

Using Special Folders in Imagine Logo

This document describes new features of Imagine Logo, which allow referencing special folders defined in Windows (like "My documents" or "Common application data") from Logo programs (starting at build 398) by using special prefixes to file paths, and

Special prefixes to file paths

Build 398 and newer recognizes special prefixes to file paths. The special prefixes denote some Windows special folders.

Even the previous version recognized these three special prefixes:

% root Imagine folder (where the exe is located, which is usually under the "Program Files" special folder)

\$ the folder of the currently loaded IMP file

§ (paragraph character) Common application data folder

These prefixes can be used in file names, which are inputs to (nearly) all procedures accepting a file name.

In build 398 new prefixes were added. We wanted to avoid introducing more special characters (even using the above three ones means that the users cannot use files, which names start with those characters, which are otherwise legal characters for file names). Therefore all the new prefixes have the form: <prefixName> i.e. a name enclosed in < and > characters (these two characters cannot be part of file names in Windows).

Another thing that we wanted to avoid is to add tens of new words for translation into LAF files or tens of fixed English words in the code, which will need to be added to with each IE update (strange enough, usually new special folders were introduced by updates of IE).

So we found a neat way (at least I think) how to name the special folders. We use the fact that the special folders are stored in the registry in a place which can be read by all users along with readable identifiers of those folders (which are not translated to the language of Windows and should be pretty "stable").

For example the name for My Documents is "Personal". So if you want to create a folder under MyDocument, you can write:

```
CreateFolder "|<Personal>New folder|
```

(note that the special name stands for the name of that special folder including the backslash on its end).

You can see all the names (and even new ones, which will come) in these two places in Registry:

```
HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Explorer\Shell Folders
```

```
HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Explorer\Shell Folders
```

You can use all the names listed in the Name column on the right panel (if you open it with RegEdit).

This new feature will allow developers, who use Imagine Logo for developing their own non-trivial programs, to put files for that program to the special places as it is expected by standards of Windows XP and Windows Vista.

Some attention must be paid to the fact that not all folders exist on all Windows versions. This can be solved by either studying Microsoft's documents and then checking the sufficient Windows version at installation time of your program or by checking the presence of the special folder at run time. For example, the following code checks for the existence of <Common AppData> folder

which should be used for storing some data related to an application (e.g. its settings), which should be persistent between two runs of that application and should be common to all users of the computer. The problem is that not all systems contain such a folder.

if folder? expandfilename "|<Common AppData>| [*it is safe to use <Common AppData> here*]