

GE Centricity RIS Reporting Customer Training Outline

Customer Training Outline

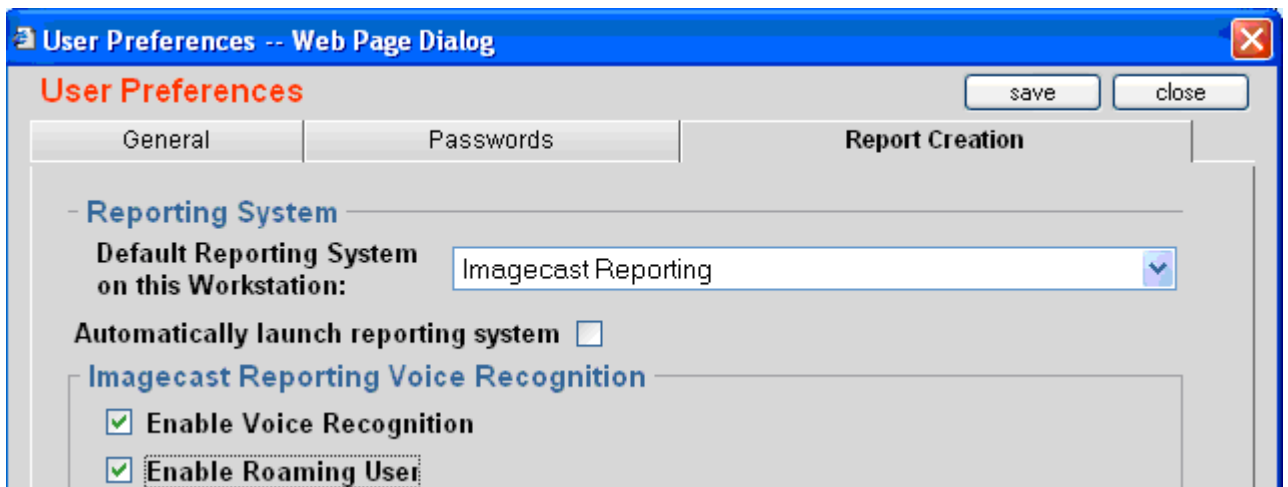
This document outlines the radiologist Voice Recognition training content. Upon completing training, radiologist should be able to use Centricity RIS VR basic functionality.

Setting the user preferences to use VR to enable VR.

- a. Log into your Imagecast webpage.
- b. Once logged in, click on Prefs in the upper right hand corner.



- c. From this User Preference screen, click the tab for “Report Creation”.



- d. Report Creation Tab Settings:
 - i. Default Reporting System on this Workstation - Imagecast Reporting
 - ii. Enable Voice Recognition – checked
 - iii. Enable Roaming User – checked
 - iv. Set other preferences as appropriate (see the Imagecast Reporting Users Guide).

- v. click "Save".
- vi. Log-out.

2. Enrollment

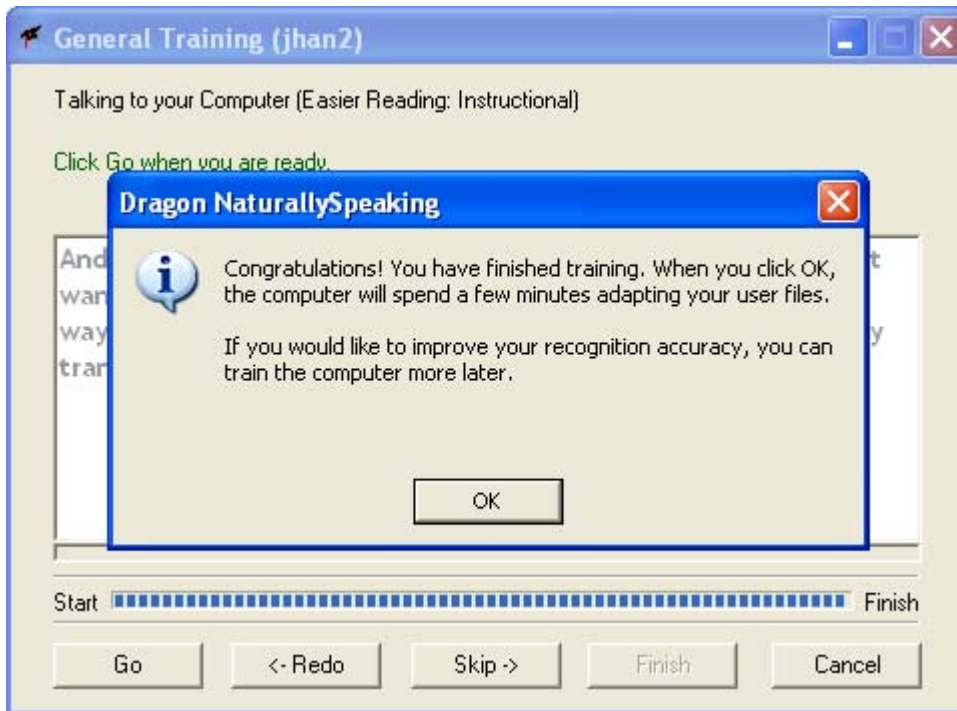
Enrollment is the first step towards creating a Voice Profile that the computer uses to recognize speech.

