



Automotive, Industrial & Multimarket

Release Notes (V2.5.1 SP1 (x64))

Infineon TPM Professional Package

Version: 1.5

Date: 30th June 2006

Dev. / Step Code:	Sales Code:
Status:	Date: 27 June 2006
Document: IFX_TPM_Professional_Package_ReleaseNotes	Created with: Microsoft Office Word
Author: AIM CC TI	TEL.
Document path:	

REVISION HISTORY

VERSION	DATE	CHANGE MADE BY	SECTION NUMBER	DESCRIPTION OF CHANGE
1.0	09/19/05	AIM CC TI	all	Beta
1.1	11/14/05	AIM CC TI	2.1.7 2.1.8	RTM RC 1
1.2	12/07/05	AIM CC TI	2.1.7 2.1.8	RTM RC 2
1.3	3/14/2006	AIM CC TI	2.1.7 2.1.8	RTM RC 3
1.4	4/26/2006	IFIN SW ADS	2.1.8	Fixes with SP1
1.5	6/19/2006	IFIN SW ADS	2.1.5 2.1.6 2.1.7 2.1.8 2.1.11	Updates for SP1 (x64)

Contents

1	Introduction	5
2	Release Notes	6
2.1.1	Purpose of the build	6
2.1.2	Descriptive Name of Deliverable	6
2.1.3	Vendor Version Number	6
2.1.4	Short Description	6
2.1.5	Supported Languages	6
2.1.6	Supported Platforms	6
2.1.6.1	Operating Systems	6
2.1.6.2	Compatibility requirements	6
2.1.6.3	Hardware Requirements	7
2.1.7	Known Observations from Test Report	7
2.1.7.1	Not supported functionality	7
2.1.7.2	Setup	7
2.1.7.3	Encrypting File System	7
2.1.7.4	PSD	7
2.1.7.5	Dictionary Attack.	8
2.1.7.6	Entrust	8
2.1.7.7	RSASecurID	8
2.1.7.8	Enhanced Authentication	8
2.1.7.9	TNA	9
2.1.7.10	Miscellaneous	9
2.1.8	Observations Fixed in this Release	9
2.1.9	Installation Instructions	14
2.1.10	WHQL Certification State	14
2.1.11	Files Installed or Changed	15
2.1.12	Component dependencies	18
2.1.13	Co-requisite hardware or software	19
2.1.13.1	BIOS Requirements	19



Infineon TPM Professional Package
Project Specific Documents

2.1.13.2	Security Platform Chip	19
3	Debug Versions.....	20

1 Introduction

This document provides a comprehensive overview of the system, using a number of different concept/design views to depict different aspects of the system. It is intended to capture and convey the significant decisions which have been made on the system.

2 Release Notes

2.1.1 Purpose of the build

Version V2.5.1 SP1 (x64)

2.1.2 Descriptive Name of Deliverable

Infineon TPM Professional Package

2.1.3 Vendor Version Number

Build: 02.50.0997.01

2.1.4 Short Description

The Infineon TPM Professional Package Software is required to use your Security Platform Chip.

The Infineon TPM Professional Package Software is a TCG-compliant security solution for PCs.

2.1.5 Supported Languages

JP - Japanese
US - English

2.1.6 Supported Platforms

2.1.6.1 Operating Systems

- Microsoft Windows XP Professional x64 Service Pack 1 with Microsoft Internet Explorer 6.0 or higher
- Microsoft Windows Server 2003 x64

2.1.6.2 Compatibility requirements

- On a Windows 2000 based platform the Internet Explorer versions 5.0 and 6.0 (for SSL client side authentication via Infineon TPM User CSP) and the related versions of the Outlook Express (for S/MIME utilizing the Infineon TPM User CSP).
- Microsoft Office applications Microsoft Office 2000 SR-1, Microsoft Office XP, Microsoft Office 2003 (for S/MIME and SSL client side authentication via Infineon TPM User CSP).
- Netscape Communicator application Netscape Communicator 4.7.9, Netscape Communicator 7.2 (for S/MIME and SSL client side authentication via TPM Cryptoki Token).
- RSA SecurID
RSA SecurID Software Token Software V3.0
RSA SecurID ACE/Agent Software V5.0 for web access authentication

RSA SecurID ACE/Agent Software V5.5 (plus patch: sdeap.dll V5.5.0.133) for remote access authentication

- Checkpoint
Check Point VPN-1 SecuRemote/SecureClient NG with Application Intelligence (R55)
Check Point VPN-1/FireWall-1 NG with Application Intelligence (R55)
- Entrust
Entrust Desktop Solutions 7.0:
Entrust Entelligence Desktop Manager (Entrust/Entelligence)
Entrust Entelligence E-mail plug-in for Outlook (Entrust/Express)
Entrust Entelligence File Plug-in (Entrust/ICE)
Entrust Entelligence TrueDelete (Entrust/TrueDelete)
- Adobe
Acrobat 6.0 Professional for digitally signing of PDF documents as well as encryption.

