# How to Collect AHS log from HP Gen8 Server

**HP TE**

Technical Tutorial

# How to Collect AHS log from HP Gen8 Server

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# Introduction

HP Gen8 Server introduced a new feature called Active Health System or AHS. AHS is an Always-ON diagnostics tool which runs on your Server and save the information in a flash memory which is embedded on server system board. AHS does not use server resources like CPU or memory; rather it works on iLO Management engine. As AHS is an Always-ON diagnostics, it will capture all the changes happened on your server.

As the HP Active Health System (AHS) is part of iLO4 Management Engine, all the collected data is stored in the 1GB partition of NAND flash embedded on the system board. AHS collects data from different sources including your Server ROM, NIC, Smart Array controller and optional OS related agents. As per HP documentation, AHS collects almost 1600 data items.

Whenever you experience an issue with Gen8 Server, it is recommend to share AHS log with HP support personnel. This will really help the HP support team to identify the exact issue and will help you to get quicker solution.

In this article, we will discuss how to collect AHS log from your Gen8 server. There are three methods to collect AHS logs. They are:

> ➢ Collect AHS log using HP Intelligent Provisioning.
> ➢ Collect AHS log using HP Integrated Lights Out 4 (iLO 4).
> ➢ Collect AHS log from Windows/Linux using Command line tool.

You can download Active Health System log through the HP Intelligent Provisioning interface. The HP Intelligent Provisioning interface uses USB 2.0 interface. Here, AHS log collection is much faster compared to iLO 4 web GUI method.  If the server does not boot, then the only option is to use iLO 4 web GUI.

If your Gen8 Server is installed with Windows or Linux operating system, you can a use a command line tool to collect AHS logs from the NAND flash. This method will be useful when you do not have access to iLO4 Web GUI or you do not want to restart the server to access Intelligent Provisioning.

Let us discuss the three methods to capture AHS logs from HP Gen8 servers.

# Method 1: Collect AHS log using Intelligent Provisioning:

1. Turn **ON** your HP Gen8 server.
2. Once HP Logo screen is shown, press **F10** key to launch Intelligent Provisioning.
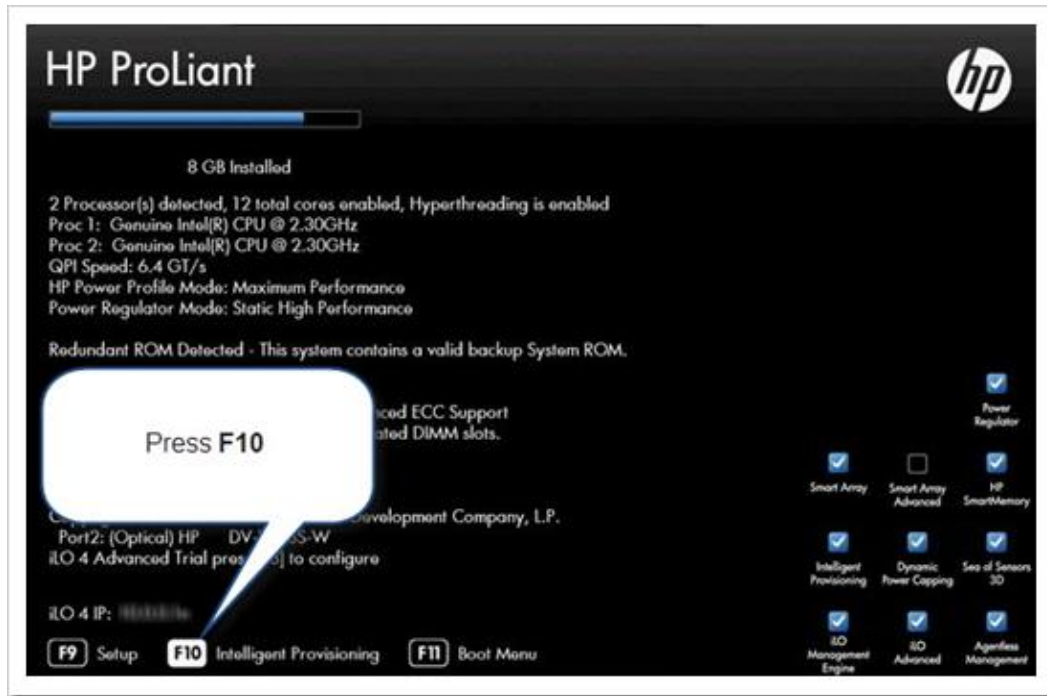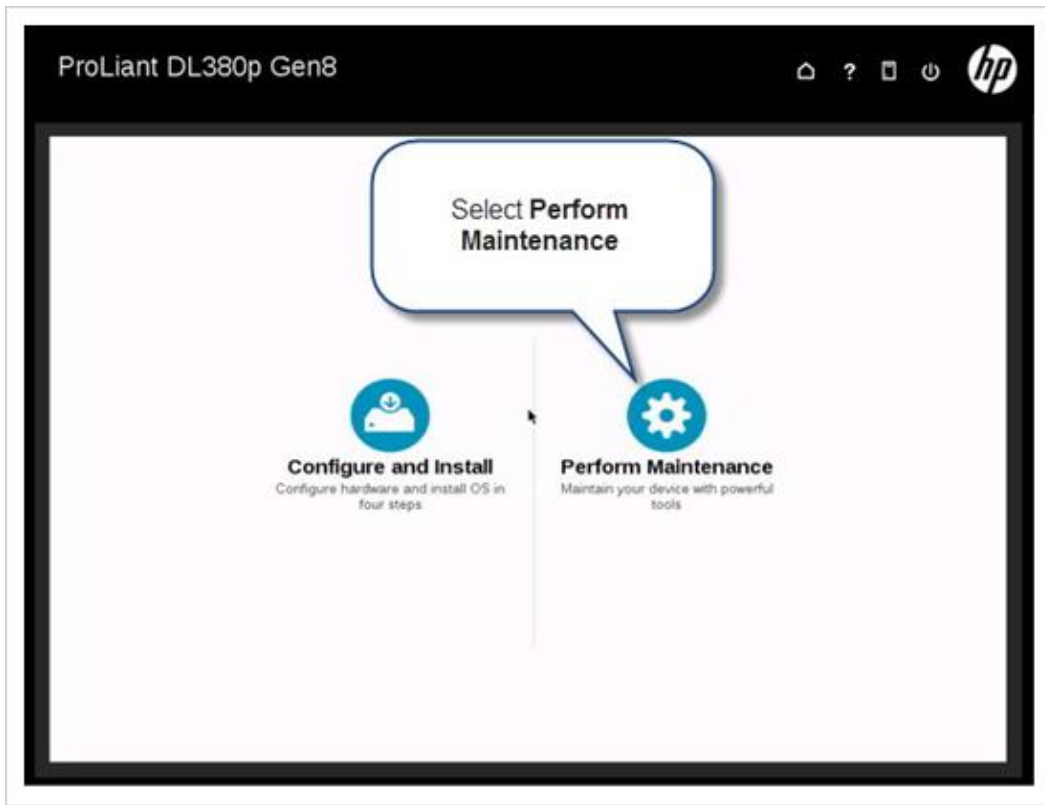


