Scanning workstation can then scan the patient's insurance card and assign it to a Document Type without having to re-select a Data Set.

Typically, once a document has been assigned to a Document Type for the selected Data Set, the Document Type button is no longer enabled. Depending on your configuration, however, after a new document is scanned, the Document Type may be re-enabled, allowing you to assign multiple documents to the same Document Type. The number of documents assigned to the Document Type for the selected Data Set is displayed in parenthesis on the Document Type button.

For example:

When registering a patient in the Emergency Room, the registrar learns that the patient has both primary and secondary insurance coverage. In order to ensure that the patient's insurance companies are properly billed, the registrar must have copies of both of the insurance cards on file.

Once the patient's primary insurance card has been scanned and assigned to the **MED - Insurance Card** Document Type, the user at the Front Office Scanning workstation scans the secondary insurance card. The **MED - Insurance Card** Document Type button is re-enabled, allowing the user to assign the image of the secondary insurance card to the proper Document Type.

Once the secondary insurance card has been assigned to the Document Type, the label on the Document Type button is displayed as **MED - Insurance Card (2)** to indicate that two documents have been assigned to that Document Type for the selected Data Set.

Scanning Documents Using Batch Scanning

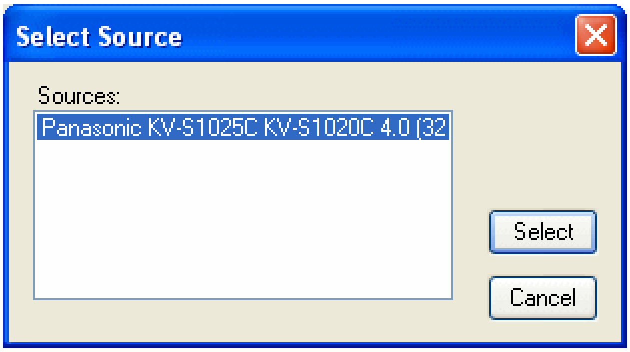
Note: Although your configuration may allow you to upload documents to Document Imaging scan queues, the Front Office Scanning Batch Scanning feature operates independently from that upload feature. Documents that are uploaded to Document Imaging scan queues can be scanned using the default Front Office Scanning method or Batch Scanning.

Batch scanning allows you to scan all pages of all documents associated with the selected Data Set at once and then organize them into individual documents that are assigned to the proper Document Types as opposed to scanning an individual document, assigning it to its Document Type, scanning the next document, assigning it to its Document Type, etc.

To scan documents using Front Office Scanning Batch Scanning:

1. Load the pages to be scanned into the scanner.
2. Click the **Scan** button.

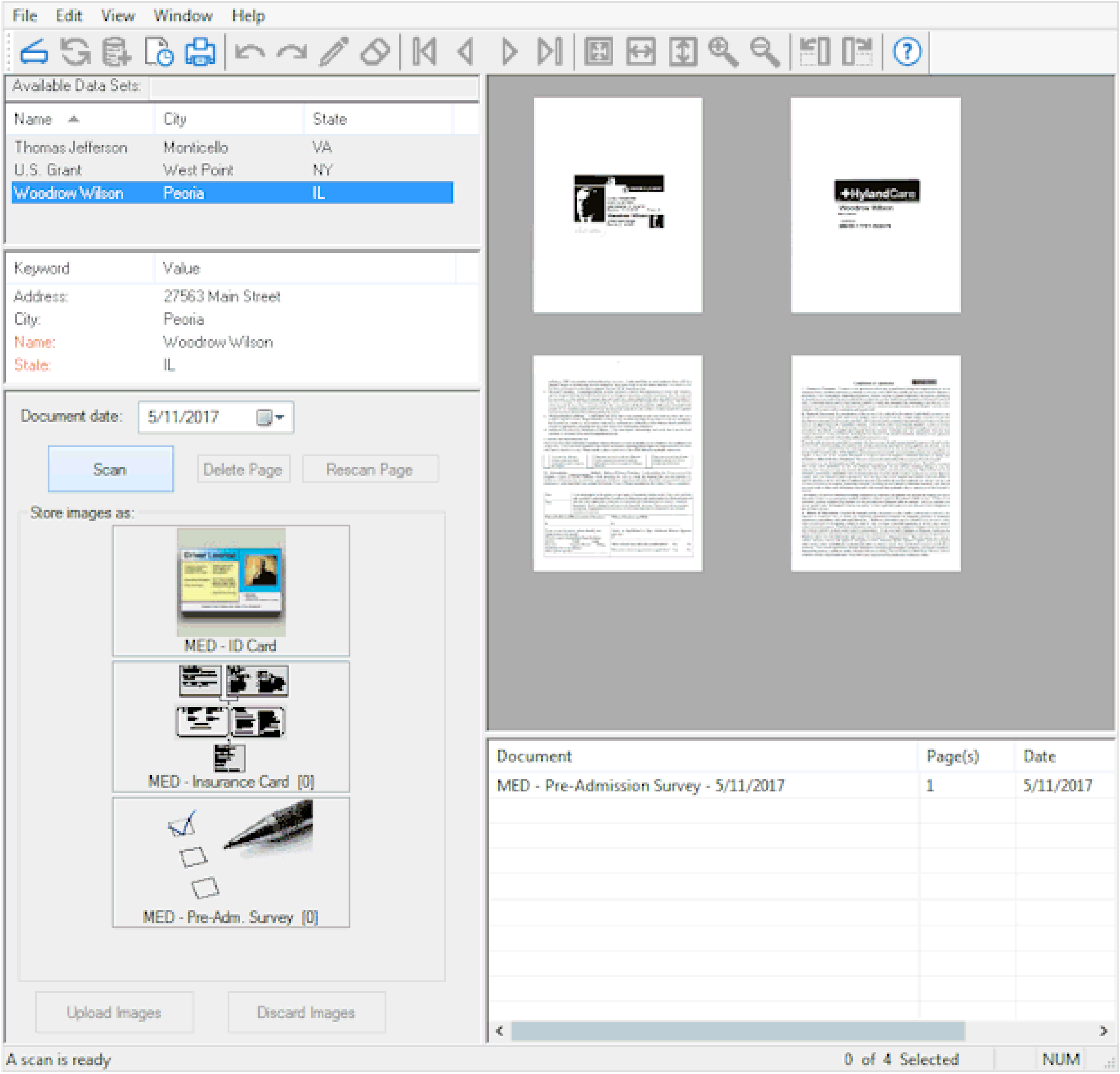
3. Depending on your configuration, you may need to select the scanner to use. The **Select Source** dialog box is displayed.



   a. From the Source list, select the scanner to use.
   b. Click **Select**.

Tip: To select a scanner at any time, click **File | Select Scanner**.

4. The documents are scanned and electronic images of the pages are displayed in the **Working** window.



- By default, the pages in the **Working** window are displayed in Thumbnail view. To display a larger thumbnail image of a page, hold the pointer over the thumbnail image.
- To display the pages in Single Page view, turn off Thumbnail view by clicking **View | Thumbnail** or by pressing **F11**.

- To display a larger view of the pages, click **View | Full Screen** or press **F11**.

Tip: When working with a batch containing a large number of pages, it may be easier to work with the Front Office Scanning client in Full Screen view.

If you are not satisfied with the currently selected page, click **Rescan Page** to delete it and rescan that page. To delete the currently selected page, click **Delete Page**.

5. Select the appropriate page(s) that compose the first document. To select all pages, click **Edit | Select All** or press **Ctrl+A**.

   A page is selected when a white box surrounds the thumbnail image. To deselect a page, click it again.

   For example, If a Privacy Notice consists of three pages, select all three pages in the Working window to ensure that the entire document is assigned to the Document Type.

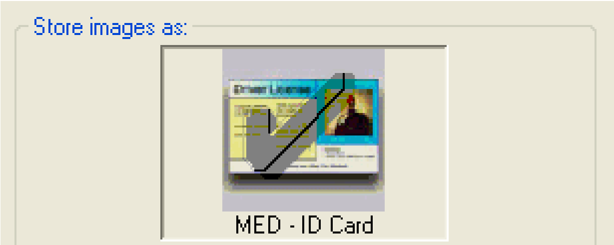
Tip: The order of the thumbnails is dependent on the order in which the pages were scanned.

6. Assign the selected document to a Document Type by clicking its Document Type button.

   Some notes about assigning a document to a Document Type:

   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.

7. Once the document has been assigned to a Document Type, the document is cleared from the Working window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



   If you are not satisfied with all of the scanned pages, click **Discard Images** to deselect the selected Data Set and delete all pages associated with it that have not yet been uploaded to OnBase.

8. Repeat Steps 5-7 for each document that was scanned.

Creating a New Document by Importing an Image or PDF Document

You can also create a document that can be stored in OnBase by importing an available image or PDF document into the Front Office Scanning client.

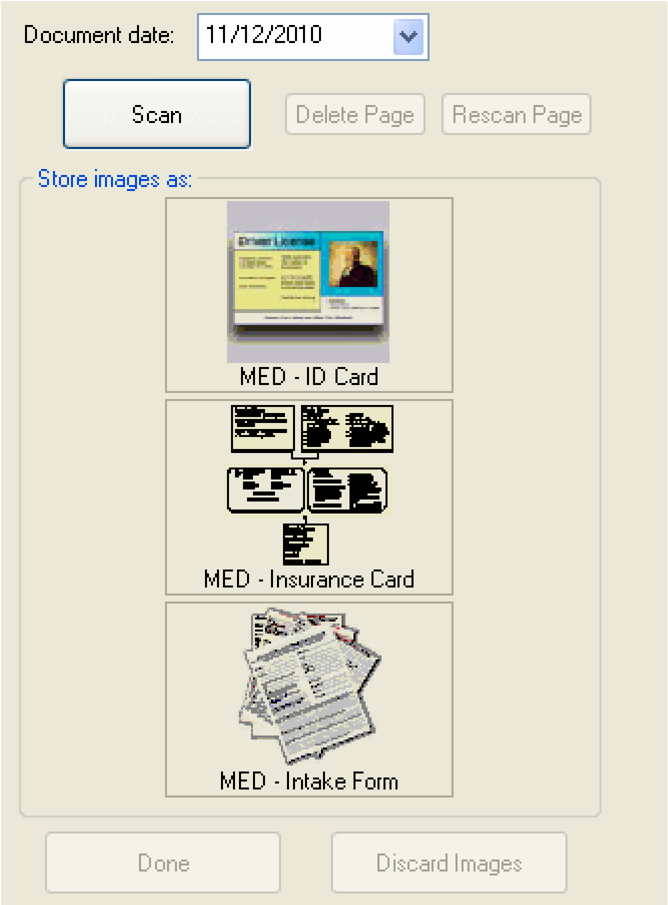
Note: Only PDFs or image documents with standard image file formats (e.g., **.jpg**, **.tiff**, **.gif**, **.bmp**, **.img**, **.png**, etc.) can be imported. Documents with other, non-standard image file formats (e.g., **.xml**, **.htm**, **.xlsx**, **.docx**, **.one**, **.ppt**, etc.) cannot be imported.

Much like scanning paper documents, once an image or PDF is imported into the Front Office Scanning client, you must select a Document Type button to assign the document to the correct Document Type. Unlike scanning paper documents, when creating a new document by importing an image or PDF document, the Front Office Scanning client cannot be configured to automatically select the Document Type for you.

By default, one file is imported, the entire file is treated as one document, it is assigned to a Document Type, another file can be scanned or imported, it is assigned to a Document Type, etc.

Depending on your configuration, however, you may be able to import a multi-page image or PDF document, organize the individual pages into multiple documents, and assign each document to the proper Document Type.

All actions are performed in the **Scan/Create Document** window, located below the **Selected Data Set** window.

