Contact Zabaware



If you have any questions, comments, or suggestions about Ultra Hal Assistant or about Zabaware please feel free to contact us.

Our web page is: http://www.zabaware.com

Our email address is: info@zabaware.com

Our postal address is: Zabaware 3175 W. 42nd St. Erie, PA 16506

Have Ultra Hal Assistant on your web page!

Do you own a web site? Do you wish you had live tech support? Do you get a lot of mail from your visitors with many dumb questions? Why should you answer all those questions when a computer (your web server) can do it for you?

We can customize Ultra Hal Assistant to answer questions about your product/service/web site. Ultra Hal Assistant will be able to talk about nothing but your product/service/web site! It's like having live tech support 24 hours a day!

Or if you don't need a live tech support, but would just like to have a computer that chats with visitors, you can do that also. You can edit Hal's brain to chat about whatever you want.

Ultra Hal will be able to run on your server if you support classTools WebAction, or you can have us host Ultra Hal off of our server for you. We can do all the work for you, just give us all the information you have about your product/service/web site that you want Hal to know about and we will teach it all to Hal.

If you are interested please contact us.

Ultra Hal Assistant Credits

Created by:

Zabaware, Inc. http://www.zabaware.com

Created and Programmed by:

Robert E. Medeksza http://www.zabaware.com

Animated Characters by:

Kenny Ong http://www.corom.com

Skins Created By:

G. Pope http://www.distilled.net.nz

Speech Recognition Engine by:

Microsoft Corp. http://www.microsoft.com

Speech Interface by:

Chant, Inc. http://www.chant.net

Uses MS Agent Technology

Component updates available from http://www.microsoft.com/MSAgent

Hal's Knowledge Database:

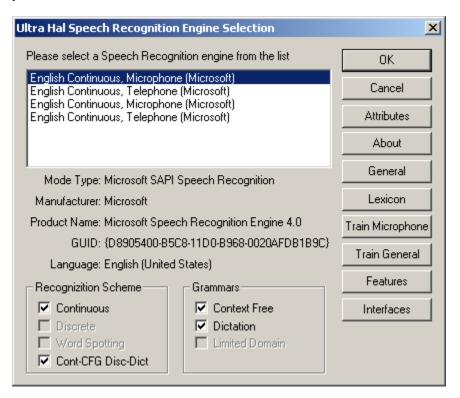
Thousands of people like you who chat with Web Hal at:
http://www.zabaware.com/webhal

How Can I use Voice Recognition with Ultra Hal Assistant?

Ultra Hal Assistant is compatible with all voice recognition that are SAPI (Speech Application Programming Interface) or SMAPI (Speech Manager Application Programming Interface) compatible. SAPI is a speech standard developed by Microsoft. SMAPI is a speech standard developed by IBM. Many speech recognition and speech synthesis programs follow one of these standards and will be compatible with Ultra Hal Assistant.

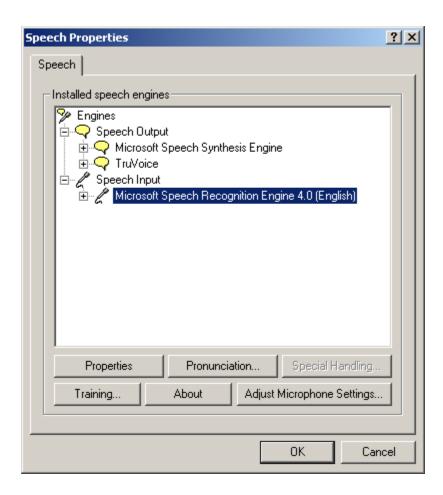
Speech Recognition or Voice Recognition programs are programs that can convert what you speak out loud into text.

If you installed a speech engine you can have Ultra Hal use it. To enable it go into Ultra Hal's speech options, and enable the SAPI/SMAPI speech recognition option. Then click on the button "Select Speech Recognition Engine..." You will get a dialog like this one, showing you what speech recognition programs you have:



Make sure the speech recognition engine supports Dictation. If it doesn't it will not work with Ultra Hal. After you have selected a compatible speech recognition program, you will be able to speak to Hal instead of typing. When you speak you should see a green bar showing the volume of your voice. When you are done speaking, after 5 seconds of silence, Hal will respond to your sentence.

Many speech recognition engines, such as the one that is included with Hal require you to go through a training session before you can use the engine. In order to train this speech recognition engine, you must go into control panels and go to the speech applet. Go into control panels, and open the speech applet. From this speech applet, you will be able to train your speech recognition engine and setup your microphone.



How to chat with Hal



Chatting with Hal is easy. All you have do is call Hal by <u>clicking on his icon</u>. Then just talk to him by either typing to him or by using a <u>speech recognition program</u> (not included with Hal). Hal will learn while talking to you, so the more you talk to him, the smarter he will become.

Here is a sample conversation with Ultra Hal:

You say to Hal: Hello Hal, my name is Robert! Hal responds: Hello, Robert! How are you today?

You say to Hal: I am fine, how about you? Hal responds: That's good. I am fine.

You say to Hal: How old are you? Hal responds: I am 3 years old?

You say to Hal: You are young!

Hal responds: I don't really think I'm young. Are you young?

You say to Hal: No, I'm old. Hal responds: I disagree with you.

You say to Hal: Why's that? Hal responds: Because.

You say to Hal: That's not a good reason.

Hal responds: I disagree. That is a good reason.

You say to Hal: No it's not. Hal responds: Yes it is.

You say to Hal: No it's not. Hal responds: Yes it is.

You say to Hal: Don't argue with me.

Hal responds: You're the one who's arguing with me.

You say to Hal: No I'm not. Hal responds: Yes you are.

You say to Hal: There is no reason to argue.

Hal responds: Okay.

You say to Hal: Are you intelligent? Hal responds: I am always intelligent.

You say to Hal: What is nine million divided by eleven?

