

ImageNow Application Plan Designer

Getting Started Guide

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Overview

This guide introduces and explains application plan methods and the Application Plan Designer. The following sections guide you through the process of integrating your business application with ImageNow and creating an application plan, previously known as an applet.

- About the application plan types
- What is Application Plan Designer?
- Creating an application plan
- Testing an application plan

More specialized topics on working with application plans are available from Product Help in ImageNow Administrator and ImageNow Application Plan Designer.

About the application plan types

Choosing which application plan type will work best with your business application is the first and most important step when creating application plans. ImageNow currently uses five methods, Agent, External, Interact, LearnMode and Manual, to work with a business application. The correct method to use depends on several variables and, there is no right or wrong method. Find the type that best fits the needs of your particular business application, its design, and the values you need to capture to link your images into ImageNow. You need to understand how each method captures data from different types of applications. It is extremely helpful to understand certain features of your business application, such as the type of application and the interfaces it uses. Also, understand how your users access it.

Agent

You use the Agent type with Fax Agent and Import Agent. These application plan methods define how the particular agent type gathers document information and defines a path for storing specified document types.

A Fax Agent application plan enables you to manipulate faxed documents in the same way you would any other document in ImageNow. The ImageNow Fax Agent requires a Fax Agent license to operate, and works with a capture profile listing the application plan, and the configured inserverFax.ini file.

The Import Agent application plan works in conjunction with a source profile, capture profile, and the inserverImp.ini file.

External

You use the External type with external ImageNow interfaces, such as iScript and Message Agent, to process images without the use of a business application. This method uses data available from the external interface to identify possible document and folder property values. Depending on how you set up your capture profile and application plan, only certain document properties and custom properties can be used for input in the external interface.

Interact

You use the Interact type to integrate the document management features of ImageNow with your existing third-party SAP applications. Using this integration, you can deliver secure, digital versions of

paper and other electronic documents. Linking documents according to content guarantees long-term easy access to the data captured.

You use this method with the Interact line of products that integrate with ImageNow, and consists of SAP ArchiveLink. ArchiveLink is a service integrated in the SAP Web Application Server for linking archived documents and the application documents entered in the SAP system.

LearnMode

LearnMode is a client-side, non-programmatic method of integrating your business application with ImageNow and learning screens or windows within that application. There are six different LearnMode methods to learn your business application, and the best method to use depends on the type of application you are using. For example, knowing whether your application is GUI-based, web-based, DOS-based, a terminal emulator, or other type of application will assist in determining the LearnMode type to use. ImageNow stores each learned business application in a container called an application plan. You can use a different LearnMode type for each application plan. An application plan is comprised of screens. Typically, there is one screen for each screen or window in your business application.

When using the LearnMode method, you set up your application plan to learn a screen or window in your business application, and it maps a corresponding screen in the application plan. Creating a screen involves capturing the data from your host screen so that you can map document properties to link the image to the record in your application. After you create and test a screen, you can scan images into ImageNow and link them to a particular record in your business application from that screen. You then can view the images from your application anytime by opening the record in your business application and clicking one button on the ImageNow Client toolbar.

The first task in learning your business application is to determine which LearnMode type to try first. Sometimes, it will require trying more than one method to determine which LearnMode type works best for your particular application, especially in the case of GUI-based applications. After you determine the LearnMode type, you can create screens for each business application screen to which you need to link documents. Testing each screen is very essential for ensuring it works as desired. After you have completed all the tasks in creating an application plan for your business application, scanning and viewing images in your business application is seamless and automatic. After setting up your application plan, you do not need to modify it again unless there is a change in your business application.

The types of applications that LearnMode is able to learn include GUI-based, DOS-based, web-based, and terminal emulation applications. LearnMode can also learn applications that communicate using OLE, and COM objects. ImageNow includes one type to manually link screens into ImageNow if your business application is unavailable or when there is no business application.

LearnMode type application plans include three methods for GUI-based applications: Window Walker, HyperLearn, and Viewpoint. For the HyperLearn method, you must know the fonts that appear in the screens you want to learn. The DOS Command Prompt method is for DOS-based applications that can run in a Command Prompt window. Applications that users access with a terminal emulator usually require the Terminal Capture method. For this method it is essential to know the terminal emulator in use. The Internet Explorer method is for web-based applications. Each section below gives an extended explanation of each method.

Window Walker

LearnMode uses this type with some GUI applications that conform to the Microsoft Windows interface design guidelines. Many applications in use today have a graphical user interface that operates entirely within a single window on the desktop. Custom-built applications may also fall into this category.

These application windows are published to the operating system in such a way that LearnMode can easily communicate with them. Different information is contained within easily distinguishable controls, such as fields, images, and objects. LearnMode obtains data automatically and dynamically from the Windows application running on your desktop. When capturing data from your business application, LearnMode delivers the unique control IDs to the application plan. LearnMode uses these control IDs in the captured window to define document properties and the screen label for the screen. Window Walker can learn some Java applets and applications that run in browsers.

HyperLearn

LearnMode uses this type for GUI applications that are not as accessible to ImageNow as others. For instance, some custom-built applications may not adhere to all current Windows interface standards. These applications can only deliver bitmapped data to a Windows screen. HyperLearn uses an on-screen character recognition process to gather data from the business application. In simple terms, LearnMode takes a screen shot of the business application window, analyzes its content, and converts the screen characters into text.

Rather than acquire the field data from controls, HyperLearn intelligently interprets the characters presented within a defined region on the window. Although this process can be very demanding, it can be used when other methods don't work. Using this method requires that you know the specific window font used by the business application. You will need to know the specific typeface, point size, and formatting style. Without this knowledge, you will be unable to use this LearnMode type. If necessary, contact the original manufacturer or designer of the application to obtain this information. After the font is determined, you define document properties by drawing boxes around the text boxes in the captured window. This method can usually define the screen label for you by getting the text in the title bar of the captured window. HyperLearn often is not effective when working with fonts where smoothing is enabled. For more information on fonts, refer to the Fonts book in ImageNow Application Plan Designer Help.

Viewpoint

LearnMode uses this type with some GUI applications that conform to the Windows interface design guidelines. It is a hybrid between the Window Walker and HyperLearn methods that is used with some Windows and web-based applications, such as Macromedia Flash. It is similar to Window Walker in that it is control-based. However, instead of using address of node in the control tree to identify and locate data, Viewpoint (formally known as Window Text) uses x,y coordinates (similar to HyperLearn) to locate a control. The controls can be in a disabled state and the window can be dragged off the screen. Document properties are defined by clicking the pointer in each text box in the captured window. This method can usually define the screen label for you by getting the text in the title bar of the captured window.

