

Nuance®  
ShadowLink 2

**User Guide**

**June 2016**

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# 1 Introduction

Nuance is capable of interfacing with client side EHR and patient scheduling software using a variety of different formats. ShadowLink is a service level application used to facilitate a connection point between systems. Installed on a client server or workstation, ShadowLink connects to Nuance servers using a standard TLS/SSL encrypted connection. The Nuance servers will select the strongest encryption method that can be supported by the client workstation operating system during the connection negotiation phase.

ShadowLink authenticates with the Nuance servers using a login ID and password unique to the client. After authentication, data is transferred between the two systems.

For demographic, scheduling, or order interfaces, there are two methods of data transmission available. Nuance can accept patient demographics using the industry standard HL7 message. Nuance then converts these messages into database entries that are made available to medical transcriptionists and providers in real time. Alternately, ShadowLink can watch a specified file path containing flat files. The file is generated by the scheduling software and then transferred to the Nuance database as patient demographics in a batch format.

For a transcription interface, Nuance and ShadowLink are capable of providing completed transcriptions in a wide variety of formats and interfacing with Electronic Health Record (EHR) systems. Nuance supports common formats such as PDF, Word, RTF, Text, and HL7 messages. If necessary, the Nuance interface team can develop custom formats, built to order.

Nuance ShadowLink is the service that transfers available patient demographic and schedule information to the medical transcriptionists to provide fast, accurate, and consistent medical transcriptions. Additionally, completed transcriptions are then automatically transferred back to the provider's EHR or another transcription repository. Medical providers send and receive patient documents and information with minimum user interaction. This allows medical providers to concentrate on providing medical services instead of clerical duties.

Examples of common import and export types can be found here:

<https://www.Emdat.com/software/exports.asp>

## 2 Requirements

For ShadowLink software to work properly within your Windows environment, you are required to meet the following software and hardware requirements.

**Note:** Macintosh or Apple computers are NOT supported by Nuance.

### Minimum Requirements:

- Windows Vista  
**Note:** For Windows 98, 2000, NT4 and XP users, Nuance does not support any version of Windows prior to Windows Vista. Please upgrade Windows before calling Nuance.
- RAM: 2 GB
- .Net Framework 4.0 (Our application will attempt to install this if not currently installed.)
- Hard Drive Free Space: 1.5 GB
- Internet Connection: High Speed Cable or DSL
- Internet Explorer 9 or higher

### Recommended Requirements:

- Server 2008 or better
- RAM: 2 GB or higher
- .Net Framework 4.0 (Our application will attempt to install this if not currently installed.)
- Hard Drive Free Space: 2 GB
- Internet Connection: High Speed Cable or DSL
- Internet Explorer 9 or higher

## 3 New Interface Requests

Before installing ShadowLink, a new service must be created to prepare the Nuance interface for a new connection. Clients (clinics and hospitals) should request a new interface with the technical contact at the Transcription Company that manages the account.

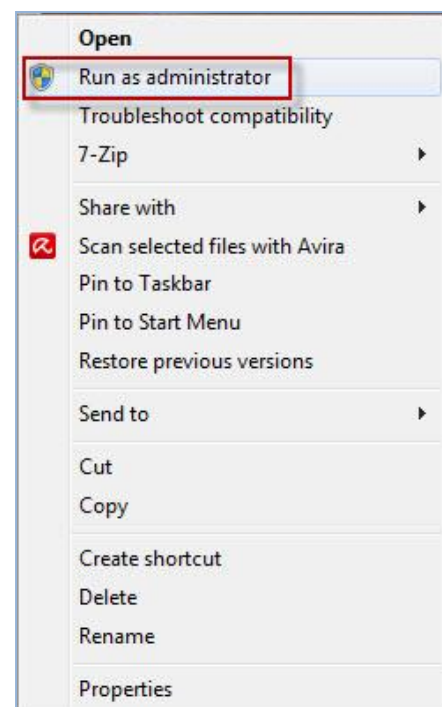
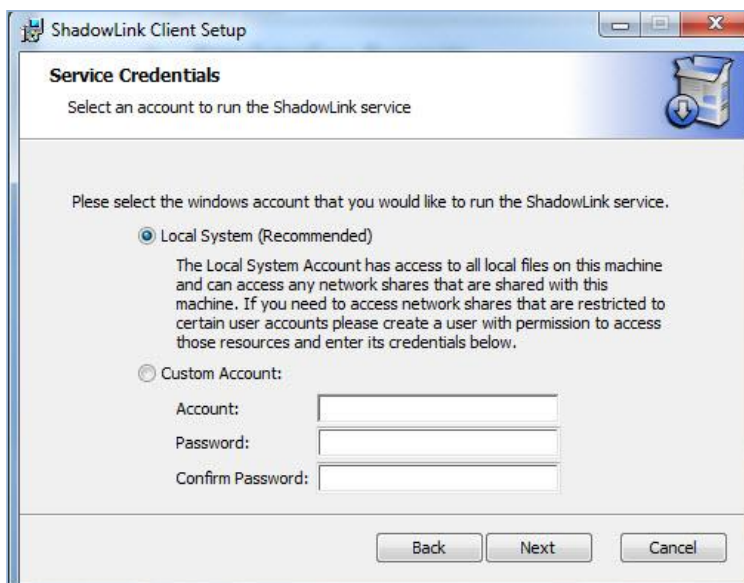
## 4 ShadowLink Service

### 4.1 Download ShadowLink

ShadowLink is available for download for free from this link:

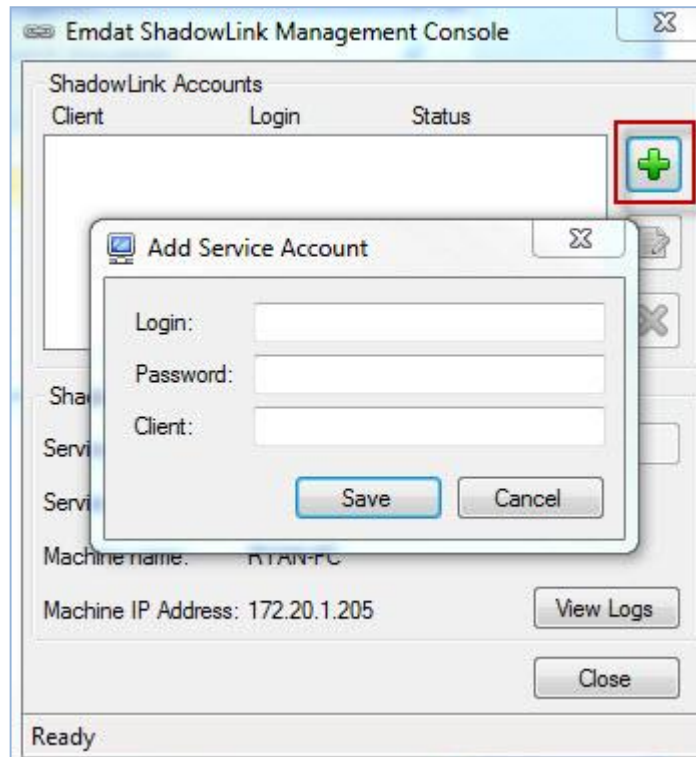
[www.Emdat.com/download/shadowlinksetup.exe](http://www.Emdat.com/download/shadowlinksetup.exe)

- Run the executable. It is recommended that you perform this install as an administrator.
- Choose to run the ShadowLink service as the local user, or specify another local or domain user to run the service under. A custom account may need to be used when ShadowLink needs to access a network path, or when the local system account does not have rights to start a windows service or access program files. This can be configured from the windows services screen at a later point in time if not configured up front.

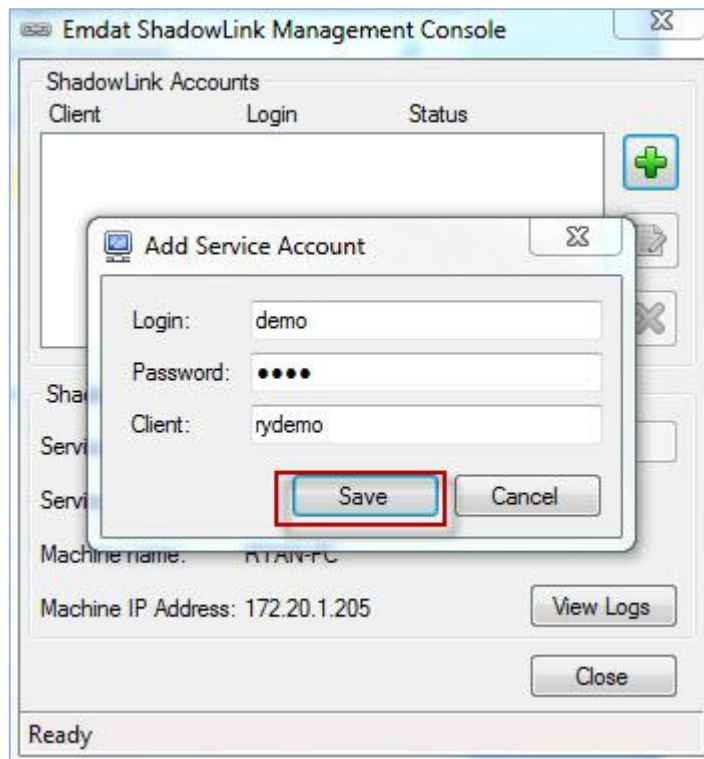


## 4.2 Entering a Service Login

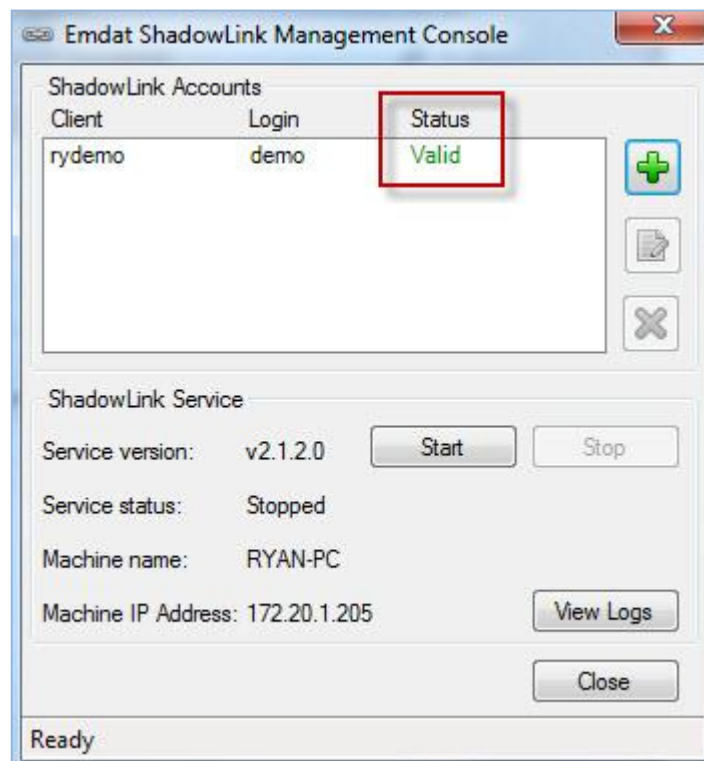
Clients who have been provided with a Service Login ID and password can begin using ShadowLink immediately. One ShadowLink installation can run with one or more login IDs. To add a login ID, click the green “+” symbol.



- Fill in all 3 boxes: Login, Password, and Client, as provided by the managing Transcription Company or Nuance. The value entered for Client should match the Client value for InSync and InQuery.
- If you do not have a Login and Password, refer to the [New Interface Requests](#) section of this manual. After all three fields are filled in, click the Save button.



- If the login information entered is correct, ShadowLink displays the entry as “Valid.”

