ENGLISH • SPANISH

ESPAÑOL • INGLÉS

iConverser!™ for Healthcare

Version 3.0 English-Spanish Standard Edition

User Manual

Say what you mean. Mean what you say.™

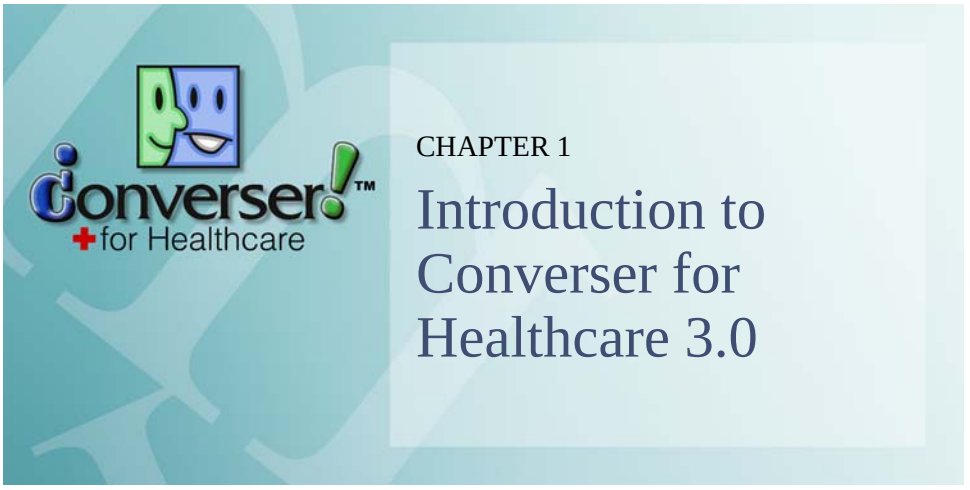
Bi-directional Translation System for Spanish <> English via typing, writing, pointing . . . ***even speech*!***

TM

Can be used with Dragon NaturallySpeaking™ for **speech-to-speech translation.*

SPOKEN™

Table of Contents



CHAPTER 1

Introduction to Converser for Healthcare 3.0

Converser for Healthcare™ 3.0, a software system designed by Spoken Translation, Inc., helps patients with limited English to communicate directly with English-speaking caregivers——doctors, nurses, and other healthcare staff.

This chapter introduces Converser by stepping through a typical short session, presented as a scenario or script. We call it the "Quickstart" Tutorial, since it includes all of the necessary elements for basic use of the system:

- logging in to Converser and beginning a Conversation
- entering text to be translated using a standard keyboard
- making and verifying translations
- sending translations to be transcribed and pronounced
- taking turns by changing the Active Participant
- saving a transcript of the Conversation
- ending the Conversation and logging out

You can see an *animated* version of the same session by navigating to the **Quickstart** item on the **Help > Tutorials** menu.

Converser "Quickstart" Tutorial

The "Quickstart" session scenario shows a Conversation between Dr. John Smith (who speaks only English) and Señora (Sra.) María Gonzáles (who speaks only Spanish). Each takes one conversational turn.

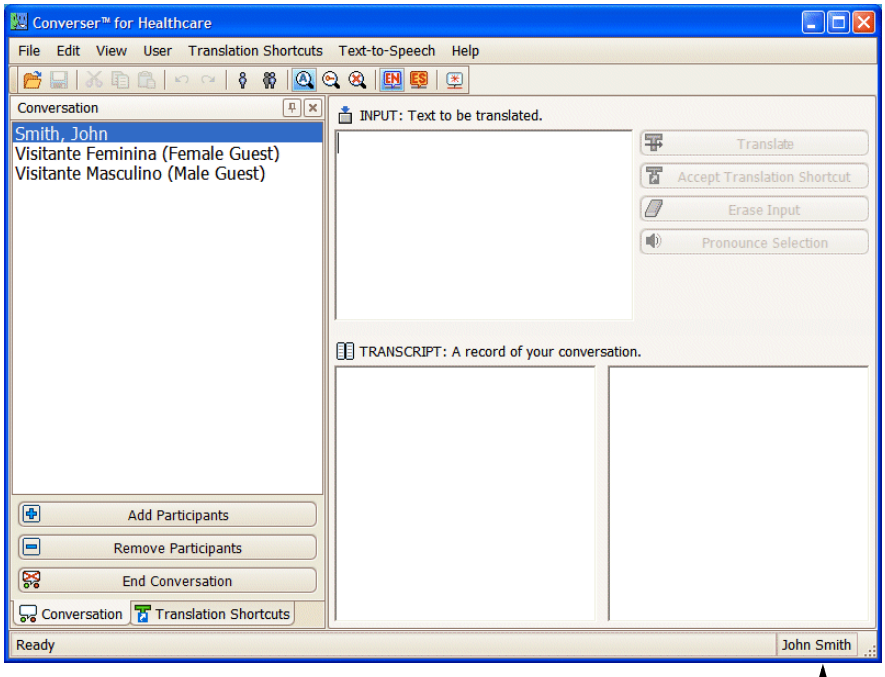
Dr. Smith has previously *registered* as a Converser user, and will participate in the Conversation under his own name. Sra. Gonzáles has not yet registered, and will participate as a *Guest User* (see Chapter 2, "Registering Users, Managing Conversations, and Saving Transcripts" for a full explanation of registration issues and procedures).

SCENE 1

Dr. Smith has already registered as an English speaker. He logs into Converser.

SCENE 2

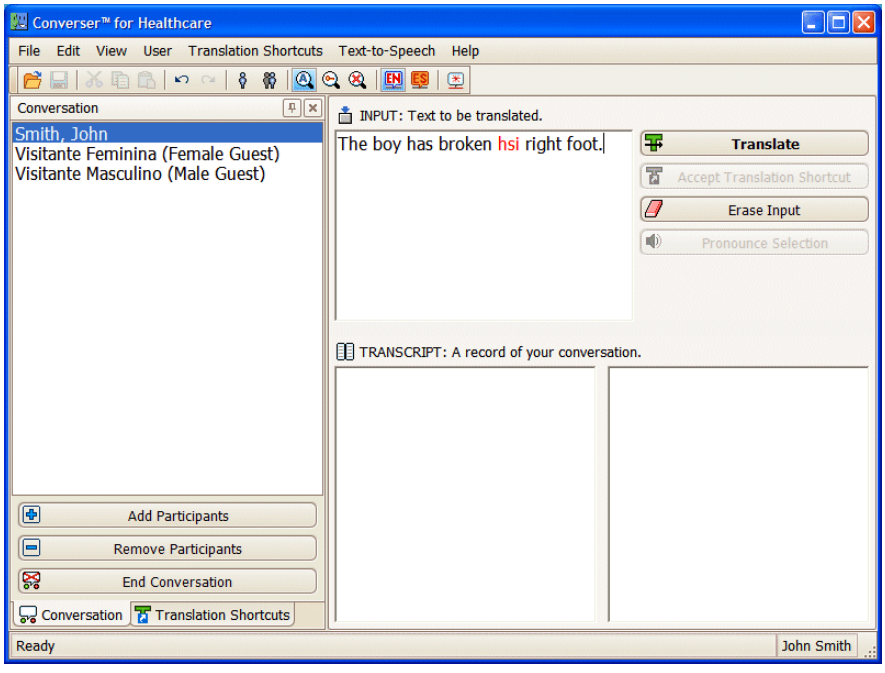
A new Conversation automatically begins. Since Dr. Smith is the Login User, he is the first speaker. He can begin entering text immediately.



SCENE 3

Dr. Smith enters text to be translated.

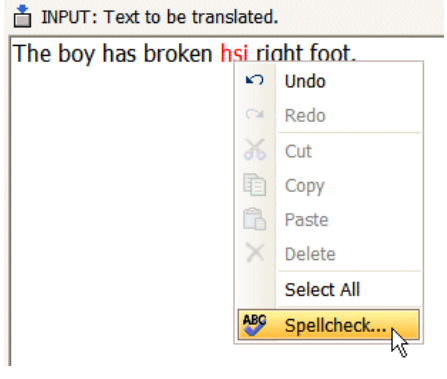
He and Sra. González will use a standard keyboard for text entry. (Three other input modes are also available: speech recognition, handwriting recognition, or on-screen keyboard.)



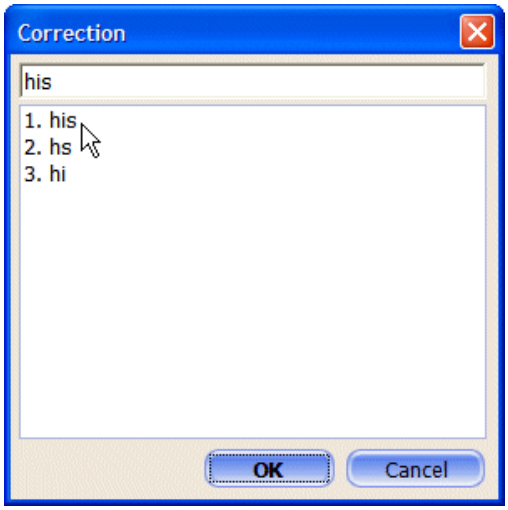
SCENE 4

Dr. Smith has made a typing error. The spellchecker has highlighted the misspelled word “hsi”’ in red.

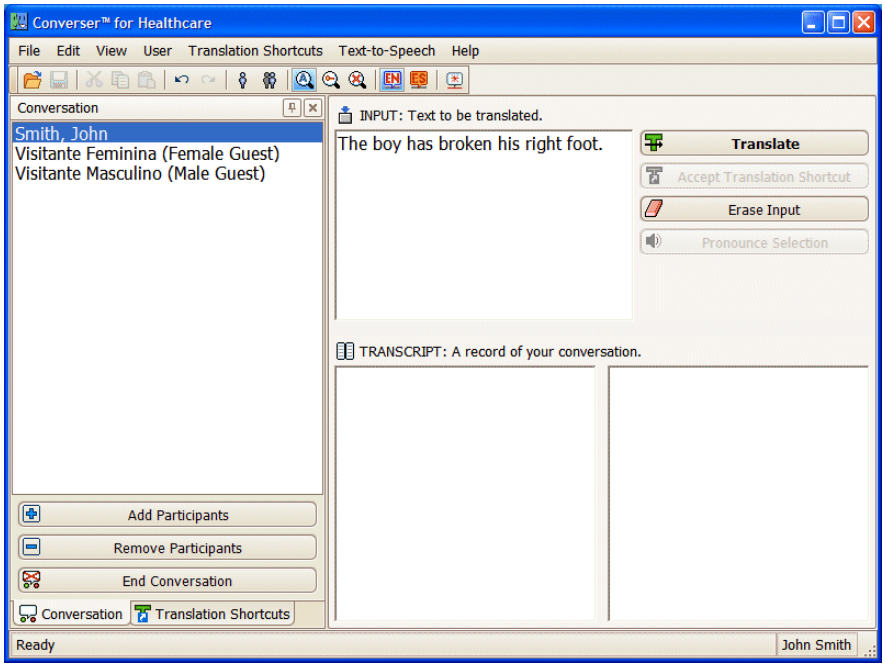
He right-clicks the misspelled word and chooses the **Spellcheck...** feature:



A list of choices appears. He makes his choice using the mouse and clicks **OK**.

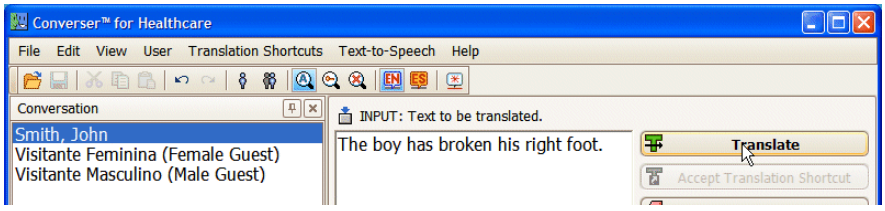


The corrected sentence now reads "The boy has broken his right foot."



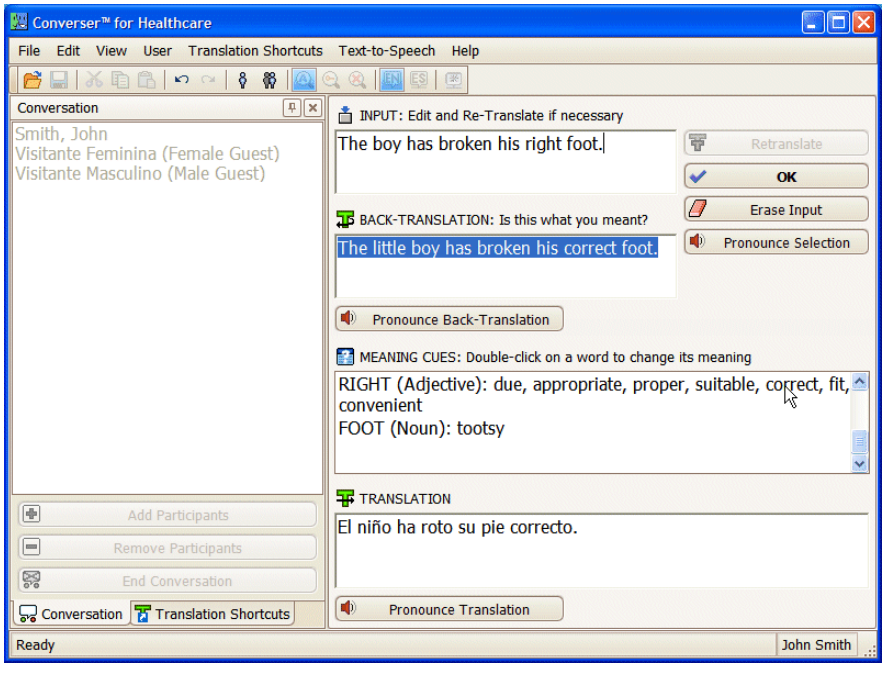
SCENE 5

Dr. Smith translates by clicking the **Translate** button.



The **Translation Screen** opens, showing

- the original sentence
- the Back-Translation (a translation of the translation back into English)
- the **Meaning Cues Window** (indicating the meaning of each expression in the input, as Converser understood it)
- the translated sentence



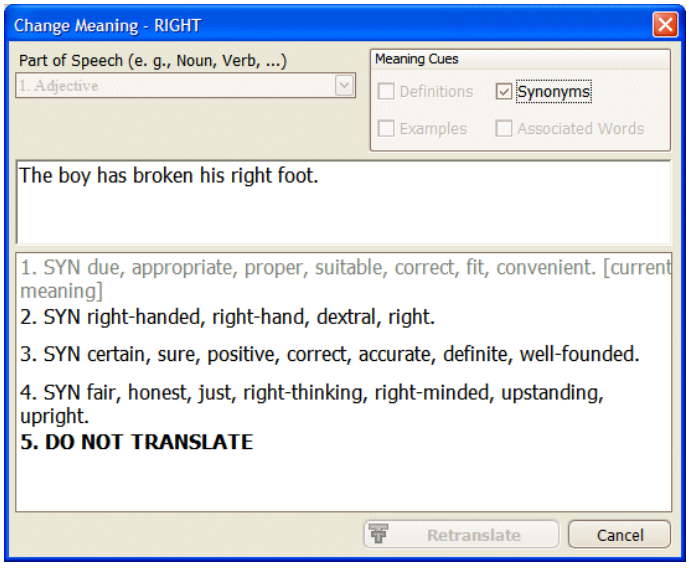
Dr. Smith checks the translation in the **Back-Translation Window**, which contains a translation of the translation: "The little boy has broken his correct foot."

Unfortunately, the word "correct" doesn't convey the intended meaning.

SCENE 6

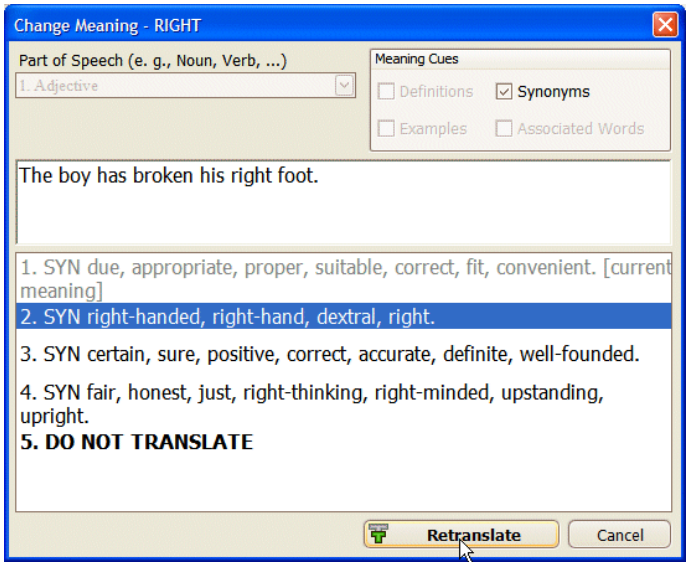
Dr. Smith fixes any word meaning errors. Here, the meaning of "right" is inappropriate; so he double-clicks this word in the **Meaning Cues Window**.

The **Change Meaning Dialog** box opens, and Dr. Smith selects the intended meaning for the word "right"—the second one ("right-handed, right-hand, ...").



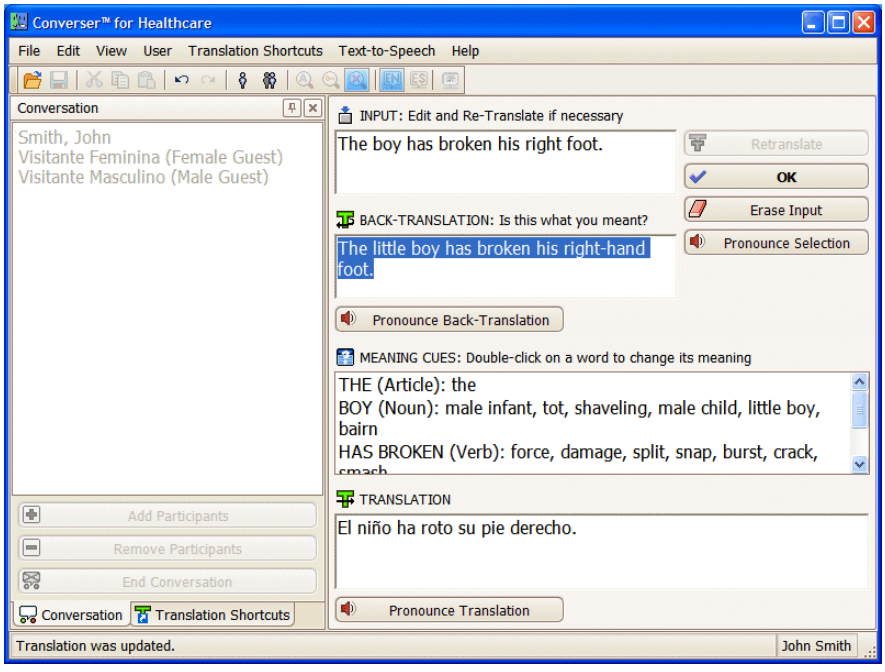
SCENE 7

Dr. Smith retranslates the input, this time using the selected meaning for "right," by clicking the **Retranslate** button.



SCENE 8

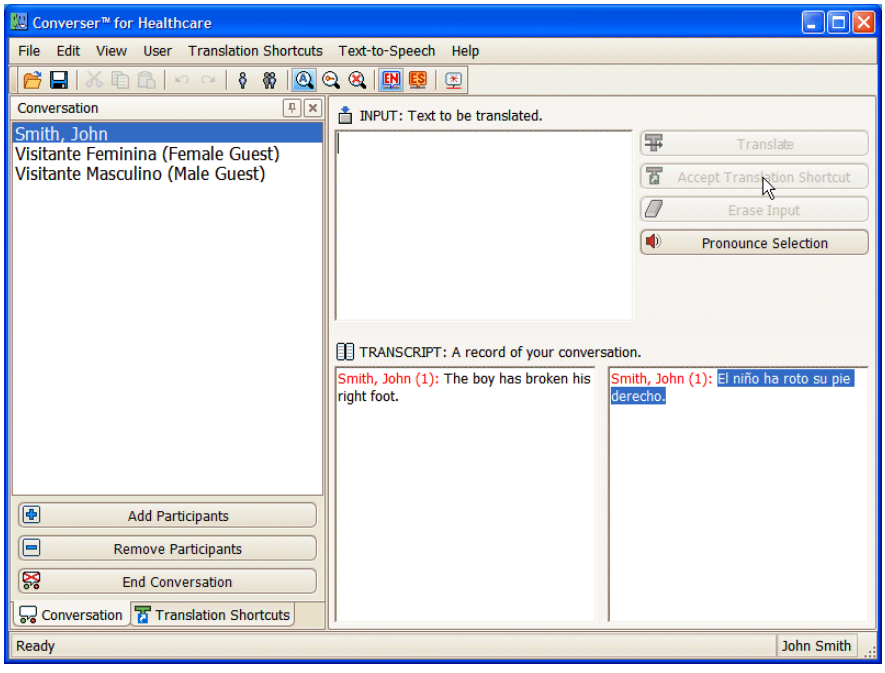
Dr. Smith re-checks the **Back-Translation Window**. Word meaning selection may have affected it. Here, "right-hand foot" has replaced "correct foot," indicating that the translator has now used the intended meaning.



He clicks the **OK** button when satisfied. The original text and its corrected translation will be sent to the **Converser Transcript Window**.

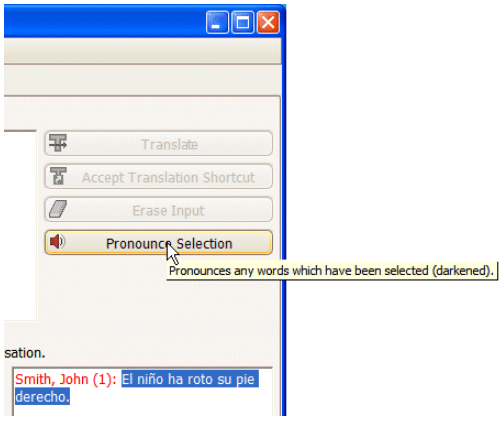
SCENE 9

Dr. Smith and Sra. Gonzáles can now see both the original and the translated text in the **Converser Transcript Window**.



They can also listen to the pronunciation of the translation.

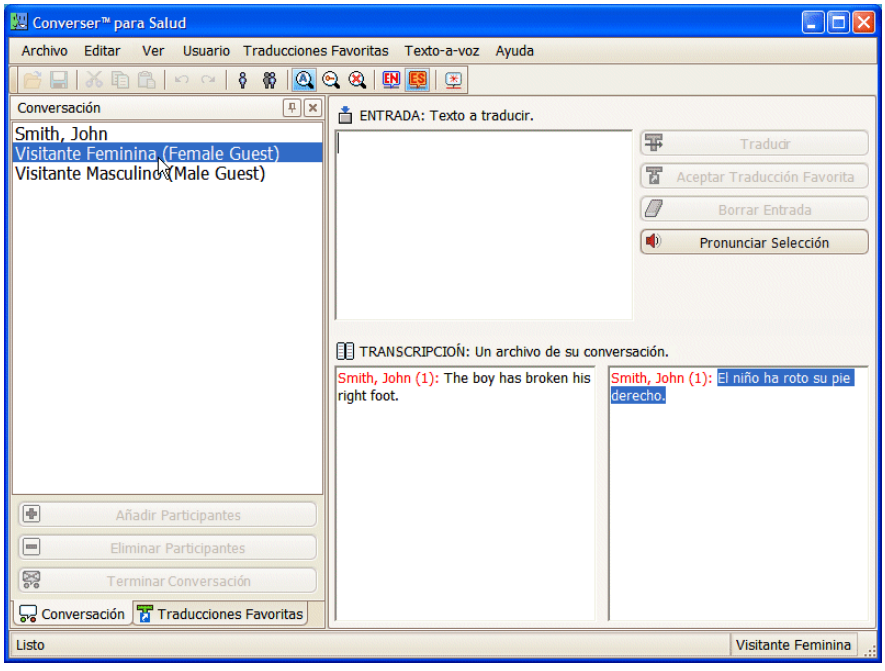
In addition, any selected text in either language can be pronounced automatically by clicking the **Pronounce Selection** button.



SCENE 10

Now Sra. Gonzáles wants to respond. She has not yet registered as a Converser User, so she can take her turn as a Guest User.

She opens the **Conversation Panel** and clicks on **Visitante Feminina** (**Female Guest**).

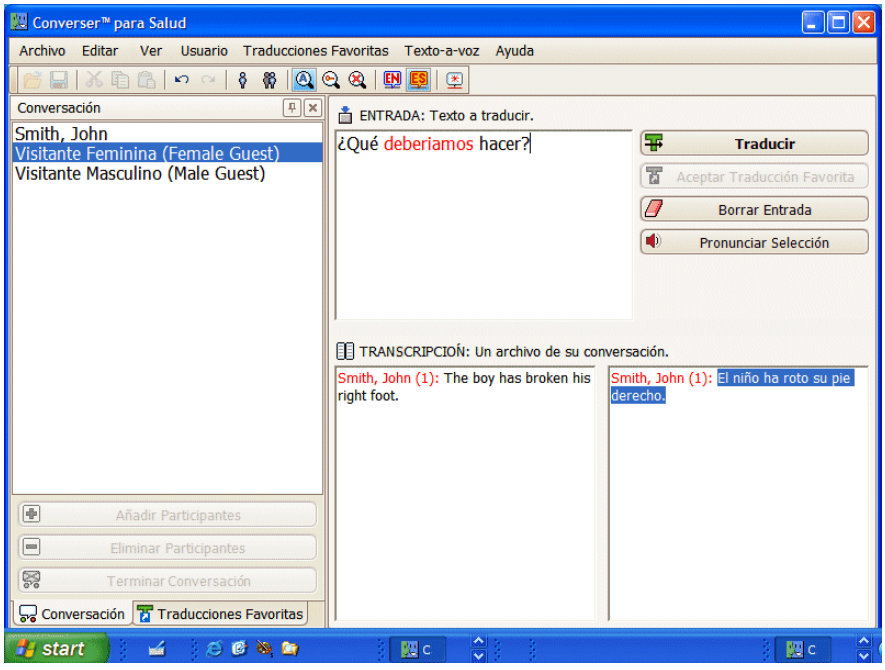


New Active Participant

SCENE 11

When a Spanish speaker takes a turn, the screen and keyboard change to Spanish. Sra. González types in her own response: "¿Qué deberiamos hacer?"