DOS Command Prompt

LearnMode uses this type with most DOS-based programs. The most common type of program that uses a DOS window is a legacy program written prior to the widespread use of the Windows graphical user interface. If you are uncertain whether your business application runs in a DOS window, contact the person or group responsible for its maintenance.

These programs behave very similarly to programs running under terminal emulation. Therefore, this method is very similar to the Terminal Capture method. LearnMode uses a method of capturing the screen data and copying it to the system clipboard. LearnMode copies the clipboard contents to the captured window in the screen and then defines the document properties by highlighting the text in the captured window. LearnMode defines the screen label in the same way.

Terminal Capture

LearnMode uses this type with terminal emulator programs and mainframe programs. This method uses a very straightforward technique of copying the business application's screen contents to the system clipboard. LearnMode uses this method most commonly with Terminal Emulation programs. The terminal emulator displays data screens from a mainframe or online business application.

Depending on the terminal emulator that you use, the method to copy screen data to the clipboard will vary. A connect string is applied to each screen that is created. The connect string provides LearnMode with a set of system level program calls that relate specifically to the terminal emulation program being used. Determining the connect string is probably one of the most difficult tasks in this method. LearnMode copies the clipboard contents to the captured window in the screen and then defines the document properties by highlighting the text in the captured window. LearnMode defines the screen label in the same way. It is always a good idea to check with Perceptive Software Product Support and ask if the connect strings have already been determined for the terminal emulator for another customer using the same program. For more information about connect strings, refer to the Application Plan Designer Help.

Internet Explorer

LearnMode uses this type with web-based applications. This method uses an HTML parser that conducts browser interrogation to identify index values. LearnMode obtains data automatically and dynamically from the web application running on your desktop. When capturing data from your business application, LearnMode delivers the unique controls to the application plan. LearnMode uses these controls in the captured window to define document properties and the screen label.

Manual Entry

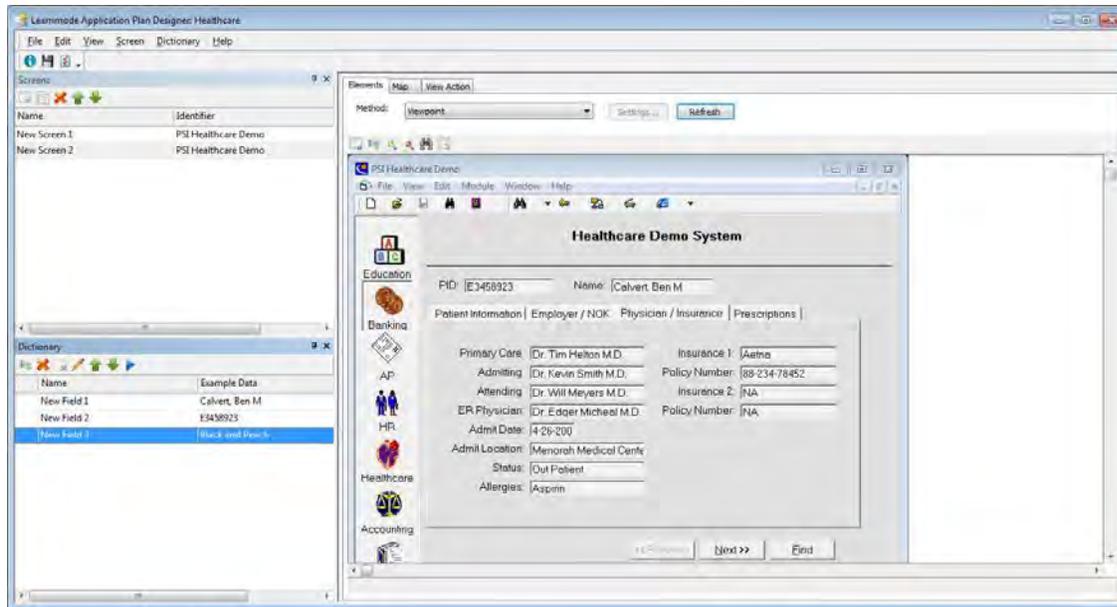
You use this method type to create a stand-alone application plan. In special situations, you can set up ImageNow to run as a stand-alone imaging system. In this case, you manually assign document properties and retrieve images without the use of a separate business application. The case for this method is if you discover a use for ImageNow that falls outside of your original intended use.

Entering document properties manually is different from the other methods where the document properties are defined using values from a captured window. There are features available during document property definition that can make manual entry less difficult. For more information on manually creating an application plan, refer to the topic "Manually create an application plan" in ImageNow Application Plan Designer Help.

What is Application Plan Designer?

In ImageNow Application Plan Designer you integrate your business application with ImageNow. Using Application Plan Designer, you can set up ImageNow to learn business application screens, define dictionary data elements, map documents and folders, configure view action settings, and test every step of the learning process without leaving the designer window.

The following figure shows the **Application Plan Designer** window.



The **Application Plan Designer** includes the following features:

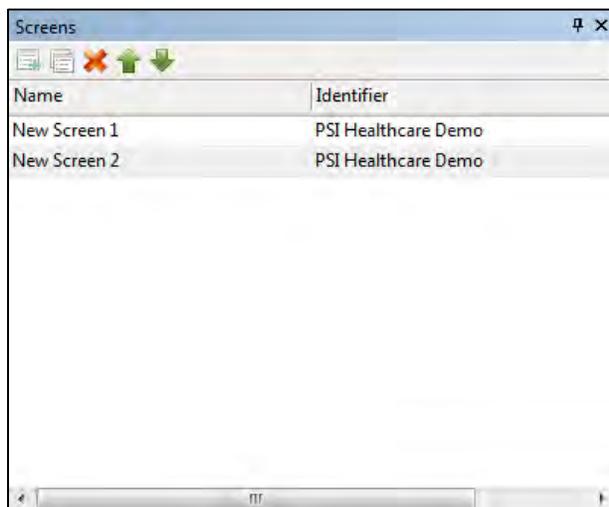
- Screens pane
- Dictionary pane
- Elements tab
- Map tab
- View Action tab

Screens

The **Screens** pane, displays a list of all the screens defined for the application plan. Using this pane, you can add, modify, rename, and delete screens. The created screens also can be reordered using the up and down arrows on the **Screens** pane toolbar.

Note The **Screens** pane only displays when working with LearnMode application plans.

The following figure shows the **Screens** pane.

