PSS®E 33.4

INSTALLATION GUIDE

March, 2013

SIEMENS

Siemens Industry, Inc.
Siemens Power Technologies International
400 State Street, PO Box 1058
Schenectady, NY 12301-1058 USA
+1 518-395-5000
www.siemens.com/power-technologies

SIEMENS

Table of Contents

SIEMENS

Chapter 1

Requirements

1.1 Hardware, Operating System, and Privileges

- Pentium IV-class 2 GHz or faster CPU
- 2 GB or more of RAM is highly recommended
- Approximately 700 MB of free disk space is required for a full installation of PSS®E. Be sure to allow sufficient room for working files. You will need to allow additional disk space to support Windows' use of virtual memory.
- Microsoft Windows® XP, Windows® Server 2003, or Windows® Vista
- Administrative privileges are required to install PSS®E, but not to run the program.

  If you are running Windows® XP, Windows® Server 2003, Windows® Vista, or Windows® 7, you must have administrative privileges on the target machine in order to install PSS®E. Setup will check for your privileges and will stop the installation process with a warning if you do not have the necessary privileges.
- The activation string provided with your copy of PSS®E. The box containing your installation media has a label printed with the code.

1.2 Display Resolution

PSS®E is written for a minimum display resolution of 1024x768 pixels. We highly recommend using 1024x768 resolution with the "small fonts" option enabled, and using a 17" or larger monitor. In general, running with less than 1024x768 resolution will yield suboptimal results.

An AGP card with color palette at a minimum setting of 32 -bit (True Color) is highly recommended to improve graphics performance.

Ghost images may be displayed when using GEXM/GOUT, if “Clear Type” is selected for “Use the following method to smooth edges of screen fonts:”. This setting is under your Display Properties dialog box. Select the Appearance tab and click on the Effects button. If the box is checked and set to Clear Type, uncheck the box or change it to Standard.

1.3 Memory

PSS®E requires a significant amount of computer memory in order to execute. This memory may be either physical RAM or virtual memory in the form of a swap file on your hard disk. For most effi-

cient operation, however, your system should have sufficient physical memory to contain the PSS®E program plus those data arrays that are dynamically allocated while the program is running. Because of these dynamic arrays, it is hard to determine the exact amount of memory that may be required in a particular case. However, following are some approximate memory requirements that can be used for planning purposes:

Memory	System	Application
65MB	12,000 bus	power flow
75MB	12,000 bus	dynamics
95MB	50,000 bus	power flow
110MB	50,000 bus	dynamics
135MB	100,000 bus	power flow
160MB	100,000 bus	dynamics
175MB	150,000 bus	power flow
210MB	150,000 bus	dynamics

After PSS®E is installed, you can use the appropriate system monitoring tool, Task Manager, to determine the exact amount of memory that is being consumed in any given case. (You should also verify that there is sufficient physical memory on your system to keep PSS®E from swapping to disk.)

Keep in mind that the operating system itself, along with any other programs that may be running, can consume a great deal of memory. Here again, a monitoring tool such as Task Manager can be very helpful in determining the amount of memory that is really available for PSS®E. (Also be aware that running multiple instances of any PSS®E program will increase memory demands.)

It is possible to run PSS®E even if there is not sufficient physical memory on your system. Performance is sure to suffer in that case, but the program should still execute if enough virtual memory is available. Consult with your computer support people if you need to increase the amount of virtual memory on your system.

1.4 Hardware Lock

Unless your work group has a PSS®E network license, each PC running PSS®E must be equipped with a hardware lock (commonly called a dongle), which is shipped as part of the PSS®E installation package. Depending upon your installation requirements, the lock may connect to the parallel printer port or to the USB interface.

USB lock: Do not connect the lock until after PSS®E 33 has been fully installed.

Parallel port lock: Connect the lock at any convenient time.

Make sure that appropriate lock has been attached. before attempting to run PSS®E.

1.5 Network License

If your work group has a network license for PSS®E 33, a locally installed hardware lock is not required. Install PSS®E 33, and then refer to the memo *Installing Sentinel License Manager* included with your network license. A network license does require that a hardware lock be attached to the server.