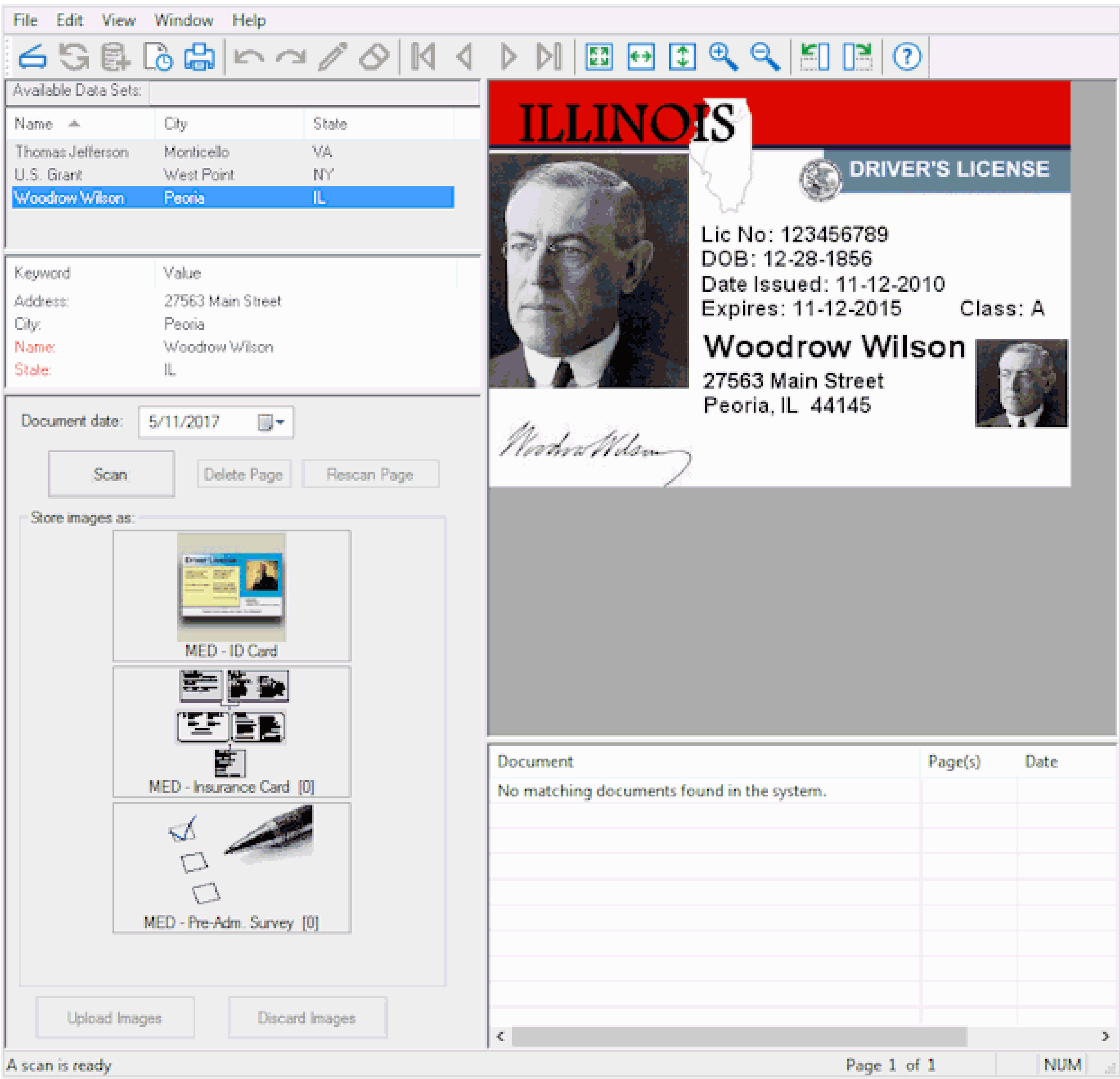


Note: The buttons in the **Store images as:** section are configured by your administrator; the buttons in your solution may be named or may be displayed differently.

Note: Some Front Office Scanning solutions are designed to allow multiple input buttons (i.e., **Scan** buttons) to allow users to scan documents from multiple scanners, from a single scanner using different settings, or to create documents by marking up an image template or by creating an E-Form. The **Scan/Create Document** window for these solutions has a different appearance; examples of this **Scan/Create Document** window can be seen in Creating a Document from an Image Template on page 303 and Creating an E-Form on page 313.

To create a document by importing an electronic image or PDF into the Front Office Scanning client:

1. From the Front Office Scanning client, click **File | Import Image File**. The **Open** dialog box is displayed.
2. Browse to the image or PDF file to be imported and click **Open**. The document is displayed in the **Working** window.



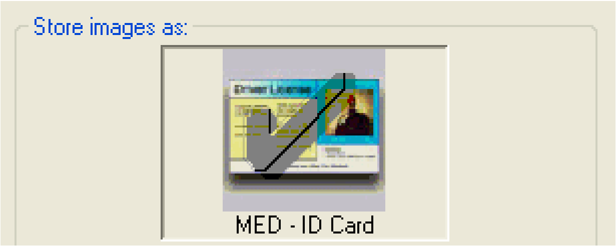
- By default, the document in the **Working** window is displayed in Single Page view.
- To display the document in Full Screen view, click **View | Full Screen** or press **F11**.
- If you are not satisfied with the currently displayed image, click **Delete Page** to delete the currently displayed page from the document.

3. Assign the document to a Document Type by clicking its Document Type button.

   Some notes about assigning a document to a Document Type:

   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, clicking the Document Type button might prompt you to select a Document Type from a drop-down list before the document can be uploaded to OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.
   - Once an image document has been imported into the Front Office Scanning client and is displayed in the **Working** window, only other images can be imported until the displayed image(s) are assigned to a Document Type.
   - Once a PDF document has been imported into the Front Office Scanning client and is displayed in the **Working** window, no other documents can be imported until the displayed PDF is assigned to a Document Type.

4. Once the document has been assigned to a Document Type, the document is cleared from the **Working** window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.

   If you are not satisfied with the currently displayed document, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

5. Repeat these steps for each document you would like import using the selected Data Set.

   Typically, once a document has been assigned to a Document Type for the selected Data Set, the Document Type button is no longer enabled. Depending on your configuration, however, after a new document is scanned, the Document Type may be re-enabled, allowing you to assign multiple documents to the same Document Type. The number of documents assigned to the Document Type for the selected Data Set is displayed in parenthesis on the Document Type button.

   For example:

When registering a patient in the outpatient lab for some testing, the registrar learns that the patient has orders for blood tests from multiple physicians. The orders are available to the Front Office Scanning from a file server on the hospital's internal network.

Once the first order has been imported and assigned to the **MED - Test Order** Document Type, the user at the Front Office Scanning workstation imports the second order. The **MED - Test Order** Document Type button is re-enabled, allowing the user to assign the image of the order to the proper Document Type.

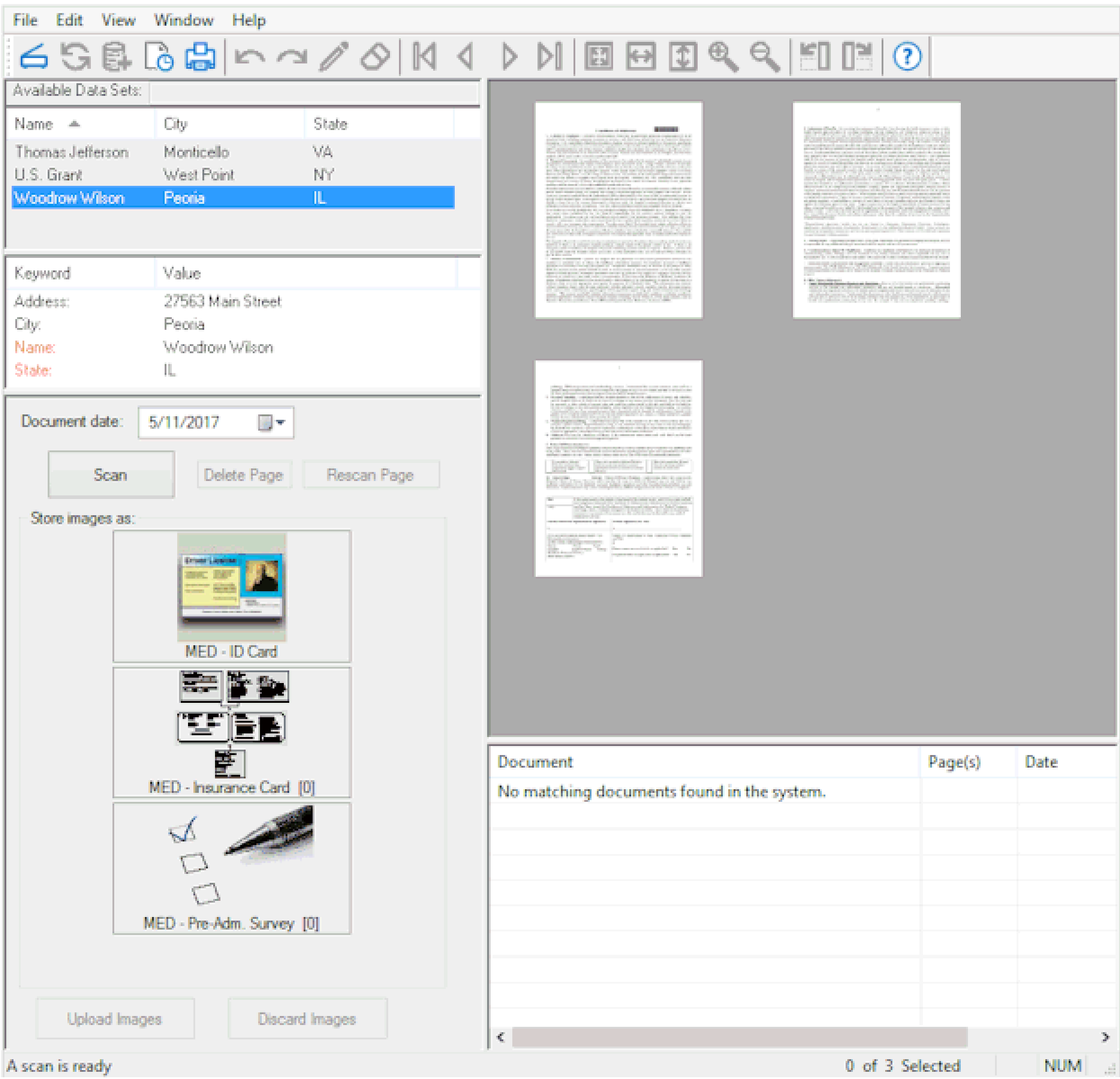
Once both orders have been assigned to the Document Type, the label on the Document Type button is displayed as **MED - Test Order (2)** to indicate that two documents have been assigned to that Document Type for the selected Data Set.

Importing a Multi-Page Image or PDF Document to Create Multiple Documents

Depending on your configuration, you may be able to import a multi-page image or PDF document for the selected Data Set and then organize the pages into individual documents that are assigned to the proper Document Types, as opposed to importing an individual document, assigning it to its Document Type, importing the next document, assigning it to its Document Type, etc.

To create multiple documents by importing a multi-page image or PDF document into the Front Office Scanning client:

1. From the Front Office Scanning client, click **File | Import Image File**. The **Open** dialog box is displayed.
2. Browse to the multi-page image or PDF file to be imported and click **Open**. The document is displayed in the **Working** window.



- By default, the document in the **Working** window is displayed in Thumbnail view. To display a larger thumbnail image of a page, hover over the thumbnail image.
- To display the document in Single Page view, turn off Thumbnail view by clicking **View | Thumbnail** or by pressing **Ctrl+B**.

- To display the document in Full Screen view, click **View** | **Full Screen** or press **F11**.

Tip: When working with a batch containing a large number of pages, it may be easier to work with the Front Office Scanning client in Full Screen view.

3. Select the appropriate page(s) that compose the first document. To select all pages, click **Edit** | **Select All** or press **Ctrl+A**.

   A page is selected when a white box surrounds the thumbnail image. To deselect a page, click it again.

   For example, if a Privacy Notice consists of three pages, select all three pages in the Working window to ensure that the entire document is assigned to the Document Type.

Tip: The order of the thumbnails depends on the order of the pages in the document.

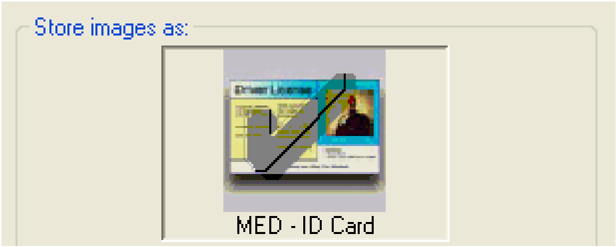
- If you are not satisfied with the currently displayed image, click **Delete Page** to delete the currently selected pages from the document.

4. Click the appropriate Document Type button to assign the selected document to its Document Type.

   When assigning a document to a Document Type, note the following:

   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, clicking the Document Type button might prompt you to select a Document Type from a drop-down list before the document can be uploaded into OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.
   - Once an image document has been imported into the Front Office Scanning client and is displayed in the **Working** window, only other images can be imported until the displayed image(s) are assigned to a Document Type.
   - Once a PDF document has been imported into the Front Office Scanning client and is displayed in the **Working** window, no other documents can be imported until the displayed PDF is assigned to a Document Type.

5. Once the document has been assigned to a Document Type, the document is cleared from the **Working** window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



If you are not satisfied with the currently displayed document, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

If you are satisfied with the currently displayed document and wish to upload it into OnBase, proceed to Uploading Documents to OnBase on page 329.

6. Repeat Steps 3-5 for each document to be created from the multi-page image document.

Importing Multiple Image Documents as a Single Document

You can import multiple image documents into the Front Office Scanning client together as a single document in one operation.

Tip: This procedure can save time over merging multiple documents into a single document outside of your OnBase system and then importing this merged document into Front Office Scanning, or over manually joining documents together within OnBase after import.

