

HPE Gen9 服务器 Linux 系统中升级硬盘固件

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一. 适用范围与注意事项

- 本文档旨在说明 HPE Gen9 系列服务器 Linux 系统中升级硬盘固件。
- 实际情况是否适用本文档, 请通过下面导航链接进行确认:
<https://zhiliao.h3c.com/Theme/details/218273>
- 提示:
 - 本文档中的信息 (包括产品, 软件版本和设置参数) 仅作参考示例, 具体操作与目标需求设置请以实际为准。
 - 固件更新有风险, 请注意提前备份数据。
 - 本文档不定期更新维护, 请以发布的最新版本为准。

二. 升级准备

1. 固件获取

具体方法请参考：<https://zhiliao.h3c.com/Theme/details/216386>

2. 连接 iLO 与启用远程控制台

具体方法请参考：<https://zhiliao.h3c.com/Theme/details/216337>

三. 升级步骤

1. 访问系统

1.1 通过 iLO 启用远程控制台访问系统

通过 iLO 4 页面 Information -> Overview 的 Integrated Remote Console 选项，或页面左侧 Remote Console 导航可启用远程控制台。

The screenshot shows two views of the iLO 4 interface. The top view is the 'Information > Overview' page, where the 'Integrated Remote Console' section is highlighted with a red box. It lists options like 'HTML5 .NET Java Web Start'. The bottom view is the 'Remote Console - ILO Integrated Remote Console' page, also with the 'Integrated Remote Console' section highlighted in red. It provides links for '.NET Integrated Remote Console (.NET IRC)' and 'HTML5 Integrated Remote Console'. A red box highlights the 'Launch' button for the .NET IRC.

注：本文以.NET IRC 为例进行说明，实际应用中也可根据自身需要选择其余类型控制台。

1.2 通过第三方 SSH 工具访问系统

The screenshot shows a terminal window with a dark background. At the top, there's a menu bar with items like Terminal, Sessions, View, X server, Tools, Games, Settings, Macros, Help, Session, Servers, Tools, Games, Sessions, View, Split, MultiExec, Tunneling, Packages, Settings, and Help. Below the menu is a 'Quick connect...' input field and a connection status bar showing '10.12.'. The main area of the terminal shows a root login session:

```

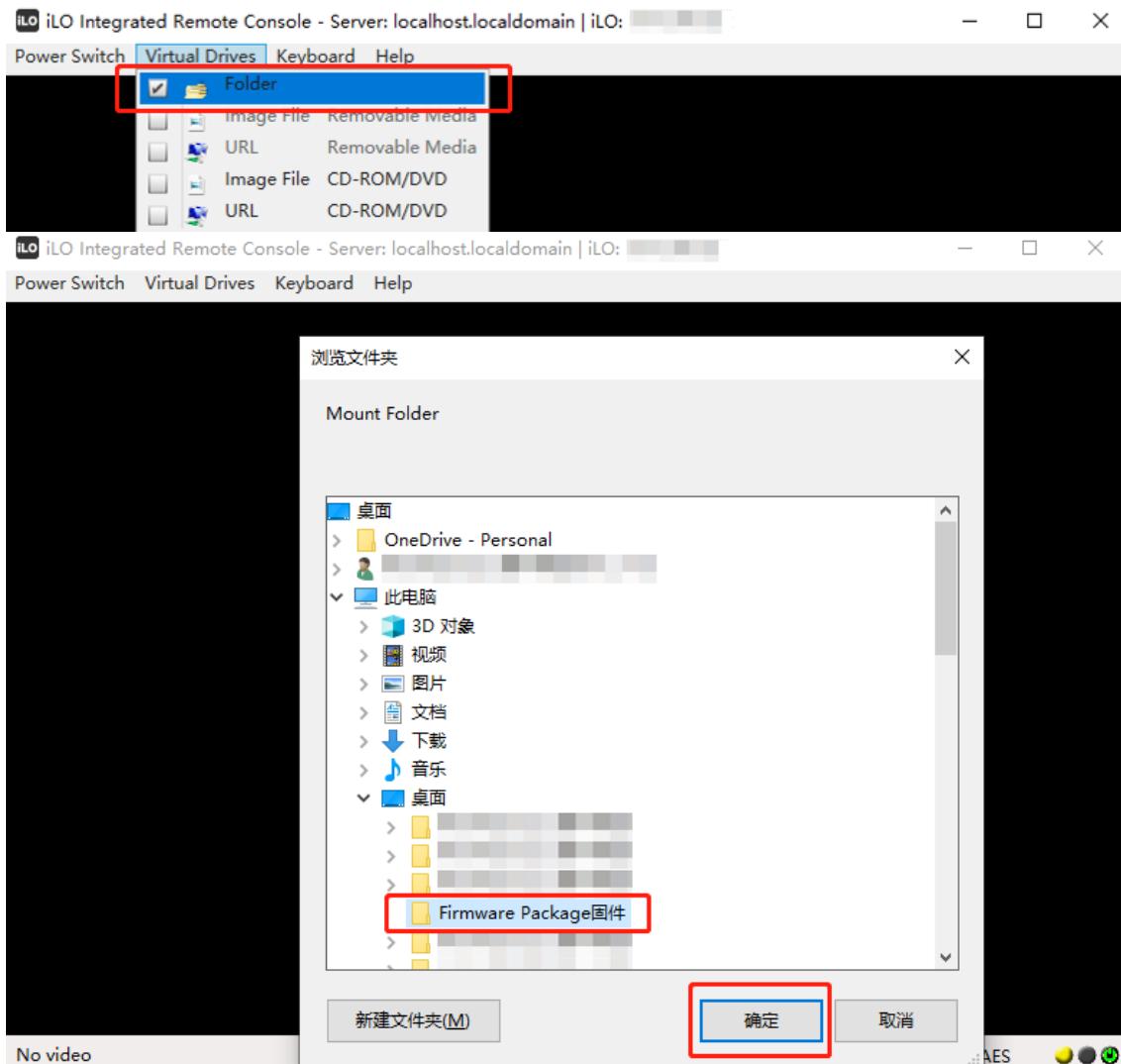
>>> login as: root
root@10.12.***: password:
[root@root ~]#