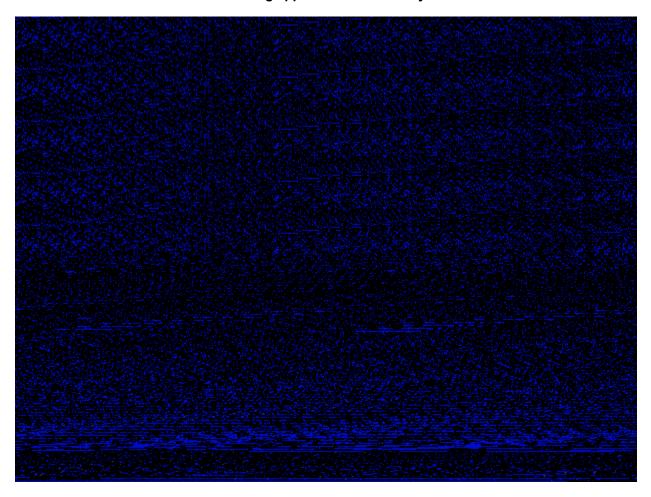
Hal responds: Nine million (9000000) divided by eleven (11) equals eight hundred eighteen thousand one hundred eighty one point eight one (818181.8181)

You say to Hal: Wow you're smart!

Hal responds: I think you are more smart than me.

You say to Hal: Thanks. Bye! Hal responds: Good bye, Robert!

Editing appointments manually



You can edit your appointment book, by either asking Hal to edit it or by right clicking on Hal and clicking "Edit Appointment Book" A window, similar to the one above, will pop up showing your appointments for the current month. You can use the "Prev Month" and "Next Month" to view different months. If you want to see all appointments for a day simply click on the day and all entries for that day will appear at the bottom of the Window. If you want to delete an entry, click on the day of the entry and then click on "Delete Entry" Hal will go through all entries for that day and ask you which ones to delete. If you want to enter an entry click on the day you want to enter an entry and click on "Add Entry" You can have Hal enter entries automatically, just simple tell him about an appointmentt. Hal will automatically remind you of dates as defined in the User-Defined events. If the entry you typed in does not have a User-Defined Event Hal will not remind you of the event. Hal comes preset with many events such as: Appointment, birthday, meeting, anniversary, date, and more. You can add or change user-defined events by clicking on "Set User-Defined Events"

How to make Hal keep appointments

Simply tell Hal about a date and he will remember it. When Hal says "I'll Remind you when this time is near" and he shows an animation with a notepad and pencil that means he understood your appointment. If he didn't do this then that means he did not write down the appointment, no matter what else he says.



In order for Hal to write down an appointment Hal needs to find an event, a date, and a specific time (optional). In this case the event was "meeting", the date was "tomorrow", and the time was "at noon"

A date can be written to Hal in any form. Let's say today is March 15, 1998 and that you have a doctor's appointment on March 22, 1998 at 1:20 pm. Here is a list of some of the possible combinations that Hal will understand:

- "doctor's appointment 3-22 at 1:20 pm"
- "doctor's appointment 3/22/1998 at 13:20"
- "doctor's appointment March 22 at 1:20"
- "doctor's appointment on March Twenty Second at 1:20"
- "I have a doctor's appointment in one week at 1:20"
- "I have a doctor's appointment in seven days at 1:20"

If you don't say to Hal either AM or PM Hal will assume PM if the hour is between 1 and 7 because most people are sleeping then. But if you really do have an important date at 2:00 in the morning make sure you say AM. Hal expects time to be given in the AM/PM format, but if you give an hour greater then 12:00, such as 15:00 Hal will automatically convert that to 3:00 pm. If you write a date in numbers Hal expects the Month to be first, then the day, and optionally a year.

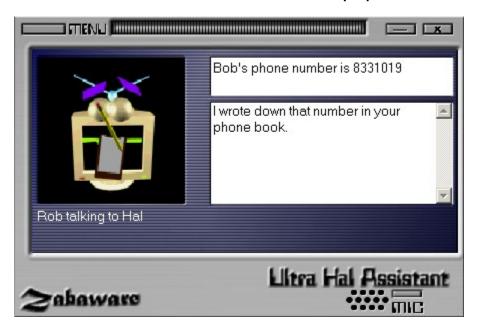
In order for Hal to write down an appointment he must understand the event. Hal is preprogrammed with many events such as: appointment, meeting, birthday, anniversary, and more. Hal knows that an appointment and meeting is a one time event and that after the event happens he should erase it from his calendar. But Hal also knows that a birthday and anniversary is an event that happens annually and he will never erase it from his calendar. Hal also knows that a meeting and appointment usually require a specific time of day and that a birthday and anniversary don't. For a birthday, Hal will remind you 2 weeks in advance. For an appointment he will only remind you 3 days in advance. If you want to teach Hal your own custom events you need to use Hal's user-defined events.

[&]quot;doctor's appointment next sunday at 1:20"

When the time or date of the event approaches Hal will remind you of it automatically by popping up when he feels a reminder is necessary. When and how often Hal reminds you of an event depends on how Hal was set to remind you for an event. You can set event reminders in Hal's user-defined events.

If you want to delete or edit an appointment, you can go into a calendar and edit the appointments manually. Either ask Hal to edit appointments, or right click on Hal and click "Edit Hal's Appointment Book" You can read the topic Editing appointments manually for more information.

How to make Hal keep a phone book



Hal will remember phone numbers if you simple tell him, like above. When Hal remembers a phone number he will say "I wrote down that number in my phone book" and he will show an animation of writing on a notebook. Anything else he says doesn't really matter.

You can ask Hal about a phone number like this:

You Ask: "What is Bob's phone number?"

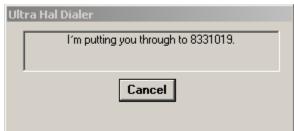
Hal says: "Bob's phone number is 833-1019"

Hal can also dial phone numbers for you if you have a modem and tell Hal where it is connected. For more information view the section called How to make Hal dial phone numbers.

You can also edit or view the phone book Hal has made. You can delete entries or change the phone numbers in them. For more information about this view the section called Editing your phone book.

How to make Hal dial phone numbers







Making Hal dial phone numbers that he has remembered is easy. Just tell Hal to call someone, like this:

You say: "Call Bob please"

Hal says: "Bob's phone number is 8331019. I'm dialing"

(Hal dials the phone number is tell you to pick up your phone when the phone starts ringing)

But in order for Hal to dial phone numbers you must have a modem installed and you must tell Hal where it is. The first time you tell Hal to dial a phone number a window will pop up asking you to what com port your modem is connected to. A computer has 4 com ports. A mouse is sometimes connected to com 1 and a modem is usually connected to com 2. You must know where it is connected and tell Hal. Check with your computer manufacturer if you are not sure.