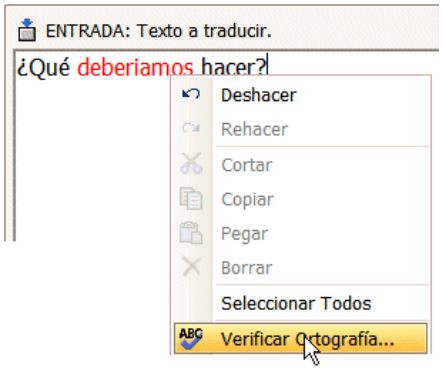
She uses standard Spanish keys for ¿ and é. Transparent keyboard labels can help Spanish typists to find these keys.



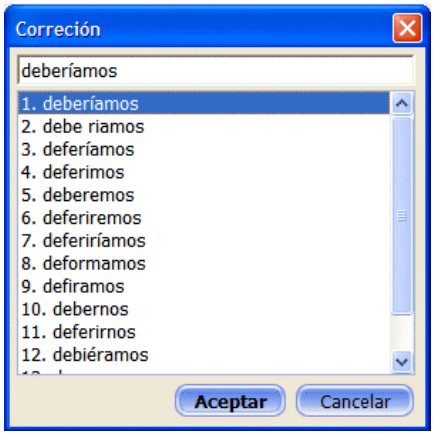
SCENE 12

Sra. Gonzáles has made a typing error. The spellchecker has highlighted the misspelled word "deberiamos"' in red (because the i should be accented).

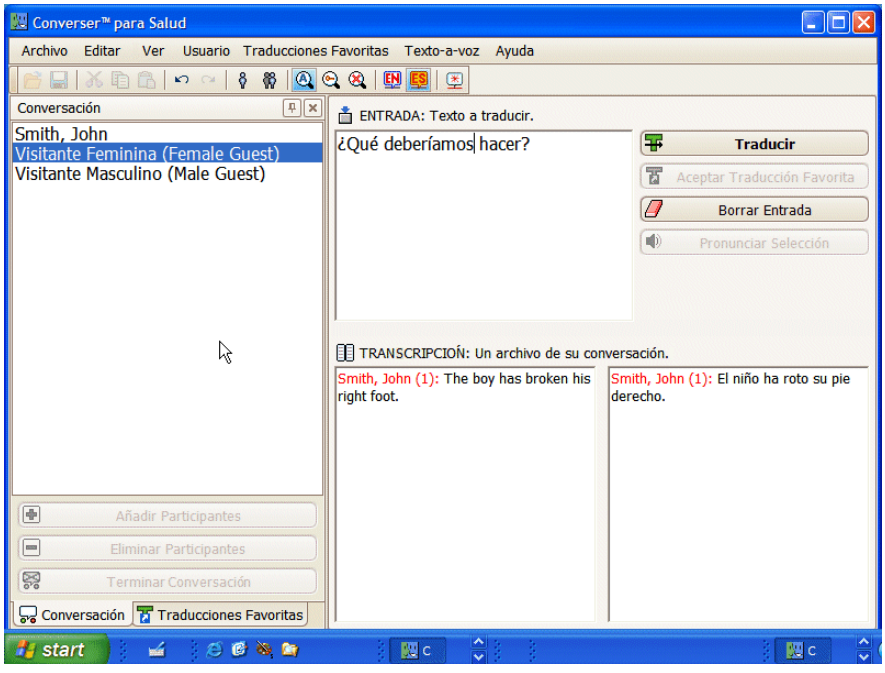
She right-clicks the misspelled word and chooses the spellchecking feature.



A list of choices appears. She makes her choice using the mouse and clicks **Aceptar** (**OK**).

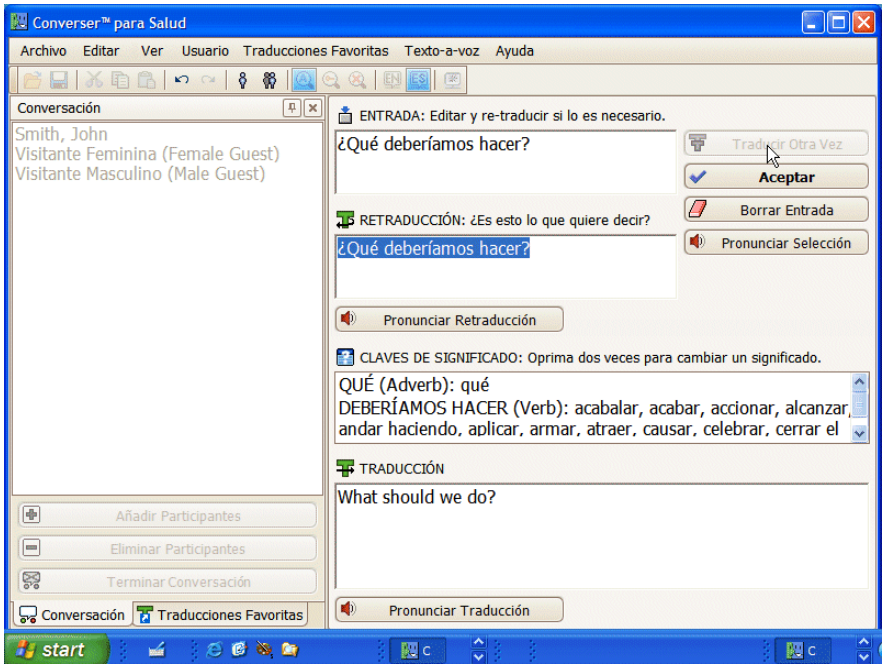


The corrected sentence now reads “¿Qué deberíamos hacer?”

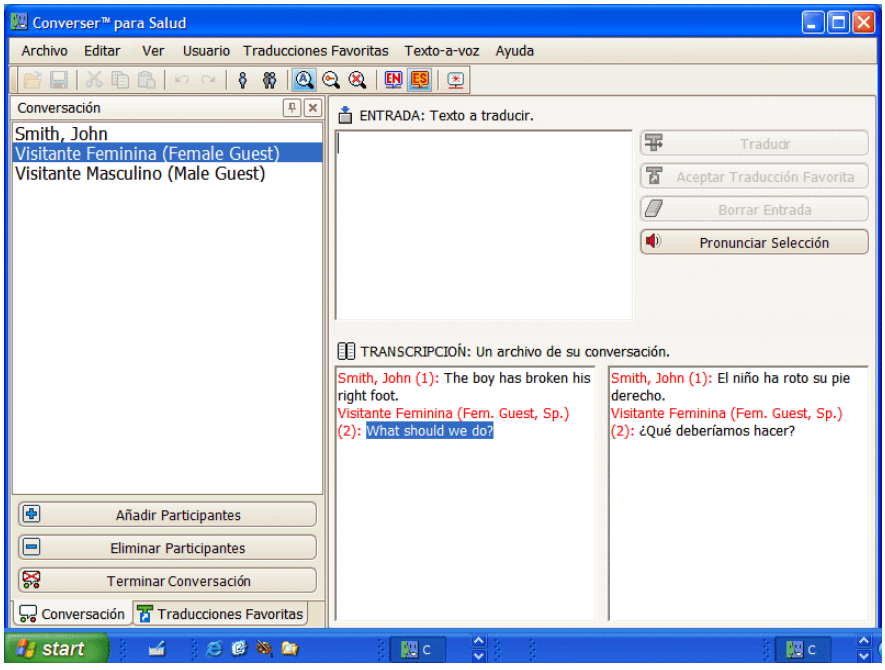


SCENE 13

Sra. González clicks the **Traducir (Translate)** button to begin interactive translation. The **Translation Screen** appears.



The Back-Translation is “¿Qué deberíamos hacer?”—the same as the input. This is acceptable, so she clicks **Aceptar (OK)**, and the **Converser Transcript** is updated.



SCENE 14

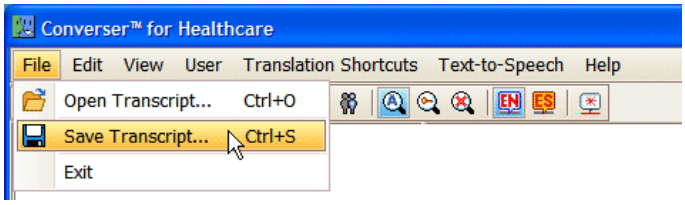
To begin his next turn, Dr. Smith can click the **Last English Participant** button on the toolbar.

Later, clicking **Last Spanish Participant** will switch back to **Visitante Feminina** (**Female Guest**).

Alternatively, the next participant can be specified explicitly by clicking and name on the **Conversation Panel**. This method is helpful for Conversations with several participants.

SCENE 15

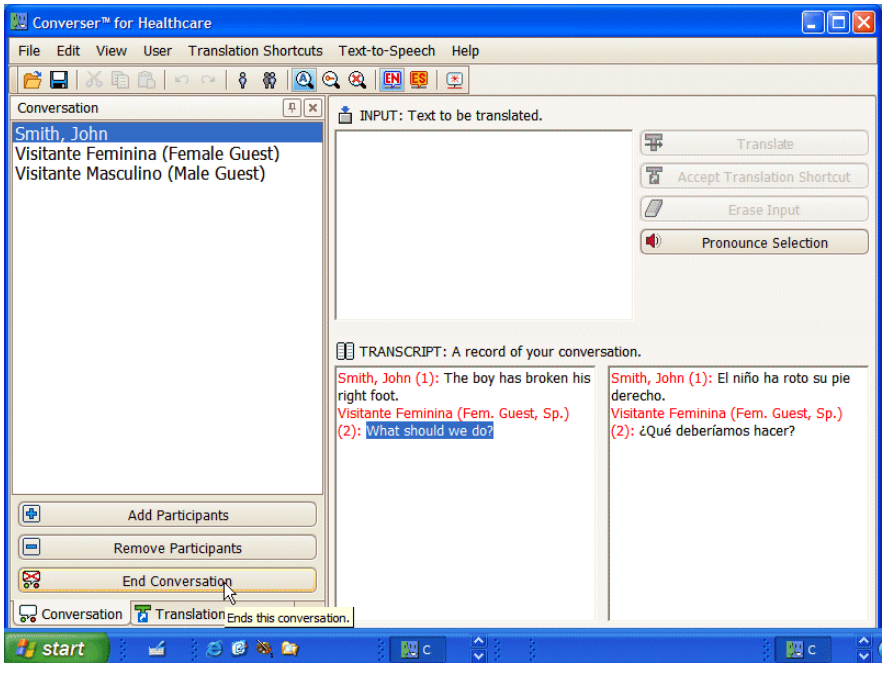
At any point, Dr. Smith can click the **Save Transcript** button on the Toolbar. The bilingual transcript will be saved to the specified file. (Clicking **Save Transcript ...** on the **File** menu would have the same effect.)



Participants' names will be *masked* for privacy, but can be unmasked using an appropriate password.

SCENE 16

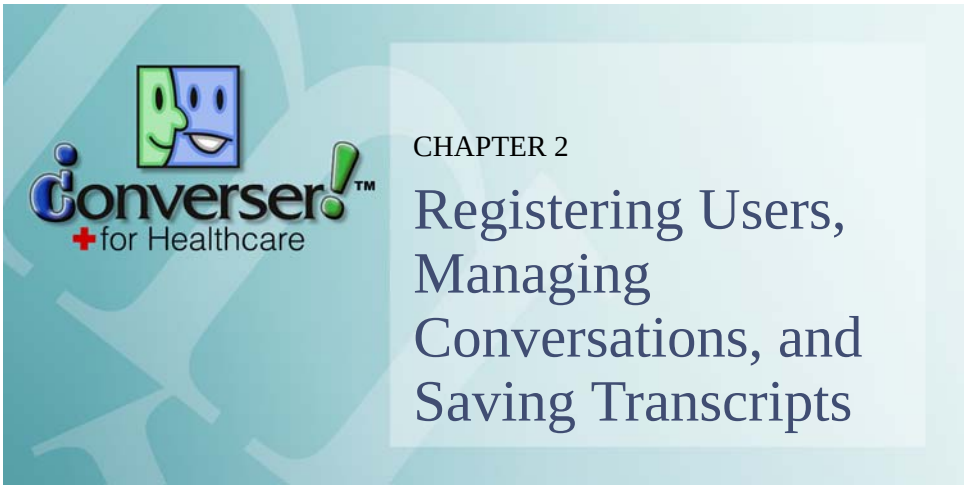
The doctor can end the current Conversation by clicking the **End Conversation** button on the **Conversation Panel**.



He'll be asked if he wants to save the Transcript. He can do so if appropriate.

Then a new Conversation will automatically start. At first, its participants will be the Login User (Dr. Smith) and the two Spanish-speaking Guest Users. However, the participant list can be changed using buttons (**Add Participants** and **Remove Participants**) on the **Conversation Panel**.

Dr. Smith can end this Converser session using the **Exit** item on the **File** menu.



CHAPTER 2

Registering Users, Managing Conversations, and Saving Transcripts

This chapter explains

1. how and why to *register* as a Converser User, thus creating a personal **User Profile**;
2. how to edit the **User Profile** of a registered User in order to modify the associated information;
3. how to manage a Converser *Conversation:*
   - how to start and end the Conversation;
   - how to add participants to it or remove participants from it;
   - how to take a turn as the current writer or speaker (the *Active Participant*);
   - and how to manage the **Conversation Panel**
4. how to save a bilingual *Transcript* of the Conversation, and how to view saved Conversations from within Conserver.

• Registering New Users

This section explains how and why to register as a regular Conserver User.

Why Register?

To log in and begin a Conserver session, you must be a registered Conserver User, with a username and password. Thus each Conserver Conversation has at least one registered User—the Login User.

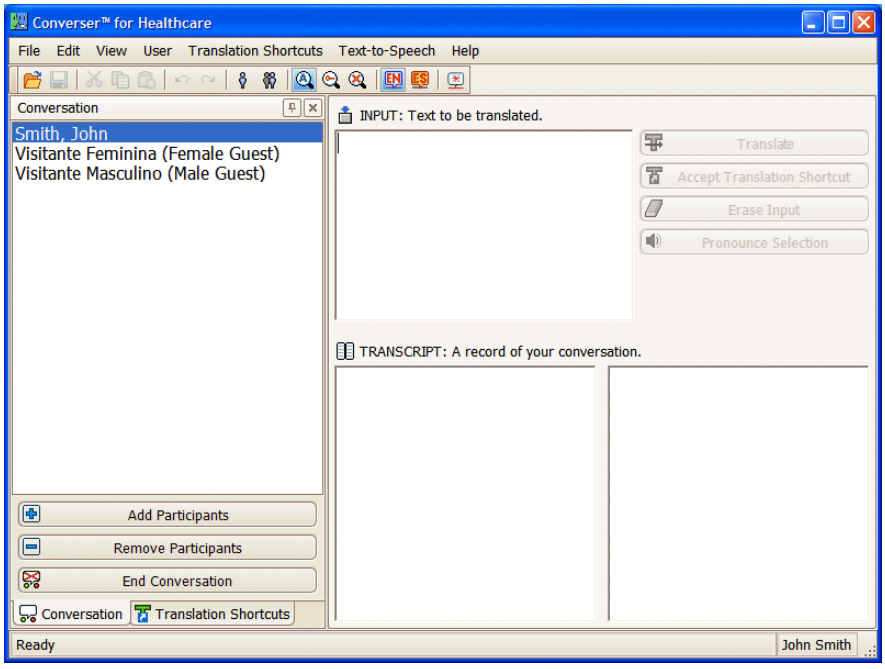
The other participants may also be registered; however, they can instead participate as *Guest Users*—as **Male Guest**, **Female Guest**, **Visitante Masculino**, or **Visitante Feminina**. Guest Users are typically temporary or one-

time users of the system, for whom a personal record is unnecessary—for example, patients who walk up to a pharmacy window.

So why register?

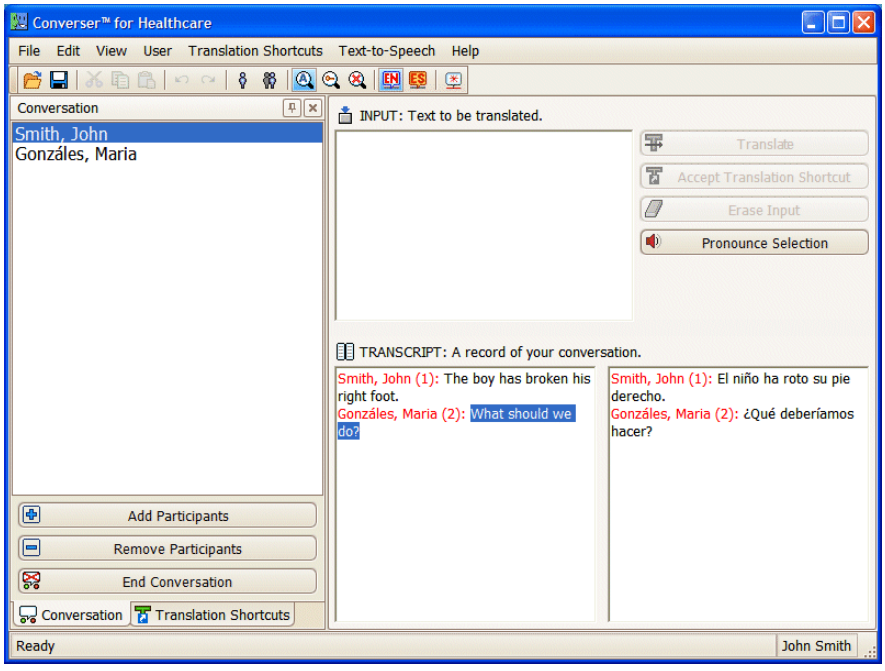
In Converser Version 3.0, registration is useful for friendliness and for record-keeping.

- *Friendliness:* If the system knows a participant's name, the name will appear in the status bar in the lower right-hand corner of the screen whenever he or she is taking a turn.



Active Participant

- *Record-keeping:* The name will also be displayed in Transcripts, making them easier to follow. Names are always visible in *on-screen* Transcripts.



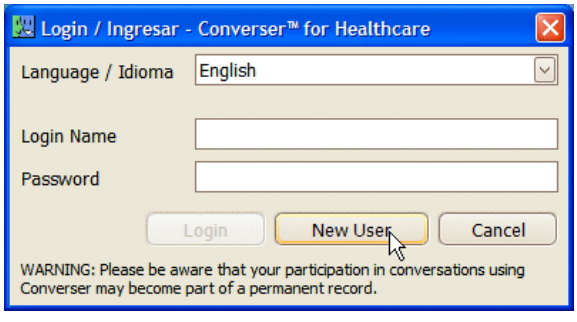
Names in *saved* Transcripts are *masked* for privacy, but can be unmasked using an appropriate password; see "Unmasking Saved Transcripts", below.

Note In future versions, Converser will have additional reasons for recognizing you personally whenever you take a turn as a speaker/writer. For example, it will be possible to create **Personal Translation Shortcuts** (for quick and easy execution of your most frequent inputs).

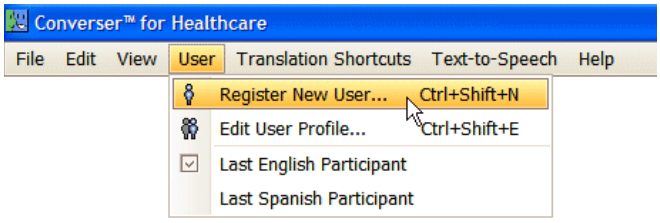
How to Register

To register a new Converser User, use the **Converser Registration Dialog**. There are four ways to access it:

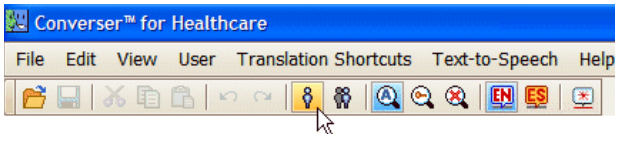
1 Via the **New User** button in the **Login/Ingresar Dialog**—the first dialog which appears during the login process.



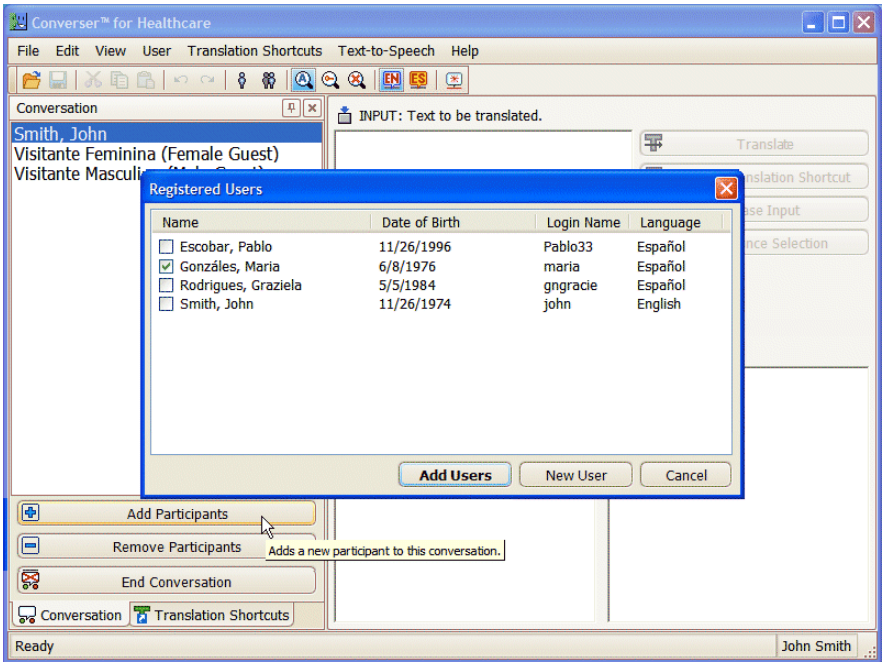
2 Via the **Register New User ...** item in the **User** menu (or use the keyboard shortcut Ctrl+Shift+N).



3 Via the **Register New User** icon in the Converser Toolbar.

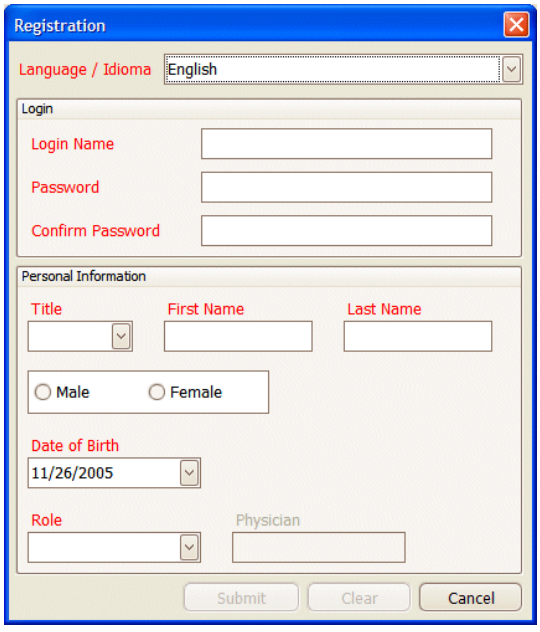


4 Via the **Add Participants** dialog reached through the **Add Participants** button on the **Conversation Panel**.



The Converser Registration Dialog

The **Converser Registration Dialog** can be used by both English- and Spanish-speaking registrants. Its **Language/Idioma** menu indicates *English* as a default, for the convenience of healthcare staff members.



However, if *Español* is selected from the menu, the labels in the dialog change to this language.

The following information fields should be filled during registration. All fields are required.

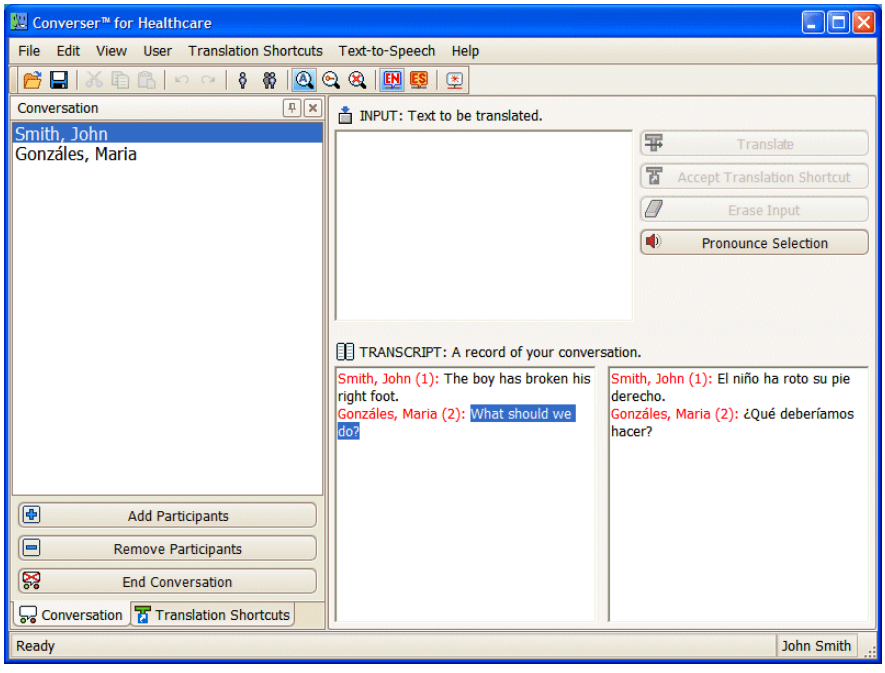
Field	Description
Date of Birth	Needed to verify the User's unique identity. Dates can be set with the mouse/stylus, or by typing in.
First Name	The User's forename, e.g. John or Juan. To be typed in.
Gender	M (Male) or F (Female). Radio buttons.
Language	English (the default, for the convenience of healthcare staff) or Spanish. A drop-down menu. If Spanish is selected, the labels in the **Converser Registration Dialog** change to this language.
Last Name	The User's surname, e.g. Smith or Martinez. To be typed in.
Password	An invented password for this User. To be typed in. To be used when logging in if this User starts the Converser program. However, other Users can participate in Conversations without logging in individually.
Physician	If this User is a Patient (as indicated by User's Role field), the name of his or her physician. To be typed in.
Title	Mr., Ms., Dr., etc. A drop-down menu.
User's Role	Patient, doctor, other staff, etc. A drop-down menu.
Login Name	An invented unique name for this User. To be typed in. To be used when logging in if this User starts the Converser program. However, other Users can participate in Conversations without logging in individually.

