



Stats & Video Analysis System

Tutorial – Stats Speak - Voice Recognition

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Introduction

This document has been designed to guide you through setting up and using Dragon Speak easy voice recognition software to log stats using DVCoach.

After completing this tutorial you should be confident and knowledgeable in the following areas:

- ✓ System requirements for voice
- ✓ Be familiar with Dragon Speak easy software
- ✓ Be familiar with where each stats voice description is set
- ✓ Loading and configuring voice engine
- ✓ Creating a user profile
- ✓ Training Stats profiles and player names for use in DV Coach Scoresheet
- ✓ Log matches/games use Stats speak

Successfully using voice recognition software requires a commitment to learn and understand the nuances of how it works as well as having patience to set it up and test it. It will not just plug in and work. User profiles must be established.

After a few hours setting it up and testing it, it will run smoothly, make your stats entry very easy, and save you time.

It is cutting edge technology and you are among the first users in the world of voice entered sports stats.

System Requirements

This sort of application is very resource hungry, and along with simultaneous DV or MPEG video capture/playback, requires that your PC's hardware have high specifications. To use the DVCoach with *Dragon Speak easy voice recognition software* in its most efficient way, it should run on a PC with the following **minimum** configuration:

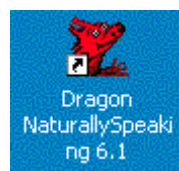
- Pentium 4 processor (1.7 Ghz or greater)
- 256 Mb RAM (or greater)

The better the specifications on the PC the better/faster the stats will be logged.

Note: Desktop PCs may be able to perform at lower specifications than notebook PCs.

Test Dragon Speak easy voice recognition software

DV Coach – Stats Speak, runs with *Dragon speak easy* voice engine. For Stats Speak to run the *Dragon* software must be installed. It is worth your while to try the software independently of Stats Speak, as you will learn more about how voice recognition software works and enable you to use Stats Speak more effectively.



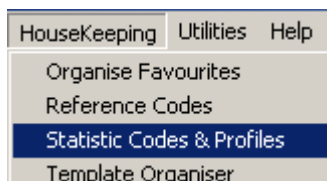
Click on the Desktop Icon to start the program.

It is worth noting that user profiles set up in *Dragon* are available for use when you go to access them within DV Coach.

From an I.T. perspective, the ability to use voice recognition software puts you at the cutting edge of technology. Voice recognition will become more and more common in the next few years, so by getting involved now you are making yourself more ready and confident to adopt these technologies as they evolve.

Voice description in *Stats Codes and Profiles*

An important module in DV Coach is the Stats Codes and Profiles (accessed from the main screen, housekeeping menu, stats codes and profiles).



As mentioned in the main DV Coach documentation, these codes are vitally important for logging stats and particularly for reporting as the codes are directly linked to the stats reports. **Do not change any settings unless you are sure of the impact it may have. Contact your ProWess consultant if in doubt.** One field in the table is the Voice description.

The screenshot shows a window titled 'Statistics Codes & Profiles'. It has a menu bar (File, Extras, View, Help) and a toolbar with various icons. Below the toolbar are search filters for Template, Type, Category, and a search box. The main area contains a table with the following columns: Template, Code, No, Ty, Description, Abbrev, Voice Description, Cat, Disp, Score Type, Val, Calc, Rnk Ord, and St. The table lists 17 rows of stats codes. An arrow from the text above points to the 'Voice Description' column.