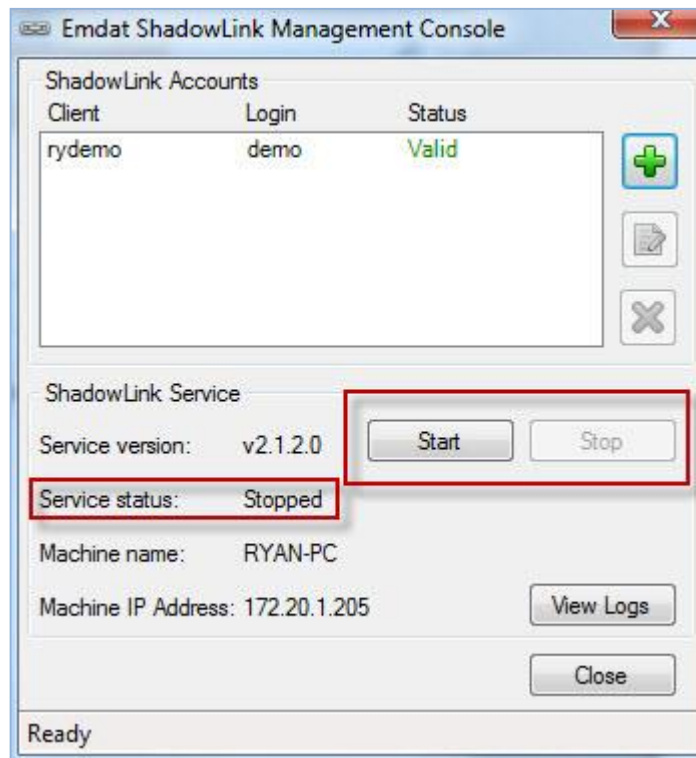




### 4.3 Starting and Stopping the Service

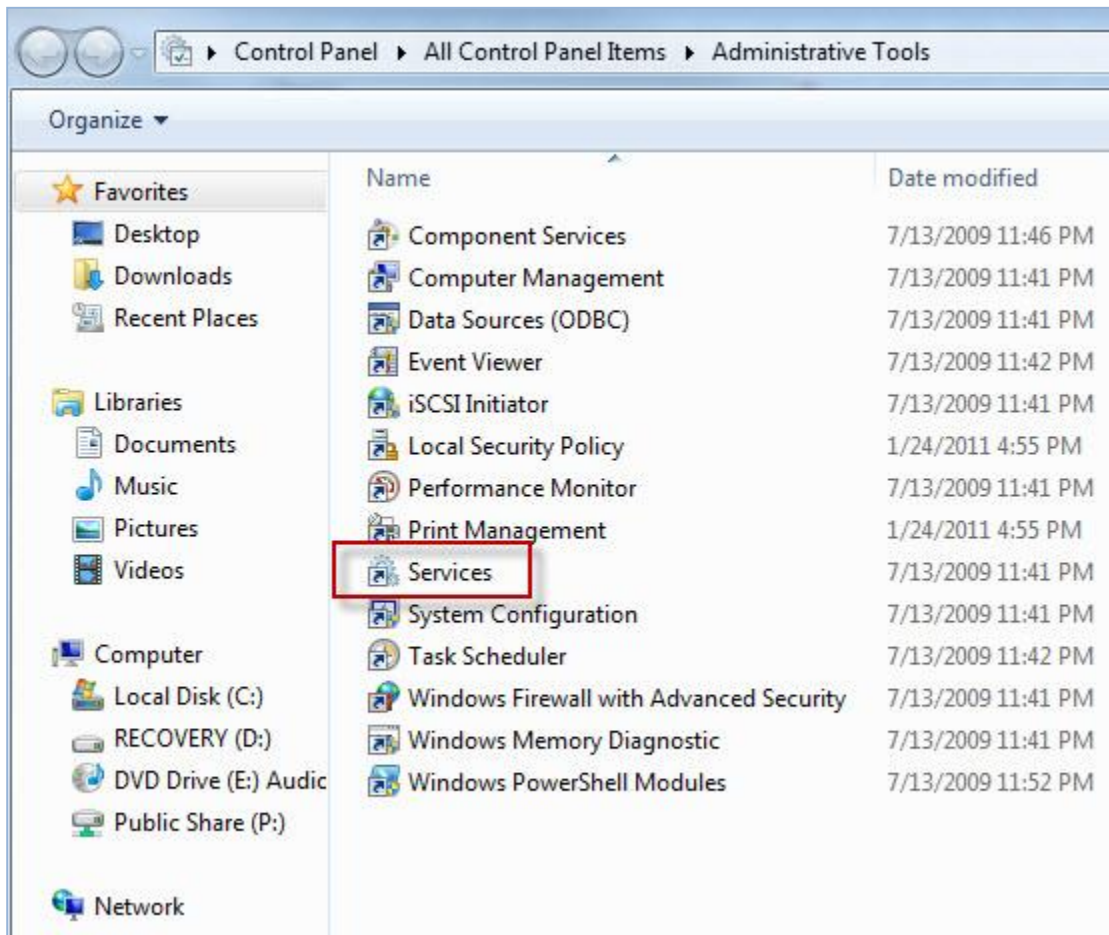
Once a valid login has been entered, the service can be started, stopped, and restarted in two ways.

- First, the service can be turned on and off in the ShadowLink GUI (Graphical User Interface). To start the interface, navigate to the Programs Menu> Emdat folder> ShadowLink Management Console.



Use the Start and Stop buttons to start, stop, and restart the service as needed.

- Alternately, you can start and stop the service using the Services applet in Windows Administrative Tools.



## 5 InCommand

For the purposes of this manual, it is assumed that ShadowLink managers are already proficient with InCommand. If needed, additional help can be found here:

<https://www.Emdat.com/download/InCommand%20Manual%20March%202014.doc>

### 5.1 Access to ShadowLink Management

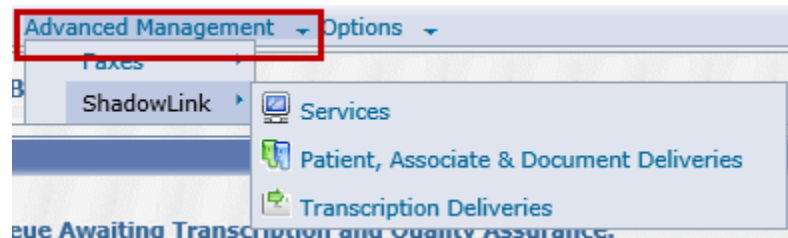
ShadowLink Management is granted through the Transcriptionist sub-tab of the Maintenance tab.

- Edit the selected transcriptionist account.
- Expand the section “InCommand Security Roles”.
- Check the box “Can Manage ShadowLink”.



## 5.2 ShadowLink Management

Access to ShadowLink Maintenance will create a new drop down menu under the Management tab called Advanced Maintenance with the ShadowLink menu. In the ShadowLink menu there are three selections: Services; Patient, Associate & Document Deliveries; and Transcription Deliveries.



## 5.3 Services

The Services selection provides InCommand users an overview of all ShadowLink services for the Transcription Company. There is a column chooser function that shows the different columns of information available to the InCommand user to help facilitate the smooth management of multiple interfaces.

- **Client:** The client that the service is set up under.
- **Name:** The name of the service running.
- **Machine:** The name of the server or PC running the ShadowLink Service.
- **Last Activity:** The last time the ShadowLink Service communicated with the Nuance server.
- **Last Logout:** The last time the ShadowLink Service was disconnected by the Client.
- **Status:** The current state of the connection between the ShadowLink client service and the Nuance server. There are three states: Connected, Unresponsive, and Disconnected.

Client	Name	Machine	Last Activity	Last Logout	Status	Service ID
rydemo	Demo	RYAN-PC	11/25/2011 10:15 AM		Unresponsive	700
DemoDanJ	export	EMDATHD-PC	7/18/2011 1:56 PM	7/18/2011 1:56 PM	Disconnected	373
patdemo	patdemosl	PATRICK	11/25/2011 10:25 AM		Connected	147
patdemo	pds12	QA-TEST-XP-IE7	4/1/2011 4:15 PM	4/1/2011 4:15 PM	Disconnected	155

## 5.4 Patient, Associate, & Document Deliveries

This tab allows InCommand users to search for and review Client Patient Demographic, Associate, and Document submissions to the Nuance server. This can be useful for determining if the client is submitting regular or complete patient demographics and associate files. The files can be downloaded and viewed by InCommand users. Files can also be searched to see if they contain specified demographics or values. There are 10 searchable fields:

- **Client:** The client who uploaded the file. ShadowLink managers can search by all clients or a specific client.
- **Service:** Search by the specific service that uploaded the file. This can be useful when a client has multiple service logins at different locations. To use the Service drop down menu, a client must be selected.
- **Delivery Type:** ShadowLink managers can search by Patient, Associate, and Document records.
- **Delivery Method:** If a client has more than one delivery method, the search can be narrowed down to Folders or TCP/IP connections.
- **Format:** Search by the format of the received file.
- **Status:** Search by the current status of the received file. Completed jobs have been received by the server and uploaded to the database. Partially completed files have only been partially accepted by the server. Pending files have been received by the server, but are still in queue to be imported into the database. Failed files have been received by the server, but the server was not able to import the data.
- **Contains:** The Contains field is a key word search allowing ShadowLink managers to search through files for a value, such as a name, date, clinician, or any other word or number that could be contained in the patient or associate file.
- **Date Created:** The date the file was created within the client's network.
- **Date Received:** The date the Nuance server received the file from the client.
- **Date Completed:** The date the Nuance server completed uploading the file into the database.

The screenshot displays the 'Patient & Associate Deliveries' search interface. At the top, there are navigation tabs: Management, Maintenance, InVision, Client Maintenance, and InQuery. A 'Log Out' button is visible in the top right corner. Below the navigation, there are several tabs: Summary, Outstanding Jobs, Delivered Transcriptions, Reports, Advanced Management, and Options. The 'Patient & Associate Deliveries' tab is currently selected. The search form includes the following fields and controls:

- Client:** A dropdown menu with 'Any' selected.
- Service:** A dropdown menu with 'Any' selected.
- Delivery Type:** A dropdown menu with 'Patient' selected.
- Delivery Method:** A dropdown menu with 'Any' selected.
- Format:** A dropdown menu with 'Any' selected.
- Status:** A dropdown menu with 'Any' selected.
- Contains:** A text input field.
- Date Created:** A date picker field.
- Date Received:** A date range field with '11/25/2011 12:00:00 AM' and '11/25/2011 11:59:59 PM' entered.
- Date Completed:** A date range field.
- Results Per Page:** A dropdown menu with '50' selected.
- Buttons:** A 'search' button with a magnifying glass icon and a 'clear' button with a trash can icon.

## 5.5 Transcription Deliveries

This tab allows InCommand users to search for and review Client Transcription Files that have been delivered to the client via ShadowLink. This allows ShadowLink managers to search for and troubleshoot Transcription deliveries. There are multiple export formats including Word documents, PDF documents, and HL7 messages. There are 12 searchable fields ShadowLink managers can use to refine their searches:

- **Client:** The client who uploaded the file. ShadowLink managers can search by all clients or a specific client.
- **Rule:** The ShadowLink Export rule that triggered the creation and delivery of the export files.
- **Service:** Search by the specific service that uploaded the file. This can be useful when a client has multiple service logins at different locations. To use the Service drop down menu, a client must be selected.
- **Delivery:** If a client has more than one delivery method, the search can be narrowed down to the folder or other delivery method used.
- **Job ID:** The internal Nuance ID associated with creating an export.
- **Transcription ID:** The unique number associated with the specific job exported. Also known as TID or TID number.
- **Status:** The current status of the exported job:
  - **Error Cleared:** The export job originally had a rendering or delivery error but has since been cleared and possibly queued for export again.
  - **Retrieved:** The client picked up the TID file but it has not yet been delivered to the client's EHR or folder.
  - **Delivered:** The TID has been delivered to the configured delivery method destination.
  - **Rendering Error:** An error has occurred while creating the export file.
  - **Delivery Error:** An error has occurred while delivering the file to the client.
  - **Rendered:** The file has been created, but has not been delivered or retrieved by the client.
- **Date Created:** The date the export file was triggered and the record created.
- **Date Rendered:** The date the export file was created on the Nuance server.
- **Date Retrieved:** The date the export file was retrieved by the client.
- **Date Delivered:** The date the file was delivered to the configured delivery method destination.