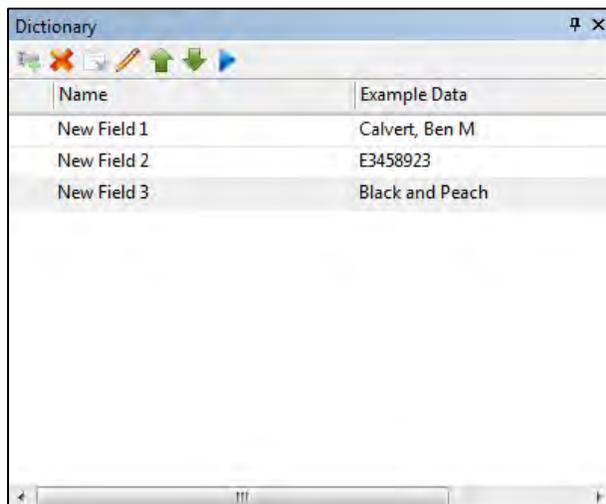


Dictionary

In **Application Plan Designer**, the data elements display in a **Dictionary** pane. Using this pane, you can add and manage the data elements for the current application plan. From the **Dictionary** pane, you can also rearrange, rename, delete, and test the data elements.

Note When working with a Manual application plan, the dictionary pane does not display.

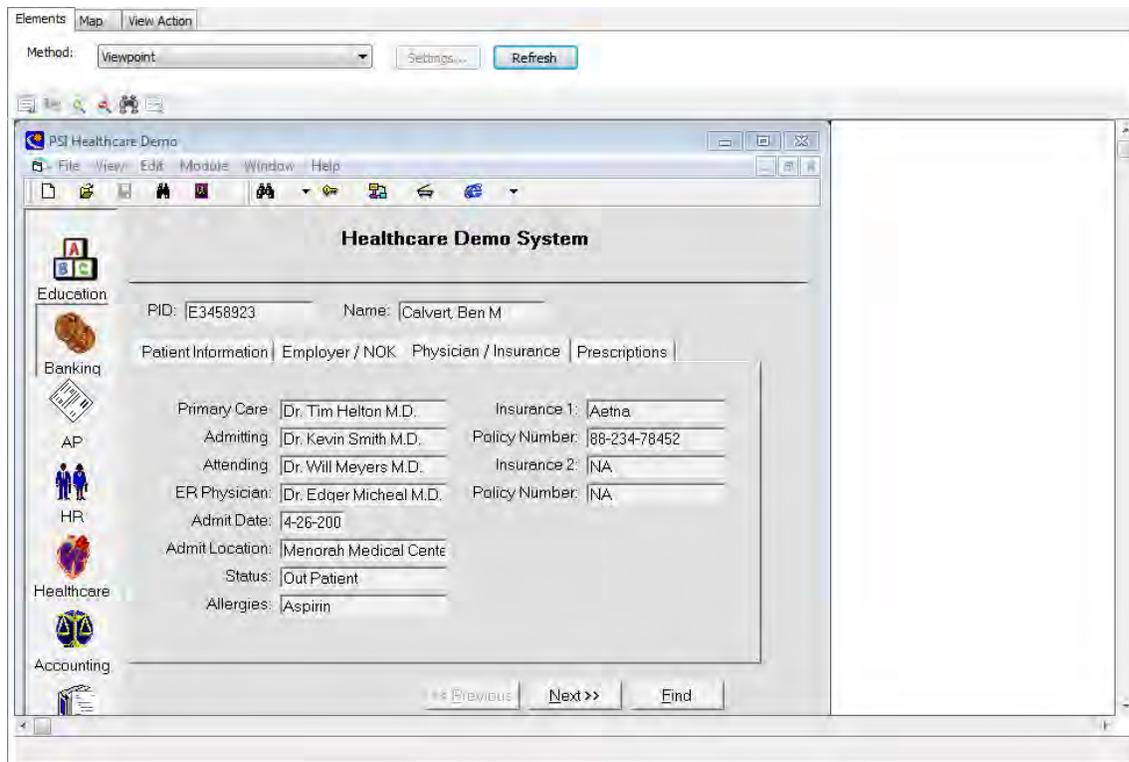
The following figure shows the **Dictionary** pane.



Screen Elements

Depending on the method, the Screen Elements tab displays the bitmap (HyperLearn or Viewpoint), text (Terminal Capture or DOS), table (Internet Explorer, Agent, External, and Interact), or tree (Window Walker) related to the business application screen you are currently trying to learn. From the Screen Elements tab, you can locate and identify the data elements you want to add to the dictionary.

The following figure shows the **Screen Elements** pane.

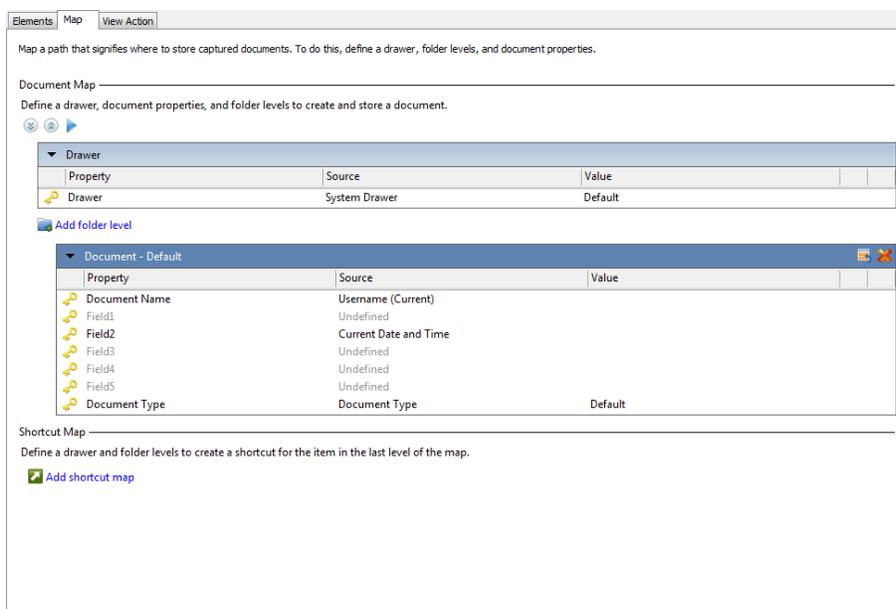


Maps

On the **Map** tab of **Application Plan Designer**, you create and organize documents, folders, and shortcuts when using an application plan. You create document and folder maps using data captured from your business application. Your business needs determine the type of map you define and how you define it.

