Tutorial 2
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What topics are covered?
• Installing ctl3d32.dll.
• Creating an INI file and setting an INI entry.
• Associating the extension .cpp to notepad.
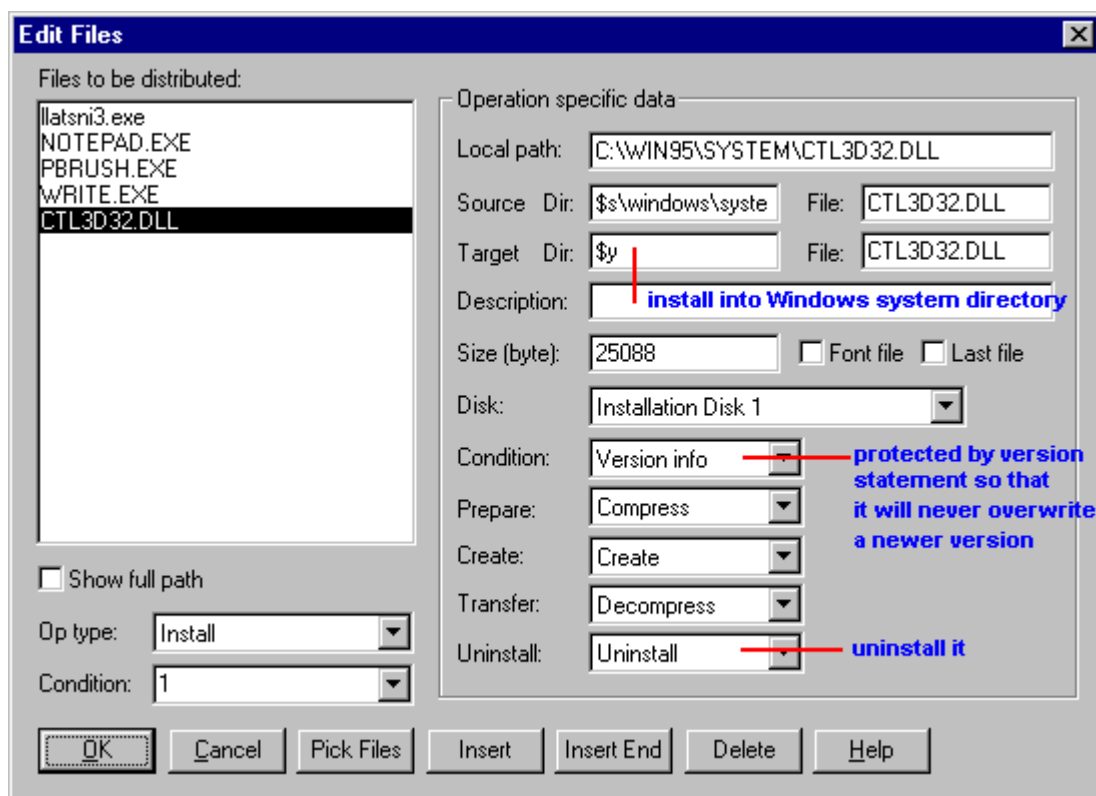• Supporting selective install.

Step 1
Open c:\prj\install.inf. You will base this tutorial on the last one.

Step 2
Suppose that write.exe needs 3D controls to run. So you need to distribute ctl3d32.dll as well.

Go to the file dialog (Edit | Files). Click on "Pick Files" button to go to the Explorer. Change to c:\windows\system, select ctl3d32.dll and drop it into the file list. Finally enter the parameters as shown below:

As with all other system-wide .DLLs, i.e., those shared by applications from different vendors, ctl3d32.dll is to be installed into Windows system directory, i.e., $y and protected by version checking. Whether it should be uninstalled or not depends on your target platform. For Win95 you should set "Uninstall" to "Uninstall" since Freeman Installer supports DLL usage counter that makes safe uninstallation of shared DLLs possible. For NT you should set "Uninstall" to "None". That is, to let the DLL survive uninstallation. The reason is that ctl3d32.dll has probably been installed onto your user's NT-based system without setting the
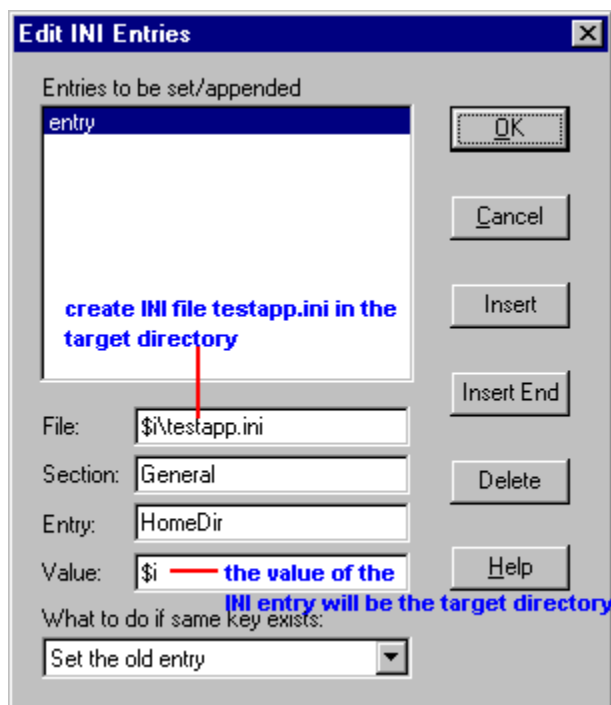
DLL usage counter.

