

H3C G3 服务器通过 iFIST 安装 ESXi 6.5 系统的安装方法

目录

一. 适用范围与注意事项.....	1
二. 安装准备.....	1
1. 系统兼容性查询.....	1
2. 系统安装介质获取.....	1
3. 阵列配置.....	1
4. 连接 HDM 与启用远程控制台.....	2
三. 安装步骤.....	2

一. 适用范围与注意事项

- 本文档旨在说明 H3C G3 系列服务器通过 iFIST 安装系统的方法,并以 R6900 G3 服务器安装 ESXi 6.5 为例进行安装步骤说明。
安装过程中您可能需要借助其他工具完成部分操作。如需了解详细介绍,请参考本文档<安装前准备>的内容查看。
- 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/208474>
- 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。
本文档不定期更新维护,请以发布的最新版本为准。

二. 安装准备

1. 系统兼容性查询
具体确认方法请参考: <https://zhiliao.h3c.com/Theme/details/207728>
2. 系统安装介质获取
具体方法请参考: <https://zhiliao.h3c.com/Theme/details/210145>
3. 阵列配置

如果有配置阵列的需求，请在阵列配置完成后再安装系统。

具体阵列配置方法请参考：<https://zhiliao.h3c.com/Theme/details/208527>

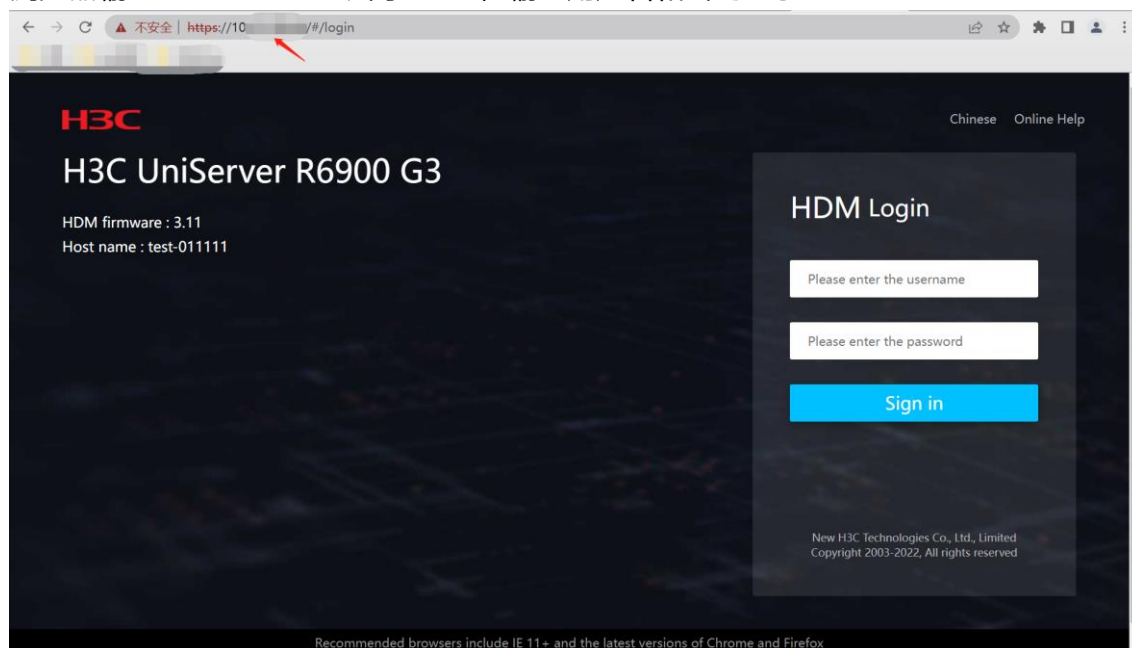
4. 连接 HDM 与启用远程控制台