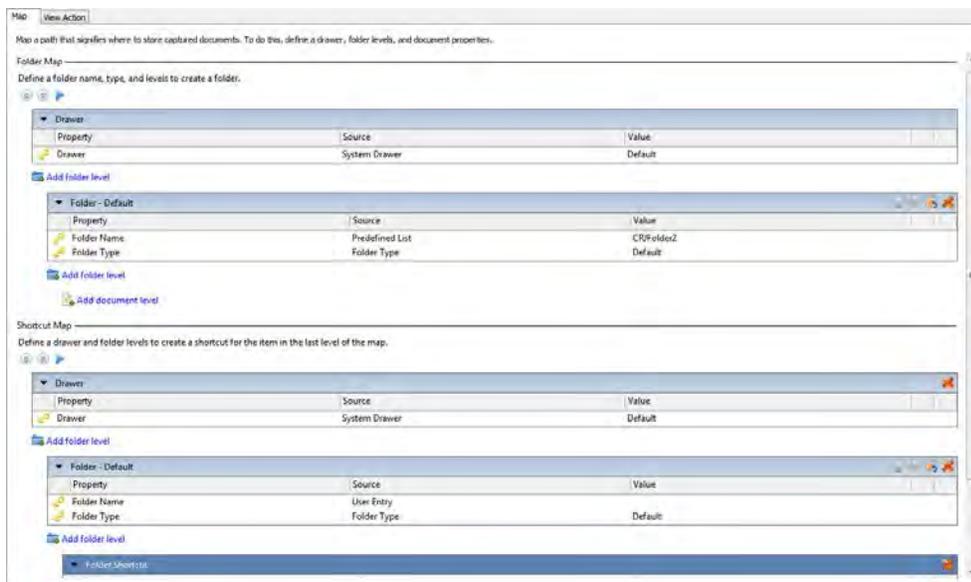
Use a **Document** map to map data elements in the dictionary to document properties and custom properties. You create documents and define a drawer, a folder hierarchy, and document and custom properties. Additionally, you define where to store the document using folder levels. ImageNow stores the created document in the last folder level you define.

The following figure shows a **Document** map.



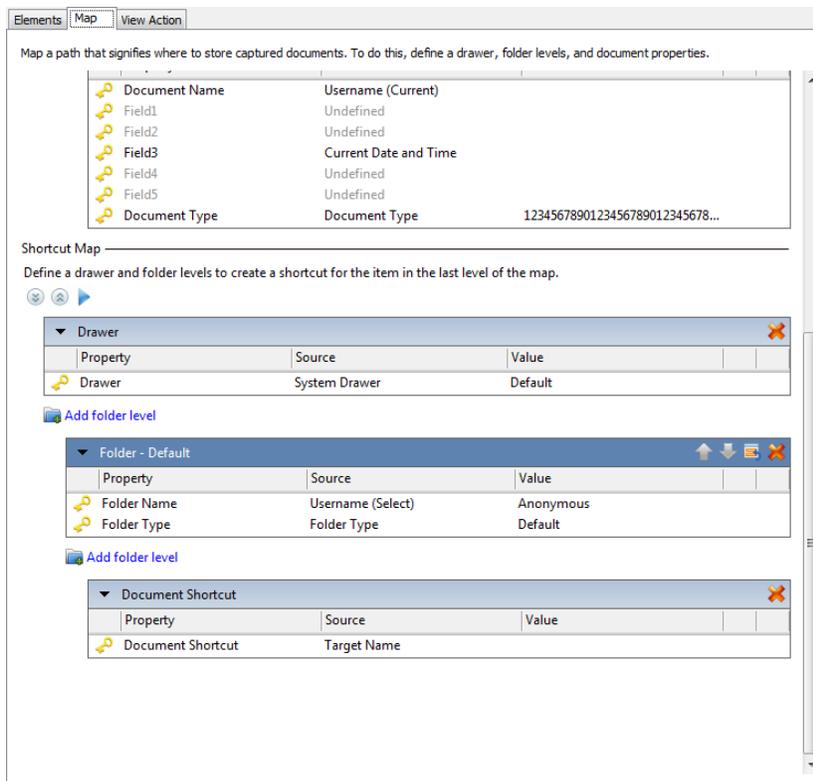
Use a **Folder** map to map data elements in the dictionary to folder properties. You create folders for storing documents, and define a drawer, at least one folder name, and folder type. You also can set values for custom properties associated with your defined folders.

The following figure shows a **Folder** map.



Use a **Shortcut** map to create a shortcut to reference a document or folder in an existing map. The shortcut map uses the last level of the document or folder map you define as its target location. To use the shortcut map, you must define at least one folder level.

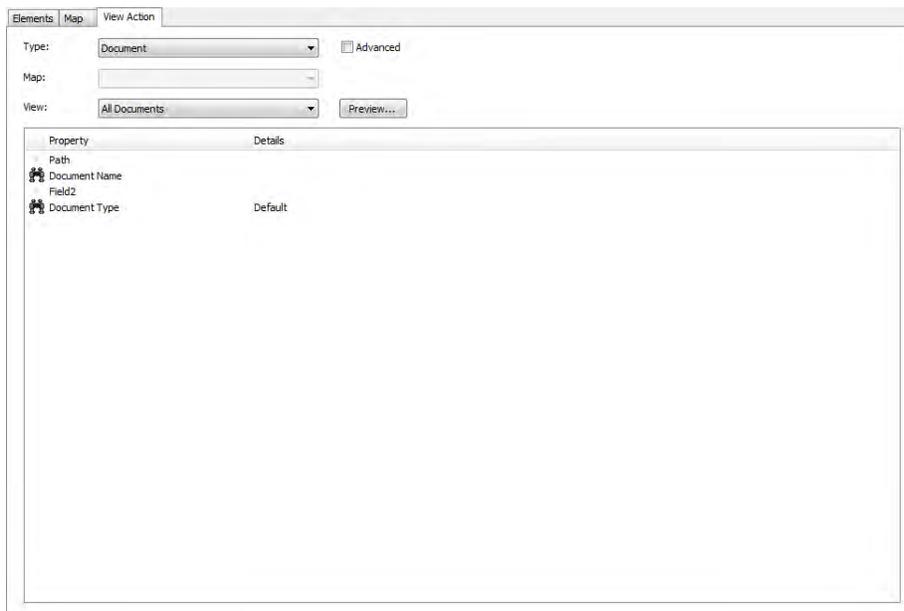
The following figure shows a **Shortcut** map.



View Action

View action is a feature that drives the subset of documents or folders that the system displays. You can also configure view action to return documents or folders.

The following figure shows the **View Action** tab.