• Managing Conversations

A Converser *Conversation* provides the context within which Users take turns entering and translating text.

A Conversation is also useful as a record-keeping device: when a Transcript is saved, the record includes the current Conversation's Login User, its start and save time, and its set of participants (with the real names masked for privacy, but accessible with a password).

Conversations are managed using the **Conversation Panel**, one of two sliding panels on the left side of the Converser screen. Using this panel, the Login User can add or remove conversational participants.

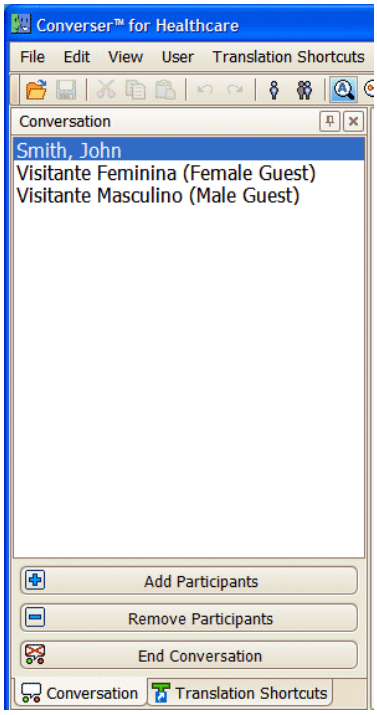


The Startup Conversation

As soon as you log in to Converser, an initial Conversation is automatically started. It always includes three participants:

- the Login User, who may be English- or Spanish-speaking
- the male Guest User speaking the opposite language (**Male Guest** or **Visitante Masculino**)
- the female Guest User speaking the opposite language (**Female Guest** or **Visitante Feminina**)

This set of participants is visible in the **Conversation Panel**.

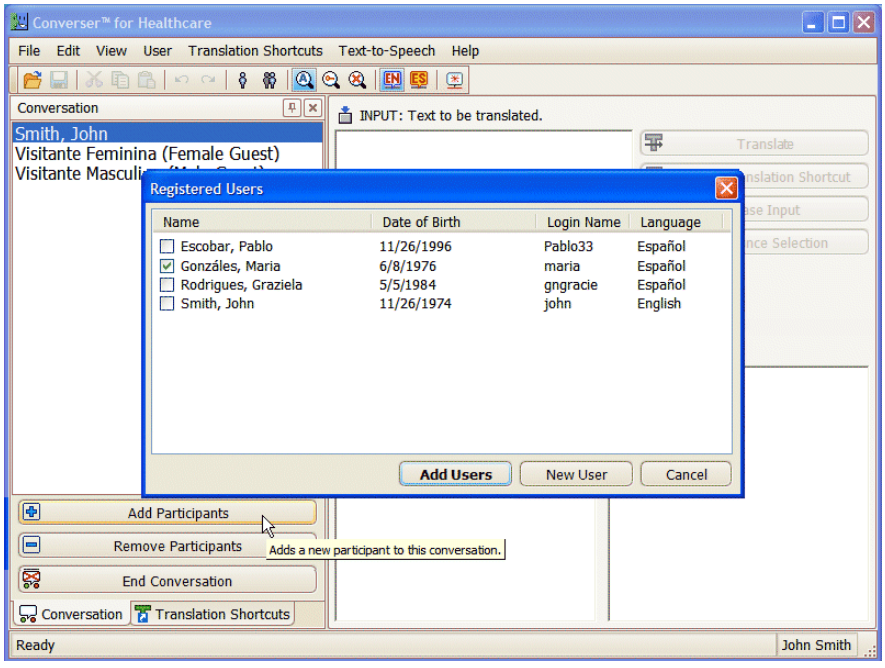


Note Male and female Guest Users behave identically; so the choice between them will be based only upon courtesy and friendliness (since your patients may prefer to be recognized as male or female in onscreen Transcripts), or upon your record-keeping preferences.

Adding Participants

The Login User (but no one else) can *add* a participant at any time by clicking the **Add Participants** button in the **Conversation Panel**. A list will appear, showing all registered Users. You can use the associated check boxes to indicate which of

these should be added to the current Conversation as new participants. Then click the **Add** button.

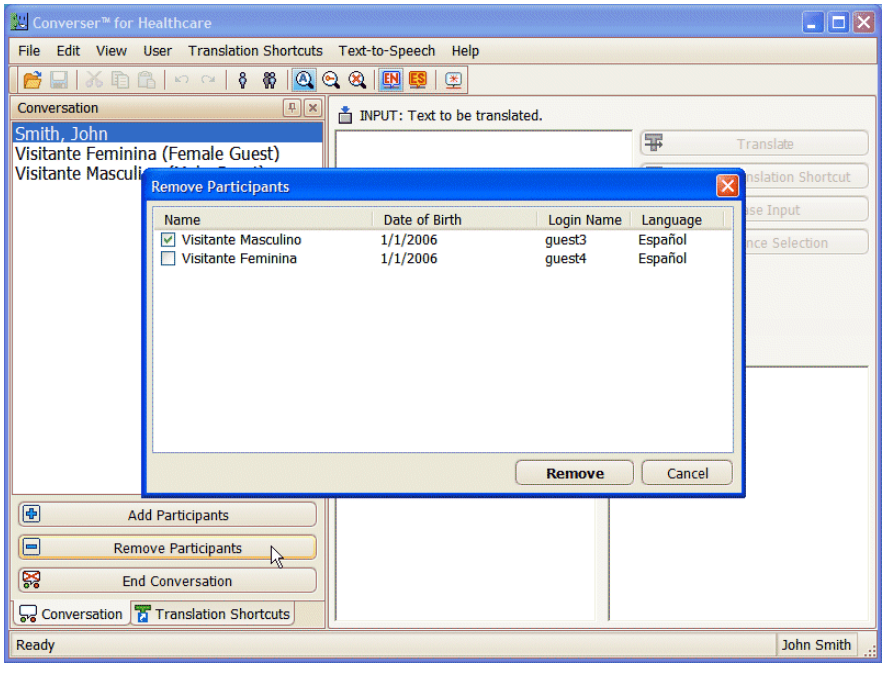


As each participant is added, his or her name appears in the **Conversation Panel**.

Any number of participants can join a Conversation, although a given User can join a given Conversation only once. This limitation also applies to Guest Users, like **Male Guest**. However, if necessary, several male guests can take turns using the **Male Guest** account. The other Guest User accounts (**Female Guest**, **Visitante Masculino**, and **Visitante Feminina**) can similarly handle several temporary Participants by turns.

Removing Participants

Similarly, the Login User can *remove* any participant (except himself or herself) using the **Remove Participants** button.



Ending a Conversation

To end a Conversation, the Login User can use the **End Conversation** button on the **Conversation Panel**.

You can end the current Conversation whenever convenient for your record-keeping—for example, when the current patient departs. However, you can also continue a Conversation indefinitely, e.g. for a series of Guest Users, such as temporary clients appearing at a pharmacy pick-up window.

When a Conversation ends, two actions will automatically be taken:

1. *You'll be offered the opportunity to save a Transcript* of the completed Conversation. If at some intermediate point during the Conversation you've already saved a Transcript to a certain file, you'll be asked if you want to append any subsequent turns to that same file.
2. *A new Conversation will be started*, containing the same three participants as the initial Conversation: the Login User and two Guest Users (male and female) speaking the opposite language.

Note Don't confuse a Converser *Conversation* with a Converser *session*–the time between launching and exiting the Converser program. You can start and end any number of Conversations before exiting a Converser session. To start a session and begin an initial Conversation, a registered User must log in with the proper Username and Password; but no login is required to add participants to an ongoing Conversation or to start a new one.

Only the Login User can end a Conversation. Thus, during other Users' turns, the **End Conversation** button will be greyed out to indicate that it is deactivated.

—Taking Turns

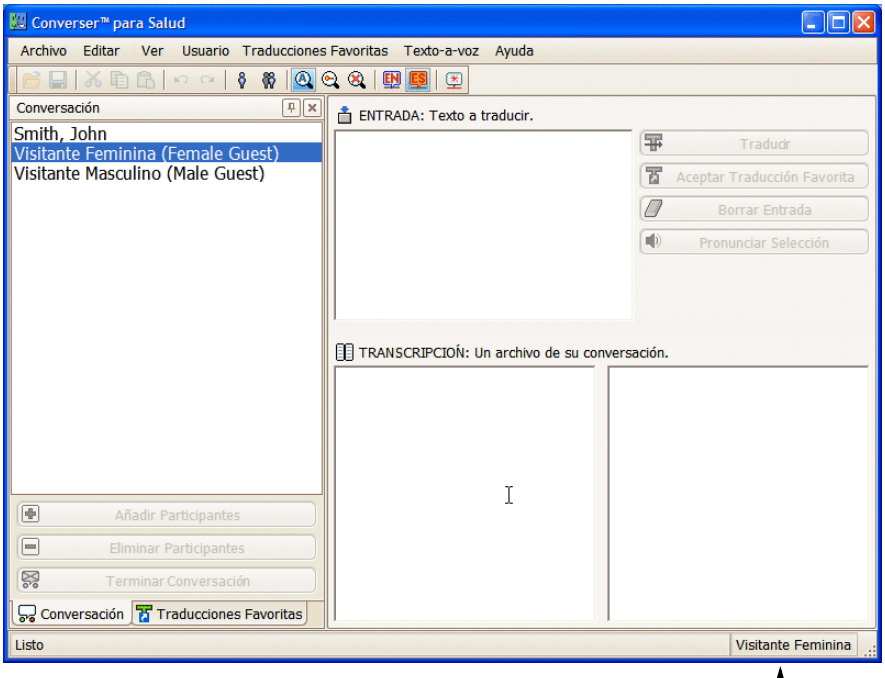
A Conversation proceeds by *turns*: Dr. Smith may take the first turn as the current writer or speaker (or *Active Participant*); Sra. González may take the next turn; and so on.

Whenever a new turn begins, three actions are taken automatically:

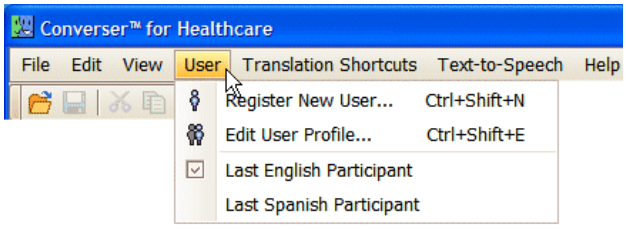
- the words and messages in the *interface* change to the Active Participant's native language;
- the *keyboard keys* change into that language.
- the *handwriting and touchscreen interfaces* change into that language;

There are three ways of indicating whose turn will be next:

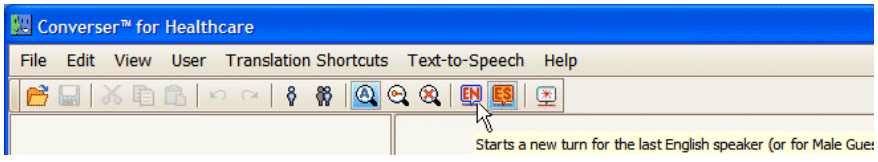
1 You can specify the next Active Participant explicitly by clicking and highlighting the relevant name in the **Conversation Panel**. The new turn will then begin (as indicated by the name in the status bar in the lower right-hand corner of the Converser screen).



2 You can bring back the most recent English or Spanish participant using the **Last English Participant** or **Last Spanish Participant** items on the **User** menu.



3 You can use the **Last English Participant** or **Last Spanish Participant** buttons on the **Converser Toolbar**.

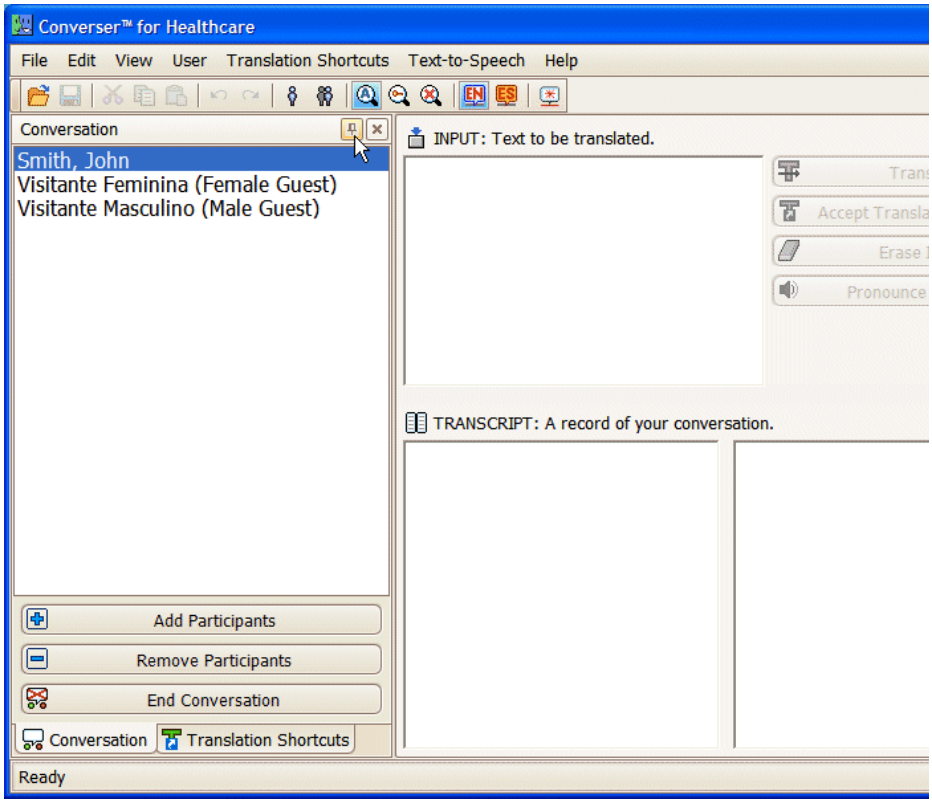


If a Conversation is just beginning, it may be that no English or Spanish participant has yet taken a turn. In such cases, there is no "last" English or Spanish participant; so the male Guest Users (**Male Guest** and **Visitante Masculino**) will become the default turn-takers.

Explicit specification of the next Active Participant via the **Conversation Panel** will be necessary for a new speaker's first turn. However, the **Last English/Spanish Participant** method of turn-taking will be useful for turns after the first one, especially for switching back and forth between speakers in Conversations with only two participants.

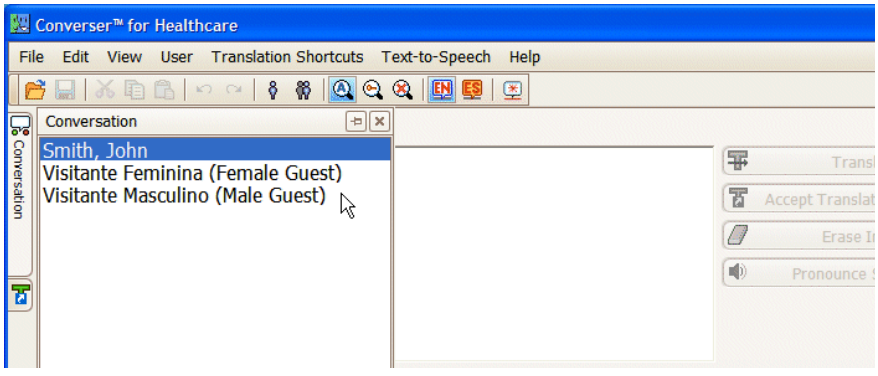
Hiding the Conversation Panel

When Converser starts up, the **Conversation Panel** is normally open and in view. Further, it is *pinned* so that it will stay open, as indicated by the vertical position of the window's pushpin icon.

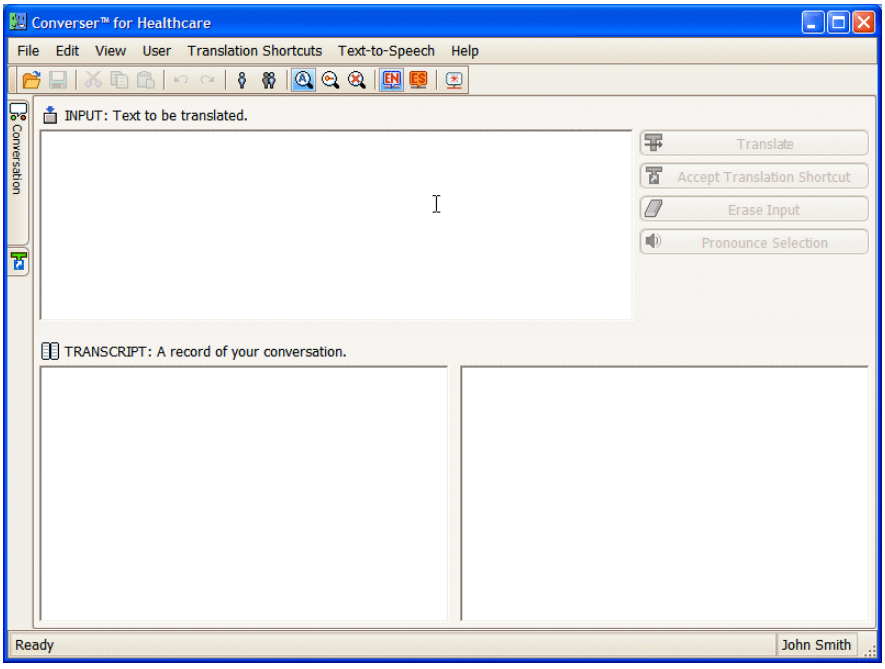


To *hide* the **Conversation Panel**—to make it slide out of view on the left side of the screen—you can

1 Click on the pushpin so that the pin becomes horizontal.

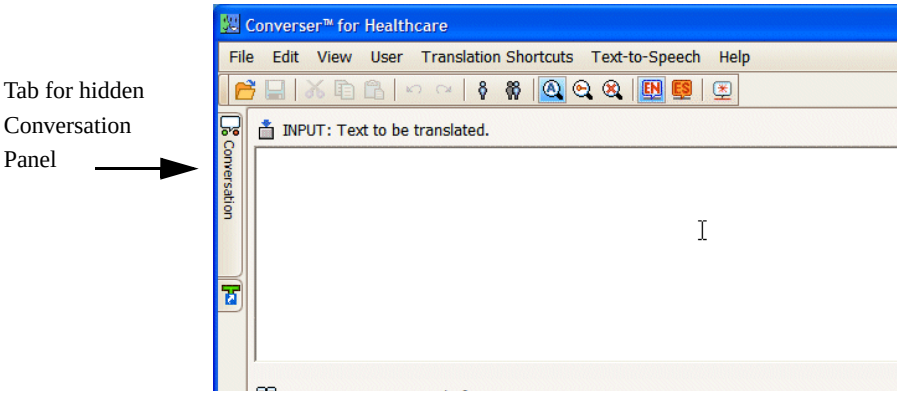


2 Then move the cursor out of the Panel.



3 If the panel doesn't close immediately, just click outside it.

When the panel is hidden in this way, its *tab* will remain in view on the left edge of the screen.



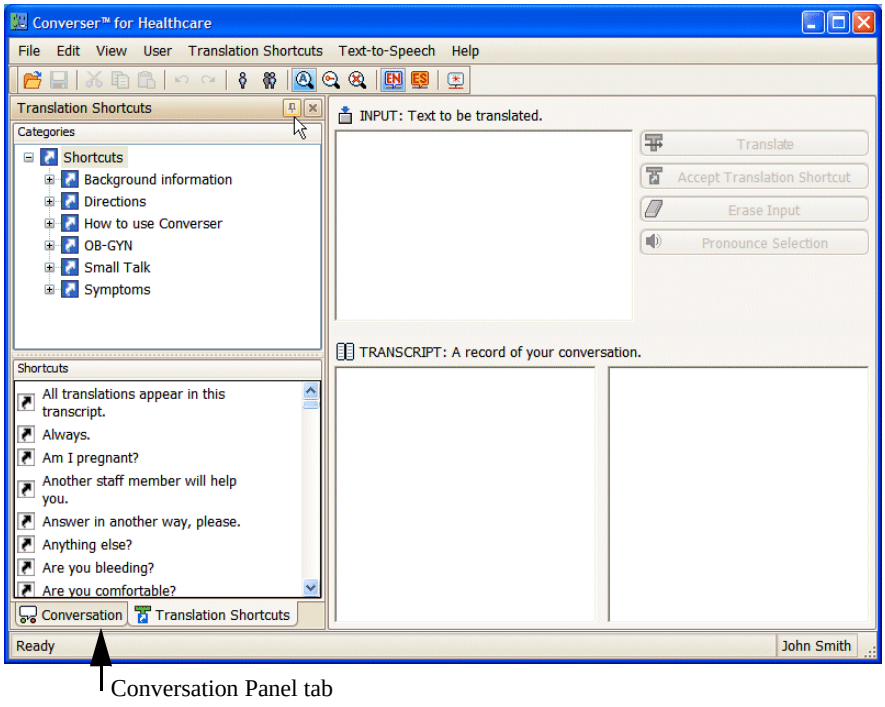
Tip The **Conversation Panel** will be used mainly by staff members when initiating a Conversation. Patients will rarely need to manipulate it. Hiding it can help to simplify the appearance of the Converser screen, thus minimizing distractions and confusions, especially for first-time participants.

Unhiding the Conversation Panel

To *unhide* the hidden **Conversation Panel**—to slide it back into view—simply hover the cursor over its tab. The panel will then stay in view as long as the cursor stays within it. The panel will again slide shut if the cursor moves outside of it.

While the panel is in view, you can again click the pushpin, so that it becomes vertical. The panel will then stay open until you unpin it again.

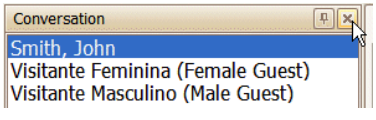
Sometimes the **Conversation Panel** will be obscured by the open and pinned **Translation Shortcuts Panel** (see "Manipulating the Translation Shortcuts Panel" on page 88). In this case, the two Panels' tabs are horizontal and below them. Just click either tab to bring the desired panel into view.



Conversation Panel tab

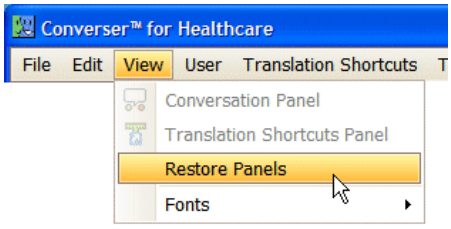
Closing the Conversation Panel

You can *close* the **Conversation Panel**, or temporarily remove it from the Converser screen, by clicking the standard Close Window (X) icon in the panel's upper right-hand corner. In this case, no tab will be visible. To make the panel visible again for use, you'll need to *restore* it (see below).



Restoring the Conversation Panel

The **Conversation Panel** can be restored to its original open and pinned state and placed in its original location by clicking the **Conversation Panel** item in the **View** menu. Alternatively, you can restore both the **Conversation Panel** and the **Translation Shortcuts Panel** by clicking the **Restore Panels** item in the same menu.



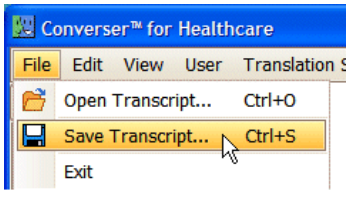
Restoration will be necessary if the panel has been closed (temporarily removed from the Converser screen), whether on purpose or by accident. It may also be necessary if either of the panels has been moved from its original location.

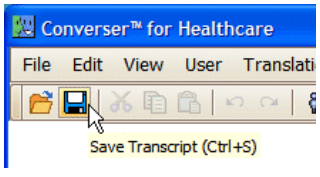
• Transcripts of Conversations

At any point during a Conversation, you can save a bilingual *Transcript*, or record, of all of the turns taken since the Conversation began. In addition, whenever you end a Conversation, you'll be offered the chance to save a Transcript of it.

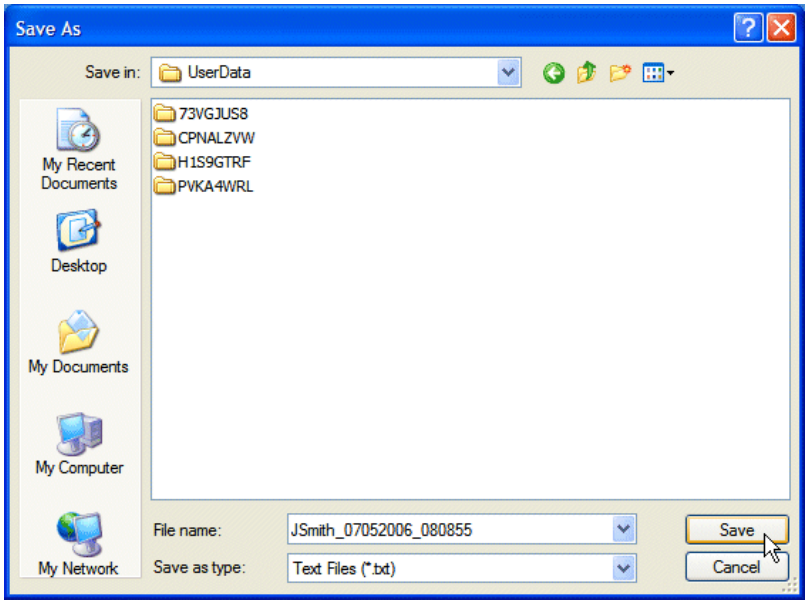
Saving a Transcript

To initiate the saving of a Transcript during a Conversation, select the **Save Transcript...** item on the **File** menu (or with the keyboard shortcut Ctrl+S). Equivalently, you can use the corresponding icon on the Toolbar.





A standard Windows **Save As ...** dialog will appear, so that you can indicate a file name and location for the new Transcript.