具体方法请参考：<https://zhiliao.h3c.com/Theme/details/210144>

三. 安装步骤

1. 访问 HDM 并启用 KVM/H5 KVM

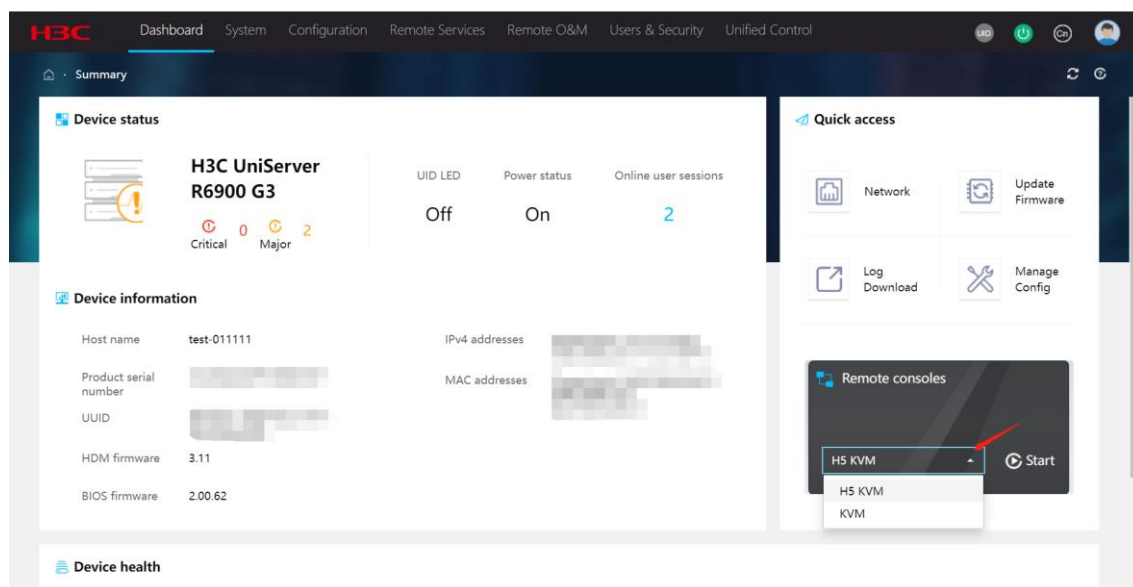
1.1 浏览器输入 HDM IP 地址访问 HDM，输入用户名和密码登录。



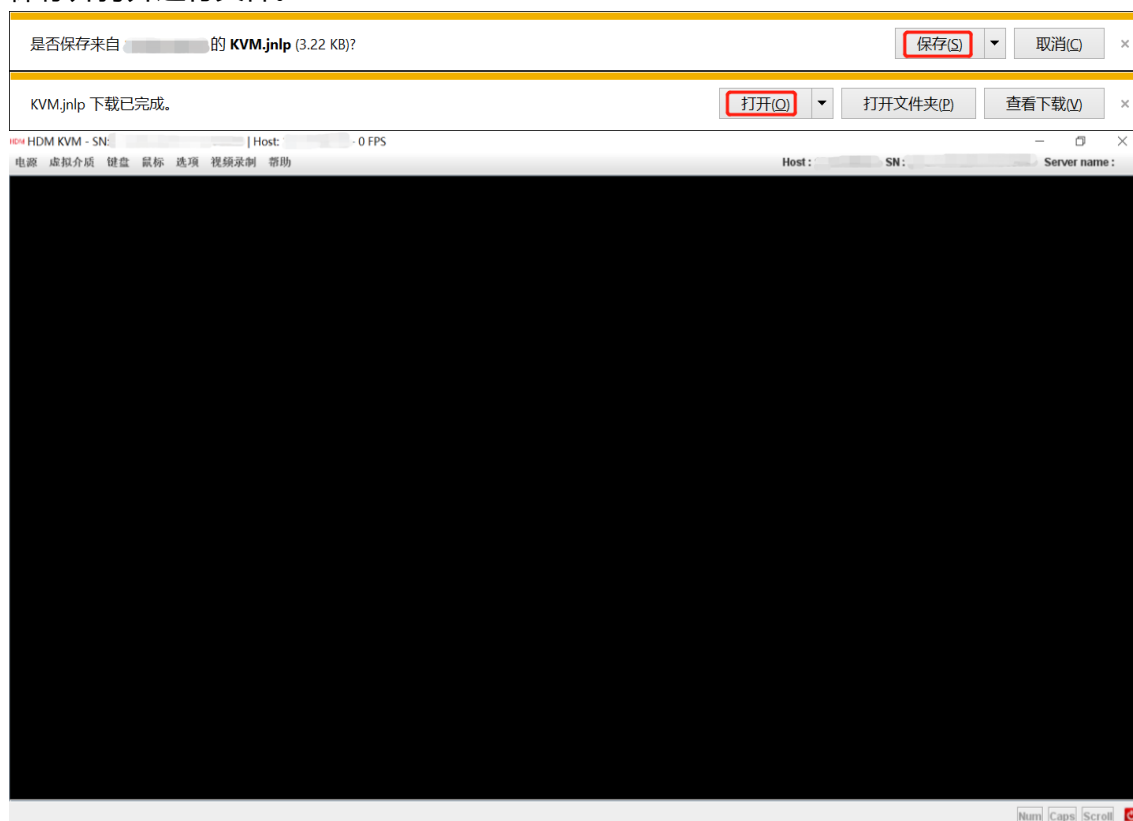
1.2 点击启动 KVM/H5 KVM

➤ 启动 KVM

1) 下拉选择 **KVM**，并点击**启动**。

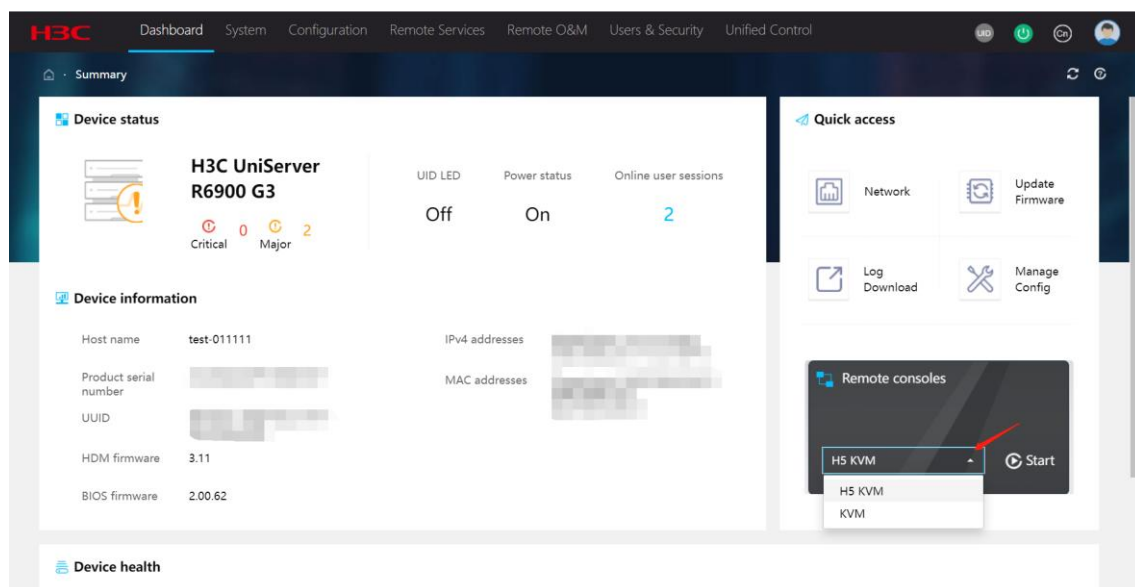


2) 保存并打开运行文件。



➤ 启动 H5 KVM

1) 下拉选择 H5 KVM，并点击启动。