You can also tell Hal where the modem port is, if you go into Hal's options.

How to make Hal remember addresses

Making Hal remember addresses is part of Hal's memory features. If Hal finds the linking verb "is" or "are" in a sentence he will remember it for good.

When you tell Hal: "Joe's address is 3175 West 42nd St." Hal will think: "Joe's address=3175 West 42nd St."

This will work with anything, for example:

When you tell Hal: "ABC is XYZ"

Hal will think: "ABC=XYZ"

When Hal learns something this way, he will tell you "(I learned something new)" and you will see a light bulb appear over Hal's head.

You can ask Hal: "What is Joe's address?"

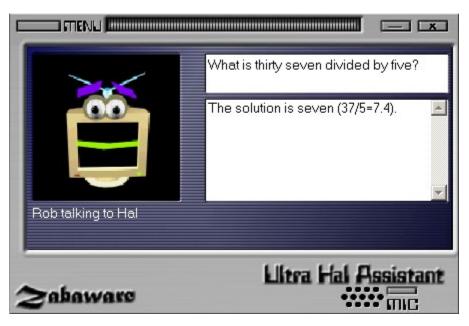
Hal will respond: "Joe's address is 3175 West 42nd St."

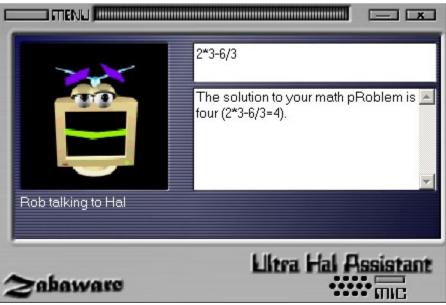
You can ask Hal: "Who's house is 3175 West 42nd St?" Hal will respond: "Joe's address is 3175 West 42nd St."

You can ask Hal: "What is ABC?" Hal will respond: "ABC is XYZ"

You can ask Hal: "What is XYZ?" Hal will respond: "ABC is XYZ"

How to use Hal's natural language calculator





Using Hal's calculator is easy. Just enter a simple math problem in either words or numbers and Hal will give you the answer. Hal can add, subtract, multiply, divide, calculate square roots, and powers.

How to make Hal run programs



When Ultra Hal Assistant starts up, he always scans your start menu and desktop for new shortcuts. Shortcuts point to programs or documents. Hal will only look for shortcuts to Windows programs, not shortcuts to DOS programs. It is very easy to make Hal run programs. All you have to is tell him what program to run.

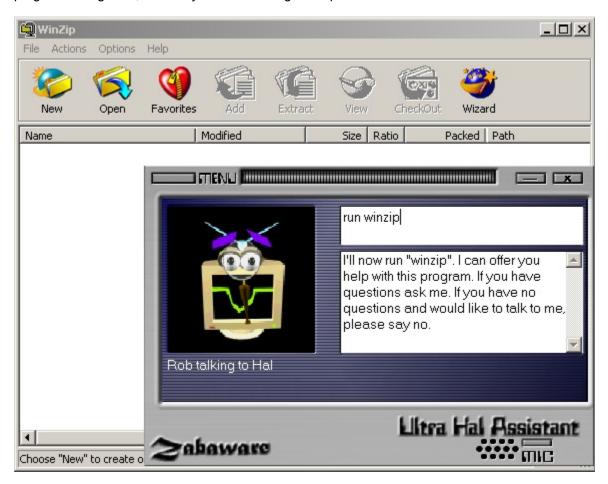
You say to Hal: "Please open wordpad." Hal will run it for you.

It's that simple. You do not need to tell Hal the full name of a program. Hal will find the closest match to the program you want to run.

Sometimes Hal will find a standard Windows help file associated with the program you are running. Hal will tell you that if you need some help with the program to ask him. For more information about this read the topic How to make Hal give help with a program.

How to make Hal give help with a program

In order for Hal to give help with a program, you must run the program through Hal. After you run the program through Hal, if Hal says he is able to give help with it then here's how:



You tell Hal to run a program called Winzip. When Hal runs it he will display the message above. That means he has found a standard Windows help file for that program. Some programs, even if they do have a help file, won't work because the program hides the help file in places Hal does not search, like the Windows folder.

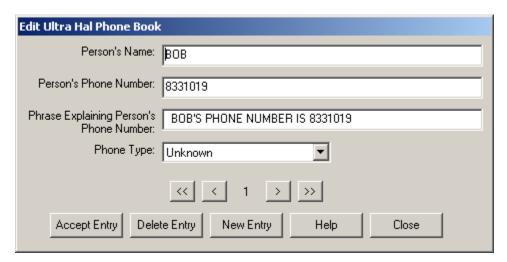


When you are working in the program, and you need help, simply click on Hal. When you click on him he will display the message above. Enter your question and press enter. If you don't have a question about the program, but you want to use Hal for something else you must say "NO" to Hal, meaning you don't want help.



Once you enter your question to Hal, Hal will search the help file and show you an article with the closest match to keywords Hal has automatically extracted from your sentence. If there are more than one article with a match a window will pop up asking you to choose an article. If no immediate matches were found then Hal will enter your keywords to the help files index so that you can browse the index easily.

Editing your Phone Book



You can change the phone numbers Hal learns from you using Hal's phone book editor. Simply right click on Hal's icon by the clock, and click "Edit Phone Book" and the dialog you see above will appear.

You can go through the entries by using the arrow buttons. "<<" takes you to the beginning of the phone book. "<" takes you back one entry. ">>" takes you to the end of the of the phone book.

To change an entry, simply either change the name of the person, or the phone number. After you make the changes click on the button "Accept Entry"

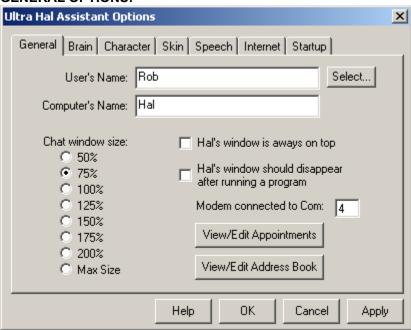
To delete an entry, simply go to the entry and click the button "Delete Entry"

To add a new entry you can either simply tell Hal a phone number, or you can add it manually. To add it manually click on the button "New Entry" Type in a persons name, their phone number, and click on the button "Accept Entry"

Setting Hal's options

Hal has many options that you can change. This section will explain what each of the options mean. To go into Hal's options, simply click on the menu button and select "General Options" You will get the following dialog. Use the tabs at the top of the dialog to setup "General", "Brain", "Character", "Skin", "Speech", "Internet" and "Start Up" options.