Creating an application plan

ImageNow holds instructions on how to extract and use data from your business application, using one of the application methods, in a container called an application plan. First you create the application plan, then you define dictionary data elements, create a document or folder map and shortcut map, create views, and apply security.

You select one of the five methods for creating an application plan and complete one of the following actions.

Creating a non-LearnMode application plan

Complete the following steps to create an application plan.

1. On the **ImageNow** toolbar, click **Manage**.
2. In the **Management Console**, in the left pane, expand the **Application Plans** tree and then click the type of application plan you want to create (**Agent**, **External**, **Interact** or **Manual**).
3. In the right pane, on the **Applications** tab, click **New**.
4. In the **Plan Settings** dialog box, on the **General** tab, perform the following substeps:
 1. In the **Name** field, enter a unique name for your application plan.
 2. Optional. In the **Description** field, enter a description for your application plan.
 3. Select **Is active**, so the application plan is visible to users.

5. Click **OK**.

Creating a LearnMode application plan

The first step in creating a LearnMode application plan is integrating your business application with ImageNow. The following steps describe how to connect to your business application.

1. Start your business application and open the window that you want ImageNow to learn.
2. Navigate to an active record.
3. On the **ImageNow** toolbar, click **Manage**.
4. In the **Management Console**, in the left pane, expand the **Application Plans** tree and then click **LearnMode**.
5. In the right pane, on the **Applications** tab, click **New**.
6. In the **Plan Settings** dialog box, on the **General** tab, perform the following substeps:
 1. In the **Name** field, enter a unique name for your application plan.
 2. Optional. In the **Description** field, enter a description for your application plan.
 3. Select **Is active**, so the application plan will be visible to users.
7. Under **Application**, do one of the following actions:
 - To identify the application or screen, do one of the following actions:

Window Title

1. To identify the business application based on the name that displays in the title of the applications window, select **Window Title** from the **Method** list.
2. Click **Identify**.
3. In the **Window Selector Starter** dialog box, click **Start**.
4. Point to the title bar of the host window and click the mouse button. The data captured from the host window appears in the **Value** field.

Class ID

Many different application plan have the same class ID, so this method is not preferred, you can try it as an alternative to other methods.

Note You can use a tool, such as Spy++ from the Microsoft Developer Network, to help identify the class ID.

1. To identify the business application based on the class ID that is designated for the application, select **Class ID** from the **Method** list.
2. Click **Identify**.
3. In the **Window Selector Starter** dialog box, click **Start**.
4. Point to the title bar of the host window and click the mouse button. The data captured from the host window appears in the **Value** field.

Application Name

1. To identify the application based on the name of the executable that is running, select **Application Name** from the **Method** list.
2. Click **Identify**.
3. In the **Window Selector Starter** dialog box, click **Start**.
4. Point to the title bar of the host window and click the mouse button. The data captured from the host window appears in the **Value** field.
 - If you want ImageNow to identify the application or screen based on a value you enter, do one of the following actions:
 1. In **Value**, enter the class ID that is designated for the application.
 2. Click **Test**. The system attempts to find the application window or screen with the information entered in the **Value** field.
8. Depending on the results, the system displays one of the following messages in the Status field.
 - **Application found.** What to do next: ImageNow has successfully connected to your business application. You can continue to the next step.
 - **Could not find application.** What to do next: Start your business application and open the window that you want ImageNow to learn and repeat this procedure.
 - **More than one application found.** What to do next: Close all applications, except the business application you want ImageNow to learn and repeat the procedure.
9. Click **OK**. ImageNow captures data from the host window and displays it in the **Application Plan Designer**.

Adding a screen

Screens are only applicable to LearnMode application plans. For each screen or window in your business application that you would like to learn, create a corresponding screen in your application plan. Creating a screen involves capturing the data from your host screen so that you can create document properties to link the image to the record in your application. After you create and test the screen in the **Elements** tab, you can scan images into ImageNow and link them to a particular record in your business application from that screen. The following steps describe how to add screens from your business application to your application plan:

1. You start the business application and navigate to the screen you want to collect data from and ensure it contains an active record before continuing.
2. In **Application Plan Designer**, in the **Screens** pane, click the **New Screen**  button.

Note When adding a new screen to your application plan, the system attempts to match the window title to the window title you entered in the **Value** field in the **Plan Settings** dialog box when you created the application plan. If a match does not exist, the system displays the error message "Could not find the business application window." For business applications with multiple screens that use different windows titles, you can use a wildcard to find an exact match on a substring of the window title or screen name. For example, a business application with the screens "Sample Module: [HR]" and "Sample Module: [AP]" can be identified with the value "Sample Module: *."

3. In the **Screen Properties** dialog box, type a unique name and then click **OK**.

4. In the **Screens** pane, click the **Move Up**  or **Move Down**  button to change the order of the screens. For example, you can move the first screen in your business application to the top of the list. The order of screens is important because LearnMode checks each screen for a match and uses the first screen that matches.
5. Repeat these steps for each screen you want to add to your application plan.

Adding a dictionary element

The dictionary is a repository containing all defined screen elements in an application plan. You can capture an unlimited amount of metadata, as well as associate dictionary data elements to document properties, custom properties, and folder properties.

1. In **Application Plan Designer**, in the **Dictionary** pane, click the **New Field**  button.

Note You can also add data elements to the dictionary by using the mouse to highlight the data in the captured window that you want to define, and then dragging it to the bottom of the data element list in the **Dictionary** pane, or you can simply double-click on an element to open the **Dictionary Field** dialog box.

2. In the **Dictionary Field** dialog box, under **General**, do the following actions:

- In the **Name** field, type a unique name for your new data element.
- Optional. Under **Processing**, do one of the following actions:

Macros

1. Click **Add** and then select **Macro**.
2. In the **Select Macro** dialog box, select one of the predefined macros described in the following table, and then click **OK**.

Value	What it does
Alpha Numeric	
Alphanumeric Characters Only	If you want the system to remove non-alphanumeric characters, including all symbols and punctuations, from the output string.
Alpha Characters Only	If you want the system to remove non-alphanumeric characters from the output string.
Numeric Characters Only	If you want the system to remove non-numeric characters from the output string.
Concatenation	If you want the system to join two dictionary data elements.
Date Conversion	If you want the system to display the date in a specific format.
Delete Characters	If you want the system to remove specific characters from the output string.
Fixed Length	If you want the system to limit the number of characters and digits in the output string.
Line Search	If you want the system to capture a value on a specific line.

