



Automotive, Industrial & Multimarket

Release Notes (Version 2.0 SP1 RC2)

Infineon TPM Professional Package

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## REVISION HISTORY

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1.0	16/07/03	M. Palatzky	all	First version
1.1	01/28/05	M.Palatzky	2.1.7 2.1.8	Beta 2
1.2	2/25/05	M.Palatzky	2.1.7 2.1.8	RC
1.3	5/20/05	M.Palatzky	2.1.7 2.1.8	Service Pack
1.4	6/24/05	M.Palatzky	2.1.7 2.1.8	Service Pack RC 2

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## **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 2.0 SP1 RC2

### 2.1.2 Descriptive Name of Deliverable

Infineon TPM Professional Package

### 2.1.3 Vendor Version Number

Build: 02.00.0514.00

### 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

CH - Chinese simplified  
CHT - Chinese Traditional  
FR - French  
GR - German  
IT - Italian  
JP - Japanese  
KR - Korean  
SP - Spanish  
US - English

### 2.1.6 Supported Platforms

#### 2.1.6.1 *Operating Systems*

- Microsoft Windows 2000 Professional SP4
- Microsoft Windows 2000 (Advanced) Server SP4
- Microsoft Windows Server 2003
- Microsoft Windows XP Professional SP2 and Microsoft Windows XP Professional SP1
- Microsoft Windows XP Home SP2 and Windows XP Home SP1
- Microsoft Windows XP Tablet PC Edition Version 2002 SP1 and SP2.

#### 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.
- tpm00001807 License Agreement window is not closed by clicking on next, another window will merge on top of the License Agreement window making the License Agreement window not to go away during the installation process. It will disappear at the Finish Window

### 2.1.7.3 PSD

- tpm00000912 No data in PSD but warning to delete it
- tpm00002404 Delete PDS with save of content  
More space than really required is requested since calculation of required space for copy contains also space used by filesystem and system volume information of PSD drive.

### 2.1.7.4 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.

### 2.1.7.5 RSA SecurID

- tpm00001051 cannot import token file to ifxtpmck.dll through double click. Button "Transfer Tokens Smart Card" does not appear.  
Status: a service request at RSA Inc. has been started and clarification is in progress.
- 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.
- tpm00002103 If the Platform is disabled and the user tries to import a token through the RSA SecurID Software Token the User Authentication Screen appears. When user enters the right password an error message "Token Import Failed: PKCS 11 Error:Error writing PKCS 11 Object" appears.

### 2.1.7.6 Backup/Restore

- tpm00002149 "Remote Backup Archive is not accessible"  
Information: If scheduled backup is configured to be written on network share the task can not be run as "System Account" since "System Account" has no access to network. Reconfigure the scheduler to use a different account with access rights for this network share.
- tpm00002654 Validation of password  
Information: While taking the system backup and restore a user on a new clean system without TPM owner present and user not initialed before, the user is asked for

a BUK password. Password cannot be validated at time the password is requested. Later on wizard will show failure information on finish page.

#### **2.1.7.7 Enhanced Authentication**

- tpm00002809 Switch to "Enhanced Authentication" when BUK password has expired  
If BUK password has expired the BUK password has to be changed first before enhanced authentication can be enabled
- tpm00002914 "Unspecified error" when driver for SC reader is not installed  
User Wizard ends up with "Unspecified error" if Platform initialized including enhanced auth but no SC reader is installed on system

#### **2.1.7.8 Miscellaneous**

- tpm00001823 Basic User Password Dialog prevents Shutdown/Restart  
When the Basic User Key password is present the user cannot perform Shutdown or Restart.
- tpm00002195 Reconfiguration of EFS on Windows 2003 Server  
Reconfiguration gets active after user has logged on again
- tpm00002791 Initialization of guest user account  
Information: Initialization of guest user account can be done successfully. But after log off OS deletes the user hive so that user is not initialized again after log in.

