

Pulling BMC logs using the SMBridge utility (rev01)

PE is requesting that we modify the way that we pull BMC logs. Currently, pulling the logs from F2 Diagnostics is causing some of the information to be stripped out as diagnostics translates it, and saving the logs from F2 captures only the last 75 events.

The SMBridge command-line utility will allow the BMC logs to be pulled and saved while the OS is up, or even when the server is powered off.

The SMbridge application can be found at:

ftp://ftp.software.ibm.com/pc/pccbbs/pc_servers/39r6689.zip

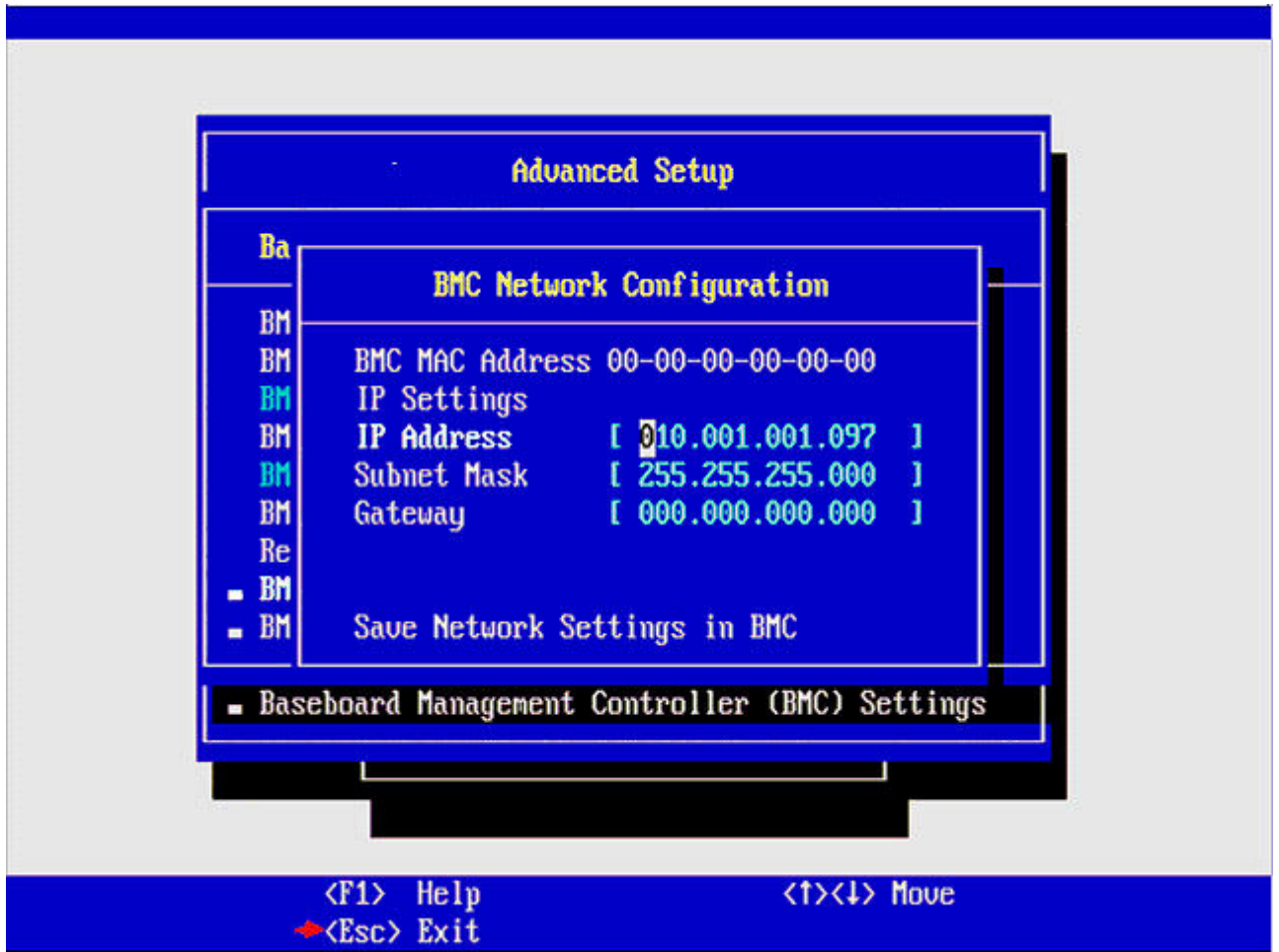
The SMBridge User's Guide can be found at:

ftp://ftp.software.ibm.com/pc/pccbbs/pc_servers_pdf/sysmgmtbridgeuserman.pdf

The BMC controller shares the network interface with the onboard NIC port 1. By default, the BMC network interface is enabled and set to the following IP settings:

IP –	10.1.1.97
Subnet –	255.255.255.000

These settings can be verified or set in F1 setup under **Advanced Setup->Baseboard Management Controller (BMC) Settings->BMC Network Configuration** (see below)



To connect to the BMC network interface, you would need to install the System Management Bridge Baseboard Management Controller CLI and Remote Console Utility referenced above. Download and unzip the package and run setup.exe. Follow the prompts on the screen to install, **using all of the default selections**. By default, the application will install to the **C:\program files\OSA directory**.