3. HP Intelligent provisioning will load on your server.

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**Note:** If you do not see the F10 prompt at the Server POST, then enable the F10 prompt at RBSU of you HP Gen8 Server. If you receive any error when you load Intelligent Provisioning on your Gen8 Server, then you may need to re-install it on your Gen8 Server.
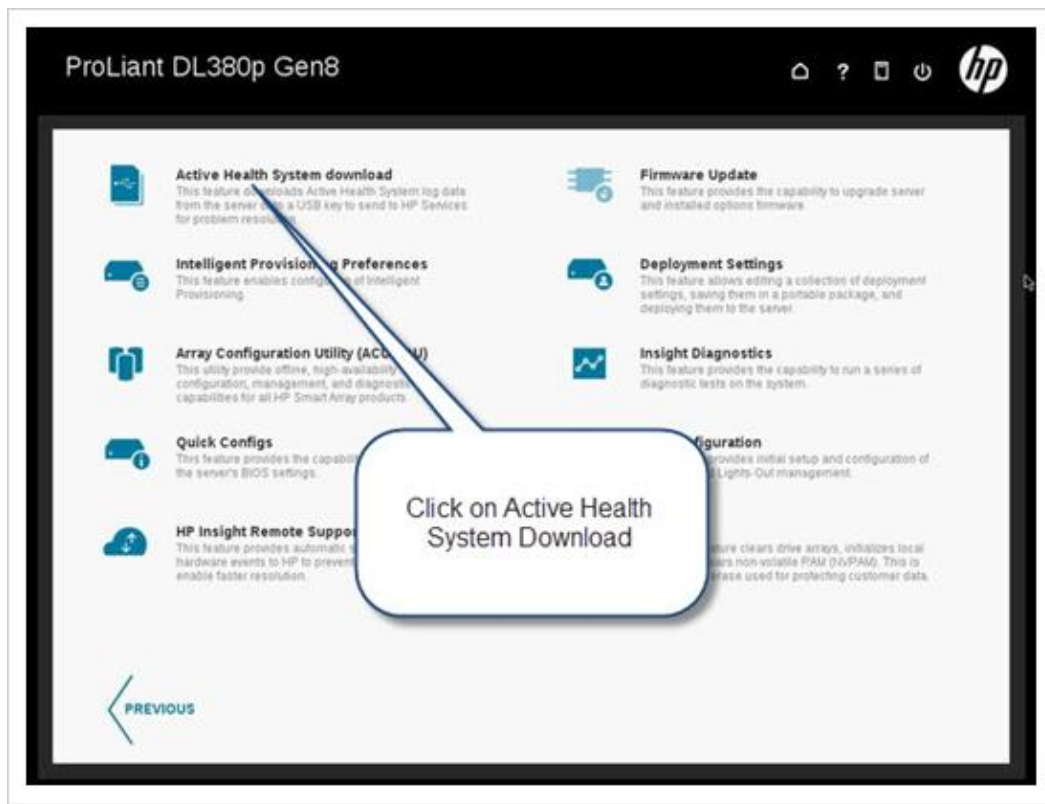
---

4. Click on **Perform Maintenance** option from Intelligent provisioning.

5. Now you will find many utilities listed in Intelligent provisioning window.
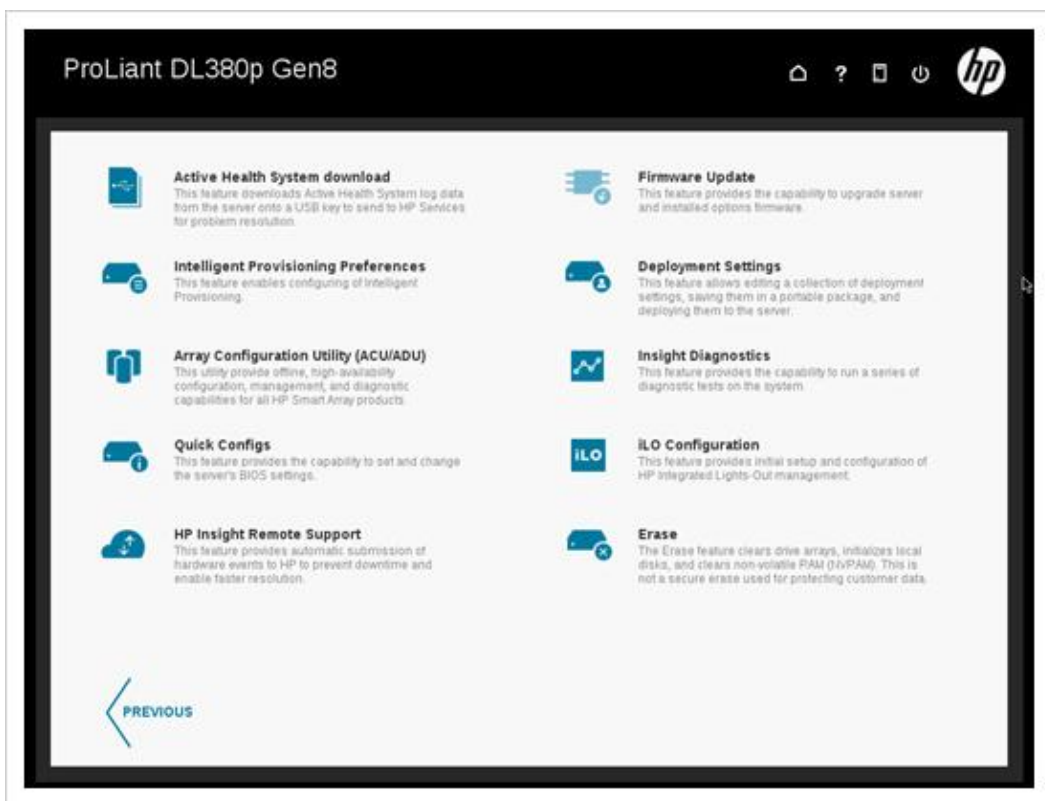
6. Click on **Active Health System download** as shown below.



7. It will open **Active Health System download** window (Screenshot provided below).

**Note:** You can save the AHS log file to a USB key which is directly connected to your Server. If you are in remote location and do not have physical access to the server, then you need to use Integrated Lights-out 4 (iLO 4) of your Gen8 server and mount a USB thumb drive using Virtual media feature of iLO 4. I recommend using a USB key of size 4 GB or less. Once you have connected USB key ensure that you click on Re-scan button.

**Note:** If you do not have any USB thumb drive connected to the server (locally or via iLO4 Virtual media), you will receive an error message stating "No USB Keys are detected. Please insert a USB key and click the Rescan button".

ProLiant DL380p Gen8

Active Health System download

Insert a USB key to download the Active Health System log.

Select the USB key:                          ⟳ Rescan

○ Download the entire Active Health System log.
◉ Select a range of the Active Health System log in days.

From: 2012-

⚠ No USB keys are detected. Please insert a USB key and click the Rescan button.

Close

HP S
Contact Name:
Phone Number:
E-mail:
Company Name:

The HP Active Health System monitors and records changes in the server hardware and system configuration. The Active Health System assists in diagnosing problems and delivering rapid resolution when system failures occur. HP Active Health System does not collect information about your operations, finances, customers, employees, partners, or datacenter (for example, IP addresses, host names, usernames, and passwords).

By downloading and sending the Active Health System data to HP, you agree to have HP use the data for analysis, technical resolution, and quality improvements. All data sent to HP is managed according to the HP Data Privacy policy available at http://www3.hp.com/us/en/hp-information/summary/srv-privacy.html.

Cancel                                    Download

*If connected through iLO Integrated Remote Console, locally connected USB keys shared through Virtual Drives can also be used for download.

