blackbox_decrypt user guide

1. Purpose

Introduce the method to use blackbox_decrypt tool.

2. Range

Applicable documents: blackbox.log and blackboxpeci.log which came from BMC

Applicable OS: 32-bit linux, Windows

3. Tool Catalog and Content

OS	Catalog	Content
Linux	linux	blackbox_decrypt
Windows	windows	blackbox_decrypt.exe

4. Tool operation flow

The blackbox_decrypt tool released this time is suitable for 32-bit Linux and Windows environments.

4.1 Function

The blackbox_decrypt tool is used to decode blackbox.log and blackboxpeci.log. Before decoding, the content in the log is garbled. After decoding, the content in the log can be viewed normally.

4.2 Command format

Command	File
blackbox_decrypt	blackbox.log or blackboxpeci.log

In the command, blackbox.log and blackboxpeci.log are blackbox logs that are exported over the network.

Remember: Do not try to open the un-decoded log file in the windows system, otherwise it will cause the content inside to be changed. When decoding again, the decoded content may be wrong.

Example: In the 32-bit Linux environment, decode the exported blackbox.log. Then execute the following command:

./blackbox_decrypt blackbox.log

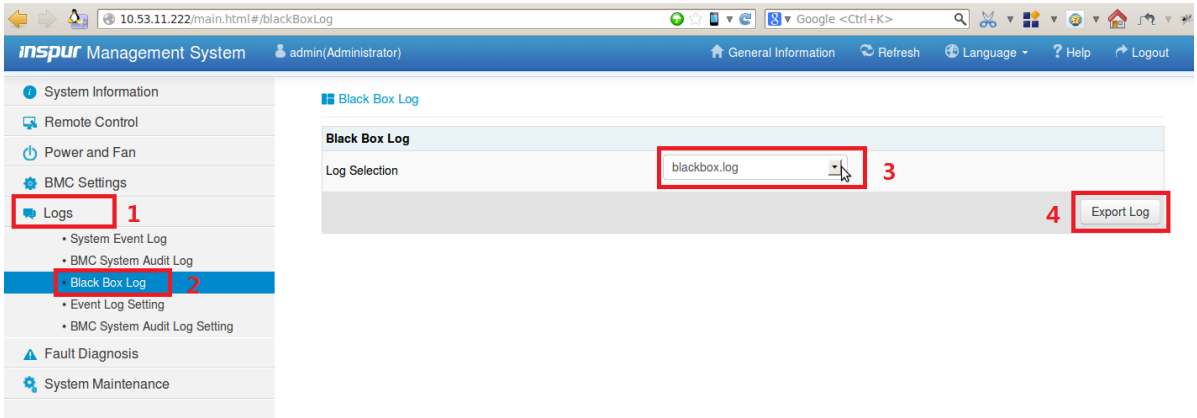
After the decoding operation is completed, a new file named "new.log" will be generated in the same directory.

For the new file "new.log" view, it can be viewed by "cat new.log" in Linux, while it can be viewed by "type new.log", or open the view directly through Notepad (recommended to use notepad to see, because the use of the type command to view may not be fully displayed) in Windows.

4.3 Blackbox log export

Both blackbox.log and blackboxpeci.log files can be either login the BMC through the browser and then exported from the logs/Black Box Log page, or can be obtained via the wget tool. The specific method of operation is as follows:

1) Login the BMC through the browser to get the blackbox log:



The specific operation steps are as shown in the above figure. First, login to the BMC through the browser. Then select Logs->Black Box Log, then select blackbox.log from the drop-down list on the page, and finally click on the "Export Log" button to export the blackbox.log.

Select blackboxpeci.log from the drop-down list on the page, then click on the "Export Log" button to export the blackboxpeci.log.

2) Get the blackbox log through the wget tool:

Wget method to get blackbox logs needs wget tool support (need install wget tool).

The following is an example of obtaining blackbox.log through the wget tool in Linux system. This section describes how to obtain blackbox logs through the wget tool.

In the Linux console, use the cd command to enter the directory where the blackbox.log is to be stored, and then enter the following command:

wget http://10.53.11.222/blackbox/record/blackbox.log

In the command, "10.53.11.222" is the IP address of the BMC management port, which needs to be filled in according to the actual situation.

After the operation is completed, you can see the blackbox.log file in the specified directory.