1.6 Python

PSS®E includes an embedded Python interpreter. Python is an open-source scripting language (http://www.python.org). PSS®E also includes an extension module for Python that allows Python programs to access the PSS®E API. The libraries for the Python interpreter are required to install PSS®E. Some of the Python scripts provided with PSS®E installation require Python for Windows extensions (pywin32) and wxPython modules. Instructions for the installation of Python are included in the PSS®E installer program. Python, Pywin 32 and WXPython are included in the PSS®E 33 prerequisite installer.

1.7 CPU

PSS®E-33 is not a multi-threaded program. It will not take advantage of multiple processors. However, multiple processors can improve the performance of the underlying run-time environments and operating system, so some improvement can be seen.

PSS®E is built as a 32 bit application, and PTI has no current plans to migrate to a 64 bit application. PTI makes no special provision for 64 bit architecture. However, as long as 32 bit applications are able to run on those platforms, then PTI will support it.

SIEMENS

Chapter 2

PSS®E Compilers

2.1 Overview

If you plan to use certain advanced modules for PSS®E program options, you will need to obtain the Intel Visual Fortran compiler, Version 12 for each system. The following list provides the combinations requiring the compiler:

- **Dynamics** (and you plan to compile and link the user written models or connection subroutines using CLOAD4.BAT or the "createusrdll" facility).
- **IPLAN** (and you plan to create a custom routine using CLIPLU.BAT).
- **Power flow** (and you want to add a user activity using CLPSSUSR.BAT).

The Intel Visual Fortran compiler is available in several configurations. Please consult the PSS®E website for guidance in choosing the compiler configuration that is right for you.

PSS®E will run without the Intel Visual Fortran compiler, but you will not be able to make system-wide modifications of PSS®E operation without it.

If you built any of the advanced modules noted above using a version of the Microsoft/Digital/COMPAQ compiler, you will need to recompile and relink them using the Intel compiler.

In case of difficulties, check to be certain that any batch file you are executing was supplied with

PSS®E-33. or, in the case of compile files, was generated by PSS®E-3. activity DYRE.

2.2 Compiler Installation

User-written software included with PSS®E (e.g. Conec, Conet, user-written dynamics models, programs that call USRCAS) should be compiled with the version of the compiler used to create that version of the PSS®E product. We cannot provide support for problems that arise when mixing code from different compilers.

If you need to compile files for use with older versions you will need to be able to correctly install and access the Fortran compiler, possibly the C compiler, and also the linker associated with the particular version of PSS®E. The following table shows the Fortran compilers used with recent versions of PSS®E.

Table 2-1. Compatible Compaq Compiler Versions

	Compaq Visual Fortran					
PSS®E	**5.0D**	**6.1A**	**6.5**	**6.5A**	**6.6**	**6.6B**
26.x	x	x	x			
27.0		x	x			
27.1				x		
28.x				x	x	
29.x						x
30.0.0 - 30.3.2						x
30.3.3 CVF						x

The Microsoft C/C++ compiler and linker used for the above PSS®E releases is version 6.

The Microsoft C/C++ compiler and linker used for PSS®E-31 is version 8 (2005 is the Microsoft product name). Version 9 (2008 is the Microsoft product name) is used for PSS®E-32. Version 10 is used for PSS®E 33.

Table 2-2. Compatible Intel Visual Fortran Versions

	Intel Visual Fortran					
PSS®E	**9.1**	**10.0**	**10.1**	**11.0**	**11.1**	**12.0**
30.3.3 IVF	x	x	x	x	x	
31.x		x	x	x	x	
32.x		x	x	x	x	
33.x						x

If the IVF compiler that you use and the one used to build PSS®E 33, it is required that the later run-time subroutines be used.

SIEMENS

Chapter 3

Installation

The following sections assume that a new installation is being performed. If a previous installation of PSS®E-33 is detected, a maintenance script will be started to allow you to remove the previous installation. See also Section 4.2, Manually Uninstalling PSS®E.

3.1 Silent Installation

You can install PSSE 33 silently by following these guidelines.

/r : record mode

In order to install PSSE in silent mode, you must first run Setup.exe with the /r option to generate a response file. Running setup.exe with the command Setup.exe /r will store data entered during the installation in a file called Setup.iss. Setup.iss is created inside the system's Windows folder. You can provide an alternative response file name and location by using the /f1 option. Example (Setup /r /f1"C:\pssetemp\PSSE_silent.iss")

/s : silent mode

The command Setup.exe /s runs the installation in silent mode. By default, the file Setup.iss will be used to provide responses contained in a response file. Setup.iss must be located in the same directory as Setup.exe. (Response files are created by running Setup.exe with the /r option.) You can provide an alternative file name or location of the response file, use the /f1 option.