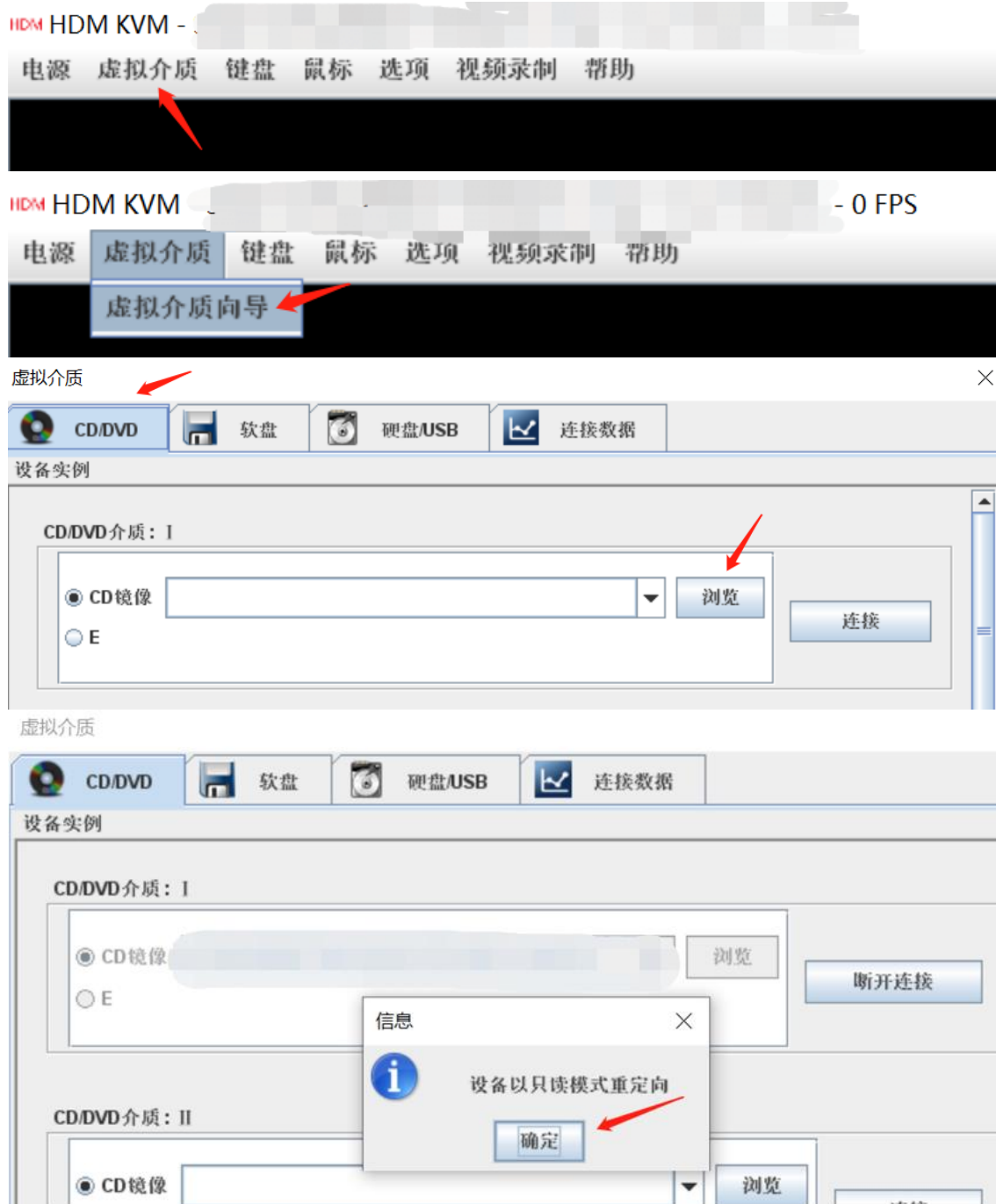
2) H5 KVM 窗口弹出。



2. 挂载系统安装介质

2.1 通过 KVM 挂载安装介质

点击 KVM 窗口左上方**虚拟介质**，在 **CD/DVD** 页面挂载并**连接**安装介质。

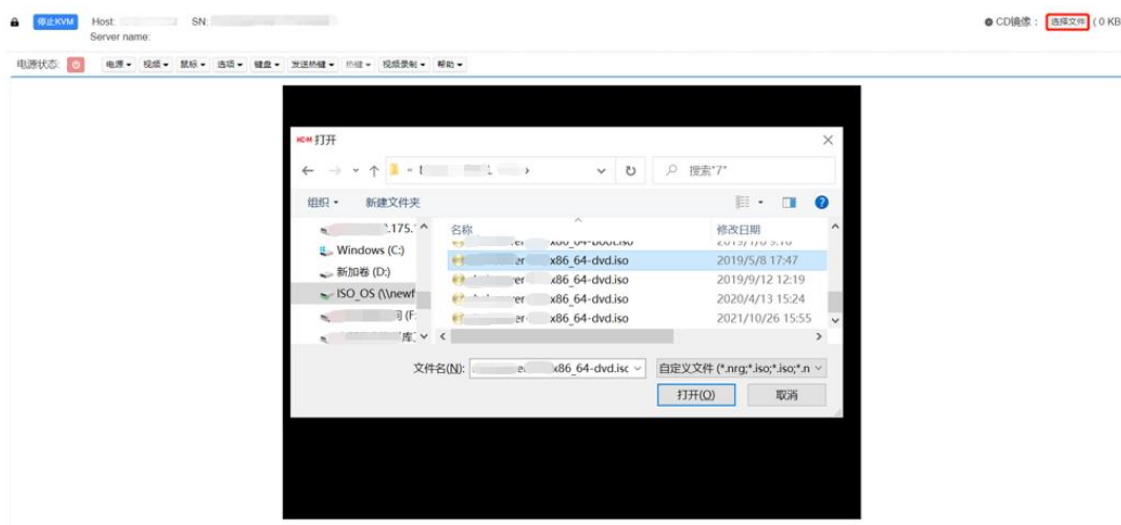


注：

- ① 在 **CD/DVD 介质: II** 处可额外挂载自定义 REPO 驱动镜像。
结合 REPO 可实现安装操作系统后自动安装驱动的功能，包含 REPO 的驱动镜像文件请从 H3C 官网上的 REPO 定制化工具获取。
- ② 1.33 版本之后 iFIST 自带驱动程序列表，不在列表中的驱动可通过带有 iso 镜像格式 REPO 文件存储介质来安装，或完成系统安装后单独在系统下安装驱动。