The *default name* of the new Transcript file includes

- the Login Name of its Login User
- its exact save time

For example, here's the default name of a Transcript saved by Login User Dr. John Smith, with Login Name JSmith, at 08:08:55 AM on July 05, 2006:

JSmith_07052006_080855

However, you can rename the file as desired.

If you re-save a Conversation for which a Transcript has already been saved, you'll be asked whether you want to update the existing file or specify a new one.

What's in a Transcript?

To help you identify its Conversation, each Transcript includes an informational header indicating

- the exact start time
- the exact time when the current Save operation was ordered
- the Login User
- the participants and their roles (Physician, Staff, Patient, Guest, etc.)

Here's the informational header of a sample Transcript.

Start Timestamp: 6/29/2006 11:34:33 AM

Save Timestamp: 6/29/2006 11:57:21 AM

Login User: user7 (role: Staff)

Participants: user7 (role: Staff); user4 (role: Guest)

Also included in a Transcript file are bilingual transcriptions of all of the conversational turns up to the save point. For each turn, the original or input language is shown on one line, and the verified translation appears on the following line. Turns are separated by blank lines.

Here are the first two turns of the sample Transcript. The first turn was taken by English speaker *user7*; and the second was taken by Spanish speaker *user4*.

user7: Good morning.

user7: Buenos días.

user4: Hola.

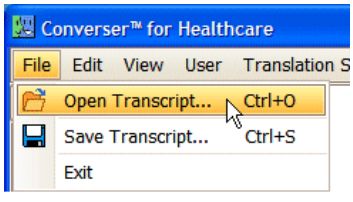
user4: Hello.

Within a saved Transcript, User Names are *masked*—replaced by opaque identifiers like *user7* or *user4*—in order to comply with privacy regulations (e.g. those of HIPAA). To learn how to *unmask* a saved Transcript, or restore the original User Names, see the immediately following sections.

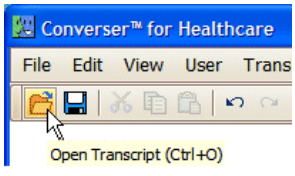
Opening Saved Transcripts

Transcripts are saved as standard text files, in format *filename*.txt, and thus can be opened for inspection in standard word processing applications such as Notepad, Wordpad, etc.

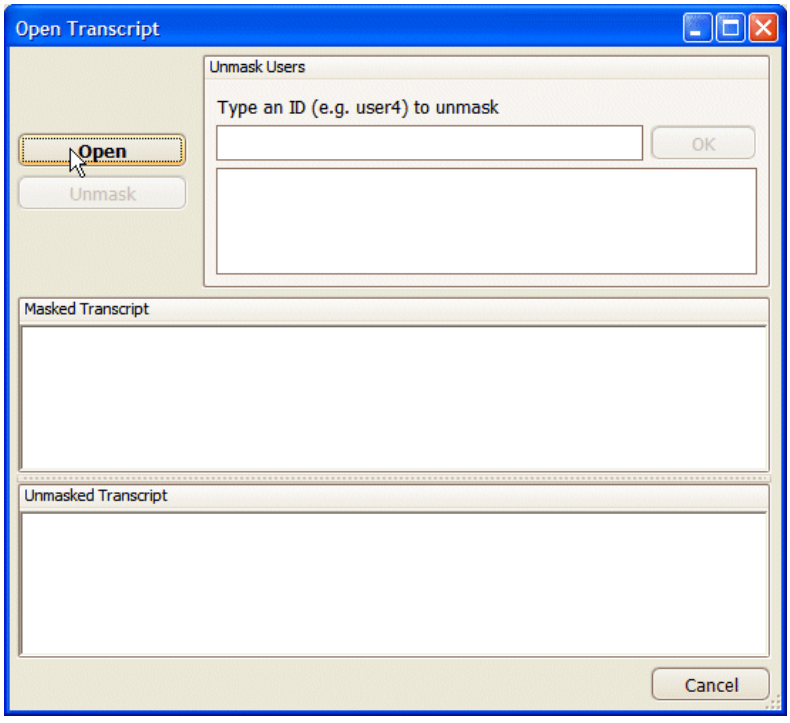
However, they can also be opened from within the Converser interface. For this purpose, use the **Open Transcript ...** item in the **File** menu (keyboard shortcut Ctrl+O).



Equivalently, you can use the corresponding icon on the Toolbar.

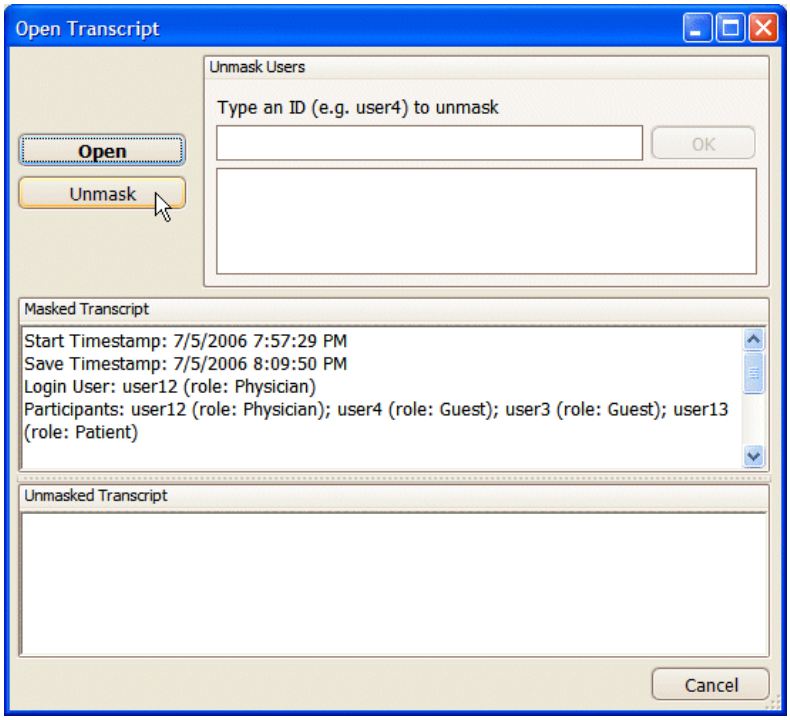


The **Open Transcript Window** will then appear. Click its **Open** button.



A standard Windows **Open File ...** dialog will then appear, allowing you to specify a Converser Transcript file to be opened. The contents of this file will then become visible in the window's **Masked Transcript** subwindow. As

explained above, User Names in the saved file are *masked*—replaced by opaque identifiers like *user7* or *user4*.



Unmasking Saved Transcripts

To view an *un*masked version of the specified Transcript, with opaque identifiers like *user 12* or *user 4* replaced by the original User Names like *John Smith*, click the **Unmask** button in the **Open Transcript Window**.

You'll be asked for a password, which can be obtained from your Converser Site Manager or from a representative of Spoken Translation, Inc. Once the password has been supplied, the unmasked version of the file will become visible in the **Unmasked Transcript** subwindow.

To learn which real User Name corresponds to a particular opaque identifier, you could simply compare the masked and unmasked versions of the Transcript. However, for added convenience, you can instead enter an identifier in the field of the **Open Transcript Window** labeled "Type an ID (e.g. user4) to unmask," and then click the **Unmask** button. That identifier's secret identity will then be revealed, e.g.

John Smith - user 12

CHAPTER 3

Input Methods—Typing, Writing

Converser supports four methods for inputting text by typing or writing:

1 standard keyboard.

2 on-screen keyboard

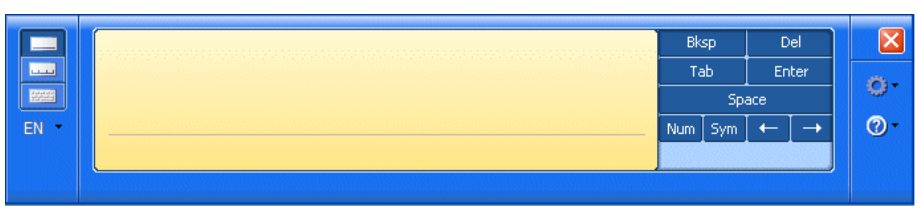
3 handwriting (**Writing Pad**)

4 single character input (**Character Pad**)

(You can also input text with your voice. See Chapter 4, "Input Methods—Voice.")

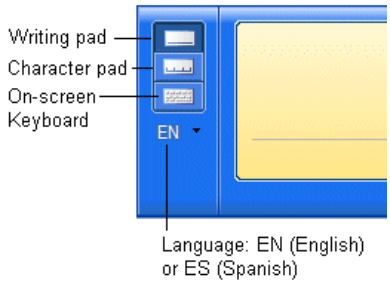
Input modes 2, 3, and 4 are provided by the Windows XP Tablet operating system. They're accessed through the **Tablet PC Input Panel**. To open this **Panel**, click the icon next to the Windows **Start** button.

The **Input Panel** looks like this:



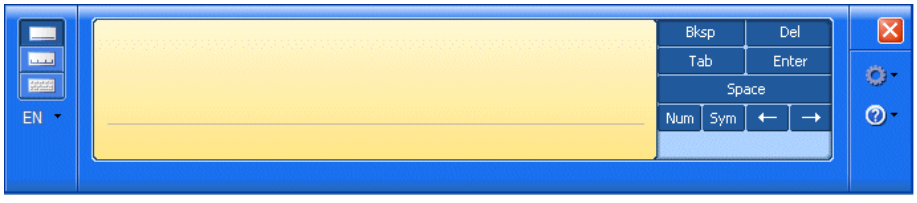
You can dock it at the top or bottom of your screen, using the small gear icon in the middle of the right-hand side of the panel.

To switch between input modes, use the buttons at the top left of the **Panel**:

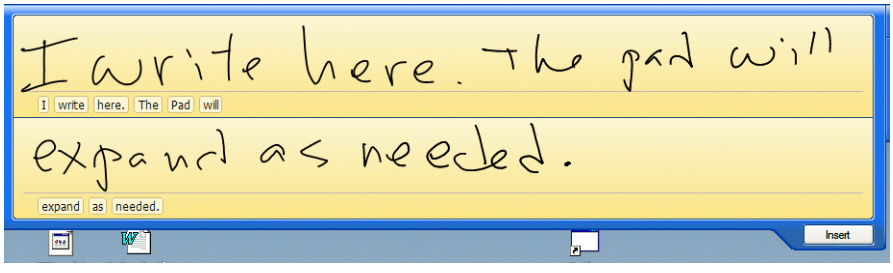


• Handwriting in the Writing Pad

This is the **Writing Pad**, accessed using the top button on the left-hand side of the **Tablet PC Input Panel**:



To use the **Writing Pad**, just write in the box with the stylus:



Windows' recognition of your handwriting is shown as typed text in small rectangles below the handwriting. When you're satisfied that this text is correct, click the **Insert** tab. The text will then be inserted at the insertion point in the active field or window.

Note When you click **Insert**, if there is no active field or window containing a flashing cursor, the text will disappear and be lost.

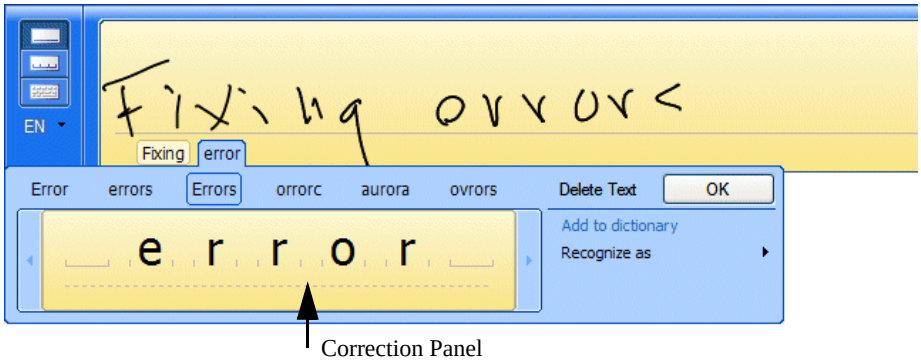
Tip Instead of clicking the **Insert** tab, you can click (or tap) in the window where you want the text to appear.

When you use the **Writing Pad**, Windows tries to recognize the words that you write by comparing them to words its own dictionary. For each handwritten word, it seeks the closest dictionary word. For example, if you write "eezy" (as a misspelling for "easy"), Windows will find "lazy" as the closest match. If you really wanted "eezy" for some reason, you would need to make a correction.

You can correct text either *before* or *after* you insert it into a waiting text field or window.

Correcting Text before Insertion

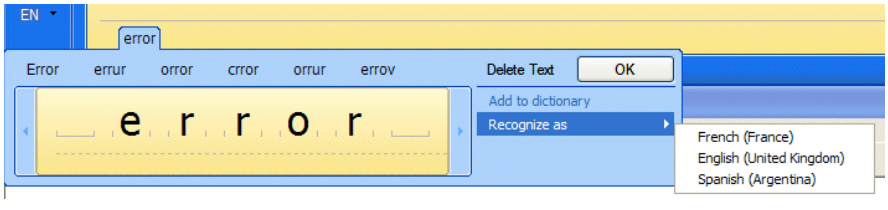
If one of the words in a small rectangle below your handwriting is incorrect, you can click it to open a *correction panel*:



Correction Panel

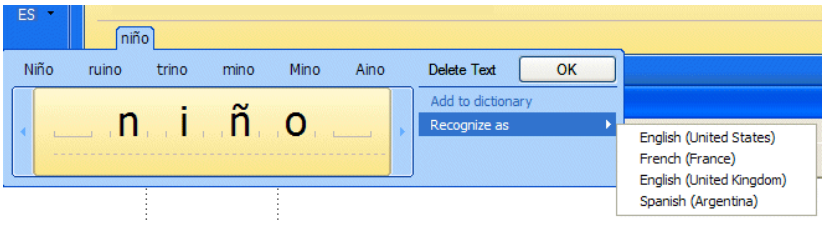
In the correction panel, you have four options:

1. Choose one of the alternative recognition candidates listed across the top of the panel.
2. Click **Delete Text**. The text will be deleted, leaving a *space* in your handwriting input where you can re-enter the word.
3. Correct individual letters, as you would when using the **Character Pad** (see "Inputting Words or Phrases With the Character Pad" on page 41, below).
4. Select **Recognize as** to open a small list of other languages that this word might belong to. For example, you might tell the system that the current word should be recognized as French, Spanish, or British English.



If you're using Spanish as the Interface Language, your choices will include

American English, British English, South American Spanish, or French.

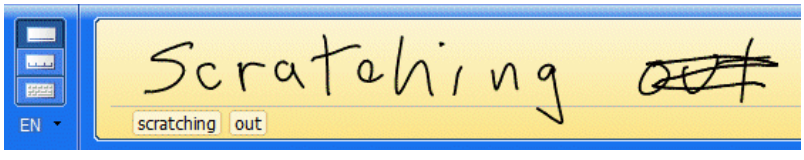


Whichever correction facility you choose, click OK when you're finished.

Note When correcting text in the **Writing Pad**, if you switch to the **Character Pad** or the **On-screen Keyboard**, you'll lose your current text.

Scratching Out Text

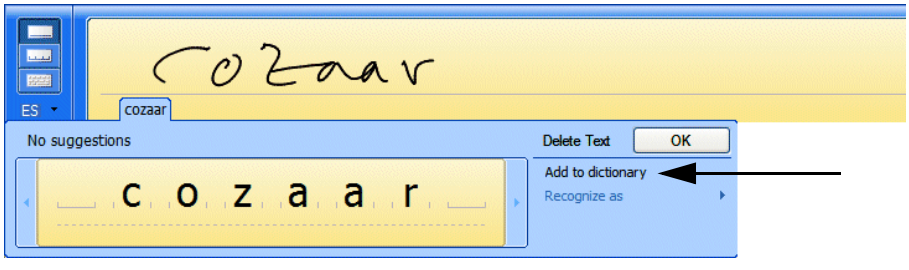
To delete characters, words, or entire phrases, you can "scratch them out." Simply rub the stylus back and forth (right and left) like this:



You'll need to scratch back and forth *horizontally*. Scratching at an angle or scribbling may not work. A simple three-stroke—right-left-right—works very well. A *blank* will be left where you scratched something out. You can enter new handwriting there.

Adding Words to a Dictionary

When a handwritten word is misrecognized, it's often because the word is not in Windows' dictionary. Medical words, such as drug names, are sometimes misrecognized for this reason. (Try "Cozaar," for an example.) To avoid future mistakes, following a failed recognition attempt, you can add your word to the dictionary.

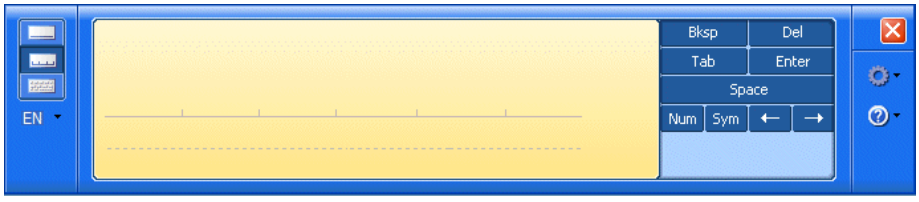


Correcting Text after Insertion

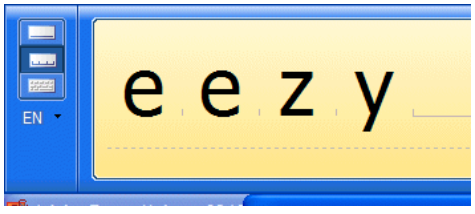
Once text has been inserted, all three modes of the **Tablet PC Input Panel**, and the standard keyboard too, can be used for correcting text. See "Correcting Inserted Text" on page 45, below.

• Inputting Words or Phrases With the Character Pad

This is the **Character Pad**, accessed through the middle button on the left-hand side of the **Tablet PC Input Panel**:



The line in the **Character Pad** is divided into sections by short vertical lines (unlike the line in the **Writing Pad**). You write one character per section. Windows tries to recognize each character individually: it does *not* use a dictionary to guess the identity of the whole word. Thus you can enter "eezy" (or "Motrin") and the characters will be accepted without changes:

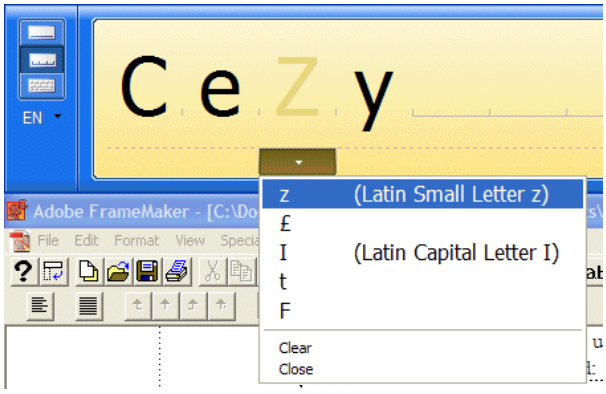


Tip The **Character Pad** is useful for inputting acronyms, jargon, or specialized words, since Windows doesn't try to "helpfully" second-guess your intention.

Correcting Text Before Insertion

You can correct individual character recognition errors. In the "eezy" example, if Windows (1) misrecognizes the first character and (2) capitalizes the 'z', you can

open a drop-down correction list by hovering the stylus over the letter to be corrected.



Note You can also correct a letter by just re-entering it, *writing right over* the letter that is already there.

NOTE: You can also correct a letter by just re-entering it, *writing right over* the letter that is already there.

As with the **Writing Pad**, you can delete one or more characters by "scratching them out." Again, a simple 3-stroke—right-left-right—will work well.

Correcting Text after Insertion

As mentioned, once text has been inserted, all three modes of the **Tablet PC Input Panel**, and the standard keyboard too, can be used for correcting text. See, "Correcting Inserted Text" on page 45, below.

• Entering Text With the On-screen Keyboard

The **On-screen Keyboard** is accessed using the lowest button on the left-hand side of the **Tablet PC Input Panel**.

Its layout is similar to that of a standard keyboard. To type, just tap the keys with the stylus. However, on-screen the *Shift*, *Ctrl*, and *Alt* keys are used a bit differently from their physical counterparts: the on-screen control keys *stay depressed* until you tap another key.

For example, to type a capital 'P', you *first* click **Shift** and *then* click **P**.

Note Be careful not to click **Shift** without a following character. If you do, the **On-screen Keyboard**, *and the standard keyboard as well*, will freeze in Shift mode. You'll be unable to type lower case characters, numbers, or any other unshifted characters.

Correcting Text After Insertion

As mentioned, once text has been inserted, all three modes of the **Tablet PC Input Panel**, and the standard keyboard too, can be used for correcting text. See, "Correcting Inserted Text" on page 45, below.

• Entering Text in Spanish

English or Spanish Keyboard Layout?

The *layout* of the physical keyboard—its assignment of characters to keys—depends on the language of the current Active Participant in a Conversation in progress. For example, when Dr. Smith is the Active Participant, the standard English layout is used, since Converser knows that he's an English speaker. By contrast, when Sra. González is taking her turn, the Spanish keyboard layout is used, since she's known to be a Spanish speaker, and will need to type characters not used in English, such as ñ and á.

Standard Keyboard (Spanish layout)

Spanish text is normally typed using the Spanish keyboard layout. As mentioned, this layout is automatically enabled by Converser whenever a Spanish speaker becomes the Active Participant.

Many of the key assignments for Spanish are the same as for English; but there are some important differences. For instance, the key which gives an equal sign (=) in English would produce the upside down question mark (¿) in Spanish. Similarly, the English key for the plus sign (+) would produce the Spanish upside down exclamation point (¡). The full set of Spanish key assignments can be seen on the Spanish **On-screen Keyboard**.

Of course, the physical *labels* on the physical keys can't be changed automatically when the software layout changes. Thus Spanish typists using a standard keyboard with the English physical layout will normally require stick-on Spanish key labels, to be used when the Spanish layout is in effect. Since these stick-on labels are transparent, they augment rather than obscure the original English key labels: the permanent English labels remain visible on the left side of the keys, while the temporary Spanish labels are added on the right side.

Stick-on labels are not necessary for all keys, since many have the same character assignments in English and Spanish layouts.

Even with the stick-on labels, typing in Spanish can be confusing. Thus some users will prefer to use the Spanish **Writing Pad** or the Spanish **On-screen Keyboard**.

Note Staff members may occasionally need to type Spanish, using the Spanish keyboard layout, on a computer lacking stick-on labels. Here are the necessary keys in this case:
[(left square bracket), followed by e or E produces é or É
; (semicolon) or : (colon) produce ñ or Ñ
+ produces ¿ and = produces ¡
- (hyphen), followed by e or E produces è or È
{ (left curly bracket), followed by u or U produces ü or Ü

Standard Keyboard (English layout)

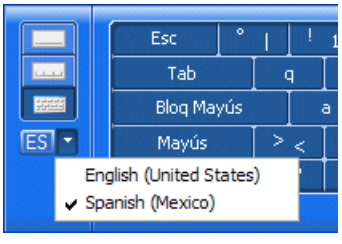
Staff members may occasionally need to enter accented Spanish text with the standard *English* keyboard layout. This is possible, but of course you won't see the special Spanish characters on the keys. Here are the relevant keys:

Ctrl + ' (apostrophe), followed by e or E produces é or É
Ctrl + Shift + ~ (tilde), followed by n or N produces ñ or Ñ
Alt + Ctrl + Shift + ? produces ¿
Alt + Ctrl + Shift + ! produces ¡
Ctrl + ` (back-apostrophe), followed by e or E produces è or È
Ctrl + Shift + : (colon), followed by u or U produces ü or Ü

Tablet PC On-Screen Keyboard

To enter Spanish text via the **Tablet PC Input Panel**, you can select Spanish (ES) in the **Panel**'s drop-down language menu. However, Converser makes this selection automatically when a Spanish speaker's turn starts.

Then, to use the Spanish **On-screen Keyboard**, select the lowest of the three buttons on the left-hand side of the **Panel**.



The Spanish keyboard looks like this:

The Spanish special characters and accents are on the right-hand side of the keyboard:

For example, to enter an é, choose ¨ ´ and then type 'e'. To enter a ü, choose Mayús , then ¨ , and then type 'u'.

The typing sequence for other special characters is self-explanatory.

Spanish Handwriting Recognition

To enter Spanish text via the **Tablet PC Input Panel**, you can select Spanish (ES) in the **Panel**'s drop-down language menu. However, this selection is automatic when a Spanish speaker's turn starts.

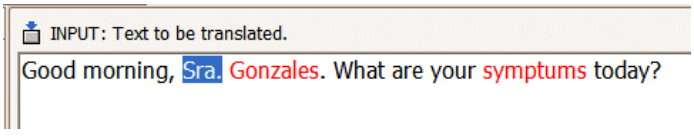
Then, to use the Spanish **Writing Pad** or **Character Pad**, select the top or middle button of the three buttons on the left-hand side of the **Panel**.

Text entry and correction procedures are the same as for English (explained above), except that a Spanish dictionary rather than an English one is used for word recognition in the **Writing Pad**.

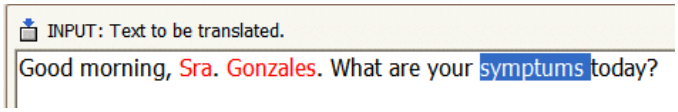
Insert the text into Converser using the Panel's **Insert** button, or by clicking (or tapping) in the window where text should appear.

• Correcting Inserted Text

When you correct text which has already been inserted into Converser, you can use any input method (standard keyboard, **On-screen Keyboard**, **Writing Pad**, or **Character Pad**) for new text entry. For example, in the following inserted text, the word "symptoms" is incorrect:



To correct the word "symptums," you could use Converser's spellchecking facility. However, you may instead prefer to correct the error by writing over it. In this case, double-click the error to select it. Then you can correct it by hand in one of



four ways:

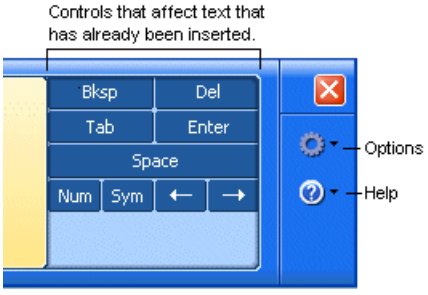
1. Type the correct word with the standard keyboard.
2. Type the correct word with the **On-screen Keyboard**.
3. Write the correct word in the **Writing Pad** and click **Insert** (or click or tap).
4. Write the correct word in the **Character Pad** and click **Insert** (or click or tap).