To get blackboxpeci.log, enter the following command:

wget http://10.53.11.222/blackbox/record/blackboxpeci.log

The process of obtaining the blackbox.log is as follows:

```
root@linux:/home# wget http://10.53.11.222/blackbox/record/blackbox.log
--2014-11-10 13:16:45--  http://10.53.11.222/blackbox/record/blackbox.log
Connecting to 10.53.11.222:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 512 [text/plain]
Saving to: `blackbox.log'

100%[======================================>] 512         --.-K/s   in 0s

2014-11-10 13:16:45 (1.13 MB/s) - `blackbox.log' saved [512/512]
```

Note:If http is disabled(only support https),the command should add parameter "—no-check-certificate".

4.4 Operating procedures

1) Use blackbox_decrypt to decode the exported blackbox.log file in the Linux environment and use cat to view:

The Linux environment here is the operating system environment of the machine (that the machine on which the blackbox_decrypt tool is located), and there is no requirement on the operating system of the remote server.

Case: The native environment is a 32-bit Linux operating system that decodes the exported blackbox.log.

The specific operation flow is as follows:

(1) Copy the blackbox_decrypt used in the 32-bit Linux environment to the local Linux system. Such as home/blackbox_decrypt/linux/blackbox_decrypt.

(2) Copy the blackbox.log file to be decoded to the directory where blackbox_decrypt is located, that is, home/blackbox_decrypt/linux/blackbox.log, or export the blackbox.log file directly to this directory.

(3) Through the console in the Linux system, use the cd command to enter the directory where blackbox_decrypt is located, as shown in the following figure.

```
root@liuyonghui-VIT-P2412:~# cd /home/blackbox_decrypt/linux/
root@liuyonghui-VIT-P2412:/home/blackbox_decrypt/linux# ls
blackbox_decrypt  blackbox.log
```

(4) execute the blackbox_decrypt command, enter the following command, and press Enter.

```
root@linux:/home/blackbox_decrypt/linux# ./blackbox_decrypt blackbox.log
```

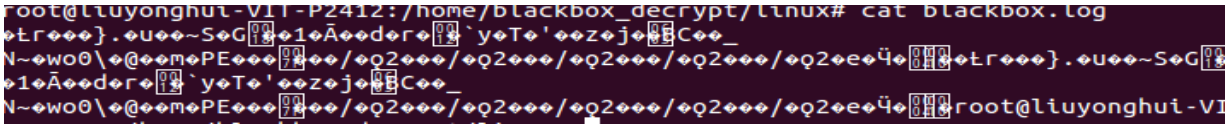
(5) The blackbox_decrypt will store the decoded file in the "new.log" file in the same directory. After the decoding is complete, you can see that there is one more " new.log " file in the directory through the ls command.

```
root@linux:/home/blackbox_decrypt/linux# ./blackbox_decrypt blackbox.log
************************************************
   Inspur blackbox log decryption tool 1.0.0
************************************************
Decrypt Success to new.log.
root@linux:/home/blackbox_decrypt/linux# ls
blackbox_decrypt  blackbox.log  new.log
```

(6) Use cat to view the decoded "new.log" file.

```
root@linux:/home/blackbox_decrypt/linux# cat new.log
[Nov 10 2014 11:03:47] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff EvD3 0x1. assertion.
[Nov 10 2014 11:03:51] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff EvD3 0xff. assertion.
[Nov 10 2014 11:04:00] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff EvD3 0x1. deassertion.
[Nov 10 2014 11:04:01] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff EvD3 0xff. deassertion.
```

Here, using cat to view the blackbox.log file before decoding, you see a bunch of garbled characters.



So far, the process of decoding the blackbox.log using blackbox_decrypt has been introduced.

2) Using blackbox_decrypt to decode the blackbox.log in the Windows environment, and use the type to view the operation flow:

The Windows environment here is the operating system environment of the machine (that is, the machine on which the tool is located), and there is no requirement on the operating system of the remote server.

Case: The local environment is a 32-bit Windows operating system that decodes the exported blackbox.log.

The specific operation flow is as follows:

(1) Copy the blackbox-decrypt used in the 32-bit Windows environment to the local Windows system. Such as D:/blackbox_decrypt/windows/blackbox_decrypt.exe.

(2) Copy the file to be decoded to the directory where blackbox_decrypt is located, that is, D:/blackbox_decrypt/windows/blackbox.log or directly store blackbox.log in this directory when exporting blackbox.log.

