

HPE Gen10 Plus & Gen10 服务器

VMware 系统中升级硬盘固件

目录

一. 适用范围与注意事项	1
二. 升级准备	2
1. 固件获取	2
2. 连接 iLO5 与启用远程控制台	2
三. 升级步骤	2
1. 访问系统	2
1.1 通过 iLO5 启用远程控制台访问系统	2
1.2 通过第三方 SSH 工具访问系统	2
2. 将硬盘固件保存到系统下	3
2.1 启用 Shell 并通过 Web Client 将固件保存到系统下	3
2.2 通过第三方 SSH 工具将文件保存到系统下	3
3. 更新固件	4
3.1 检查固件更新前的版本	4
3.2 通过系统命令更新固件	5
3.3 检查固件更新后的版本	8

一. 适用范围与注意事项

- 本文档旨在说明 HPE Gen10 Plus & Gen10 系列服务器 VMware 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 iLO5 与启用远程控制台

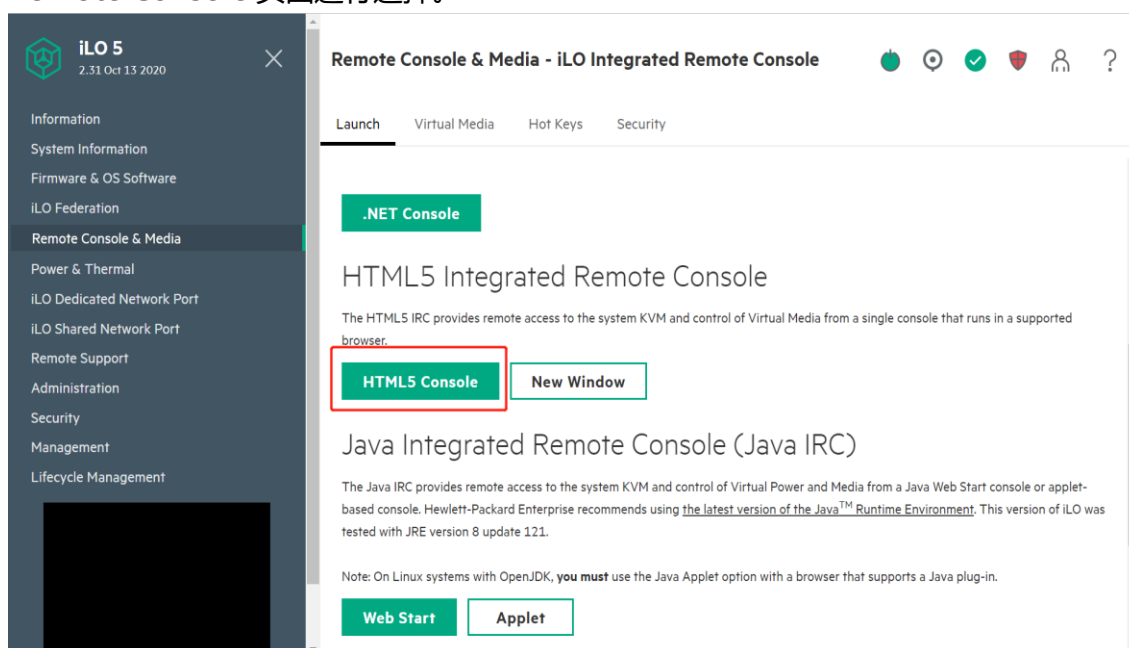
具体方法请参考：<https://zhiliao.h3c.com/Theme/details/216337>