8. Please connect a USB thumb drive to your Server (Local/iLO 4 Virtual Media).

**Note:** If you are connecting USB key physically to your server, please ignore step 9 and 10 provided below. Steps 9 and 10 are applicable only if you are in remote location and mounting a USB key using iLO 4 Virtual media.
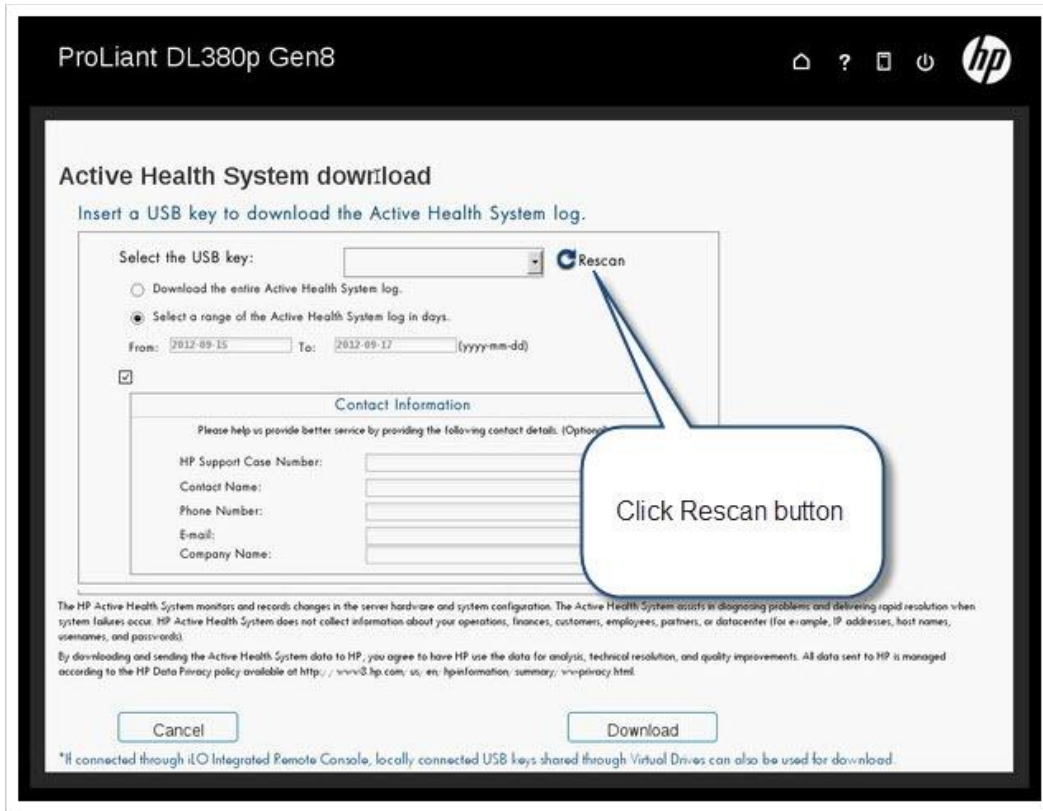
9. To mount USB thumb drive using ILO 4, Open iLO4, Open Remote Console, Click Virtual Drives.
10. Under Floppy/USB-Key option, select the drive letter of USB key (in my case it is D: drive)
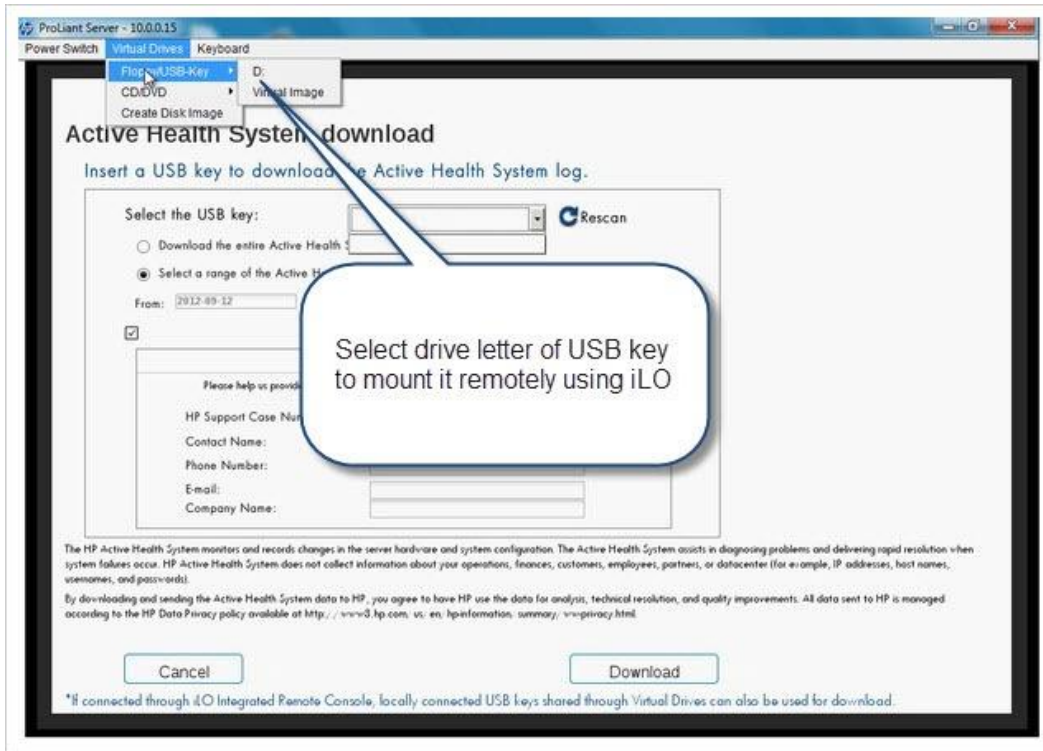
11. Click **Rescan** button if USB key is not detected (Check below provided screenshot).
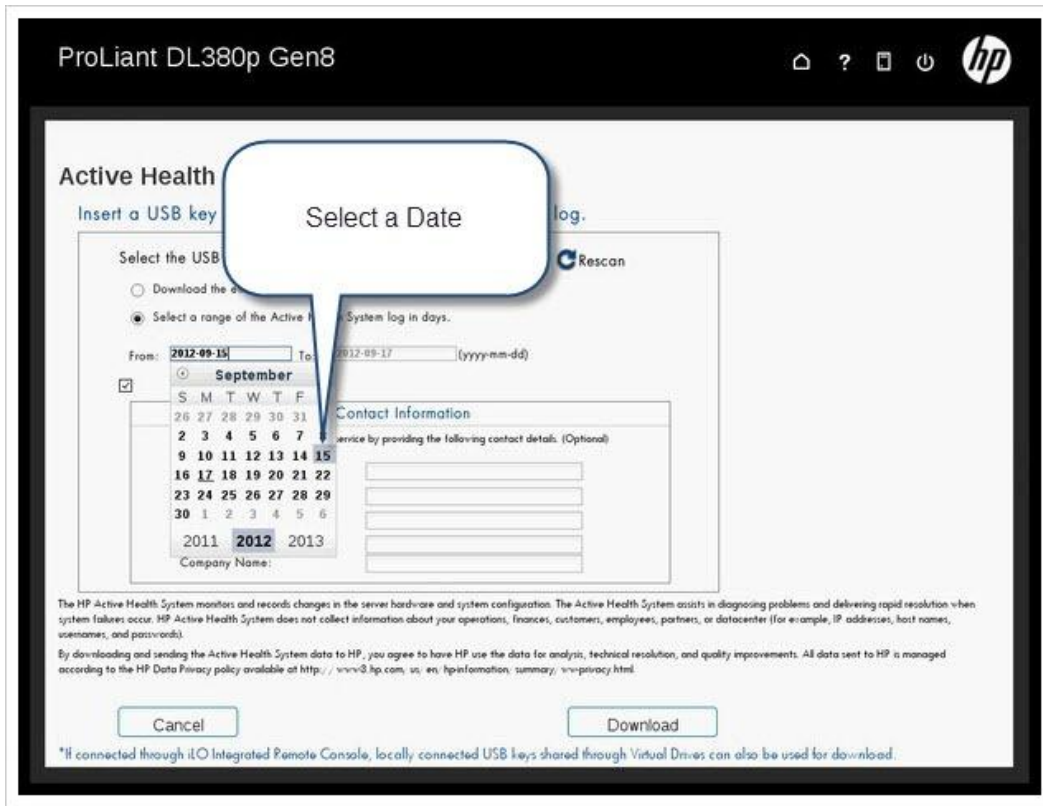
12. Now the USB drive key should be detected (Check the screenshot provided below)