```

A sidebar on the left is titled 'Sessions' and shows a single entry with a yellow star icon.

2. 将硬盘固件保存到系统下

2.1 通过 iLO 启用远程控制台将固件挂载到系统下



2.2 通过 U 盘将文件挂载到系统下

U 盘接入服务器后，在系统下通过 mount 命令挂载。

2.3 通过第三方 SSH 工具将文件保存到系统下

参考第三方工具使用说明。

3. 更新固件

3.1 检查固件更新前的版本

3.1.1 通过 iLO 检查固件版本

通过 iLO 4 页面 System Information - Firmware Information 查看所有固件版本。

	Firmware Version	Location
Firmware Name	7.18.82	Embedded
HP FlexFabric 10Gb 2port 534FLR-SFP+ Adapter	20.18.31	Embedded
HPE Ethernet 1Gb 4-port 331i Adapter - NIC	2.1	Embedded
HPE Smart Storage Battery 1 Firmware	2.61 Jul 27 2018	System Board
iLO	27.01	System Board
Intelligent Platform Abstraction Data	2.86.2	System Board
Intelligent Provisioning	1.0.9	System Board
Power Management Controller Firmware	P89 v2.96 (05/17/2022)	System Board
Power Management Controller FW Bootloader	3.1.3.21.0	System Board
Redundant System ROM	7.00	Slot 1
Server Platform Services (SPS) Firmware	Version 0x34	System Board
Smart Array P400 Controller	P89 v3.04 (08/04/2022)	System Board
System Programmable Logic Device		
System ROM		

3.1.2 通过系统命令检查固件版本

```
# smartctl -a /dev/sdx -d cciss,x |grep Rev
```

```
[root@localhost ~]# smartctl -a /dev/sda -d cciss,0 |grep Rev
Revision:          HPD9
[root@localhost ~]#
```