#### **2.1.8 Observations Fixed in this Release**

Fixed with SP1 RC2

- tpm00003023/tpm00003004 Typos in JP version of online help
- tpm00003022 Localization: User Wizard  
Inappropriate JP sentences for PSD dialog
- tpm00003021 Localization: Typo in Start Menu entry of JP version
- tpm00003020 Localization: Garbage characters in JP readme file of V2.0 SP1 RC1
- tpm00003019 User Wizard: Wrong summary text after deleting PSD with saving an unencrypted copy
- tpm00003018 Localization: Layout of JP version of Basic User Password dialog
- tpm00003017/ tpm00003016 Localization: Typo in US online help
- tpm00003015 User wizard is not responding  
Pressing "e" on Emergency Recovery Token configuration page breaks platform wizard
- tpm00003005 Setup: limited user install generates error during the un-installation by running the setup with "run as" under W2K
- tpm00002995/tpm00002989 Localization: Typo in FR online help
- tpm00002983 Layout issue in PSD Overwrite dialog of Backup Wizard

- tpm00002977 Localization: Layout issue of Platform wizard page for Emergency Recovery - Scroll bar visible for SP version
- tpm00002975 Localization: Setup - Several dots at the end of a sentence in Italian version
- tpm00002974 Localization: Layout issue of Backup wizard finish page - Scroll bar visible for GR version
- tpm00002973 Localization: Capitalizations are not consistent in CPL for same phrase in US version
- tpm00002972 Certificate viewer: unable to delete embedded security certificates, after a factory reset of the tpm chip
- tpm00002965/tpm00002876 Localization: wording mismatches between CPL GUI and Help of FR version
- tpm00002944 Localization: unnecessary scrollbar at User Wizard finish page
- tpm00002942 Localization: unnecessary scrollbar at Backup Wizard finish page
- tpm00002941 Password Reset Wizard: Problem with going back and forward in PSW reset
- tpm00002937/tpm00002901/tpm00002849 IFXUAGUI crashes sometimes after change password
- tpm00002929 Localization: bold letters in header and in footer in online help of KR version
- tpm00002923 Localization: the text in the dialog offering to start the CPA during deinstallation is incomplete in CHT version.
- tpm00002922/ tpm00002910 Localization: Typos in KR version of User Wizard
- tpm00002911 Localization: Typos in KR version of Migration Wizard
- tpm00002919/tpm00002917/tpm00002909 Localization: Typos in KR version of CPL
- tpm00002912 Typos in KR version of Password Reset Wizard
- tpm00002907/tpm00002904 Localization: Typos in CHT version of Migration Wizard
- tpm00002906 Localization: Typos in KR version of CPL
- tpm00002905 Localization: Typos in CHT version of Platform Wizard
- tpm00002903 Localization: Typos in CHT version of Backup Wizard
- tpm00002894 Localization: Typos in JP version of Platform Wizard
- tpm00002891 CPL: controls are not aligned on the Password Reset CPL page
- tpm00002884 Localization: Footer is missing in online help of CHS version
- tpm00002879 Localization: Typos in IT version of CPL
- tpm00002874 User Wizard: error handling while creating a new certificate and providing a wrong password on second password request in BUK dialog

- tpm00002869 CPL: Button layout of More Details dialog
- tpm00002865 Localization: Typo in FR version of TNA
- tpm00002854/tpm00002829 Localization: Typo in GR version of PKCS#12 wizard
- tpm00002828 Localization: Typo in GR version of Migration wizard
- tpm00002826 Localization: Typo in GR version of Password Reset wizard
- tpm00002824 Localization: Typo in GR version of User wizard
- tpm00002818 Localization: Typo in GR version of CPL
- tpm00002811 Localization: Typo in GR version of Backup wizard
- tpm00002629 Enhanced Authentication: Handling of missing plug in
- tpm00002213 Migration Wizard: Wrong text if PSD drive check failed