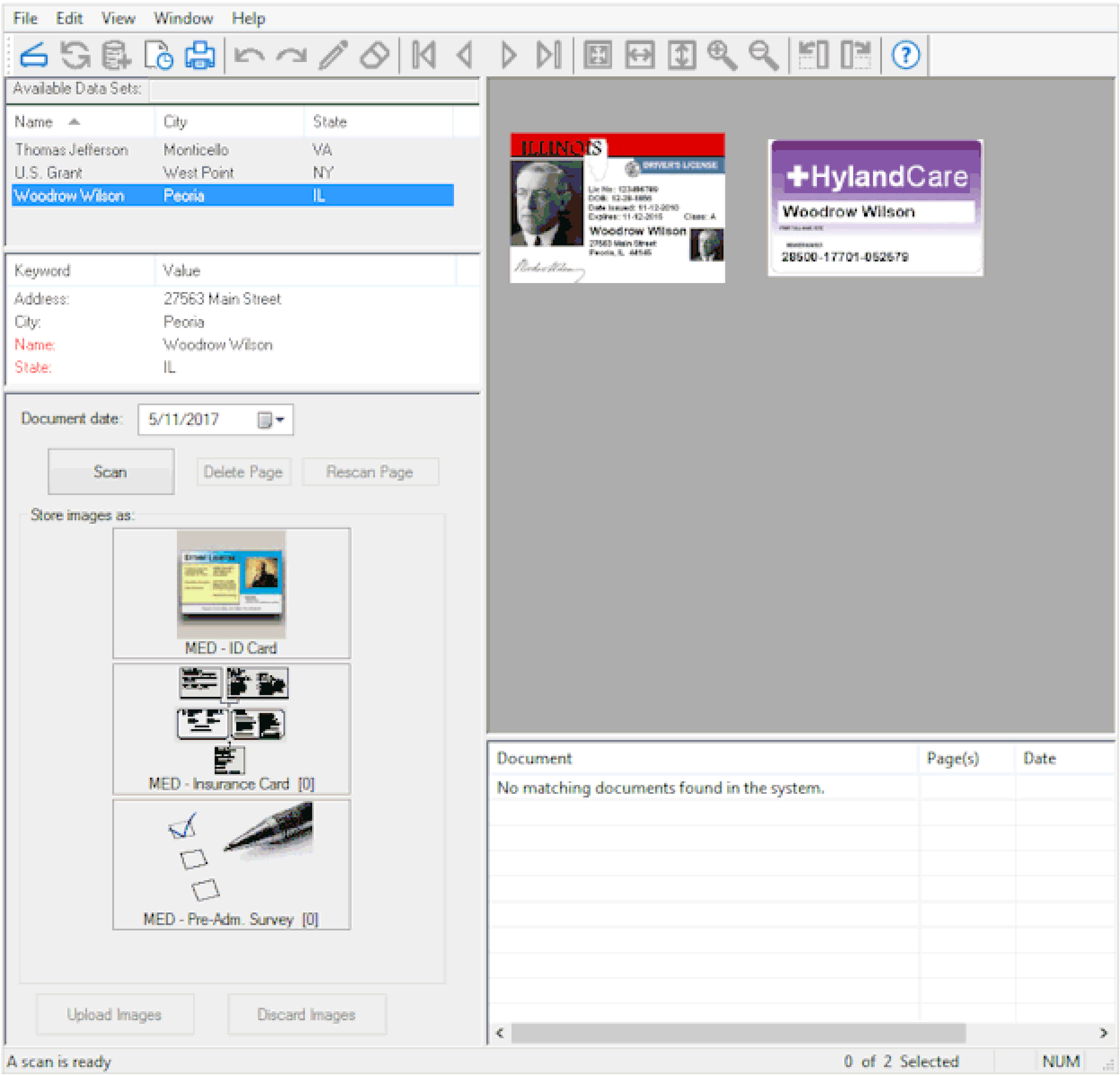
Note: Multiple PDF documents cannot be imported into the Front Office Scanning client in a single operation. If you attempt to import multiple PDFs at the same time, only the first selected PDF will be imported.

To import multiple image documents as a single document into the Front Office Scanning client:

1. Click **File | Import Image File**. The **Open** dialog box is displayed.
2. Browse to the folder containing the image documents you wish to import.
3. To select multiple documents simultaneously within this folder, press and hold the CTRL key while clicking each document you wish to import.

Note: If you wish to include additional documents from a different folder in this import process, you can add them in a later step.

4. Once you have selected all desired documents, click **Open**. The documents are displayed in the **Working** window.



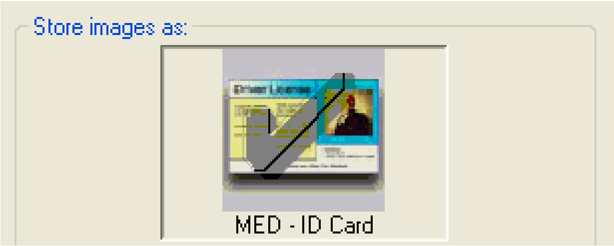
- By default, the document in the **Working** window is displayed in Thumbnail view. To display a larger thumbnail image of a page, hover over the thumbnail image.
- To display the document in Single Page view, turn off Thumbnail view by clicking **View | Thumbnail** or by pressing **Ctrl+B**.
- To display the document in Full Screen view, click **View | Full Screen** or press **F11**.

5. In the **Working** window, select all documents you wish to import as a single document.
   - To select each document individually, click the appropriate thumbnail images.
   - To select all documents at once, click **Edit | Select All** or press **Ctrl+A**.

Note: A document is selected when a white box surrounds the thumbnail image. A document remains selected, even after importing additional documents, until you deselect it. To deselect a document, click its thumbnail image(s) again.

6. If you wish to remove a document from the import process, select only that document's thumbnail image(s) and click **Delete Page**.
7. If you wish to include additional image documents from a separate folder in this import process, repeat steps 1 to 6 before proceeding.
8. Once you have selected all documents you wish to import as a single document, click the appropriate Document Type button to assign the selected document to its Document Type.

   When assigning a document to a Document Type, note the following:
   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, clicking the Document Type button might prompt you to select a Document Type from a drop-down list before the document can be uploaded into OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.
9. Once the document has been assigned to a Document Type, the document is cleared from the **Working** window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



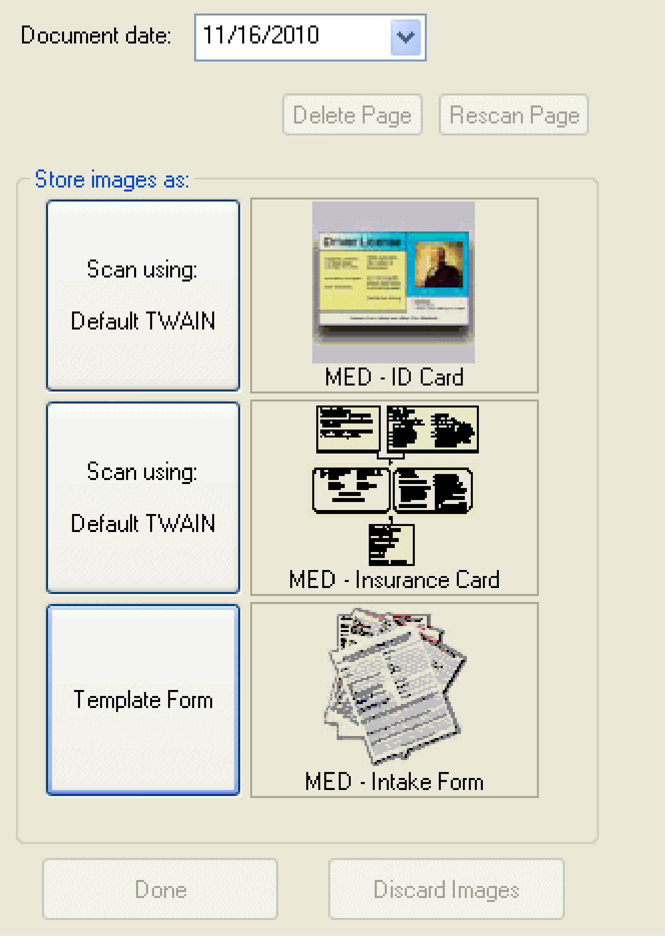
   If you are not satisfied with the currently displayed document, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

   If you are satisfied with the currently displayed document and wish to upload it into OnBase, proceed to Uploading Documents to OnBase on page 329.

Creating a Document from an Image Template

Documents can also be created by marking up an image (called an image template) inside of the Front Office Scanning client. When creating documents this way, you select the image template to be displayed (usually in the Working window) where you can add markups to the image, instead of clicking a **Scan** button to scan a paper document or importing an image file into the Front Office Scanning client.

In order to create documents from image templates, your Front Office Scanning client must be configured to use multiple input buttons instead of a single **Scan** button; these input buttons are displayed in the Store images as section of the **Scan/Create Document** window, next to the Document Type buttons.



Note: The buttons in the **Store images as:** section are configured by your administrator; the buttons in your solution may be named or may be displayed differently.

Once you click the input button associated with the image template that will be used to create the document, an image is displayed that, depending on your configuration, you can markup as needed.

Tip: By default, the input button is named **Template Form**, although it is likely that your administrator has configured a different name for the button. Typically, the input button for an image template is displayed next to the Document Type button of the Document Type the document created from the image template will be assigned to.

Depending on your configuration, the image template may be displayed in a number of ways:

- In the Front Office Scanning client's Working window, in Full Screen view.
- On a TOPAZ clipboard device.

Tip: This is useful for documents, such as a Notification of Privacy Practices, that are displayed for a patient's acknowledgment/signature.

Additionally, once the image template is selected, it can be used in the following ways:

- The image template can be marked up (e.g., notations can be added, the document can be signed, etc.) and assigned to a Document Type.
- The image template can be assigned as-is to a Document Type. This process may be automatic or you may need to manually assign the document to a Document Type.
- The image template is automatically printed.

  Depending on your configuration, once the image template is automatically printed:
  - It may be displayed in the **Working** window, where it can be discarded without any further action or it can be marked up and assigned to a Document Type.
  - It may automatically be discarded without any user interaction.

If you are using a multi-page image as an image template, your administrator can configure which page is displayed first.

To create a document from an image template:

1. From the Front Office Scanning client, click the input button associated with the image template that you want to use to create the document.

Tip: By default, the input button is named **Template Form**, although it is likely that your administrator has configured a different name for the button. Typically, the input button for an image template is displayed next to the Document Type button of the Document Type the document created from the image template will be assigned to. If you are unsure of which input button to select to create a document from an image template, contact your administrator.

2. The next action depends on the design of your Front Office Scanning solution and its configuration:
   a. **If the image template is configured to be stamped with an image captured with a webcam**. Depending on your configuration, the Front Office Scanning client may take a still image with a webcam and automatically stamp the image on the document.

      Once the image has been taken and stamped onto the document, proceed to Step 2b.

b. **If the image template is configured to be marked up by the user**. Depending on your configuration, the image template may have automatically been printed before it is displayed for markups. It is displayed either in the Front Office Scanning client or on a signature device (e.g., a tablet or a TOPAZ device).

   - For information on working with an image template in the Front Office Scanning client, see Marking Up an Image Template in the Front Office Scanning Client on page 307.
   - For information on working with an image template on a signature device (e.g., a tablet or a TOPAZ device), see Marking Up an Image Template Using a Signature Device on page 311.

   Once all markups have been added to the document, proceed to Step 3.

c. **If the image template does not require markups but must be manually assigned to a Document Type**. Proceed to Step 3.

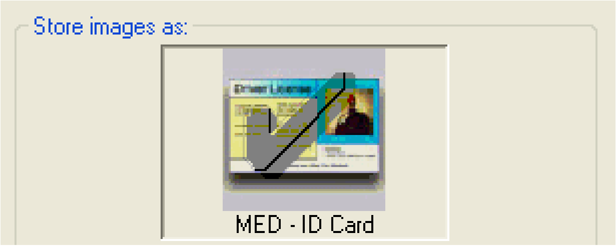
d. **If the image template does not require markups and is automatically assigned to a Document Type**. No further user interaction is required for this document.

e. **If the image template is automatically printed and discarded**. No further user interaction is required.

3. If you are not satisfied with the currently displayed document:
   - Click **Delete Page** to delete the currently displayed page from the document.
   - Click **Delete All** to delete the current document. The currently selected Data Set remains selected.
4. Assign the document displayed in the **Working** window to a Document Type by clicking its Document Type button.

   Some notes about assigning a document to a Document Type:
   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, you may be able to use only the Document Type button next to the corresponding input button that you used to create the document. For more information, contact your administrator.
   - Depending on your configuration, clicking the Document Type button might prompt you to select a Document Type from a drop-down list before the document can be uploaded to OnBase.
   - Depending on your configuration, once a document is assigned to a Document Type, an overlay image, a signature, and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, contact your administrator.

5. Once the document has been assigned to a Document Type, the document is cleared from the Working window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



If you are not satisfied with the currently displayed document, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

6. Repeat these steps for each document you would like create from an image template into OnBase using the selected Data Set.

For example:

When registering a new patient in the Emergency Room, the registrar must have the patient sign several documents, including a notification of privacy practices and an acknowledgment of financial responsibility. These documents, once signed by the patient, are saved as part of the patient's record along with the scanned copies of the patient's driver's license and insurance card.

To quickly and easily capture the patient's signature on these documents and archive the signed copies in OnBase, the notification of privacy practices and the acknowledgment of financial responsibility are saved as image templates available to the Front Office Scanning workstation.

Once the registrar has scanned both the patient's driver's license and insurance card and assigned them to the proper Document Type, he/she clicks the input button associated with the notification of privacy practices. The form is displayed for the patient to read and then acknowledge by signing. The registrar assigns the notification of privacy practices to its Document Type by clicking its associated Document Type button.

With the Data Set still selected, this process is repeated for the statement of financial responsibility.

Typically, once a document has been assigned to a Document Type for the selected Data Set, the Document Type button is no longer enabled. Depending on your configuration, however, after a new document is scanned, the Document Type may be re-enabled, allowing you to assign multiple documents to the same Document Type. The number of documents assigned to the Document Type for the selected Data Set is displayed in parenthesis on the Document Type button.

For example:

When registering a child as a patient in the Emergency Room, the registrar must have the parents of the child sign a waiver granting the hospital and its physicians permission to perform medical treatment on the child. This waiver is stored as an image template available to the Front Office Scanning workstation.

The registrar displays the waiver by clicking the input button associated with its image template and the child's mother reads and acknowledges the waiver by signing it. The registrar then assigns the waiver to the **MED - Parental Permission Waiver** Document Type by clicking the its Document Type button.