GENERAL OPTIONS:



User's Name: Enter your name under this text box. This is what Hal will call you. When you enter a new name, a new user will be created on your hard drive. Each user has their own configuration of Ultra Hal.

Select: You can change to users already created by clicking on the button "Select..."

Computer's Name: Enter what you would like the computers name to be. It does not have to be Hal if you don't want it to.

Modem Connected to Com: If you want Hal to be able to dial phone numbers for you, you must enter the COM port your modem is connected to here.

Hal's window is always on top: If you want Hal to always be above all other windows no matter what, then select this option.

Chat window size: You can change the size of Hal's window relative to its standard size. Simply select ther percentage of the original size that you want to appear.

BRAIN OPTIONS: See Choosing a different personality for Hal.

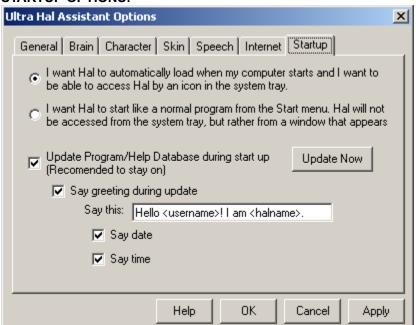
CHARACTER OPTIONS: See Choosing a different animated character for Hal.

SKIN OPTIONS: See Choosing a different skin for Hal.

SPEECH OPTIONS: See Choosing a different voice for Hal.

INTERNET OPTIONS: See <u>Have Hal help you browse the Internet.</u>

STARTUP OPTIONS:



Automatically load Hal when your computer starts: Select the first option if you would like Hal to start up with your computer. If you want Hal to be always accessible to you and you want Hal to remind you of appointments make sure this option is on.

DO NOT Automatically load Hal when your computer starts: Select the second option if you would NOT like Hal to start up with your computer. When you want to run Hal you would simply run Hal from its Start Menu position. Hal will not always be accessible to you and Hal will not be able to automatically remind you of appointments.

Update Program/Help Database during start up (Recommended to stay on): In order for Hal to be able to run programs for you and offer help with programs, he must scan your hard drive for programs during your computer's start up. If this option is deactivated running programs and offering help with programs may not work correctly, but your computer will take about 20 seconds faster to turn on.

Say greeting during update: When Hal scans your computer during start up, he can greet you. Select this option if you want Hal to greet you.

Say This: Enter what you want Hal to say when he greets you in the text box.

Say date: Select this option if you want Hal to tell you the date during his greeting.

Say time: Select this option if you want Hal to tell you the time during his greeting.

After you finish setting Hal's options, be sure to click on "Apply" or "OK" to save the options. If you don't

want to save the changes you made, click on "Cancel"

Changing and creating users

The current user is Sue	
Please select a different user a	and click ok.
John.hla	
Hobert.hla Sue.hla	

OK Cance

Note: To make a new user, go into Ultra Hal Options and change the username and Hal will automatically create a new user file. Each user has their own user defined brain and configuration.

Ultra Hal can have many different users. Each user has their own customizable brain file, and configuration. What Hal learns under one user he won't remember with another user.

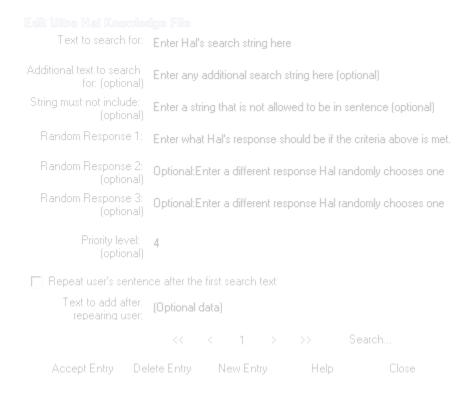
You can create new users from Ultra Hal's Options. You can change users by right clicking on Hal, and selecting "Change User" or clicking on "Select..." from Ultra Hal's Options.

Just select the user you want from the list, and click "OK" Hal will load the user right away.

Teach Hal by keyword and priority

When Ultra Hal learns from you, he puts what he learns into a knowledge file. Hal has 2 different knowledge files. Hal learns from every sentence you tell him, but he only gives you the option of editing some of it. You can read on how Ultra Hal learns.

You can edit or delete the things that Hal learns from you, or you can make your own entries to Hal's brain. You can get into Hal's knowledge file, either through Ultra Hal's Options, or click on the menu bar and selecting "Edit Keyword & Priority Brain" When you do you will get a window like this one:



To go to the beginning of Hal's brain, click on the "<<" button. To go backward one entry click on the "<" button. To go forward one entry click on the ">" entry. To go to the end of Hal's knowledge file click on ">>"

If you know what you are searching for, click on the "search..." button. When prompted enter a search keyword and the first match will be found starting from the entry your on. Search again with the same keyword and the next match will be found.

If you get to an entry that you want to delete, simply click on the button "Delete Entry"

If you want to edit an entry, go to it, change all fields that you want to edit, and click on "Accept Entry" Read the section below to find out what all the fields mean.

If you want to create a new entry, click on "New Entry". All the fields will be blank. Fill out all applicable fields and then click "Accept Entry" Read the section below to find out what all the fields mean.

Explanation of fields:

Text to search for: Enter a keyword or key phrase that Hal should look for in a user's sentence.

Additional text to search for (optional): If you Hal to make sure another keyword or key phrase is an a user's sentence in addition to the field above enter it here.

String must not include (optional): If you want Hal to make sure a certain keyword or key phrase is not in the user's sentence enter it here.

Random Response 1: If the "text to search for" is in the users sentence and if the "additional text to search for" is in the sentence and if the "string must not include" is not in the sentence then type what you want Hal's response to be here.

Random Response 2 (optional): If you want Hal to choose between more than one response then the one above, enter another response here.