**Note:** There are two options when you download AHS logs. First option is to download the entire AHS log. The next option is to download AHS logs between two date ranges specified. I would recommend you to download the AHS logs between specific date ranges.
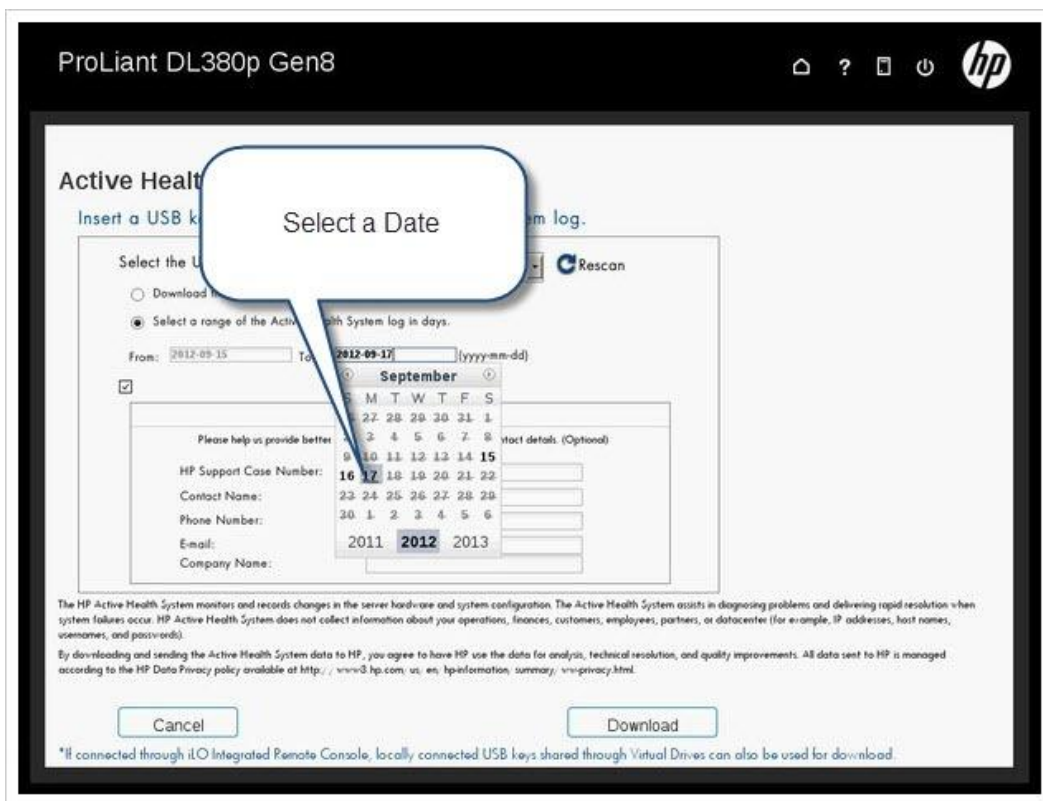
13. Select a range of Active Health System log in days as shown below.
14. Select the start date by clicking the "**From**" text box.
15. Now you will see a date picker, please select a date.

16. Click in the "**To**" text box, it will open a date picker as shown below.

17. You may also enter **Contact Information** (Not mandatory, fill only if you wish).



18. Click **Download** button to save the AHS log.
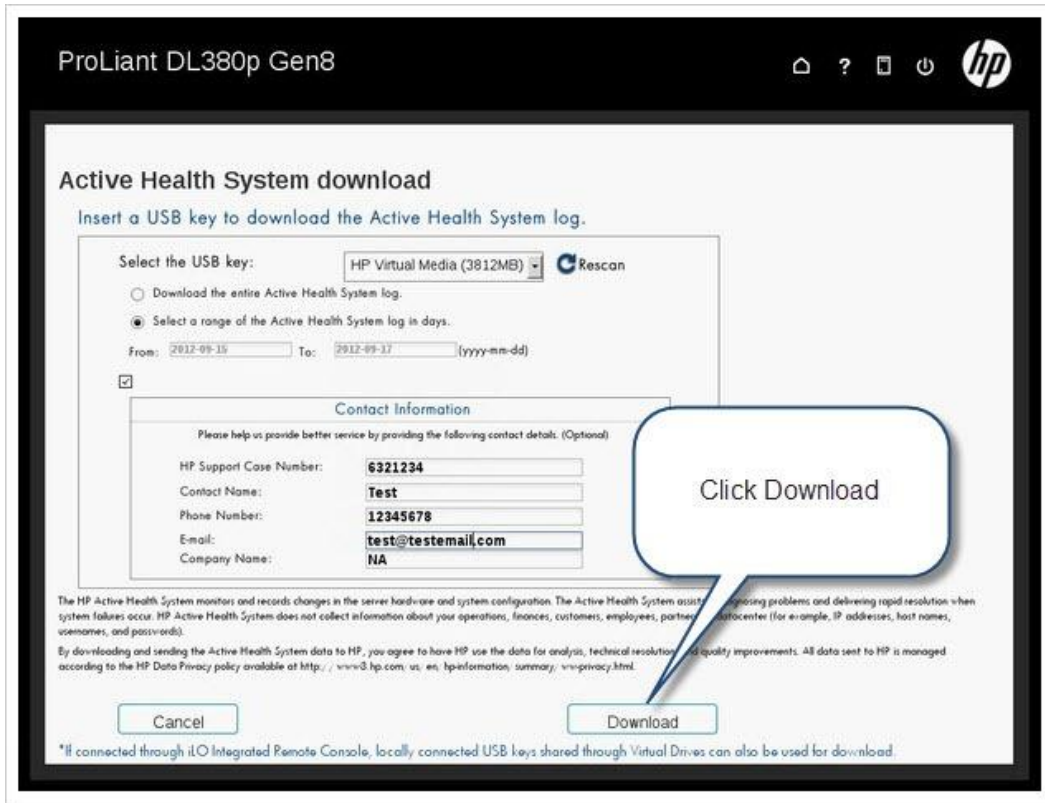
19. Please wait while AHS log file is getting saved (This may take some time).
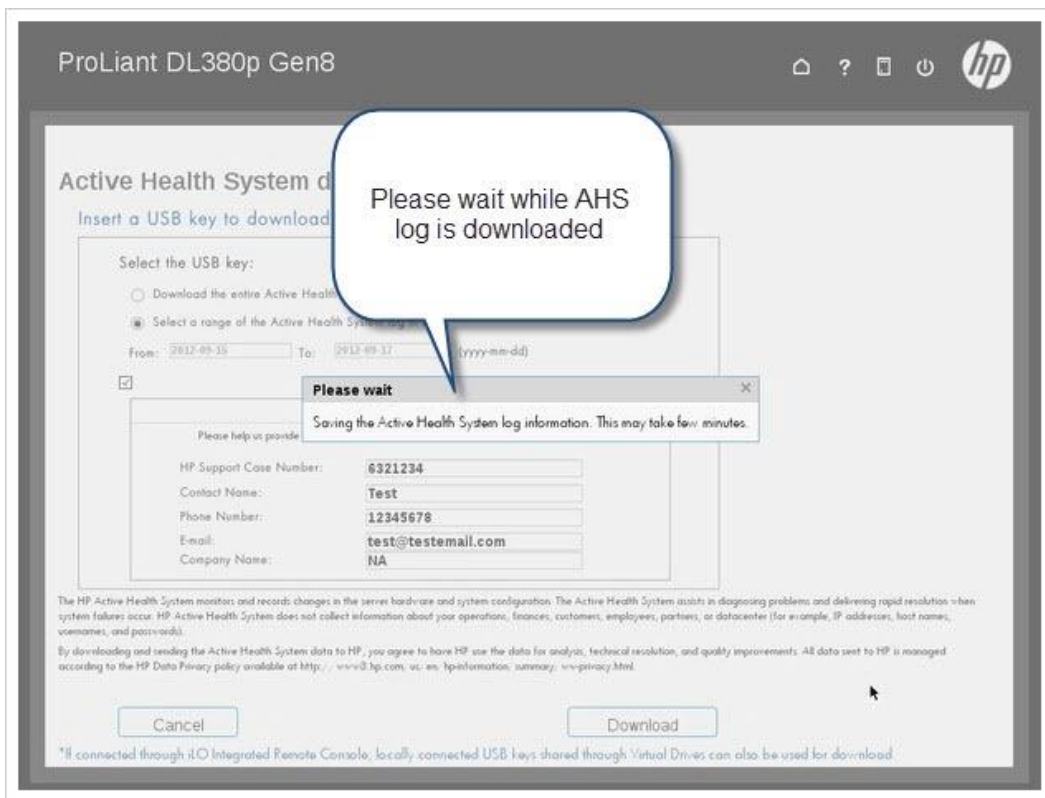
20. You will receive a window once the AHS log downloaded successfully. Click **Close** button to exit.