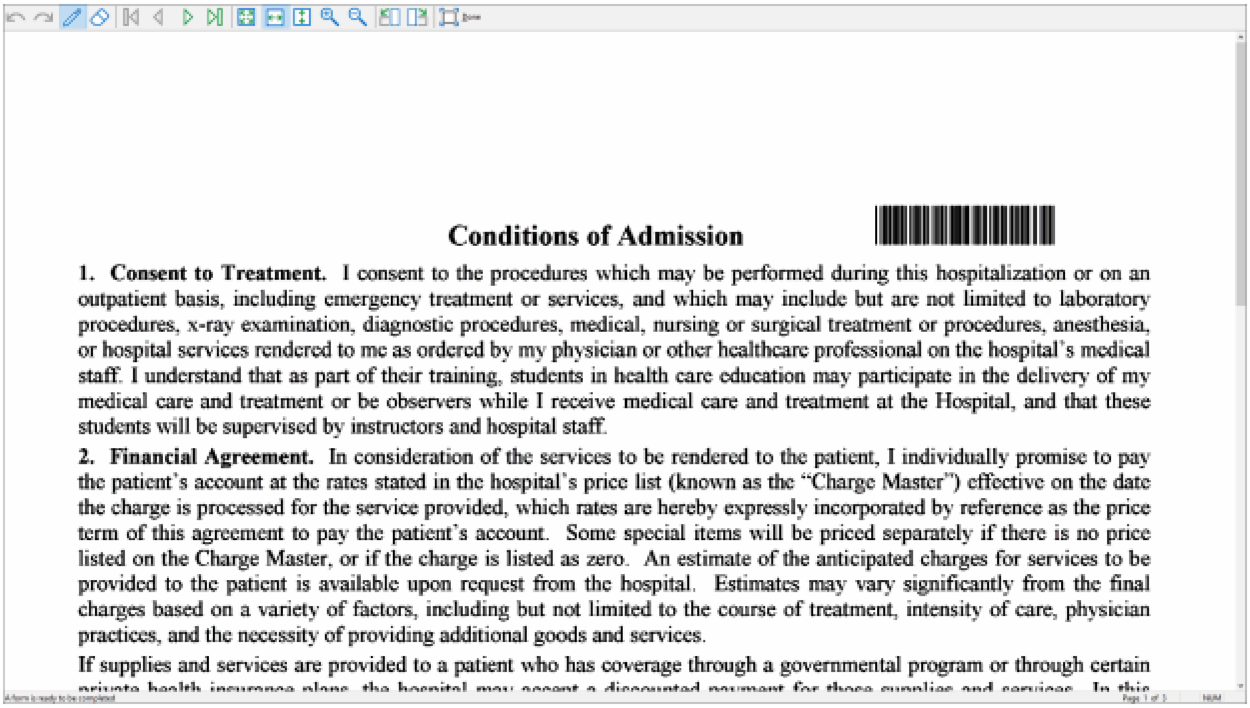
The registrar clicks the input button associated with the waiver again, allowing the child's father to read and acknowledge it. The **MED - Parental Permission Waiver** Document Type button is re-enabled, allowing the user to assign the waiver to the its Document Type.

Once the waiver signed by the child's father has been assigned to the Document Type, the label on the **MED - Parental Permission Waiver** Document Type button is displayed as **MMED - Parental Permission Waiver (2)** to indicate that two documents have been assigned to that Document Type for the selected Data Set.

Marking Up an Image Template in the Front Office Scanning Client

By default, when you click the input button associated with an image template that allows markups, it is displayed in the Front Office Scanning client in Full Screen view.

In Full Screen View, the Front Office Scanning client window is expanded to take up the entire display. The Markup toolbar is displayed at the top and the image template takes up the remainder of the window.



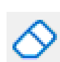
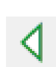
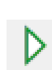
Conditions of Admission

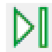
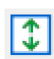
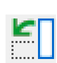
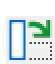
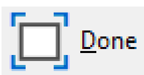
1. Consent to Treatment. I consent to the procedures which may be performed during this hospitalization or on an outpatient basis, including emergency treatment or services, and which may include but are not limited to laboratory procedures, x-ray examination, diagnostic procedures, medical, nursing or surgical treatment or procedures, anesthesia, or hospital services rendered to me as ordered by my physician or other healthcare professional on the hospital's medical staff. I understand that as part of their training, students in health care education may participate in the delivery of my medical care and treatment or be observers while I receive medical care and treatment at the Hospital, and that these students will be supervised by instructors and hospital staff.

2. Financial Agreement. In consideration of the services to be rendered to the patient, I individually promise to pay the patient's account at the rates stated in the hospital's price list (known as the "Charge Master") effective on the date the charge is processed for the service provided, which rates are hereby expressly incorporated by reference as the price term of this agreement to pay the patient's account. Some special items will be priced separately if there is no price listed on the Charge Master, or if the charge is listed as zero. An estimate of the anticipated charges for services to be provided to the patient is available upon request from the hospital. Estimates may vary significantly from the final charges based on a variety of factors, including but not limited to the course of treatment, intensity of care, physician practices, and the necessity of providing additional goods and services.

If supplies and services are provided to a patient who has coverage through a governmental program or through certain private health insurance plans, the hospital may accept a discounted payment for those supplies and services. In this

The Markup toolbar contains all tools necessary to markup an image template:

Button Name	Toolbar Button	Description
Undo		Click to undo the last markup action (e.g., drawing, erasing) from the image template. **Note:** This button is only enabled after you have added a markup to the image template.
Redo		Click to redo the last action that was undone. **Note:** This button is only enabled after you click the **Undo** button.
Draw Tool		Click to enable the drawing tool. The drawing tool allows you to draw markups on the image template with the mouse or other pointer device. **Tip:** The drawing tool can also be enabled in Single Page view by clicking **Edit | Draw Tool**.
Erase Tool		Click to enable the eraser tool. The eraser tool allows you to delete markups, or parts of markups, from the image template. **Tip:** The drawing tool can also be enabled in Single Page view by clicking **Edit | Erase Tool**.
First Page		Click to display the first page of the image template. **Note:** This button is only enabled if your image template contains multiple pages and the currently displayed page is not the first page.
Previous Page		Click to display the previous page of the image template. **Note:** This button is only enabled if your image template contains multiple pages and the currently displayed page is not the first page.
Next Page		Click to display the next page of the image template. **Note:** This button is only enabled if your image template contains multiple pages and the currently displayed page is not the last page.

Button Name	Toolbar Button	Description
Last Page		Click to display the last page of the image template. **Note:** This button is only enabled if your image template contains multiple pages and the currently displayed page is not the last page.
Fit in Window		Click to display the entire currently displayed page in the window. **Note:** The Front Office Scanning client remains in Full Screen view when this option is selected.
Fit to Width		Click to display the document to fit the width of the window. **Note:** The Front Office Scanning client remains in Full Screen view when this option is selected.
Fit to Height		Click to display the document to fit the height of the window. **Note:** The Front Office Scanning client remains in Full Screen view when this option is selected.
Zoom In		Click to zoom in on an area of the image template.
Zoom Out		Click to zoom out on the image template.
Rotate Left		Click to rotate the image template 90 degrees to the left.
Rotate Right		Click to rotate the image template 90 degrees to the right.
Close Full Screen		Click to exit Full Screen view and return the Front Office Scanning client to Single Page view.

To add markups to the image template:

1. While viewing the image template in Full Screen view, navigate to the page of the image template that you would like to mark up by using the **First Page**, **Previous Page**, **Next Page**, and **Last Page** toolbar buttons.
2. Enable the drawing tool by clicking the Drawing Tool toolbar button.

3. Use the mouse or other pointer device to draw markups on the image template.

   If you are using the mouse, click and hold the left mouse button while dragging the pointer across the image template to draw a line. To end the line, release the left mouse button.

Note: The width of the line is automatically determined by the resolution of the image used for the image template, but can be configured by your administrator.

4. To delete a markup, or part of a markup, click the **Eraser Tool** toolbar button to enable the eraser tool. The eraser tool is used the same was as the drawing tool is used to create a line.

Tip: You can also click the **Undo** and **Redo** toolbar buttons to undo previous markups/redo previously undone markups.

Note: Once a markup has been added to the image template, the Rotate Left and Rotate Right buttons are disabled.

5. Once you have added all necessary markups to the image template, click **Done** to exit Full Screen view and return the Front Office Scanning client to Single Page view.
6. From Single Page view, you can continue to add markups to the image template or you can assign the marked-up image template to a Document Type by selecting the appropriate Document Type button.

   Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.

Note: All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the document can be assigned to a Document Type.

If you are not satisfied with the marked-up image template:

- Click **Delete Page** to delete the currently displayed page from the image template.
- Click **Delete All** to delete the currently displayed image template. The currently selected Data Set remains selected.
- Once the image template has been assigned to a Document Type, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

Tip: To return to Full Screen view, click **View | Full Screen** or press **F11**.

Marking Up an Image Template Using a Signature Device

Depending on the design of your Front Office Scanning solution, image templates may be edited on a TOPAZ-compatible device or on a general signature device.

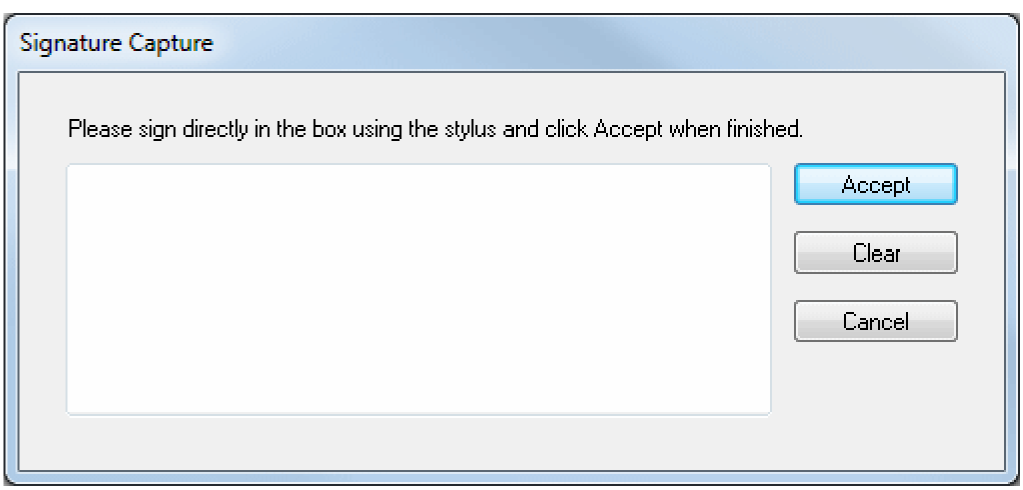
- **A TOPAZ Clipboard**. The image template is configured to display on a TOPAZ clipboard device where it is marked up in much the same way as it would be in the Front Office Scanning client.
- **A Signature Device (for example, a Tablet or a TOPAZ Signature Pad)**. The image template is displayed in the Front Office Scanning client, but signatures captured from the signature device are added to the image template. Depending on your configuration, the signature is stored in one of two ways:
  - **The signature is captured as a markup on an existing document**. See Adding the Signature as a Markup to an Image Template on page 311 for more information.
  - **The signature is captured and "stamped" on a pre-defined area of the image template**. See Stamping the Signature on the Image Template on page 312 for more information.

Note: If you are using a multi-page image template, only one page of the image template can be displayed and marked up on a TOPAZ device; the page that is displayed is configured by your administrator.

Clicking **Delete All** or **Delete Page** in the Front Office Scanning client deletes the image template.

Adding the Signature as a Markup to an Image Template

If your Front Office Scanning configuration specifies that a signature is to be added as a markup to image template, the **Signature Capture** window is displayed in the Front Office Scanning client to the right of the **Selected Data Set** window.



As you sign the signature device, your signature is displayed on the document in the **Signature Capture** window.

Clicking **Cancel** in the **Signature Capture** window or clicking **Accept** without marking up (i.e., signing) the image template deletes the image template.

Stamping the Signature on the Image Template

If your Front Office Scanning configuration specifies that signatures are to be stamped on a pre-defined area of the image template (i.e., the signature is captured separately and is then applied to the document), an additional button (the **Sign** toolbar button) is displayed in the Markup toolbar when the image template is displayed in Full Screen view.

Click **Sign**. The **Signature Capture** window is displayed and the area of the image template where the signature will be displayed is highlighted.

If your Front Office Scanning configuration specifies that certain signatures are not required to be stamped on the document, an additional button (the **Skip Signing** button) is displayed in the **Signature Capture** window.

To skip the signature, click **Skip Signing**. The signature is marked as completed without being stamped on the image template. If the document is configured for multiple signature areas and you click the **Sign** button again, the **Signature Capture** window is displayed for the next signature, which can be signed or skipped as needed.

Once the signature device is signed, click **Accept**. The signature is "stamped" onto the proper location on the image template.

The process is repeated for each signature required for the document.