2.2 通过 H5 KVM 挂载安装介质

点击 H5 KVM 窗口右上方**选择文件**，挂载并**连接**安装介质。



注：

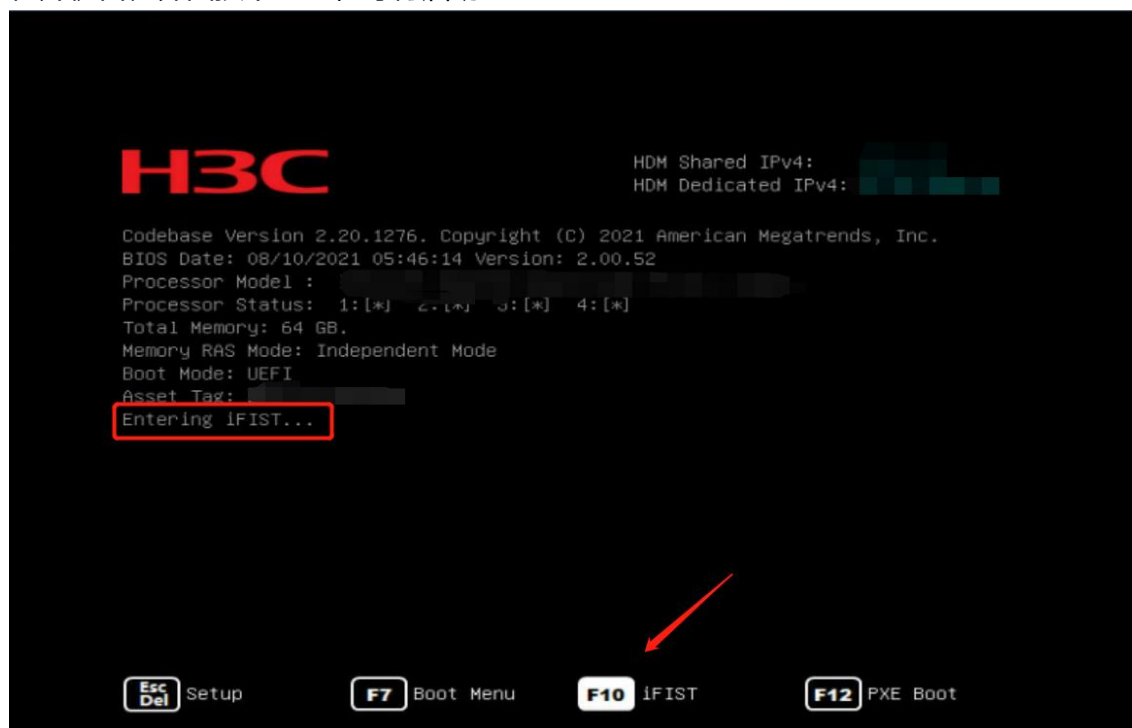
- ① 如果已定制 REPO 驱动镜像，可通过 U 盘挂载到服务器。

结合 REPO 可实现安装操作系统后自动安装驱动的功能，包含 REPO 的驱动镜像文件请从 H3C 官网上的 REPO 定制化工具获取。

- ② 1.33 版本之后 iFIST 自带驱动程序列表，不在列表中的驱动可通过带有 iso 镜像格式 REPO 文件存储介质来安装，或完成系统安装后单独在系统下安装驱动。

3. 启用 iFIST

3.1 在开机自检界面按下 **F10**，等待启动 iFIST。



3.2 正在进入，等待即可。

```

Booting iFIST

-

Starting Cleaning Up and Shutting Down Daemons...
[ OK ] Stopped target Timers.
Starting Setup Virtual Console...
[ OK ] Stopped dracut pre-pivot and cleanup hook.
[ OK ] Stopped target Initrd Default Target.
[ OK ] Stopped target Initrd Root Device.
[ OK ] Stopped target Basic System.
[ OK ] Stopped target Paths.
[ OK ] Stopped target Sockets.
[ OK ] Stopped target Slices.
[ OK ] Stopped target Remote File Systems.
[ OK ] Stopped target Remote File Systems (Pre).
[ OK ] Stopped dracut initqueue hook.
[ OK ] Stopped target System Initialization.
[ OK ] Stopped target Swap.
[ OK ] Stopped udev Coldplug all Devices.
[ OK ] Stopped Apply Kernel Variables.
[ OK ] Stopped Create Volatile Files and Directories.
Stopping udev Kernel Device Manager...
[ OK ] Stopped target Local File Systems.
Starting Plymouth switch root service...
[ OK ] Started Cleaning Up and Shutting Down Daemons.
[ OK ] Stopped udev Kernel Device Manager.
[ OK ] Stopped dracut pre-udev hook.
[ OK ] Stopped Create Static Device Nodes in /dev.
[ OK ] Stopped Create list of required static device nodes for the current kernel.
Stopping Hardware RNG Entropy Gatherer Daemon...
[ OK ] Closed udev Control Socket.
[ OK ] Closed udev Kernel Socket.
Starting Cleanup udevd DB...
[ OK ] Stopped Hardware RNG Entropy Gatherer Daemon.
[ OK ] Started Plymouth switch root service.
[ OK ] Started Cleanup udevd DB.
[ OK ] Started Setup Virtual Console.
[ OK ] Reached target Switch Root.
Starting Switch Root...
[ *** ] A start job is running for Switch Root (10s / no limit)

nohup: appending output to 'nohup.out'
JRE has checked, the version is "1.8.0.262"
java -Declipse.ignoreApp=true -Dorg.osgi.noShutdown=true -Dconfig.dir=. -Dfelix.fileinstall.bundles.startTransient=true -Dorg.eclipse.equinox.http.jetty.context.sessioninact
iveInterval=3000 -Dorg.osgi.service.http.port=80 -Dorg.eclipse.equinox.http.jetty.https.port=443 -Dlogback.configurationFile=configuration/fist-logback.xml -Dfelix.filei
ninstall.bundles.startTransient=true -XX:+PrintGCDetails -XX:+PrintGCTimeStamps -Xloggc:gc.log -XX:+HeapDumpOnOutOfMemoryError -jar plugins/org.eclipse.osgi_3.10.1.v201409
09-1633.jar -clean -console -configuration configuration

iFIST is starting...

```

3.3 进入 iFIST 首页。



4. 引导系统安装

4.1 进到 iFIST 主界面，选择**系统安装**即可开始安装步骤。



4.1.1 基础配置

- 1) 设置目标阵列卡
- 2) 查看当前阵列卡的工作模式
- 3) 查看 JBOD 属性
- 4) 选择配置方式：
 - 自定义配置：会进入下一步配置
 - 导入配置文件：导入配置为服务器的存储控制卡配置和操作系统参数配置
- 5) 选择镜像源：U 盘/光盘/HDM
- 6) 选择驱动源：1.33 版本之后 iFIST 自带驱动程序列表，通过挂载 REPO 驱动镜像可

