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How to fix the System_Disk exception error

Appli	es to:		
	Platform	OS version	WinPAC/ViewPAC utility version
	WP-8x3x	V1.6.1.1 and before	All versions
	WP-8x4x	V1.3.0.1 and before	All versions
	VP-25W1	V1.1.1.0 and before	All versions
	VP-23W1	V2.2.0.0 and before	All versions
	WP-5000	V2.2.0.0 and before	All versions

The reason for the System_Disk exception error:

If the system is **defragmenting** (*Note1) the System_Disk, and the device is turned off or loses power suddenly, the **File allocation table (FAT)** possibly cause damage to the System_Disk and will result the exception error similar to that described below.

Situations that cause a System_Disk exception error:

Situation:

1. Locate the error that occurs when accessing files on the System_Disk:

- Cannot save or copy files to the System_Disk.
- Cannot delete files.
- The file disappears after be copied to the System_Disk.
- All files disappear from the System_Disk.
- 2. The capacity of the System_Disk that has been used is different to the actual capacity that has been used.
- After using the defrag function in the Storage Manager, an exception occurs: Click Control Panel->Storage Manager->Dismount->Properties->Defrag-> Verify Corrections->Start.



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4. The System_Disk disappears from "my device" and the "DSK1: Flash Disk Block" item also disappears from the Storage Manager.

	Storage Propertie	s 🛛 ? OK 🔀
	Storage Manager	
	Store Info:	
(
	Capacity:	
	Unallocated:	
	Sector Size:	
	<u>F</u> ormat	<u>D</u> ismount
	Partitions:	
		New
		Delete
		Properties

Solution:

For situations $1 \cdot 2 \cdot 3$ solution 1 can be used. For situation 4, use solution 2 to rebuild the **File allocation table (FAT)** for the files on the System_disk.

Solution 1:

Click Control Panel->Storage Manager->Dismount->Format. After formatting, make sure the statue of System_disk is normal. If the statue of System_disk is not normal, use solution 2.

Storage Proper	ties 💦 🕐 🔀
Storage Manager]
Store Info:	
DSK1: Flash D	isk Block 🔽
2 Capacity:	61.28 MB 1
Unallocated:	0.00 B
Sector Size:	4.00 KB
<u> </u>	Dismount
Partitions:	
Part00	New
	Delete
	Properties

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Solution 2:

Execute the clearflash_16bit_dataflash.exe program and click the clear button.



The clearflash_16bit_dataflash.exe can be found at: <u>ftp://ftp.icpdas.com.tw/pub/cd/winpac/napdos/wp-</u> <u>8x4x_ce50/misc/clearflash/intel/clearflash_16bit_dataflash.exe</u>

Wait a few minutes for the System_Disk to be erased, and then reboot the WinPAC after erasing has completed.

<u>F</u> ile	Edit	<u>H</u> elp					
Bytes	Per B.	lock .		03	«2000)	
Number	of B	locks		03	cf8		
Flash	Type .			03	кl		
Data B	ytes 1	Per Se	ctor	03	¢200		
Sector	s Per	Block		03	¢100		
0w≺1≻	<2> <:	3> <4>	<5≻	<6> -	<7> <8	3≻	
@w≺9≻	<a> <1	b≻ ≺c≻	≺d≻	<e> -</e>	<f> <1</f>	LO≻	
@w≺11≻	<12≻	<13>	<14≻	<15≻	<16≻	<17≻	<18≻
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@w≺29≻	<2 a ≻	<2b≻	<2c≻	<2d>	<2e≻	<2 f ≻	<30≻
@w≺31≻	<32>	<33>	<34>	<35>	<36>	<37>	<38>
@w≺39≻	<3 a ≻	<3b≻	<3c≻	<3d>	<3e>	<3f>	<40≻
@w≺41≻	≺42≻	<43≻	<44≻	<45≻	<46≻	<47≻	<48>
@w≺49≻	≺4a≻	<4b>	<4c>	<4d≻	<4e≻	<4f>	<50>
@ឃ≺51≻	≺52≻	<53≻	<54≻	<55≻	<56≻	<57≻	<58>
@w≺59≻	<5 a ≻	<5b≻	<5c≻	<5d≻	<5e≻	<5f≻	<60>
@w≺61≻	<62≻	<63>	<64>	<65≻	<66>	<67>	<68>
@ឃ≺69≻	<6a≻	<6b≻	<6c≻	<6d≻	<6e≻	<6f>	<70≻
@w≺71≻	≺72≻	<73≻	<74≻	<75≻	<76≻	<77≻	<78>
@ʊ≺79≻	<7a≻	<7ь≻	<7c≻	<7d≻	<7e≻	<7f>	<80>
@w≺81≻	<82≻	<83≻	<84>	<85≻	<86>	<87≻	<88>
@w≺89≻	<8a≻	<8b≻	<8c>	<8d≻	<8e≻	<8f>	<90>
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@w≺c9≻	<ca></ca>	≺cb≻	≺cc≻	<cd></cd>	≺ce≻	≺cf≻	<d0></d0>
@w≺dl≻	≺d2≻	<d3≻< td=""><td><d4≻< td=""><td><d5></d5></td><td><9P></td><td><d7></d7></td><td><d8></d8></td></d4≻<></td></d3≻<>	<d4≻< td=""><td><d5></d5></td><td><9P></td><td><d7></d7></td><td><d8></d8></td></d4≻<>	<d5></d5>	<9P>	<d7></d7>	<d8></d8>
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After reb Formattir	ooting, the moning of the System	or will bec _Disk will	ome WHITE f take 5~10 mir	or a while oute.	e, and then reb	ooot your \	WinPAC <mark>aga</mark>
	Format Disk				×		
	My Device Formatting the c Internet E Microsoft	lisk, and Wait	for 5~10 minutes 0				
	WordPad My Documents		C	uutiuni tep 1. Turi	n the rotary, swit	ch to 0 (noi	DK ×
			s Microse	tep 1. Turi oft Window	n the rotary swit	ch to 0 (noi	rmal) <mark>1/21</mark> 10

Suggestion:

1. Do not frequently access the files on the System_Disk. If the System_Disk is going to be **defragmented**. Do not turn off the device or do not cause power to be lost suddenly, the **File allocation table (FAT)** will possibly be damaged. If you still want to frequently access the files on the System_Disk, do not turn off the device when RUN led is blinking.

2. Use the Backup_utility to back up the System_Disk.

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*Note 1: System_Disk defragment action:

System_Disk defragment action is designed to increase access speed by rearranging the files stored on the System Disk so that they occupy contiguous storage locations. The purpose is to optimize the time it takes to read and write files to/from the System_Disk by minimizing head travel time and maximizing the transfer rate. While defragmenting the System_Disk, the RUN LED will blink and the defragment icon will be show in the system tray on the bottom-right hand side of the screen.

Note: Don't power off the WinPAC while defragment action is proceeding.



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Revision History

Revision	Date	Description
1.0.1	2013/08/06	NEW: Added support information for WP-5000.
1.0.0	2010/02/12	Initial release