Stamping a Signature on File on the Image Template

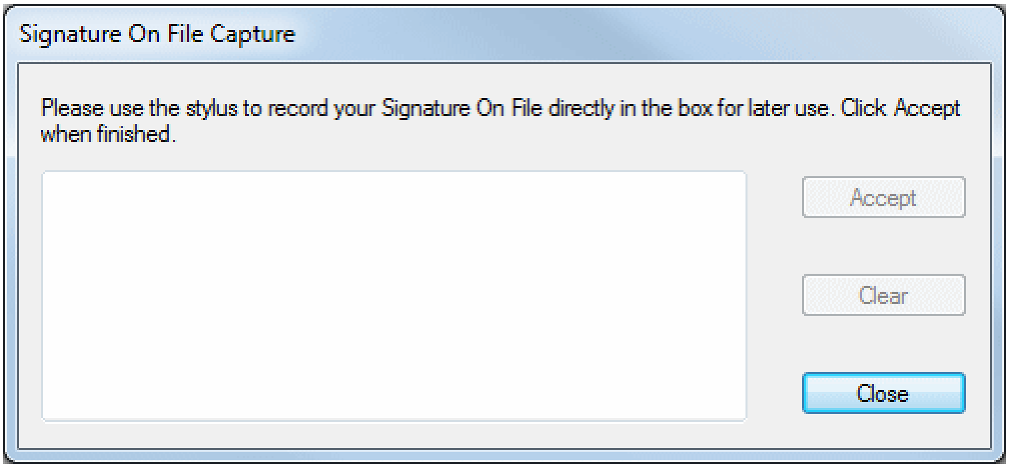
If your Front Office Scanning configuration requires a third party's (e.g., a patient's) signature and the Front Office Scanning user's (e.g., the registrar's) signature, your Front Office Scanning solution can be configured to store your signature on disk and stamp it on the image template when needed.

Like stamping a signature captured from the signature device on an image template, the location of document that the signature on file is applied to is pre-defined by your administrator.

Note: The signature is only available to the user who created it, and only one signature can be stored per user. When stored on disk, the signature is encrypted to prevent unauthorized use/ access of the signature.

To Capture Your Signature and Store it on Disk:

1. From the Front Office Scanning client, click **File | Manage Signature On File.** The **Signature On File Capture** dialog box is displayed.



2. Sign the signature device. To save the signature, click **Accept**. Your signature is saved to disk.

   To discard your signature without saving it to disk, click **Clear** and re-sign the signature device.

   To delete a signature on file, click **Discard**. The stored signature is deleted, and you are prompted to sign and save a new signature.

Applying a Signature on File to an Image Template

A signature on file can only be applied to a document if at least one other signature has been captured by the signature device and stamped on the document.

1. Once the last signature to be captured by the signature device has been stamped on the document, a message is displayed informing you that the document requires a signature on file to be applied to the document.
2. Click **OK**. The signature on file is applied to the document.

   If there is no signature on file for the user, he/she is prompted to capture a signature.

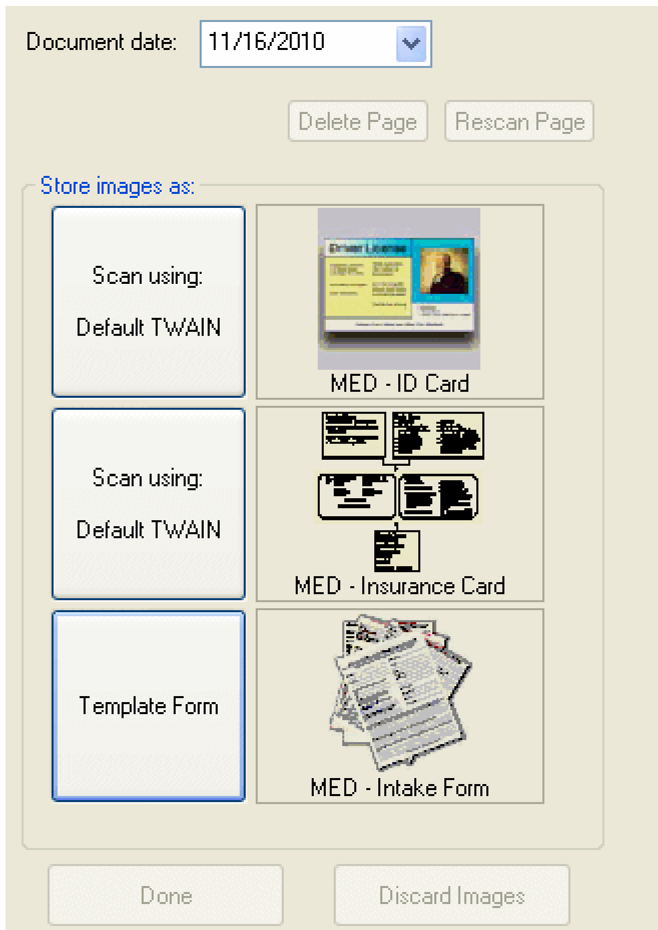
Creating an E-Form

Note: In order to create E-Forms from the Front Office Scanning client, your solution must be licensed for E-Forms.

If your OnBase solution is properly licensed and configured for E-Forms, you can create E-Form documents from within the Front Office Scanning client using Keyword Values from the selected Data Set to automatically populate form fields on the E-Form.

E-Forms are created in much the same way that documents created from image templates are created; however, markups cannot be added to an E-Form document. E-Forms, however, can have signatures applied to them; they are first converted to images documents within the Front Office Scanning client, and then the signature is stamped on the image document.

Like creating documents from an image template, in order to create E-Forms, your Front Office Scanning client must be configured to use multiple input buttons instead of a single **Scan** button; these input buttons are displayed in the **Store images as:** section of the **Scan/Create Document** window, next to the Document Type buttons.



Note: The buttons in the **Store images as:** section are configured by your administrator; the buttons in your solution may be named or may be displayed differently.

Once you click the input button associated with the E-Form, the E-Form is displayed in the Working window. Form fields on the E-Form are automatically populated with corresponding Keyword Values from the selected Data Set.

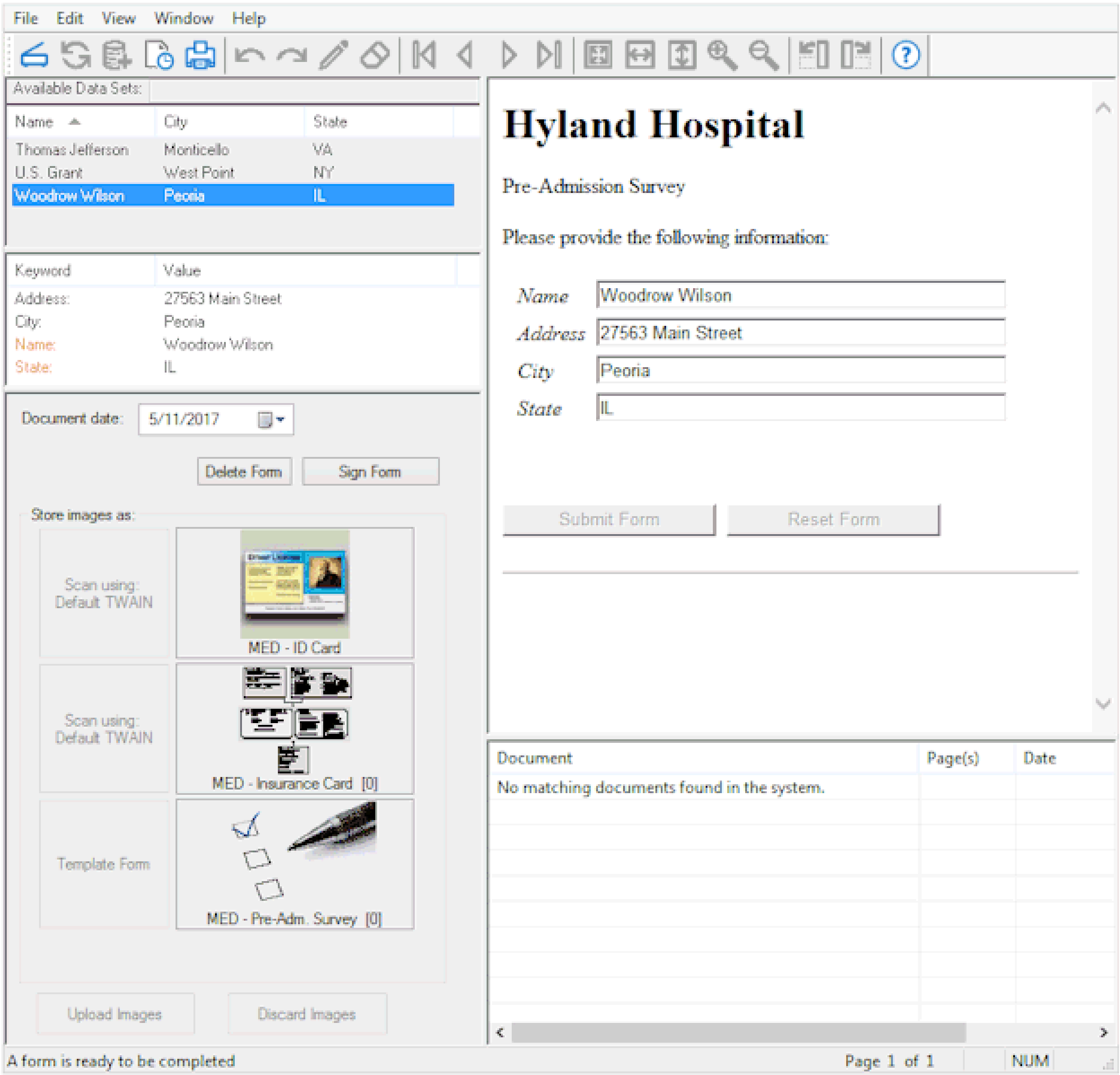
Tip: By default, the input button is named **Template Form**, although it is likely that your administrator has configured a different name for the button. Typically, the input button for an E-Form is displayed next to the Document Type button of the Document Type the E-Form will be assigned to.

To create an E-Form:

1. From the Front Office Scanning client, click the input button associated with the E-Form you wish to create.

Tip: By default, the input button is named **Template Form**, although it is likely that your administrator has configured a different name for the button. Typically, the input button for an E-Form is displayed next to the Document Type button of the Document Type the E-Form will be assigned to. If you are unsure of which input button to select to create a document from an E-Form, contact your administrator.

2. The E-Form is displayed in the Working window.



The Keyword Values from the selected Data Set are used to automatically populate the fields on the E-Form. The fields are read-only and their values cannot be modified.

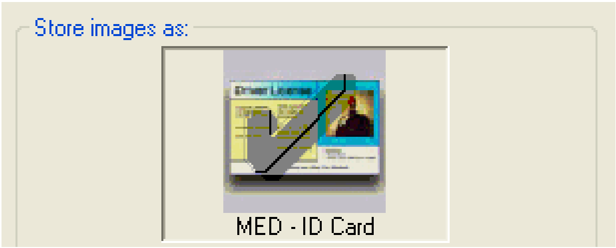
Caution: Although other form fields not populated by Keyword Values from the Data Set are enabled, any data entered into these form fields is not retained once the E-Form is uploaded to OnBase.

Note: If you want the Keyword Values that populate the E-Form to be styled differently than the regular text that appears on the E-Form, you must add a style that targets read-only text to the E-Form template. For general information on E-Forms, see the **E-Forms** module reference guide.

Note: If any **Submit** or **Reset** buttons are configured for the E-Form, they are automatically disabled.

3. If you are not satisfied with the currently-displayed document:
   - Click **Reset Form** to clear all manually-entered data from the form fields on the E-Form. All fields filled by the selected Data Set remain populated.
   - Click **Delete Form** to delete the E-Form document. The currently-selected Data Set remains selected.
4. Assign the E-Form to a Document Type by clicking its Document Type button.

   Some notes about assigning a document to a Document Type:
   - Depending on your configuration, the E-Form may be automatically assigned to a Document Type. For more information, contact your administrator.
   - All required Keyword Types (i.e., those displayed in red in the **Selected Data Set** window) must have Keyword Values associated with them before the E-Form can be assigned to a Document Type.
   - Required Document Types are displayed in red. Documents must be assigned to these Document Types for the Data Set before documents can be uploaded to OnBase.
   - Depending on your configuration, you may be able to use only the Document Type button next to the corresponding input button that you used to create the document. For more information, contact your administrator.
   - Depending on your configuration, clicking the Document Type button might prompt you to select a Document Type from a drop-down list before the document can be uploaded to OnBase.
   - Depending on your configuration, once an E-Form is assigned to a Document Type, it may be converted to an image and an overlay image and/or Keyword Values (or bar codes representing Keyword Values) may automatically be stamped on the document. For more information, see your administrator.
5. Once the E-Form has been assigned to a Document Type, the E-Form is cleared from the **Working** window, a check mark is displayed over the selected Document Type button, and the Document Type button is no longer enabled.



   - If you are not satisfied with the currently-displayed E-Form, click **Discard Images** to deselect the selected Data Set and delete all documents associated with it that have not yet been uploaded to OnBase.

6. Repeat these steps for each E-Form you would like to create using the selected Data Set.

Typically, once an E-Form has been assigned to a Document Type for the selected Data Set, the Document Type button is no longer enabled. Depending on your configuration, however, after a new E-Form is created, the Document Type button may be re-enabled, allowing you to assign multiple E-Forms to the same Document Type. The number of E-Forms assigned to the Document Type for the selected Data Set is displayed in parentheses on the Document Type button.