In each case, the correct word will replace "symptums." (You can also enter corrections using your voice. See "Dictation and Vocal Correction" on page 58.)

Note You could also highlight the letter 'u' and use any of the four methods to replace it with 'o'.

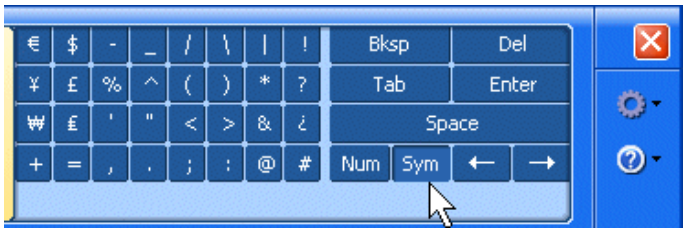
NOTE: You could also highlight the letter 'u' and use any of the four methods to replace it with 'o'.

For editing text which has *already been inserted* into Converser, the **Tablet PC Input Panel** offers several special keys. They appear on the right-hand side of the **Panel** during such editing (and only then):

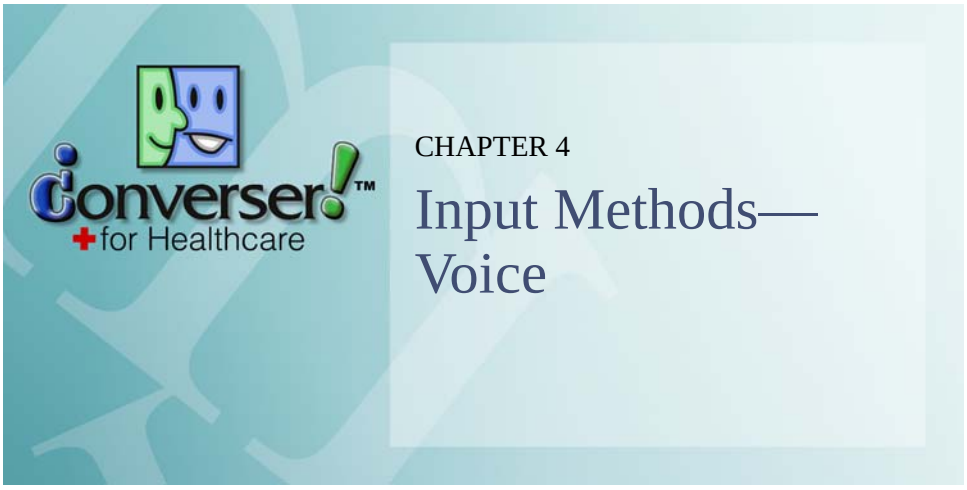


The **arrow keys** move the insertion point (cursor) back and forth through the text. The **Backspace** and **Delete** keys delete the character before or after the insertion point. The **Space** and **Tab** keys enter a space or tab at the cursor, and the **Enter** key moves to the next line.

You can also click the **Sym** key to open an additional set of symbol keys:



Likewise, the **Num** key opens a set of number keys.



CHAPTER 4

Input Methods—Voice

Converser for Healthcare 3.0 offers four *input modes*, or ways to enter text into the **Input Window**:

- handwriting
- on-screen keyboard
- standard, physical keyboard
- speech

The first three input modes are provided by the Windows XP, Tablet PC Edition, operating system, and are discussed in a separate chapter ("Input Methods—Typing, Writing").

The last input mode, speech, is provided by Converser, in cooperation with Dragon NaturallySpeaking. NaturallySpeaking, the only speech recognition program that has been tested with Version 3.0, is produced and sold by Nuance Communication, Inc. Converser has been designed to work closely with NaturallySpeaking in order to take full advantage of its features, although the two software products are installed separately.

Note Installation of NaturallySpeaking is *optional*: Converser for Healthcare 3.0 can be used without it. In this case, Speech Input Mode will be unavailable, but the three text-only input modes (standard keyboard, handwriting, and on-screen keyboard) can be used without modification.

Converser offers several exciting facilities for speech input and control.

- It can type what you say, just like a secretary. In other words, it can take dictation.
- It can also obey spoken commands for correcting dictation errors.

- You can control the Converser interface with your voice instead of your mouse or stylus.

To use speech input most effectively, users can use the NaturallySpeaking facility for creating a **Personal Audio Model**, which allows NaturallySpeaking to study their individual speech characteristics. In the next section, we'll describe this creation process.

Note In Converser for Healthcare 3.0, Speech Input Mode has been implemented and tested for English speakers only. For now, Spanish speakers are expected to reply using the three remaining input modes (handwriting, standard keyboard, or on-screen keyboard (see Chapter 3, "Input Methods—Typing, Writing""Input Methods—Typing, Writing")), or using the **Translation Shortcuts Browser** (see Chapter 6, "Translation Shortcuts""Translation Shortcuts") with the mouse or stylus, and without text input. Future versions of Converser will enable dictation and command-and-control with Spanish as well as English.

Preparations for Speech Input Mode

In Speech Input Mode, registered English-speaking Converser Users can dictate input, correct dictation errors by voice, and control Converser using Voice Commands.

In preparation, several steps must be taken:

- Dragon NaturallySpeaking must be installed.
- Each registered English-speaking Converser user wishing to use Speech Input Mode must create a NaturallySpeaking User including a personal audio profile. (As part of this profile creation, the microphone to be used for speech recognition must be adjusted.)
- Optionally, you can set up keyboard shortcuts or customize tablet buttons to allow the microphone to be easily turned on and off, and to enable Push-to-Talk functionality.

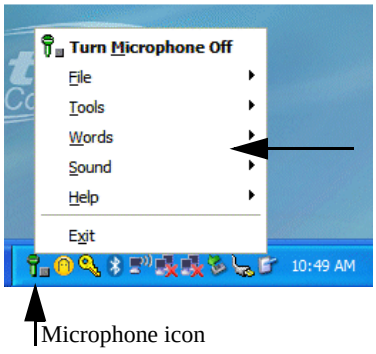
We now examine these steps individually.

Installing Dragon NaturallySpeaking

Dragon NaturallySpeaking should be installed on the same computer where Converser for Healthcare is installed, according to the instructions provided by the vendor, Nuance Communication, Inc.

Enterprise versions of NaturallySpeaking, in which audio profiles are maintained on a central server and then downloaded onto local computers on demand, have not yet been tested for use with Converser for Healthcare.

When the NaturallySpeaking application is running, it can be controlled through a microphone icon which is always visible in the lower right-hand area of the Windows screen. To bring up a menu, right-click on this icon.



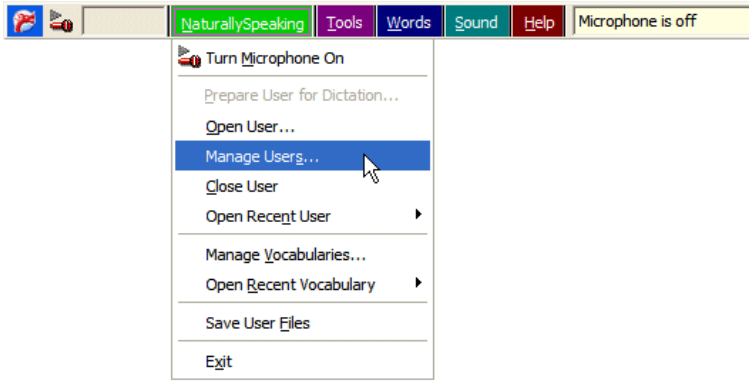
In addition, you can optionally display the **NaturallySpeaking Dragon Bar**, which can be docked at the top or bottom of the screen or allowed to float freely.

The lower button bar (containing **Correction ...** etc.) can be turned on and off by clicking the double arrow at the right of the menu bar.

In the images shown in this chapter, the **NaturallySpeaking Dragon Bar** is docked at the top of the screen and Converser fills the rest of the screen under it.

Creating and Opening a NaturallySpeaking User

At the end of the Dragon NaturallySpeaking installation, an opportunity is offered to *create* the first NaturallySpeaking User. Thereafter, new NaturallySpeaking Users can be created at any time by using NaturallySpeaking's **Open User ...** or **Manage Users...** dialogs. Both can be accessed through the **NaturallySpeaking** menu in the **NaturallySpeaking Dragon Bar**.



Alternatively, the same dialogs can be accessed through the **File** item in the right-button menu of the NaturallySpeaking microphone icon in the lower-right-hand area of the Windows screen.

Once NaturallySpeaking has successfully created a new User account for you, you'll have a chance to *open* it, or load it, when NaturallySpeaking starts up, so that NaturallySpeaking can prepare to recognize *your* voice, rather than someone else's. At any time during a NaturallySpeaking session, you can switch Users via NaturallySpeaking's **Open User ...** action.

Naming NaturallySpeaking Users

Each NaturallySpeaking User must be named. Registered Converser Users are free to choose any NaturallySpeaking names they like.

To avoid confusion, the NaturallySpeaking User names and the Converser User names should be mutually recognizable, if not identical. For example, if the Converser User Name is *johnsmith*, the NaturallySpeaking User Name might also be named *johnsmith*, *John Smith*, *J. Smith*, *JSmith*, and so forth.

Converser and NaturallySpeaking currently have no knowledge of each other's internal User Names. Mutual recognizability is suggested only to avoid *user* confusion.

Voice Training for NaturallySpeaking Users

Once a NaturallySpeaking User has been created for a particular speaker, NaturallySpeaking continually learns about his or her pronunciation and voice characteristics by studying recognition errors and their corrections. In addition, users can carry out *Voice Training* by reading selected texts aloud, so that the NaturallySpeaking can study the speakers' pronunciation of known words and sequences.

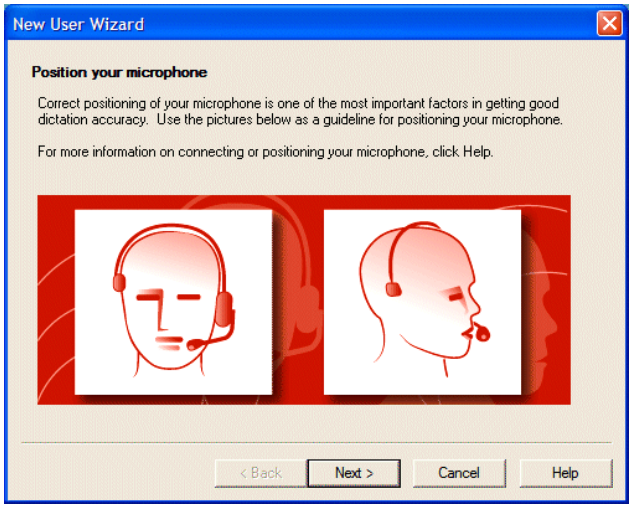
From NaturallySpeaking Version 9.0 on, Voice Training is *optional*, and can be bypassed when a new User is created. In earlier versions, it is *required* for each new user. Since even optional Voice Training can increase recognition accuracy, we'll describe it here.

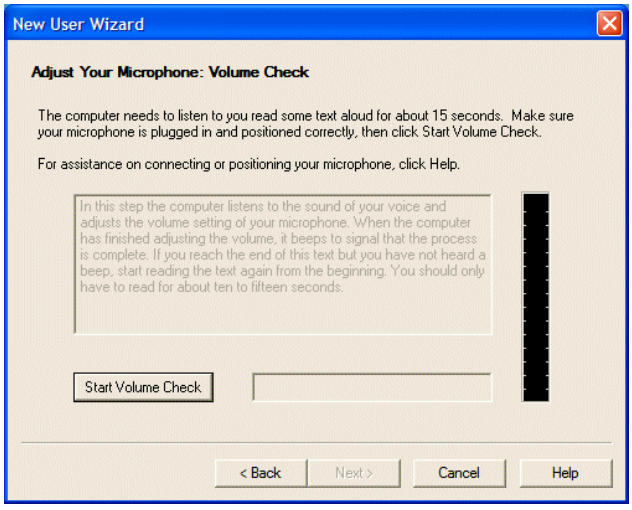
The process generally requires 5 to 10 minutes, and proceeds in two stages:

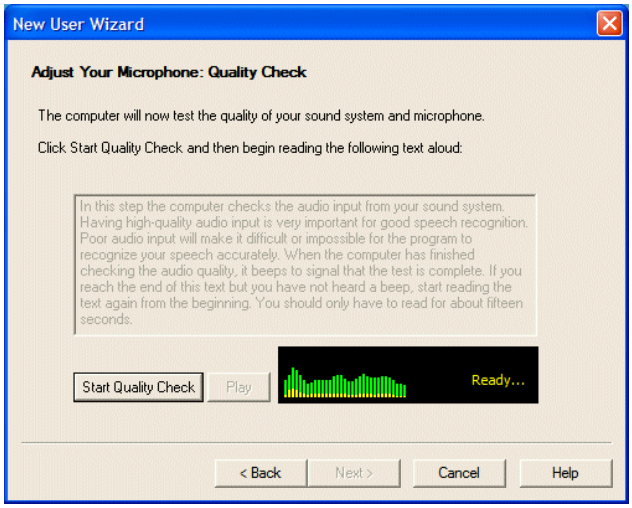
- First, microphone set up and adjustment is verified.
- Second, the prospective NaturallySpeaking User is asked to read aloud, so that his or her pronunciation and vocal characteristics can be studied.

Microphone adjustment involves connecting and positioning the microphone and checking its volume and quality. Some brief speech samples are requested, to help

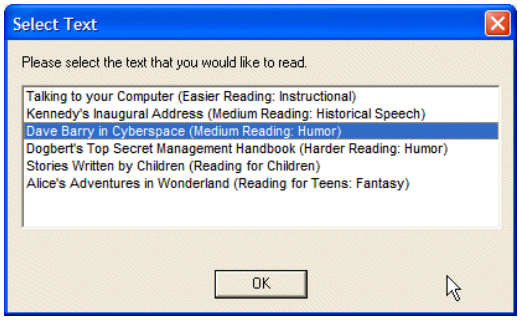
NaturallySpeaking judge whether the microphone level is too high, too low, or just right, and to gauge the level of background noise in comparison with speech.







Once microphone adjustment is complete, you select and read aloud a short text which interests you (e.g. a selection from *Alice in Wonderland*, John F. Kennedy's inaugural address, etc.).

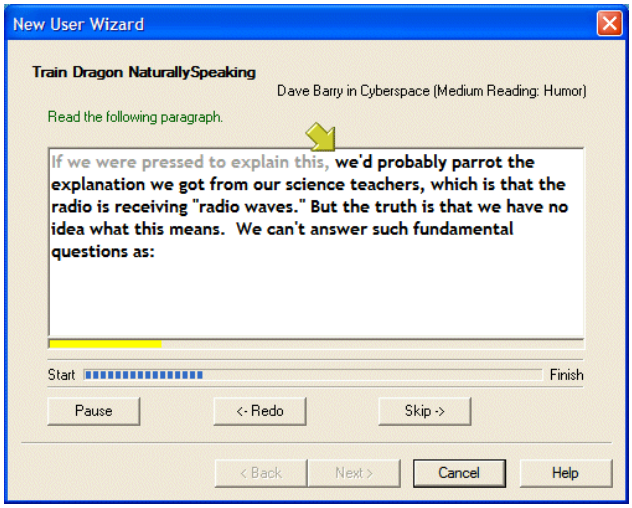


As you read, NaturallySpeaking compares your spoken words to the written ones, and in this way learns how you pronounce the individual sounds within them.

Note This study of your voice is helpful because NaturallySpeaking performs speaker-*dependent* speech-recognition, which permits accurate recognition of hundreds of thousands of word. In this respect, NaturallySpeaking differs from the sort of speaker-*in*dependent speech recognition that you may encounter on the telephone, or in other similar applications. In these applications, the range of vocabulary to be recognized is much narrower. Converser for Healthcare takes full advantage of this speaker-dependent breadth of vocabulary. Because of it, you can vocally enter almost any text that you want to translate.

As you read aloud, an arrow pointer keeps your place. If NaturallySpeaking has been able to recognize the last few words you read, the pointer moves beyond

them; if not, the pointer remains where it was, and you must either try pronouncing the segment again or skip it by clicking a button.

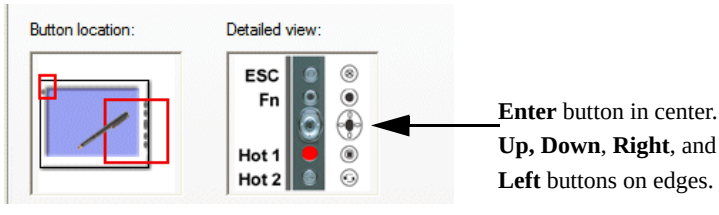


Meanwhile, a microphone level check is visible—a bar indicating the loudness of your voice, which turns green when it's in the right volume range.

When you've read enough to allow adequate analysis of your pronunciation, NaturallySpeaking tells you so, and asks you to wait during the actual analysis, which takes another minute or two.

Customizing Keys and Buttons for Microphone Control

Tablet PCs allow operation without keyboards, since it's possible to provide input using handwriting or the on-screen keyboard (see Chapter 3, "Input Methods—Typing, Writing"). To aid keyboard-free operation, Tablets provide several control buttons not found on standard PCs. The extra buttons are on the right-hand side of the screen unit, and are designated (from top to bottom) **ESC** (Escape), **Fn** (Function), **Enter**, **Up**, **Down**, **Right**, **Left**, **Hot 1**, and **Hot 2**.



The **ESC**, **Fn**, and **Enter** buttons behave like their keyboard counterparts, and the **Up**, **Down**, **Right**, and **Left** buttons act like arrow keys on the keyboard.

Our interest is in the **Hot 1** and **Hot 2** buttons. By default, they perform useful operations unique to the Tablet PC:

- **Hot 1** opens the Tablet PC **Dashboard** (which allows control of the computer's display, audio, pen, and other attributes);
- and **Hot 2** executes the **mcrotate** program (which rotates the screen orientation from horizontal to vertical).

If you're using Converser on a Tablet PC, it will be useful to *customize* both hot buttons so that they control the NaturallySpeaking microphone: **Hot 1** will switch the mic on and off; and **Hot 2** will provide Push-to-Talk functionality.

This customizing requires three steps:

1. Provide alternative methods of accessing the **Dashboard** and executing **mcrotate**, in order to free up the two hot buttons for other uses.
2. Assign keyboard keystroke combinations in NaturallySpeaking which have the desired microphone switching behaviors.
3. Customize the Tablet PC buttons so that they virtually execute these NaturallySpeaking keystroke combinations.

Alternatives for Tablet Hot Buttons

To provide alternative methods of accessing the **Dashboard** and executing **mcrotate**, create Windows shortcuts on the Desktop for the following programs:

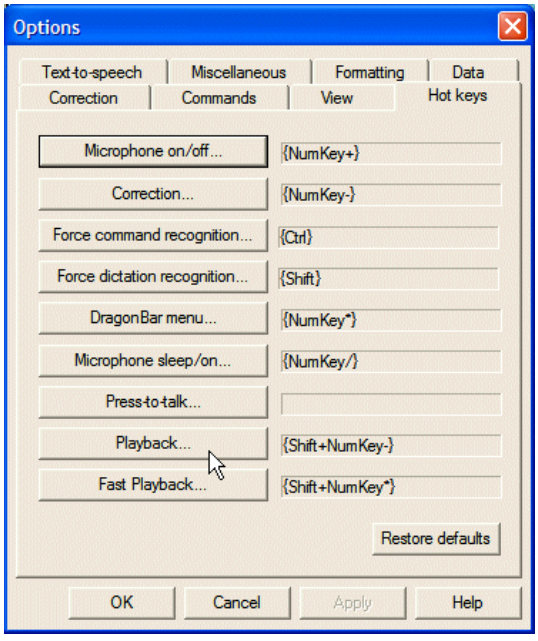
C:\WINDOWS\system32\dashboard.exe

C:\WINDOWS\system32\mcrotate.exe

Assigning NaturallySpeaking Key Combinations

To assign keyboard keystroke combinations in NaturallySpeaking which have the desired microphone switching behaviors, take these steps:

1 In the **NaturallySpeaking** toolbar or from the right-button menu of the NaturallySpeaking microphone icon, open **Tools > Options** and choose the **Hot keys** tab.



2 Click the **Microphone on/off ...** button. The **Set Hot Key** dialog appears.

3 In response to the prompt, "Press the key combination that you want to turn the microphone on and off," press *Alt+o*. Then press OK.

4 Click the **Press-to-talk ...** button. The **Set Hot Key** dialog reappears.

5 In response to the prompt, "Press the key combination you want to press and hold down to turn on the microphone," press *Alt+t*. Then press OK.

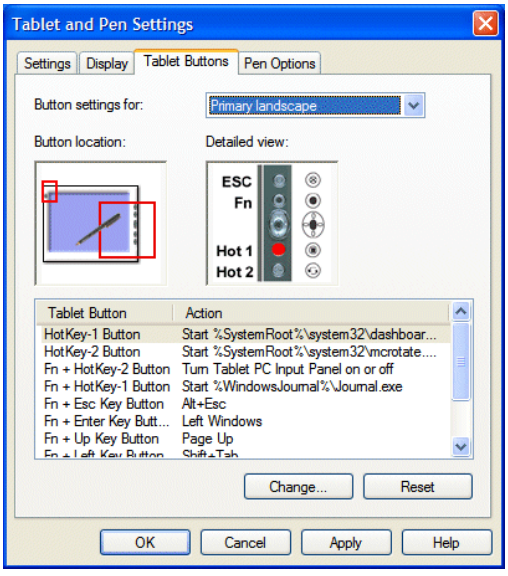
6 Click OK to close the Options dialog.

Note As you may have noticed, NaturallySpeaking already provides default keystroke combinations for the two actions in question. Unfortunately, these default combinations employ keystrokes which the Tablet PC buttons are unable to emulate. Thus the defaults must be overridden for our purposes. The new combinations (*Alt+o* and *Alt+t*) have been chosen to avoid conflicts with existing NaturallySpeaking keystrokes, but are not otherwise significant.

Customizing Tablet Hot Key Buttons

To customize the Tablet PC buttons so that they virtually execute the new NaturallySpeaking keystroke combinations, take these steps:

1 Open **Control Panels > Tablet and Pen Settings > Tablet Buttons**.



2 In the **Tablet Button** list, highlight the **HotKey 1** line.

3 Click **Change ...** The **Change Tablet Button Actions** dialog appears.

4 In the **Action** drop-down menu, select "Press a key or key combination".

5 Place the insertion point in the **Keys** input buffer, and then press **Alt+o**.

6 Press OK.

7 Back in the **Tablet Button** list, highlight the **HotKey 2** line.

8 Click **Change ...** The **Change Tablet Button Actions** dialog reappears.

9 In the **Action** drop-down menu, again select "Press a key or key combination".

10 Place the insertion point in the **Keys** input buffer, and then press **Alt+t**.

11 Press OK.

Congratulations! The Tablet **Hot 1** and **Hot 2** buttons should now provide handy ways to switch the NaturallySpeaking mic on and off. **Hot 1** now acts as a toggle, or standard on/off switch, while the **Hot 2** now provides Push-to-Talk functionality.

• Dictation and Vocal Correction

We assume that you've prepared for Speech Input Mode as described in the preceding section: you've installed Dragon NaturallySpeaking; you've created a NaturallySpeaking User (personal audio profile) for your own use, e.g. *JSmith*; and you may have customized keyboard shortcuts or tablet buttons to facilitate control of the microphone.

Beginning a Turn in Speech Input Mode

You're now ready to dictate some text to be translated. There are three final steps to take when beginning a turn in Speech Input Mode—one in Converser, and two in Dragon NaturallySpeaking:

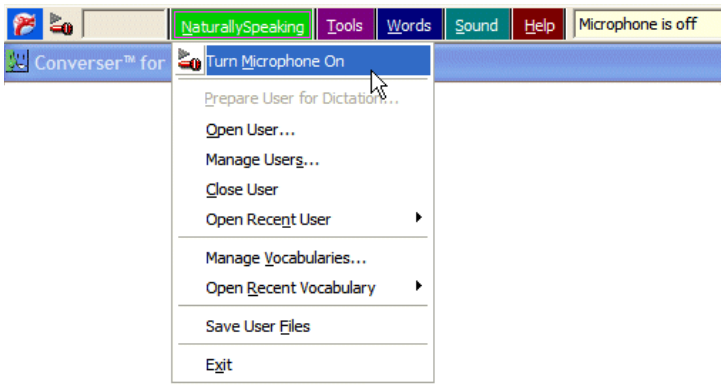
1 *In Converser*, begin a new turn as Active Participant as described in Chapter 2, "Registering Users, Managing Conversations, and Saving Transcripts": you can click on your name (e.g. Smith, John or Dr. Smith) in the **Conversation Panel**, or you can use the **Last English Participant** or **Last Spanish Participant** item on the **User** menu or toolbar).

To enable dictation, the insertion point must be in the Converser **Input Window**. It should appear in this window automatically when a new turn begins. If it doesn't, click once to put it there.

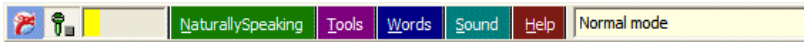
2 *In Dragon NaturallySpeaking*, open your NaturallySpeaking User (e.g. *JSmith*).

3 *In Dragon NaturallySpeaking*, turn on the microphone. If you've prepared custom keys or buttons for this purpose, you use can them now. You can click the NaturallySpeaking microphone icon (just once!) at any time to turn the microphone on or off.

or you can use the command in the NaturallySpeaking **NaturallySpeaking** menu item



When the microphone is on, the microphone icon will switch from prone to upright and a message in the **NaturallySpeaking** toolbar will show its status as "Normal mode."



Tip If you've customized NaturallySpeaking keyboard combinations as suggested above, you can use the custom combination *Alt+o* to switch the mic on and off, and can use *Alt+t* for Push-to-Talk functionality. (If you haven't customized, and

if your keyboard has a number pad on the right-hand side, you can use NaturallySpeaking's *default* combinations: the plus (+) key on the number pad switches the mic on and off, and the slash (/) key on the number pad gives Push-to-Talk.)

Dictation

You can then start to *dictate*—to pronounce the words that you want to translate. Speak "announcer-style"—loud and clear.