/f1 : specify response file name and path

The /f1 option allows you to specify where the response file is created and its name.

Example (Setup /s /f1"C:\pssetemp\PSSE_silent.iss").

The /f1 option is available when creating a response file (with the /r option) and when using a response file (with the /s option).

/f2 : specify log file name and path

The /f2 option allows you to specify the name and location where the log file is created.

Example (Setup /s /f1"C:\pssetemp\PSSE_silent.iss" /f2" C:\pssetemp\ setup.log")

To silently uninstall, you must first create a uninstall response file. This will uninstall PSSE 33. You can then use this response file to uninstall other installations of PSSE 33

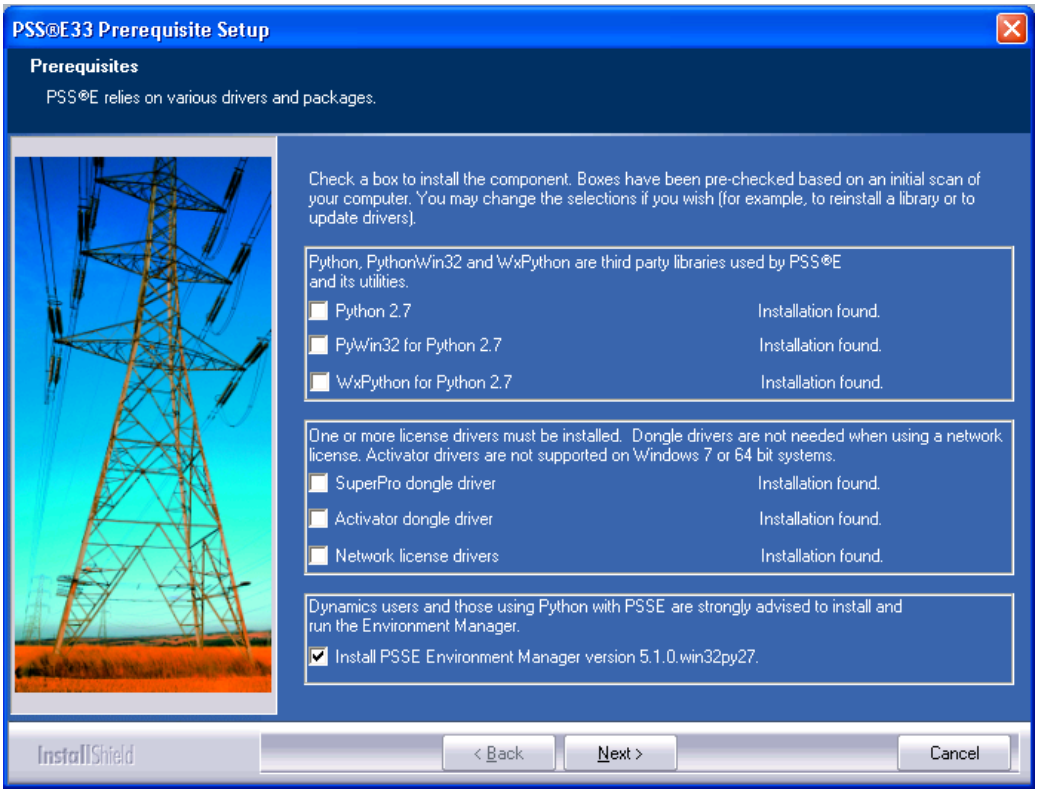
Example (Setup /s /f1"C:\pssetemp\PSSE_silent_uninstall.iss").

Then use the command:

Setup /s /f1"C:\pssetemp\PSSE_silent_uninstall.iss"

3.2 Prerequisite Installation

Before installing PSSE 33, run the PSSE 33 prerequisite installer. The prerequisite installer will install Python, PyWin32, WxPython, SuperPro Dongle drivers, Activator dongle drivers, network license files and the PSSE Environment Manager.



The prerequisite installer should be downloaded from the following PSSE webpage:

https://www.pti-us.com/pti/software/psse/userarea/download_psse.cfm

3.3 Preliminary Setup Screens

1. Review **ReadMe**

   The latest ReadMe Notes for PSS®E-33 will display. Read these notes very carefully, because they contain critical information that you should consider before installing PSS®E-33 on your system.