#### Fixed with RC1

- tpm00002659 Due to limited access rights of a guest account user initialization /feature configuration fails.
- tpm00001968 Intermittent tray icon error "Embedded Security"  
Intermittent tray icon error "Embedded Security is disabled "0xe0280006" appears instead of the message that asks user to restart the system in order to enable back Embedded Security, when selecting to enable Embedded Security after it has been temporarily disabled using the systray icon.
- tpm00002213 Migration Wizard: Check on PSD\_DRIVE\_ID\_COLLISION not correct  
Migrating to a user with an already configured PSD ends up in a wrong warning message: "User <> on this platform has already configured the same Personal Secure Drive. Therefore Personal Secure Drive configuration data will not be restored."
- tpm00002240 PSD with XP Home: PSD Recovery Agents certificates are stored in My store instead of an own specific store as required in Spec
- tpm00002286 Change Basic User Password for enhanced authentication (smart card)  
Unknown internal error occurs if the "Insert Smart Card" dialog is cancel by user.  
Afterwards "Change basic User Password" dialog pops up and cannot be canceled.
- tpm00002292 Restore PSD backup file: if valid drive image file is already existing, user is not asked to overwrite  
If the user selects to also restore his PSD drive image file, the restoration of this file fails, because there is already a valid file at that location. But PSD is working fine afterwards.
- tpm00002496 If automated backup is configured after initial platform initialization and user has already configured enhanced authentication, TNA offers a balloon to provide password and is not asking for passphrase or token when user is logging in to the system.
- tpm00002500 Cancel change of passphrase in CPA – User Settings leads to error "At least one argument is invalid (0x80070057)".

If user is initialized to use smartcard based enhanced authentication token and clicks on cancel in the "Change BUP" dialog while smartcard is inserted this error is raised. The usage secret of the BUP is changed although when clicking on cancel but not the content of the smartcard.

- tpm00002503 Smartcard removal handling problem  
If user is asked to insert the smartcard, has provided the PIN and user removes the smartcard shortly after clicking OK the smartcard handling is not working properly afterwards.
- tpm00002544 Information: If a user is restored by an backup archive containing also EFS configuration data, EFS must be re-configured as user wizard recommends in the feature page. If user does not re-configure EFS, new file will be encrypted with previous configured certificate whereas according key may not longer be available due to restore operation.
- tpm00002553 If user with initialized smartcard based enhanced authentication clicks on back at the PIN page, wizard is goes to finish page with error "Smart card removed. Please insert and restart wizard."
- tpm00002624 Shadow Backup update via trigger. Does not auto update backup file from schedule
- tpm00002638 Text is cut off at the Basic User Password screen
- tpm00002641 Restore and Backup default to different files
- tpm00002668 Unclear Summary message in PSD delete
- tpm00002669 On Wizard Completion screen of User Initialization  
On the Wizard Completion screen of user initialization there are two abbreviations EFS and PSD. These should be spelled out in full...  
EFS = Encrypting File System  
PSD = Personal Secure Drive
- tpm00002674 Grammar of sentence needs to be corrected
- tpm00002745 TNA double click  
Double click on TNA icon shows both the small context menu (like with right click) and starts a Wizard at the same time.
- Migration import with configured smartcard based enhanced authentication is not possible by providing the smartcard and PIN but possible by providing the passphrase.

### **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**

**2.1.11.1 Installed Files**

<b>File Name</b>	<b>Installation Directory</b>	<b>Comment</b>
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
IFXTPM.inf	%INSTALLDIR%\TPM Driver	TPM Kernel Device Driver installation information file
IFXTPM.sys	%INSTALLDIR%\TPM Driver	TPM Kernel Device Driver
IFXTPM.cat	%INSTALLDIR%\TPM Driver	TPM Kernel Device Driver signature file
IfxSpURs%MUI.dll	%INSTALLDIR%	Common UI resource DLL
IfxSpCRs%MUI%.dll	%INSTALLDIR%	Common customization 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
SpMUIHp.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