- a. Make sure your microphone is configured properly.
- b. Log back into the system
- c. Please be patient as the first login may take a few minutes. Depending on your system configuration you may be asked to select a sound system.
 - i. If using the Plantronics headset, select Plantronics Audio and click Next
 - ii. If using the Philips Speechmike, select Audio Control Microphone and click Next

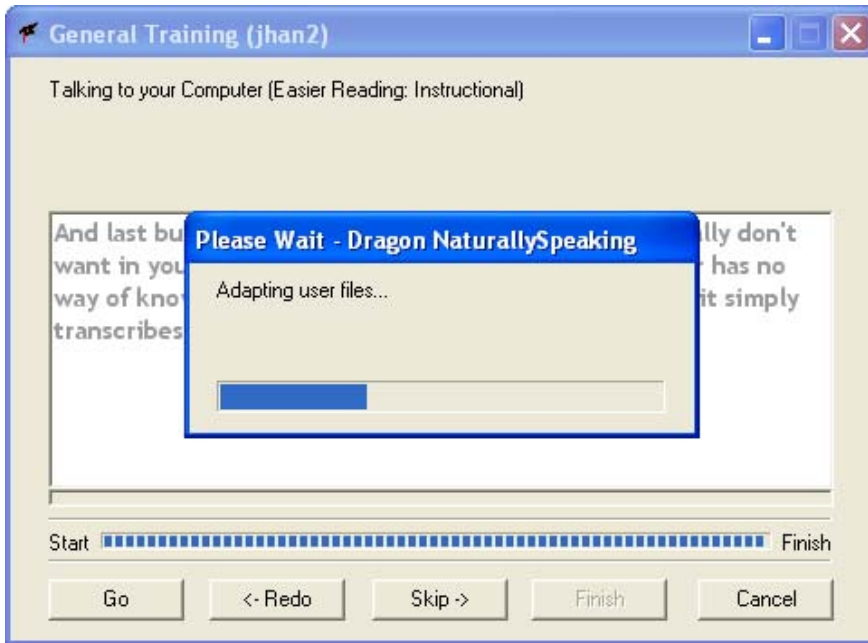


- d. The next window explains how to position the microphone. When ready, click Next.
- e. System volume check: Click the "Start Volume Check" and read the paragraph.
- f. A beep indicates completion. Click Next.
- g. Audio quality check: Click the "Start Quality Check"
- h. Wait for the green and yellow bars to drop or level off, then start reading the paragraph.
 - i. If you pass, click "Finish". Otherwise click "back" repeat Volume Check.

- i. Upon completion, click “Go” and read the words on the screen.
- j. When prompted to select the training text, use “Talking to your computer” and press “OK”
- k. Continue reading the text until complete. Speech training will take around 5-8 minutes.
 - i. TIPS
 1. Don’t read punctuation.
 2. Pause for commas and periods so system recognize phrases/sentences.
 3. Read exactly what you see.
 4. While reading, recognized words change from Black to Grey.
 5. If recognition problems occur, resume reading where the yellow arrow indicates
 6. If you misread:
 - a. Stop and the yellow arrow will appear.
 - b. Use the “Redo” button to reread a segment.
 7. To break, cough, or answer a phone click “Pause”. Resume with the “Go” button.
 8. Read the text at the pace, tone and volume that you normally dictate.
 9. Avoid saying “um and uh”. The system only filters some of such noise.
- l. When you finish the training, click “OK”