2. Review **License Agreement**

   Siemens PTI requires that you accept the terms of our license agreement.

Note that this release of PSS®E has not been tested with versions of the IVF runtime libraries later than 10.1. If IVF runtime libraries later than 10.1 have been previously installed, then you should choose YES to have the IVF 10.1 runtime libraries installed to the PSSBIN folder.

YES: This option keeps the Intel files in the PSSBIN folder. However, there is a potential hazard: any user-generated code compiled with version later than 10.1 may not be compatible with the version 10.1 libraries being installed.

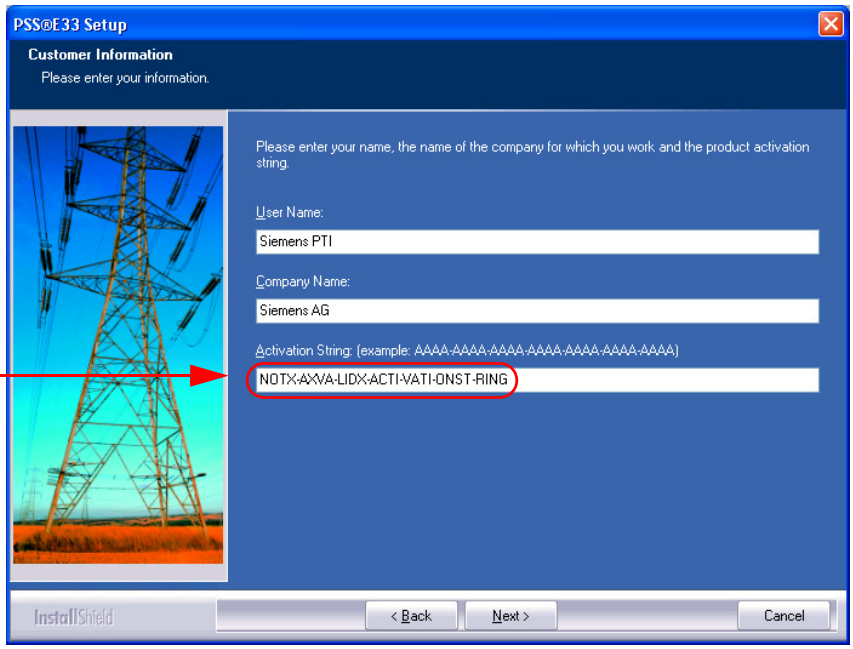
NO: This option does not install the Intel files to your computer.

If no compiler is installed, then PSS®E will not install, and the installation application closes.

3.4 Customer Identification

Setup will now ask you for some identifying information.

Code Number from Siemns PTI



User Name

Enter your name.

Company Name

Enter your company's name.

Activation String

The activation string consists of seven groups of four characters each, separated by hyphens. Enter it exactly as provided by Siemens PTI.

3.5 Destination Directory

Specify a destination directory for PSS®E. The default directory is **C:\Program Files\PTI\PSSE33**, which should be satisfactory in most cases.

3.6 Program Folder

Specify the Program Folder (i.e., the name of the folder under ***Start>Programs>Siemens PTI>PSSE 33***) that will be used to contain all the PSS®E-33 programs installed on the system. Type a Program Folder name or highlight an existing folder.

3.7 Operating Frequency

Select the appropriate operating frequency for your studies. By default, PSS®E is set for 60 Hz, but you may also select 50 Hz operation.

3.8 Confirmation

Setup will now show you a summary of choices you have made in the course of the installation dialogs. If you are unsatisfied with any of these choices, you may use the ***Back*** button to move to the appropriate dialog and change your selections. After a moment, Setup will display an installation progress screen.

3.9 PSS®E-33 Command Prompt

The PSS®E-33 Command Prompt should be used any time a PSS®E-33 command such as, CLOAD4, CLOAD4NEW, PSSE, etc., needs to be run from the command line. Select the location for the shortcut PSS®E-33 Command Prompt, in the Start Menu or on your desktop.

3.10 Post-Installation

Setup is now complete. Review the Release Notes, if desired, or restart the computer. Remove the installation CD after restarting the computer.