For example, you might say "I'm happy to see you again PERIOD." You'll see the words and punctuation appear on the screen in the **Input Window** as you speak.

You don't need to shout (assuming that the microphone is set up correctly), but the speech recognition program does need to hear each sound.

You should *not* say … one … word … at … a … time. In fact, the dictation program prefers whole phrases (several words together), since it recognizes words by their neighbors.

Likewise, you should *not* break words in … to … syl … la … bles—because the program will assume that they're separate words.

Punctuation marks like "PERIOD," "QUESTION MARK," or "COMMA" are helpful for the translation program, but it often succeeds without them.

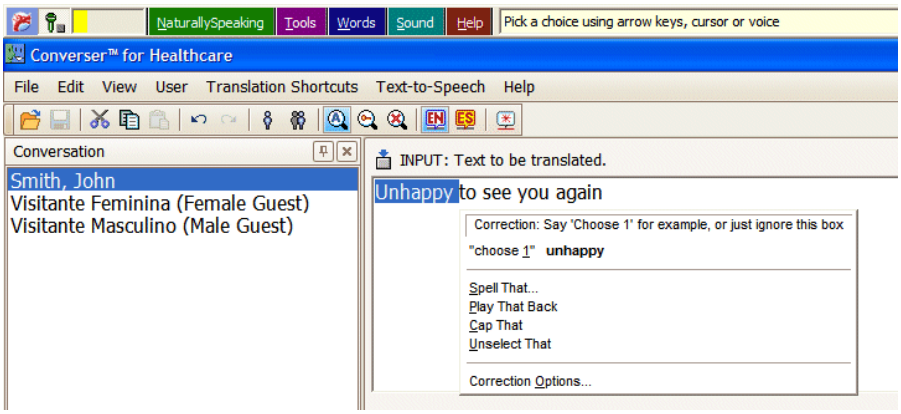
Correcting Dictation Errors

Assume that the speech recognition program has made an error: for instance, you said "I'm happy to see you again," but the program heard "Unhappy to see you again." No problem—you can easily fix the error with your voice.

Several different NaturallySpeaking commands could be used to make the correction. Here, you can choose the **"Correct <dictated words>"** command.

1 Say **"Correct unhappy"**.

In response to this command, a list appears under "unhappy," showing other words or sequences which the speech recognition program thinks you might have said. The correct word sequence, "I'm happy," may be included in the list.



If the correct word sequence had been in the correction list, say as item 2, then you could have inserted it in place of unhappy by saying **"Choose two"**. In this case, the correct replacement is not in the list, so you could say "I'm happy" while unhappy is highlighted.

The corrected sentence now reads "I'm happy to see you today," which is what you intended.

2 You can proceed to *translate* the new input in the normal way (see Chapter 5, "Translating").

Tip Instead of correcting a speech recognition error with a NaturallySpeaking command, you can always use the stylus, the mouse, or a standard keyboard. Keep these alternatives in mind if for some reason vocal correction isn't working for you in a particular instance. The rule of thumb is, "Don't struggle!" If you find yourself correcting the correction of the correction, stop fighting and simply use another correction mode.

Learning the Voice Commands

If you use Converser regularly in Speech Input Mode, you'll soon get to know the most useful NaturallySpeaking commands. To see a partial list of NaturallySpeaking commands at any time, say **"What can I say?"** The partial list also links to a complete list maintained in the NaturallySpeaking Command Browser.

You can also access a list of the most useful NaturallySpeaking commands via the **Converser Voice Commands** item in Converser's **Help** menu.

There is often more than one way to correct text with voice commands. For example, instead of saying **"Correct unhappy,"** you could say "**Select unhappy"** and then **"Correct That"**.

The list of alternative speech recognition candidates would then appear, just as if you had said **"Correct unhappy"**.

To *delete* the last phrase you spoke, say **"Scratch That"** (You can repeat this command several times to delete the last several phrases.)

To capitalize words, say **"Capitalize That"**

To change a capitalized word to lower-case, say **"No-caps That"**.

Tip Always pronounce a NaturallySpeaking correction command as a *complete phrase, without pauses* between the words. If you said **"What …[pause] can I say?,"** the program wouldn't recognize this speech as a command. Instead, it would type those words as text. Always pronounce NaturallySpeaking correction commands *loud and clear – all the way to the end.* If the last word is mumbled, the command may be misinterpreted as text.

—Here is a list of useful NaturallySpeaking commands for correcting dictation errors:

You say	This happens
"Capitalize That"	Capitalizes the first letter of each word in a selection (except for articles and prepositions).
"Choose <number>"	Chooses among numbered alternatives. Can be used to select an alternative speech recognition candidate.
"Correct <dictated words>"	Corrects incorrect words in the dictated text. A numbered menu of alternative speech recognition candidates will appear. You can choose a number by double-clicking the mouse, or by using the "Choose <number>" Voice Command.
"Correct That"	Corrects incorrect words which have already been selected (if any). If no text has been selected, corrects the last pause group in the dictated text.
"No-caps That"	Lower-cases the first letter of each word in a selection.
"Scratch That"	Deletes text which has already been selected (if any). If no text has been selected, deletes the last pause group in the dictated text. This command can be repeated in order to delete successive pause groups.
"Select <dictated words>"	In the input field, selects words in the dictated text. *You can also select text using the stylus or mouse.*

• Voice Commands

Voice Commands can be used not only to correct dictation, but to control Converser in general. In Version 3.0, you can

- control the *microphone* by turning it off, or by putting it to sleep and waking it up;
- control the *buttons* on the **Converser Input Screen** and **Translation Screen;**
- control all of the *menus* and their menu items;
- operate *keys and mouse buttons* with your voice—for example, to move around the screen by controlling the *Tab* key, or to move up and down lists of Translation Shortcuts.

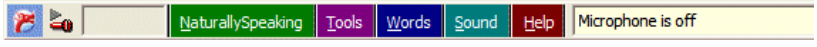
Vocal Control of the Microphone

NaturallySpeaking includes built-in voice commands for turning off the microphone, and for putting it to sleep and waking it up. (When the microphone is sleeping, it ignores everything except the wake-up commands.)

Turning the Microphone Off

To turn the microphone *off*, you can say **"Microphone off"**.

The microphone icon moves to a horizontal position and turns red to indicate that it's turned off.



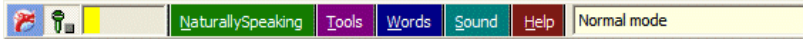
There's no command for turning it on again—since it's off, it can't hear you!—so you'll have to turn it on manually.

Putting the Microphone to Sleep

Assume that you're dictating with the microphone on and you want to *pause*—for example, to talk to someone without NaturallySpeaking mistaking your words for text. You can say either **"Go to sleep"** or "**Stop listening**". This puts the microphone in *sleep mode*. The microphone icon turns yellow and leans at a 45° angle. Now you can talk without activating NaturallySpeaking. Until you say the

wake-up phrase, NaturallySpeaking pays no attention.

To awaken the microphone, say either "**Wake up**" or "**Listen to me.**" The microphone turns on and the icon stands upright again.



Summary of Voice Commands for Microphones

Here's a summary of voice commands related to the microphone:

You say	This happens
"Microphone off"	Turns off the microphone. (Note that there is no Voice Command to turn on the microphone; the mike must be turned on manually.)
"Go to sleep" or "Stop listening"	Puts the microphone into sleep mode, so that it will react to nothing except the "Wake up/Listen to me" command. This is a way to turn off the microphone temporarily, so that it can be reawakened by voice.
"Wake Up" or "Listen to me"	Awakens the microphone from sleep mode, so that dictation and Voice Commands can resume.

Vocal Control of Converser Buttons

You can use your voice to "press" the enabled buttons on the **Converser Input Screen** and **Translation Screen**.

To do so, say the relevant button name, e.g. say "**Translate**".

Always *pause before and after* pressing a button by voice, as in "**... [pause] Translate [pause] ...**". If the intended command immediately follows or immediately precedes dictated text, it may be misunderstood as part of that input text. A brief pause—less than a second—will be sufficient.

If a button-pressing command contains several words, always pronounce them as a *complete phrase, without pauses* between the words. If you said **"Pronounce …[pause] Selection,"** the program would assume that these words were part of the input text to be transcribed.

On the other hand, what if your actual intent is to dictate the word "translate" (or "pronounce selection" or some other button name) as part of the input text, as in "Converser was unable to translate that sentence"? There are two ways to obtain this result:

1. You can purposely pronounce the word "translate" *without* a pause either before and after it.
2. You can hold down the *Shift* key while speaking.

Tip The *Shift* key can be pressed on the on-screen keyboard of a tablet PC, as well as on a standard keyboard.

Always pronounce button commands *loud and clear—all the way to the end*. If the last word is mumbled, the command may be misinterpreted as text.

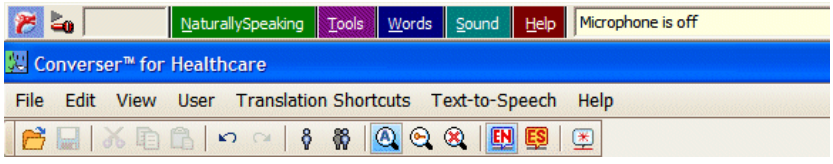
SUMMARY OF VOICE COMMANDS FOR CONVERSER BUTTONS

Here's a summary of Voice Commands related to Converser Buttons:

You say	This happens
"Translate"	The **Translate** button is clicked.
"Accept Translation Shortcut"	The **Accept Translation Shortcut** button is clicked.
"Erase Input"	The **Erase Input** button is clicked.
"Pronounce Selection"	The **Pronounce Selection** button is clicked.
"Retranslate"	The **Retranslate** button is clicked.
"OK"	The **OK** button is clicked.

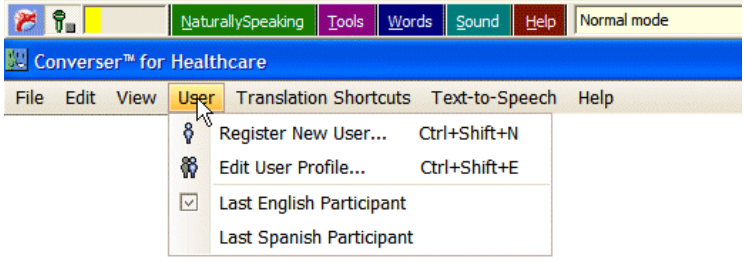
Vocal Control of Menus

You can use your voice to choose the menus and menu items in the **Converser Menu Bar**.



To do so,

1 say the name of the relevant menu or menu item, e.g. say "User".



2 Then say the name of the desired item or submenu, e.g. say "Register New User".

You can continue opening submenus by voice if necessary. For instance, say "Help," "Tutorials," "English," and "Quickstart" in succession.

Pronunciation advice: (1) *Pause before and after* choosing a menu or menu item by voice. (2) If a menu or item name command contains several words, pronounce them as a *complete phrase, without pauses* between the words. (3) Pronounce button commands *loud and clear—all the way to the end.*

Your words will be interpreted as dictated text rather than as commands if you (1) purposely pronounce the words *without* a pause both before and after them, or (2) hold down the *Shift* key while speaking.

If you open a menu with your voice and then say the name of a different menu, the first menu will close and the second one will open.

To force the closure of an open menu at any time, you can click the *Escape* key or use your voice by saying "Press Escape".

SUMMARY OF VOICE COMMANDS FOR CONVERSER MENUS

Here's a summary of Voice Commands related to Converser Buttons:

You say	**This happens**
"File"	The **File** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
"Edit"	The **Edit** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
"View"	The **View** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
"User"	The **User** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
"Translation Shortcuts"	The **Translation Shortcuts** menu is opened. All items within this menu can likewise be operated by pronouncing their names.

“Text-to-Speech”	The **Text-to-Speech** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
“Help”	The **Help** menu is opened. All items within this menu can likewise be operated by pronouncing their names.
“Press Escape”	Clicks the *Escape* key to force closure of any open menus.

Operating Keys and Mouse by Voice

NaturallySpeaking contains built-in commands which let you operate keys and mouse buttons with your voice. You can use them to navigate and control the Converser interface in various ways. You can

- move around the screen by controlling the *Tab* key;
- execute button actions or selected list elements by clicking the *Enter* key.
- move up and down lists using the *Up Arrow* and *Down Arrow* keys, in order to traverse Translation Shortcuts or menu items;
- expand and contract Translation Shortcut Categories using the *Right Arrow* or *Left Arrow* keys;
- click mouse buttons (left click, left double click, and right-click) to execute selected list elements or access certain menus

Operating these keys by voice is exactly equivalent to operating them physically.

These voice-driven navigation and control methods are explained and compared with other methods of achieving the same results in Appendix A, “Navigation and Control Methods”.

CHAPTER 5

Translating

This chapter describes Converser's main translation processes, and the ways in which you can supervise them.

Our concentration here is upon Converser's "open-ended" or "full-strength" translation facility, as opposed to its *Translation Shortcuts* facilities. We can begin by clarifying the difference.

- Converser's "open-ended" translation programs can translate almost any text which is entered into the **Input Window**. This will often be text that the programs have never translated before. For this reason, Converser provides several powerful tools for *verifying* a brand-new translation before sending it to other participants in the Conversation. This chapter explains these verification and sending procedures in detail.
- By contrast, a Translation Shortcut is a prepared or prepackaged translation. Because a Shortcut's accuracy has been verified in advance, you can send it to other conversational participants immediately and with full confidence, without further checking. An appropriate Translation Shortcut can often be found and used very quickly by using the **Translation Shortcuts Browser** or **Translation Shortcuts Search** facility. It's also possible to use Translation Shortcuts through the **Translation Shortcuts Browser** using the mouse or stylus only, without entering any text; and this mode of use can be very helpful for less literate participants (see Chapter 6, "Translation Shortcuts").

The chapter first covers preparations for open-ended translation, and then goes on to discuss translation and its verification.

Preparations for Open-ended Translation

Before performing open-ended translation, you'll need to take a few preparatory steps:

- the Active Participant must be selected
- the text to be translated must be entered into the **Input Window**

You may also want to make a few interface adjustments to avoid distractions, especially if you're a beginning user of Converser, or are instructing a beginner.

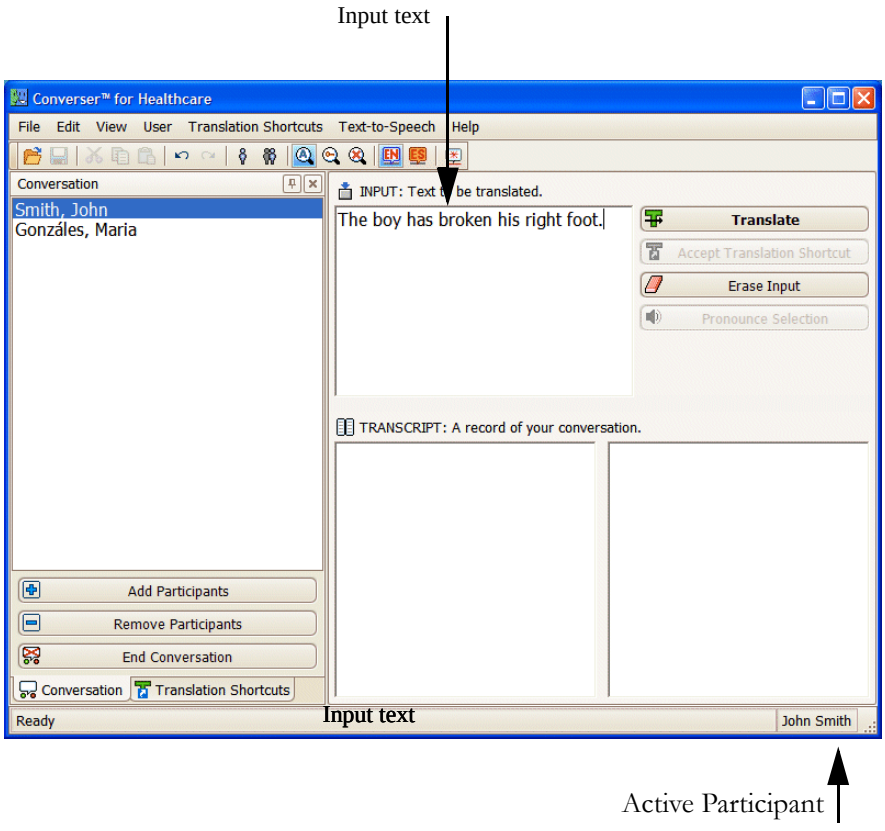
Selecting the Active Participant

To determine which language to translate to and from, Converser needs to know who is speaking—that is, who is the *Active Participant*. For example, if Dr. Smith is speaking, translation from English to Spanish is expected, since the doctor is a registered Converser User whose native language is English. Likewise, if Sra. González is the Active Participant, translation will be from Spanish to English. The four Guest Users (**Male Guest**, **Female Guest**, **Visitante Masculino**, and **Visitante Feminina**) indicate the translation direction in the same way.

Selection of the Active Participant is carried out using the **Conversation Panel**, or via the **Last English Participant** and **Last Spanish Participant** items on the **User** menu (or the corresponding Toolbar icons), as explained in Chapter 2, "Registering Users, Managing Conversations, and Saving Transcripts".

Entering Text to be Translated

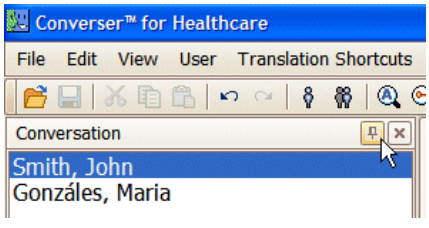
There are several ways to enter text to be translated via Converser's open-ended translation facilities: you can use a standard keyboard; you can use Windows' handwriting recognition or on-screen keyboard; or you can use speech recognition. All of these text entry modes are explained in other chapters: Chapter 3, "Input Methods—Typing, Writing" and Chapter 4, "Input Methods—Voice".



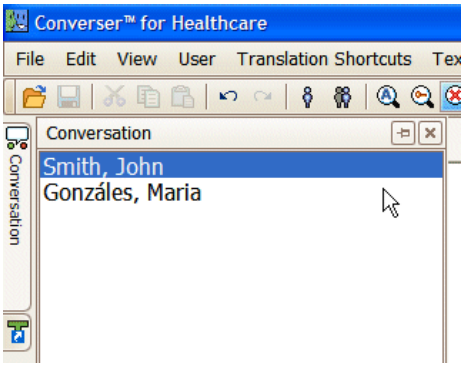
Removing Distractions

Before using open-ended translation facilities, you may want to remove any on-screen distractions in order to concentrate on the translation process. Removing distractions can be especially helpful if you're just learning to use Converser, or helping someone who is just learning.

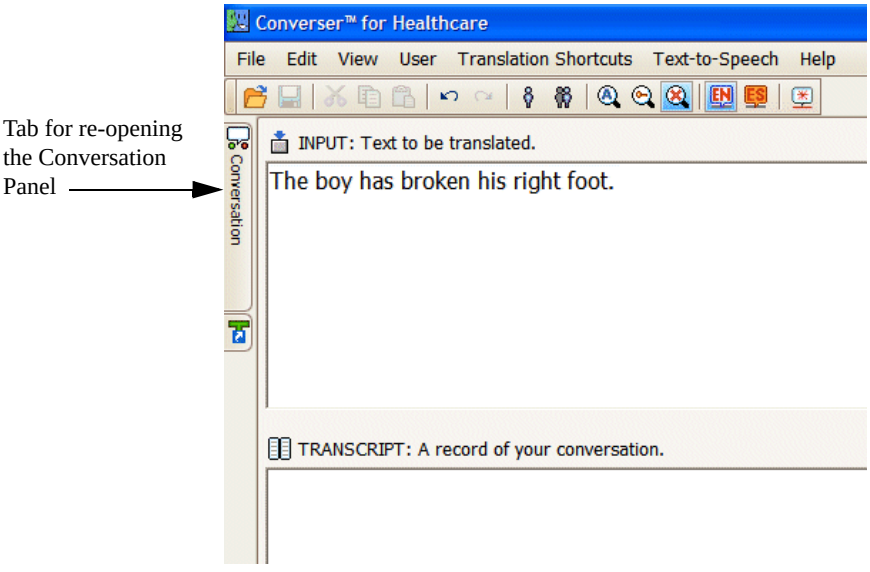
1 Hide the **Conversation Panel** (see "Hiding the Conversation Panel" on page 28) and **Translation Shortcuts Panel** (see "Manipulating the Translation Shortcuts Panel" on page 88) if either panel is open. To do so, click the vertical pushpin icon



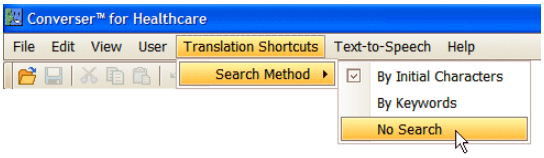
at the top of either panel so that it becomes horizontal.



Then move the cursor outside the panel (see "Hiding the Conversation Panel" on page 28).



2 Turn off the **Translation Shortcuts Search** mechanism, so that no Shortcuts will be offered as you enter text into the **Input Window**. The Search facility is described in Chapter 6, "Translation Shortcuts".



• Translating

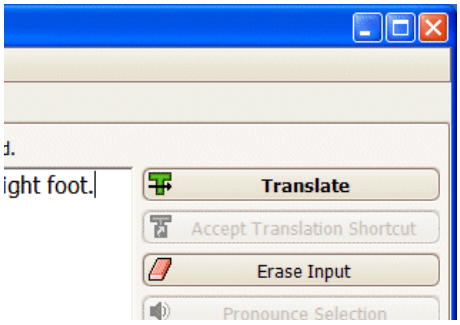
As described in the preceding section, you've selected an Active Participant to indicate the translation direction, and have entered the text to be translated into

the Converser **Input Window**. You may also have adjusted the interface to avoid any distractions.

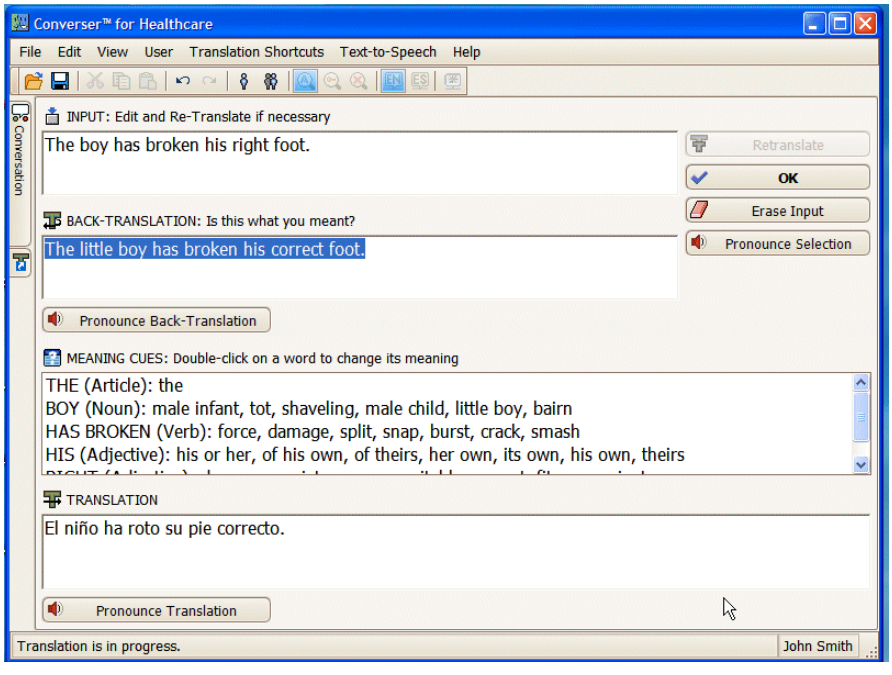
Now you're ready to translate the new text.

You'll have the chance to *verify* the translation before (1) sending it to the **Transcript Window** and (2) pronouncing it for the benefit of your conversational partner.

1 Click the **Translate** button (or use the corresponding Voice Command, "Translate"). It's on the right side of the **Converser Input Screen**, just above the **Accept Translation Shortcut** button.



This action will take you to the **Converser Translation Screen**, which contains several tools for verifying and fixing the current translation.



The Back-Translation Window

Just below the **Input Window** in the **Converser Translation Screen** is the **Back-Translation Window**. It contains a specially controlled translation of the translation—a paraphrase (or rewording) of your input as Converser understands it.

Your input was "The boy has broken his right foot." The Back-Translation (or paraphrase) is "The little boy has broken his correct foot."

Note Normally, you'll want to read this Back-Translation silently to yourself, to help you to evaluate the translation's correctness. At times, however, *you may want to hear it pronounced automatically* as soon as it's produced, in order to keep your eyes free for other tasks. In this case, click or tap the **Pronounce Back-Translation Automatically** item on the **Text-to-Speech** menu. A check mark will indicate that the switch has been turned on. (You can turn it off in the same way.) Alternatively, to prompt pronunciation manually, you can click or tap the **Pronounce Back-Translation** button at any time, or use the associated Voice Command, "Pronounce Back-Translation".

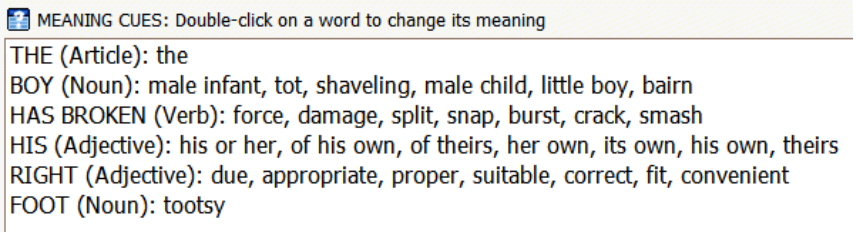
Verifying the Translation via the Back-Translation

Does the **Back-Translation Window** express more or less what you meant to say? True, some of the wording may change in unimportant ways—in the current example, "boy" has been replaced by "little boy," for example, which still conveys your meaning. On the other hand, some wording changes may require correction—here, "right foot" has been replaced by "correct foot," which does not convey the right meaning.

To double-check the correctness of the translation, you can examine the **Meaning Cues Window**.