The screenshot shows the Nuance ShadowLink 2 interface. At the top, there is a navigation bar with tabs for Management, Maintenance, InVision, Client Maintenance, and InQuery. Below this, there is a secondary navigation bar with tabs for Summary, Outstanding Jobs, Delivered Transcriptions, Reports, Advanced Management, Options, and Transcription Deliveries. The main content area is a search and filter interface. It includes a 'Client' dropdown menu set to 'Any', a 'Rule' dropdown menu set to 'Any', a 'Service' dropdown menu set to 'Any', a 'Delivery' dropdown menu set to 'Any', a 'Format' dropdown menu set to 'Any', and a 'Job ID' text input field. To the right of these filters, there is a 'Transcription ID' text input field, a 'Status' dropdown menu set to 'Any', and four date range filters: 'Date Created', 'Date Rendered', 'Date Retrieved', and 'Date Delivered', each with a 'thru' indicator and a calendar icon. At the bottom right, there are 'search' and 'clear' buttons. At the bottom left, there is a 'Results Per Page' dropdown menu set to '50'. A 'Log Out' link is visible in the top right corner.

## 6 Client Maintenance – Workflow

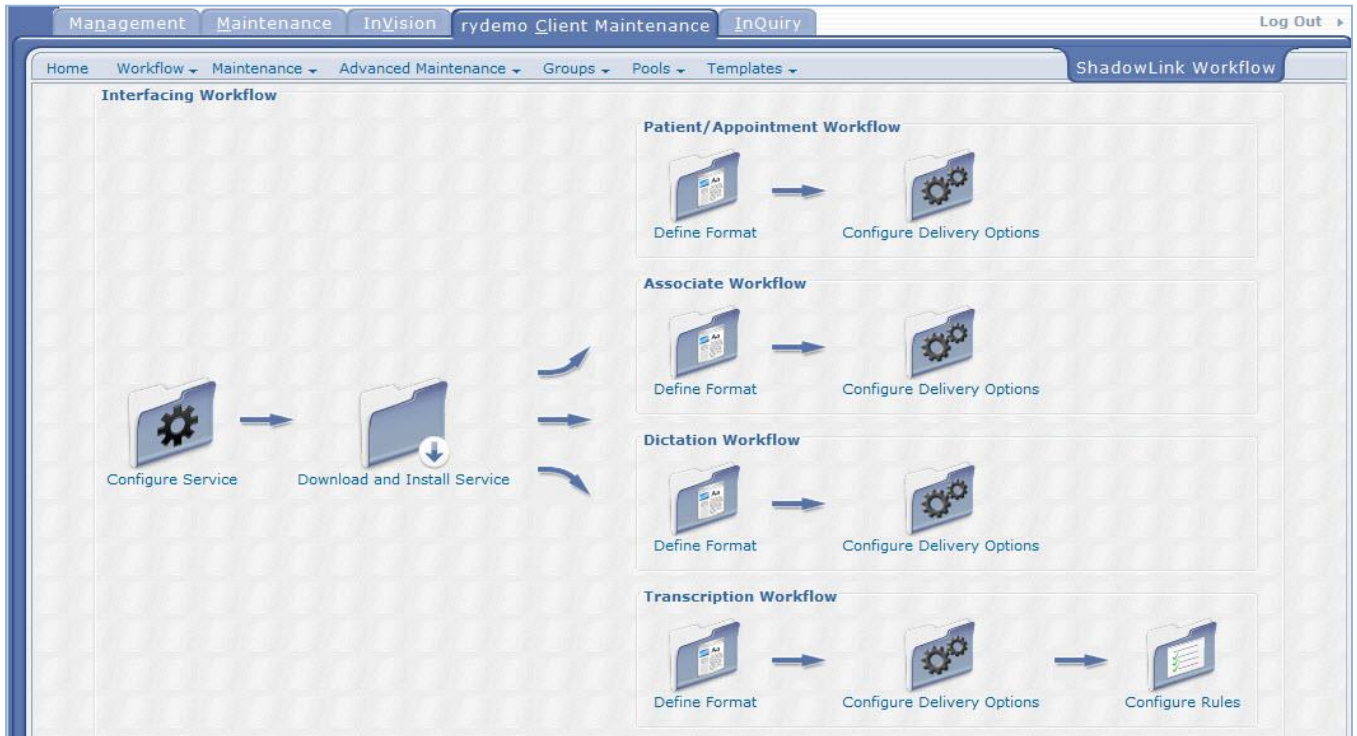
The Client Maintenance workflow must be enabled for ShadowLink Administrators by the Nuance Interfaces team. Under the Client Maintenance tab, ShadowLink Administrators have access to the Advanced Maintenance pull down menu, with the ShadowLink subfolder inside.

The Workflow option under the Client Maintenance tab provides a graphical overview of the services that ShadowLink can provide (see next page). In this manual, each of these distinct services is covered in its own section. Each service can also be accessed using the ShadowLink subfolder in the Advanced Maintenance pull down menu.

The configurable services are:

- **Services:** The login for the configured service account to be used on the installation. (See [Services](#), p. 17.)
- **Patient/Appointment Formats:** Where administrators define the format of patient demographic files. (See [Patient/Appointment Formats](#), p. 26.)
- **Associate Formats:** Where administrators define the format of Associates (Carbon Copies) files. (See [Associate Formats](#), p. 36.)
- **Dictation Formats:** Where administrators define the format of audio files for upload to the Nuance server. (See [Dictation Formats](#), p. 40.)
- **Transcription Formats:** Where administrators define the format of completed documents that will be exported to the Client EHR or folder. (See [Transcription Formats](#), p. 43.)
- **Rules:** Where administrators create the rules and triggers for document export. Rules determine which documents qualify for export and at what time. (See [Rules](#) p, 45.)

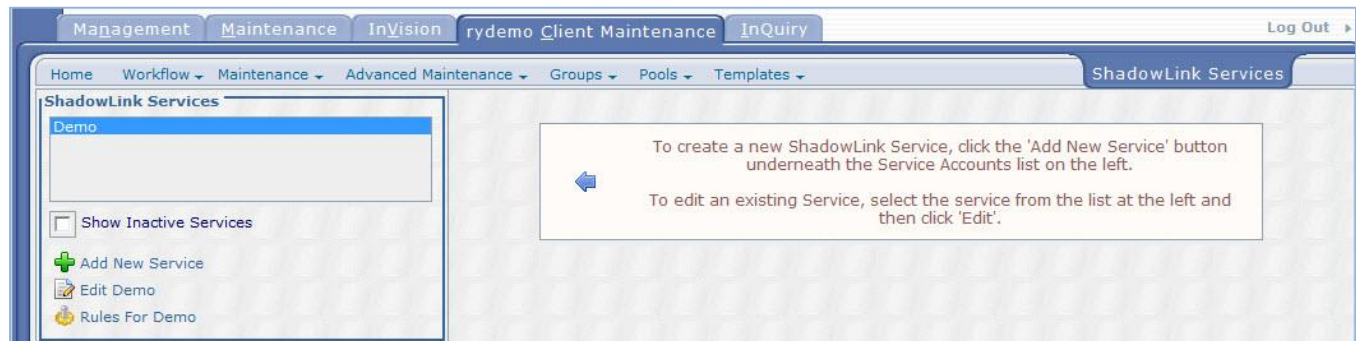
Figure 6.1 The ShadowLink Configuration and Installation process





## 7 Services

A ShadowLink Service is a unique set of login credentials that allows unique instances of the ShadowLink application installed on client side servers to connect to the Nuance interface servers and transmit data. Creating a service is the first step in creating an interface of any kind. There is no limit to the number of services that can be created and connected to the Nuance server. It is also possible to run all four kinds of data transmission from one ShadowLink service. Multiple services can be established to provide redundancy and to allow uploads from multiple physical or logical locations.



### 7.1 ShadowLink Services

As shown in the graphic above, existing services can be viewed in the list on the left. To add a new service, click the “Add New Service” link. To edit an existing service, select it in the list and then click “Edit”. The “Rules” link is a shortcut for the Transcription Export Rules associated with the service.

To display Services that have been previously inactivated, check the “Show Inactive Services” check box.

Service features include:

- **Name:** The name used to identify the service. The name allows ShadowLink Administrators to organize their services.
- **Description:** Where ShadowLink Administrators can make notes or expand on the name of the service to better describe what it is for or where it is located, or to add any other information that the administrator may need to maintain the service.
- **Active:** Services can be inactivated when they are no longer required, or if they need to be temporarily disabled. Recheck the box to turn inactive services back on.
- **Login:** The login ID used when connecting a client side ShadowLink service to the Nuance servers.
- **Password:** The password defined by the ShadowLink Administrator to authenticate valid ShadowLink connections.

- **Notification Email Address:** Enter an email address to receive notifications about ShadowLink statuses, including disconnections or inactivity.
- **IP Address:** Displays the IP address of the Server or PC that is currently using the Service.
- **Local Workstation Name:** The name of the computer that the ShadowLink service is connected to.

The Login ID, Password, IP Address, and Workstation Name are used every time the ShadowLink Service running on the client's workstation authenticates with the Nuance Servers. This means that two ShadowLink Services cannot be running on different client workstations using the same Service credential at the same time.

In order to log in to the service on another machine, the IP address and Workstation Name must be cleared using the clear button. This is only necessary if the Service is being moved to another computer.

The screenshot displays the 'ShadowLink Services' management interface. The main content area is titled 'Edit Demo Service Account' and contains the following fields:

Name	Demo *
Description	
Active	<input checked="" type="checkbox"/>
Login	demo *
Password	•••• *
Notification Email Address	fake@fake.com *
IP Address	172.20.1.205
Local Workstation Name	RYAN-PC <input type="button" value="clear"/>

On the left side, there is a sidebar with a 'ShadowLink Services' list containing 'Demo'. Below this list are options: 'Show Inactive Services' (checkbox), 'Add New Service' (plus icon), 'Edit Demo' (pencil icon), and 'Rules For Demo' (gears icon). Below the services list is a section for 'Delivery Methods For Demo', which includes a sub-section for 'Patient/ Appointment Delivery' with 'Demo Patient' listed. At the bottom of this section are 'Add', 'Edit', and 'Delete' buttons.

## 7.2 Delivery Methods

In the second part of the Services menu, ShadowLink Administrators assign duties to the selected Service. These include inbound Patient, Associate, Dictation, and Document files or outbound Transcription files. Delivery Methods determine where inbound files will be picked up and where outbound files will be delivered. File formats must be created using the steps defined in sections 8 through 12, before they can be added to a Delivery Method. However, once they have been created, file formats can be added to one or more ShadowLink Delivery Method. It is possible to add more than one type of delivery method to a service. This includes adding more than one format to a specific type of delivery method. For example, one Service could be hosting 3 different kinds of Patient Formats.

The screenshot shows a web interface titled "Delivery Methods For Service". It is organized into five distinct sections, each with a heading and a corresponding input field. Below each input field are three buttons: a green plus sign labeled "Add", a document icon labeled "Edit", and a red X labeled "Delete". The sections are: "Patient/Appointment Delivery", "Document Delivery", "Associate Delivery", "Dictation Delivery", and "Transcription Delivery".