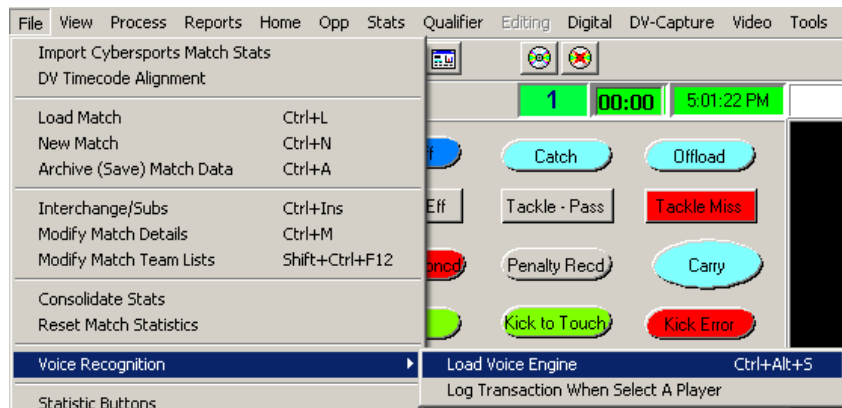
Temp late	Code	No	Ty	Description	Abbrev	Voice Description	Cat	Disp	Score Type	Val	Calc	Rnk Ord	St
	TKL	1		Tackle - Effective	Tackle - Eff	Tackle effective	1				<input type="checkbox"/>		
	TKP	2		Tackle - passive	Tackle - Pass	Tackle passive	1				<input type="checkbox"/>		
	TKM	3		Tackle Missed (Ineffective)	Tackle Miss	Missed Tackle	1				<input type="checkbox"/>		
	KCK	4		Kick in Play	Kick	Kick	5				<input type="checkbox"/>		
	RUN	5		Run / Carry	Carry	Carry	2				<input type="checkbox"/>		
	OFL	6		Pass / Offload	Offload	Offload	2				<input type="checkbox"/>		
	RCK	7		Ruck	Ruck	Ruck	2				<input type="checkbox"/>		
	MAU	8		Maul	Maul	Maul	2				<input type="checkbox"/>		
	LO	9		Lineout	LineOut	Lineout	4				<input type="checkbox"/>		
	LOL	10		Lineout Lost	Lineout LOST	Lineout lost	4				<input type="checkbox"/>		
	SCR	11		Scrum	Scrum	Scrum	4				<input type="checkbox"/>		
	SCL	12		Scrum Lost	Scrum LOST	Scrum lost	4				<input type="checkbox"/>		
	TRY	13		***TRY***	Try	Try	3		1	5	<input type="checkbox"/>		
	CNV	14		Conversion	Conversion	Conversion	3		2	2	<input type="checkbox"/>		
	GLD	15		Drop Goal	Drop Goal	Drop Goal	3		3	3	<input type="checkbox"/>		
	GLP	16		Penalty Goal	Pen Goal	Penalty Goal	3		3	3	<input type="checkbox"/>		
	MCV	17		Missed Conversion	Missed Cnv	Missed Conversion	3				<input type="checkbox"/>		

This text that is in this field is what the stats description for that stat will appear as when using Stats Speak. It should be set-up for you, but it is possible to change the set-up. In the above example Tackle miss was changed to Missed tackle as this worked much better because of other stats like Missed conversion.

It is important for you to know about this, even though you may not need to change you settings.

Loading Voice Engine

Once *Dragon Speak easy* voice recognition software is installed on your PC DV Coach can access it. To load the voice engine from within the DV Coach scoresheet module select this menu option:

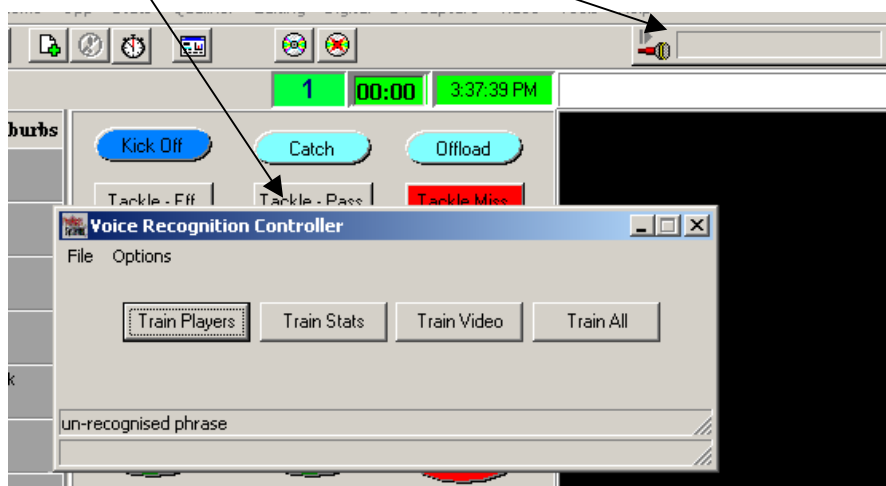


The following appears as the Voice engine is loading.



This may take thirty seconds or so.

After the module has loaded, a new window appears and a display for the microphone is also included.



The microphone display allows the user to toggle the microphone on and off and also displays the level of sound being received.



Microphone off.

Microphone on, and voice being received.

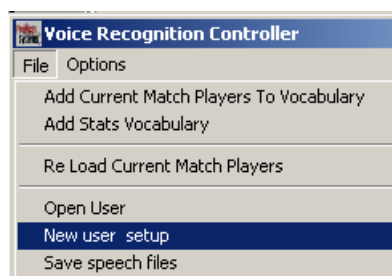
Configuring Voice Engine

To begin using Stats Speak, the voice engine has to have User files that are established and retained for each user. In effect it must 'learn' the voice patterns of each individual who will use the system. As each voice has its own nuances this must be done for each user.