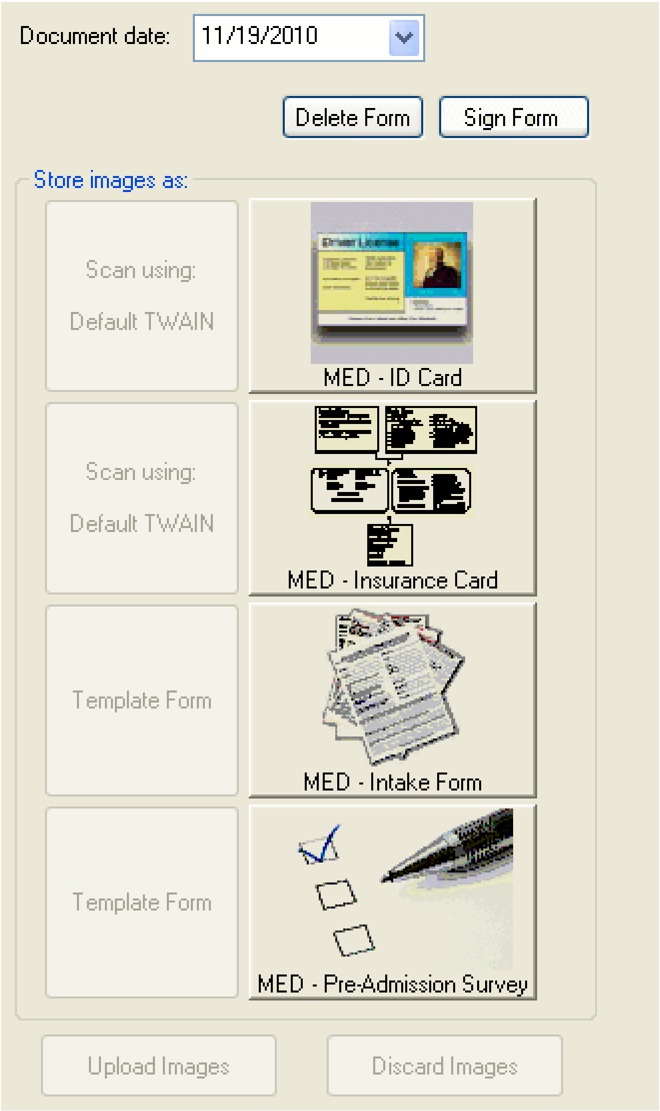
Stamping a Signature on an E-Form

Depending on your configuration, signatures captured by a signature device (for example, a TOPAZ signature pad or a mouse/stylus) can be stamped on a pre-defined area of the E-Form (similar to image templates).

In order to stamp a signature on an E-Form, the E-Form is first converted to an image document and then the signature is applied to it.

To stamp a signature on an E-Form:

1. After creating the E-Form, click the **Sign Form** button, displayed in the **Scan/Create Document** window below the **Document date** field.



The E-Form is converted into a bi-tonal image document, and the image is displayed in Full Screen view in the background.

Note: E-Forms cannot be viewed in Full Screen view; however, once the E-Form is converted to an image so the signature markup can be added, it can be displayed in Full Screen view.

An additional button (the **Sign** toolbar button) is now displayed in the Markup toolbar.

2. The **Signature Capture** window is displayed in the foreground, and the area of the image where the signature will be displayed is highlighted in Full Screen view in the background.
3. If your Front Office Scanning configuration specifies that certain signatures are not required to be stamped on the document, an additional button (the **Skip Signing** button) is displayed in the **Signature Capture** window.

   To skip the signature, click **Skip Signing**. The signature is marked as completed without being stamped on the image template. If the document is configured for multiple signature areas and you click the **Sign** button again, the **Signature Capture** window is displayed for the next signature, which can be signed or skipped as needed.
4. Sign the signature device.
5. Click **Accept**. The signature markup is "stamped" onto the proper location on the image.

Note: If you click **Cancel**, you will be returned to the Full Screen view. To return to the **Signature Capture** window, click the **Sign** button in the Markup toolbar.

6. Steps 1-4 are repeated for each signature required for the document.

Stamping a Signature on File on the E-Form

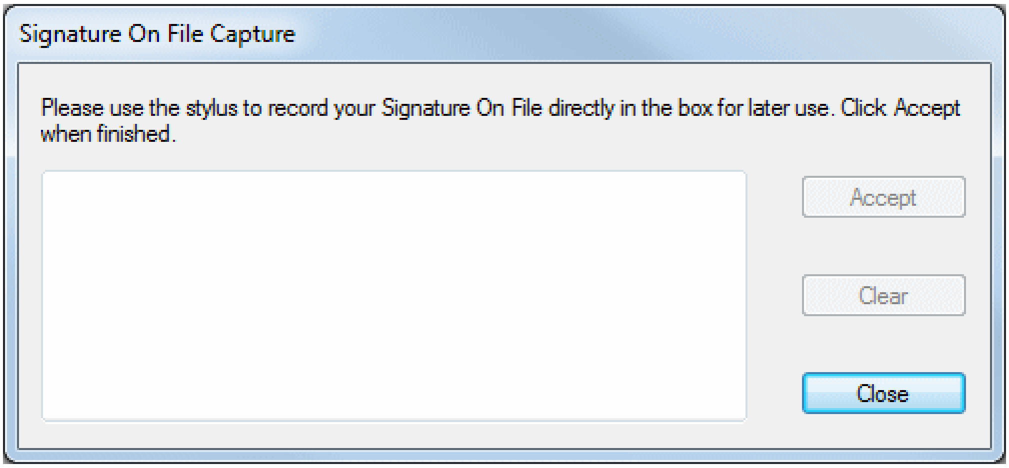
If your Front Office Scanning configuration requires a third party’s (e.g., a patient’s) signature and the Front Office Scanning user’s (e.g., the registrar’s) signature, you may be able to (depending on your configuration) store your signature on disk and stamp it on the E-Form when needed.

Like stamping a signature captured from the signature device on an E-Form, the location of E-Form where the signature is applied is pre-defined by your administrator and the E-Form must first be converted to an image document before the signature is applied to it.

Note: The signature is only available to the user who created it, and only one signature can be stored per user. When stored on disk, the signature is encrypted to prevent unauthorized use of/access to the signature.

To Capture Your Signature and Store it on Disk:

1. From the Front Office Scanning client, click **File | Manage Signature On File.** The **Signature On File Capture** dialog box is displayed.



2. Sign the signature device. To save the signature, click **Accept**. Your signature is saved to disk.

   To discard your signature without saving it to disk, click **Clear** and re-sign the signature device.

   To delete a signature on file, click **Discard**. The stored signature is deleted, and you are prompted to sign and save a new signature.

Applying a Signature on File to an E-Form

A signature on file can only be applied to a document if at least one other signature has been captured by the signature device and stamped on the document.

1. Once the last signature to be captured by the signature device has been stamped on the document, a message is displayed informing you that the document requires a signature on file to be applied to the document.
2. Click **OK**. The signature on file is applied to the document.

   If there is no signature on file for the user, he/she is prompted to capture a signature.

Working with Documents in the Working Window

While a document is displayed in the Working window (i.e., before it is uploaded to OnBase), there are a number of actions you can take to work with the document as needed.

If your Front Office Scanning solution is configured to allow you to access documents stored in OnBase related to the selected Data Set via the Related Documents list, you may also be able to work with those documents in much the same way you can work with documents created in the Front Office Scanning client.

For more information on accessing OnBase documents from the Front Office Scanning client, see Performing Document Retrieval in the Front Office Scanning Client on page 324.

Single Page, Full Screen, & Thumbnail View

The Front Office Scanning client can be viewed in three different modes, or views: Single Page view, Full Screen view, and Thumbnail view. Each of the three different view is used for a specific purpose.

Single Page View

Single Page view is the default view of the Front Office Scanning client. It allows you to view the **Available Data Sets** list, the **Selected Data Set** window, the **Scan/Create Document** window and the **Working** window in the same window.

Single Page view allows you to view only a single page of the current document in the **Working** window. Most work in the Front Office Scanning client is completed in Single Page view.

To view the Front Office Scanning client in Single Page view, ensure that both the Full Screen and Thumbnail views are toggled off by clicking **View | Full Screen** or by pressing **F11** for Full Screen view or by clicking **View | Thumbnails** or by pressing **Ctrl+B** for Thumbnail view.

Full Screen View

Full Screen view is used to give you a better view of the Working window. When the Front Office Scanning client is displayed in Full Screen view, the Front Office Scanning client window is expanded to cover the entire display area, and the Working window is expanded to take nearly the entire Front Office Scanning client window. It allows you to gain a better view of an image template, E-Form or scanned document.

Tip: Full Screen view is most often used when marking up an image template or stamping a signature on an image template or E-Form.

Note: E-Forms cannot be viewed in Full Screen View.

The Main Menu, Front Office Scanning toolbar, **Available Data Sets** list, **Selected Data Set** window and **Scan/Create Document** window are not visible when in Full Screen view.

To view the Front Office Scanning client in Full Screen view, click **View | Full Screen** or press **F11**.

Note: For some Front Office Scanning workstation configured to use dual monitors, initiating Full Screen view displays the Front Office Scanning client on the secondary monitor.

Thumbnail View

If your Front Office Scanning client is configured to use Front Office Scanning Batch Scanning or to create multiple documents from an imported multi-page image document, you can view available pages in the Front Office Scanning client in Thumbnail view.

Thumbnail view allows you to view thumbnail images of all currently available pages in the Working window so that the pages can be grouped into documents.

When using the Front Office Scanning client in Thumbnail view, some features work slightly differently than when the Front Office Scanning client is used in Single Page view.

- **Deleting Pages**. To delete pages in Thumbnail view, select the thumbnail images of the pages to be deleted and click **Delete Page**.
- **Rescanning Pages**. To rescan a page in Thumbnail view, select the thumbnail image of the page to be rescanned and click **Rescan Page**.
- **Printing Pages**. To print pages in Thumbnail view, select the thumbnail images of the pages to be printed and select **File | Print**, click the **Print** toolbar button, or press **Ctrl+P**.

  If no thumbnail images are selected, all pages are printed.
- **Rotating Pages**. To rotate pages in Thumbnail view, select the pages to be rotated and click either the **Rotate Left** or **Rotate Right** toolbar buttons as needed.

Note: If pages have been marked up, they cannot be rotated.

To view the Front Office Scanning client in Thumbnail view, click **View | Thumbnails** or press **Ctrl+B**.

Printing Documents

To print the currently-displayed document, press **Ctrl+P**, click **File | Print...**, click the **Print** toolbar button, or click **Print** from within the Print Preview window.

The **Print** dialog is displayed, allowing you to select your printer and your printing preferences. A default printer may already be selected for you.

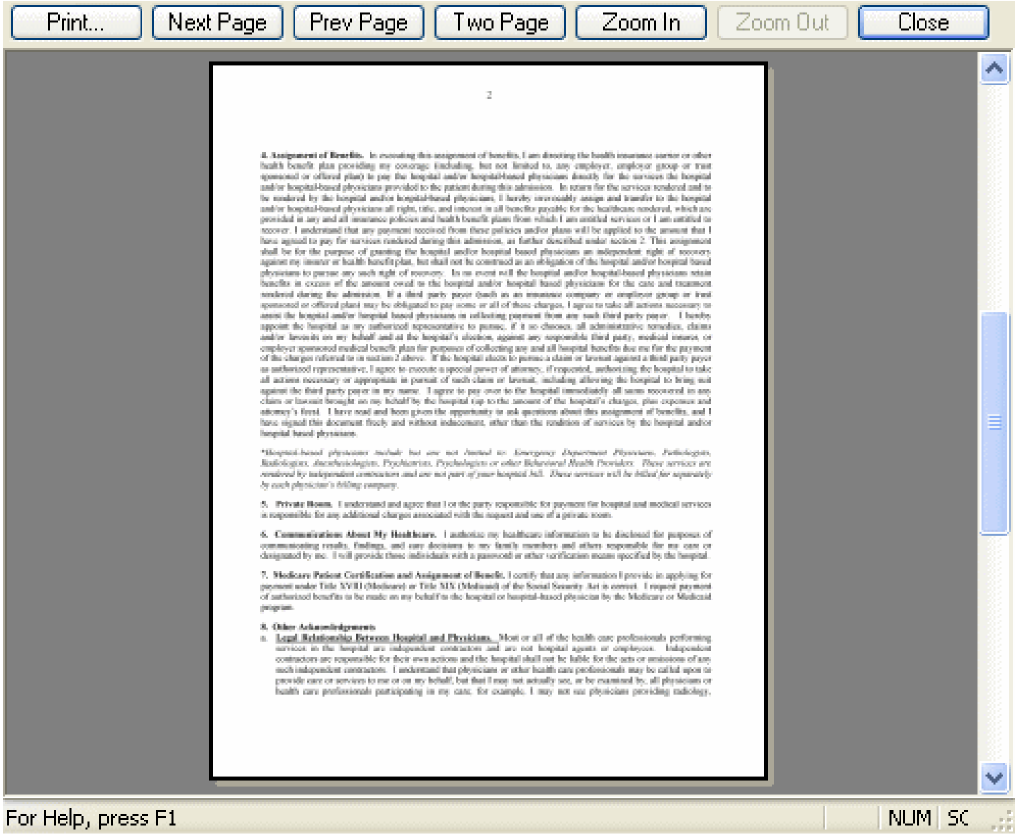
Click **OK** to print the document.

Note: Depending on your configuration, a document may be configured to automatically print when its associated input button is selected.

Print Preview

Note: A print preview of E-Form documents is not available.

To view a print preview of the currently-displayed document, click **File | Print Preview**. The Print Preview window is displayed.



