



Architect of an Open World™

Optima – Log Collect Procedure

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LOGS

3 methods exist to get logs

- USB Flash Drive
- iSM CLI
- iSM Client

1 With USB Flash Drive

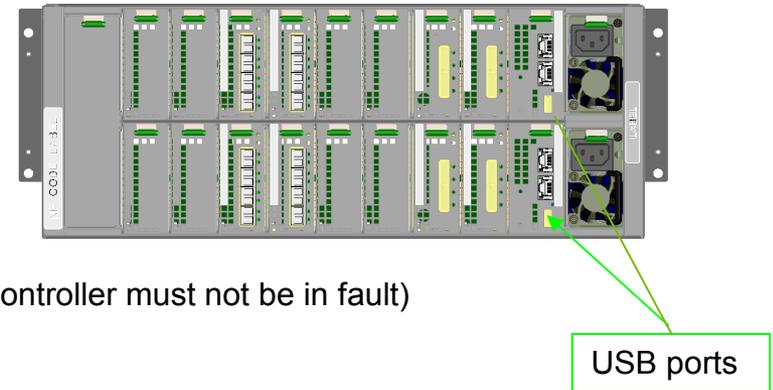
USB Flash Drive must be:

- FAT 32 or FAT 16 formatted
- write enabled
- at least 1,2 Gb free memory space
- fit out with a led

- Insert USB Flash Drive into the port of the controller 0 or 1 (controller must not be in fault)
- Logs are automatically save on the USB
- Activity is completed as soon as led is off (3 to 20 minutes)

Logs collected are :

- Basic: Information set (OS/SW/FW/HW logs, OS trace dump, and unit configuration information)
- Local_dump: Memory dump of the controller in which the USB memory is inserted
- Remote_dump: Memory dump of the controller in which the USB memory is not inserted



LOGS

2 Through CLI (Command Line Interface)

- Connect one PC on the maintenance port (Mnt) of the management card
- Run a Telnet client (Putty) at the floating IP@
- Enter the username and password
- Enter the command: **iSMgather**

```
support@CNT1!!iSMgather
Files are being collected, please wait for a minute...
CNT0 : Success
CNT1 : Success
:
ExitStatus:0
```

Run FTP client and make a connection onto the same floating IP@, with the same username and password

- Bring back the file located onto folder: `./wkarea/iSMgather/`

Dump of the local controller

- Repeat the previous steps précédentes with the command: **iSMgather -dump -l**

Dump of the remote controller

- Repeat the previous steps with the command: **iSMgather -dump -r**

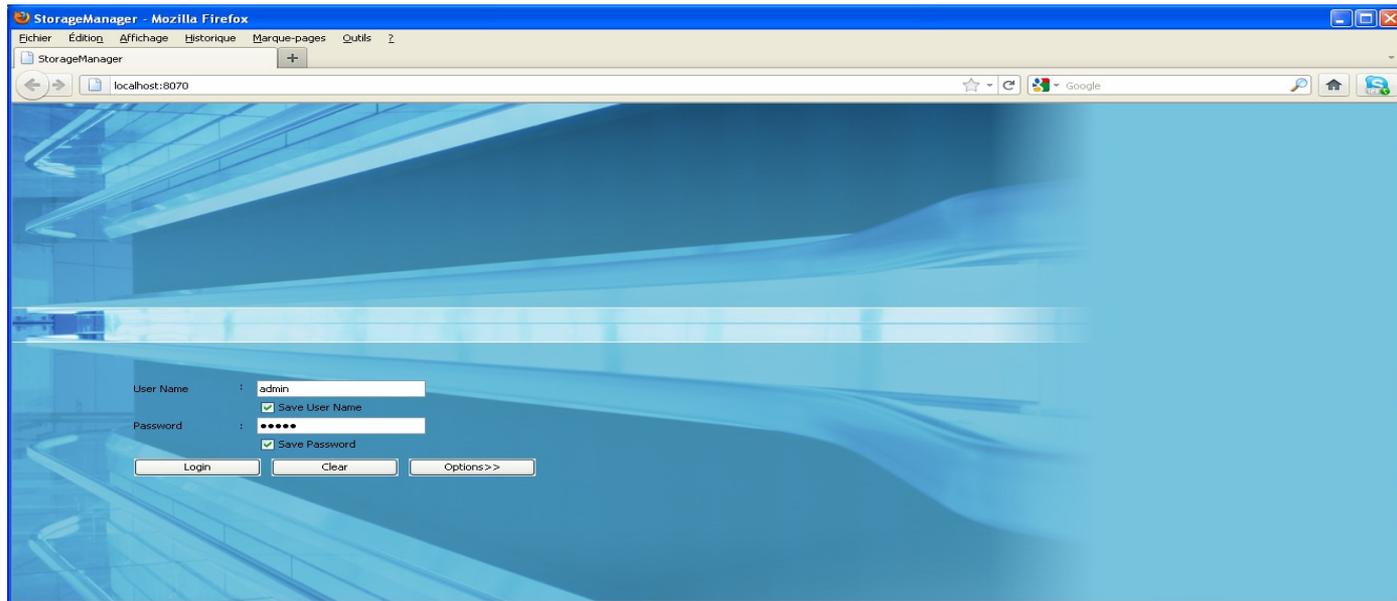
If one controller is in fault, make a connection onto the other