Value	What it does
Number Conversion	If you want the system to display a number string in a specific format.
Split at Delimiter	If you want the system to capture a value in a string that is separated by a delimiter character.
Static Search	If you want the system to capture a value based on a specific string.
Trim Character	If you want the system to remove characters from the output string.

Note For more information on applying macros, refer to the Processing topics in the Application Plan Designer Help.

Scripts

You can use scripts when using the LearnMode or Manual application plan methods.

1. Click **Add** and then select **Script**.
 - In the **Scripts** dialog box, select the script you want the system to execute on the dictionary field, or click **Create** and create a script as you normally would.
2. Click **OK**.

Note For more information on applying scripts, refer to the Processing topics in ImageNow Application Plan Designer Help.

3. Optional. In the **Dictionary Field** dialog box, under **Sample**, do one of the following actions:
 - If you selected a macro as your processing type, in the **Input** field, enter an example of the unaltered data.
 - If you selected a script as your processing type, in the **Input** field, enter an example of the unaltered data. Click **Refresh** to update the Results and verify the script returns the correct data.
4. Click **OK** to save your changes.

Defining a dictionary element

The dictionary pane contains the data elements collected from screens in your business application. You can define a single data element for multiple business application screens. For example, if you have an account number on your first host screen and second host screen, you only need to define it once. The various methods are described that you can use to collect data elements from your business application.

Agent method

The following steps explain how to define dictionary elements using the Agent method.

1. In **Application Plan Designer**, on the **Elements** tab, select the appropriate Agent product from the **Method** list.
2. In the **Elements** pane, select the data element you want to define, and then do one of the following actions:

- If the data element is already added to the dictionary, drag it to the appropriate data element in the **Dictionary** pane.
- If the data element is not in the dictionary, drag it to the bottom of the data element list in the **Dictionary** pane and then modify it as you normally would.

Interact application plan

The following steps explain how to define dictionary elements using the Interact method.

1. In **Application Plan Designer**, on the **Elements** tab, select the appropriate Interact product from the **Method** list.
2. Under **Type**, select the data element you want to define, and then do one of the following actions:
 - If the data element is already added to the dictionary, drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, drag it to the bottom of the data element list in the **Dictionary** pane and then modify it as you normally would.

DOS program method

The following steps explain how to define dictionary elements using the DOS method.

1. Start your DOS business application.
2. Open the screen in the host program that you want ImageNow to learn and navigate to an active record.
3. In **Application Plan Designer**, on the **Elements** tab, select **DOS Command Prompt** from the **Method** list.
4. Do one of the following actions to add a data element:
 - If the data element is already added to the dictionary, use the mouse to highlight the data in the captured window that you want to define, and then drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, use the mouse to highlight the data in the captured window that you want to define, and then drag it to the bottom of the data element list in the **Dictionary** pane.
5. In the **Dictionary Field** dialog box, add the data element as you normally would.
6. Repeat these steps for each data element you want to define.

HyperLearn method

Use the HyperLearn method to learn a custom-built business application or other business applications that are not normally accessible to ImageNow as others. The following steps explain how to define dictionary elements using the Hyperlearn method.

1. Start your Windows business application, and open the window that you want ImageNow to learn.
2. Navigate to an active record.
3. In **Application Plan Designer**, on the **Elements** tab, select **HyperLearn** from the **Method** list. The system captures a screen shot of the host window and displays it in **Application Plan Designer**.

4. Click **Settings** to add or modify the fonts used by the business application. If you do not select the correct font, you will get an error message when trying to define a dictionary data element, document property, or custom property. If this occurs, you must repeat this step until you are able to successfully define a property.
5. Click the mouse button and drag a box around the data element containing the value in the captured window. Extend the box to the end of the control to ensure that the longest value entered for that control will be entered into the dictionary data element and do one of the following actions:
 - If the data element is already added to the dictionary, drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, drag it to the bottom of the data element list in the **Dictionary** pane and then modify it as you normally would.

Tip When defining a data element, you can use the LEFT ARROW key, the RIGHT ARROW key, the DOWN ARROW key, or the UP ARROW key to move the box. To resize the box, press SHIFT+LEFT ARROW or RIGHT ARROW to resize it horizon. You can also use the mouse to move the box or resize it.

Internet Explorer method

The following steps describe how to define dictionary data elements using a web-based application.

1. Start your web browser, type the URL of the application you want ImageNow to learn, and then navigate to an active record.
2. In **Application Plan Designer**, on the **Elements** tab, select **Internet Explorer** from the **Method** list. The system captures a list containing the controls on the host screen and displays it in **Application Plan Designer**.
3. A list of controls appears in the **Elements** pane. Review the list as needed to see the various controls from the program. Each row represents an available control. The left column lists the name or ID of the control. The right column of the line displays the current data for the control. The screen identifier is the data on your host screen that uniquely identifies the screen. Do one of the following actions to add a data element:
 - If the data element is already added to the dictionary, point to the appropriate control you want to define, and then drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, click the appropriate control you want to add and define, and then drag it to the bottom of the data element list in the **Dictionary** pane.
4. In the **Dictionary Field** dialog box, add the data element as you normally would.

Terminal Capture method

The following steps describe how to define dictionary data elements using a terminal emulator or mainframe application.

1. Start your terminal emulation program and log in.
2. Open the screen in the host program that you want ImageNow to learn and navigate to an active record.
3. In **Application Plan Designer**, on the **Elements** tab, select **Terminal Capture** from the **Method** list.
4. Click **Settings**.

5. In the **Terminal Capture Settings** dialog box, do the following substeps:
 1. In the **Connect Strings** box, type the connect string.
 2. In the **Retries** box, type the number of times you want the system to attempt to connect to the terminal emulation program.
 3. In the **Delay (milliseconds)** box, type the length of time you want the system to wait between each command in the connection string and between connection attempts. The system copies the screen contents and displays it in **Application Plan Designer**.
6. Do one of the following actions to add a data element:
 - If the data element is already added to the dictionary, use the mouse to drag a box around the data in the captured window that you want to define, and then drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, use the mouse to drag a box around the data in the captured window that you want to define, and then drag it to the bottom of the data element list in the **Dictionary** pane.
7. In the **Dictionary Field** dialog box, add the data element as you normally would.
8. Repeat these steps for each data element you want to define.

Viewpoint method

Use the following procedure to learn GUI applications that conform to the Windows interface design.