添加列表外驱动或高版本驱动。若此项不做选择，也可在系统安装后单独在系统下安装驱动。

注：具体参数解释可点击右上方[?]获取联机帮助。

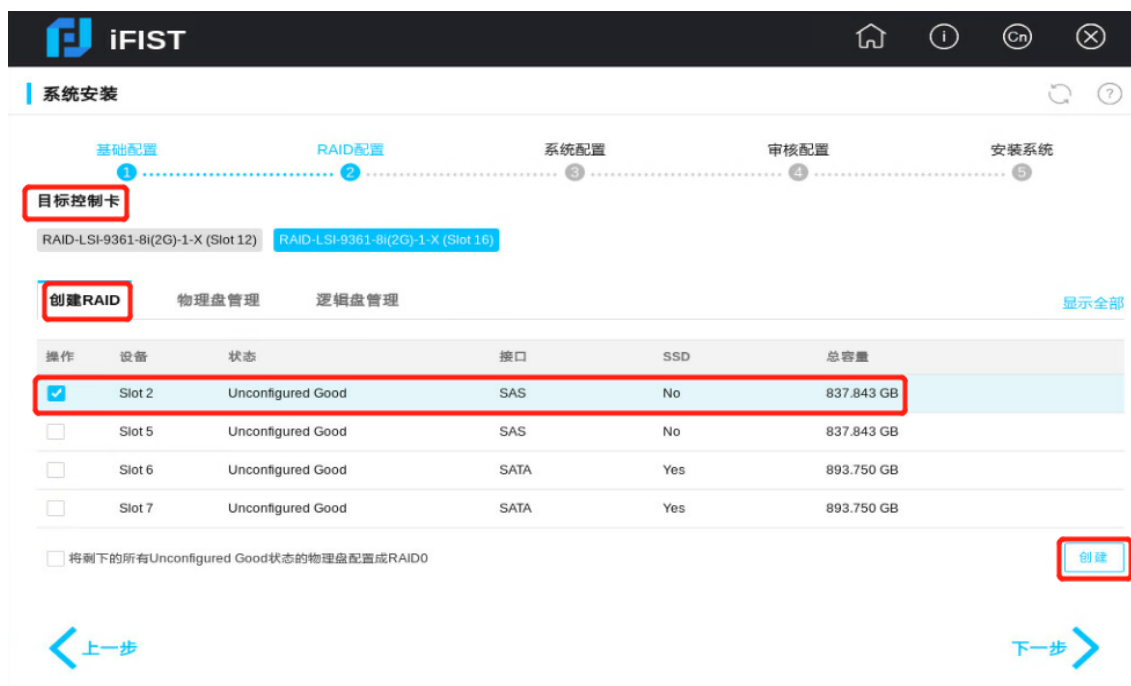
The screenshot shows the 'iFIST 联机帮助' (iFIST Online Help) page. On the left is a '目录导航' (Table of Contents) with sections: 1 iFIST简介, 2 系统安装, 2.1 基础配置, 2.2 RAID配置, 2.3 系统配置, 2.4 审核配置, and 2.5 安装系统. The main content area is titled '2 系统安装' and contains several bullet points explaining RAID creation, control card types, and configuration steps. A search bar at the top right says '请输入关键词' (Please enter keywords).

设置完成后，点击<下一步>按钮。

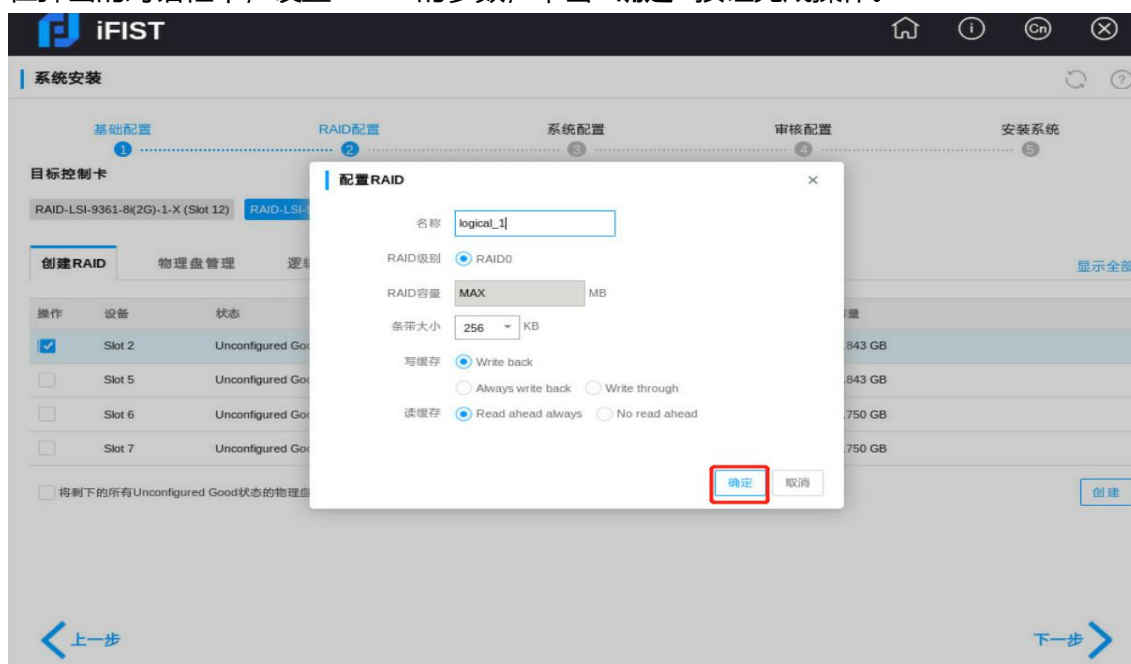
The screenshot shows the 'iFIST 系统安装' (iFIST System Installation) configuration interface. At the top, there's a navigation bar with icons for home, help, and other functions. Below it, a progress bar shows five steps: 1 基础配置 (Basic Configuration), 2 RAID配置 (RAID Configuration), 3 系统配置 (System Configuration), 4 审核配置 (Review Configuration), and 5 安装系统 (Install System). The '基础配置' step is currently active. It includes fields for '目标控制卡' (Target Control Card) set to 'RAID-LSI-9361-8i(2G)-1-X (Slot 12)', '工作模式' (Work Mode) set to 'RAID', 'JBOD' set to 'ON', '配置方式' (Configuration Method) set to '自定义配置' (Custom Configuration), '镜像源' (Image Source) set to '光盘 (物理光盘或HDM虚拟媒体)' (CD-ROM (Physical CD-ROM or HDM Virtual Media)), and '驱动源' (Driver Source) set to '光盘 (物理光盘或HDM虚拟媒体)' (CD-ROM (Physical CD-ROM or HDM Virtual Media)). A red box highlights a help icon (?) in the top right corner. At the bottom right, a red box highlights the '下一步' (Next Step) button with a right-pointing arrow.