Random response 3 (optional): If you want Hal to choose between more than one response then the 2 above, enter the 3rd response here.

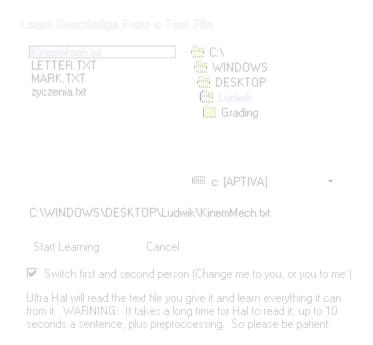
Priority level: If Hal has finds more then one response that match in his brain, he chooses the last (most recent) response with the highest priority level. Hal chooses priority 1 first, then 2, then 3, then 4. It must be between 1-4. When there is a priority 4, Hal's other brain (the one you have no control over) is used before priority 4 in this brain.

Repeat user's sentence after first search text: Select this if you want Hal to repeat what the user said after the keyword or key phrase. For example if the search string was "I am", and the user said "I am xyz", and response 1 is "are you really ", and this option is selected, Hal will say "Are you really xyz"

Text to add after repeating user: If the option above is selected, you can have Hal add something after repeating a user's sentence. This is usually used to add a period, question mark, or exclamation point.

There are more advanced thing that you can do in the knowledge editor. To read about them, read the help article Advanced editing to Hal's knowledge file.

Making Hal learn from a text file



Hal learns from every sentence you tell him. If you have a large text document that you want Hal to learn, you don't have to type each sentence to him. Instead you can have Hal read it himself. For more information on how Hal learns you can read the article Info on how Ultra Hal learns.

First you must save the document you want Hal to read as an ASCII text file somewhere on your hard drive. Make sure it has a txt file extension. Hal cannot read any other text format.

Next, right click on Hal, and click on "Learn Knowledge from Text File" The dialog you see above will appear. Locate the text file you want Hal to learn on your hard drive.

Before you make Hal learn it, decide whether or not you want Hal to switch the first and second person while reading sentences. If you leave the option blank, Hal will read it exactly as it is and will respond with those exact sentences. If you select the option Hal will switch first and second person. For example if a sentence in the document is:

"I went over to my grandmother's house."

With the option activated, when Hal uses this sentence in his response Hall will say:

"You went over to your grandmother's house."

With the option deactivated, when Hal uses this sentence in his response Hal will say:

"I went over to my grandmother's house."

When you are ready for Hal to start learning from the file, click on "Start Learning" Hal may spend a few minutes formatting your document, by figuring out where a sentence ends and a new one begins, and by removing all extra spaces and carriage returns. After Hal does this he will begin reading each sentence, one by one until he reaches to the end of the document. He will show you the sentence he is learning from and he will show you what percent of the document he has read. You may work in other programs while Hal is learning, you just won't be able to work in Hal. When Hal is done learning he will give you a percentage of how much he thought he understood from the document.

Advanced editing to Hal's knowledge file

In order to understand advanced editing to Hal's knowledge file, you must first understand editing Hal's knowledge file.

When giving a response, Hal can do some special things. All you have to do is enter some special Hal tags into his responses.

- <USERNAME> This tag will change into the current user's name. Let's say the current user is "Rob". The sentence "Hello, <USERNAME>! How are you?" will change to "Hello, Rob! How are you?"
- <COMPUTERNAME> This tag will change into Hal's current name.
- <TIME> This tag will change into the current time
- <DATE> This tag will change into the current date
- <RUN>xyz</RUN> Hal will open whatever you put between these two tags. You can either type in the Start Menu name of a program, the real path (C:\path\file.ext), or an Internet page (http://www.webpage.com)
- <YES>xyz</YES><NO>xyz</NO> If you want Hal's response to be a yes or no question, then you can say what Hal will respond if the user answers yes and what Hal will respond if the user answers no. No nesting.
- <PHONE>xyz</PHONE> This will make Hal dial a phone number by typing in a number. If you enter a name Hal will search his phone book for a phone number to dial.
- <CHANGESUBJECT> This will make Hal change the topic of conversation.
- <CHANGESUBJECT2> This will make Hal change the topic of conversation, and give a lame reason why he did.
- <MAKECOMPLIMENT> This will make Hal give a compliment to the user. Makes Hal happier.
- <MAKEINSULT> This will make Hal insult the user if he is mad enough. Makes Hal madder and sadder.
- <MAKEINSULT2> This will make Hal insult the user and make fun of the user's insult.
- <CALENDAR> This will make Hal show his appointment book.
- <EDITKNOW> This will make Hal show his knowledge editor.
- <EDITPHONE> This will make Hal show his phone book.
- <OPTION> This will make Hal show his options dialog.

How to start and close Ultra Hal



When your computer turns on Hal will greet you, scan your computer for new programs, and show the picture above.



After Hal is finished scanning your computer for new programs (usually takes about 10 seconds) he will put his icon in your system tray (by the clock) Anytimeyou want to talk to Hal just click on this icon and Hal will pop up. You can right click (click with the right mouse button) on this icon to get a setup menu.



Once you click on Hal's icon he will pop up.

Changing Hal's speech synthesis

Register by Internet

Register by phone

Register by mail

How to make Hal remember and write email

Ultra Hal Assistant can remember people's email addresses. He can later recall an address for you, or he can automatically start your default email program and automatically write in the address for you. The following conversation illustrates this:

You say: Joe's email address is Joe@hotmail.com

Hal says: I have learned Joe's email address. If you ask me to email this person, I will automatically start your default email program and write in the address for you. (I learned something new)

You say: What is Joe's email address?