三. 升级步骤

1. 访问系统

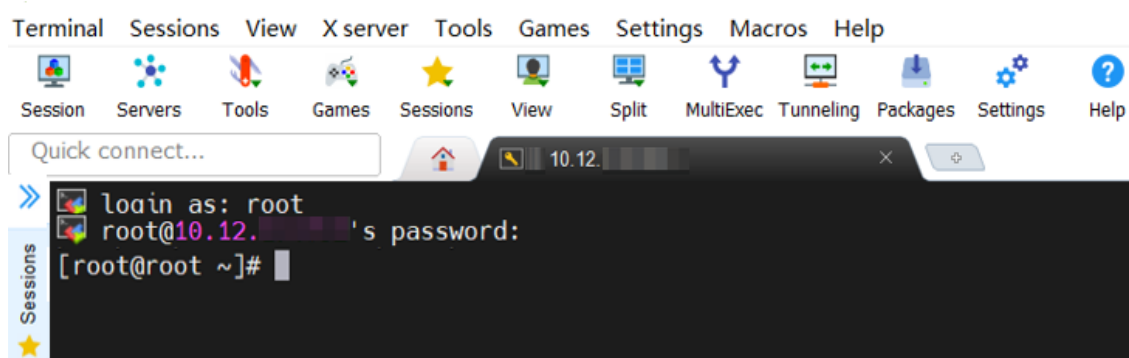
1.1 通过 iLO5 启用远程控制台访问系统

通过 iLO5 页面 **Information > Overview** 的 **Remote Console** 选项,或页面左下方 **Remote Console** 选区可直接启用远程控制台;也可在 **Remote Console & Media - iLO Integrated Remote Console** 页面进行选择。