To run the application, attach a client to port 1 on the server. Open a command prompt and change to the install directory. To pull BMC logs via the network, the following syntax is used:

```
smbridge -ip IPADDRESS -u USERNAME -p PASSWORD sel get
```

Pulling the logs from a BMC set to default network settings would be done with the following command:

```
smbridge -ip 10.1.1.97 -u USERID -p PASSWORD sel get
(Note that the "o" in PASSWORD is a zero-^)
```

To save the logs to a text file, issue the following command:

```
smbridge -ip 10.1.1.97 -u USERID -p PASSWORD sel get >bmclog.txt
```

There are many other commands included in the command-line utility, and they are detailed in the user's guide, but to round out this document, I have included additional command syntax below:

Command Syntax:

```
smbridge -ip <ip | hostname> [-u <user>] [-p <password>] subcommand
```

```
smbridge -com <serialport> [-baud <baudrate>] [-flow <flowcontrol>]  
[-u <user>] [-p <password>] subcommand
```

Standard Options:

- ip specifies the IP address or hostname of the remote managed server BMC.
- com specifies the port to use for the serial connection (i.e. for Windows, valid values include "1", "2", "3", etc. - for Linux valid values include "ttyS0", "ttyS1", "ttyS2", etc.).
- baud specifies the baudrate to use for the serial connection (i.e. "9600", "19200", etc.). If not specified, the default baud-rate is 19200.
- flow specifies the flowcontrol mode used for the serial connection (i.e. "none" = no flowcontrol, "cts" = CTS/RTS hardware flowcontrol, "xon" = xon/xoff software flowcontrol). If not specified, the default flowcontrol is cts.
- u specifies the username used for the connection. If not specified, the default is the anonymous user.
- p specifies the password used for the connection. If not specified, the default password is NULL or the empty string.

Valid Subcommands:

identify - controls the identification LED on front panel of server.

power - controls the power options of server (i.e. shutdown).
sel - performs operations with the System Event Log (SEL).
sysinfo - displays general system information related to the server and BMC.

identify

NAME

identify - Control identification LED on the front panel.

SYNOPSIS

identify [on [-t <seconds>]]off]

DESCRIPTION

This command is used to turn on/blink or off the LED.

SUB-COMMANDS

on - Turn on the LED. If the BMC supports IPMI extension "Chassis Identify On" command, then "identify on" turns the LED on indefinitely until "identify off" is used to turn the LED off. Otherwise, the LED will be turned on for the maximum allowed time of 255 seconds.
off - Turn off the LED.

OPTIONS

-t seconds
Specify how long the LED will be turned on. It should be no longer than 255 seconds.

power

NAME

power - Control power status of the remote managed server.

SYNOPSIS

power status|on|cycle|reset
power off [-force]

DESCRIPTION

This command is used to display the current power status of the managed server, turn on/off or reset the server.

SUB-COMMANDS

status - Display the current power status of the server, the returned value is "on" or "off".
on - Turn on the server.
off - Issue a "graceful shutdown" IPMI command.
cycle - Turn off the server first, after a period of time, then

turn it on.
reset - Pulse the system reset signal regardless of the power state.

OPTIONS

-force

This option will simulate pressing the power button and will force the system off.

sel

NAME

sel - Perform operations on the system event log.

SYNOPSIS

```
sel get [[[-begin <index1>]][-max <count>|-end <index2>]]|-last <n>]
sel clear
sel status
sel set -time <YYYY/MM/DD hh:mm:ss>
```

DESCRIPTION

This command allows user to perform some operations on the system event log, such as displaying the total number of records in the event log, deleting all the records, displaying contents of the event log, or set timestamp.

SUB-COMMANDS

get - Print all or part of the event logs.
clear - Remove all the records in the event log.
status - Display the total number of system event log records.
set - Set timestamp for the event log.

OPTIONS

-begin index1

Specify from which record to begin displaying.

-end index2

Specify to which record to end displaying.

-max count

Specify the maximum number of displayed records.

If <count> is bigger than the total number of the records, this option will lapse. The last record displayed will be the last one in the event log.

-last n

Specify the number of records to be printed, starting from the last record then counting backwards.

-time YYYY/MM/DD hh:mm:ss

Specify a point in time as the value of timestamp. It

should in the format of "YYYY/MM/DD hh:mm:ss"
YYYY:Year, it should be a valid calendar year number and include 4 digits,such as 1999.
MM:Month, it should be a valid calendar month number from 01 to 12, such as 06 (June),11(November)
DD:Day, it should be a valid calendar day number from 01 to 31.
hh:Hour, it should be a valid hour number from 00 to 23.
mm:Minute, it should be a valid minute number from 00 to 59.
ss:Second, it should be a valid second number from 00 to 59.

sysinfo

NAME

sysinfo - Retrieve and display the system information.

SYNOPSIS

sysinfo [fru|id]

DESCRIPTION

This command is used to retrieve and display the system information, including information about FRU and BMC.

SUB-COMMANDS

fru - Return FRU related information.
id - Return BMC related information.