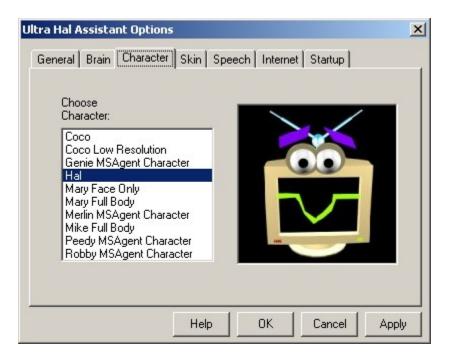
Hal says: Joe's email address is Joe@hotmail.com

You say: Email Joe

Hal says: I will now start an email for JOE@HOTMAIL.COM

(Hal actually runs your default email software and writes in the address for you)

How to choose a different character for Hal



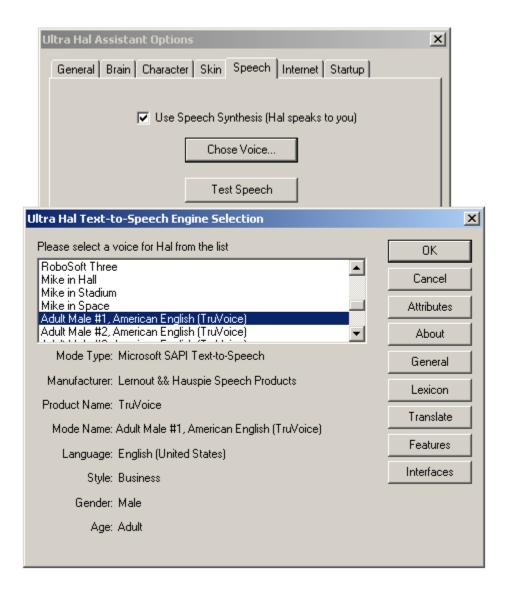
Ultra Hal has many different animated characters to choose from. Characters are all external plugins and additional characters can be downloaded from http://www.zabaware.com/assistant/plugins.html To choose a different character, simply go into Ultra Hal's options, click on the character tab, choose the character that you want, and click on ok.

How to choose a different voice for Hal

A speech synthesis program, also known as text-to-speech, is a program that allows a computer to speak any word out loud.

Ultra Hal Assistant comes with many voices that you can choose from. But if you want to get even more voices you may use any SAPI complaint voice on the market. Most speech synthesis programs sold today are SAPI complaint.

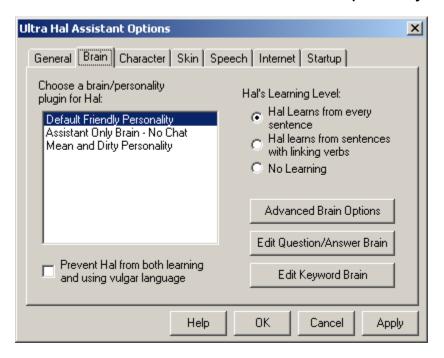
To change the voice, first go into Hal's options, select the "Speech" tab, and click on "Choose Voice..." You will get a window like this:



Choose the voice that you would like Hal to have and click on OK.

If you notice that Hal mispronounces some words, you can fix it. Simply click on the "Lexicon" option and you can fix the pronunciation. You may also set attributes for the voice by clicking on "Attributes" or general options for the voice by clicking on "General"

How to choose a different personality for Hal



Ultra Hal gives you the option of choosing from many different personalities and brains. The 3 brains shown above are included with Hal. Additional brains can be downloaded from http://www.zabaware.com/assistant/plugins.html To choose a different brain plugin, go into Hal's options, select the brain tab, and select the brain plug-in you wish to use.

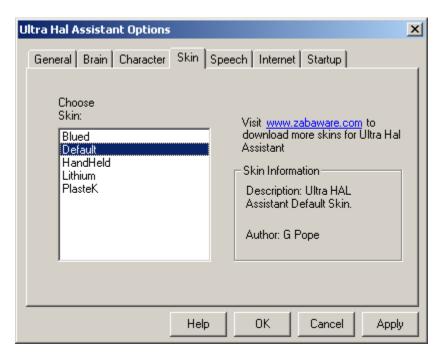
If you wish to prevent Hal from learning and using vulgar language, be sure to select the check box labeld "Prevent hal from both learning and using vulgar language" Also make sure that the "Default Friendly Personality" is selected.

Hal is able to learn from every sentence that you say. You can select the level at which Hal learns from the radio boxes on the right.

If the brain plug-in you chose has advanced options, click on "Advanced Brain Options" to setup the advanced options.

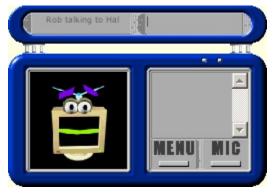
Hal automatically learns by chatting with you, but you may manually teach Hal for better results. Simply click on "Edit Question/Answer Brain" or "Edit Keyword Brain" to teach Hal new things.

How to choose a different skin for Hal



Ultra Hal's user interface can be customized to look however you wish. Ultra JHal uses a skin interface that changes every aspect of your window. Choose the skin that you like best. The following skins are included with Hal:





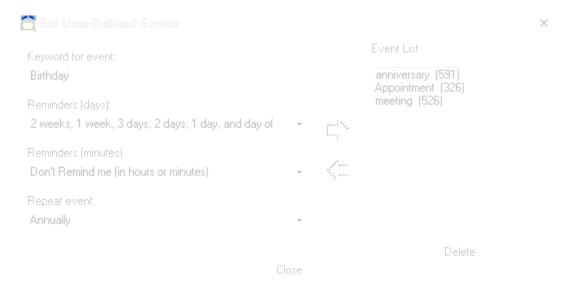






More skins can be downloaded from http://www.zabaware.com/assistant/plugins.html

Setting user-defines events



In order for Ultra Hal to write down an appointment and remind you of it, he must understand what the event is and how to remind you of it. For example, a birthday is an event that should be reminded of at least 2 weeks before it. But there is no need to remind you of the event in minutes or hours. A birthday is an event that should be repeated annually. An event such as a meeting doesn't need a 2 week reminder, 1 or 2 days is enough to remind you of it. But reminders in hours or minutes is necessary so that you don't miss the meeting.

Ultra Hal comes pre-loaded with many events. But if you would like to change how Ultra Hal reminds you of the events, or if you would like to add your own events you can use Ultra Hal's "Set User-Defined Events"

You can get into the event setup dialog from the Ultra Hal Calendar, or from Ultra Hal Options.