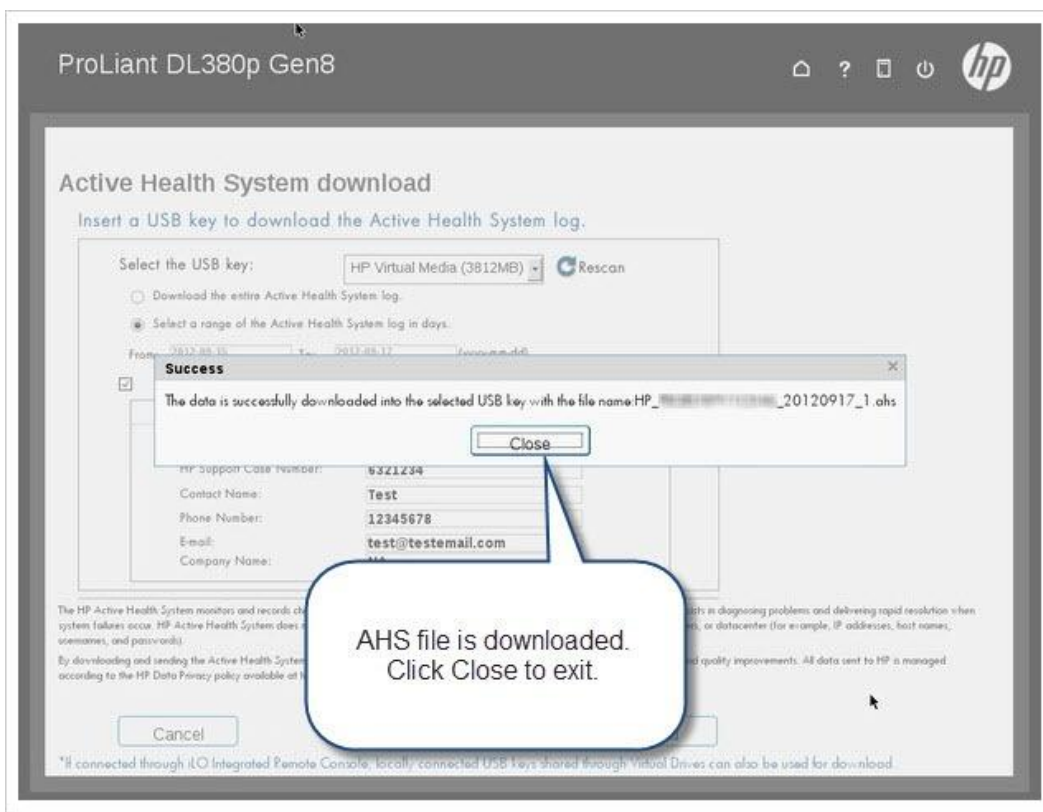## Method 2: Using Integrated Lights-out 4:

AHS log file can be downloaded directly from iLO of your HP Gen8 Server. To download the AHS log, you need to open iLO 4 web interface. Using the iLO 4 web interface is the only way to access the AHS log if your server is down and won't boot. This method uses serial peripheral interface bus between iLO 4 and the flash memory which is embedded on the server system board.  So this can be a slow process if you are downloading complete AHS log. Here, let us check how to collect AHS log from iLO.

1. Enter the IP address of iLO 4 at the address bar of web-browser.
2. It will open the Login screen of iLO 4 as shown below.
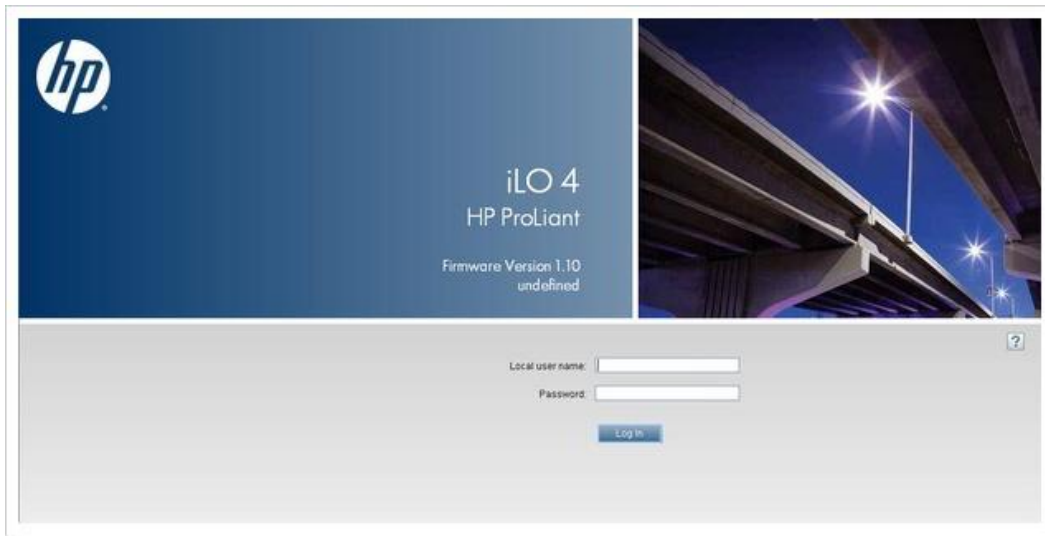
3. Once you login to iLO, click on **Active Health System Log**.
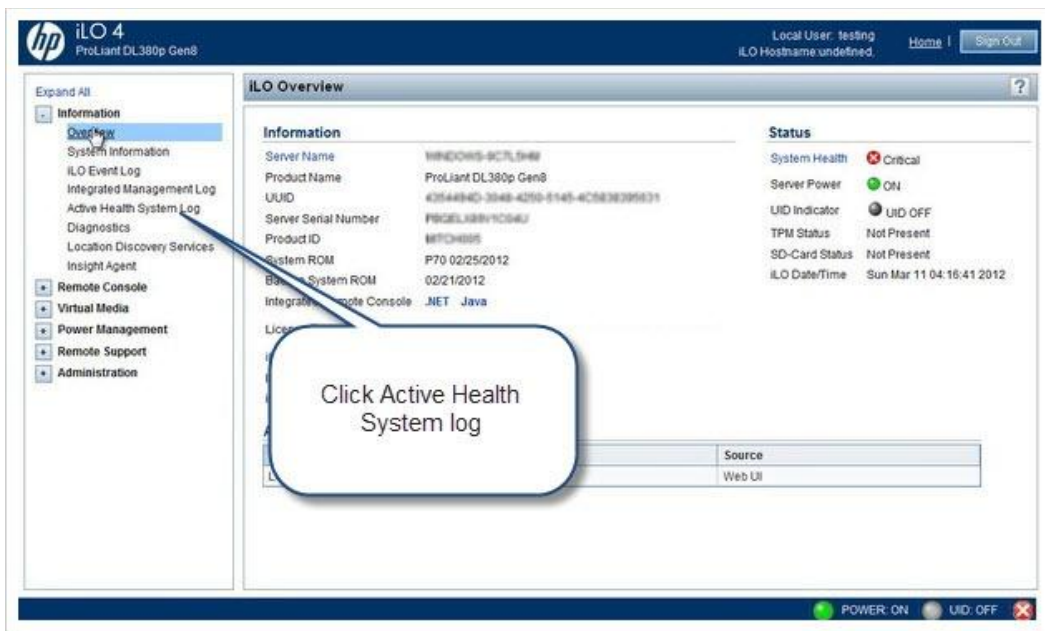