However, if it was just a private .DLL (i.e., it will be used by your own application only), you should install it into $i and set "Uninstall" to "Uninstall" no matter which is your target platform..

Now, click on "OK" button to close the file dialog.

Step 3

Now you are going to set up some INI entries to be created during the install. Note that when designing your real application it is recommended you should the registry in place of INI files if possible.

Choose Edit | INI entries. Click on "Insert" to create a new entry. Enter the parameters as shown below:
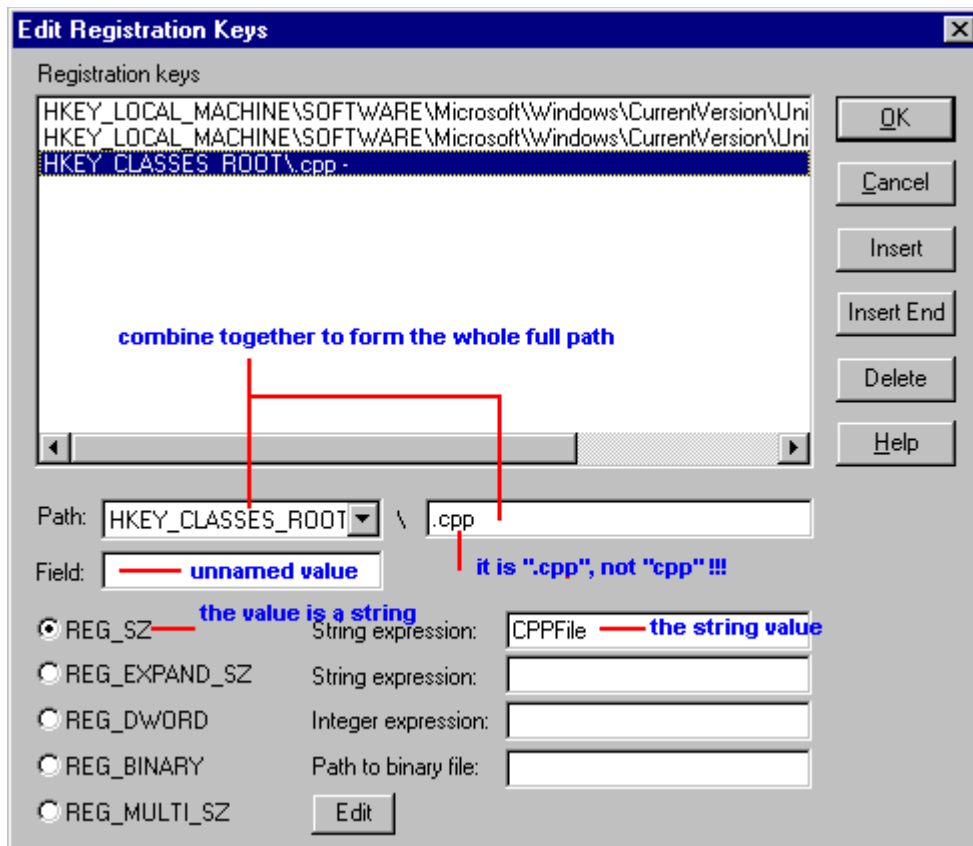

Click on "OK" button.