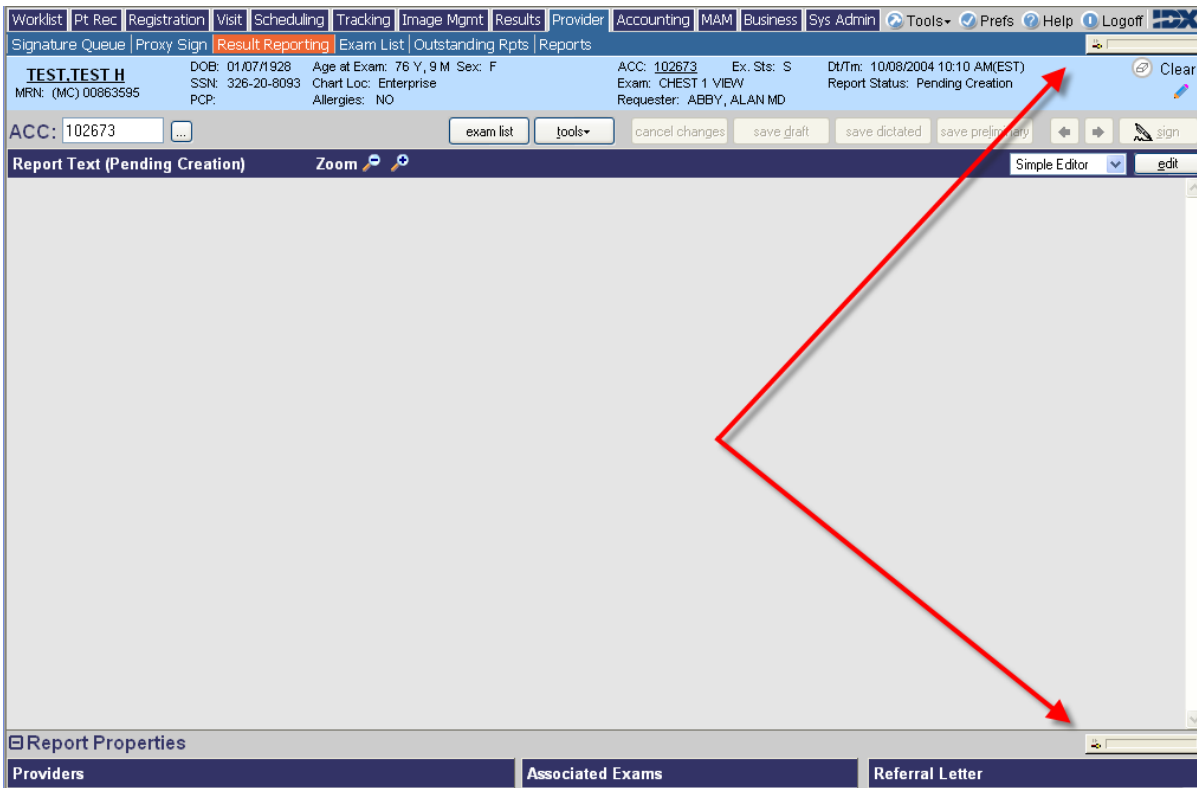
- m. The system creates your voice profile and closes the window. Please logout and log back in to start using VR.



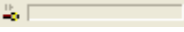


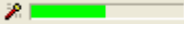

3. VR controls

a. Microphone button allows users to click the microphone on and off.

i. Location



ii. Different microphone states

1.  off (light grey)
2.  asleep (dark grey)
3.  on – listening, nothing recognized (yellow)
4.  on – recognized something (green)
5.  on – recognized something, but audio is too loud (red)

iii. Hot key to turn microphone on and off

1. Press the Hot key as defined in the User Preferences

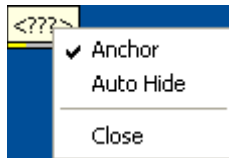
iv. Voice commands to control microphone (go to sleep, wake up, etc.)

1. “go to sleep” or “stop listening” – puts microphone in sleep mode, only responds to “wake up” or “listen to me”
2. “wake up” or “listen to me” – puts microphone in on mode
3. “microphone off” – turns microphone off

b. Results Box



- i. The Results Box is a buffer of what the VR engine recognizes before it is inserted into the report.
- ii. Right click on Results Box and enable “Anchor”. User can drag it to another monitor or a different part of the screen.



c. Speech Tools

- i. Access to VR related tools.