From the Print Preview window, you can:

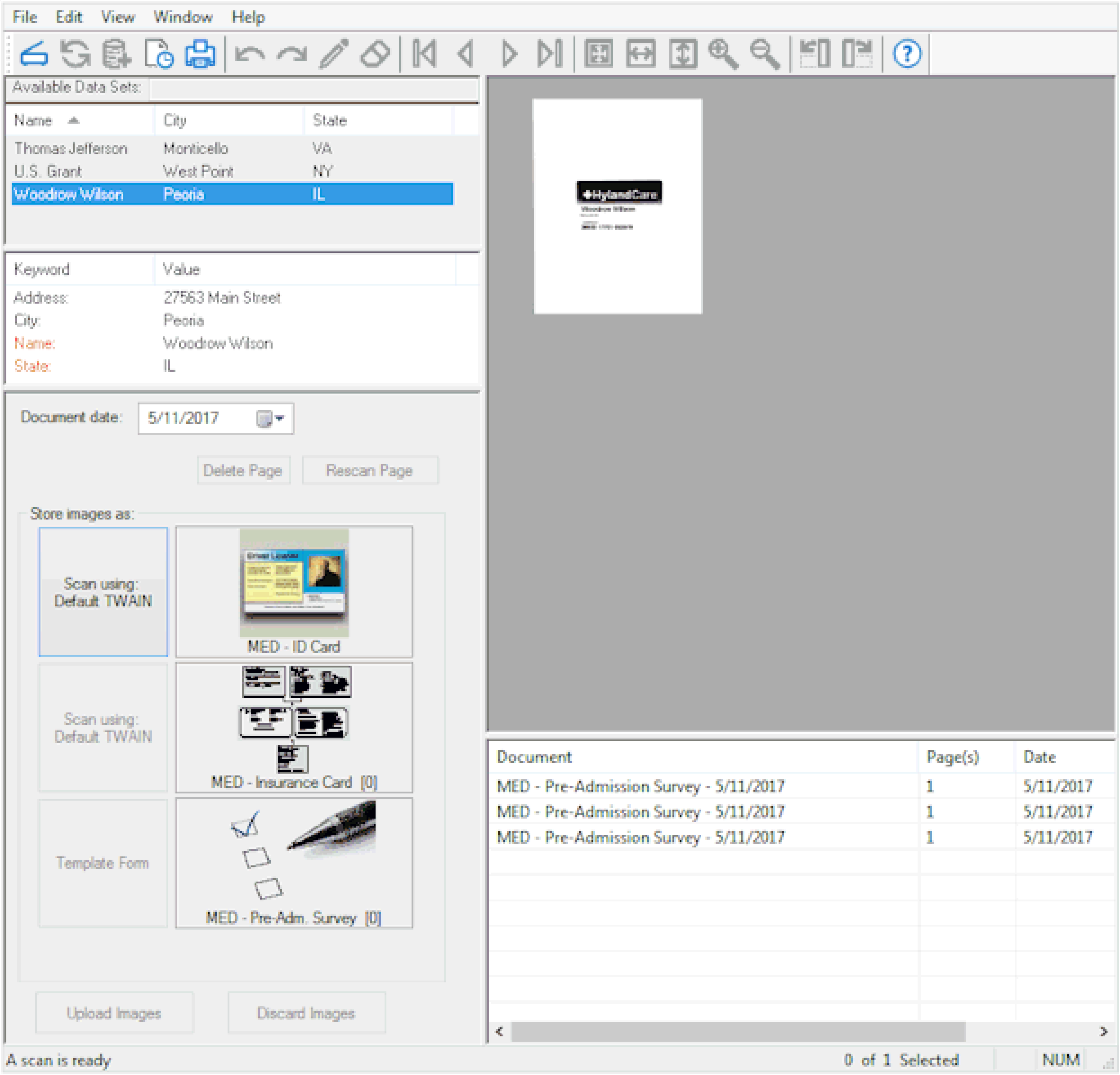
- Print the document by clicking the **Print...** button.
- If you are viewing a multi-page document, navigate the document by clicking the **Next Page** and **Prev Page** buttons.
- View either one or two pages at a time by clicking the **One Page** or **Two Page** button.
- Zoom in or out on a page by using the **Zoom In** and **Zoom Out** buttons.
- Exit the Print Preview window without printing the document by clicking **Close**.

Note: The Print Preview window cannot be closed by clicking the **X** in the upper-right corner of the window; to exit the window without printing a document, you must click **Close**.

Performing Document Retrieval in the Front Office Scanning Client

Depending on your configuration, you may be able to view documents related to the selected Data Set (i.e., documents stored in OnBase or documents that are pending upload to OnBase that share Keyword Values with the selected Data Set).

If this feature is available, the related documents are displayed in the **Related Documents** list, displayed below the **Working** window when the Front Office Scanning client is viewed in Single Page or Thumbnail view.



The **Related Documents** list is automatically populated when a Data Set is selected from the **Available Data Sets** list. The **Related Documents** list is NOT populated when a Data Set is manually created.

The documents displayed in the **Related Documents** list have one or more Keyword Values in common with the Keyword Values in the selected Data Set. The Keyword Types used to determine if existing documents match the selected Data Set are specified by your administrator.

Note: If your Front Office Scanning client is configured to run in disconnected mode (i.e., you are able to collect several Data Sets' documents before performing an upload), only documents that are pending upload are displayed in the **Related Documents** list. Documents stored in OnBase are not displayed.

To determine if documents in the **Related Documents** list are currently stored in OnBase or if they are awaiting upload to OnBase, note the corresponding values in the **Pending** column:

- Related documents that are awaiting upload into OnBase have a **Pending** value of **Yes**.
- Related documents that are already stored in OnBase have a **Pending** value of **No**.

Related documents awaiting upload are displayed with the document's Document Type name displayed in the **Document** column. Related documents already stored in OnBase are displayed with the document's full Auto-Name string displayed in the **Document** column.

You can also sort the documents in the **Related Documents** list by column. To sort the documents by a particular column, click on the column's header. An arrow to the right of the column's label indicates the direction of the sorting (e.g., an upward arrow sorts in ascending order, a downward arrow sorts in descending order). To change the direction of the sorting, click on the column's header again.

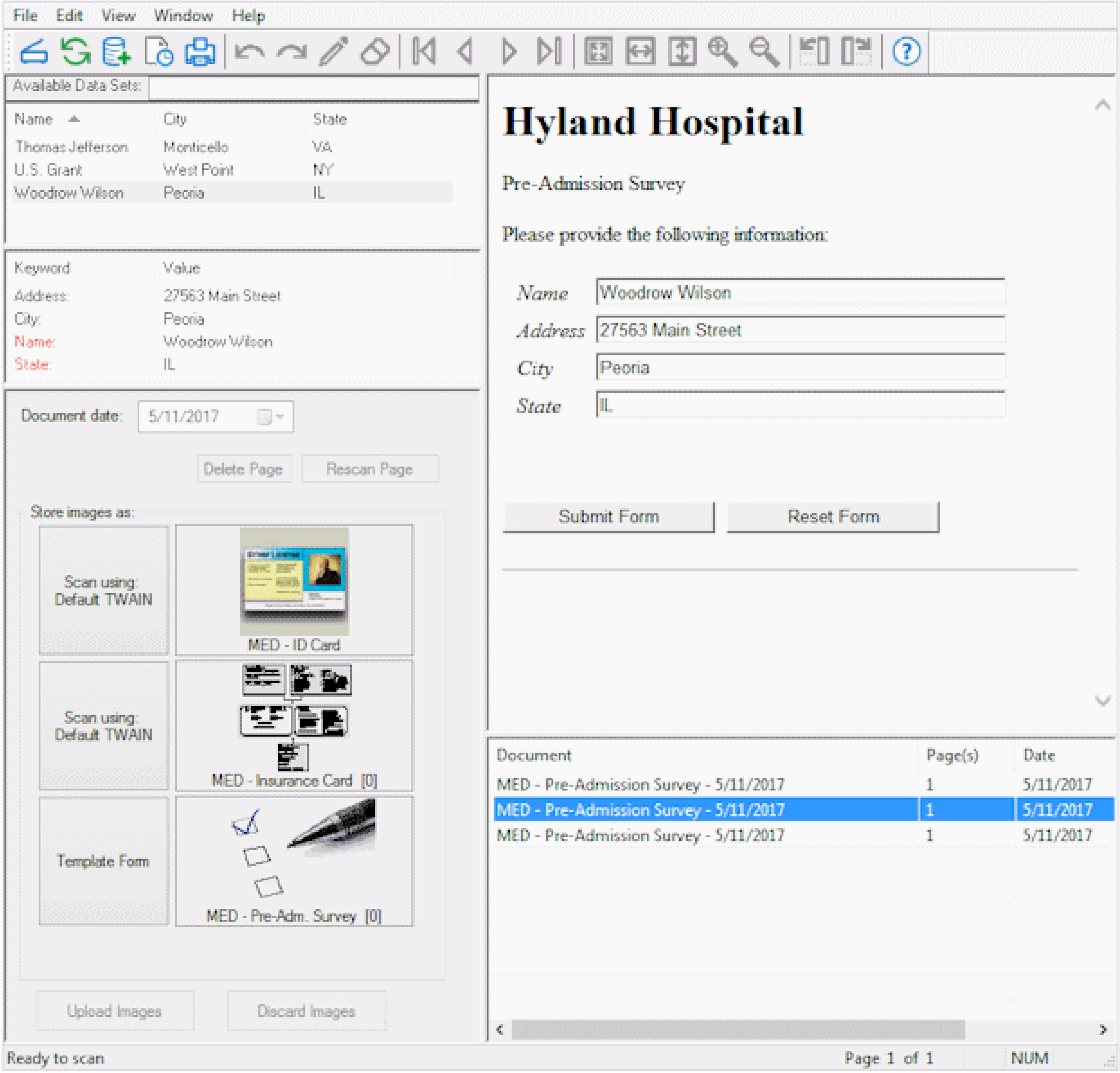
Viewing a Related Document

To display a document stored in OnBase list in the Front Office Scanning client's **Working** window:

1. From the **Related Documents** list, double-click on the document to be viewed or right-click on the document and select **View**.

   If a document is currently displayed in the Working window that has not yet been assigned to a Document Type, you are asked if you would like to discard that document. Click **Yes** to discard the current document and open the document from OnBase.

   The document is displayed in the **Working** window.



Note: If an OnBase document is viewed in the Front Office Scanning client, the action is recorded in the document's history.

Copying an Existing Document

Depending on your system configuration, you may be able to copy a document listed in the Related Documents list by opening it in the Working window and then assigning it to a Document Type by clicking a Document Type button.

The newly-created document uses the same as the document from the **Related Documents** list, but it does not need to belong to the same Document Type as the original document (although it can) and it is indexed using the currently selected Data Set, which may or may not contain all of the same Keyword Values as the original document.

Reindexing a Related Document

If a document listed in the **Related Documents** list has not yet been uploaded to OnBase, it can be re-indexed to a different Document Type.

1. From the **Related Documents** list, right-click the document to be re-indexed and select **Reindex**.

Note: The document is still indexed by the selected Data Set; the Data Set values assigned to the document cannot be individually changed in this manner.

2. A message is displayed asking you to confirm that you would like to re-index the document. Click **Yes** to proceed.

   The document is cleared from the **Related Documents** list and is displayed in the **Working** window.
3. Click the Document Type button of the Document Type you would assign the document to.

   The document is cleared from the **Working** window and it is added to the **Related Documents** list.

Printing Related Documents

Documents listed in the Related Documents list can be printed using the workstation’s default printer.

From the **Related Documents** list, right-click the document(s) to be printed and select **Print**.

The documents are automatically printed using the workstation’s default printer (or the printer configured for your Front Office Scanning solution) using the default settings. All pages of each of the selected document are automatically printed.

Deleting a Related Document

If a document listed in the **Related Documents** list has not yet been uploaded to OnBase, it can be deleted from the Front Office Scanning client.

1. From the **Related Documents** list, right-click the document to be deleted and select **Delete**.
2. A message is displayed asking you to confirm that you would like to delete the document. Click **Yes** to proceed.

   The document is deleted. It is cleared from the **Related Documents** list.

Tip: Unlike the **Discard Images** button, which deletes all documents associated with the selected Data Set that have not yet been uploaded to OnBase from the Front Office Scanning client, this option only deletes the selected document.

Refreshing the Related Documents List

The **Related Documents** list can be refreshed manually by right-clicking any document in the list and selecting **Reload Existing Documents**.

The **Related Documents** list is reloaded, and the list now reflects any changes to the related documents that have been made in either Front Office Scanning or OnBase since the last time list was loaded or refreshed. For example, this list can change if a user is working on a Data Set on one Front Office Scanning workstation while a user on another workstation has scanned, uploaded, or deleted documents for the same Data Set.

Uploading Documents to OnBase

In the Front Office Scanning client, once all necessary documents have been created for the selected Data Set, the newly created documents must be uploaded to OnBase from the Front Office Scanning workstation. By default, documents scanned/created in the Front Office Scanning client are individually ad hoc imported into OnBase once the document is uploaded.

Depending on your configuration, your Front Office Scanning solution may be configured to upload documents as a batch belonging to a Document Imaging scan queue. Regardless of how documents are stored once uploaded to OnBase (i.e., as individually ad hoc imported documents or as a batch), they are scanned/created and uploaded exactly the same way in the Front Office Scanning client.

Note: An E-Form cannot be uploaded to OnBase as part of a batch belonging to a scan queue unless it is first converted to an image.

By default, all documents associated with the selected Data Set must be uploaded before another Data Set can be selected and documents can be scanned/created for it.