SIEMENS

Chapter 4

Uninstalling Previous Versions of PSS®E

4.1 Uninstalling PSS®E

Normally, a particular version of PSS®E should be uninstalled by going to:

```
Start>Settings>Control Panel>Add/Remove Programs
```

and selecting the version of PSS®E that is to be uninstalled. Sometimes, if part of PSS®E has been manually deleted, it will not be possible to run the uninstaller. In that case, it may be necessary to manually uninstall some or all of the components that make up a PSS®E installation. In all cases, though, an attempt should first be made to uninstall the program by using Add/Remove Programs!

4.2 Manually Uninstalling PSS®E

The following sections describe the procedure for uninstalling a locally installed copy of PSS®E.

Some of the steps described below require editing the Registry. Incorrect modification of the registry can prevent a system from running correctly. Therefore, if you are not familiar with editing the registry, please consult someone who is knowledgeable in that area!

4.2.1 Uninstalling the Dongle Drivers

Many Siemens PTI programs are protected by a hardware lock, typically called a "dongle". The driver(s) for these "dongles" should only be removed if you are certain that no dongle-protected programs need to run on this system.

Currently, two types of dongles are supported:

- The older "Activator" dongles, originally produced by Software Security Inc. (SSI).
- The newer "SuperPro" dongles produced by SafeNet, Inc.

Depending upon which Siemens PTI programs/versions have been installed, it is possible that no driver is present, or that drivers for either or both types of dongle have been installed. Please note, once again, that these drivers should only be uninstalled if you are not using any programs (Siemens PTI supplied or otherwise) that require a dongle.

If any of the following dongle driver files are still on your system, delete them. The folder may be C:\Windows instead of C:\WINNT.

C:\WINNT\system32\drivers\SNTNLUSB.SYS

C:\WINNT\system32\drivers\sentinel.SYS

C:\WINNT\system32\drivers\SSIDDP.SYS

C:\WINNT\system32\drivers\SSIPDDP.SYS

C:\WINNT\system32\rnbovdd.dll

C:\WINNT\system32\snti386.dll

The instructions given below can be used to uninstall the indicated dongle drivers. Note that the PSS®E prerequisite installation directory must be present in order for these procedures to work. If the PSS®E installation directory has already been deleted, it will not be possible to uninstall these drivers this way. In that case, it may be easiest to just leave the drivers installed – they should not cause any trouble. Alternatively, PSS®E could be manually uninstalled (as described in the following sections) and then reinstalled. It will then be possible to delete the dongle drivers. Finally, Add/Remove Programs can be used to uninstall the rest of PSS®E.

To uninstall a dongle driver, bring up a Command Prompt and give the appropriate command(s):

- Uninstalling the SSI "Activator" dongle driver:
  a. Change to the Setup\Dongle subdirectory of the PSS®E installation directory.
  b. Give the command:

     ```
     DDINST32 REMOVE
     ```

- Uninstalling the SafeNet "SuperPro" dongle driver:
  a. Change to the Setup\Dongle subdirectory of the PSS®E installation directory.
  b. Give the command:

     ```
     Sentinel Protection Installer 7.6.3.exe
     ```

After uninstalling the dongle driver(s), type EXIT to close the Command Prompt.

4.2.2 Removing the Installation Directory

From Explorer, or whatever file manager you are using, delete the directory into which you installed PSS®E. Be sure to save any files that you want before deleting this directory and its contents!

4.2.3 Deleting the License Information

The PSS®E licensing information is stored in the registry. To remove that information, bring up the registry editor (REGEDIT.EXE or REGEDT32.EXE as appropriate).

- If using REGEDIT, go to:

  ```
  My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\PTI\License
  ```

- If using REGEDT32, go to:

  ```
  HKEY_LOCAL_MACHINE on Local Machine\SOFTWARE\PTI\License
  ```

You should see an entry for each PSS®E executable program that is installed on your system. The exact list of programs will depend upon which version of PSS®E was installed, and which program sections you have licensed. If SAVE26/SAVE28 has been run, the PSS®E-26 program names will include a "_26" suffix and the PSS®E-28 program names will include a "_28" suffix. For example,

the rev 26 version of BMATRIX will appear as BMATRIX_26. Beginning with rev 30, all licensed programs were installed with the version number appended to the filename.