For all delivery methods, there are three main functions available:

- **Add:** The Add link with the Green “+” symbol will create a new delivery method.
- **Edit:** This allows ShadowLink Administrators to edit an existing Delivery Method.
- **Delete:** Removes the selected Delivery Method from the Service.

### 7.2.1 Patient/Appointment Delivery

Delivery methods for patient demographics and scheduling into the system are created, edited, and removed under this heading. Additionally, the specifics regarding file paths and the format created in [Patient/Appointment Formats, p. 26](#), are selected here.

- **Name:** A unique name for the delivery method of the selected ShadowLink Service.
- **Description:** A general description of the delivery method, for reference purposes.
- **Active:** The On/Off switch for the delivery method.
- **Source:** Where Patient Demographics will be retrieved from. They can either be retrieved from a folder or received from a TCP server.
  - Folder Sources require a path to retrieve files from. Once it has been verified that Nuance has the file, the same file is removed from the current folder. Optionally, a Save Path feature that allows you to retain the files sent to Nuance, may also be specified. If the folder specified for Nuance to retrieve the files from has additional files, a file mask can be used to

restrict the upload to specific file names or types. For additional information on how to use file masks, see the Microsoft documentation at [https://msdn.microsoft.com/en-us/library/ms690414\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/ms690414(v=vs.85).aspx).

- TCP Server Sources must specify a port number and whether or not the connection should disconnect after receiving the ACK (acknowledgement) packet. Some sending systems can be configured to not send start and end characters. We have an option to expect them by default.
- Custom sources are other means of retrieving patient information not handled by the other 2 types. Contact your interface programmer for more information.
- **Default Format:** A default format must be selected from the drop down menu. Patient formats are created in [Patient/Appointment Formats, p.26](#).

Edit Demo Patient Patient Delivery Method	
Name	Demo Patient *
Description	1rst Patient Schedule
Active	<input checked="" type="checkbox"/>
Source	Folder ▼
Path	C:\Schedules\ *
Save Path	
File Mask	
Default Format	Patient Upload ▼ *

### 7.2.2 Document Delivery

Delivery method for document files that are sent from the client's system to be imported into the Nuance Platform are created, edited, and removed under this heading. Additionally, the specifics regarding file paths and the format created from [Document Formats, p. 31](#) are selected here.

- **Name:** A unique name for the delivery method of the selected ShadowLink Service.
- **Description:** A general description of the delivery method, for reference purposes.
- **Active:** The On/Off switch for the delivery method.
- **Source:** Where documents will be retrieved from. Documents can be retrieved from a folder on the client's workstation or network share, or sent to an IP address/port within the client network.
  - Folder Sources require a path where the file is sent to. Optionally, a Save path may be specified. A file mask can be used to restrict the upload to specific file names or types.

- TCP Server Sources must specify a port number and whether or not the connection should disconnect after receiving the ACK (acknowledgement) packet. Some sending systems can be configured to not send start and end characters. We have an option to expect them by default.
- **Format:** A default format must be selected from the drop down menu. Document formats are created in [Document Formats, p. 31](#).

The screenshot shows a web form titled "Add New Document Delivery Method". The form has the following fields and controls:

- Name:** A text input field with a red asterisk to its right, indicating it is required.
- Description:** A large text area with up and down arrow icons on the right side.
- Active:** A checkbox that is currently checked.
- Source:** A dropdown menu with "Folder" selected.
- Path:** A text input field with a red asterisk to its right, indicating it is required.
- Save Path:** A text input field.
- File Mask:** A text input field.
- Default Format:** A dropdown menu with "Select a Format" selected and a red asterisk to its right, indicating it is required.

### 7.2.3 Associate Delivery

Delivery methods for Associate files being brought into the Nuance platform are created, edited, and removed under this heading. Additionally, the specifics regarding file paths and the format created from [Associate Formats, p. 36](#) are selected here.

- **Name:** A unique name for the delivery method of the selected ShadowLink Service.
- **Description:** A general description of the delivery method, for reference purposes.
- **Active:** The On/Off switch for the delivery method.
- **Format:** A default format must be selected from the drop down menu. Associate formats are created in [Associate Formats, p. 36](#).
- **Path:** Where Associate files are retrieved from. This can be a local folder or UNC path.
- **Save Path:** A path where Associate files can optionally be backed up locally.
- **File Mask:** A file mask can be specified to filter out a specific file or file type. Asterisks (\*) are used as wild card place holders.

Edit Demo Associate Associate Delivery Method	
Name	Demo Associate *
Description	Demo Associate Delivery
Active	<input checked="" type="checkbox"/>
Format	Associate Upload ▾
Path	C:\Associates
Save Path	
File Mask	*.*

#### 7.2.4 Dictation Delivery

Delivery methods for Dictation files being uploaded from a client's server to the Nuance platform are created, edited, and removed under this heading. Additionally, the specifics regarding file paths and the format created from [Dictation Formats, p. 40](#) are selected here.

- **Name:** A unique name for the delivery method of the selected ShadowLink service.
- **Description:** A general description of the delivery method, for reference purposes.
- **Active:** The On/Off switch for the delivery method.
- **Format:** A default format must be selected from the drop down menu. Dictation formats are created in [Dictation Formats, p.40](#).
- **Audio File Path:** The name of a local folder or UNC path where the audio files are uploaded from.
- **Audio File Mask:** A file name mask can be specified to filter out a specific file or file type. Asterisks (\*) are used as wild card place holders.
- **Header File Path:** The name of a local folder or UNC path. Some audio file creation software includes an additional file with patient or appointment information.
- **Header File Mask:** A file name mask can be specified to filter out a specific file or file type. Asterisks (\*) are used as wild card place holders.
- **Save Path:** The name of a local folder or UNC path used to locally backup audio files that have been uploaded to the Nuance server. If no path is entered a save file will not be created.
- **Save Sent Dictations for:** The number of days that ShadowLink should save files in the Save Path. Administrators can choose between 1 and 100 days or Always.
- **Reconcile Path:** The name of a local folder or UNC path where an acknowledgement file can be saved for those systems that require one.

Edit Dictation Demo Dictation Delivery Method <span style="float: right;">?</span>	
Name	Dictation Demo *
Description	Dictation Demo Delivery
Active	<input checked="" type="checkbox"/>
Format	demo ▾
Audio File Path	C:\Audio\ *
Audio File Mask	*.*
Header File Path	
Header File Mask	*.*
Save Path	
Save Sent Dictations for	Always ▾
Reconcile Path	

### 7.2.5 Transcription Delivery

Delivery methods for Transcription files that are being sent from the Nuance platform to the client's EHR other systems are created, edited, and removed under this heading. The specifics regarding file paths are discussed here. The specifics of how the Transcription is delivered to the client are specified in Rules.

- **Name:** A unique name for the delivery method of the selected ShadowLink service.
- **Description:** A general description of the delivery method, for reference purposes.
- **Active:** The On/Off switch for the delivery method.
- **Source:** There are three available source types that an export can be delivered to.
  - **Folder:** The name of a local folder or UNC path to deliver the documents to. \*See Figure 7.2.5.
    - **Path:** The name of a local folder or UNC path.
  - **TCP:** TCP delivery requires an IP address and a Port to deliver to. Administrators can also choose to disconnect after the ACK (acknowledgment) packet has been received. \*See Figure 7.2.6.
    - **Address:** The name of the address.
    - **Port:** The port number to send to.
    - **Disconnect After ACK:** The toggle On/Off switch.

- **Max NAK:** The maximum number of NAK messages before a failure.
- **Ack Timeout (in seconds):** The number of seconds to wait for an acknowledgement message before raising an error. The default is 60 seconds.
- **Start of Message Indicator:** The sequence of bytes that indicates the start of the acknowledgement message, specified as a hexadecimal value. The default is 0x0B.
- **End of Message Indicator:** The sequence of bytes that indicates the end of the acknowledgement message, specified as a hexadecimal value. The default is .0x1C.
- **Segment Delimiter:** The sequence of bytes that indicates the end of an HL7 segment in the acknowledgement message, specified as a hexadecimal value. The default is 0x0D (carriage return).
- **Ack Code Position:** The position in the HL7 acknowledgement message where the Acknowledgement Code is found. The default is MSA.1.
- **Ack Accept Code:** The value of the Acknowledgement Code that indicates a successful delivery. The default is AA.
- **Ack Description Position:** The position in the HL7 acknowledgement message where a description of the acknowledgement is found. This is primarily used for NAK reasons. The default is MSA.3.
- **Custom:** A delivery method specific to a system. It transmits the transcription export to the EHR using web services or other custom transmission method. Contact your interface programmer for more information.

Figure 7.2.5

Edit Export Demo Transcription Delivery Method	
Name	Export Demo *
Description	Demo Export Format
Active	<input checked="" type="checkbox"/>
Source	Folder
Path	C:\Exports\ *



Figure 7.2.6

**Add New Transcription Delivery Method** ?

<b>Name</b>	<input type="text"/> *
<b>Description</b>	<div style="border: 1px solid gray; height: 40px; width: 100%;"></div>
<b>Active</b>	<input checked="" type="checkbox"/>
<b>Source</b>	TCP ▾

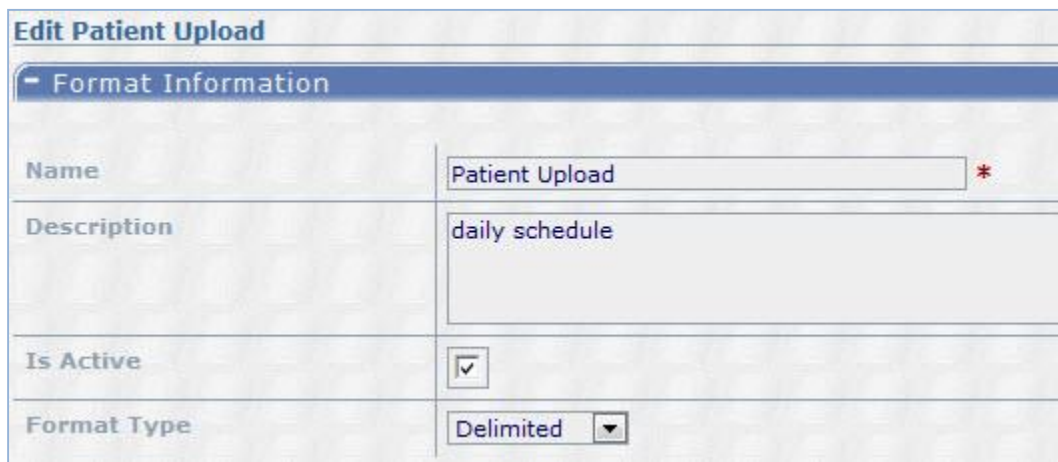
<b>Address</b>	<input type="text"/> *
<b>Port</b>	<input type="text"/> *
<b>Disconnect After ACK</b>	<input type="checkbox"/>
<b>Max NAK</b>	3
<b>Ack Timeout (in seconds)</b>	60 *
<b>Start Of Message Indicator</b>	0x0B
<b>End Of Message Indicator</b>	0x1C
<b>Segment Delimiter</b>	0x0D *
<b>Ack Code Position</b>	MSA.1 *
<b>Ack Accept Code</b>	AA *
<b>Ack Description Position</b>	MSA.3 *

## 8 Patient/Appointment Formats

Patient/Appointment Formats define the structure of the files the client will be sending. When creating a patient schedule, the order and format are critical to ensuring that the database imports the correct information into the correct database fields. Incorrectly or inaccurately defining the Patient format will result in missing or incorrect demographics. Associate fields can also be defined within the patient/appointment file to be added to the Associate database.