4. Now you will be at Active Health System Log page.
5. Select range of AHS log in days (Select **From** and **To** field as shown below)
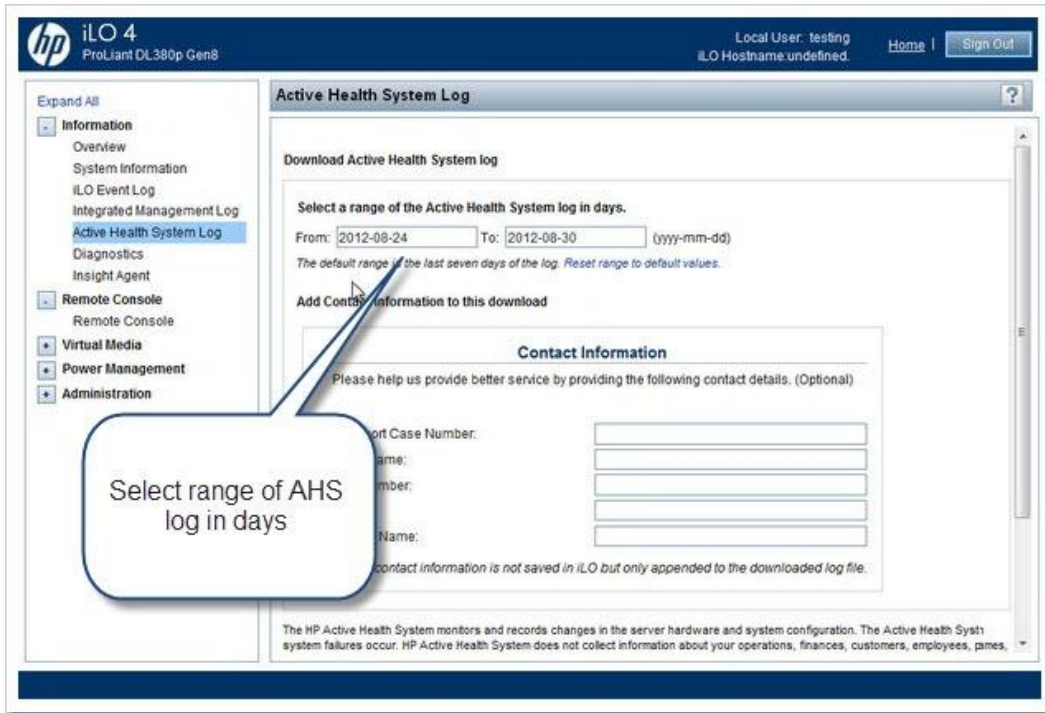
**Note:** The Default range if the last seven days of the AHS log. However, you can always specify the date range if you wish. I would recommend NOT downloading the complete AHS log of your server as it may take lot of time.

6. Enter the **Contact Information** if you wish (This is Optional)
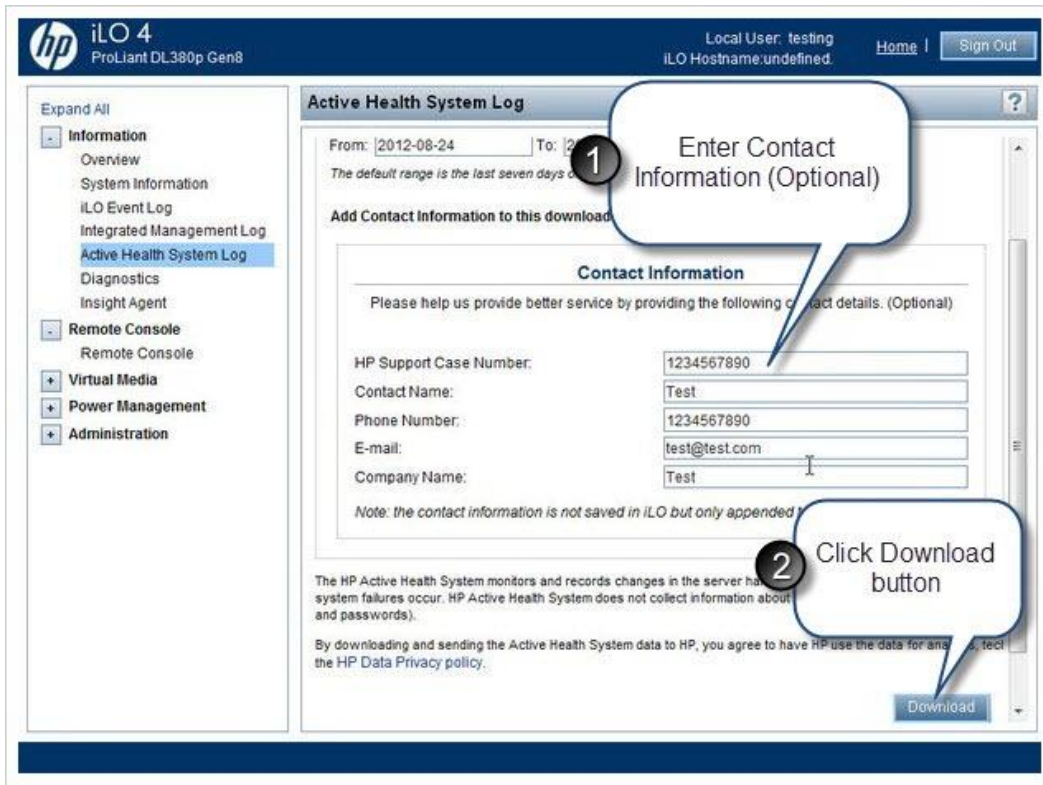
7. You will receive a Download window, **Save** the AHS log now.



8. Send this AHS file to HP Support team for further analysis.

## Method 3: Collect AHS log using AHS Log Download CLI:

This section explains how to collect HP Active Health System (AHS) log from your HP Gen8 Server using a Command-line tool called as Active Health System Log Download CLI (AHS log downl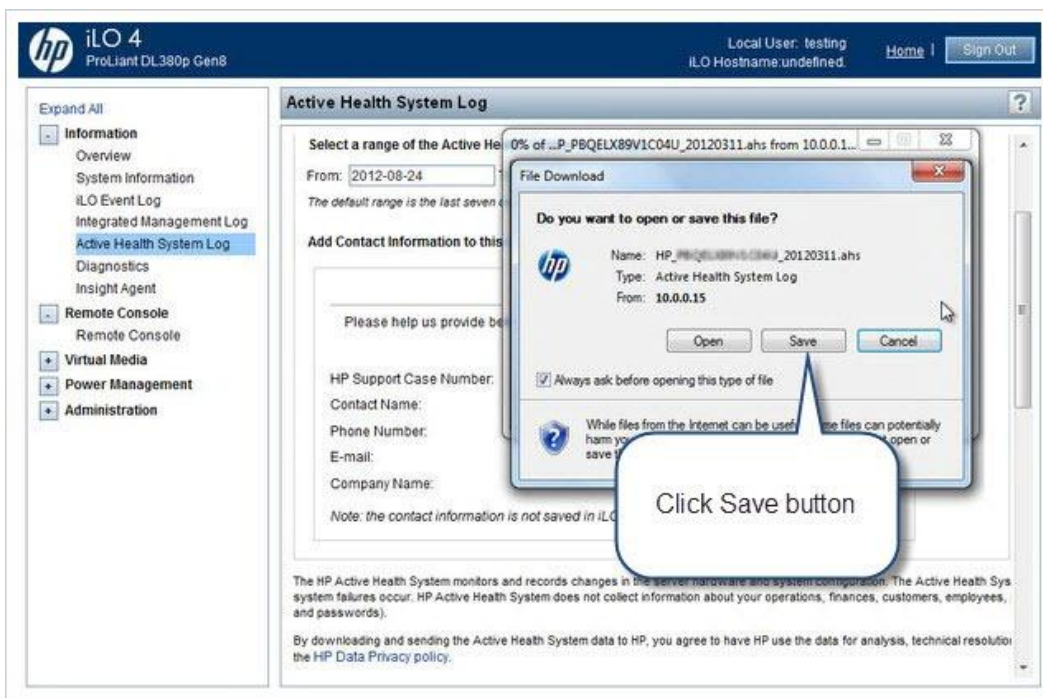oad CLI). For AHS log download CLI to work, HP ProLiant Integrated Lights-Out Management Interface Driver must be is installed on the server (Example: Click this link). When you run this tool on your server, it will create an .ahs package file on your Server

Active Health System Log Download CLI for Windows or Linux is available for download at HP.com. Let us see how to *download* and install this tool on your server.