注：本文以.NET Console 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。

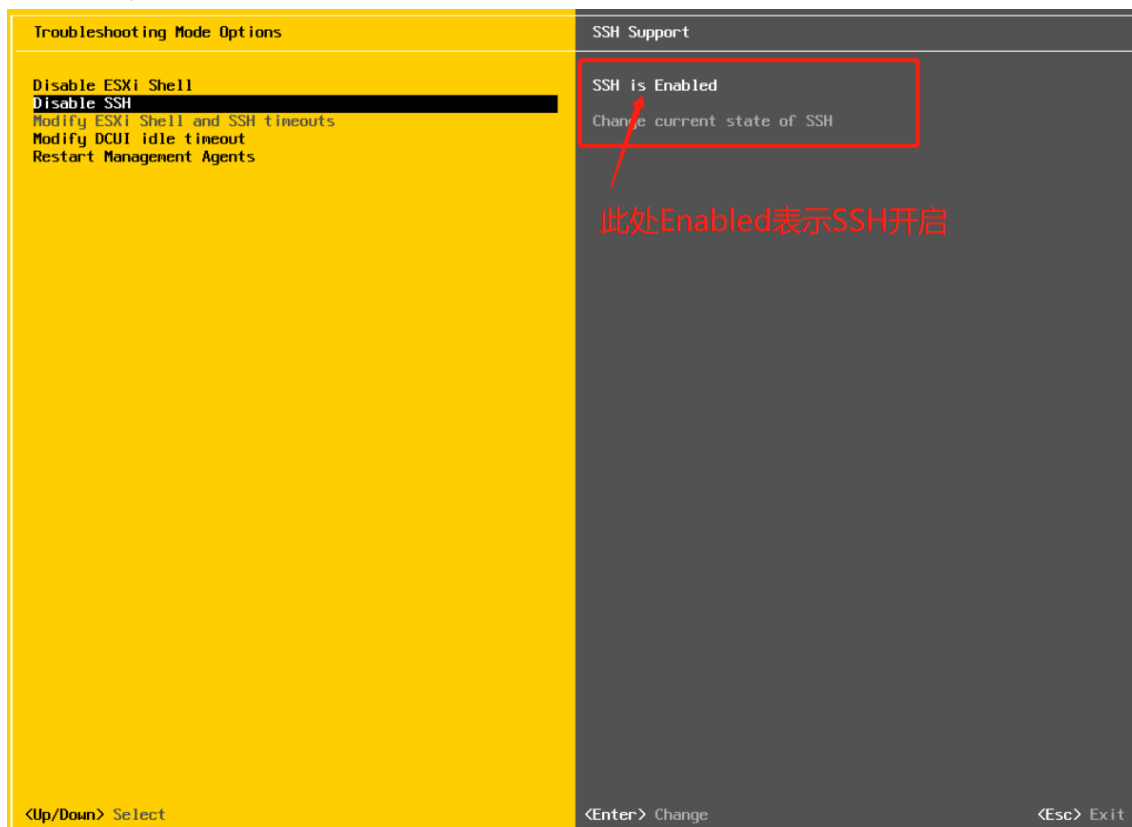
1.2 通过第三方 SSH 工具访问系统



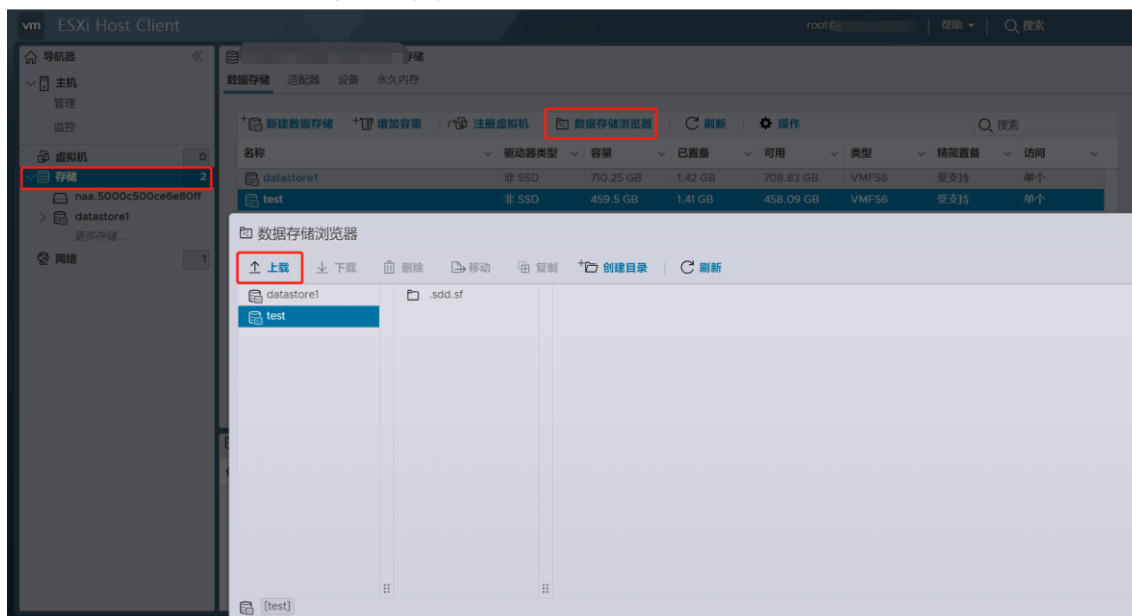
2. 将硬盘固件保存到系统下

2.1 启用 Shell 并通过 Web Client 将固件保存到系统下

2.1.1 在系统下将 SSH 设置为 Enabled。



2.1.2 打开 Web Client 在存储中上传固件。



2.2 通过第三方 SSH 工具将文件保存到系统下

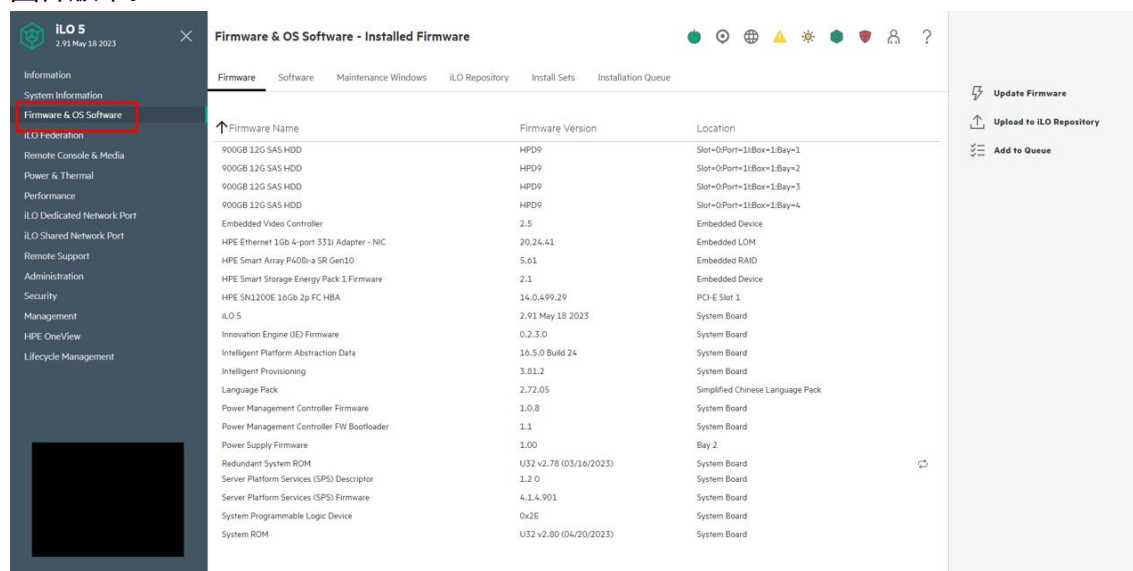
参考第三方工具使用说明。

3. 更新固件

3.1 检查固件更新前的版本

3.1.1 通过 iLO5 检查固件版本

通过 iLO5 页面 **Firmware & OS Software - Installed Firmware** 查看所需升级硬盘固件版本。



3.1.2 通过系统命令检查固件版本

1) 进入 ssaccli 目录并启用 ssaccli。

```
#cd /opt/smartstorageadmin/ssaccli/bin/
#./ssaccli
```

```
[root@localhost:~] cd ./opt/smartstorageadmin/ssaccli/bin/
[root@localhost:/opt/smartstorageadmin/ssaccli/bin] ./ssaccli
Smart Storage Administrator CLI 5.30.6.0
Detecting Controllers...Done.
Type "help" for a list of supported commands.
Type "exit" to close the console.
=>
```

2) 查看阵列卡所在槽位，并查看该槽位阵列卡控制所有硬盘固件。