Following is a more-or-less comprehensive list of possible executables for PSS®E-26/27/28/29/30/31/32/33:

ACCCBRWSGRID	BMATRIX	CONVERTRAW	CREATERAW	CMDYRE
CNV27	CNV29	CNV30	CNV31	CNVDRW
CNVRAW	CNVRSQ	COMDAT	COMFOR	DBUILD
IMD	IPLAN	LINEPROP	LSYSAN	PLINC
PSAP4	PSSE	PSSLF4	PSSDS4	PSSPLT
RAW23	RAW26	RAW30	RAWSCC	RAWECC
RAW28	RAW29	REACTPSSE	TMLC	VCV
WECCDS	WECCLF	CNV32	PSSECMD	WSCCDS
WSCCLF	WSCDAT	WSCFOR	RAW 31	ANSPNLF
CNVOPF				

If there are no other License entries present, you can just delete the Siemens PTI key itself and all entries underneath it. Otherwise, just delete the entries associated with each of these executables. Unless the entire Siemens PTI key has been deleted, the appropriate PSSE entry under that key should also be deleted. (Expand that PSSE key to make sure that you are deleting the proper entry.)

4.2.4 Removing the "App Paths" Entries

Each PSS®E executable is associated with an "App Paths" entry in the Registry that defines what directories are to be searched (for DLLs, etc.) when that executable is started via a Windows Shortcut. To remove the PSS®E related "App Paths" entries, start your registry editor program (see above):

- if using REGEDIT, go to:

  ```
  My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\
  CurrentVersion\App Paths
  ```

- if using REGEDT32, go to:

  ```
  HKEY_LOCAL_MACHINE on Local Machine\SOFTWARE\Microsoft\
  Windows\CurrentVersion\App Paths
  ```

When you double-click on the "App Paths" folder, you should see an entry for each PSS®E executable (with the EXE suffix). NOTE: There will likely be a number of "App Paths" entries for non-PSS®E programs. Those entries should not be touched!

Delete all the "App Paths" entries associated with the PSS®E program that is being uninstalled. (See the list, above, to determine which executables are associated with PSS®E.)

4.2.5 Deleting the PSS®E Shortcuts

The shortcuts associated with PSS®E can now be deleted. Under Microsoft Windows XP, Microsoft Server 2003, or Microsoft Vista, go to **Start>Programs** and right-click on the entry associated with

the version of PSS®E that is to be deleted. From the resulting pop-up menu, select Delete and then allow the main PSS®E Shortcut to be deleted.

4.2.6 Removing Uninstall Entries

The installation program itself may have left some "uninstall" entries in the Registry. If not removed, these entries can cause a problem when PSS®E is reinstalled. Therefore, these entries should be removed!

Bring up your registry editor (see above):

- if using REGEDIT, go to:

  ```
  My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\
  CurrentVersion\Uninstall
  ```

- if using REGEDT32, go to:

  ```
  HEY_LOCAL_MACHINE on Local Machine\SOFTWARE\Microsoft\
  Windows\CurrentVersion\Uninstall
  ```

If you are uninstalling PSS®E-26, you should see an entry such as "PSSE 26.2.3" under the Uninstall folder. Delete this entry.

If you are uninstalling PSS®E-27 (or higher) you will not see such an obvious entry. Rather, you will see one or more "funny" entries that look more-or-less like this:

```
{E689F94B-DB06-11D3-B36A-0060B0F0D1A3}
```

Click on each of these entries until you locate the one which has a "DisplayName" (shown in the right-hand panel) corresponding to the version of PSS®E that you are uninstalling. Write down this long string – it will be needed below. Delete that entry, after carefully making sure that it is the correct one!

4.2.7 Removing Installation Entries

The next step is to delete some installation data that may have been left on your system. Explore to ***C:\Program Files\InstallShield Installation Information*** and see if there are any folders there with "funny" names as mentioned in the previous section. If there are, see if any of these folders have exactly the same name as the folder that was deleted in the previous step. If there is a match, delete that folder and its contents.

4.2.8 Removing Miscellaneous Files

PSS®E may have installed or updated some of the files listed below. Some of these files can be safely deleted, while others should only be removed if you are certain that no other programs are using them. (The details are listed following each file or group of files.) In the following discussion, <WinDir> refers to the main Window's directory (typically C:\Windows) and <SysDir> refers to the SYSTEM32 (Microsoft Windows XP/Server 2003/Vista/Windows 7) directory under <WinDir>. The files which may have been installed or updated are:

```
<WinDir>\psse3300.ini
<WinDir>\imd3300.ini
<WinDir>\pssplt3300.ini
```

These files can always be deleted.

```
<SysDir>\DFORMD.DLL
```

This is the runtime library for Digital/Compaq Fortran programs. It should only be deleted if you are absolutely certain that no other programs (i.e., programs written using the Digital/Compaq Fortran compiler) need this library.

```
<SysDir>\Psapi.dll
```

These libraries are quite likely to be used by other programs, and should not be deleted unless you are absolutely certain that no other programs need them.