4.1.2 RAID 配置

- 1) 选择目标阵列卡。
- 2) 在**创建 RAID** 页签中，选中待创建 RAID 的物理盘，单击<创建>按钮。



- 3) 在弹出的对话框中，设置 RAID 的参数，单击<确定>按钮完成操作。



4.1.3 系统配置

1) 驱动配置

显示可以安装的驱动列表和 FIST SMS。安装 Windows、Redhat 和 CentOS 系统时，界面会显示支持的 iFIST 自带的驱动选项。FIST SMS 默认不勾选。

注：FIST SMS（全称为 FIST System Management Service）是一款安装在服务器操作系统中，用于增强 HDM 和 FIST 管理功能的软件。

2) 参数配置

- ① 设置主机名称 (选填): 待安装操作系统的服务器的主机名。当 VMware ESXi 系统的 IPv4 配置为 DHCP 时, 不支持设置主机名。
- ② 密码: 进入操作系统的密码。
- 3) 网络配置
服务器操作系统的网络地址获取类型, 包括 DHCP 和 Static。
该选项仅针对镜像类型为 Linux 的系统, 其他系统不显示。
- 4) 系统盘配置
目标控制卡: 将操作系统安装到指定控制卡上。
目标盘: 将操作系统安装在指定盘上。
主分区容量: 待安装操作系统的逻辑盘的对应的容量。Linux 系统中不显示主分区容量, 默认使用最大值, 且 RAID 最小容量要求为 80GB。

确认无误后, 点击<下一步>按钮。

The screenshot shows the iFIST system installation interface. At the top, there's a navigation bar with the iFIST logo and icons for home, help, and user. Below the navigation bar, a progress bar indicates the current step is 'System Configuration' (系统配置), which is the third step in a five-step process: 基础配置 (Basic Configuration), RAID配置 (RAID Configuration), 系统配置 (System Configuration), 审核配置 (Review Configuration), and 安装系统 (Install System).

The 'System Configuration' section includes several expandable categories:

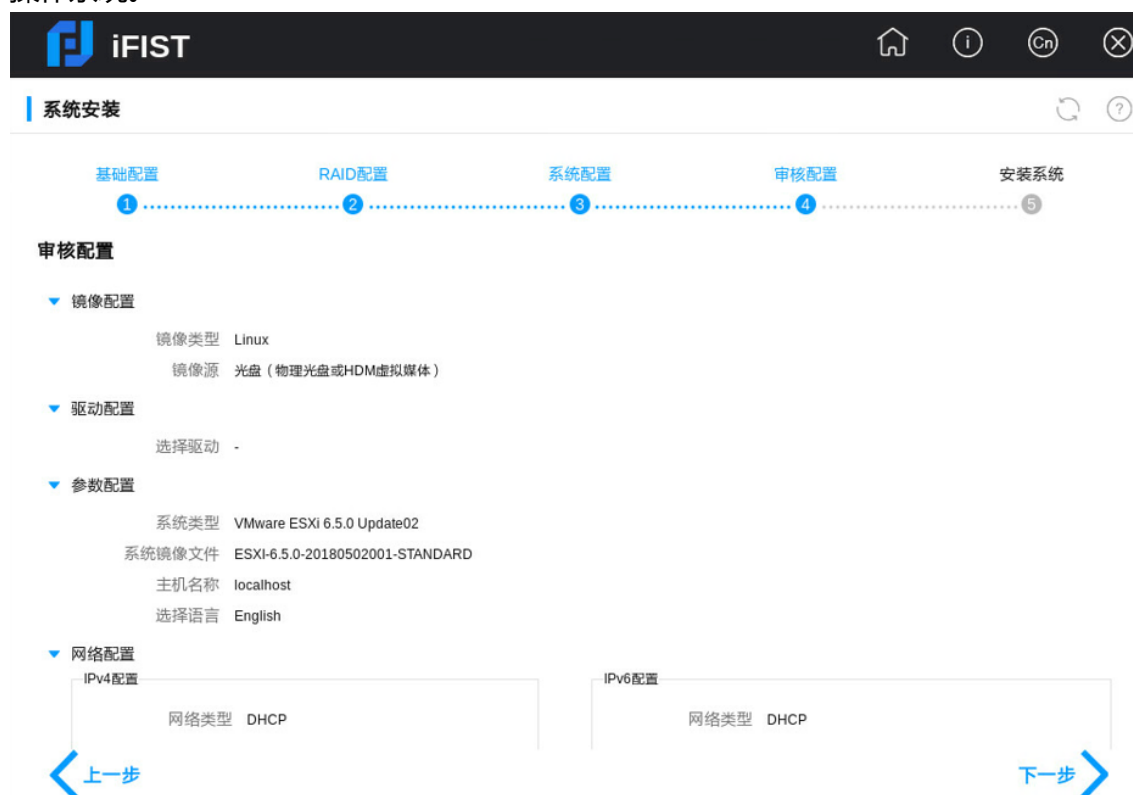
- 镜像配置 (Image Configuration):** 镜像类型 (Image Type) is set to Linux.
- 驱动配置 (Driver Configuration):** 选择驱动 (Select Driver) has a checkbox for FIST SMS.
- 参数配置 (Parameter Configuration):**
 - 系统类型 (System Type) is VMware ESXi 6.5.0 Update02.
 - 系统镜像文件 (System Image File) is ESXi-6.5.0-20180502001-STANDARD.
 - 主机名称 (Host Name) is localhost, with a '可选' (Optional) label.
 - 密码 (Password) and 确认密码 (Confirm Password) fields are present, both with '输入密码' (Enter Password) placeholder text.
 - 选择语言 (Select Language) has a radio button selected for English.
- 网络配置 (Network Configuration):**
 - IPv4配置 (IPv4 Configuration):** 网络类型 (Network Type) is set to DHCP.
 - IPv6配置 (IPv6 Configuration):** 网络类型 (Network Type) is set to DHCP.
- 系统盘配置 (System Disk Configuration):** 目标盘 (Target Disk) is set to 名称: Front 0 Slot 0 | 状态: JBOD | 容量: 953868MB.