The screenshot displays a medical software interface. At the top, there is a navigation menu with tabs for Worklist, Pt Rec, Registration, Visit, Scheduling, Tracking, Image Mgmt, Results, Provider, Accounting, MAM, Business, Sys Admin, Tools, Prefs, Help, and Logoff. Below this is a sub-menu for Signature Queue, Proxy Sign, Result Reporting, Exam List, Outstanding Rpts, and Reports. Patient information for TEST,TEST H is shown, including DOB, SSN, PCP, Age at Exam, Sex, ACC: 102673, Ex. Sts: S, Dt/Tm: 10/11/10, Exam: CHEST 1 VIEW, Report Stat, and Requester: ABBY, ALAN MD. A 'tools' button is visible in the editor area. A red arrow points from this button to the 'Tools' menu in the top navigation bar. The 'Report Properties' section at the bottom contains three tables: Providers, Associated Exams, and Referral Letter.

Providers				
Name	Perf.	Cont.	Resp.	Signature
<click to add new row (Alt+1)>				

Associated Exams	
Accession	Description
102673 (P)	CHEST 1 VIEW
<click to add new row (Alt+2)>	

Referral Letter
<click to add new row (Alt+3)>

NOTE: VR is only available with the Simple Editor.

4. Dictation Basics

a. Consistency

- i. Microphone in the right position
- ii. Speak clearly and enunciate
- iii. Microphone discipline – Remember to turn off microphone when not dictating.
- iv. Difference between commands and dictation
 1. Commands have to be spoken with a pause before and after the command.
 2. Dictation not recognized as a command is inserted as text.
 3. Example: if you say “go to sleep”, the microphone will be placed in sleep mode.
If you say “go... to... sleep”, the words “go to sleep” will appear in the report.

b. Basic Punctuation

Say...	To...	Say...	To...
Period	.	Comma	,
Colon	:	Semi-colon	;
Open quote	"	Close quote	"
Left parenthesis	(Right parenthesis)
Left bracket	[Right bracket]
Pound sign	#	Ampersand	&
Less than	<	Greater than	>
Dash	--	Hypen	-
Backslash	\	Slash	/

- c. New Lines and New Paragraphs
 - i. To insert a new line or one carriage return, use the voice command “new line”
 - ii. To insert a new paragraph or two carriage returns, use the voice command “new paragraph”
- d. Scratch that
 - i. Use “scratch that” command to remove the last utterance or the highlighted text.
- e. Dates
 - i. To see a date in the format of Sunday, January 1, 2006, say “Sunday January first two thousand four”. The day of the week is optional.
 - ii. To see a date in the format 1/1/06 say “one slash one slash zero six”

5. Read a sample report

6. Correction Techniques

When you use VR for the first time, there will undoubtedly be some mistakes. But as you correct the mistakes, the VR engine will learn and in time provide better recognition. Look through the text from the dictation you just did and find a mistake.

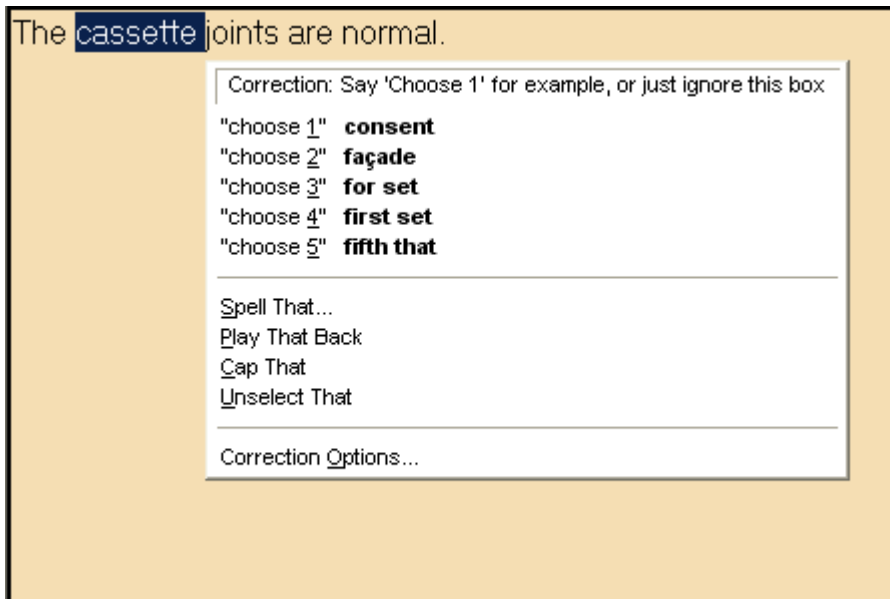
As an example:

User said, “the facet joints are normal period” but the screen shows “The cassette joints are normal.”