1. Complete one of the following actions:
 - Start your Windows business application and open the window that you want ImageNow to learn.
 - Start your web browser and type the URL of the business application you want ImageNow to learn.
2. Navigate to an active record.
3. In **Application Plan Designer**, on the **Elements** tab, select **Viewpoint** from the **Method** list. The system captures a screen shot of the host window and displays it in **Application Plan Designer**.
4. Do one of the following actions to add a data element:
 - If the data element is already added to the dictionary, point to the business application field you want to define, and then drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, click the business application field you want to add and define, and then drag it to the bottom of the data element list in the **Dictionary** pane.
5. In the **Dictionary Field** dialog box, add the data element as you normally would.
6. Repeat these steps for each data element you want to define.

Window Walker method

Use the following procedure to learn GUI applications that conform to the Windows interface design.

1. Start your Windows business application, and open the window that you want ImageNow to learn.
2. Navigate to an active record.
3. In **Application Plan Designer**, on the **Elements** tab, select **Window Walker** from the **Method** list. The system captures a tree containing the controls on the host window and displays it in **Application Plan Designer**.
4. You will see a tree of window controls displayed in the captured window. Expand the tree as needed to show the various controls from the program. Click the PLUS SIGN (+) to expand the tree. Each row in the tree represents an available control. The first part of the row lists the type of control. The second part of the line (to the right of the arrow) displays the current data for the control. For example, [+].ThunderRT6MDIForm>PSI Higher Ed Demo.
5. Do one of the following actions to add a data element:
 - If the data element is already added to the dictionary, point to the business application control you want to define, and then drag it to the appropriate data element in the **Dictionary** pane.
 - If the data element is not in the dictionary, click the business application control you want to add and define, and then drag it to the bottom of the data element list in the **Dictionary** pane.
6. In the **Dictionary Field** dialog box, add the data element as you normally would.
7. Repeat these steps for each data element you want to define.

Mapping to a document

After you define dictionary data elements, you use document mapping to create and link documents with data from your business application. Document mapping allows you to map your data elements in the dictionary to document and folder properties and custom properties. This mapping enables you to select the data from your business application that is used to categorize and display your documents in ImageNow.

You can quickly map elements using drag and drop elements from the dictionary to your document properties and custom properties. You can also test the mapping you define directly in Application Plan Designer.

1. In **Application Plan Designer**, click the **Map** tab.
2. In the **Screens** pane, select the screen for which you want to enable document mapping.
3. For each property that you want to assign a value, do the following actions:
 - **Drawer**
 1. Double-click the **Drawer** document property.
 2. In the **Drawer Attributes** dialog box, under **General**, do one of the following actions:
 - **System Drawer**
 1. From the **Source** list, select **System Drawer**.
 2. From the **Drawer** list, select the system drawer you want to associate to this document property.

- **System Drawer List**
 - If you want to allow the user to select from a list of drawers to which he or she has access, select **System Drawer List** from the **Source** list.
- **Dictionary**
 1. From the **Source** list, select **Dictionary**.
 2. From the **Dictionary** list, select the dictionary data element you want to associate with this document property.

Note **Dictionary** is only an option if you have data elements defined in the dictionary.
- **Document Name, Field1, Field2, Field3, Field4, and Field5, or Custom Property**
 1. Double-click the **Document Name, Field1, Field2, Field3, Field4, or Field5** property.
 2. In the **<Property> Attributes** dialog box, under **General**, do one of the following actions:
 - If you want this property to share a value with a data element in the dictionary, select **Dictionary** from the **Source** list, and then select the appropriate data element from the **Value** list.

Value	What it does
Undefined	If you want the value of this property to be empty.
Literal	If you want to apply a literal value to this property. After selecting, you enter the value you want in the value box.
User Entry	If you want the user to enter a value for this property during the linking process. This is what is known as a prompted value.
Predefined List	If you want the user to select from a list of predefined values during the linking process. After selecting, you pick the item you want from the available choices in the list.
Username (Current)	If you want to set the value of this property to the name of the current user.
Username (Select)	If you want to set the value of this property to the name of a user from a list of all users.
Current/Date/Time	If you want to assign the current date to this property.
Sequence Number	If you want to use a published sequence to acquire a new value for this property. After selecting, you pick the number sequence you want from the available choices in the list.
Unique ID	If you want the system to provide a unique ID to this property.

Note **Dictionary** is only an option if you have data elements defined in the dictionary.

- **Document Type**
 1. Double-click the **Document Type** property.
 2. In the **<Property> Attributes** dialog box, do one of the following actions:

- **Document Type**
 1. From the **Source** list, select **Document Type**.
 2. From the **Value** list, select the document type you want to associate with this property.
 - **Document Type List**
 1. Select **Document Type List** from the **Source** list.
 2. From the **Value** list, select the document type list you want to associate with this property.

Note Click **Edit List** if you want to edit the selected document type list.
 - **Dictionary**
 1. From the **Source** list, select **Dictionary**.
 2. From the **Dictionary** list, select the dictionary data element to which you want to associate with this property.

Note **Dictionary** is only an option if you have data elements defined in the dictionary.
4. Optional. Under **Advanced**, do the following actions:
 - If you want the system to display something other than the default label for values in Field1 to Field5, enter the name in the **Alternate label** box.
 - If you want the system to associate a script to this property, select the script from the **Script** list.
 - If the value of the property can be empty, select **Allow empty**.
 - If the value of the property can be modified by the current user during the linking process, select **User modifiable**.
 - If you want ImageNow to remember the last user-modifiable value, select **Remember last value**.
 - If you want this value to overwrite the proposed value when capturing data, select **Overwrite proposed key**.
 5. Click **OK**.
 6. Close **Application Plan Designer**.

Mapping to a folder

After you define dictionary data elements, you use folder mapping to automatically create new folders during the linking process. This mapping enables you to select the data from your business application you use to categorize and display your folders in ImageNow.

If a folder already exists for a defined name, ImageNow automatically adds the document to that folder. You can also specify which type of folder to create and which custom properties to automatically populate. In **Application Plan Designer**, click the **Map** tab.

1. In the **Screens** pane, select the screen for which you want to enable folder mapping.
2. For each property that you want to assign a value, do the following actions:
 - **Folder Name**
 1. Double-click the **Folder Name** property.
 2. In the **Folder Name Attributes** dialog box, under **General**, do one of the following actions:

- Select the **Source** you want.
- Select the **Value** you want. The following table describes the options.