2.1.6.3 Hardware Requirements

A PC capable to run one of the mentioned operating systems and equipped with an Infineon Security Platform Chip TPM SLD 9630TT1.1 or SLB 9635TT1.2

2.1.7 Known Observations from Test Report

Known Bugs and Limitations

2.1.7.1 Not supported functionality

- Archive with emergency recovery / password reset public key not selectable by Security Platform admin in platform init wizard

2.1.7.2 Setup

- tpm00000761 If the user changes the “Language for non-Unicode programs” in Control Panel, Regional settings, the Setup will run in that language and the shortcuts in the Start menu are created in the same language.

2.1.7.3 Encrypting File System

- tpm00003360 Reconfiguration of EFS on Windows 2003 Server
Reconfiguration gets active after user has logged on again
- tpm00004170 Key Set Problem while configuring the EFS when the system time is changed.

2.1.7.4 PSD

- tpm00002404 Delete PSD with save of content
More space than really required is requested since calculation of required space for copy contains also space used by file system and system volume information of PSD drive.

- tpm00003566 PSD TNA Load
If PSD is configured to "Load at logon" and user does not provide Basic User Password (BUP) during that process but chooses to load PSD additionally from TNA an error message "Personal Secure Drive is in use by another process" pops up. PSD can still be loaded by providing BUP in first BUP dialog.
- tpm00003934 PSDCFGWZ.ocx does not start PSDrt.exe at PSD creation

2.1.7.5 Dictionary Attack.

- tpm00003623 No event log entry after entering DA defense mode
- tpm00003749 Reset of DA if Platform is in state "Initialized with Other OS" state
Calling the Platform Initialization wizard with command line parameter /resetAttack to reset DA defense measures has no effect. TPM wizard ignores parameter and wants to initialize the platform.

2.1.7.6 Entrust

- tpm00002158
 - Creation of an Entrust profile for a user id that is not TPM-initialized
Error displayed from the Entrust software - "Cryptoki device returned an unknown error value"
 - Creation of an Entrust profile for a user id that is TPM-initialized, but the platform is disabled
Error displayed from the Entrust software - "This profile must be a token profile"
- tpm00002497 Basic User Password dialog pops up twice
 - After login (entrust login is started automatically), the BUP dialog comes up twice, then the Entrust dialog "Enter pin ..." once.
 - While creating Entrust Profile BUP dialog comes up twice, in between the entrust dialog ("enter pin ...") pops up.

2.1.7.7 RSASecurID

- tpm00001061 Remote access authentication from Windows logon screen
In the Windows logon screen the PKCS#11 module does not support the option "Log on using dial-up connection".
Workaround: Log on to the system and start the remote access connection from the Control Panel, Network Connections.

2.1.7.8 Enhanced Authentication

- tpm00002809 Switch to "Enhanced Authentication" when BUP password has expired
If BUP password has expired the BUP password has to be changed first before enhanced authentication can be enabled

2.1.7.9 TNA

- tpm00003386 TNA does not offer EFS logout when EFS certificate is used which is no not yet valid
When user decrypts a file which is encrypted by a certificate which is not yet valid TNA does not show "Logout from Encrypting File System" menu because EFS state is set to "needs reconfiguration".
- tpm00003568 Wrong tooltip in TNA if platform is temp disabled due to dictionary attack
TNA tooltip says "Ready to use" even when TPM 1.2 chip goes into defense state and DA mode of TPM 1.2 is configured to TPM_AT_DELAY_DOUBLE_LOCK.

2.1.7.10 Miscellaneous

- tpm00003340 (SMS00000328)Basic User Password Dialog prevents Shutdown/Restart
When the Basic User Key password is present, the user cannot perform Shutdown or Restart. However Standby and Hibernate can be performed.