Step 4

Now you are going to associate .cpp to notepad so that after installation the user can:
• double click on a .cpp file to load the file into notepad.
• right click on a .cpp file to bring up a menu containing the "Open" and "Print" command.
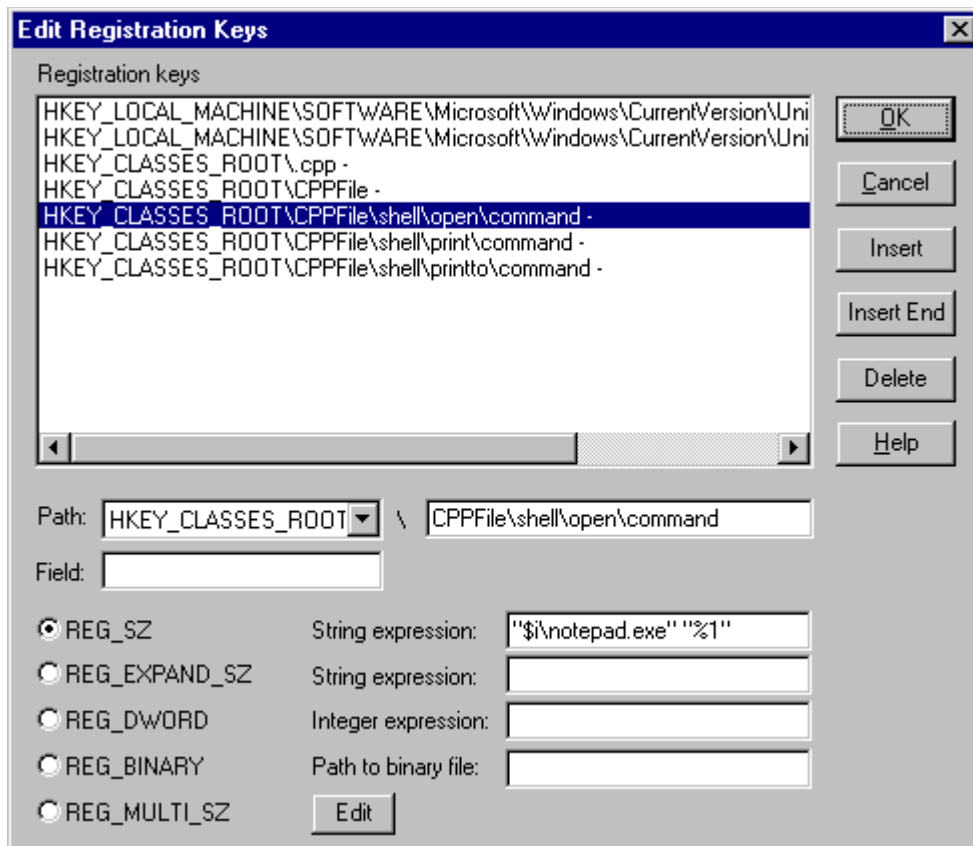• print a .cpp file by dropping it onto a printer icon.

Choose Edit | Registration Keys. There are already two entries there that registers the uninstaller with Control Panel. You don't need to touch them. Click on "Insert End" and then enter the parameters as shown below:

Create four more keys:

key path	field	type	value
• CPPFile	empty	REG_SZ	C++ Source File
• CPPFile\shell\open\command	empty	REG_SZ	"$i\notepad.exe" "%1"
• CPPFile\shell\print\command	empty	REG_SZ	"$i\notepad.exe" /p "%1"
• CPPFile\shell\printto\command	empty	REG_SZ	"$i\notepad.exe" /pt "%1" "%2"