SIEMENS

Chapter 5

Uninstalling PSS®E 33

5.1 Getting Started

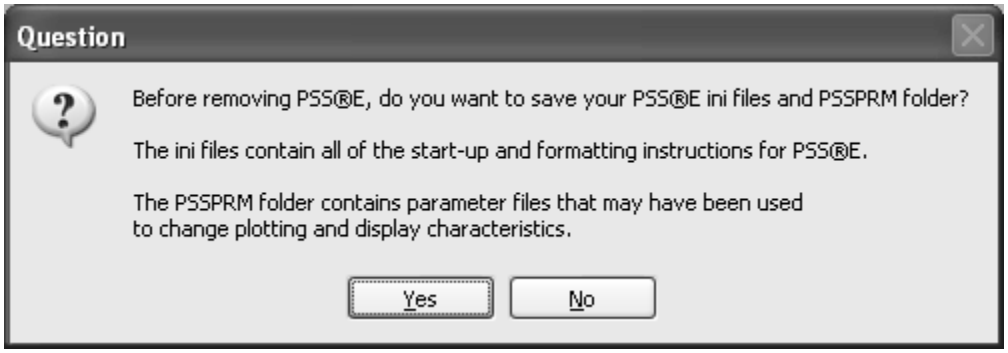
Before uninstalling PSS®E 33, make sure you have saved any files in the PSS®E 33 installation directory that you do not want deleted.

PSS®E-33 can then be uninstalled in one of two ways:

- Going to **Start>Settings>Control Panel>Add/Remove Programs**, selecting PSSE33
- Attempting to reinstall a copy of PSS®E 33.

This next screen will ask you to confirm that you *really* want to uninstall the application and all features.

The following screen will ask you if you want to save your PSS®E ini files and PSSPRM folder. Parameter files are used to change the default plotting and display characteristics. Ini files contain startup and formatting instructions.



Yes

The Uninstall program will save your PSSPRM folder. When saving your PSSPRM folder, you will be asked for the current PSSPRM folder location as well as destination folder location.

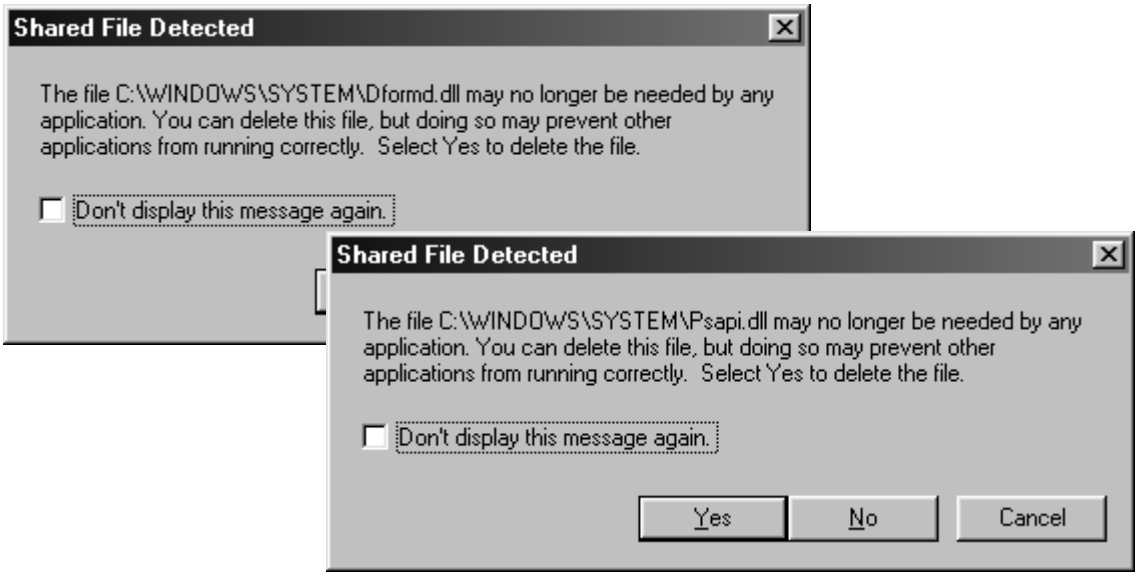
No

The PSSPRM folder will be uninstalled.