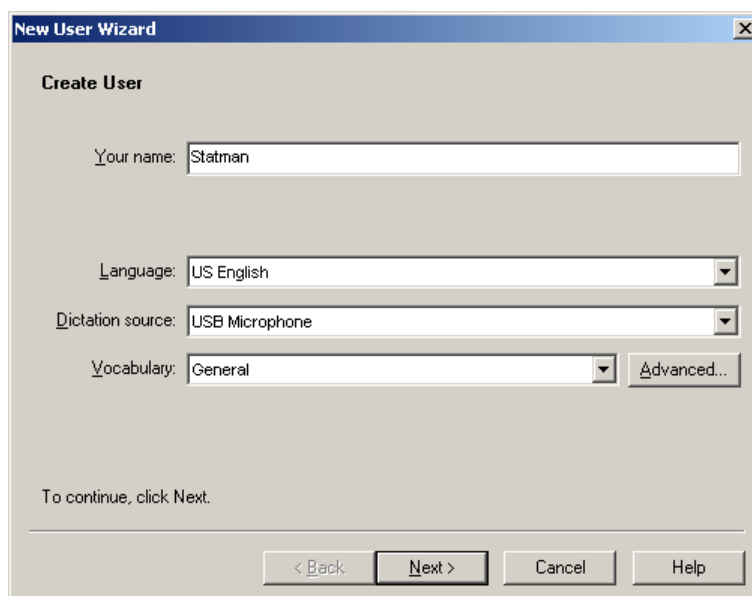
When speaking into the microphone it is important to retain a natural speaking voice and speak with your regular volume and diction.

User profiles can be created within the *Dragon* software or from within DV Coach.

To create a new user profile within DV Coach, select New User Set up from the File menu of the Voice recognition controller:

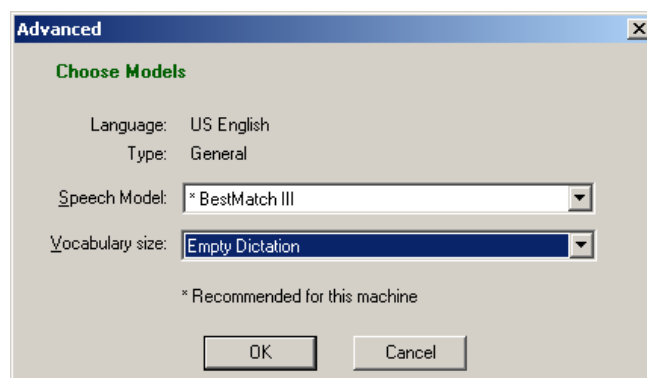


Fill in the following fields:



Ensure that Language is set to US English as this allows us to change a setting in the Advanced tab. Set your dictation source to your style of microphone. USB microphones tend to get the best results. Set the Vocabulary to General.

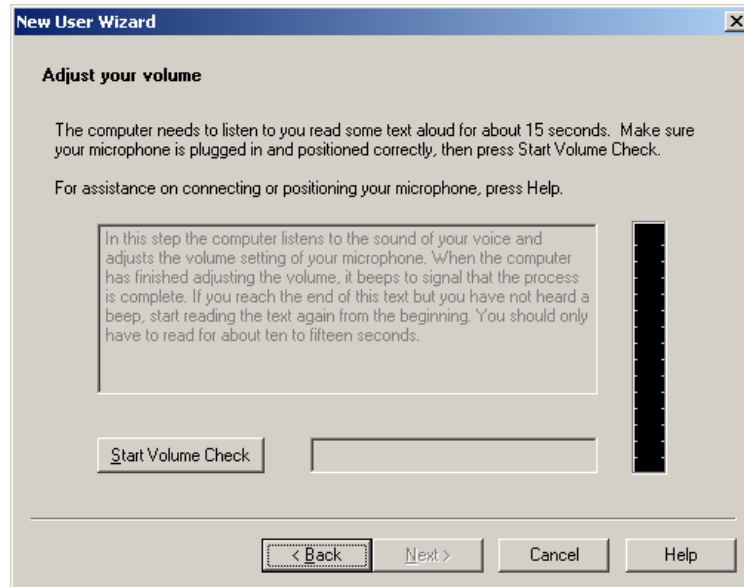
Select the Advanced tab and set Vocabulary size to 'Empty dictation'. (Language must be set to US English to enable



Click next.