```
#ctrl all show
```

```
#ctrl slot=x pd all show detail (说明: x 为阵列卡槽位编号, 根据实际情况更改)
```

```
=> ctrl all show
HPE Smart Array P408i-a SR Gen10 in Slot 12 (sn: PWXKV0CRHFJ7Q6)

=> ctrl slot=12 pd all show detail
HPE Smart Array P408i-a SR Gen10 in Slot 12

Array A

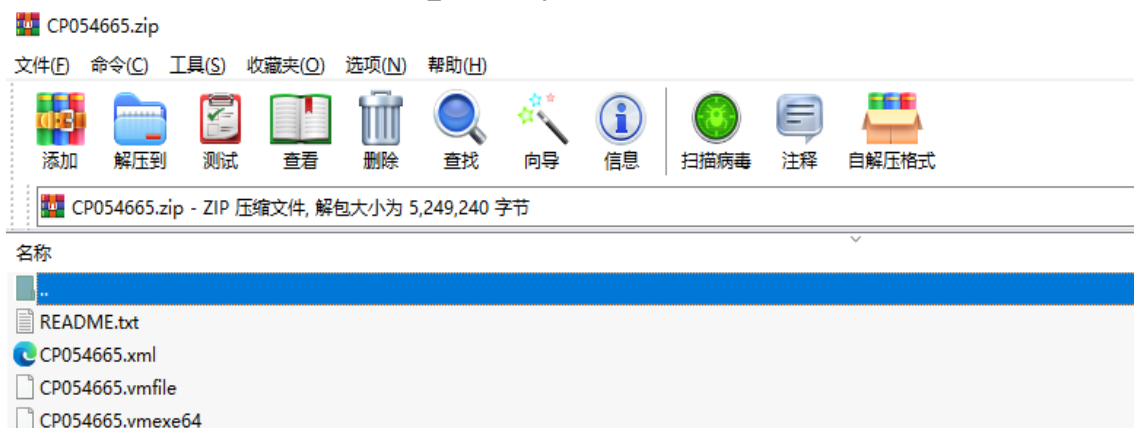
physicaldrive 2I:3:5
  Port: 2I
  Box: 3
  Bay: 5
  Status: OK
  Drive Type: Data Drive
  Interface Type: SAS
  Size: 900 GB
  Drive exposed to OS: False
  Logical/Physical Block Size: 512/512
  Rotational Speed: 15000
  Firmware Revision: HPD8
  Serial Number: WAG15G3X
  WWID: 5000C500DDCF3379
  Model: HPE EH000900JWCPN
  Current Temperature (C): 50
  Maximum Temperature (C): 55
  PHY Count: 2
  PHY Transfer Rate: 12.0Gbps, Unknown
  PHY Physical Link Rate: 12.0Gbps, Unknown
  PHY Maximum Link Rate: 12.0Gbps, 12.0Gbps
  Drive Authentication Status: Not Applicable
  Sanitize Erase Supported: True
```