### 8.1 Format Information

- **Name:** Assign a unique name for this format. The name will be displayed on other screens to identify this type of patient format. If applicable, the name should represent the system the format was set up for.
- **Description:** Enter a descriptive summary of the format's purpose and specification.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.
- **Format Type:** Select the general type of message that this format will parse into database entries. There are 4 basic types: Custom, Delimited, Fixed Width, and HL7.



The screenshot shows a web form titled "Edit Patient Upload". A blue header bar contains a minus sign and the text "Format Information". Below this, the form is divided into four sections:

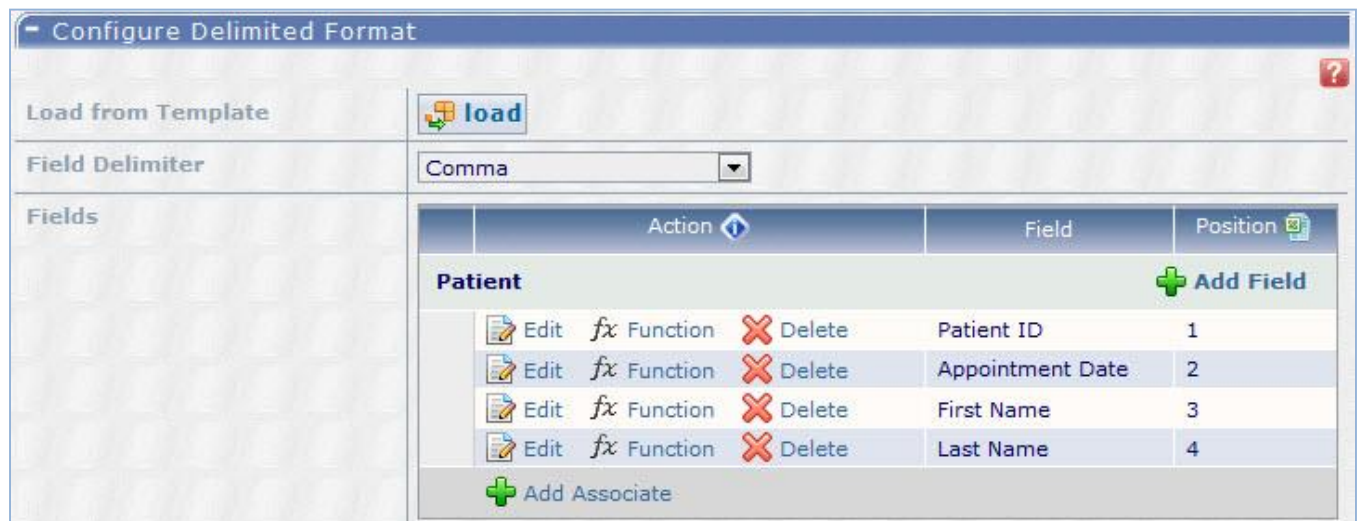
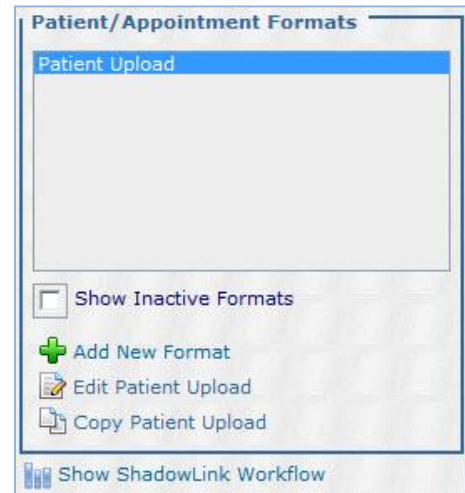
Name	Patient Upload *
Description	daily schedule
Is Active	<input checked="" type="checkbox"/>
Format Type	Delimited ▼

### 8.1.1 Custom Format Type

The Custom Format type for patient demographics includes anything that isn't covered by the other options, and requires Nuance to write custom code to interpret. Contact your support representative for custom format requests.

### 8.1.2 Delimited Format Type

Delimited formats have their values separated by a common symbol or character. The Nuance servers are able to parse the information into user-friendly database entries that are available throughout the system.

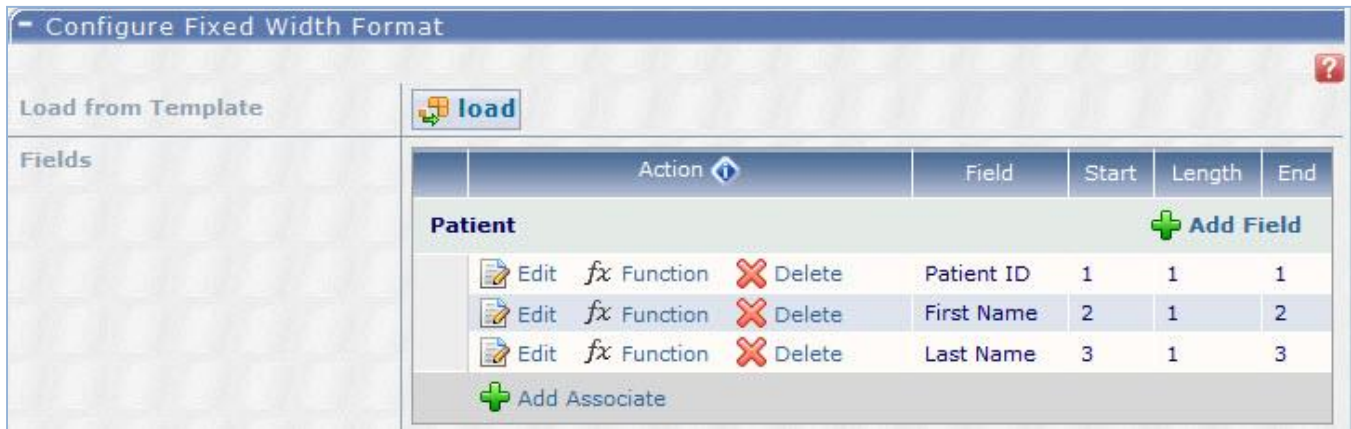


- Load from Template:** Nuance maintains a library of commonly used delimited formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- Field Delimiter:** The field delimiter is the character used to separate the database entries. Comma, tab, and space are all common delimiters. Custom characters can also be selected with the Custom Character option.

- **Fields:** The Fields grid contains the fields that have been defined for the format. To add a new field, click the Add field button and enter a position (such as 1, 2, 3, 4, etc.). The position of the field indicates where in the data string the demographic feature is located. To apply more advanced functions to a field, click the function button in that field's row. Press the Microsoft Excel icon next to the Position column header to convert the position numbers to Excel spreadsheet column letters.
- **Functions:** Functions alter or omit data that does or does not meet criteria. The available functions include:
  - **Substring Before:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything before that character in the position defined. For example, Substring Before on "Last, First" with a character of ",", would result in a value of "Last".
  - **To Proper Case:** Ensures that the string in the specified location has "Proper Case" instead of "lower case" or "UPPER CASE."
  - **Static Text:** Place a hard coded value for any field.
  - **Substring:** The substring function will pull out and enter text into the database starting and ending at a specified character.
  - **Normalize Space:** Apply this function to remove unwanted leading or trailing spaces, or middle spaces where there is more than one.
  - **Value of:** Gives the value of a particular position and is used to append multiple values together.
  - **Strip Double Quotes:** Removes double quotes (") from the string.
  - **Parse Date Time Exact:** Use to import date and time formats that would not natively be imported into the system. For example, Thursday November 11, 2011 would not normally be accepted without the function to Parse Date Time Exact.
  - **Get ASCII Character:** Enter an ASCII non-standard character into a field.
  - **Substring After:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything after that character in the position defined. For example, Substring After on "Last, First" with a character of "," would result in a value of "First".
  - **Current Date/Time:** Enters the Current Date and Time. For Patient Demographics that do not include an Appointment time, the Current Date and Time can be substituted.
  - **Remove Non-Numeric:** Removes all non-numeric values from the string. Useful for parsing phone numbers.
  - **Current Date/Time Formatted:** Format the Current Date and Time into a specified format.
  - **Is Valid Phone Number:** Returns true if it's a valid phone number of the specified length. This function is particularly useful for the fax number field.

### 8.1.3 Fixed Width Format Type

Fixed Width formats have specified column widths defined by the number of characters per field. The Nuance servers are able to parse the information into user-friendly database entries that are available in InScribe and InQuery.



- **Load from Template:** Nuance maintains a library of commonly used Fixed Width formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Fields:** The Fields grid contains the fields that have been defined for the format. Click the Add Patient or Add Associate button to add a new field. Then enter a field position (such as 1, 2, 3, 4, etc.) and length (number of characters). The position of the field indicates where in the data string the demographic feature begins. To apply more advanced functions to a field, click the function button in that field's row.
- **Functions:** Fixed Width functions are the same as those specified in the Delimited Format Type section.

### 8.1.4 HL7 Format Type

HL7 formats are used to parse HL7 files or messages received from external systems.

- **Load from Template:** Nuance maintains a library of commonly used HL7 formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Start of Message Terminator:** Enter the Start of Message (SOM) Terminator in the textbox. The default is 0B (vertical tab). **Note: Values must be entered as hexadecimal.**
- **End of Message Terminator:** Enter the End of Message (EOM) Terminator in the textbox. The default is 1C (file separator). **Note: Values must be entered as hexadecimal.**
- **Segment Delimiter:** Enter the Segment Delimiter in the textbox. The default is 0D (carriage return). **Note: Values must be entered as hexadecimal.**
- **Delimiters:** Select whether to automatically detect the field delimiters or enter the custom field delimiters in the textbox.
- **Fields:** This grid lists the fields defined for this format. Click the Add Patient or Add Associate button and enter a position to define a new field. To apply more advanced functions to a field, click the function button in that field's row.
- **Functions:** In addition to the functions available in Delimited Format Type, there is one more available to HL7 interface users:
  - **Raw XSL:** If any custom code is needed that is not covered by the other fields, Nuance can define it for the field.

## 8.2 Testing

A test file can be loaded to verify that the configured format is working correctly. Test files will not work with custom formats. Click the run test button to browse for the file, then press ok. The test results will display.

**Note:** Testing should always be done to ensure that there are no issues for the client later on.



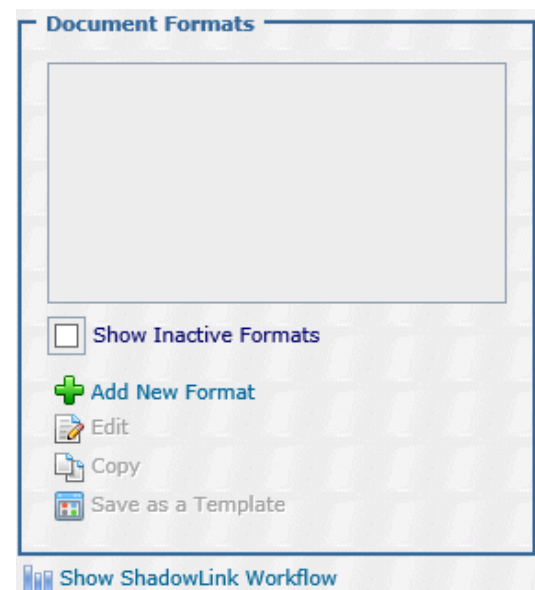
- **Field Display Name:** The intended database field name.
- **Parsed Value:** The value that was read from the original file.
- **Mapped/Formatted Value:** The value that would be entered into the database after any functions are applied.

## 9 Document Formats

Document Formats allow the client to send back a previously unsigned document as a signed document. This allows Nuance to distribute the document as though the physician signed the document within the Nuance Platform.