(3) In Windows system, select "Command Prompt" under "Accessories", or enter CMD at the program search place to enter the command prompt interface, as shown in the figure below.



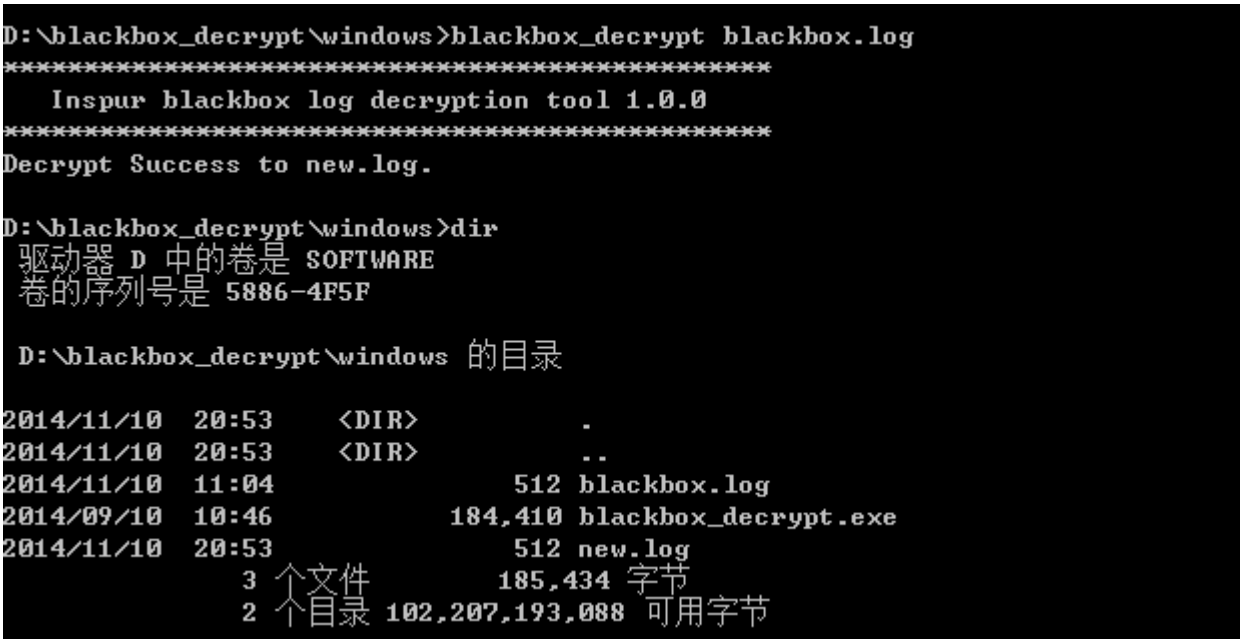
(4) At the command prompt interface, use the cd command to enter the directory where blackbox_decrypt is located, as shown in the following figure.



(5) Execute the blackbox_decrypt command, enter the following command, and press Enter.



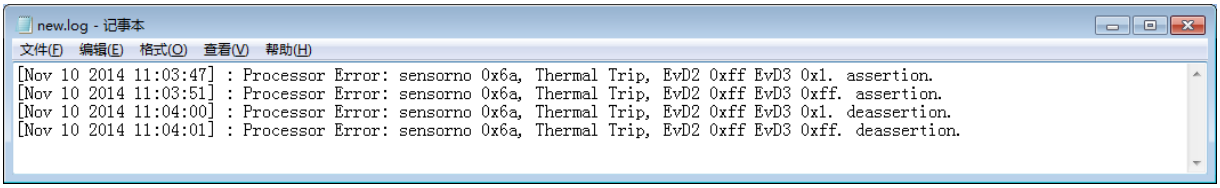
(6) The blackbox_decrypt will store the decoded file in the "new.log" file in the same directory. After the decoding is complete, you can see that there is a new.log file in the directory through the dir command.



(7) Use the type to check the decoded "new.log".

```
D:\blackbox_decrypt\windows>type new.log
[Nov 10 2014 11:03:47] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff
[Nov 10 2014 11:03:51] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff
[Nov 10 2014 11:04:00] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff
[Nov 10 2014 11:04:01] : Processor Error: sensorno 0x6a, Thermal Trip, EvD2 0xff
 EvD3 0xff. deassertion.
```

Or use Notepad to view "new.log". (**Recommended to use notepad to view**)



So far, the process of decoding the blackbox.log using blackbox_decrypt has been introduced.