The Meaning Cues Window

The **Meaning Cues Window** shows a set of *Meaning Cues* which allow you to judge the meanings of words and expressions in the input, as the translation program currently understands them. For our sample input, "The boy has broken his right foot," the Meaning Cues set appears as follows:



Here, synonyms are used as Meaning Cues.

The Change Meaning Dialog

Despite the best efforts of the translation program, the input will not always be understood correctly on the first try. When either the **Back-Translation Window** or the **Meaning Cues Window** indicates that one or more of the expressions in the input has been temporarily misunderstood, it becomes necessary to make corrections. The **Change Meaning Dialog** can be used for this purpose.

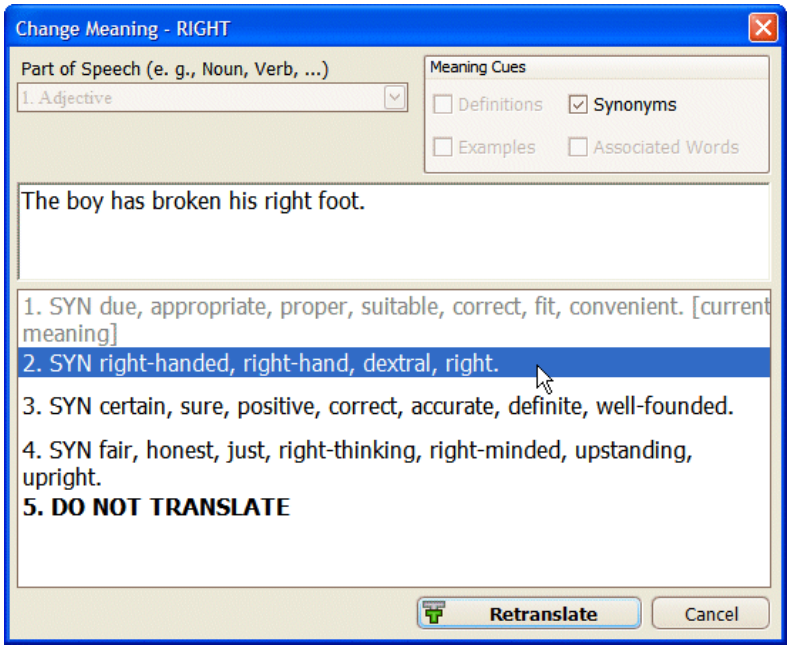
With "The boy has broken his *right* foot" as input, the **Back-Translation Window** shows "The little boy has broken his *correct* foot" and the **Meaning Cues Window** shows this Meaning Cue for the word "right":

RIGHT (Adjective): due, appropriate, proper, suitable, correct, fit, convenient

Unfortunately, it's clear that the word "right" has been misinterpreted. For the moment, Converser's machine translation program mistakenly believes that this word should mean "due, appropriate, proper, suitable, etc.," and is translating it accordingly. However, you actually want the word to be translated with a different meaning. What should you do?

In the **Meaning Cues Window**, double-click or double-tap the entry for the word "right". The **Change Meaning Dialog** for "right" appears.

This dialog contains a listing of *all* the meanings of "right" which Converser's translation program can understand and translate:



The second meaning is the appropriate one to translate "right foot" (even if the combination "right-hand foot" would be a little funny). To select it, click or tap it.

You're now ready to *retranslate* the current input, this time using the newly specified word meaning for "right" (in this case, "right-hand," as opposed to "correct").

To do so, click or tap the **Retranslate** button in the **Change Meaning** dialog.

Tip There's also a quicker way to get the same effect: just *double*-click (or double-tap) the desired meaning.

Converser then re-executes both the translation and its Back-Translation, or paraphrase. You can recheck both, and then either accept the new translation (see below) or begin another correction cycle.

The Translation Window

The tentative or preliminary translation of the current input appears in the **Translation Window**, at the bottom of the **Converser Translation Screen**.

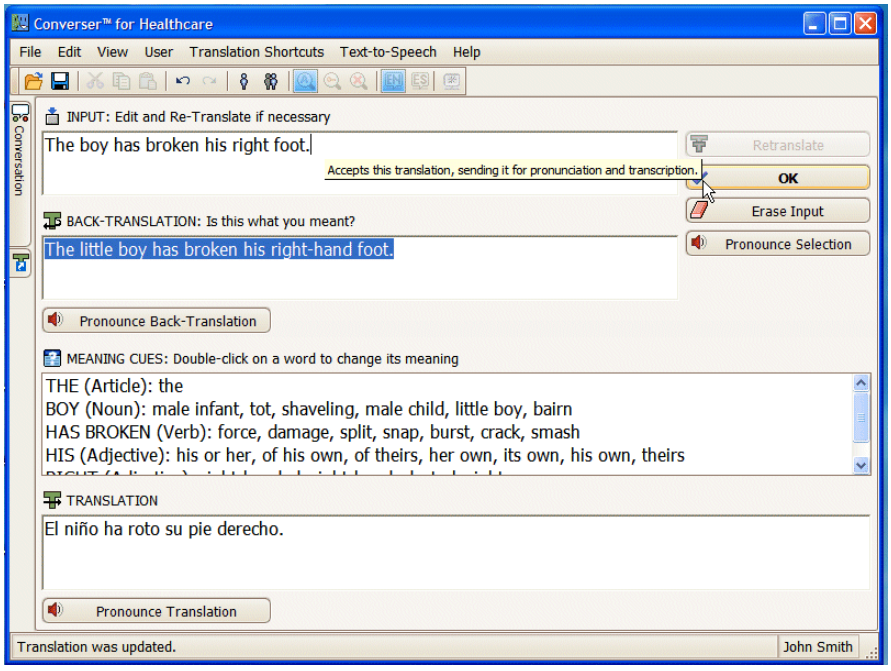
The Pronounce Translation Button

Normally, you'll wait until verification of the translation is complete before prompting pronunciation of the translation using the **OK** button (see just below). However, you may occasionally want to hear the pronunciation during verification, e.g. for study purposes. If so, you can click or tap the **Pronounce Translation** button (or use the associated Voice Command, "Pronounce Translation). It's just below the **Translation Window**.

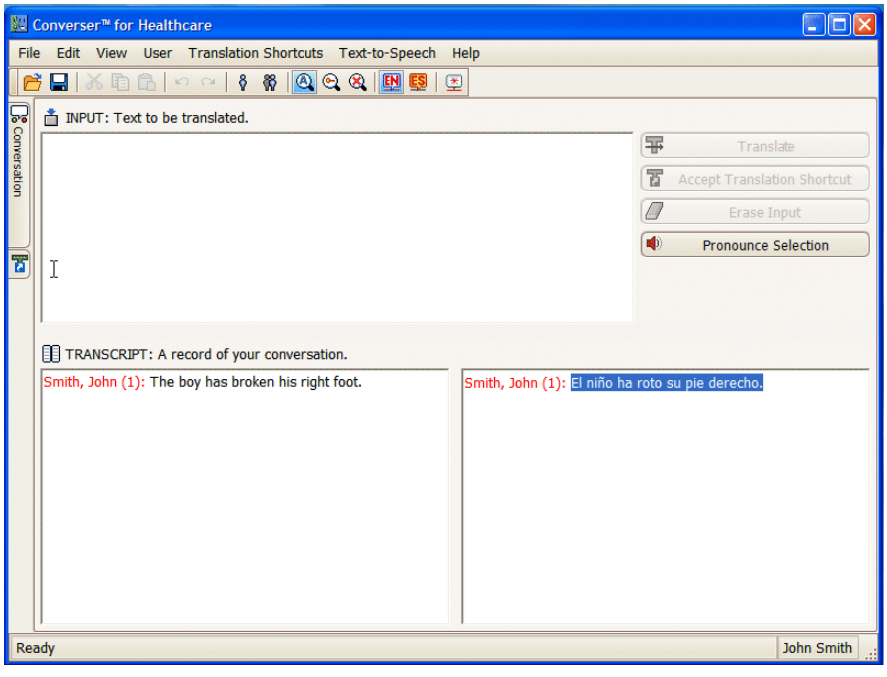
Accepting the Verified Translation

Once you've confirmed that the input has been understood and translated acceptably, you can *accept* the current translation by clicking or tapping the **OK** button (or using the associated Voice Command, "OK").

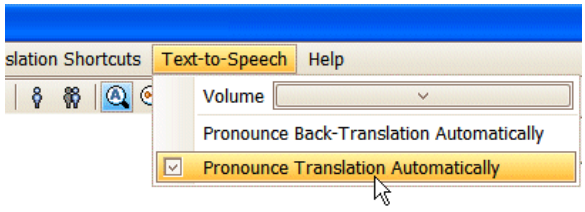
.



When you accept a translation, the interface returns to the **Converser Input Screen**, the input and translation appear in the **Transcript Window**, and the new translation is automatically pronounced.



Note At times, you may want to *suppress the automatic pronunciation* of the translation–for example, if your conversational partner can read it and your work situation requires quiet. In this case, click or tap the **Pronounce Translation Automatically** item on the **Text-to-Speech** menu.



The check mark will disappear, indicating that the switch has been turned off. (You can turn it back on in the same way.) If you want to hear the translation later, you could select it in the **Transcript Window** at any time and then use the **Pronounce Selection** button.

Tip —Immediately after a translation has been verified and sent to the **Transcript Window**, its text is automatically selected (darkened). Thus you can easily repeat the pronunciation of the last translation any number of times by repeatedly using the **Pronounce Selection** button.

Revising the Input and Retranslating

Sometimes the **Back-Translation Window** may indicate that the translation program has seriously misunderstood the input. The paraphrase may then be garbled, or simply too far from your intended meaning; and there may be no obvious way to repair the problem by changing the meaning of individual words or expressions.

Your best option then is to:

1 revise or rephrase the input,

2 retranslate,

3 repeat the revise/re-translate cycle as needed

until the Back-Translation and Meaning Cues jointly indicate that the translation is good enough for your purposes.

For instance, if for some reason "twice a day" were not properly understood, you could change this phrase to "twice daily" or "two times daily" and then try re-translating.

Tip Garbled translations often indicate that the translation program has had difficulty in breaking the input into its proper parts. To ease this task during the next translation attempt, follow this motto: KISS ("Keep It Simple, Sweetheart!"). Short sentences are much easier than long sentences for Converser's translation program to digest. So, when rephrasing, imagine that you're talking to a second grader: bright and willing, but with a short attention span.

As soon as you make any changes in the **Input Window** on the **Converser Translation Screen** (using any input mode), the remaining information windows will be cleared in preparation for a new translation cycle.

To initiate the new translation cycle based on the revised input,

4 click or tap the **Retranslate** button (or give the corresponding Voice Command, "Retranslate").

All of the information windows will be repopulated.

To start fresh, you can also clear all of the windows on the screen, including the **Input Window**, by clicking the **Erase Input** button.

Skipping Verification

Should you verify the translation, using the **Back-Translation Window**, the **Meaning Cues Window**, and perhaps the **Translation Window**? In general, yes. Verification will increase the overall accuracy of your communication and—just as important—increase your confidence that you have in fact said what you mean to say.

On the other hand, there are times when you're in a hurry, or when the accuracy of the translation just isn't terribly important. At those times, you can elect to click the **OK** button immediately after it appears on the **Translation Screen**, without having checked for translation accuracy. Translation accuracy is likely to fall, but may remain high enough for communication. Of course, if your conversational partner indicates misunderstanding or confusion and you suspect a mis-translation, you can always repeat the relevant input with verification.

There is one further, and quite important, reason for sometimes skipping verification. Some patients, while sufficiently literate to manage initial text input, may be unable to check the **Back-Translation Window** or to check and manipulate the **Meaning Cues Window**, since these actions require a degree of computer literacy. Staff members can encourage them (or help them) to click **OK** immediately without attempting to verify the translation, and can then attempt to resolve any resulting misunderstandings by asking follow-up questions.

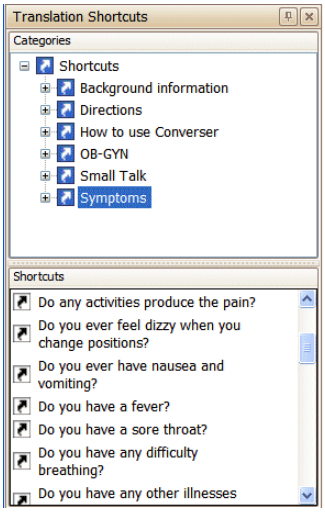
CHAPTER 6

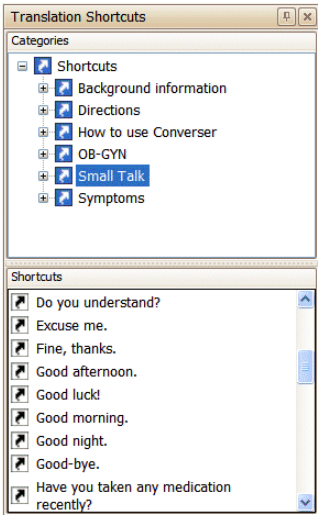
Translation Shortcuts

Converser's open-ended translation facilities (see Chapter 5, “Translating”) can be used to translate an unlimited set of inputs that Converser has never seen before. The system’s unique verification facilities can be used to verify translation accuracy, even for wide-ranging conversations.

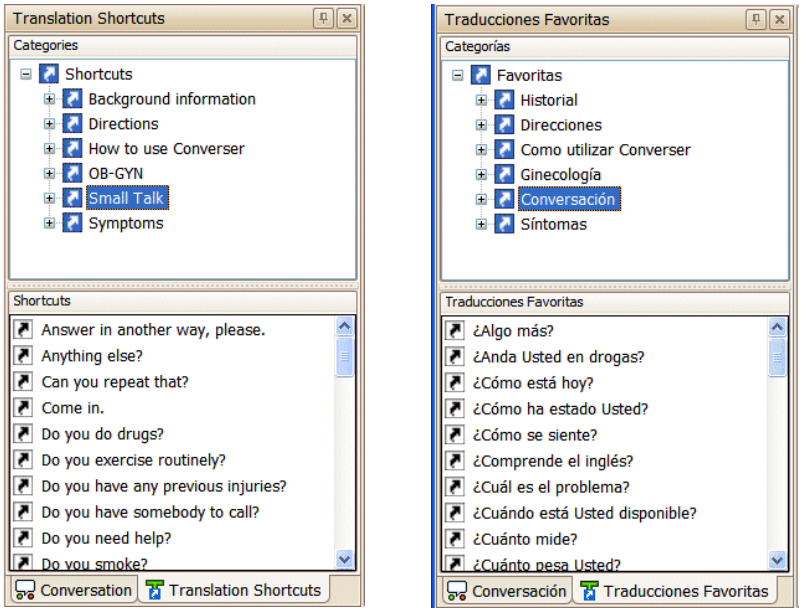
While verification can be crucial for accurate translation, it can be time-consuming. Further, you may find yourself verifying the same translation repeatedly. Thus it’s often convenient to use *Translation Shortcuts*—frequently used input sentences which have previously been translated and corrected, and thus are known in advance to be accurate.

Here are some examples, grouped by their *Shortcut Categories (Symptoms* and *Small Talk*).





Translation Shortcuts are automatically presented in the language of the current Active Participant:



When you use a Shortcut, since there's no need to check the translation, the **Converser Translation Screen** is bypassed. The Shortcut is immediately *displayed* in the bilingual **Transcript Window** and *pronounced* in the target language.

Translation Shortcuts are bidirectional: if you use the English Shortcut, you get the prepared Spanish translation, and vice versa.

In addition to pre-verified accuracy, Translation Shortcuts have two other important advantages:

- *Speed.* As their name suggests, Shortcuts can be used very quickly. It isn't necessary to enter the entire input text to be translated, since it can be retrieved by a quick automatic *search* based on only part of the text. When the complete input text is found, the pre-checked translation will be instantly retrieved along with it.
- *Activation without input text.* In fact, it may be unnecessary to enter any text at all, since the desired input can instead be *indicated by pointing* with the mouse or stylus. This input-free mode of using Shortcuts can be especially important for less literate participants in Converser conversations.

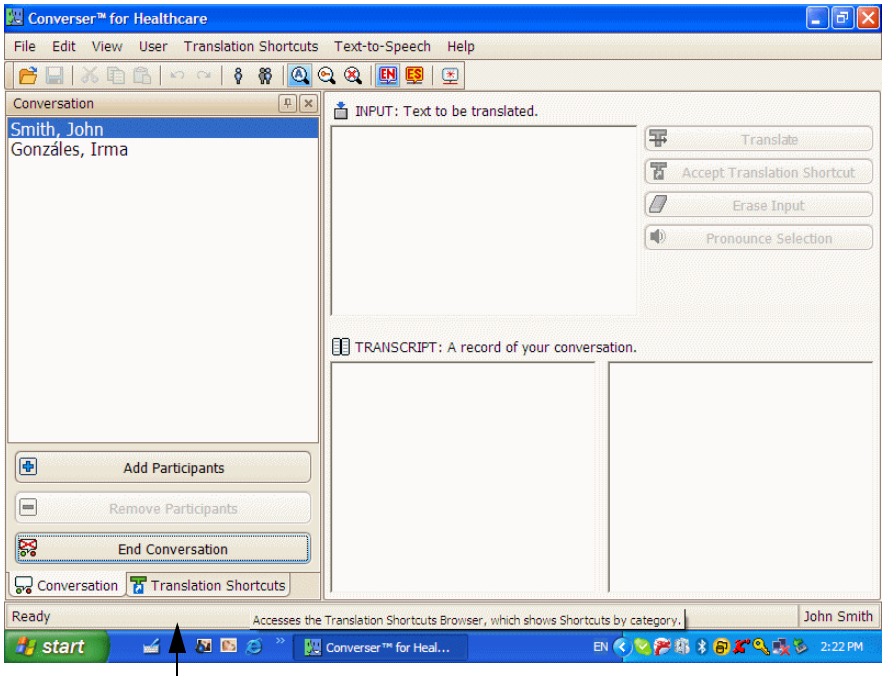
There are two ways to access Converser's Translation Shortcuts:

1. Via the **Translation Shortcuts Browser**. The Browser presents a tree of **Translation Shortcut Categories**. When a Category is selected, a list of the Shortcuts it contains appears in the lower section of the Browser.
2. Via the **Input Window**. As you type, Converser can automatically search for Translation Shortcuts which match the text you're entering. Without

completing the text entry, you can then select and execute a matching Shortcut to instantly obtain a pre-verified translation. Or, if you enter the entire text of a known Shortcut, Converser can recognize the Shortcut and give the focus to the **Accept Translation Shortcut** button. Then, clicking it will execute the completed Shortcut, once again supplying a pre-verified translation.

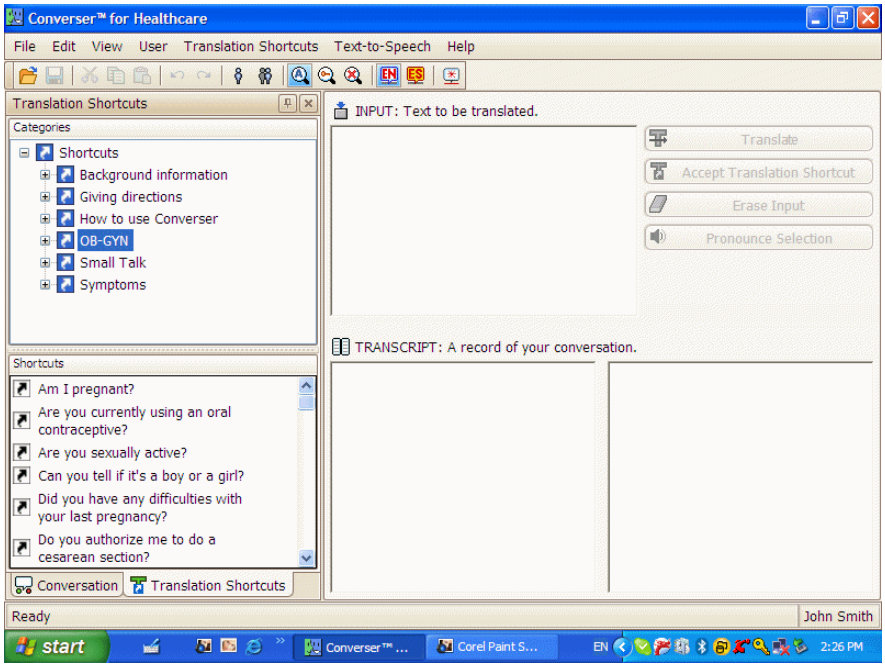
• The Translation Shortcuts Browser

Translation Shortcuts can be accessed using the **Translation Shortcuts Browser** on the **Translation Shortcuts Panel**, one of two panels on the on the left side of the Converser screen—it alternates with the **Conversation Panel**, described in "Managing Conversations" on page 20. To open it, click its tab.



Click here to open the Translation Shortcuts Panel

Clicking the tab will bring the **Translation Shortcuts Panel** to the foreground.



For more information on manipulating the Panels, see "Manipulating the Translation Shortcuts Panel" on page 88.

Selecting a Translation Shortcuts Category

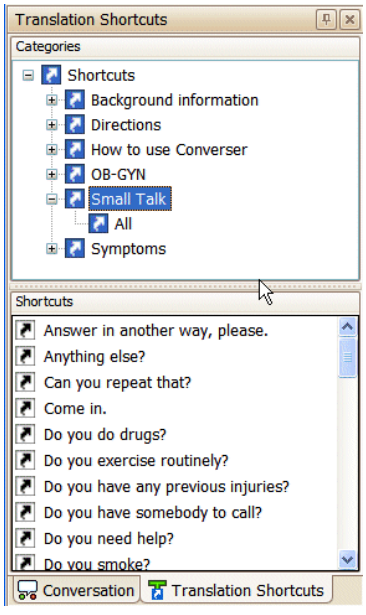
The upper section of the Translation Shortcuts Browser contains a hierarchical tree of Shortcut Categories and subcategories. In Converser 3.0, the following Categories are offered:

- **Background information**—questions and answers for filling out patient information forms
- **Giving directions**—questions and answers useful for finding important locations around a healthcare facility
- **How to use Converser**—questions and answers about using Converser, for assisting novice users
- **OB-GYN**—questions and answers about this specialty
- **Small Talk**—frequently used phrases in conversation: hello, goodbye, thank you, and so forth
- **Symptoms**—questions and answers about a wide variety of symptoms

Shortcut Categories can be further divided into *subcategories*. Most major Categories contain a subcategory called **Staff** for inputs which are most likely to

be used by staff members, and a subcategory called **Patient** for inputs more likely to be used by patients.

The *Small Talk* category, on the other hand, contains only a single subcategory *All*, containing expressions equally likely to be used by both groups.



Expanding and Contracting Shortcut Categories

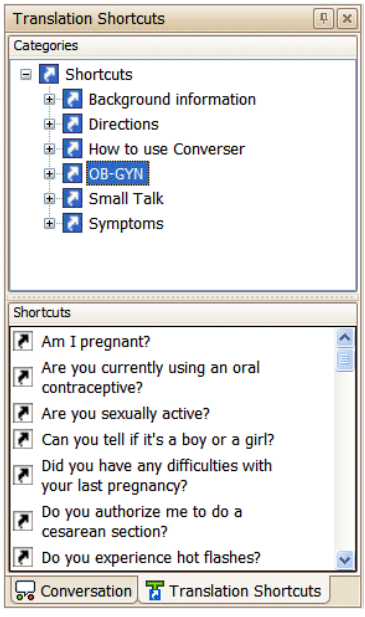
You can expand or collapse a parent Category to examine or hide its subcategories by using the plus (+) and minus (-) symbols to the left of the Category name, just as you would with any other Windows tree.

Tip A Category can also be expanded or collapsed by selecting it and then using the *Right Arrow* or *Left Arrow* keys.

Selecting Shortcut Categories Manually

To *select* any visible Shortcut Category, click once on the Category.

The Category will become highlighted to indicate selection. At the same time, the complete list of Translation Shortcuts within that Category will appear in the lower section of the **Translation Shortcuts Browser**, in alphabetical order.



Note Parent Categories always contain more Shortcuts then their child Categories (subcategories). To see this effect, click first on the highest-level, or *root*, Category (Shortcuts) and examine the resulting list, which contains *all* Shortcuts in *all* Categories. Then click one of its subcategories, e.g. **Background Information**, and examine the list of Shortcuts for this Category only. Finally, click one of the two subcategories of **Background Information**, e.g. **Patient**, whose list contains only patient responses to background questions posed by staff members.

Selecting Shortcut Categories Automatically

Converser can automatically select Translation Shortcut Categories when a new turn begins. The intent is to facilitate turn-taking between staff and patients, so that appropriate Shortcuts become available for each when a turn begins.

The selection procedure depends on (1) the Category currently selected and (2) the *Role* of the new Active Participant, as indicated within his or her User Profile (see "Registering New Users" on page 15).

Consider the **Symptoms** Category as an example. Like most Categories, it contains **Staff** and **Patient** subcategories. Automatic selection operates as follows when a new turn begins:

- If either **Staff** or **Patient** was selected as a subcategory for the *last* turn, then **Staff** or **Patient** will be chosen automatically for the *new* turn, according to the *Role* of the new Active Participant.
- If the new Active Participant's *Role* is *Physician* or *Other Staff*, then Converser will automatically select **Staff**.
- If the new Active Participant's *Role* is *Patient*, then Converser will automatically select **Patient**.

For example, if Dr. Smith (a *Physician*) has selected **Symptoms > Staff**, in order to ask questions about symptoms, then when Sra. Gonzáles (a *Patient*) begins a new turn, **Symptoms > Patient** will automatically be selected, so that appropriate Shortcut responses will become available for her use. When the doctor takes his turn again, **Symptoms > Staff** will once again be automatically chosen; and so on.

Most Categories other than **Symptoms** (e.g. **Background Information**, **OB-GYN**, etc.) behave in the same way. (**Small Talk** is an exception, since it contains no **Staff** and **Patient** subcategories.)

Automatic subcategory selection can be overridden by manual selection at any time. For example, even if **Staff** was automatically selected for Dr. Smith when his turn began, he can manually select **Patient**.

Note You may at times want to specify a group of Shortcuts appropriate for *both* sides of the conversation. Simply select an *entire* Category (such as **Symptoms**, **Background Information**, **OB-GYN**, or the root Category **Shortcuts**). In this case, automatic selection will *not* operate. To re-initiate automatic selection, you'll need to select a **Staff** or **Patient** *sub*category.