If it was your own application instead of notepad.exe, you should accept the /p and /pt command line options for this to work (as a matter of fact, notepad doesn't support /pt option. But let's assume it does). %1 will be the path to the document being opened or printed. %2 will be the name of the printer. Since they could contain spaces, they are all quoted.
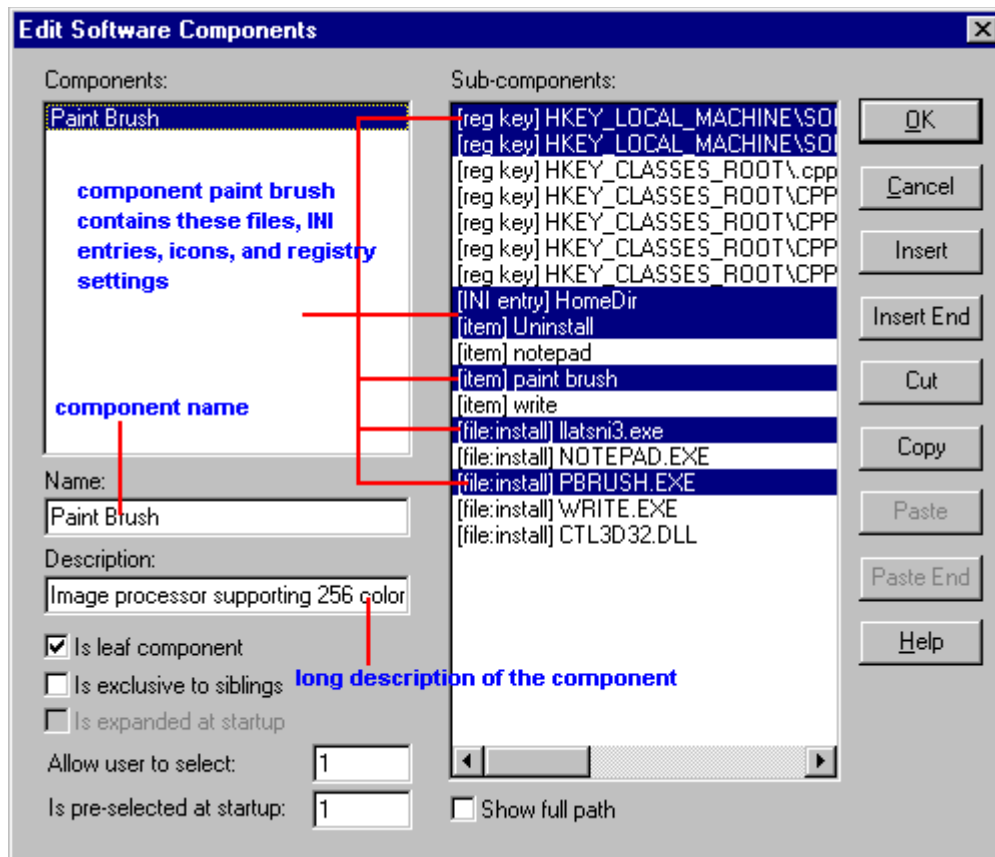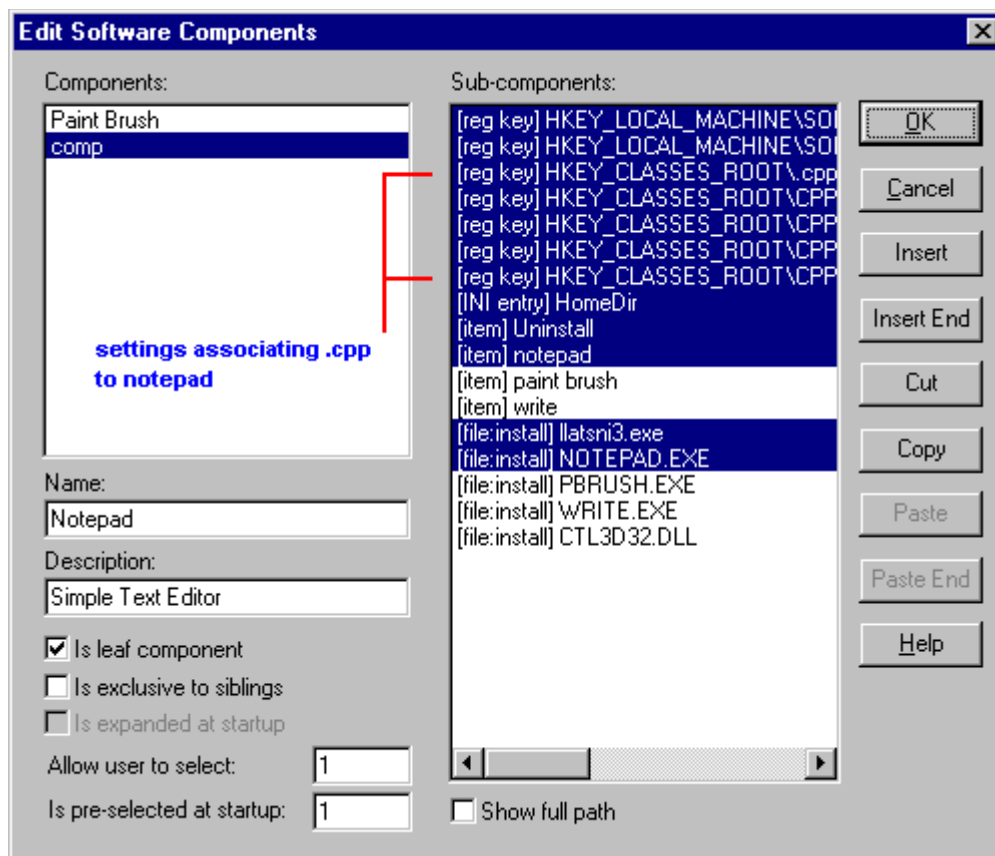
Click on "OK" button.

Step 5

Now you are going to divide your package into selectable "components" so that the user can choose which parts to install.

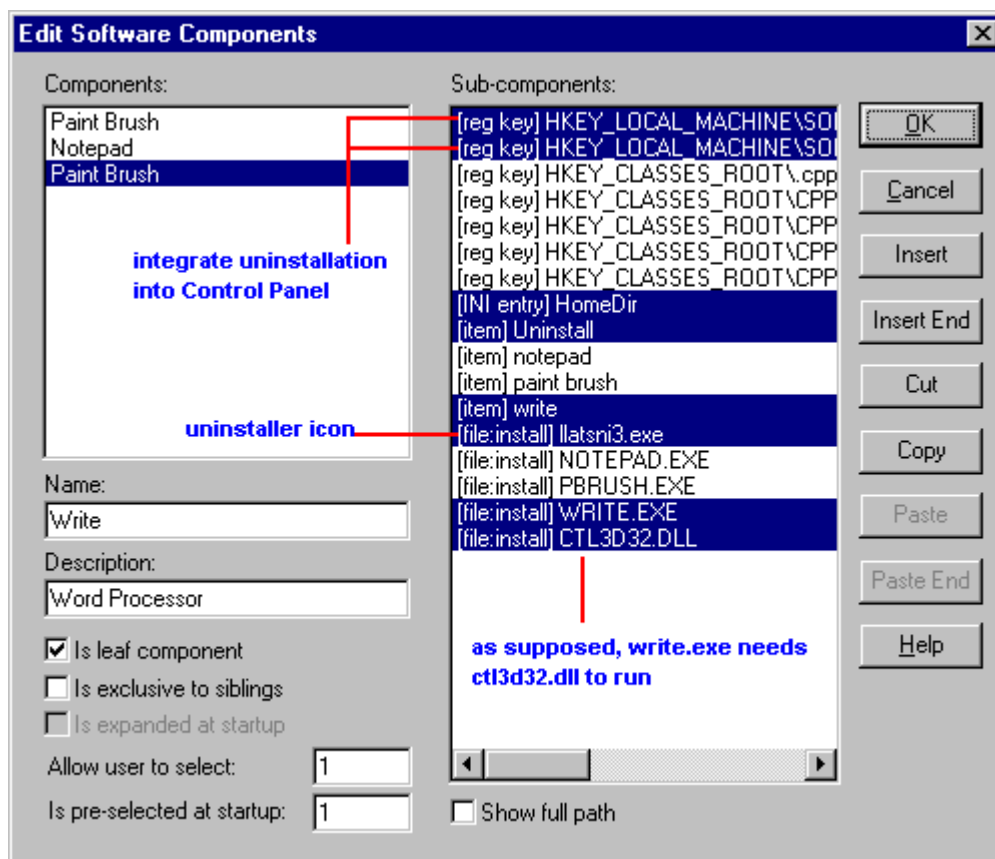Choose Edit | Software Components. Click on "Insert" to create a new component for paint brush. Enter the parameters as shown below:

Edit Software Components

Components:
- Paint Brush

component paint brush contains these files, INI entries, icons, and registry settings

component name

Name:
Paint Brush

Description:
Image processor supporting 256 color

☑ Is leaf component
☐ Is exclusive to siblings
☐ Is expanded at startup

long description of the component

Allow user to select: 1
Is pre-selected at startup: 1

Sub-components:
- [reg key] HKEY_LOCAL_MACHINE\SO
- [reg key] HKEY_LOCAL_MACHINE\SO
- [reg key] HKEY_CLASSES_ROOT\.cpp
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [INI entry] HomeDir
- [item] Uninstall
- [item] notepad
- [item] paint brush
- [item] write
- [file:install] llatsni3.exe
- [file:install] NOTEPAD.EXE
- [file:install] PBRUSH.EXE
- [file:install] WRITE.EXE
- [file:install] CTL3D32.DLL

☐ Show full path

Buttons: OK, Cancel, Insert, Insert End, Cut, Copy, Paste, Paste End, Help

Click on "Insert End" to create an entry for notepad:

Edit Software Components

Components:
- Paint Brush
- comp

settings associating .cpp to notepad

Name:
Notepad

Description:
Simple Text Editor

☑ Is leaf component
☐ Is exclusive to siblings
☐ Is expanded at startup

Allow user to select: 1
Is pre-selected at startup: 1

Sub-components:
- [reg key] HKEY_LOCAL_MACHINE\SO
- [reg key] HKEY_LOCAL_MACHINE\SO
- [reg key] HKEY_CLASSES_ROOT\.cpp
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [reg key] HKEY_CLASSES_ROOT\CPP
- [INI entry] HomeDir
- [item] Uninstall
- [item] notepad
- [item] paint brush
- [item] write
- [file:install] llatsni3.exe
- [file:install] NOTEPAD.EXE
- [file:install] PBRUSH.EXE
- [file:install] WRITE.EXE
- [file:install] CTL3D32.DLL

☐ Show full path

Buttons: OK, Cancel, Insert, Insert End, Cut, Copy, Paste, Paste End, Help

Now you're going to create yet another component for Write. Since it's composition is similar to that of paint brush, you can copy the component for paint brush by drag'n'drop with the control key pressed:

To help the user select the components, you create four more components:
• full install   --- It includes everything in the package.
• typical install   --- It includes everything except notepad since write can do its job.
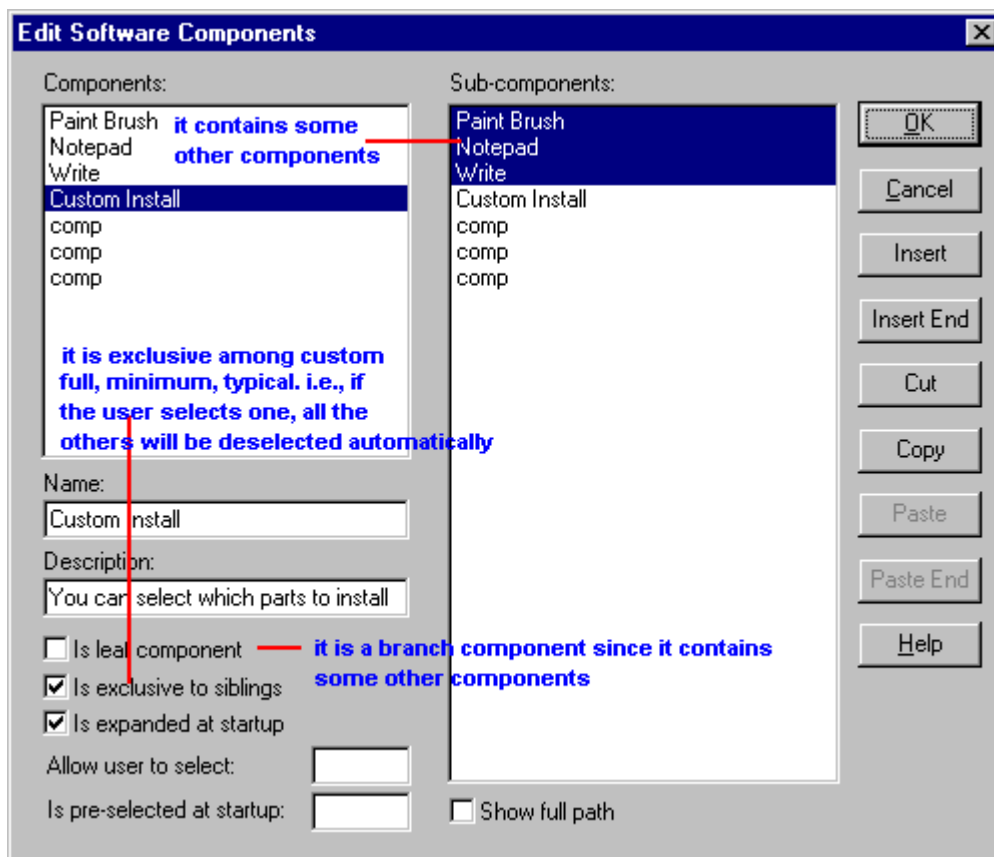• minimum install   --- It includes notepad only.