3.2 通过系统命令更新固件

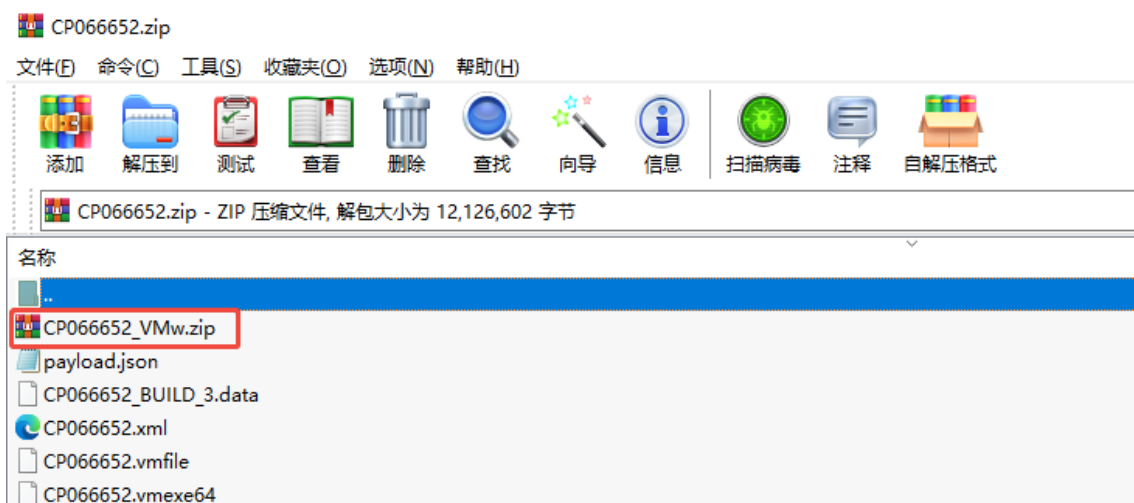
3.2.1 硬盘固件包说明

VMware 硬盘固件包有两种格式文件。

- 1) 格式一：压缩包中无 CPXXXXXX_VMw.zip 可执行文件。



- 2) 格式二：压缩包中带有 CPXXXXXX_VMw.zip 可执行文件。



3.2.2 通过 CPXXXXXX.vmexe 可执行文件更新固件

1) 解压压缩包。

#unzip CPXXXXXX.zip

```
[root@localhost:~] cd /tmp
[root@localhost:/tmp] unzip CP053495.zip
Archive: CP053495.zip
  inflating: CP053495_BUILD_4.data
  inflating: CP053495.vmexe
  inflating: CP053495.vmexe64
  inflating: CP053495.vmfile
  inflating: CP053495_VMw.zip
  inflating: CP053495.xml
  inflating: payload.json
```

2) 对工具赋权并执行固件更新。

#chmod +x CPXXXXXX.vmexe64

```
[root@localhost:/tmp] chmod +x CP053495.vmexe64
```

#./CPXXXXXX.vmexe64

```
[root@localhost:/tmp] chmod +x CP053495.vmexe64
[root@localhost:/tmp] ./CP053495.vmexe64
Online HDD/SSD Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL and EH000900JWCPN Drives (HPD9), searching...
1) EH000900JWCPN Drive 1I:3:3 (HPE Smart Array P408i-a SR Gen10 in Slot 12) (HPD8)
2) EH000900JWCPN Drive 1I:3:4 (HPE Smart Array P408i-a SR Gen10 in Slot 12) (HPD8)
3) EH000900JWCPN Drive 2I:3:5 (HPE Smart Array P408i-a SR Gen10 in Slot 12) (HPD8)
4) EH000900JWCPN Drive 2I:3:6 (HPE Smart Array P408i-a SR Gen10 in Slot 12) (HPD8)
Select which devices to flash [#,-#,(A)ll,(N)one]> A
Flashing Drive 1I:3:4 (HPE Smart Array P408i-a SR Gen10 in Slot 12) [ HPD8 -> HPD9 ]
NDU flashing completed successfully
Flashing Drive 2I:3:5 (HPE Smart Array P408i-a SR Gen10 in Slot 12) [ HPD8 -> HPD9 ]
NDU flashing completed successfully
Flashing Drive 2I:3:6 (HPE Smart Array P408i-a SR Gen10 in Slot 12) [ HPD8 -> HPD9 ]
NDU flashing completed successfully
Flashing Drive 1I:3:3 (HPE Smart Array P408i-a SR Gen10 in Slot 12) [ HPD8 -> HPD9 ]
NDU flashing completed successfully
***** Summary *****
Smart Component Finished

Summary Messages
*****
4 new FW images have been activated

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

固件变化

升级全部相同model号的硬盘

注：新固件将在重启服务器后生效。

3.2.3 通过 CPXXXXXX_VMw.zip 可执行文件更新固件

- 1) 将下载的 CPxxxxxx.zip 进行解压缩，解压文件夹找到所需固件。

#unzip CPXXXXXX.zip