File Name	Installation Directory	Comment
CapiCom.dll	%SYS32%	CAPI COM support; Redistributable from Microsoft
IfxSpMgt.cpl	%SYS32%	Security Platform Control Panel Applet
IfxSpMgt.dll	%SYS32%	Security Platform Management Provider
IfxSpMgt.exe	%SYS32%	Security Platform Management Service
IfxSpMps.dll	%SYS32%	Security Platform Management ServiceProxy/Stub
IFXTCS.exe	%SYS32%	TSS Core Service
IFXTCSps.dll	%SYS32%	TSS Core Service Proxy/Stub
IFXTPM.dll	%SYS32%	TSS Device Driver Library
IfxTPMCK.dll	%SYS32%	IFX PKCS#11 Provider
IFXTPMCP.dll	%SYS32%	TPM Cryptographic Provider
IFXTSP.dll	%SYS32%	TSS Service Provider
IfxUAGUI.exe	%SYS32%	IFX User Authorization Server
IfxUAGps.dll	%SYS32%	IFX User Authorization Server Proxy/Stub
IfxSPArc.dll	%SYS32%	Security Platform Archive Access Component
IfxWlxEN.dll	%SYS32%	WinLogon Event Notification DLL
IfxXmlRs.dll	%SYS32%	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.
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

File Name	Installation Directory	Comment
PSDRecovery.exe	%SYS32%	Personal Secure Drive Recovery Tool

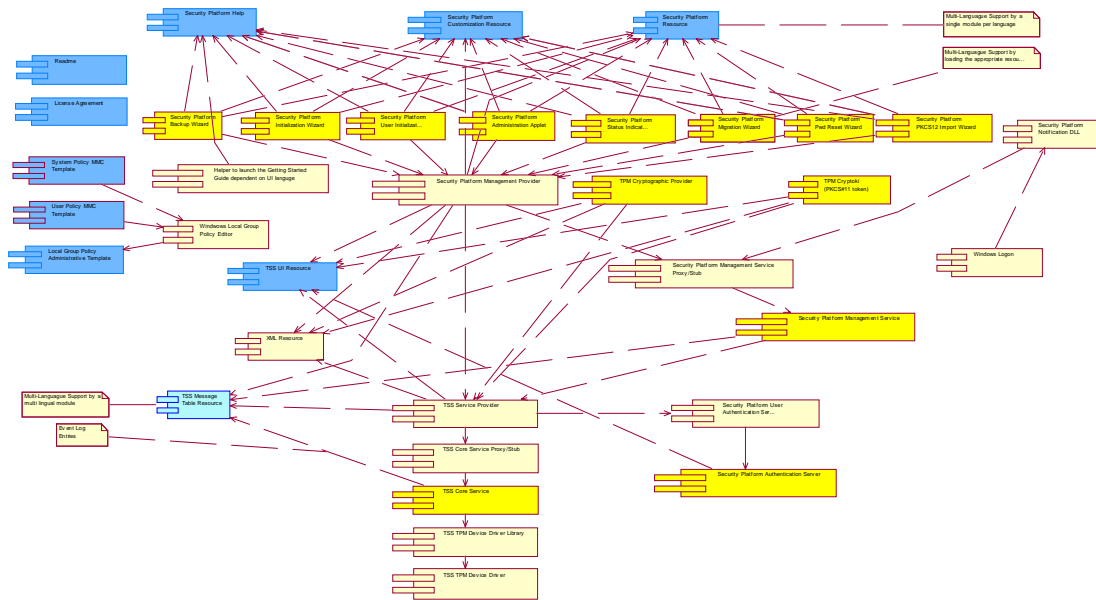
Following files will be temporarily installed during the installation process and will be removed after the installation process finished:

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, FR, GR, SP, IT, 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	

### 2.1.12 Component dependencies



### **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: F2.66

### **2.1.14 Memory requirements**

### **2.1.15 Known conflicting components**



### **3 Test Results**

## **4 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

0x00000020 PSDInfo.dll

0x00000040 PSDrecovery.exe

0x00000080 PSDNtfy.dll

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".



## **5 FTP drop box**