If the two controllers were in fault, replace the controllers and collect logs after replacement

LOGS

3 Trough iSM client

- Two methods exist to establish a connection through a browser and log on ISM:
 - Connect one PC on the maintenance port (Mnt) of the management card
 - Connect one PC onto iSM server
- With the browser make an http connection on: **http://IP address :8070**
- Enter username and password



LOGS

The screenshot shows the StorageManager web interface in Mozilla Firefox. The main window displays the status of the OPTIMA2_PRA2 disk array, including a table of logical disks and their formatting progress. A 'Log Collection' dialog box is open, allowing the user to select the recipient directory and the types of logs to be collected. The dialog box has a 'Save To' field set to 'C:\Documents and Settings\lragilliere-p' and a 'Browse...' button. Under 'Logs of server to be collected', the 'All logs' radio button is selected, and the 'All Diskarray' dropdown is set. The 'Logs of client' section is currently empty. The 'Collect' button is highlighted in yellow.

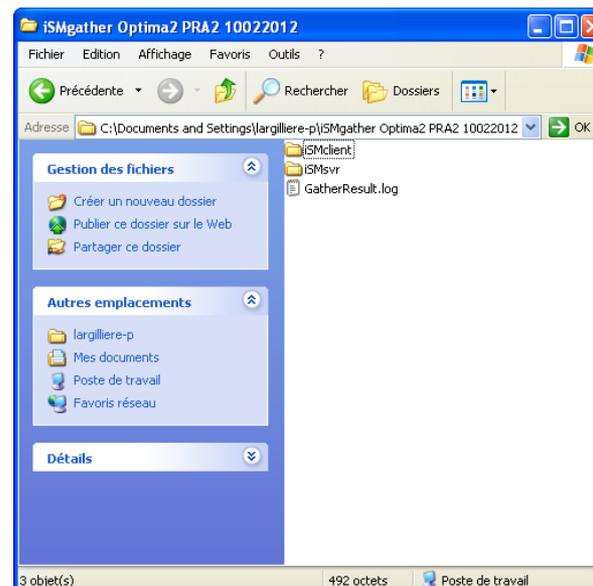