```
[root@localhost: /tmp] unzip CP066000.zip
Archive: CP066000.zip
  inflating: CP066000_BUILD_2.data
  inflating: CP066000.vmexe64
  inflating: CP066000.vmfile
  inflating: CP066000_VMw.zip
  inflating: CP066000.xml
  inflating: payload.json
```

- 2) 对可执行文件赋权并释放可执行文件 CP059505_VMw.zip，可选添加选项--no-sig-check。

#chmod +x CPXXXXXX_VMw.zip

#esxcli software component apply-d <绝对路径> CPXXXXXX_VMw.zip

```
[root@localhost: /tmp] esxcli software component apply -d /tmp/CP066000_VMw.zip
Installation Result
  Message: Operation finished successfully.
  Components Installed: Smart-Component-CP066000_HPDB.2-10EM.800.1.0.20613240
  Components Removed:
  Components Skipped:
  Reboot Required: false
  DPU Results:
```

选项--no-sig-check 说明：Bypasses acceptance level verification,including signing.Use of this option poses a large security risk and will result in a SECURITY ALERT warning being displayed in vSphere Web Client（绕过接受级别验证，包括签名验证。使用此选项会带来很大的安全风险，并会在 vSphere Web Client 端中显示“安全警报”警告）

- 3) 文件释放后，找可执行文件目录/opt/Smart_Component/CPXXXXXX，注意不同下载包 CPXXXXXX 目录名称不同，也可以通过 find 命令查找目录位置。

#find / -name CPXXXXXX

```
[root@localhost: /opt/Smart_Component/CP066000] find / -name CP066000
/opt/Smart_Component/CP066000
```

- 4) 切换到硬盘可执行文件 CPXXXXXX 目录，并在目录下执行固件升级，可以通过 ./setup 或 ./Execute_Component 进行升级。

#cd /opt/Smart_Component/CPXXXXXX

#./Execute_Component -s

```
[root@localhost:~]# ls
CP066000.vmcfg      CP066000_BUILD_2.data  SKESTMDB.rel          flash.so              mvn_cli              setup
CP066000.xml        Execute_Component       determine_which_OS.sh  libsetup.so          payload.json
[root@localhost:~]# ./Execute_Component -s

Command [ ./Execute_Component -s ]
Number of parameters passed in [ 1 ]
The parameters are [ -s ]
OS Version found [ 8.0.2 ]
Process [ 8.0.2 ] with path [ ./ ]
No changes needed ... default flash engine is the one to execute
execute setup with parameters [ -s ]

Online HDD/SSD Flash Component for VMware ESXi - EH000300JWCPK, EH000600JWCPL, EH000900JWCPN, EH000300JXLVR, EH000600JXLVT and EH000900JXLVU Drives (HPDB), searching...
Flashing Drive 11:1:10 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPDA -> HPDB ]
NDU flashing completed successfully
Flashing Drive 11:1:11 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPDA -> HPDB ]
NDU flashing completed successfully
Flashing Drive 11:1:12 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPDA -> HPDB ]
NDU flashing completed successfully
Flashing Drive 11:1:13 (HPE Smart Array P816i-a SR Gen10 in Slot 0) [ HPDA -> HPDB ]
NDU flashing completed successfully
===== Summary =====
Smart Component Finished

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

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

... END [ ./Execute_Component - Return value is 0 ] ...
```

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 iLO5 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。