Value	What it does
Undefined	If you want the value of this property to remain empty.
Literal	If you want to apply a literal value to this property. After selecting, you enter the value you want in the value box.
User Entry	If you want the user to enter a value for this property during the linking process. This is what is known as a prompted value.
Predefined List	If you want the user to select from a list of predefined values during the linking process. After selecting, you pick the item you want from the available choices in the list.
Username (Current)	If you want to set the value of this property to the name of the current user.
Username (Select)	If you want to set the value of this property to the name of a user from a predefined list.
Current/Date/Time	If you want to assign the current date to this property.
Sequence Number	If you want to use a published sequence to acquire a new value for this property. After selecting, you pick the number sequence you want from the available choices in the list.
Unique ID	If you want the system to provide a unique ID to this property.

Note **Dictionary** is only an option if you have data elements defined in the dictionary.

- **Folder Type**

1. Double-click the **Folder Type** property.

Note When you clear the **Enable Document Mapping** check box on the **Document Map** tab, the **Document Custom Property** and the **Document Keys** options do not appear in the **Source** list.

2. In the **Folder Type Attributes** dialog box, under **General**, do one of the following actions:

- **Document Property**

1. From the **Source** list, select **Document Key**.
2. From the **Value** list, select the document key you want to associate to this property.

- **Document Custom Property**

1. From the **Source** list, select **Document Custom Property**.

Note **Document Custom Property** only appears in the **Source** list if a custom property is linked to the selected document type.

2. From the **Value** list, select a document custom property.

- **Folder Type**
 1. From the **Source** list, select **Folder Type**.
 2. From the **Value** list, select the folder type you want to associate to this property.
 - **Folder Type List**
 1. Select **Folder Type List** from the **Source** list.
 2. From the **Value** list, select the folder type list you want to associate to this property.

Note Click **Edit List** if you want to edit the selected folder type list.
 - **Dictionary**
 1. From the **Source** list, select **Dictionary**.
 2. From the **Dictionary** list, select the dictionary data element you want to associate with this property.

Note **Dictionary** is only an option if you have data elements defined in the dictionary.
3. Optional. Under **Advanced**, do the following actions:
 - If you want the system to display something other than the default label, enter the name in the **Alternate label** box.
 - If the value of the property can be empty, select **Allow Empty**.
 - If the value of the property can be modified by the current user during the linking process, select **User Modifiable**.
 - If you want ImageNow to remember the last user-modifiable value, select **Remember last value**.
 - If you want this value to overwrite the proposed value when capturing data, select **Overwrite proposed key**.
 4. Click **OK**, then close **Application Plan Designer**.

Creating a View Action

View action is the functionality that determines the subset of documents or folder that ImageNow displays. You can configure view action to return documents or folder.

Document type

The following steps explain how to create a View Action for your application plan.

1. In **Application Plan Designer**, click the **View Action** tab.
2. In the **Screens** pane, select the screen for which you want to configure view action.
3. From the **Type** list, select **Document**.
4. From the **View** list, select the document view you want to associate with this application plan.
5. If you want to modify the document view properties, do one of the following actions:
 - **Quick Filter**. If you want the system to display the selected properties, perform the following.
 - On the **View Action** tab, for each property you want the system to display, click the first column to add the binoculars  icon.

- **Full View.** If you want to search by conditional values, perform the following substeps:
 1. On the **View Action** tab, select **Advanced**.
 2. Click the **Add**  button.
 3. In the **Add Condition** dialog box, in the **Constrain By** list, select the kind of constraint that will set up the lists you need in the **Type**, **Field**, and **Operator** boxes.
 4. In the **Type** list, click **Normal** or **Variable**.

Note If you are creating a condition for a filter, the **Type** list will also include **Prompted** and **LearnMode**.

5. In the **Field** list, click the document field in which the value will be tested by the operator and value you select below.
6. In the **Operator** list, click the operator.
7. In the **Value** box, enter or select the value to which the operator will be applied.

Note If you selected **Prompted** as the type, the **Message** box replaces the **Value** box. Enter instructions telling the user what value to enter.

8. Click **OK**.
9. Repeat steps to add additional condition rows.

Note Each new row begins with **AND** by default. Click the link to change **AND** to **OR**.

6. Click **Preview** to verify the system returns the correct results. Modify column names or column sizes as necessary. ImageNow displays the changes the next time you execute the View Action
7. Click **OK**, then close **Application Plan Designer**.

Folder type

Complete the following steps to create a view action for folders.

1. In **Application Plan Designer**, click the **View Action** tab.
2. In the **Screens** pane, select the screen for which you want to configure view action.
3. From the **Type** list, select **Folder**.
4. From the **View** list, select the folder view you want to associate with this application plan.
5. If you want to modify the folder view properties, do one of the following actions:
 - **Quick Filter**
 - On the **View Action** tab, for each property you want the system to display, click the first column to add the binoculars icon.
 - **Full View**
 1. On the **View Action** tab, select **Advanced**.
 2. Click the **Add**  button.
 3. In the **Add Condition** dialog box, in the **Constrain By** list, select the kind of constraint that will set up the lists you need in the **Type**, **Field**, and **Operator** boxes.

4. In the **Type** list, click **Normal** or **Variable**.

Note If you are creating a condition for a filter, the **Type** list will also include **Prompted**.

5. In the **Field** list, click the document field in which the value will be tested by the operator and value you select below.
6. In the **Operator** list, click the operator.
7. In the **Value** box, enter or select the value to which the operator will be applied.

Note If you selected **Prompted** in step 3, the **Message** box replaces the **Value** box. Enter instructions telling the user what value to enter.

8. Click **OK**.
9. Repeat the steps to add more condition rows.

Note Each new row begins with **AND** by default. To change **AND** to **OR** or vice versa, click it.

6. Click **Preview** to verify the system returns the current results. Modify column names or column sizes as necessary. ImageNow displays the changes the next time you execute the View Action.
7. Click **OK**.
8. Close **Application Plan Designer**.

Testing the application plan

In ImageNow, you can test every step of the learning process without leaving the designer window. You can test the data dictionary, document mapping, and folder mapping for your selected application plan.

Testing the dictionary

The following steps describe how to test your data dictionary.

1. In **Application Plan Designer**, in the **Dictionary** pane, click the **Test**  button.
2. In the **Test Map** dialog box, verify ImageNow returns the appropriate data from your business application.

Testing a document or folder map

The following steps describe how to test your document or folder map.

1. In **Application Plan Designer**, on the **Map** tab, in the **Document Map** section, click the **Test**  button.
2. In the **Test Map** dialog box, verify ImageNow returns the appropriate data from your business application.

Testing a shortcut map

The following steps describe how to test your shortcut map.

1. In **Application Plan Designer**, on the **Map** tab, in the **Shortcut Map** section, click the **Test**  button.
2. In the **Folder Map Test** dialog box, verify ImageNow returns the appropriate data from your business application.

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