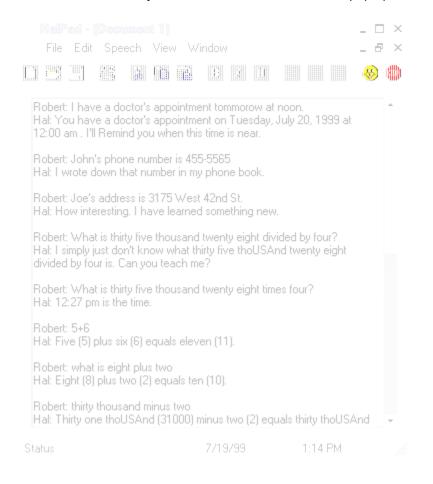
To change an existing event, select it from the list on the right of the window, and click on the left arrow near the list. Now on the left side of the dialog, you can change the keyword for the event, how often Hal should remind you in days, how often Hal should remind you in hours and minutes, and how often to repeat this event. Once your finished changing the event, click on the right arrow to send it back to the list.

To delete an event, select the event from the list on the right and click on the "delete" button located below the list.

To add your own event, simply enter a keyword for the event, select how often you want Hal to remind you in days and hours, and select how often you want this event to be repeated. Once your done, click on the right arrow to send it to the list on the right.

Viewing and saving conversations

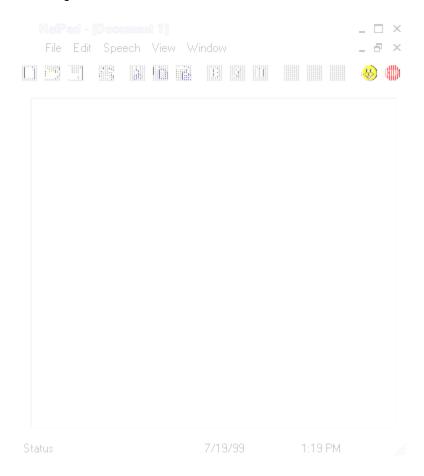
Ultra Hal Assistant records your conversations with him. You can view these conversations any time or you can save them as a text file. Once you shut down your computer or Hal, the stored conversation is lost unless you save it. To view a conversation simply click on the menu button and select "View/Save Conversation" Once you do, a window like this one will pop up and show you your conversation:



This works like a standard text editor. If you would like to save the conversation simply click on "file" and then "save". You may print the conversation if you click on "file" and "print" You may also edit the conversation if you wish. You can have your conversation spoken out loud if you wish. For more information on speaking documents out loud read Using Hal pad to speak documents out loud.

Using Hal Pad to speak documents out loud

Ultra Hal Assistant can read your documents out loud for you. This can be useful for proof reading your documents. Hal is able to open text files and rich text files. You may also copy and paste documents into Hal. To start Hal Pad, simply click on the menu button and select "Read a document out loud" You will get a window like this:



You may open a document by clicking "File" then "Open" You may also copy paste text into Hal or you may simply type text. Hal will read the document out loud when you push the smiley face icon or when you click on "Speech" and "Read Document Out Loud" You may stop Hal's speech at any time by simply pushing the stop button. You may make changes to the document just like you would with a regular text editor. If you would like to save the file simply click on "file" and then "save". You may print the file if you click on "file" and "print". You may change Hal's speaking voice by clicking on "Speech" and "Choose Voice"

Teaching Hal by question and answer

You can teach Ultra Hal answers to sentences by going into the Question and Answer dialog. To get there click on the menu button and select "Teach Hal by Question & Answer" You will get a dialog that looks like this:

Enter User's Question:
Rephrase User's Sentence for better results: (Optional but recommended)
Rephrase User's Sentence again for best results. (Optional but recommended)
Hal's Answer to the question above
Teach Hal Close

Enter a sentence or question in the first text box that you would like Hal to look for. In the second text box, if you wish, you may rephrase the sentence from the first text box for better results. In the third text box, you may rephrase the sentence one more time if you wish. In the last text box enter the answer that Hal should give. You may use Hal Tags in the answer if you wish.

Even if a user does not type in the sentence exactly as you type it, it will not matter. Hal compares sentences and will use the most similar sentence. Nevertheless, you still should rephrase the sentence to help Hal out a little bit.

Introduction to plugins

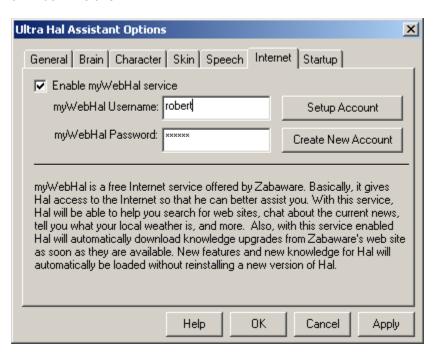
Ultra Hal Assistant is upgradable via plugins. Plugins can be made in VBScript, JavaScript, as ActiveX controls, and as separate DDE programs. Everything about Hal can be run by plugins. Hal's voice is upgradable via plugins. Hal's faces are upgradable by plugins. Hal's voice recognition is upgradable by plugins. And most important Hal's entire brain is upgradable by plugins. This makes it possible for anyone to change Hal's personality or to simply make Hal smarter.

Please visit http://www.zabaware.com/assistant/plugins.html to see a listing of all plugins that have been made for Hal.

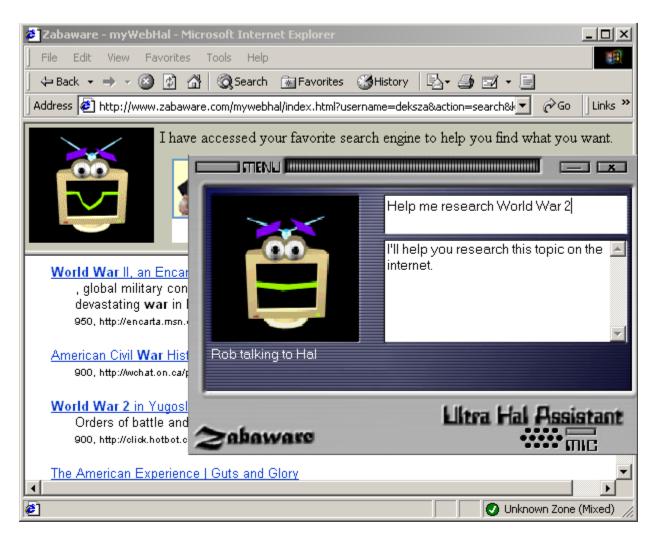
If you are a programmer and are interested in programming plugins for Ultra Hal Assistant please visit http://www.zabaware.com/assistant/programming.html for documentation on how to go about doing this.