### 9.1 Format Information

- **Name:** Assign a unique name for this format. The name will be displayed on other screens to identify this type of format. If applicable, the name should represent the system the format was set up for.
- **Description:** Enter a descriptive summary of the format's purpose and specification.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.
- **Format Type:** Select the general type of message that this format will parse into database entries. There is currently only HL7 format type.



**Add New Document Format**

**Format Information**

Name	<input type="text"/> *
Description	<input type="text"/>
Is Active	<input checked="" type="checkbox"/>
Format Type	HL7 <input type="button" value="v"/>

### 9.1.1 Configure HL7 Format

HL7 formats are sent in real time using the Industry Standard.

At a minimum, the format must be configured with these fields:

- **Transcription ID** – identifies which transcription to edit and complete from the Preliminary workflow folder.
- **Date Signed** – sets the date the transcription was signed within the sending system.

**Configure HL7 Format**

Load from Template	load									
Start of Message Terminator	<input type="text" value="0x0B"/>									
End of Message Terminator	<input type="text" value="0x1C"/>									
Segment Delimiter	<input type="text" value="0x0D"/>									
Delimiters	<input checked="" type="radio"/> <b>Automatically detect field delimiters</b> <input type="radio"/> Use these delimiters: <input type="text"/>									
Fields	<table border="1"> <thead> <tr> <th>Action</th> <th>Field</th> <th>Position</th> </tr> </thead> <tbody> <tr> <td colspan="3" style="text-align: center;">No Fields have been defined.</td> </tr> <tr> <td colspan="3" style="text-align: center;"> Add Field</td> </tr> </tbody> </table>	Action	Field	Position	No Fields have been defined.			Add Field		
Action	Field	Position								
No Fields have been defined.										
Add Field										
Text Body Format	Single OBX Segment <input type="button" value="v"/>									



- **Load from Template:** Nuance maintains a library of commonly used delimited formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Start of Message Terminator:** Enter the Start of Message (SOM) Terminator in the textbox. The default is 0B (vertical tab). **Note: Values must be entered as hexadecimal.**
- **End of Message Terminator:** Enter the End of Message (EOM) Terminator in the textbox. The default is 1C (file separator). **Note: Values must be entered as hexadecimal.**
- **Segment Delimiter:** Enter the Segment Delimiter in the textbox. The default is 0D (carriage return). **Note: Values must be entered as hexadecimal.**
- **Delimiters:** Select either “Automatically detect field delimiters” or “Use these delimiters”. If you choose “Use these delimiters”, enter the delimiters in the textbox.
- **Functions:** Functions alter or omit data that does or does not meet criteria. The available functions include:
  - **Substring After:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything before that character in the position defined. For example, Substring After on “Last, First” with a character of “,” would result in a value of “First”.
  - **To Upper Case:** Ensures that the string in the specified location is in all “UPPER CASE” instead of “lower case” or “Proper Case”.
  - **Substring Before:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything before that character in the position defined. For example, Substring Before on “Last, First” with a character of “,” would result in a value of “Last”.
  - **Normalize Space:** Apply this function to remove unwanted leading or trailing spaces, or middle spaces where there is more than one.
  - **Value of:** Gives the value of a particular position and is used to append multiple values together.
  - **Raw XSL:** If any custom code is needed (code that is not covered by the other fields), Nuance can define it for the field.
  - **To Proper Case:** Ensures that the string in the specified location has “Proper Case” instead of “lower case” or “UPPER CASE.”
  - **Substring:** The substring function will pull out and enter text into the database starting and ending at a specified character.
  - **Parse Date Time Exact:** Use to import date and time formats that would not natively be imported into the system. For example, Thursday November 11, 2011 would not normally be accepted without the function to Parse Date Time Exact.
- **Text Body Format:** Select the format of the expected text body.

### 9.1.2 Configure ACK

When the client sends Nuance an HL7 message for patient information **through a TCP connection**, their EHR is looking for an acknowledgement from the ShadowLink Client to ensure that it was received.

**Note:** The Configure ACK is not needed when looking within a folder at the client site.

- **Load from Template:** **Warning:** Loading from a template will overwrite the currently defined ack. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Start of Message Terminator:** Enter the Start of Message (SOM) Terminator in the textbox. The default is 0B (vertical tab). **Note:** Values must be entered as hexadecimal.
- **End of Message Terminator:** Enter the End of Message (EOM) Terminator in the textbox. The default is 0D1C0D (file separator). **Note:** Values must be entered as hexadecimal.
- **Segment Delimiter:** Enter the Segment Delimiter in the textbox. The default is 0D (carriage return). **Note:** Values must be entered as hexadecimal.
- **Delimiters:** This field must be filled in. The default is |^~&\.
- **Ack:** This tree view lists the message segments and fields for the acknowledgement that will be sent to the sending system.

Configure ACK	
Load from Template	
Start of Message Terminator	0x 0B
End of Message Terminator	0x 0D1C0D
Segment Delimiter	0x 0D
Delimiters	^~&\
Ack	<div style="border: 1px solid gray; padding: 5px;"> <p style="text-align: center;">HL7 Message Ack</p> <p style="text-align: center;"> <span>+ Add Child Node</span> <span>Edit</span> <span>X Delete</span> <span>▲ Move Up</span> <span>▼ Move Down</span> </p> <p>HL7 Segments</p> </div>

## 9.2 Testing

A test file can be loaded to verify that the configured format is working correctly. Click the run test button to browse for the file, then press ok. The test results will display, including the parsed body result.

**Note:** Testing should always be done to ensure that there are no issues for the client later on.



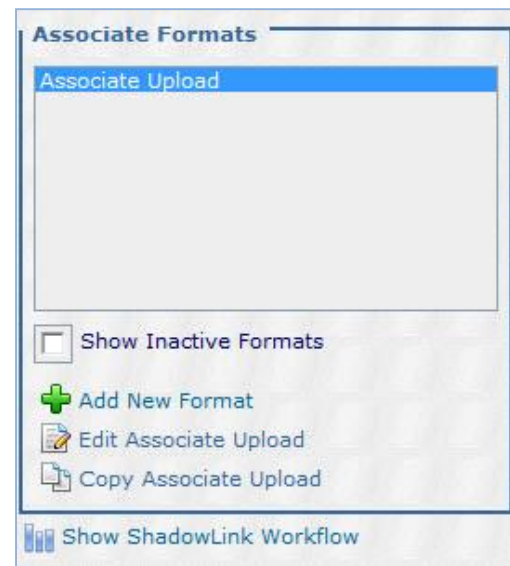
- **Field Display Name:** The intended database field name.
- **Parsed Value:** The value that was read from the original file.
- **Mapped/Formatted Value:** The value that would be entered into the database after any functions are applied.

## 10 Associate Formats

Associate Formats define the structure of the files that the client will be sending. When creating an associate file, the order and format are critical to ensuring that the database imports the correct information into the correct database fields. Incorrectly or inaccurately defining the Associate format will result in missing or incorrect entries.

### 10.1 Format Information

- **Name:** Assign a unique name for this format. The name will be displayed on other screens to identify this type of associate format. If applicable, the name should represent the system the format was set up for.
- **Description:** Enter a descriptive summary of the format's purpose and specification.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.
- **Format Type:** Select the general type of message that this format will parse into database entries. There are 3 basic types: Custom, Delimited, and Fixed Width.



Edit Associate Upload	
Format Information	
Name	Associate Upload *
Description	Demo Associates
Is Active	<input checked="" type="checkbox"/>
Format Type	Delimited ▼

#### 10.1.1 Custom Format Type

The Custom Format type for patient demographics includes anything that isn't covered by the other options, and requires Nuance to write custom code to interpret. Custom formats can be requested by contacting support.

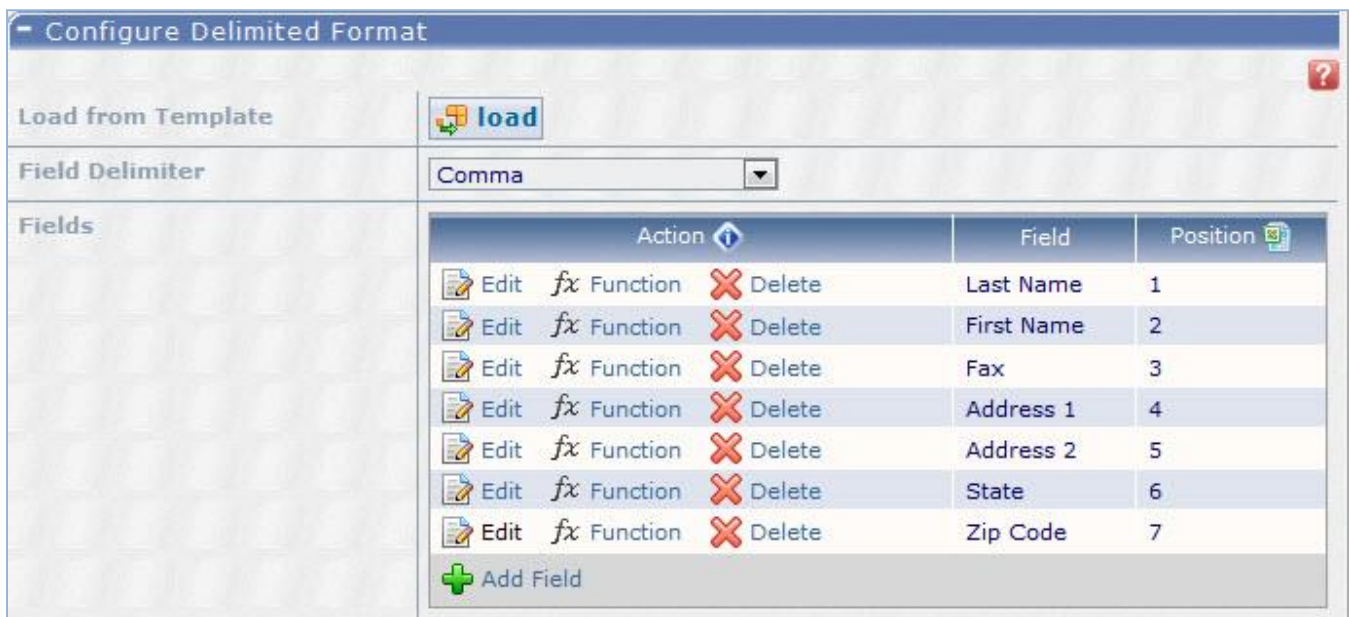
### 10.1.2 Delimited Format Type

---

Delimited formats have their values separated by a common symbol or character. The Nuance servers are able to parse the information into user-friendly database entries that are available in InScribe and InQuiry.

- **Load from Template:** Nuance maintains a library of commonly used delimited formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Field Delimiter:** The field delimiter is the character used to separate the database entries. Comma, tab, and space are all common delimiters. Custom characters can also be selected with the Custom Character option.
- **Fields:** The Fields grid contains the fields that have been defined for the format. To add a new field, click the Add field button and enter a position (such as 1, 2, 3, 4, etc.). The position of the field indicates where in the data string the demographic feature is located. To apply more advanced functions to a field, click the function button in that field's row.
- **Functions:** Functions will alter or omit data that does or does not meet criteria. The available functions include:
  - **Substring Before:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything before that character in the position defined. For example, Substring Before on "Last, First" with a character of "," would result in a value of "Last".
  - **To Proper Case:** Ensure that the string in the specified location has "Proper Case" instead of "lower case" or "UPPER CASE".
  - **Static Text:** Place a hard coded value for any field.
  - **Substring:** The substring function will pull out and enter text into the database starting and ending at a specified character.
  - **Normalize Space:** Apply this function to remove unwanted leading or trailing spaces, or middle spaces where there is more than one.
  - **Value of:** Gives the value of a particular position and is used to append multiple values together.
  - **Strip Double Quotes:** Removes double quotes ("") from the string.
  - **Parse Date Time Exact:** Use to import date and time formats that would not natively be imported into the system. For example, Thursday November 11, 2011 would not normally be accepted without the function to Parse Date Time Exact.
  - **Get ASCII Character:** Enter an ASCII non-standard character into a field.
  - **Substring After:** This function takes in two parameters: the position you want to apply this function to and the character you want to use. It will grab anything after that character in the position defined. For example, Substring After on "Last, First" with a character of "," would result in a value of "First".