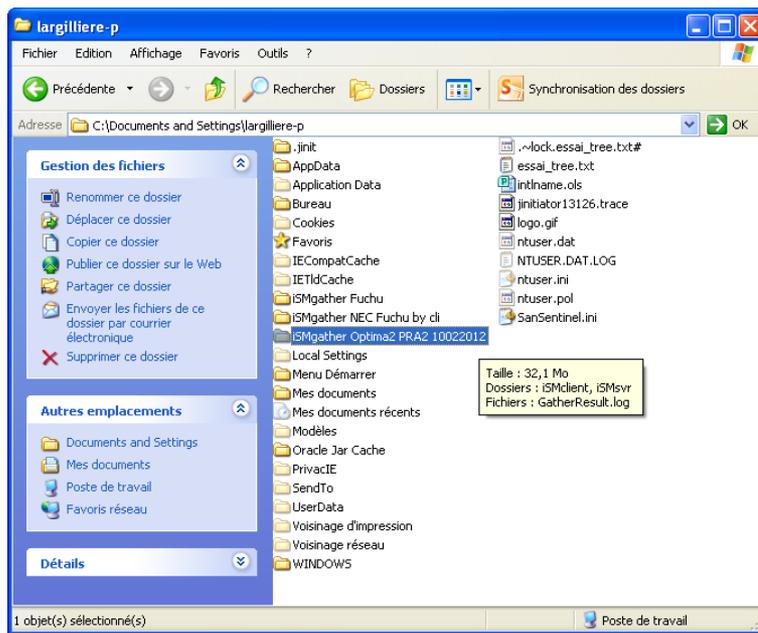
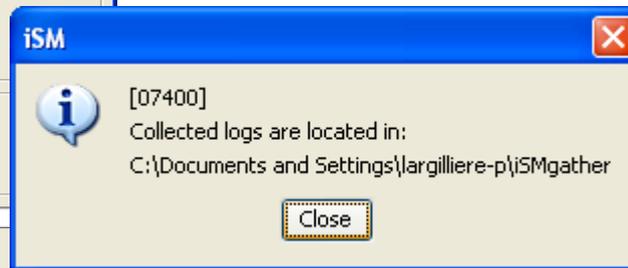
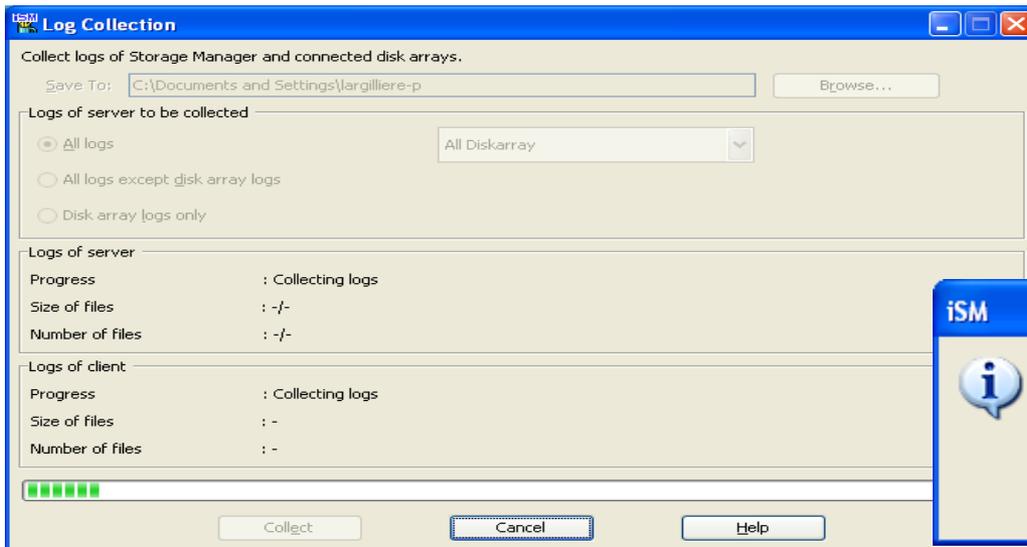
Number	OS Type	Logical Disk Name	Status	RAID	Capacity (GB)	Actual Used Capacity (GB)	Progress Ratio	Pool Num
0000h	RG1_SAS_LD0000	Ready (formatting)	5/50	512,0		80%	000fh	
0001h	RG1_SAS_LD0001	Ready (formatting)	5/50	512,0		84%	000fh	
0002h	RG1_SAS_LD0002	Ready (formatting)	5/50	512,0		85%	000fh	
0003h	RG1_SAS_LD0003	Ready (formatting)	5/50	512,0		83%	000fh	
0004h	RG1_SAS_LD0004	Ready (formatting)	5/50	512,0		80%	000fh	
0005h	RG1_SAS_LD0005	Ready (formatting)	5/50	512,0		84%	000fh	
0006h	RG1_SAS_LD0006	Ready (formatting)	5/50	512,0		85%	000fh	
0007h	RG1_SAS_LD0007	Ready (formatting)	5/50	512,0		83%	000fh	
0008h	RG2_SAS_LD0008	Ready (formatting)	5/50	512,0		83%	0010h	
0009h	RG2_SAS_LD0009	Ready (formatting)	5/50	512,0		86%	0010h	
000ah	RG2_SAS_LD000A	Ready (formatting)	5/50	512,0		87%	0010h	
000bh	RG2_SAS_LD000B	Ready (formatting)	5/50	512,0		85%	0010h	
000ch	RG2_SAS_LD000C	Ready (formatting)	5/50	512,0		82%	0010h	
000d4	RG2_SAS_LD000D	Ready (formatting)	5/50	512,0		86%	0010h	