2.1.8 Observations Fixed in this Release

- tpm00003742 Backup Wizard restore behaves unexpected when TPM 1.2 DA state is active
Root cause: In case of dictionary attack, backup wizard jumps to finish page.
Fix: Show the error and stay on same page.
- tpm00003751 New backup archive structure not yet reflected in help
Root cause: New backup archive structure description was missing in the help.
Fix: modified online help pages to reflect this new structure. Additionally, the term "archive file" is replaced with "archive" and translated accordingly in all languages.
- tpm00003859 User wizard does not offer drive letter for PSD configuration after power loss
Root cause: With this power off, PSD is not correctly un-mounted and the drive letter is not unmapped.
Fix: PSD checks if mapped drive ID is the current one. If it is, this drive ID is shown.
- tpm00003864 PSD drive is 0.2 MB bigger than specified
Root cause: Incorrect conversion of specified MB to bytes, which resulted in .2MB more.
Fix: Conversion is done precisely now.
- tpm00003878 PSD Drive letter conflict pop-up message box should be more informational.
Root cause: the message shown doesn't help the user as to what action he should take.

Fix: the message is elaborated to direct the user as to what action he should take.

- tpm00003894 Improvement of User Interface for DA defense.

Description: When the remaining authentication tries reaches a certain value, a hint is displayed on the UI as "Remaining Attempts: X" either in the status bar (where applicable) or on the dialog itself. By default, this value is 3.

- tpm00003906 TNA / IFXUAGUI does not show error when PSD cert is deleted; TNA Menu does not reflect this either. "PSD->Load" menu is still shown.

Root cause: TNA receives CANCELLED error message in this case and hence the menu is not changed since this amounts to user canceling the load operation.

Fix: TNA checks if PSD needs reconfiguration and shows new balloon "Click here to reconfigure your Security Platform Features". New menu "Reconfigure user features" is now available.

- tpm00003908 Specifying wrong file in policy "Use public key of Emergency Recovery Token from archive" and initializing the platform for the first time leads to finish page with not so user friendly message.

Root Cause: During initialization if backup is also configured the end result is owner is successfully initialized but backup failed due to incorrect policy. On the wizard finish page title is displayed as successful but under features list backup is shown as failed. However, this gives wrong impression to the user who may just look at the finish page title.

Fix: In case of partial failure, wizards show the finish page with title "The wizard partly failed".

- tpm00003913 User Authentication Dialog error message is shown behind the dialog box

Root cause: Modality issue, User Authentication Dialog is always the top most window.

Fix: Error message box overrides this and thus shows up as top most.

- tpm00003916 Setup – Upgrade of policy administrative template

Root cause: While upgrading Infineon TPM Professional Package , the policy administrative template file is only updated in Window\inf directory. If the template is registered in policy editor the template file is copied to Windows\system32\GroupPolicy\Adm directory and is not updated in that location accordingly.

Fix: template file is also updated at Windows\system32\GroupPolicy\Adm location if it is already registered

- tpm00003920 PSD Configwizard does not exploit PSD policies on 64 bit platforms

Root cause: PSD configwizard directly checks the registry for policy settings and does not use the common Policy class

Fix: PSD configwizard uses the common Policy class

- tpm00003940 Change the default value of minimum free disk space after PSD creation to 5000MB

Description: The default minimum free disk space required after PSD creation is changed from 250 MB to 5000MB.

- tpm00003942 Enhance the backup page of Security Platform Settings ToolHP ProtectTools Security Module

Description: Descriptive text on this page is changed as follows:

"Setup automatic system backups for all users (administrative task)."

"Start a manual backup for the current user."

"Restore from a system or manual backup." OR "Restore from a manual backup." (*if user is not an administrator*)

- tpm00003984 FUS - x64: Cert Manager fails under certain condition

Root cause: EndSession has the value related problem.

Fix: Solved the EndSession problem.

- tpm00003985 TNA hangs after Fast User Switches with mounted PSD

Root cause: The error occurs when a process is inside a PSD status retrieval call and is then killed at logoff.

Fix: TNA denies logoff if it is in the middle of PSD operation. User must try to logoff again after few seconds.

- tpm00003986 PSD can be created even if TPM SW policy is set as strict of "Minimum free space after PSD creation".

Root cause: Error message was inappropriate "The minimum PSD size is limited to 10MB".

Fix: the error message is more elaborate "The specified Personal Secure Drive Size does not meet the policy setting "Minimum free space after PSD creation". Please select another drive or reduce the Personal Secure Drive size."