- custom install   --- notepad, paint brush and write are all there for user selection.

Custom install is quite special in that it doesn't contain files, icons, or other settings, but some other components. Components containing other components are called branch components (like "custom install") while those containing files and icons are called leaf components (like "write" or "full install").
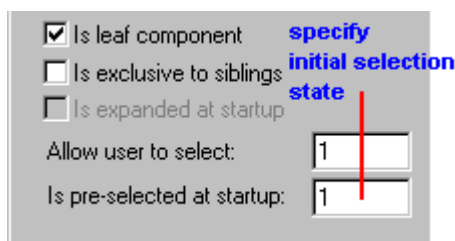
OK. Click on "Insert End" four times and fill out the parameters one by one:

Since full, typical, minimum and custom install are exclusive to one another, it is meaningless to select all of them at startup. Instead, at startup you should select full install only and deselect all others.

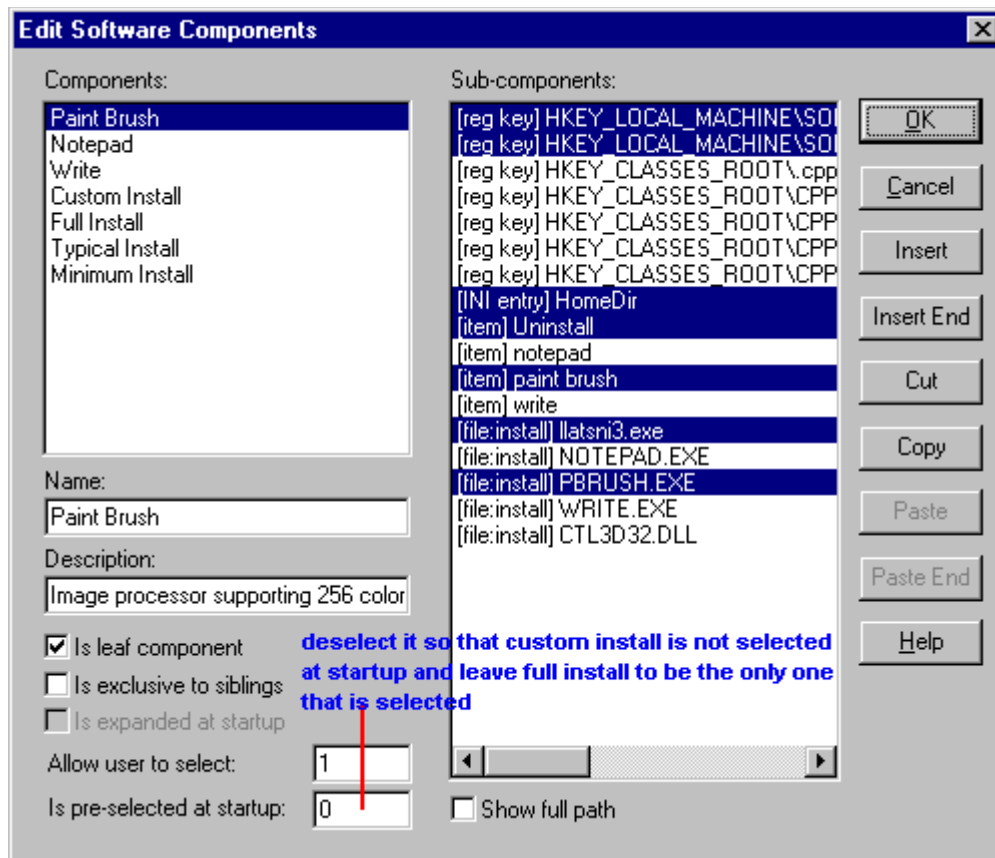For a leaf components like full install or typical install, the initial selection state can be

specified directly:

However, for a branch component like custom install whose selection state is calculated from those of its sub-components, the only way to specify its initial selection state is to specify its
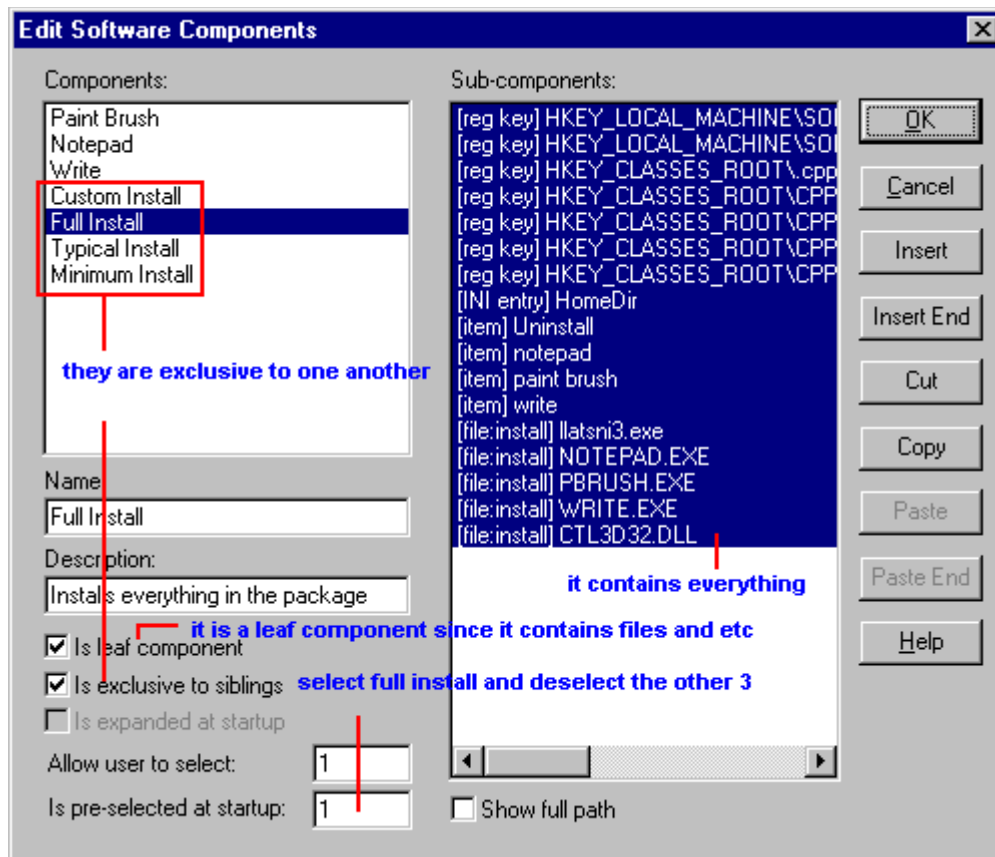
sub-components' initial selection states.