Select menu 'Option'»
then 'Log Collection'

Select recipient directory
and click onto 'Collect'



LOGS



LOGS - Summary

This chart shows the various logs and how to collect them:

Name	Description	Collection method
OS/SW/FW/HW log	Storage device logs (such as failure log)	USB log collection CLI log collection iSM client log collection
OS trace dump	CONT FAULT error log (log that is useful for CONT FAULT)	USB log collection CLI log collection iSM client log collection
Device configuration information	Configuration information for a storage device	USB log collection CLI log collection iSM client log collection
Memory dump	CONT FAULT dump information (information collected if software fails)	USB log collection CLI log collection (-dump option)

Optima Typical Message

Message class:

- Info
- Notice
- Warning
- Error

Date et heure

Détails

Thu Feb 9 14:36:24 2012 0000005524 Info iSMclcomm iSM02040: iSM/Client connected user=admin client=WebCL ip=127.0.0.1

Thu Feb 9 14:39:21 2012 0000000300 Err iSMagcomma iSM03200:Control path access failed. ip=10.1.0.10 port=2730 func=connect errno=20000 detail=6-2039

Thu Feb 9 14:39:21 2012 0000000300 Err iSMagcomma iSM03224:Control path is blockaded. ip=(10.1.0.10) func=connect errno=20000 status=0000 (OPTIMA2_PRA2 productID=M500 Disk Array SN=0000000943000002) host=B013843 [UC=0000000000 FC=97][_ALERT_]

Thu Feb 9 14:39:21 2012 0000006112 Warning iSMrmond iSM07091:Control path access to OPTIMA2_PRA2 failed. (status=0x0017/0x60/0x00004e20/0x003f0178/0x000000)

Thu Feb 9 14:39:21 2012 0000004688 Err iSMrmond iSM07026:Resource monitoring changes to recovery mode.(OPTIMA2_PRA2 productID=M500 Disk Array SN=0000000943000002) [UC=0000000000 FC=92][_ALERT_]

Cabinet Identification



Glossary

Glossary

Acronyms

Disk Array unit	Denotes a set configuration of DAC and DE.
Disk array controller (DAC)	This is a unit that controls the disk array functions. This denotes a configuration consisting of a DAC enclosure and an HPE. Specifically, it is a combination of NF5341-xB00xx and NF5341-xFxx.
Disk enclosure (DE)	Denotes a unit that is connected to the DAC and used to expand or add a disk drive. Denotes NF53x1-xE70x/xE71x disk enclosure.
Controller (CONT)	Denotes a controller in a DAC enclosure.
Host port extension (HPE)	Denotes an interface module with a host. This is installed in a DAC enclosure.
Adapter (ADP)	Denotes the control module mounted on the DE section.
Power supply (PS)	Denotes the power supply units mounted on the DAC and DE.
Disk drive	Denotes a HDD or SSD with an exclusive carrier. NF53x1-SMxxx(HDD) NF53x1-SSxxx(SSD) This is sometimes simply called a drive or physical disk (PD).
Dummy carrier	Denotes an exclusive carrier (used for an uninstalled hard disk drive). A dummy tray and dummy HDD tray are also used.
Management server	Denotes a server that is connected to a management port and executes management software such as NEC Storage Manager.
Application server	Denotes an upper-level host machine executing application.
Client	Denotes a personal computer on which management software is running.
Host bus adapter (HBA)	Denotes a FC interface card to be installed in an application server.
Network Interface Card (NIC)	Denotes an iSCSI interface card to be installed in an application server.



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