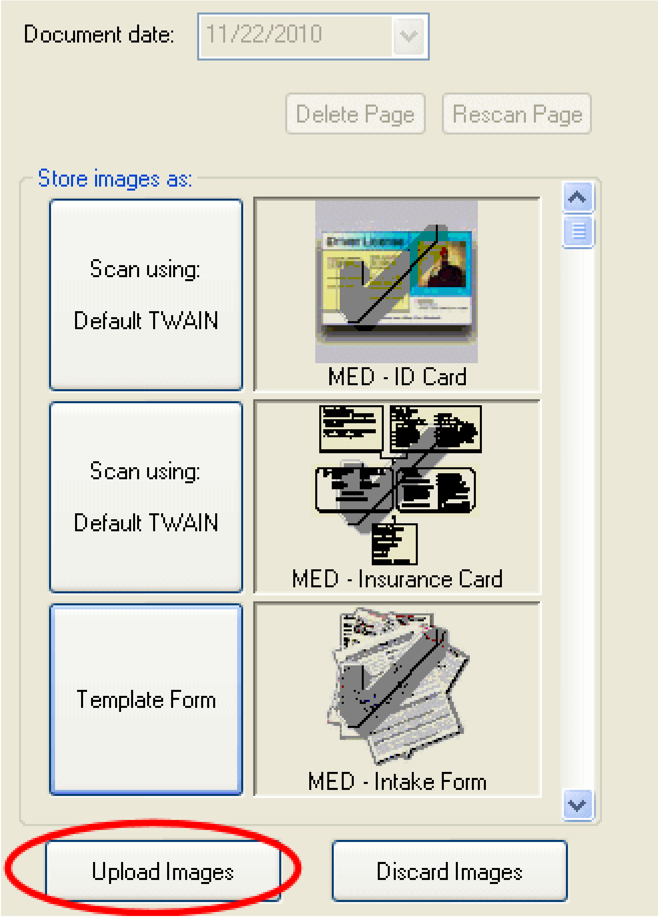
Depending on your configuration, however, your Front Office Scanning solution may be configured to run in disconnected mode, allowing you to collect several Data Sets' documents before performing an upload.

To view documents waiting to be uploaded to OnBase, click the **View Pending Uploads** toolbar button or click **File | View Pending Uploads** to display the **Documents Pending Upload** dialog box. For more information, see Viewing Documents Pending Upload on page 331.

Note: If users are able to view documents related to the selected Data Set from the **Related Documents** list, users can view documents pending upload, as well as documents already stored in OnBase, from the **Related Documents** list. For more information, see Performing Document Retrieval in the Front Office Scanning Client on page 324.

Note: If your Front Office Scanning solution is configured to run in disconnected mode and your solution is configured to allow users to view documents related to the selected Data Set in the **Related Documents** list, users are able to only view documents pending upload, not documents already stored in OnBase, in the **Related Documents** list.

To upload documents from the Front Office Scanning workstation into OnBase, click the **Upload Images** button in the **Scan/Create Document** window.



The indexed documents are uploaded to OnBase.

If your Front Office Scanning client is configured to run in disconnected mode, you are also able to upload all pending document by clicking **File | Upload Pending Documents**.

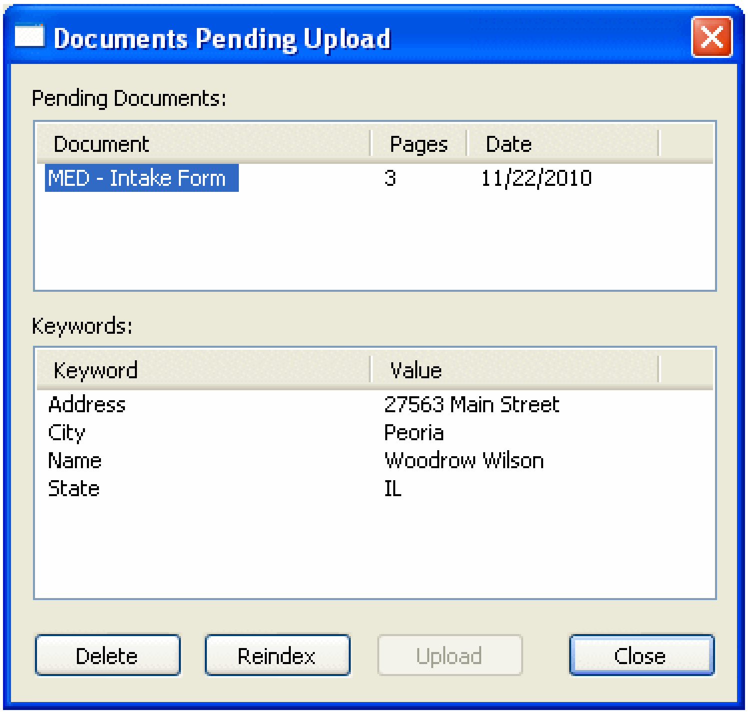
Tip: Required Document Types are displayed in red. Documents must be assigned to these Documents Types for the Data Set before documents can be uploaded to OnBase.

Tip: While the documents are uploading, the Status Bar displays **Uploading Documents**. Once the upload is complete, **Uploading Documents** is replaced by **Select a Data Set**.

After the upload is complete, the selected Data Set and its associated documents are deleted from the Front Office Scanning workstation, the XML file containing the selected Data Set is deleted from its stored location (e.g., the shared folder), and the Front Office Scanning user is able to select another Data Set and scan or create documents to associate with it.

Viewing Documents Pending Upload

To view documents that are waiting to be uploaded to OnBase, click the **View Pending Uploads** toolbar button or click **File | View Pending Uploads**. The **Documents Pending Upload** dialog box is displayed.



The **Document Pending Upload** dialog box is divided into two sections: the Pending Documents section and the Keywords section.

Each document that is awaiting upload to OnBase is listed in the Pending Documents section, with the most recent document listed first. The number of pages the document contains and the date it was created is also displayed.

Select a document from the Pending Documents list to display its associated Keyword Types and Keyword Values in the Keywords Section. Double-click a document in the Pending Documents list to display it in the **Working** window.

Deleting Documents Pending Upload

A document pending upload can also be deleted from inside the **Documents Pending Upload** dialog box by selecting it in the Pending Documents section and clicking **Delete**.

When a document is deleted, it is cleared from the **Documents Pending Upload** dialog box (and the **Related Documents** list, if available) and the Document Type button associated with the Document Type it was assigned to is re-enabled.

Tip: A document pending upload can also be deleted from the **Related Documents** list. See Deleting a Related Document on page 329 for more information.

Reindexing Documents Pending Upload

A document pending upload can be re-indexed to a different Document Type in the **Documents Pending Upload** dialog box by selecting it in the Pending Documents section and clicking **Reindex**.

When a document is reindexed, it is cleared from the **Documents Pending Upload** dialog box (and the **Related Documents** list, if available), the Document Type button associated with the Document Type it was assigned to is re-enabled, and the document is displayed in the **Working** window.

Tip: A document pending upload can also be re-indexed from the **Related Documents** list. See Reindexing a Related Document on page 328 for more information.

Refreshing the List of Documents Pending Upload

The list of Pending Documents in the **Documents Pending Upload** dialog box can be refreshed manually by right-clicking any document in the list and selecting **Reload Existing Documents**.

The **Pending Documents** list is reloaded, and the list now reflects any changes to the documents pending upload that have been made in Front Office Scanning since the dialog box was opened. For example, this list can change if a user is viewing the **Documents Pending Upload** dialog box for a Data Set on one Front Office Scanning workstation while a user on another Front Office Scanning workstation has scanned or deleted documents for the same Data Set.

Tip: The list of documents pending upload can also be refreshed from the **Related Documents** list. See Refreshing the Related Documents List on page 329 for more information.

Uploading Documents Pending Upload

Note: This feature is only available when running the Front Office Scanning client in disconnected mode.

A document can be uploaded to OnBase from the **Documents Pending Upload** dialog box by selecting it in the Pending Documents section and clicking **Upload**.

Note: The **Upload** button is only enabled when a Data Set is not currently selected.

When a document is uploaded, it is cleared from the **Documents Pending Upload** dialog box.

Restarting Pending Uploads

If an upload process fails or is otherwise incomplete, you can attempt to re-upload all documents that are awaiting upload by clicking **File | Restart Pending Uploads**.

This option is not available when a Data Set is selected.

System Maintenance

The following preventative maintenance is recommended to keep your Front Office Scanning solution functioning optimally.

Cleaning Up Outdated/Unused Data Sets

The shared folder (or, if your Front Office Scanning solution is configured to retrieve Data Sets from a network location accessible by the Application Server) should be monitored to ensure that files containing outdated and/or unused Data Sets are routinely deleted.

Tip: It is considered a best practice to automate this process by configuring your Data Sets to expire and be automatically deleted after a specified length of time.

System Interaction

Application Enabler

Application Enabler can capture data from a line-of-business application via a screen scrape event and use that data to automatically create a Data Set to be used by a Front Office Scanning workstation.

In order to create the XML file containing the Data Set and make it available to the Front Office Scanning workstation, the data entry workstation must be running the following programs:

- The line-of-business application from which the data for the Data Set will be captured
- Application Enabler

- The Front Office Scanning Enabler Service

For more information, see Using Application Enabler on the Data Entry Workstation on page 271.

Additionally, depending on your configuration:

- The Data Set created via Application Enabler may automatically be selected in the Front Office Scanning client
- The Front Office Scanning client may be automatically launched and the Data Set created via Application Enabler may automatically be selected when a screen scrape event is initiated.

For specified information on how Application Enabler works, or can work, with your Front Office Scanning solution, contact your administrator. For general information on Application Enabler, see the **Application Enabler** module reference guide or help file.

AutoFill Keyword Sets

AutoFill Keyword Sets are supported for the Front Office Scanning client.

Depending on your configuration, AutoFill Keyword Sets may be triggered in either of the following scenarios:

- If an AutoFill Keyword Set is assigned to a Document Type available in the Front Office Scanning client and the primary Keyword Value of an AutoFill Keyword Set is provided by the selected Data Set, the AutoFill Keyword Set is triggered when the document is uploaded to OnBase.

Note: In this scenario, the AutoFill Keyword Set is not triggered within the Front Office Scanning client, and users are given no indication that the AutoFill Keyword Set will expand upon upload.

If the primary Keyword Value provided by the selected Data Set is associated with more than one instance of the AutoFill Keyword Set, then only the first available instance is assigned to the document upon upload. Currently, users are not given the opportunity to apply multiple instances of the AutoFill Keyword Set or to select the instance they want to apply to the document.

- If the primary Keyword Value of an AutoFill Keyword Set is entered in a Keyword Type field when manually creating a Data Set in the Front Office Scanning client, the AutoFill Keyword Set is triggered immediately as the secondary Keyword Values are populated in the **Selected Data Set** window.

Note: This scenario is only possible with Keyword Type level AutoFill Keyword Sets; it is not possible with Document Type level AutoFill Keyword Sets. Furthermore, this scenario is only possible with AutoFill Keyword Sets containing 50 or fewer Keyword Types.

If the primary Keyword Value provided by the selected Data Set is associated with more than one instance of the AutoFill Keyword Set, then the **Select Keyset** dialog box is displayed, allowing users to select which instance of the autofill they wish to apply to the Data Set. If existing values in the Data Set conflict with any of the secondary values in the AutoFill Keyword Set, then the **Autofill Conflict** dialog box is displayed, allowing users to either retain or overwrite the existing Data Set values with the values being populated by the autofill.

For more information on AutoFill Keyword Sets, see the **AutoFill Keyword Sets** module reference guide or help files.

Disconnected Scanning

If your Front Office Scanning solution is configured to launch OnBase Disconnected Scanning via the **Launch Application** button on the Front Office Scanning toolbar, there are several command line switches that can be used with the Disconnected Scanning shortcut to control the Disconnected Scanning client's behavior to make it more compatible with the Front Office Scanning client.

For more information on these command line switches, see your administrator.

Document Imaging

By default, documents scanned/created in the Front Office Scanning client are individually ad-hoc imported into OnBase when documents are uploaded to OnBase.

Depending on your configuration, your Front Office Scanning solution may be configured to import documents as a batch belonging to a Document Imaging scan queue for further processing.

Regardless of how documents stored once imported into OnBase (i.e., as an individually ad-hoc imported documents or as a batch), they are scanned/created exactly the same way in the Front Office Scanning client.

Note: An E-Form cannot be imported into OnBase as part of a batch belonging to a scan queue unless it is first converted to an image.

For more information on working with documents in a batch belonging to a Document Imaging scan queue, see the **Document Imaging** module reference guide or help files.

HL7

In a healthcare scenario, a line-of-business application (typically an Electronic Medical Record solution) can generate an HL7 message that can be processed by an OnBase solution licensed for HL7 to automatically create XML files containing Data Sets for use by a Front Office Scanning workstation.

For more information on configuring HL7 to automatically create Front Office Scanning Data Sets, see the **HL7 Module** module reference guide or help file.

E-Forms

E-Forms can be automatically created within the Front Office Scanning client using the data from the selected Data Set to populate fields on the E-Form.

Depending on the design of your Front Office Scanning solution (for example, in order to stamp a signature captured via a TOPAZ signature pad, or via a mouse/stylus, or in order to upload an E-Form into batch of a Document Imaging scan queue), an E-Form document may be converted to an image in the Front Office Scanning client.

For more information on creating E-Forms within the Front Office Scanning client, see Creating an E-Form on page 313.

For general information on E-Forms, see the **E-Forms** module reference guide or help files.

Virtual Print Driver

Electronic images captured by the Virtual Print Driver can be appended to documents in the Working window, used as image templates within the Front Office Scanning client, or used to create new documents within the Front Office Scanning client.

These options to use images captured by the Virtual Print Driver are enabled in the Front Office Scanning configuration file. For more information, see your administrator.

For general information on the Virtual Print Driver, see the **Virtual Print Driver** module reference guide or help file.