3.2 通过系统命令更新固件

- 1) 输入命令查看挂载路径。

```
# lsblk
```

```
[root@localhost ~]# lsblk
NAME    MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda      8:0    0   1.1T  0 disk 
└─sda1   8:1    0   200M  0 part /boot/efi
  └─sda2   8:2    0   1G   0 part /boot
  └─sda3   8:3    0   1.1T  0 part 
    ├─centos-root 253:0  0   50G  0 lvm  /
    ├─centos-swap 253:1  0   4G   0 lvm  [SWAP]
    └─centos-home 253:2  0   1T   0 lvm  /home
sdb      8:16   0   1.1T  0 disk 
sdc      8:32   0   1.1T  0 disk 
sdd      8:48   0   1.1T  0 disk 
sde      8:64   0   888G 0 disk 
└─sde1   8:65   0   450M 0 part 
  └─sde2   8:66   0   100M 0 part 
  └─sde3   8:67   0   16M  0 part 
  └─sde4   8:68   0   887.5G 0 part 
sdf      8:80   1   128M 1 disk /run/media/llw/iLO FOLDER
[root@localhost ~]#
```

- 2) 使用命令安装 RPM 包。

```
# rpm -ivh <rpm_package_name>.rpm
```

```
[root@localhost iLO FOLDER]# rpm -ivh firmware-hdd-3d97759111-HPD9-1.1.x86_64.rpm
warning: firmware-hdd-3d97759111-HPD9-1.1.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID 26c2b797: NOKEY
Verifying...
Preparing...                                           #####[ 100%]
Updating / installing...
1:firmware-hdd-3d97759111-HPD9-1.1 #####[ 100%]
```

- 3) 进入固件所在路径。

```
# cd /usr/lib/x86_64-linux-gnu/firmware-hdd-xxxxxxxxxx-HPDx-x.x/
```

```
[root@localhost x86_64-linux-gnu]# cd /usr/lib/x86_64-linux-gnu/firmware-hdd-3d97759111-HPD9-1.1/
[root@localhost firmware-hdd-3d97759111-HPD9-1.1]# ll
total 17768
-rw-r--r--. 1 root root    74645 Dec  8 03:19 CP055384.xml
lrwxrwxrwx. 1 root root      5 Dec  8 03:19 hpsetup -> setup
-rw-r--r--. 1 root root 13756568 Dec  8 03:19 libsetup.so
-rwxr-xr-x. 1 root root 2098872 Dec  8 03:19 mmv_cli
-rw-r--r--. 1 root root   4175 Dec  8 03:19 payload.json
-rwxr-xr-x. 1 root root   6904 Dec  8 03:19 setup
-rw-r--r--. 1 root root 2237952 Dec  8 03:19 SKESTND9.rel
```

4) 执行命令升级硬盘固件。

```
# ./setup
```

```
[root@localhost firmware-hdd-3d97759111-HPD9-1.1]# ./setup
Online HDD/SSD Flash Component for Linux (x64) - EH000300JWCPL, EH000600JWCPL and EH000900JWCPN Drives (HPD9), searching...
1) EH000900JWCPN Drive 2I:1:5 (HPE Smart Array P816i-a SR Gen10 in Slot 0) (HPD7)
2) EH000900JWCPN Drive 2I:1:6 (HPE Smart Array P816i-a SR Gen10 in Slot 0) (HPD7)
Select which devices to flash [#,#-#,A]ll,(N)one]> A
Flashing Drive 2I:1:5 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPD7 -> HPD9 ]
NDU flashing completed successfully
Flashing Drive 2I:1:6 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPD7 -> HPD9 ]
NDU flashing completed successfully
===== Summary =====
Smart Component Finished

Summary Messages
=====
2 new FW images have been activated

Exit Status: 0
NDU flashing completed successfully
Selected devices updated successfully.
```

注：新固件将在重启后生效。

3.3 检查固件更新后的版本

与本文<[3.1 检查固件更新前的版本](#)>方法一致，完成更新后可到 iLO 4 相应页面或系统下查看更新后的固件版本，以验证更新是否成功。