- a. Select the wrong text by saying “select cassette” or by highlighting “cassette” and saying “correct that”

NOTE: It is very important that you select the correct portion of text so the system is properly learning.

- b. A box will appear



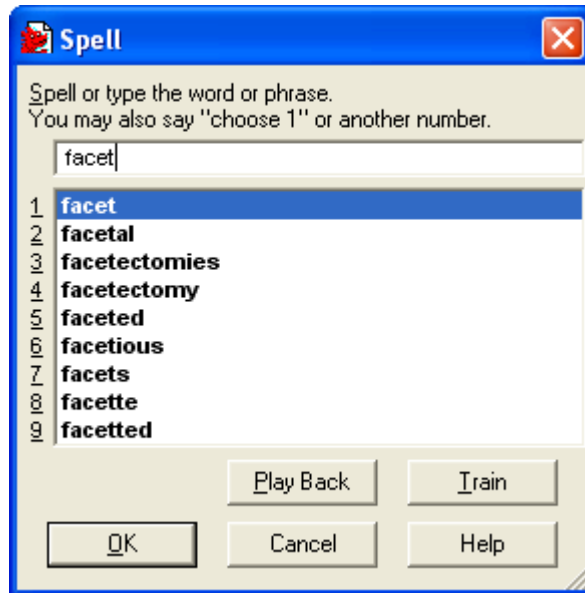
- i. If the word you want (facet) is listed as an option, say “choose #” or click on it with your mouse.
- ii. If the word you want (facet) is not listed, you can
 1. Type the correct word
 2. Try speaking the word again
 3. Say “spell that” – see below
- c. Using spell that

Spell that is very similar to correct that, but it allows the user to easily use voice to spell the word and train the difference between the correct and incorrect word.

 - i. With the text highlighted, say “spell that” and you will see the following window appear:



1. Type or speak the correct word. As you enter each letter, the lower part of the screen will show possible matches. You can highlight the word you need without having to spell out the entire word.



- ii. Once the new word has been entered, click “OK” to insert or click “Train”
 1. If you click “Train” you will see the following:



2. Click “Go” and read the word that is displayed/highlighted and click “Done” when finished. This allows you to train the difference between facet and cassette.

Note: Sometimes corrections will not occur immediately. You will need to continue recorrecting until the statistics have been updated to reflect the correction.

7. Read in a few more sample reports

8. More Voice Commands

a. Basic formatting commands

Say...	To...
Bold That	Apply bold to selected text
Italicize That	Apply italics to selected text
Underline That	Apply underlining to selected text
Format That Number	Change selected text to numbers
Format That Spelled Out	Change selected numbers to text

b. Capitalization commands

Say...	To...
All Caps On	Start typing words in all uppercase
All Caps Off	Stop typing words in all uppercase
All Caps <word>	Type <word> in all uppercase
All Caps that	Formats selected text (or last utterance) all in uppercase
No Caps On	Start typing words in all lowercase
No Caps Off	Stop typing words in all lowercase
No Caps <word>	Type <word> in all lowercase
No Caps that	Formats selected text (or last utterance) all in lowercase
Caps On	Start typing words with initial capitals
Caps Off	Stop typing words with initial capitals
Cap <word>	Type <word> with an initial capital
Caps that	Formats selected text (or last utterance) with initial capitals

c. Selecting Text

Say...	To...
Select <word> or <words>	Select a particular word or words to replace, correct, or format.
Select Again	Select the same word or words again but in a different place
Select <word1> through <word2>	Select a group of words from word1 to word2
Select previous / next paragraph	Selects the next or previous paragraph

d. Document Navigation

i. Window must be in focus to use these commands

Say...	To...
Insert Before...or Insert After <words or words>	Move the insertion before or after certain text to insert text there
go to top / go to bottom	Moves the cursor to the top or bottom of document
Go to end of line	Moves the cursor to the end of current line