Using Translation Shortcuts in the Browser

There are three ways to use a Translation Shortcut from the Translation Shortcuts Browser:

1 double-click (or double-tap) it, or

2 click once to select it, and then click or tap the **Accept Translation Shortcut** button (or use the equivalent Voice Command, "Accept Translation Shortcut"), or

3 click once to select it, and then click, tap, press, or say "*Enter*."

Tip When the **Translation Shortcuts Panel** is in focus, the *Up Arrow* and *Down Arrow* keys can be used to move the Shortcut selection up or down the current list.

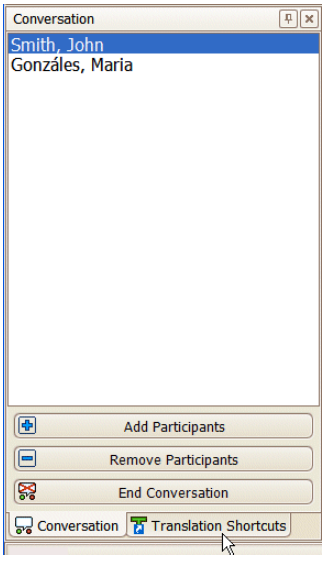
The **Panel** is in focus when the selected Shortcut within it turns dark. When the **Panel** is not in focus, the selected Shortcut is grey. To bring the **Panel** into focus, click or tap it, or use the *Tab* key repeatedly.

Manipulating the Translation Shortcuts Panel

As already explained, the **Translation Shortcuts Browser** is found in a special window called the **Translation Shortcuts Panel**. We now explain how this window can be manipulated—how it can be revealed when it is obscured, hidden or unhidden, and closed or restored.

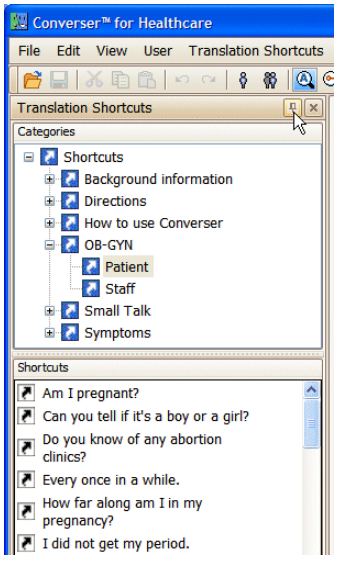
Revealing the Translation Shortcuts Panel

When Converser starts up, the **Translation Shortcuts Panel** is normally open, but *obscured* behind the **Conversation Panel**. To *reveal* the Panel, or bring it to the front for use, click its tab.

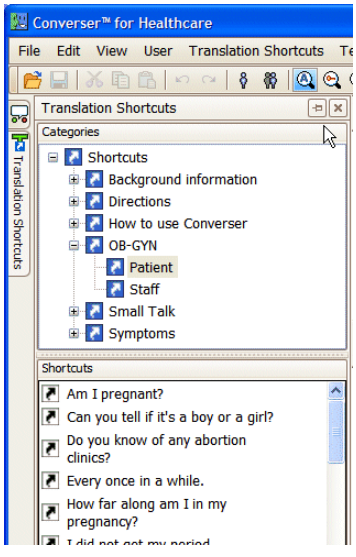


HIDING THE TRANSLATION SHORTCUTS PANEL

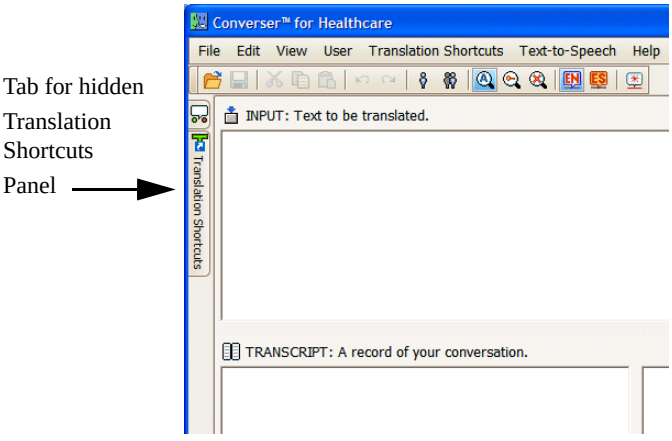
When Converser starts up, the **Translation Shortcuts Panel** is normally *pinned* so that it will stay open, as indicated by the vertical position of the window's pushpin icon.



You can *hide* the **Translation Shortcuts Panel**—make it slide out of view on the left side of the screen—by clicking on the pushpin so that the pin becomes horizontal, and then moving the cursor out of the Panel. (If the panel doesn't close immediately, just click outside it.)



When the panel is hidden in this way, its *tab* will remain in view on the left edge of the screen.



Tip Hiding the **Translation Shortcuts Panel** can sometimes help to simplify the appearance of the Converser screen, thus minimizing distractions and confusions, especially for first-time participants.

UNHIDING THE TRANSLATION SHORTCUTS PANEL

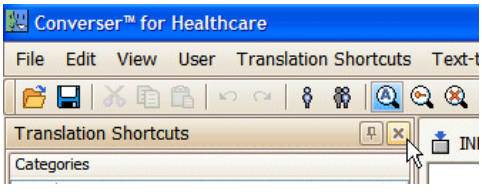
To *unhide* the hidden **Translation Shortcuts Panel**—to slide it back into view—just hover the cursor over its tab.

The panel will then stay in view as long as the cursor stays within it. The panel will again slide shut if the cursor moves outside of it.

While the panel is in view, you can again click the pushpin, so that it becomes vertical. The panel will then stay open until you unpin it again.

CLOSING THE TRANSLATION SHORTCUTS PANEL

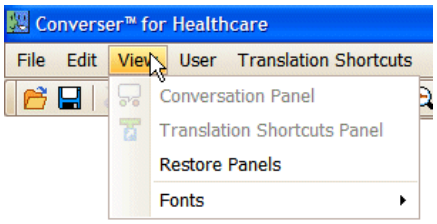
You can *close* the **Translation Shortcuts Panel**, or temporarily remove it from the Converser screen, by clicking the standard Close Window (X) icon in the panel's upper right-hand corner. In this case, no tab will be visible. To make the panel visible again for use, you'll need to *restore* it (see immediately below).



RESTORING THE TRANSLATION SHORTCUTS PANEL

The **Translation Shortcuts Panel** can be restored to its original open and pinned state and placed in its original location by clicking the **Translation**

Shortcuts Panel item in the **View** menu. Alternatively, you can restore both the **Translation Shortcuts Panel** and the **Conversation Panel** by clicking the **Restore Panels** item in the same menu.

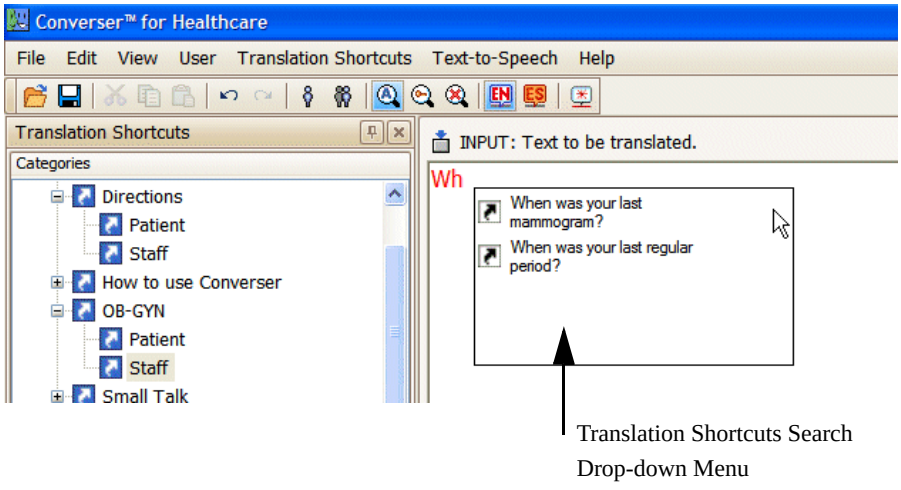


Restoration will be necessary if the panel has been closed (temporarily removed from the Converser screen), whether on purpose or by accident. It may also be necessary if either of the panels has been moved from its original location.

The Translation Shortcuts Search Facility

As a second way of using Translation Shortcuts, you can enter some text into the **Input Window** (using any text entry method) and allow Converser to *search* in the currently selected Category for Shortcuts which match it.

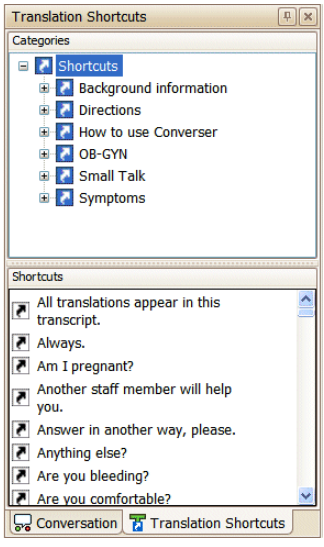
Matching Shortcuts will be displayed in the **Translation Shortcuts Search Drop-down Menu**, which appears just below the current input text in the **Input Window**. A matching Shortcut can then easily be selected from the menu for instant use.



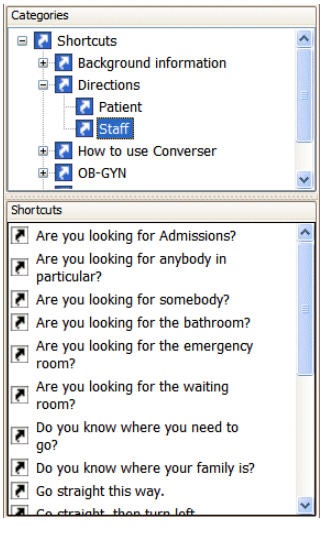
Here Dr. Smith has selected the **Staff** subcategory of the *OB-GYN* Category, and has begun to type "Wh...". All of the Shortcuts in this subcategory which begin with these characters are presented for selection.

Selecting the Category for Search

Translation Shortcuts which match the search criteria (as explained just below) will be sought only within the currently selected Translation Shortcuts Category, as indicated in the **Translation Shortcuts Browser**. So, to search among *all* Shortcuts in the **Browser**, select the highest (*root*) Category, **Shortcuts**. The candidate Shortcuts will then be those listed in the lower section of the Browser—in this case, all Shortcuts in all Categories and subcategories.



To search only among the Shortcuts in e.g. the **Staff** subcategory of the **Directions** Category, select this subcategory in the **Browser**. A shorter set of candidate matches will be listed in the **Browser**'s lower section—in this case, only the Shortcuts in this subcategory.



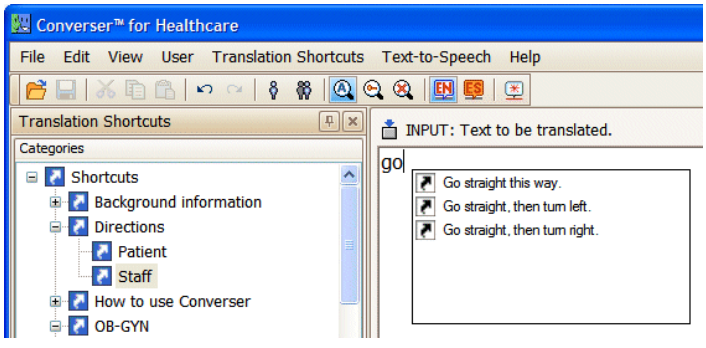
Search Methods

When you search for matching Shortcuts, you can use two different matching criteria, or *Search Methods*—**By Initial Characters**, or **By Keywords**. It's also possible to turn off searching entirely (**No Search**).

By Initial Characters

When search is performed **By Initial Characters**, Shortcuts will match if they begin with the characters currently in the **Input Window**. For example, if the selected Category is **Directions > Staff** and the Input currently contains the characters "Go" then the following Shortcuts will match:

- "Go straight this way."
- "Go straight, then turn left."
- "Go straight, then turn right."



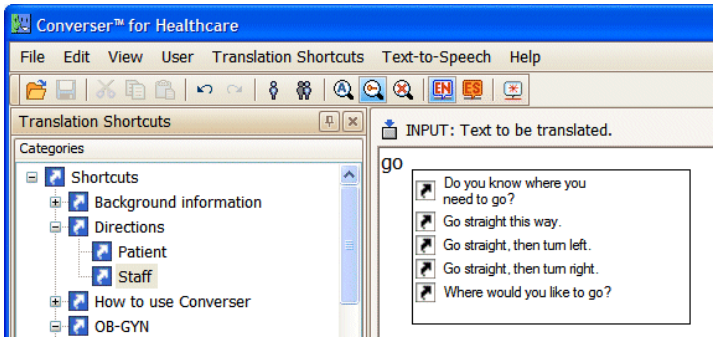
Note Capitalization is ignored for the purpose of search by initial characters. In the present example, the initial character strings "Go" and "go" would be treated equivalently.

By Keywords

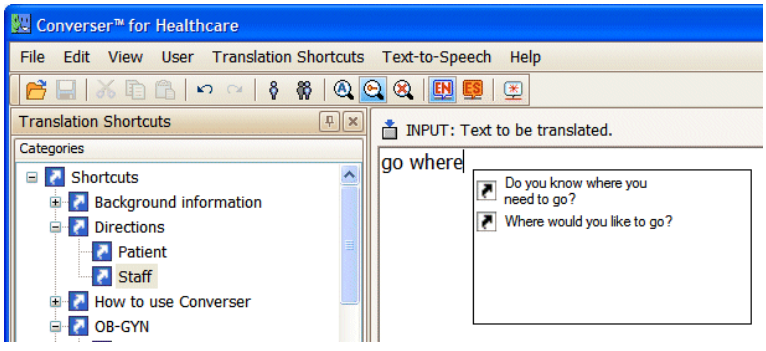
If search is performed **By Keywords**, Shortcuts will match if they contain all of the keywords currently in the **Input Window**. For example, if the selected Category is **Directions > Staff** and the **Input Window** currently contains the word "go" then the following Shortcuts will match:

- "Do you know where you need to go?"
- "Go straight."
- "Go straight, then turn left."
- "Go straight, then turn right."

- "Where would you like to go?"



However, if the **Input Window** contains the characters "go where" (or "where go"), then only two of these will match.



Note For the purposes of search by keywords, a keyword is any word *not* included on a short list of *stop words*–words so common that almost any input might contain them, such as "the," "a," etc. Following is a full list of current stop words for keyword-based search in English and Spanish:

—

a	an	at	of	from
the	this	that	these	I
me	mine	my	we	us
you	your	yours	our	ours
he	his	she	her	hers
they	them	their		

a	de	el	él	ella
ese	este	éste	estos	éstos
la	los	usted	yo	las
esta	ésta	estas	éstas	

Note The *order* of keywords is not significant for the purposes of keyword-based search. For example, "go where" and "where go" would be treated equivalently.

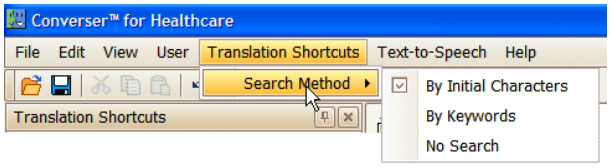
NO SEARCH

Rather than search for Shortcuts by either initial characters or keywords, you may sometimes prefer to *turn off the search facility*. In this case, no drop-down menu will appear.

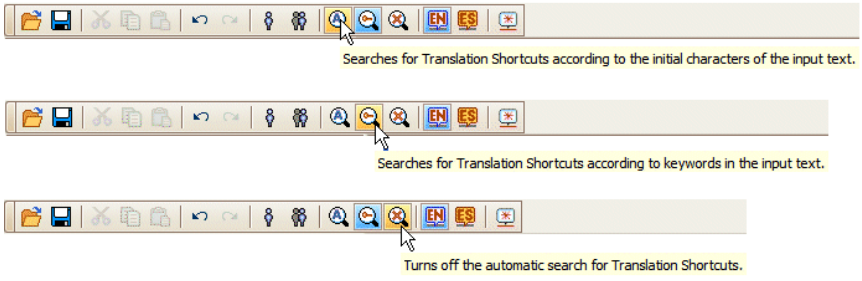
Tip Turning off search can be helpful for simplifying the Converser interface, e.g. for beginning users.

Selecting the Search Mode

As explained, there are two Search Modes, or criteria for seeking matching Shortcuts—**By Initial Characters** or **By Keywords**. You can also choose to turn off the search facility (**No Search**). To select the desired Search Mode, use the **Search Mode** submenu of the **Translation Shortcuts** menu, and select the desired item: **By Initial Characters**, **By Keywords**, or **No Search**.



Tip The selection can also be made using the corresponding icons on the Toolbar:



Using Shortcuts in the Translation Shortcuts Search Drop-down Menu

There are three ways to use a Translation Shortcut from the **Translation Shortcuts Drop-down Menu**:

1 double-click (or double-tap) it, or

2 click once to select it, and then click or tap the **Accept Translation Shortcut** button (or use the equivalent Voice Command, "Accept Translation Shortcut"), or

3 click once to select it, and then click, tap, press, or say "*Enter*."

Tip When the **Input Window** is in focus, the *Up Arrow* and *Down Arrow* keys can be used to move into and out of the drop-down menu, and to move the Shortcut selection up or down the list of matching Shortcuts.

The **Input Window** is in focus when the flashing insertion point is visible within it. To bring the **Input Window** into focus, click or tap it, or use the *Tab* key repeatedly.

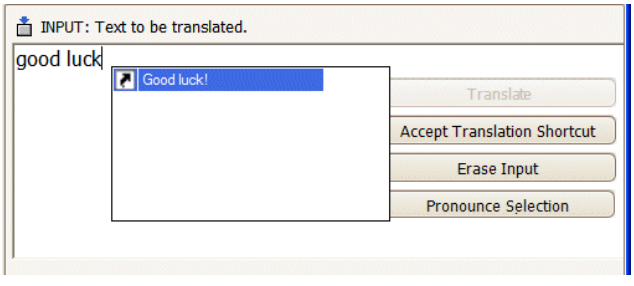
The Accept Translation Shortcut Button

As described in "The Translation Shortcuts Search Facility" on page 91, you can access Translation Shortcuts through the **Input Window** by using the **Translation Shortcuts Search** facility. It's usually unnecessary to enter the entire text of a Shortcut, since initial characters or keywords will suffice to retrieve a set of matching Shortcuts, from which the desired Shortcut can be selected and executed.

However, you may also enter the complete text of a Shortcut into the **Input Window**, either accidentally or on purpose. In this case, Converser will recognize the Shortcut and realize that verification of the translation is unnecessary.

Accordingly, the system will deactivate the **Translate** button (which gives access to the **Translation Screen** and its verification tools) and will instead activate the **Accept Translation Shortcut** button.

When this button is clicked, the pre-verified translation will immediately be used.



Note For the purposes of matching against text in the **Input Window**, capitalization and punctuation are ignored. Thus "good luck" and "Good luck!" would be treated equivalently.

This mode of access to Translation Shortcuts has been designed to provide seamless transition between Shortcuts and open-ended translation. You can enter text into the **Input Window** freely, without deciding in advance which translation mechanism to use. If the text matches a Shortcut, the Shortcut will be used, and

time will be saved; if not, the full power of open-ended translation is at your service.

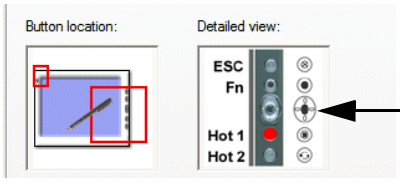
APPENDIX A

Navigation and Control Methods

You can *navigate around* Converser for Healthcare 3.0 and *issue its commands* in three ways:

1 Using a standard keyboard and mouse.

2 Using the Tablet PC's stylus and buttons.



Enter button in center.
Up, Down, **Right**, and **Left** buttons on edges.

3 Using Voice Commands (when Converser is used in conjunction with Dragon NaturallySpeaking (see Chapter 4, "Input Methods—Voice")).

In most cases, a given action, e.g. pressing *Enter*, can be carried out via any of the three navigation methods. You can choose the navigation/control method freely. Here are examples of this three-way choice among methods:

Keyboard	Tablet	Voice Commands
Press *Enter* key	Press *Enter* button Tap on-screen keyboard *Enter*	Say "Press Enter"
Press *Up Arrow* key	Press *Up* button	Say "Move Up"

The three navigation/control methods can be freely alternated or combined. For example, if you're using a Tablet PC which includes a standard keyboard, then all three methods can be available simultaneously. You might

- move down a list of Translation Shortcuts (see "Using Translation Shortcuts in the Browser" on page 87) using the *Down Arrow* key on the keyboard,
- move back up the Shortcut list by saying "Move up," "Move up two," etc., or
- execute the currently selected Shortcut by pressing the Tablet's *Enter* button.

This chapter describes and compares the three navigation/control methods.

What Can You Do?

Whether you choose to navigate and control Converser using the standard keyboard and mouse, using the Tablet buttons and stylus, or using Voice Commands, what can you actually do?

You can

1. Move around the screen using *Tab.*
2. Use *Enter* to:
   - press buttons if they are enabled and have the focus, or
   - execute selected Translation Shortcuts
   - execute commands in a right-click, **Drop-down Menu**
3. Move up and down lists or menus using the *Up Arrow* and *Down Arrow* keys or the *Up* and *Down* Tablet buttons.
4. Expand and contract Translation Shortcut Categories using the *Right Arrow* and *Left Arrow* keys or the *Right* and *Left* Tablet buttons.
5. Single-click mouse buttons or single-tap the stylus to:
   - press buttons if they are enabled and have the focus, or
   - select Translation Shortcuts from a list
   - execute items on a menu
6. Double-click mouse buttons or double-tap the stylus to:
   - execute selected Translation Shortcuts
7. Right-click mouse buttons (or tap the stylus while squeezing its button) to access right-button menu items (such as **Spellcheck ...** in the **Input Window**)

The remaining sections in this chapter examine each of these possibilities.

Using Tab

Tab is useful for moving around the Converser screen.

Keyboard	Tablet	Voice Commands
Tab key	*Fn* button, then *Right* button (press in sequence)	Say "Press Tab"

If you start with the insertion point in the **Input Window** on the **Input Screen**, using *Tab* repeatedly will move the focus around the Converser screen in a clockwise direction, progressing through elements in the following order:

- the enabled buttons to the right of the **Input Window**, one at a time
- the Spanish (right) half of the **Transcript Window**
- the English (left) half of the **Transcript Window**
- any **Panel** which is open (visiting first the lower and then the upper sections of the **Translation Shortcuts Panel** if appropriate)
- and back to the **Input Window**

If you start with the insertion point in the **Input Window** on the **Translation Screen**, using *Tab* repeatedly will again move the focus around the Converser screen clockwise, progressing as follows:

- the enabled buttons to the right of the **Input Window**, one at a time
- the **Back-Translation Window**
- the **Pronounce Back-Translation** button
- the **Meaning Cues Window**
- the **Translation Window**
- the **Pronounce Translation** button

If you start with any menu open, the *Tab* key will cycle through the menu items, without progressing to other menus.

Using Enter

Enter can be used to execute the action of an enabled Converser button that is highlighted to indicate that the button is currently *in focus*.

Keyboard	Tablet	Voice Commands
Press *Enter* key	Press *Enter* button	Say “Press Enter”

While you can always set the focus using the *Tab* key, sometimes the button focus is set automatically by Converser according to the program’s state or situation. For example, when you begin entering text into the **Input Window**, the **Translate** button becomes highlighted. Using *Enter* at that point will execute the translation program, just as if you had clicked the button. Similarly, if you type the entire text of a Translation Shortcut into the **Input Window** window, the **Accept Translation Shortcut** button will become highlighted. then *Enter* will have the same effect as clicking this button.

Enter is also helpful for executing list elements, for example

- previously selected Translation Shortcuts in the **Translation Shortcuts Drop-down Menu** (see “The Translation Shortcuts Search Facility” on page 91)

and the lower section of the **Translation Shortcuts Browser** (see "The Translation Shortcuts Browser" on page 83)

- previously selected Meaning Cues in the **Meaning Cues Window** or **Change Meaning Window** (see "The Meaning Cues Window" on page 74)]
- menu items

• Using Up and Down Arrow Keys or Tablet Buttons

The *Up Arrow* and *Down Arrow* keys (or *Up* and *Down* Tablet buttons) are useful for moving up and down lists, e.g. in

- The **Translation Shortcuts Drop-down Menu** (see "The Translation Shortcuts Search Facility" on page 91).
- The lower section of the **Translation Shortcuts Panel** (see "The Translation Shortcuts Browser" on page 83).
- The items in any menu.

Keyboard	Tablet	Voice Commands
Up Arrow key	*Up* button	Say "Move up (*number**)"
Down Arrow key	*Down* button	Say "Move down (*number**)"

**number* is optional, as in e.g. "Move down two"

• Using Right and Left Arrow Keys or Tablet Buttons

The *Right Arrow* and *Left Arrow* keys (or *Right* and *Left* Tablet buttons) are useful for expanding and contracting **Translation Shortcut Categories** in the upper section of the **Translation Shortcuts Browser**.

They're also useful during dictation to move the insertion point left and right. For example, to move the insertion point two words to the left, say "Move left two words".

Keyboard	Tablet	Voice Commands
Right Arrow key	*Right* button	Say "Move Right ((*number* (words)*)"
Left Arrow key	*Left* button	Say "Move Left ((*number* (words)*)"

* *number* and "words" are optional—as in "Move left," "Move right two," or "Move left two words"

• Clicking the Mouse Buttons

Like *Enter*, mouse clicks and double-clicks are useful for selecting and/or executing list elements.

Keyboard Mouse	Tablet Stylus	Voice Commands
Click left once	Tap stylus once	Say “Mouse click”
Click left twice	Tap stylus twice	Say “Mouse double click”

The right mouse button is useful for opening drop-down menus. For example, right-clicking on a selected word or word sequence in the **Input Window** opens the **Edit** menu. Edit operations such as **Select All** and **Spellcheck ...** can be accessed in this way.

Keyboard	Tablet	Voice Commands
Click right	Tap stylus while squeezing stylus button	Say “Mouse right click”

Index