- tpm00003987 PSD can not be initialized if the folder which contains PSD data has "Encryption" attribute; A user newly created can not load or use PSD because of the encryption of PSD.

Root cause: Error occurs because the PSDdrive image files is first created with normal file attributes and the system attribute is set afterwards.

Fix: Drive image is now created with system attribute set.

- tpm00003994 TPM driver installation does not happen during repair.

Root cause: Repair condition for driver installation was missing.

Fix: Repair condition for driver installation in setup.

- tpm00003999 Incorrect message displayed if limited user attempts to install over already installed version.

Root cause: Pre-install check condition was wrong.

Fix: This condition is corrected in the setup.

- tpm00004016 PSD kernel driver not ready for 64 bit

Root cause: PSD kernel driver is not migrated to be ready for 64 bit.

Fix: PSD kernel driver migrated to 64 bit.

- tpm00004020 PSD can not be loaded when user log on

Root cause: Problem in the "Security Platform Management Service".

Fix: Close the handle within the "Security Platform Management Service" and not in IFXWlxEN.dll

- tpm00004021 Help is confusing about copy/paste

Root cause: Help says "To prevent from unwanted input and spy out attacks on passwords, the copy-and-paste mechanism is not supported by password input fields."

Fix: "To prevent from spying attacks on passwords the copying from password input fields is not supported."

- tpm00004022 Infineon TPM Professional Package installs on system without TPM

Root cause: Presence of the chip is identified by reading the ACPI table from the registry. If the OS image, though hardware does not have a TPM chip, has an entry in the registry it causes the setup to install successfully.

Fix: Device enumeration is done for TPM chip instead of reading ACPI table registry entry in the setup.

- tpm00004030 System recovery procedure is confusing.

Root cause: If the user has not logged into the machine atleast once before, then the user name is not shown in the restore list.

Fix: "<ADD USER...>" option is available in the list, which, when double-clicked will open user picker dialog where domain users can be searched for and add them.

- tpm00004037 TNA does not update menu when EFS configuration is reverted to MS certificate.

Root cause: TNA is not notified of this change

Fix: TNA is notified of this change

- tpm00004045 Broken link in XP Home online help
Root cause: Links refer to local Windows OS help files. These are not available in XP Home
Fix: Removed these links in help file and added description on how to find Windows OS help files.
- tpm00004056 "Create backup device" button is available after reverting to BUP
Root cause: Security Platform Settings Tool did not update itself after changing the mode of authentication
Fix: Updates itself after changing mode of authentication..
- tpm00004066 During deleting PSD (when PSD is not loaded), user wants to backup unencrypted copy. A message is shown informing user to login again to load the PSD. This message is insufficient since logging in may not load the PSD if the option is not set. So an appropriate message should be shown.
Root cause: Current message "The Personal Secure Drive has to be active to save an unencrypted copy. Please log on again to activate your Personal Secure Drive and restart the wizard." is inappropriate.
Fix: Changed message to "The Personal Secure Drive has to be loaded to save an unencrypted copy. Please load your Personal Secure Drive and try again."
- tpm00004074 Default size of PSD should be changed to 200MB
Description: Default size of PSD is changed from 50MB to 200MB
- tpm00004076 Group policy update does not work on 64-bit OS.
Root cause: Setup does not update the template file correctly.
Fix: Corrected the update location in Setup
- tpm00004080 PSD shows configured under config settings, even after PSD feature failed to configure during User Initialization.
Root cause: Configuration is not reflecting.
Fix: Fixed to set the Configuration
- tpm00004084 Mismatch user page in Backup Wizard, the controls inside list control cannot be accessed via keyboard.
Root cause: Keyboard access not possible in the list
Fix: Keyboard access is now provided for this list.
- tpm00004091 TPM Driver handling in V2.5.1 SP1 (x64)
Description: Setup runs only if a TPM is visible.
Setup runs only if a TPM occurring in a "positive list" is detected. "Positive List" is provided within setup.ini and can easily be customized.
- tpm00004092 Identity Key problem.

Root cause: Incorrect handling of the CAPubKey stream

Fix: Corrected the handling of the CAPubKey stream.

- tpm00004124 PSD configuration could offer current system drive as default location for configuring PSD

Root cause: C:\ drive was offered always as the default drive to configure PSD.