A status screen will show the progress of the uninstallation.

5.1.1 Shared Files

You may see one or both of these screens:



which are asking if it is *OK* to remove two files (Dformd.dll and Psapi.dll) that *may* be needed by some other programs. If you are using any other Siemens PTI programs (or programs written using COMPAQ/Digital Fortran) you should click ***No*** to prevent these file(s) from being deleted. Otherwise, you can click ***Yes*** and save a little room on your hard disk.

At this point, all the unmodified PSS®E 33 files will be deleted.

After you click ***Finish*** to exit from the uninstall program, any files which you added or modified AFTER the installation of PSS®E 33 will still be present in your PSS®E 33 installation directory. Therefore, if you want to **completely** remove PSS®E 33 you will probably need to manually delete the PSS®E 33 installation directory and any files which still remain there.

SIEMENS

Chapter 6

Support

6.1 Getting Help

6.1.1 PSS®E Manuals

The *PSS®E Program Operation Manual*, the *PSS®E Program Application Guide*, the *PSS®E GUI Users Guide*, and the *PSS®E Command Line Interface (CLI) Users Guide* provide detailed information on how to work with PSS®E.

6.1.2 On-Line Help

Selecting Help>Help Topics from the menu bar will open the file Contents.pdf. From there you can view any of the manuals.

6.1.3 World Wide Web

If you have access to a web browser, you can check our web site for late-breaking information and FAQs. Just point your browser to www.siemens.com/power-technologies. Besides information on PSS®E, our web site contains information on the whole range of PTI products and services.

Visit the Siemens PTI Web Site at www.siemens.com/power-technologies and the PSS®E User Support Web Page.

Please note that access to the PSS®E User Support Web Page and to technical PSS®E support is only available to those users whose companies have purchased or renewed their PSS®E maintenance and support agreement for the current calendar year.

6.1.4 Technical Support

For fastest response to any questions, please send your questions/comments to: PTI.Support.Energy@siemens.com or www.pti-us.com/PTI/software/support/support.cfm. Alternatively, you can use the "Request for Technical Support" fax transmittal sheet on the following page. For telephone support between the hours of 8:00 a.m. and 5:00 p.m. (Eastern Standard Time) Monday through Friday, address your calls to the PSS®E support staff at 518-395-5075.

6.1.5 Reporting a Problem

Whenever you report a problem with PSS®E, please provide as thorough a description as possible. Use the form included on the next page to help you provide the necessary inforomation.

REQUEST FOR TECHNICAL SUPPORT

PSS®E Support
Siemens Power Transmission & Distribution, Inc. Power Technologies International Fax Number: 518-346-2777 For a prompt reply to your technical support questions, complete this form and fax it along with any additional information to Siemens PTI.
NAME: COMPANY: PHONE: FAX: ELECTRONIC MAIL ADDRESS: PSS®E Version: Date: PC Manufacturer/Model: CPU Type: Operating System/Version: Amount of RAM Installed: Amount of Virtual Memory:
Describe your problem as completely as possible, including **all** steps needed to replicate the problem:

Submitting Bug Reports and Feature Requests

Bug reports and feature requests should be submitted directly to PSS®E support at PTI.Support.Energy@siemens.com or www.pti-us.com/PTI/software/support/support.cfm. Please provide as much detail as possible. If submitting a report for a potential bug please include the steps taken, along with pertinent data files and scripts so that we may accurately reproduce the problem. If an issue does turn out to be a program bug, one of the following priorities will be assigned to it:

- High priority is given to issues that cause the program to crash or produce incorrect results with no published work around.
- Medium priority is given to issues that cause incorrect functionality, however the problem can be remedied by a published work around.
- Low priority is given to those issues that do not fall into the above categories, or are purely cosmetic in nature.

Every effort is made to address high and medium issues in a PSS®E point release. Some low priority items may also be include in a point release although this cannot be guaranteed.

Feature requests are evaluated on the basis of whether it benefits a wide majority of PSS®E users. If it does, it will likely be considered for implementation in a point release or major release of PSS®E. If several users have the same feature request, the feature may sit higher in the queue than others for implementation in PSS®E.