- **Current Date/Time:** Enters the Current Date and Time. For Patient Demographics that do not include an Appointment time, the current Date and Time can be substituted.
- **Remove Non-Numeric:** Removes all non-numeric values from the string. Useful for parsing phone numbers.
- **Current Date/Time Formatted:** Format the current Date and Time into a specified format.
- **Is Valid Phone Number:** Returns true if it's a valid phone number of the specified length. This function is particularly useful for the fax number field.



### 10.1.3 Fixed Width Format Type

Fixed Width formats have specified column widths defined by the number of characters per field. The Nuance servers are able to parse the information into user-friendly database entries that are available in InScribe and InQuiry.

- **Load from Template:** Nuance maintains a library of commonly used Fixed Width formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Field Delimiter:** The field delimiter is the character used to separate the database entries. Comma, tab, and space are all common delimiters. Custom characters can also be selected with the Custom Character option.
- **Fields:** The Fields grid contains the fields that have been defined for the format. Click the Add Patient or Add Associate button to add a new field. Then enter a field position (such as 1, 2, 3, 4, etc.) and length (number of characters). The position of the field indicates where in the data

string the demographic feature begins. To apply more advanced functions to a field, click the function button in that field's row.

- **Functions:** Fixed Width functions are the same as those specified in Delimited Format Type.



## 10.2 Testing

A test file can be loaded to verify that the configured format is working correctly. Test files will not work with custom formats. Click the run test button to browse for the file, then press ok. The test results will then be displayed.

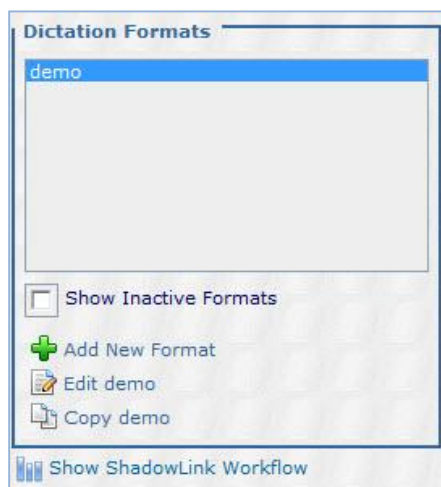
**Note:** Testing should always be done to ensure that there are no issues for the client later on.



- **Field Display Name:** The intended database field name.
- **Parsed Value:** The value that was read from the original file.
- **Mapped/Formatted Value:** The value that would be entered into the database after any functions are applied.

## 11 Dictation Formats

Dictation Formats define the structure of the files the client will be sending. When creating a Dictation file format, the order is critical to ensuring that the database imports the correct information into the correct database fields. Incorrectly or inaccurately defining the Dictation format will result in missing or incorrect entries.



### 11.1 Format Information

- **Name:** Assign a unique name for this format. The name will be displayed on other screens to identify this type of dictation format. If applicable, the name should represent the system the format was set up for.
- **Description:** Enter a descriptive summary of the format's purpose and specification.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.

A screenshot of a web application window titled "Edit demo". The window contains a form with a section header "Format Information" and a minus sign icon to its left. The form has three rows. The first row is labeled "Name" and contains a text input field with the value "demo" and a red asterisk icon to its right. The second row is labeled "Description" and contains a text input field with the value "demo". The third row is labeled "Is Active" and contains a checked checkbox.



## 11.2 Configure Dictation Format

- **Load from Template:** Nuance maintains a library of commonly used dictation formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Header File Type:** The options in this drop down define the type of dictation format to be configured.
  - **Dictaphone:** This header file type can be configured to parse information out of the embedded WAV header. **Note: There is a template that can be loaded in as a starting point.**
  - **DSS Header:** This option allows information to be parsed out of a DSS file header. **Note: this functionality depends on InSync v5 or later being installed alongside ShadowLink on the same machine.**
  - **ID3 Tags:** This option allows data to be extracted from an MP3 ID3 tag.
  - **INI:** If there is a corresponding text file in an INI style format paired with the audio file, select this option to parse information out of the INI/TXT file.
  - **No Header File:** If there is not a paired data file with the audio file, and none of the other header file type options is appropriate, select this option. This option allows you to parse information out of the filename or folder structure, or just upload basic audio files.
  - **XML:** If there is a corresponding XML file paired with the audio file, select this option to parse information out of the XML file.
- **File Path Delimiters:** Enter the delimiters that will be used to extract fields from the dictation file path.
- **Dictation Fields:** Define the fields that will be associated with the file.
  - **Fields include:** Client, Comment, Date Dictated, Dictation Length, Document Type, Document Type Dictation ID, Location ID, Order Number, Patient ID, STAT, User Name, User Dictation ID, and User Fields 1 through 5.
- **Appointment Fields:** These fields are used to create a patient and potentially an appointment from the data included with the audio file. If the audio file with data contains more information than would be received from a supplemental patient interface, this is a good option to take advantage of.
  - **Fields include:** Action, Address 1 & 2, City, State, ZIP Code, Admit Date, Appointment Date, Birthdate, Dictation ID, Discharge Date, First Name, Last Name, Middle Initial, Home Phone, Work Phone, Location ID, Order #, Gender, Patient ID, Physician, Primary Associate ID, Primary Associate Type, Referring Client, and User Fields 1 through 5.
- **Client Mappings:** Maps audio files and patient demographic information from the audio file to another client. The Client field under Dictation Fields must be present to use this function. The clients listed in the mapping section are displayed based on referral relationships.

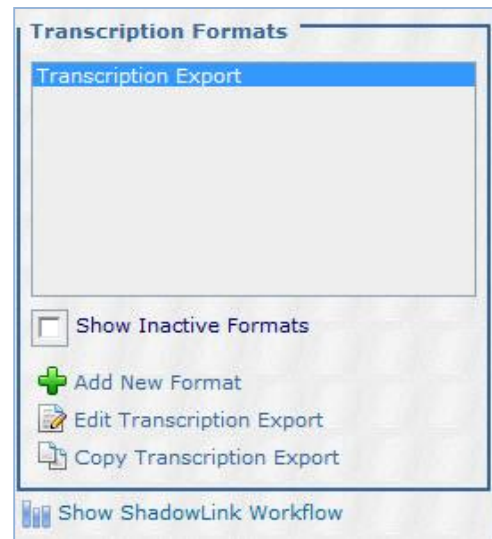
- Acknowledgement Format:** Some systems ask that an acknowledgement file be sent from ShadowLink to a folder to confirm that the audio file was received. This drop down allows you to configure your format to support this functionality.

← Configure Dictation Format ?

Load from Template	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">  load         </div>												
Header File Type	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">           No Header File ▼         </div>												
File Path Delimiters	<div style="border: 1px solid #ccc; height: 20px; width: 100%;"></div>												
Dictation Fields	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th style="width: 30%;">Action</th> <th style="width: 40%;">Field</th> <th style="width: 30%;">Value</th> </tr> </thead> <tbody> <tr style="background-color: #f2f2f2;"> <td> <div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div> </td> <td>Client</td> <td>1</td> </tr> <tr> <td> <div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div> </td> <td>Location ID</td> <td>2</td> </tr> <tr style="background-color: #d3d3d3;"> <td colspan="3" style="text-align: left; padding: 5px;"> <div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div> </td> </tr> </tbody> </table>	Action	Field	Value	<div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div>	Client	1	<div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div>	Location ID	2	<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div>		
Action	Field	Value											
<div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div>	Client	1											
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<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div>													
Appointment Fields	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th style="width: 30%;">Action</th> <th style="width: 40%;">Field</th> <th style="width: 30%;">Value</th> </tr> </thead> <tbody> <tr style="background-color: #f2f2f2;"> <td> <div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div> </td> <td>Appointment Date</td> <td>3</td> </tr> <tr style="background-color: #d3d3d3;"> <td colspan="3" style="text-align: left; padding: 5px;"> <div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div> </td> </tr> </tbody> </table>	Action	Field	Value	<div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div>	Appointment Date	3	<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div>					
Action	Field	Value											
<div style="display: flex; align-items: center; gap: 5px;"> <span> Edit</span> <span style="color: red; font-weight: bold; font-size: 1.2em;">✕</span> Delete           </div>	Appointment Date	3											
<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Field           </div>													
Client Mappings	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th style="width: 30%;">Action</th> <th style="width: 40%;">External Client Name</th> <th style="width: 30%;">Maps To</th> </tr> </thead> <tbody> <tr style="background-color: #f2f2f2;"> <td colspan="3" style="text-align: center; padding: 10px;">           No Client Mappings have been defined.         </td> </tr> <tr style="background-color: #d3d3d3;"> <td colspan="3" style="text-align: left; padding: 5px;"> <div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Client Mapping           </div> </td> </tr> </tbody> </table>	Action	External Client Name	Maps To	No Client Mappings have been defined.			<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Client Mapping           </div>					
Action	External Client Name	Maps To											
No Client Mappings have been defined.													
<div style="display: flex; align-items: center; gap: 5px;"> <span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add Client Mapping           </div>													
Acknowledgement Format	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">           None ▼         </div>												

## 12 Transcription Formats

Transcription Formats define the structure of the files sent to the client. When creating a Transcription Format, the client should provide ShadowLink Administrators with specifications and a sample of the format they want to receive. This will ensure that the format can be created accurately. Nuance can export files in PDF, DOC, DOCX, HL7, Plain Text, RTF, and TIFF formats.



### 12.1 Format Information

- **Name:** Assign a unique name for this format. The name will be displayed on other screens to identify this type of transcription format. If applicable, the name should represent the system the format was set up for.
- **Description:** Enter a descriptive summary of the format's purpose and specification.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.



The screenshot shows the "Edit Transcription Export" form. It has a tabbed interface with "Format Information" selected. The form contains three fields:

Name	Transcription Export *
Description	Demo Transcription Export
Active	<input checked="" type="checkbox"/>

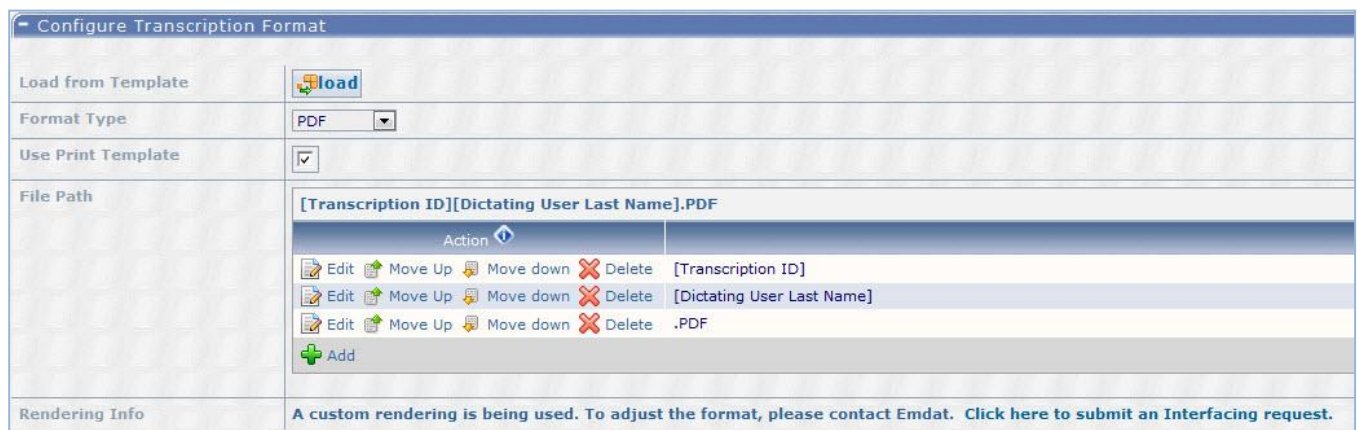
## 12.2 Configure Format

All seven format types are configured using the same criteria.