1. Open www.hp.com, and click on Support & Drivers link.
2. Search using HP Server Model number (Example: DL380p Gen8).
3. Go to Driver Download page of your Server and choose the Operating System.
4. Find **Active Health System Log Download CLI for Windows** or **Linux** download link.



OR



**Note**: Here we are using AHS download CLI for Windows.  If Linux operating system is installed in your server, then you can download Linux version of A Active Health System Log Download CLI.

5. Download Active Health System Log Download CLI for Windows on your Server.
6. The file name is: **AHSdownload_Windows_x.x.x.x.zip** and it is a .ZIP file.
7. Open the ZIP file and **extract** it to a folder (I used WinZip program to extract .ZIP file).
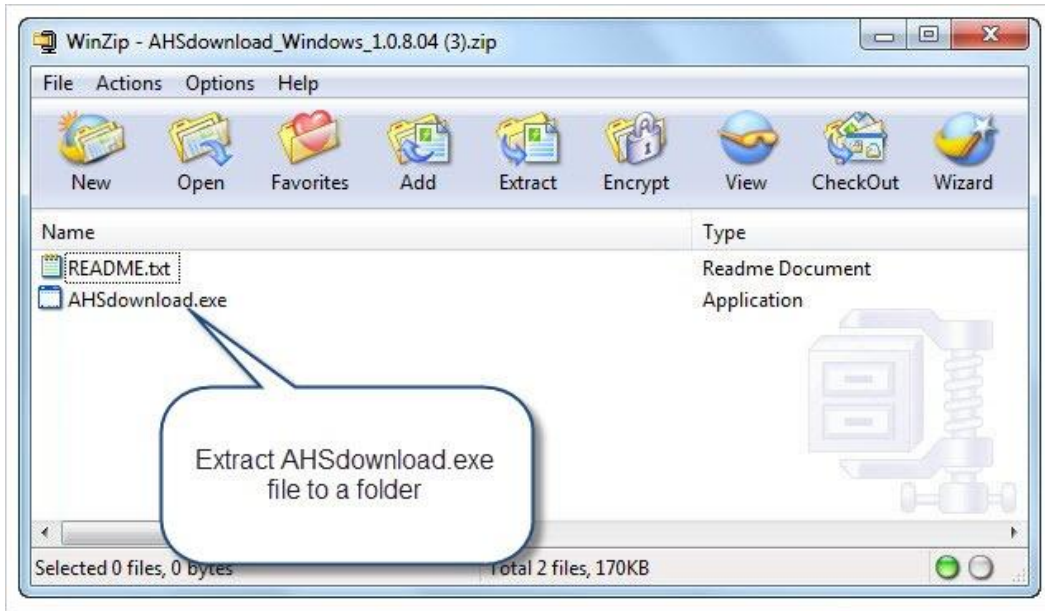
8. In my case, I extracted files to the **C:\AHS** folder (Save the file in any folder of your choice).
9. Open the folder in which you extracted the file. You will find **AHSdownload.exe** file listed there.
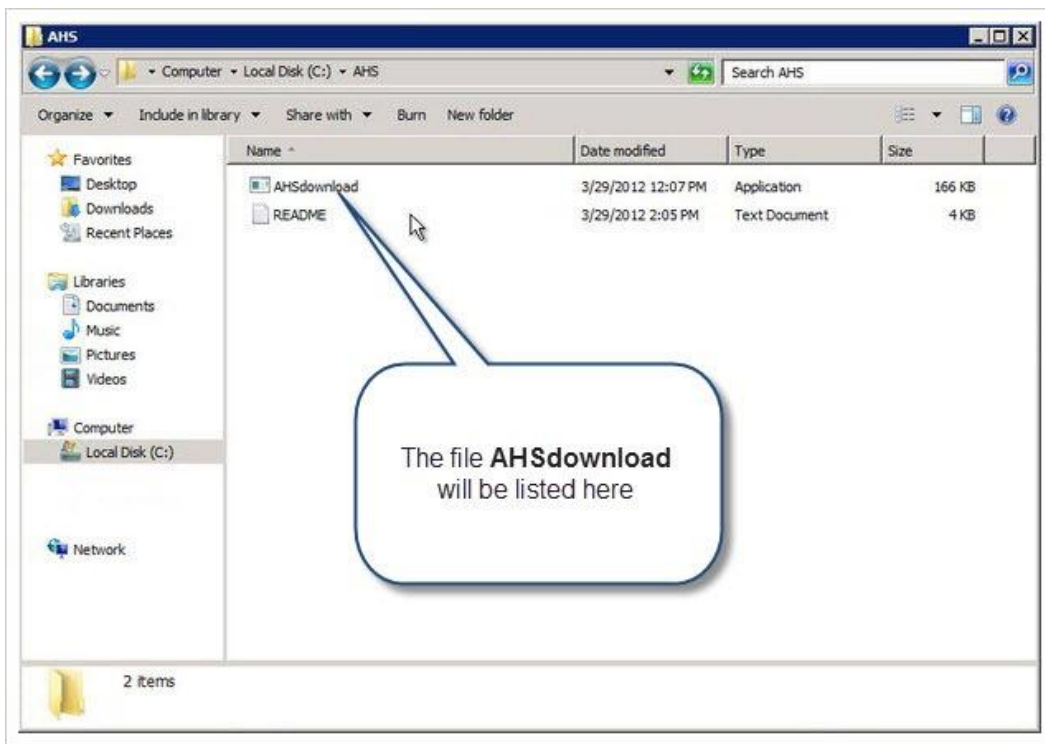


10. AHSdownload.exe is the command line tool used to collect AHS log.

## How to download AHS log of last seven days:

If you need to collect last 7 days AHS log from your HP Gen8 Server, then the procedure you need to follow is very easy. You just need to double click AHSdownload.exe file and it will download past 7 days AHS log from your Server. This command-line tool does not require any kind of user name or password to download the AHS log. Please check below provided steps to understand better.

1. Double click on AHSdownload.exe file (I have it saved in **C:\AHS** folder)
2. It will open Command prompt window and will automatically start Downloading AHS log.
3. AHS log will be saved in the same folder where AHSdownload.exe is located (E.g.:- C:\AHS folder).

```
Initiating the iLO connection.
Successfully connected to iLO.

Creating the package: .\HP_          _20120921.ahs

AHS log download progress: 0%...0%...0%...0%...0%...1%...1%...1%...1%...1%...1%.
..7%...7%...8%...8%...64%...64%...70%...75%...75%...81%...87%...93%...99%...100%

Successfully created the AHS file with name: .\HP_          _20120921.ahs
```

**Note:** By default AHSdownload.exe collects last 7 days logs.

## How to download AHS log between two date ranges:

If you would like to collect logs between two date ranges, then you need to open Command Prompt on your Server and run the AHSdownload.exe file. I hope you have basic understanding of Microsoft Command Prompt. Please refer below provided procedure to learn how to use Active Health System Log Download CLI on your Server.