Fix: Since the OS may be installed on a different drive the current system drive is shown as the default location for configuring PSD

- tpm00004152 PSD minimum size description is not same in help and policy

Root cause: Changed the help file with the correct data.

Fix: Changed the help file with the correct data.

- tpm00004154 dots in psd load/unload documentation page

Root cause: Unnecessary dots inserted in the text

Fix: Fixed in html pages.

- tpm00004161 'Backup warning occurrence' policy is not working

Root cause: Full implementation of this policy was missing

Fix: Implemented this policy

- tpm00004241 'Moniker cannot open file' error - when trying to set BUK to 6 "." characters

Root cause: BUK with 6 "." characters failed in checking for Enhanced Authentication moniker string. OS file moniker returns unexpected error code in that case.

Fix: Improved parsing of password string for existence of monikers specific to support Enhanced Authentication.

- tpm00004327 Running setup in system context produces an error message.

Root cause: Problem with Installshield version 11 API.

Fix: Implemented as VBscript custom action.

2.1.9 Installation Instructions

The module <Setup.exe> installs the Infineon TPM Professional Package Software.

Installing Infineon TPM Professional Package Software requires administrative rights.

2.1.10 WHQL Certification State

Guardionic Solutions has a signed contingency from Microsoft for its PSD.SYS driver that WHQL is not applicable to this driver. Contingency No: 622

2.1.11 Files Installed or Changed

File Name	Installation Directory	Comment
CustomBIOS.htm	%INSTALLDIR%\%MUI%	Online Help for BIOS information
FooterLine.gif	%INSTALLDIR%\%MUI%	Online Help for BIOS information
SecurityPlatform.chm	%INSTALLDIR%\%MUI%	Security Platform Help
License_%S.txt	%INSTALLDIR%\%MUI%	License text
Logo.gif	%INSTALLDIR%\%MUI%	Online Help for BIOS information
MS_Help.css	%INSTALLDIR%\%MUI%	Online Help for BIOS information
Readme.txt	%INSTALLDIR%\%MUI%	Release Notes
IfxSpURs%MUI.dll	%INSTALLDIR%	Common UI resource DLL
IFXTRs%MUI%.dll	%INSTALLDIR%	IFX TSS Resource DLL
IFXTRsMs.dll	%INSTALLDIR%	IFX TSS Message Table Resource DLL
SpPolSys.msc	%INSTALLDIR%	MMC template: Security Policy – System
SpPolUsr.msc	%INSTALLDIR%	MMC template: Security Policy - User
SpMigWz.exe	%INSTALLDIR%	Security Platform Migration Wizard
SpMUIHlp.exe	%INSTALLDIR%	MUI Helper for launching the Getting Started Guide
SpTna.exe	%INSTALLDIR%	Security Platform TNA
SpTPMWz.exe	%INSTALLDIR%	Security Platform Initialization Wizard
SpUserWz.exe	%INSTALLDIR%	Security Platform User Initialization Wizard
SpP12Wz.exe	%INSTALLDIR%	Security Platform PKCS#12 Import Wizard
SpPwdResetWz.exe	%INSTALLDIR%	Security Platform Password Reset Wizard
SpBackupWz.exe	%INSTALLDIR%	Security Platform Backup Wizard
SpUpgrade.exe	%INSTALLDIR%	Tool for upgrading from V1.70 to this version
IfxSpCustomGlue.dll	%INSTALLDIR%	Helper Dll for launching the Security Platform Mgt.
IfxSpPol.adm	%POL%	Administrative Template for Group Policy Editor
IFXTPM.sys	%DRIVER%	TPM Kernel Device Driver
CapiCom.dll	%SYS64%	CAPICOM support; Redistributable from Microsoft
IfxSpMgt.cpl	%SYS64%	Security Platform Control Panel Applet

File Name	Installation Directory	Comment
IfxSpMgt.dll	%SYS64%	Security Platform Management Provider
IfxSpMgt.exe	%SYS64%	Security Platform Management Service
IfxSpMps.dll	%SYS32% %SYS64%	Security Platform Management ServiceProxy/Stub
IFXTCS.exe	%SYS64%	TSS Core Service
IFXTCSps.dll	%SYS32% %SYS64%	TSS Core Service Proxy/Stub
IFXTPM.dll	%SYS64%	TSS Device Driver Library
IfxTPMCK.dll	%SYS32% %SYS64%	IFX PKCS#11 Provider
IFXTPMCP.dll	%SYS32% %SYS64%	TPM Cryptographic Provider
IFXTSP.dll	%SYS32% %SYS64%	TSS Service Provider
IfxUAGUI.exe	%SYS64%	IFX User Authorization Server
IfxUAGps.dll	%SYS32% %SYS64%	IFX User Authorization Server Proxy/Stub
IfxSPArc.dll	%SYS32% %SYS64%	Security Platform Archive Access Component
IfxWlxEN.dll	%SYS32%	WinLogon Event Notification DLL
IfxXmlRs.dll	%SYS64%	XML Resource DLL