In your case, in order to deselect custom install at startup, you have to deselect all its sub-components (notepad, paint brush, write) like:
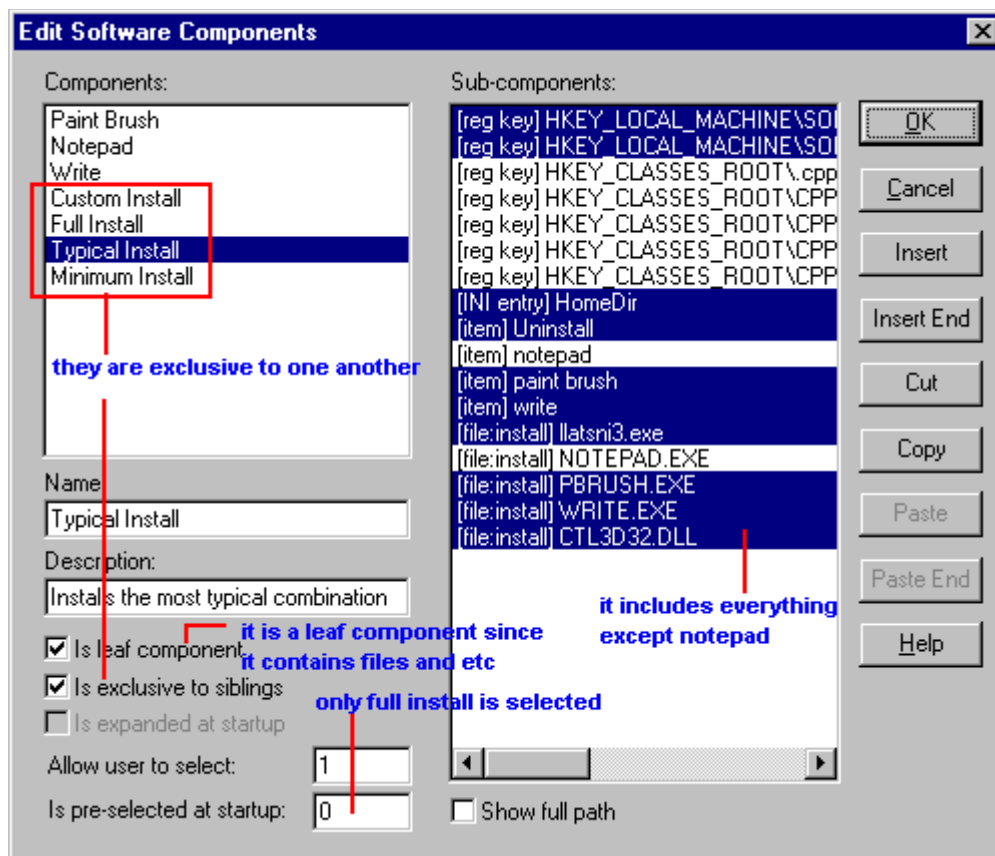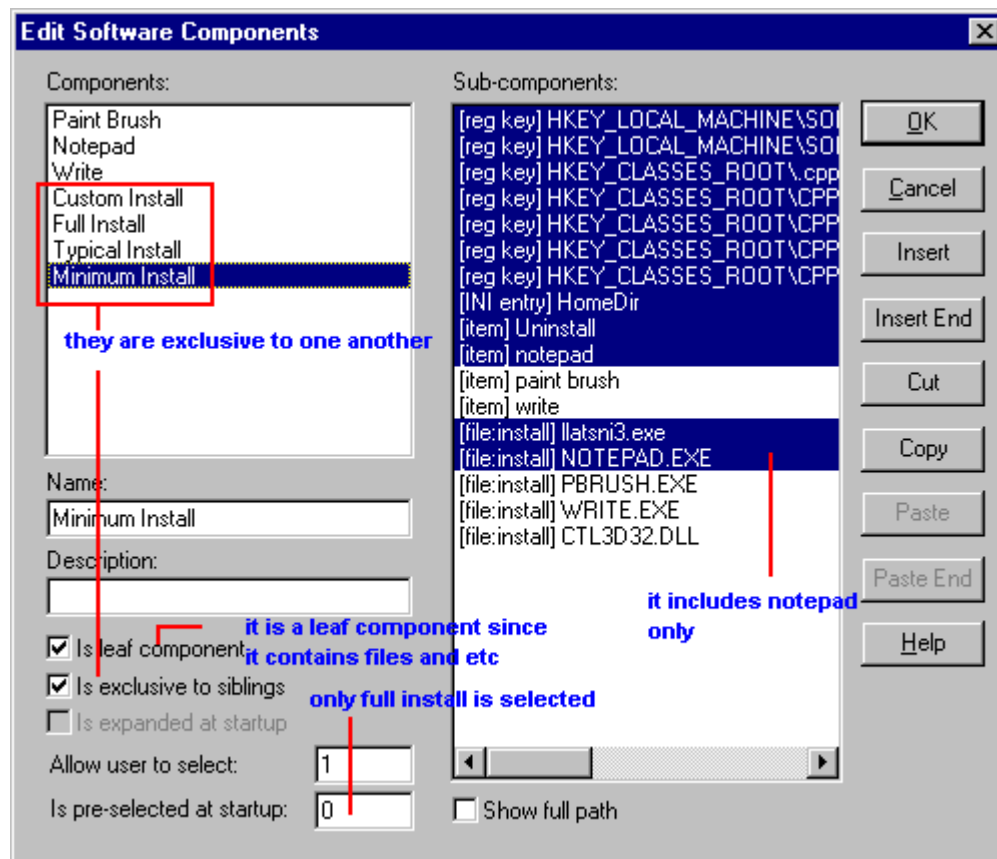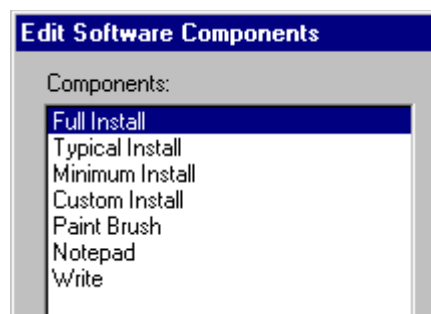

For full install:

For typical install:

For minimum install:

To follow the top-down design, you would be better off re-arranging the components so that they follow this order: full install, typical install, minimum install, custom install, notepad, paint brush, write. You can do this by drag'n'drop. Just select the component, drag it to the desired position, and finally release the mouse. The final order should look like:

Click on "OK" button.

Step 6

Now, test run, build disk set, purify and zip the install. After the installation you can double click on a .cpp file, or, right click to bring up a menu containing "Open", "Print" and "Print to" commands (don't try the "Print to" command since, as mentioned before, notepad doesn't really support /pt option).

Congratulations! You have finished tutorial 2.