e. Imagecast Commands

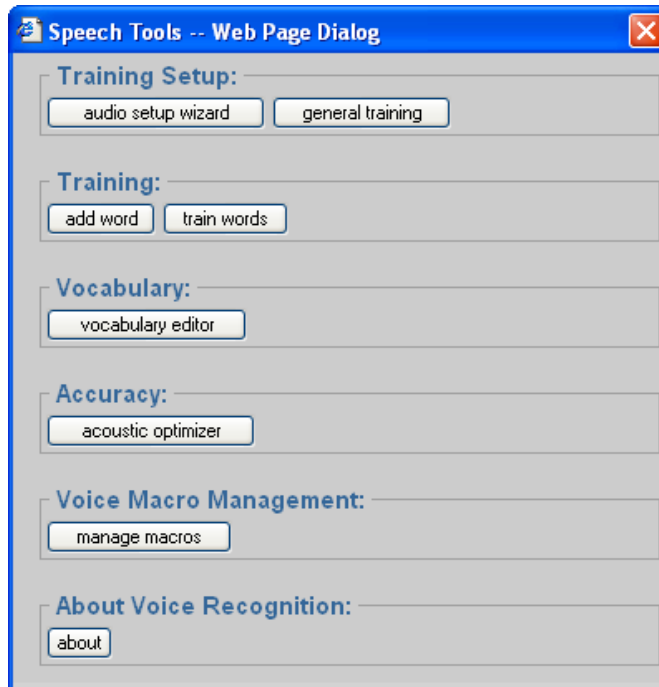
i. When Results Reporting is open

Say...	To...
start dictation	Enabled the report editor
cancel changes	Report text and audio discarded
standard macro <macro name>	Inserts a standard macro into the currently selected report field.
macro that	Create a macro for the currently selected text.
next field or previous field	Advances to the next or previous field in the report. Field identified by []. (left and right bracket).
show report	Restores Results Reporting window if minimized
hide report	Minimizes Results Reporting window
Associate exam	Show the associate exam window

ii. When in Work Queue

Say...	To...
Move next / previous	Move to next or previous exam in queue
Close exam	Close current exam
Pull exam	Pull next exam in filter into queue
Show queue	Show a list of current exams in queue
Launch / start report	Opens results reporting window for exam
Exam inquiry	Shows Exam Inquiry window
Patient inquiry	Shows Patient Inquiry window

9. Speech Tools (refer to pages 41-42 in the 10.4 IDX Imagecast Reporting Solution User Guide)



- a. Training Setup
 - i. Audio setup wizard
 - 1. If the background noise level in the room changes or if you are not getting your usual accuracy, try using this tool.
 - ii. General training
 - 1. Run the Audio Setup Wizard before doing additional General Training
 - 2. Conduct the additional training in a quite location
 - 3. Use *General Training* when achieving poor accuracy.
 - 4. We recommend using Sample Radiology Reports.
 - 5. After new VR users have used the system for a few days, repeating *General Training* can improve accuracy.
 - 6. Run the Acoustic Optimizer after doing additional training.
- b. Training
 - i. Add word
 - 1. Lets you quickly add a word to your vocabulary
 - ii. Train words
 - 1. Lets you train a word or a phrase
 - 2. If you are having trouble with the recognition of word, training the word in it's most common phrase can help.
 - 3. When training words, it is very important to speak the way you would normally dictate. Don't over enunciate.
- c. Vocabulary
 - i. Vocabulary Editor
 - 1. Refer to pages 68-70 in the 10.4 IDX Imagecast Reporting Solution User Guide
 - 2. VR will only insert words in the vocabulary. If the word is not in the vocabulary it will not be recognized.
 - 3. Words will appear in your report based on how they are entered in the vocabulary. Be careful about spelling and formatting when adding words to the vocabulary.
- d. Accuracy
 - i. Acoustic Optimizer
 - 1. This allows the system to compile and analyze your acoustic information and adapt your voice profile.
- e. Voice Macro Management
 - i. Macros
 - 1. Refer to pages 57-61 in the 10.4 IDX Imagecast Reporting Solution User Guide
 - 2. Be consistent when naming macros so it is easier to remember

10. Read in more sample reports

11. Let them create/use macros

- a. Depending on where the training is done, macro created during the training session may not be available in the live system.

12. Advanced

a. Modes

- i. You can put the system in different modes depending on what you want to dictate.
 1. Normal Mode – This is the default. You can dictate and use commands as long as you pause briefly before and after the command.
 2. Dictation Mode – Everything you say will be treated as dictation. No commands will be recognized and instead the words will appear in your report.
 3. Command Mode – Treats everything you say as commands.
 4. Numbers Mode – Treats everything you say as numbers.
 5. Spell Mode – Treats everything you say as letters.
- ii. Switching between modes
 1. To go from one mode to another mode, say “Start X Mode”, “X Mode On” or “Switch to X Mode” (replace X with either “Normal”, “Dictation”, “Command”, “Numbers”, or “Spell”)