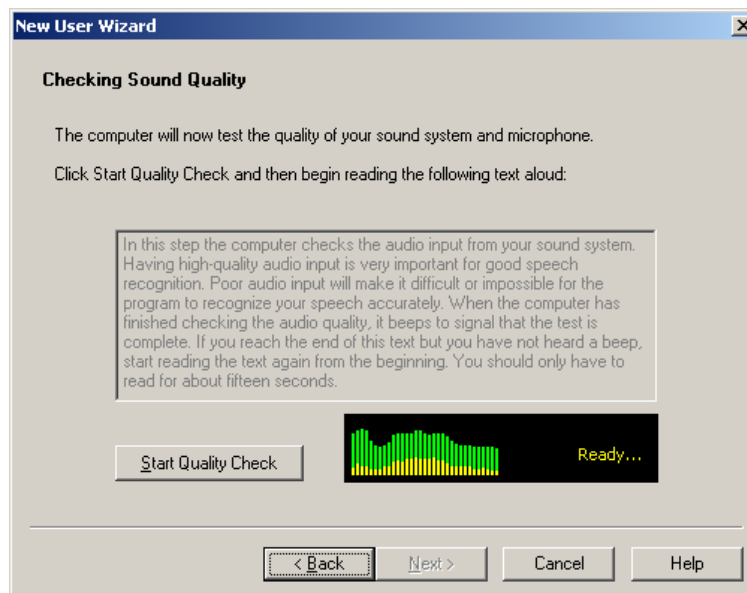
Accept Defaults.

The next step is for volume levels to be tested. This step requires the reading of some text. Try to speak in your normal speaking voice.



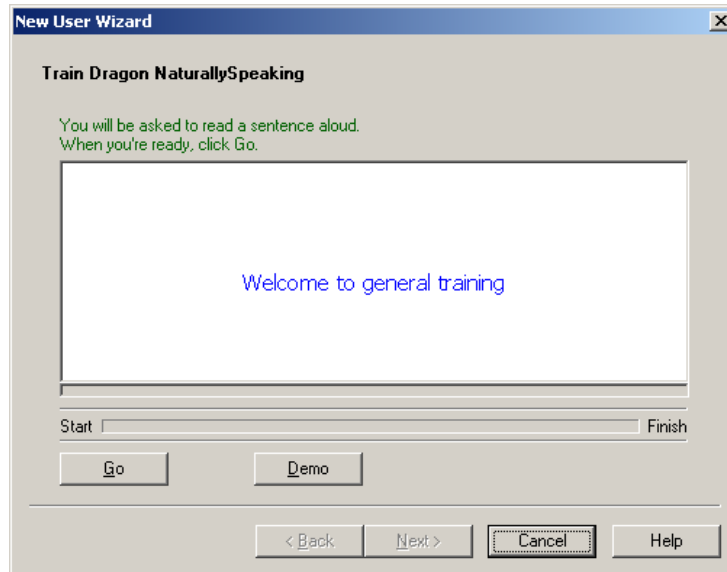
Click next.

The next step is for the sound system of the PC and the microphone levels to be tested.

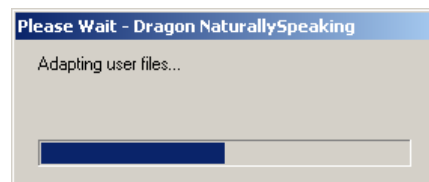
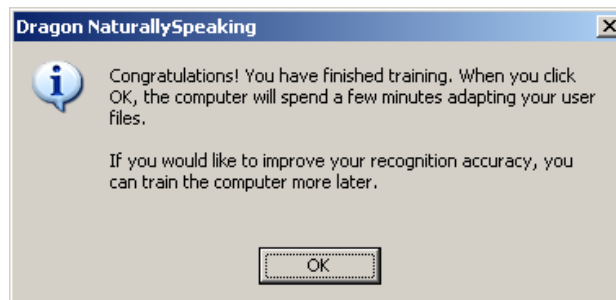


Click next.