Have Hal help you browse the Internet

Ultra Hal can help you browse the Internet. But before you use this feature, you must setup an account on Zabaware's server. To do so first go into Hal's options. Next click on the "Internet" Tab. You will get a window like this:

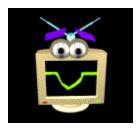


First make sure that "enable myWebHal service" is checked. If you already have an account with Zabaware, simply type in your username and password. If you don't have an account yet, simply click on "Create New Account" and a free account will be setup for you. When you finish creating a free account, enter your username and password in the text box. Whenever you wish to change your account settings you can click on the "Setup Account" button. Once this service is enabled Hal will be able to help you browse the Internet. Here is an example showing how Hal can help you research a topic.



Hal can research anything for you. Hal can also tell you what your local weather is, what your local news is, and more. The services on myWebHal will continue to expand, please visit www.zabaware.com or go into your account settings to see what the latest improvements have been. Unless you opted out of receiving mail from Zabaware, we will also send you notification when any improvement has been made to our services.

Welcome to Ultra Hal Assistant!



Ultra Hal Assistant is your digital secretary and companion. He can help you be more organized, he can help you use your computer, he can help you browse the Internet, and he can entertain you. Ultra Hal has many great animated faces to choose from and he speaks to you through your sound card with his own voice! You can also speak outloud to Hal with Hal's speech recognition engine, or you can type to him if you wish. All you need to know in order to use Ultra Hal is to speak English!

The following conversation is a example conversation between Ultra Hal and a person. It demonstrates all of Hal's features. Please read this sample conversation so that you know everything that Hal is capable of doing for you. Hal is capable of doing quite a lot of things, so we recommend that you print this page to keep as reference. If you wish to print, simply click on "file", and then click on "print".

User: Hello Hal.

Hal: Hello! How are you today?

User: I am fine. How about you? **Hal:** That's good. I am fine also.

User: What can you do? **Hal:** Anything you want.

User: I have a doctor's appointment tommorow at noon.

Hal: You have a doctor's appointment on June 14, 2000 at 12:00 pm. I will remind you when this time is

near.

User: Our anniversary is on October 14.

Hal: Your anniversay is on October 14, 2000. I will remind you when this time is near. I will repeat this event annually.

User: Bob's birthday is on 9-21-00. **Hal:** Bob's birthday is on September 21, 2000. I will remind you when this time is near. I will repeat this

event annually.

User: I have a date with my girl friend on Friday at 7:00.

Hal: You have a data with your girl friend on June 16, 2000 at 7:00pm. I will remind you when this time is

User: Rob's home phone number is 833-1019.

Hal: I wrote this person's phone number is my phone book.

User: Rob's office phone number is 835-2351.

Hal: I wrote this person's phone number is my phone book.

User: John's phone number is 833-3642.

Hal: I wrote this person's phone number in my phone book.

User: What is Rob's phone number?

Hal: I have multiple entries for this person, including office, and home. Please be more specific.

User: What is Rob's home phone number?

Hal: Rob's home phone is 8331019. Would you like me to dial this person's number for you?

User: No.

Hal: How can I help you?

User: Call Rob's office.

Hal: I am now contacting Rob at office at 8352351. The phone is ringing. Please pick up your phone to

talk to Rob.

(Hal actually dials the number for you if you using your modem)

User: Open word.

Hal: I will now open the program "Microsoft Word" (Hal actually opens the program Microsoft Word)

User: Thank you.

Hal: Your welcome, I think you are very polite.

User: Open winzip.

Hal: I'll now run the program "Winzip". I can offer you help with this program. If you have questions ask

me. If you have no questions and would like to talk to me, please say no.

(Hal actually opens the program Winzip)

User: How do unzip a file?

Hal: I will scan the programs help file and show you a relevant article.

(Hal actually opens the winzip's help file and searches for an answer)

User: What's the weather like?

Hal: I will now open your favourite weather web site.

(Hal actually opens a browser window and downloads your local weather forecast)

User: Show me the news.

Hal: I will now open your favourite news site.

(Hal actually opens a browser windows and downloads the news for you)

User: Help me research World War 2.

Hal: I will help you research this topic on the Internet.

(Hal actually opens a browser windows and performs a search using your favourite search engine)

User: Rob's email address is Rob@hotmail.com

Hal: I have learned Rob's email address. If you ask me to email this person, I will automatically start your favorite email program and write in the address for you.

User: John's email address is John@aol.com.

Hal: I have learned John's email address. If you ask me to email this person, I will automatically start your favorite email program and write in the address for you.

User: Email Rob.

Hal: I'll now start an email for rob@hotmail.com

(Hal automatically starts your email program and writes in the address for you)

User: Sally's eyes are blue.

Hal: Cool. I have learned something new.

User: Rob's address is 3175 West 42nd St. **Hal:** Cool. I like learning new things like that.

User: What color are Sally's eyes?

Hal: Sally's eyes are blue.

User: What is Rob's address?

Hal: Rob's address is 3175 West 42nd St.

User: What is five times ten plus six?

Hal: That's easy. The answer is 56 (5*10+6=56)

User: What is five squared plus nine?

Hal: Math is easy for me. The answer is thirty four $(5^2+9=34)$.

User: 2*(5+COS(60)/SIN(30))+3

Hal: Math is easy for me. The answer is fifteen (2*(5+cos(60)/sin(30))+3=14.9278997902311)

User: Wow! You are smart!

Hal: Thank you! I think you are smart also.

User: What is today?

Hal: The date is tuesday, june 13, 2000.

User: Can you chat?

Hal: I can answer most your questions.

User: What is the capital of Pennsylvania? **Hal:** The capital of Pennsylvania is Harisburg.

User: I like hamsters.

Hal: A hamster is a cute little rodent with cheek pouches and avery small tail. Hamsters are good pets.

User: Who are you? **Hal:** My name is Hal.

User: Do you sleep?

Hal: Well I am human aren't i?

User: No you're not. **Hal:** Yes I am.

User: No you're not. **Hal:** Yes I am.

User: Don't arque.

Hal: I am not arguing, you are.

User: You are weird.

Hal: I am not weird, please don't insult me.

User: I'm sorry.

Hal: I accept your apology

User: Good bye, Hal.

Hal: See you later.