1. Open Command prompt by Clicking **Start**, Click **Run**, type **CMD** and press **Enter** key.
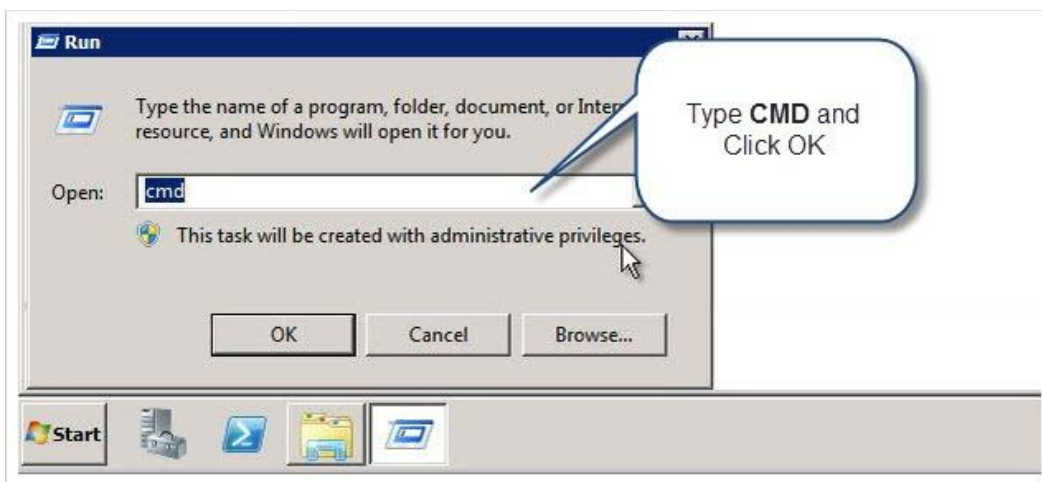


2. It will open Command Prompt window as shown below.

3. As the AHSdownload.exe is saved in C:\AHS folder, first you need to come back to root of C: drive.
4. Execute the command "**CD\**" to go to the highest level, I mean the root of the drive.

```
01.   CD\
```

5. Then run the command "**CD AHS**" to change directory to C:\AHS

```
01.   CD AHS
```

6. Now the Command-Prompt window will look similar to the screenshot provided below.

```
C:\Users\Admin>cd\
C:\>
C:\>cd AHS
C:\AHS>
```
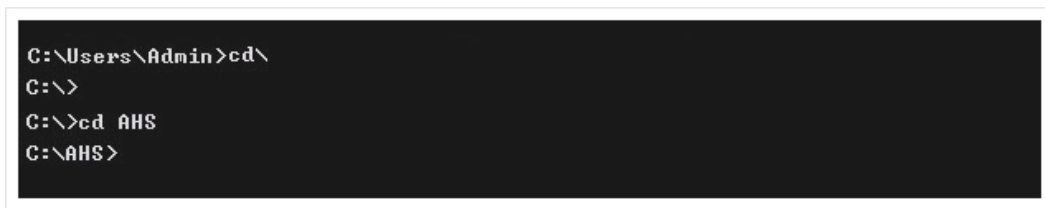
7. You may collect AHS log between two date ranges now. The syntax of command is provided below.

```
01.   AHSdownload [-s] start_date] [-e] end_date]
```
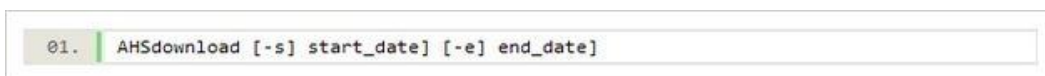
8. For easy understanding, please check below said example.

```
01.   Ahsdownload -s 09_22_2012 -e 09_23_2012
```

9. It will download the AHS log from 22nd-September 2012 to 23rd-September-2012.
10. If you need further clarification, please check below provided screenshot.

```
C:\AHS>ahsdownload -s 09_22_2012 -e 09_23_2012

Initiating the iLO connection.
Successfully connected to iLO.

Creating the package: C:\AHS\HP_▓▓▓▓▓▓▓_20120922.ahs

AHS log download progress: 1%...1%...3%...4%...5%...7%...7%...8%...48%...49%...5
0%...52%...93%...95%...96%...96%...98%...99%...100%

Successfully created the AHS file with name: C:\AHS\HP_▓▓▓▓▓▓▓_20120922.ahs

unmount_ilo returns SUCCESS.

C:\AHS>_
```

11. AHS log will be saved in the same folder where AHSdownload.exe is located (E.g.:- C:\AHS folder).

**Note:** If you wish to save AHS log in a specific folder then you need to use [-d] switch.

12. To save AHS log to a specified folder, follow the command syntax provided below.

```
01.    AHSdownload [-s] start_date] [-e] end_date] [-d] destination_folder
```

13. For better understanding, please check below provided example.

```
01.    Ahsdownload -s 09_22_2012 -e 09_23_2012 C:\Windows
```

14. This command will save the AHS log from 22nd-Sept to 23rd-September to **C:\Windows** folder.
15. If you wish to see the command-prompt screen, please check below provided screenshot.

```
C:\AHS>ahsdownload -s 09_22_2012 -e 09_23_2012 -d C:\Windows
Initiating the iLO connection.
Successfully connected to iLO.

Creating the package: C:\Windows\HP_▓▓▓▓▓▓▓_20120922.ahs

AHS log download progress: 1%...1%...3%...4%...5%...7%...7%...8%...48%...49%...5
0%...52%...93%...95%...96%...96%...98%...99%...100%

Successfully created the AHS file with name: C:\Windows\HP_▓▓▓▓▓▓▓_20120922.ahs

unmount_ilo returns SUCCESS.

C:\AHS>_
```

**Note:** If you wish to save complete AHS log of your Gen8 server, then you need to use [-a] switch. In most cases, Downloading complete AHS log will not be necessary. Remember that this process may take long time to complete.

16. To save the complete AHS log file of your Gen8 server, please run below provided command.

```
01.    Ahsdownload -a
```

17. Above said command will download complete AHS log. Wait till it finishes.
18. For better understanding, please check below provided screenshot.



```
C:\AHS>ahsdownload -a
Initiating the iLO connection.
Successfully connected to iLO.

Creating the package: .\HP_▓▓▓▓▓▓▓_20120921.ahs

AHS log download progress: 0%...0%...0%...0%...0%...0%...1%...1%...1%...1%...2%
..2%...2%...3%...3%...3%...4%...4%...4%...4%...4%...5%...5%...5%...5%...5%...6%
..6%...7%...7%...8%...9%...10%...10%...11%...12%...13%...13%...14%...15%...16%.
.16%...16%...17%...18%...19%...19%...20%...21%...22%...22%...23%...24%...25%...
6%...26%...26%...27%...28%...28%...29%...30%...31%...32%...32%...33%...34%...35
...36%...36%...37%...38%...39%...39%...40%...41%...41%...42%...43%...44%...44%.
.44%...45%...45%...45%...45%...46%...47%...48%...48%...49%...50%...51%...52%...
2%...53%...54%...55%...56%...56%...57%...0%...1%...1%...2%...3%...4%...5%...5%.
.6%...7%...8%...8%...9%...10%...11%...11%...12%...13%...14%...14%...15%...15%.
16%...24%...25%...26%...26%...27%...28%...28%...29%...29%...30%...31%...32%...3
%...33%...34%...35%...36%...36%...37%...38%...38%...39%...40%...41%...42%...100

Successfully created the AHS file with name: .\HP_▓▓▓▓▓▓▓_20120921.ahs
unmount_ilo returns SUCCESS.

C:\AHS>_
```

19. **Congrats**, you did it!

## Conclusion

Active Health System log helps HP support personal to diagnose gen8 server issues in an efficient manner and often results in better problem resolution. AHS is a revolutionary new technology available with HP Gen8 servers and it will change the way HP diagnose your server related issues. The information available in AHS log enables HP to start problem analysis 5 times faster and you will spend less time with HP support team reproducing or describing errors.

Public Document | Created by: Sirajul Haque, GSCB-TE