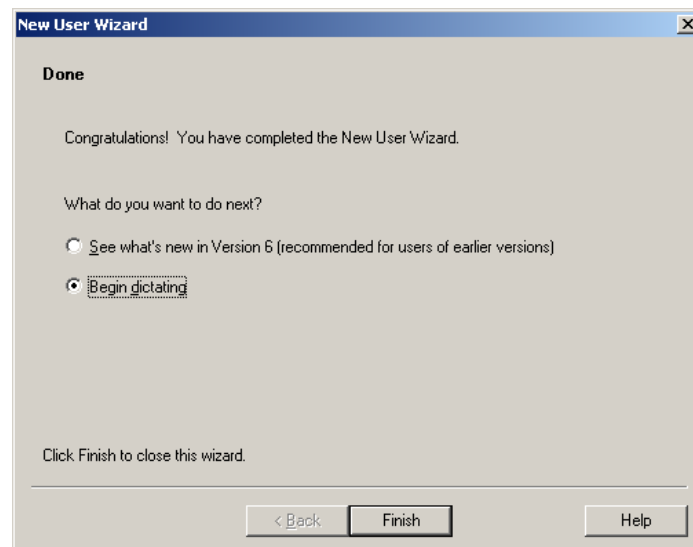
The next step is the General Training section. This is where the voice engine 'learns' your voice. This takes a few minutes to complete and there is a status bar that indicates your progress.



When you are finished, the following window appears:



When this has finished the following window appears:

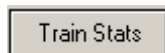


Click Finish. We are now ready to configure our stats and players within DV Coach

Configuring Stats and Players

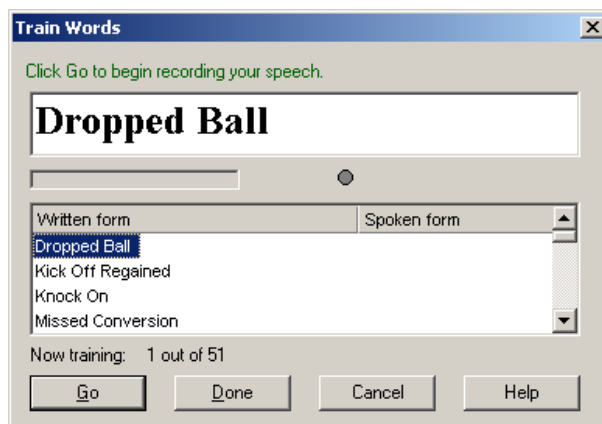
Once you have configured your user profile, the next step is to train the stats, players and video controls. Maximise the Voice recognition controller and click on the button of the action that you wish to perform. The following example is for training stats.

Click the Train Stats button to begin.

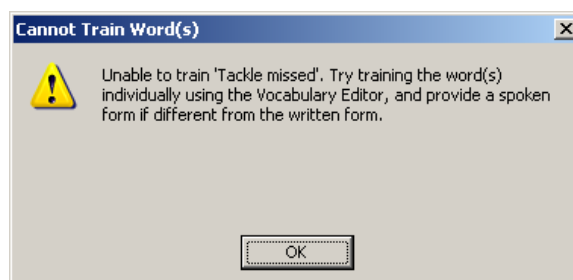


In this process the voice engine 'learns' to associate your pronunciation and align it to the stat. Remember to speak in your natural speaking voice.

Click Go to commence. The word to say will be displayed in the large field as well as being highlighted in the scrolling list below. After you have pronounced the word, the process will move onto the next.



If a word cannot be trained the following message will appear.



This message comes from the Dragon program. For Stats speak it is best to disregard this advice (i.e. going to the vocabulary editor). We are able to tweak the settings are re-practice the word.

It is possible to have this error appear but then the stat will log properly in your testing. The voice engine manages to get better at recognising your voice, the longer you use the system.

Repeat the process for players. This needs to be done for each game that you load up. This process only takes one minute when you are used to it.

You can also configure DV controls to be accessed by voice as well. Follow the same procedure as for stats and players.

Logging events

Once the voice engine is loaded and the voice profile is established and set to the current user, you are ready to begin logging stats.

This can be done

- Live with no video playing or Capturing. Stats will log, no DV timecodes will be logged. To use this file the Alignment module needs to be used to align footage to these stats.
- From previously captured DV or MPEG footage. This logs the stats with the DV timecode marked against each event.
- Live while capturing DV footage.

Note: This cannot be done while capturing MPEG footage as the demands on the system too high and the quality of the video decreases.

Each method has its advantages; the best method is to mark from previously captured footage as you can control the DV.

The rules of logging events / stats:

- Use this order **Player**, then **stat**. This logs the event to that player. It is also possible to log events as team events, use the order **Team**, then **Stat**.
- If you just log a **stat**, it will be enter to the team or player who had the last event logged.
- If the engine cannot recognize the statement it **does not enter a stat**.