Personal Secure Drive Integration:

File Name	Installation Directory	Comment
Psd.dll	%INSTALLDIR%	Personal Secure Drive Middleware module
PSDCFGWZ.ocx	%INSTALLDIR%	Personal Secure Drive Configuration Wizard Pages
PSDCFGWZ%MUI%.dll	%INSTALLDIR%	Personal Secure Drive Language Ressource DLL's for Wizard Pages
PSDMsg.dll	%INSTALLDIR%	Personal Secure Drive Message Library for Event Logging
PSDRecovery%MUI%.dll	%INSTALLDIR%	Personal Secure Drive Language Ressource DLL's for Recovery Tool.

File Name	Installation Directory	Comment
PSDrt.exe	%INSTALLDIR%	Personal Secure Drive Runtime Application
PSDrt%MUI%.dll	%INSTALLDIR%	Personal Secure Drive Language Ressource DLL's for Runtime Application.
PSDShExt.dll	%INSTALLDIR%	Personal Secure Drive Explorer Shell Extension
PSDShExt%MUI%.dll	%INSTALLDIR%	Personal Secure Drive Language Ressource DLL's for Explorer Shell Extension.
PSDSrv.exe	%INSTALLDIR%	Personal Secure Drive Windows Service
PSD.sys	%DRIVER%	Personal Secure Drive Disk driver
PSDRecovery.exe	%OS%	Personal Secure Drive Recovery Tool

Following files will be temporarily installed during the installation process and will be removed after the installation process finished:

File Name	Installation Directory	Comment
IfxInstDrv.dll	%SUPPORTDIR%	Driver Installation Helper DLL
IfxInstHlp.dll	%SUPPORTDIR%	Installation Helper DLL
License_%S.txt	%SUPPORTDIR%	Licence text displayed in License Agreement Dialog

Installation Directory:

Abbreviation	Windows 2000 / XP	Comment
%DRIVER%	<Windows>\System32\Drivers	
%HELP%	<Windows>\Help	
%INSTALLDIR%	<Program Files>\Infineon\Tpm Software	Default installation directory, but user may change it
%MUI%	US, JP	Abbreviation for MUI support identifying a certain language
%OS%	<Windows>	
%POL%	<Windows>\inf	
%SUPPORTDIR%		Dynamically created by Windows Installer on start of a installation process. It is automatically removed on process finish.
%SYS32%	<Windows>\System32	
%SYS64%	<Windows>\SysWoW64	

[illegible]

2.1.13 Co-requisite hardware or software

2.1.13.1 BIOS Requirements

BIOS ACPI plug and play support for the Security Platform Chip.

2.1.13.2 Security Platform Chip

- Security Platform Chip: TPM SLD 9630TT1.1
Firmware: Version 1.05
- Security Platform Chip: SLB 9635TT1.2
Firmware: Version 1.00

3 Debug Versions

PSD supports event logging also for debugging purposes.

The PSD event logging is controlled via registry entries at
HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\App Paths\PSDapp

The event log level is set by the value 'EventLogging' as REG_DWORD, this value is set at install time.

Following values are defined:

- No event log

0 No event log

1 Only error events

2 Error and warning events (**default** at installation)

3 Error, warning and information events

4 Error, warning, information and debug events (EventDebugging value)

In case of debug events, an additional value 'EventDebugging' controls with module posts debug events as REG_DWORD, one or more values can combined (added) together.

0x00000001 PSD.dll

0x00000002 PSDrt.exe

0x00000004 PSDsvc.exe

0x00000008 PSDCFGWZ.ocx

0x00000010 PSDShExt.dll

0x00000040 PSDrecovery.exe

0x00000100 unmount.exe (only visible at uninstall time)

Note:

Enabling debug events for all modules will fill up the eventlog very fast.

Therefore the recommendation is to change the event log properties.

Increase the log size and enable the option "overwrite events as needed".