- **Load from Template:** Nuance maintains a library of commonly used formats. Choosing a template format could save time over creating a format from scratch. Templates that do not match the required format can still be edited and adjusted to suit.
- **Use Print Template:** The associated document type Print Template will be used to build the export. The exported documents will appear the same as they do in InQuiry.
- **File Path:** When files are delivered to the Client via ShadowLink, they will be created with a filename specified by the Client. ShadowLink Administrators can build a filename with data from the transcription header and with static text. For example, if each Transcription should be saved with the Patient ID, a space, the Date of Service, and then the file extension, it can be defined with fields and text elements. Received Transcriptions can also be delivered to subfolders on the local system or UNC file path by separating the file path built to appear as follows. For example:

**[Document Type][Transcription ID]\_[Patient ID].PDF**

would be delivered to the Client as:**C:\My Files\Chart\1234\_5678.PDF**



Action	
[Edit] [Move Up] [Move down] [Delete]	[Transcription ID]
[Edit] [Move Up] [Move down] [Delete]	[Dictating User Last Name]
[Edit] [Move Up] [Move down] [Delete]	.PDF
[Add]	

## 12.3 Testing

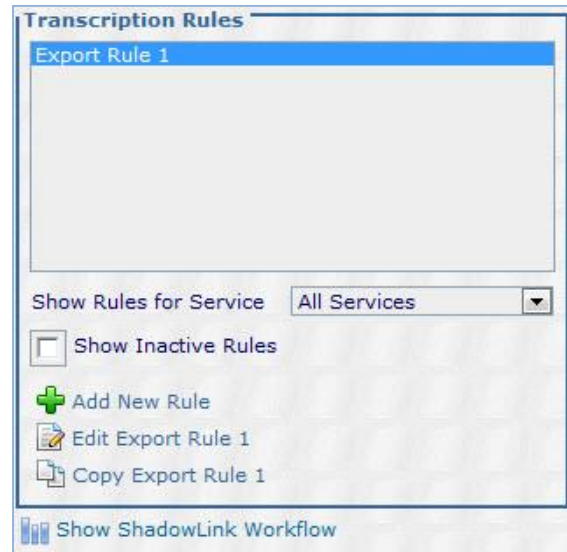
A test file can be requested for delivery to the local PC to verify that the configured format is working correctly. Enter a TID number and use the test button to render and download a sample file.

**Note: Testing should always be done to ensure that there are no issues for the client later on.**



## 13 Rules

Rules define how and when an export is triggered. Use the criteria below to generate and customize exports.



### 13.1 Rule Information

- **Name:** Assign a unique name for this rule. The name will be displayed on other screens to identify this rule.
- **Description:** Enter a descriptive summary of the rule triggers and other helpful information.
- **Include All Linked Documents:** Check this box to include all appended documents in the document set available for rendering and data usage. Checking this option also means that all documents that are appended to one another must all pass the rule in order for the rule to trigger.
- **Is Active:** Enable/Disable the format. Formats are never deleted; only inactivated.

The screenshot shows a window titled "Edit Export Rule 1". The window has a tab labeled "Rule Information". Below the tab, there are four rows of information:

Name	Export Rule 1 *
Description	Demo Export Rule
Include All Linked Documents	<input type="checkbox"/>
Is Active	<input checked="" type="checkbox"/>

## 13.2 Transcription Delivery Method

This section provides a top down overview of which services are responsible for exporting the various Transcription formats. The Export must be linked to a service, delivery method, and format for a successful export.

**Note:** Transcriptions can trigger once for a rule and send to multiple service account and delivery method combinations using different formats.

**Note:** If you are using an inactive delivery method on your rule, the rule will not pass.



## 13.3 Workflow Trigger

Select one or more workflow positions to trigger an export when the transcription leaves that position. If there are multiple folders in a single position in the workflow, a single export will be triggered when the transcription has left both folders. Folders that are not in use will not be displayed. Note that the name displayed for the folders will reflect the name set up for the client's workflow folders.

- **Dictation Received:** Check this box if you want the transcription to process after the dictation has been received. This is used in very rare circumstances, as there is no transcription content available at the time, only data related to the transcription.
- **Delivered:** Check this box if you want the transcription to process after it has been typed and finished.
- **Completed from Marked For Review and Marked For Review 2:** Check this box if you want the transcription to process once it is past this point in the workflow. If the transcription is not marked for these folders, it will process upon delivery instead. If it is marked for one or both of these folders, it will wait until completion from both folders.
- **Completed from Preliminary** Check this box if you want the transcription to process once it is past this point in the workflow. If the client is signing within Nuance, you would likely want to process the transcription to send via this option.
- **Completed from Final and Final 2:** Check this box if you want the transcription to process once it is past this point in the workflow.

- **Edited:** Check this box if you want to process a transcription to send through any time it is edited after the first trigger point.



### 13.4 Document Types

- **Include All Document Types:** Check this box to enable this rule for all document types. If unchecked, more options will appear, allowing you to customize which document types are enabled for this rule.
- **Require Client Code:** Check this box to require that the Client Code field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **Require Dictation ID:** Check this box to require that the Dictation ID field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **Document Types:** Select the document types that should generate exports for this rule. This option only applies if the "Include All Document Types" box is unchecked.

Document Types					
Include All Document Types	<input type="checkbox"/>				
Require Client Code	<input checked="" type="checkbox"/>				
Require Dictation Id	<input type="checkbox"/>				
Document Types	Document Type	Document Description	Client Code	Dictation Id	Included
	1	Copy of Chart			<input checked="" type="checkbox"/>
	Blank	Blank Test			<input checked="" type="checkbox"/>
	Chart	Chart Note			<input checked="" type="checkbox"/>
	Image	Image Test			<input type="checkbox"/>
	Letter	Letter			<input type="checkbox"/>
	Problem	Problem List			<input type="checkbox"/>
Page 1 of 1					

### 13.5 Locations

- **Include All Locations:** Check this box to enable this rule for all locations. If unchecked, more options will appear, allowing you to customize which locations are enabled for this rule.
- **Require Client Code:** Check this box to require that the Client Code field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **Require Dictation ID:** Check this box to require that the Dictation ID field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **Location Groups:** Select the location groups that should generate exports for this rule. This option only applies if the "Include All Locations" box is unchecked.
- **Location Overrides:** Select overrides for locations that should not obey the settings set by group. This option only applies if the "Include All Locations" box is unchecked.



Locations
?

**Include All Locations**

**Require Client Code**

**Require Dictation Id**

**Location Groups**  **All Locations**

**Location Overrides**

Location	Location Code	Client Code	Dictation Id	Result	Group	Override
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Fitchburg WI	Fitchburg Demonstrators			✓		✓
Stoughton WI	Stoughton WI			✓		✓
Testing						<input type="checkbox"/>

Page 1 of 1

### 13.6 Users

- **Based On:** Select which type(s) of users will trigger exports:
  - Dictating User
  - Authenticating User
  - Dictating OR Authenticating User
- **Include All Users:** Check this box to enable this rule for all users. If unchecked, more options will appear, allowing you to customize which users are enabled for this rule.
- **Require Client Code:** Check this box to require that the Client Code field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **Require Dictation ID:** Check this box to require that the Dictation ID field be populated in order for an export to be generated. **Note: This should be used sparingly, as there is no holding bin on our end for transcriptions that do not have these values.**
- **User Groups:** Select the user groups that should generate exports for this rule. This option only applies if the "Include All Users" box is unchecked.
- **User Overrides:** Select the overrides for users that should not obey the settings by group. This option only applies if the "Include All Users" box is unchecked.

Users
?

<b>Based on</b>	Dictating User <span style="float: right;">▼</span>																												
<b>Include All Users</b>	<input type="checkbox"/>																												
<b>Require Client Code</b>	<input checked="" type="checkbox"/>																												
<b>Require Dictation Id</b>	<input type="checkbox"/>																												
<b>User Groups</b>	<input type="checkbox"/> <b>Attending Physicians</b> <input type="checkbox"/> <b>Default Settings</b> <input type="checkbox"/> <b>Resident Physicians</b> <input type="checkbox"/> <b>Staff</b>																												
<b>User Overrides</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4f81bd; color: white;"> <th>User</th> <th>Username</th> <th>Client Code</th> <th>Dictation Id</th> <th>Result</th> <th>Group</th> <th>Override <span style="float: right;">⬇</span></th> </tr> </thead> <tbody> <tr> <td>Administrator, Emdat</td> <td></td> <td></td> <td></td> <td style="text-align: center;">✓</td> <td></td> <td style="text-align: center;">✓</td> </tr> <tr> <td>McDictator, Billy</td> <td></td> <td></td> <td></td> <td style="text-align: center;">✗</td> <td></td> <td style="text-align: center;">✗</td> </tr> <tr> <td>Talker, Martin</td> <td></td> <td></td> <td></td> <td style="text-align: center;">✓</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>	User	Username	Client Code	Dictation Id	Result	Group	Override <span style="float: right;">⬇</span>	Administrator, Emdat				✓		✓	McDictator, Billy				✗		✗	Talker, Martin				✓		✓
User	Username	Client Code	Dictation Id	Result	Group	Override <span style="float: right;">⬇</span>																							
Administrator, Emdat				✓		✓																							
McDictator, Billy				✗		✗																							
Talker, Martin				✓		✓																							

### 13.7 Custom Filters

Custom filters ensure that transcriptions that meet some criteria pass the rule, while those not meeting the criteria, do not pass the rule and send through. Custom filters are created by the interface team when the criteria built into the UI does not meet the need, or is not specific enough.

- Click Add Filter to include any filter that has been created for the client by a Nuance Interfaces team member.
  - **Action:** choose to Save or Undo changes made to the custom filter.
  - **Field:** choose a field that has been created for the client.
  - **Operator:** choose Equals or Does not Equal.
  - **Value:** the value that the field should or should not equal.

### 13.8 Testing

You can test your rule settings against a particular Transcription ID to ensure that it passes or does not pass, based on the settings.

Test							
Transcription ID		500006896 <input type="button" value="test"/>					
Results	Transcription Status: <span style="color: green;">✓</span> Pass						
		Field Name	Field Value	Status	Reason		
	<div style="border: 1px solid gray; padding: 2px;"> <span style="font-size: small;">-</span> <b>Transcription ID: 500006896</b> </div>						
		Excluded from future exports	No	<span style="color: green;">✓</span> Pass			
		Workflow	SearchAll	<span style="color: green;">✓</span> Pass			
		Document Types	Chart Note	<span style="color: green;">✓</span> Pass			
		Locations		<span style="color: green;">✓</span> Pass			
		Dictating User	Doctor Doctor	<span style="color: green;">✓</span> Pass			
		Authenticating User	Doctor M Doctor	<span style="color: green;">✓</span> Pass			
		Custom Criteria		<span style="color: green;">✓</span> Pass			
	Custom Filter	Expected Value	Operator	Actual Value	Status	Reason	

## **14 Support**

Please contact Nuance support in the event that you need further assistance with ShadowLink 2.



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