At the bottom of the interface, there are two large blue arrows: a left arrow labeled '上一步' (Previous Step) and a right arrow labeled '下一步' (Next Step).

4.1.4 审核配置

- 1) 确认待安装操作系统的配置信息是否有误, 确认无误后单击<下一步>按钮开始安装

操作系统。



- 2) 提示安装过程中系统会多次重启，安装过程中不要移除镜像介质或刷新界面。点击**确定**，继续安装。



4.1.5 安装系统

安装等待即可，无需其他操作。



4.2 服务器自动重启。

```
[ OK ] Stopped IPv4 firewall with iptables.
[ OK ] Stopped Session 1 of user root.
      Stopping Login Service...
[ OK ] Removed slice User Slice of UID 0.
      Stopping Permit User Sessions...
[ OK ] Stopped Permit User Sessions.
[ OK ] Stopped target Remote File Systems.
[ OK ] Stopped target Network.
      Stopping Network Manager...
[ OK ] Stopped Network Manager.
      Stopping D-Bus System Message Bus...
[ OK ] Stopped D-Bus System Message Bus.
[ OK ] Stopped Login Service.
[ OK ] Stopped target Basic System.
[ OK ] Stopped target Paths.
[ OK ] Stopped Forward Password Requests to Plymouth Directory Watch.
[ OK ] Stopped target Sockets.
[ OK ] Stopped target Slices.
[ OK ] Removed slice User and Session Slice.
[ OK ] Closed D-Bus System Message Bus Socket.
[ OK ] Stopped target System Initialization.
[ OK ] Stopped Back the need to relabel after reboot.
[ OK ] Stopped target Swap.
[ OK ] Stopped Apply Kernel Variables.
      Stopping Load/Save Random Seed...
      Stopping Update UTMP about System Boot/Shutdown...
[ OK ] Stopped Read and set NIS domainname from /etc/sysconfig/network.
[ OK ] Stopped target Local Encrypted Volumes.
[ OK ] Stopped Forward Password Requests to Wall Directory Watch.
[ OK ] Stopped Load/Save Random Seed.
[ OK ] Stopped Update UTMP about System Boot/Shutdown.
      Stopping Security Auditing Service...
[ OK ] Stopped Security Auditing Service.
[ OK ] Stopped Create Volatile Files and Directories.
[ OK ] Stopped Import network configuration from initramfs.
[ OK ] Stopped target Local File Systems.
      Unmounting /EFI/Boot...
[ OK ] Unmounted /boot...
[ OK ] Unmounted /EFI/Boot.
[ OK ] Reached target Unmount All Filesystems.
[ OK ] Stopped target Local File Systems (Pre).
[ OK ] Stopped Create Static Device Nodes in /dev.
[ OK ] Stopped Remount Root and Kernel File Systems.
[ OK ] Reached target Shutdown.
[ OK ] Reached target Final Step.
      Starting Reboot...
```

H3C

P18-2.00.52 V100R001B02D052
Initialize System, Please Wait...
Progress: [14%]

HDM Shared IPv4: [REDACTED]
HDM Dedicated IPv4: [REDACTED]

PCH Pre-Initializing...
Platform Information Initializing...
SPS Firmware Initializing...
Platform Early Initializing...

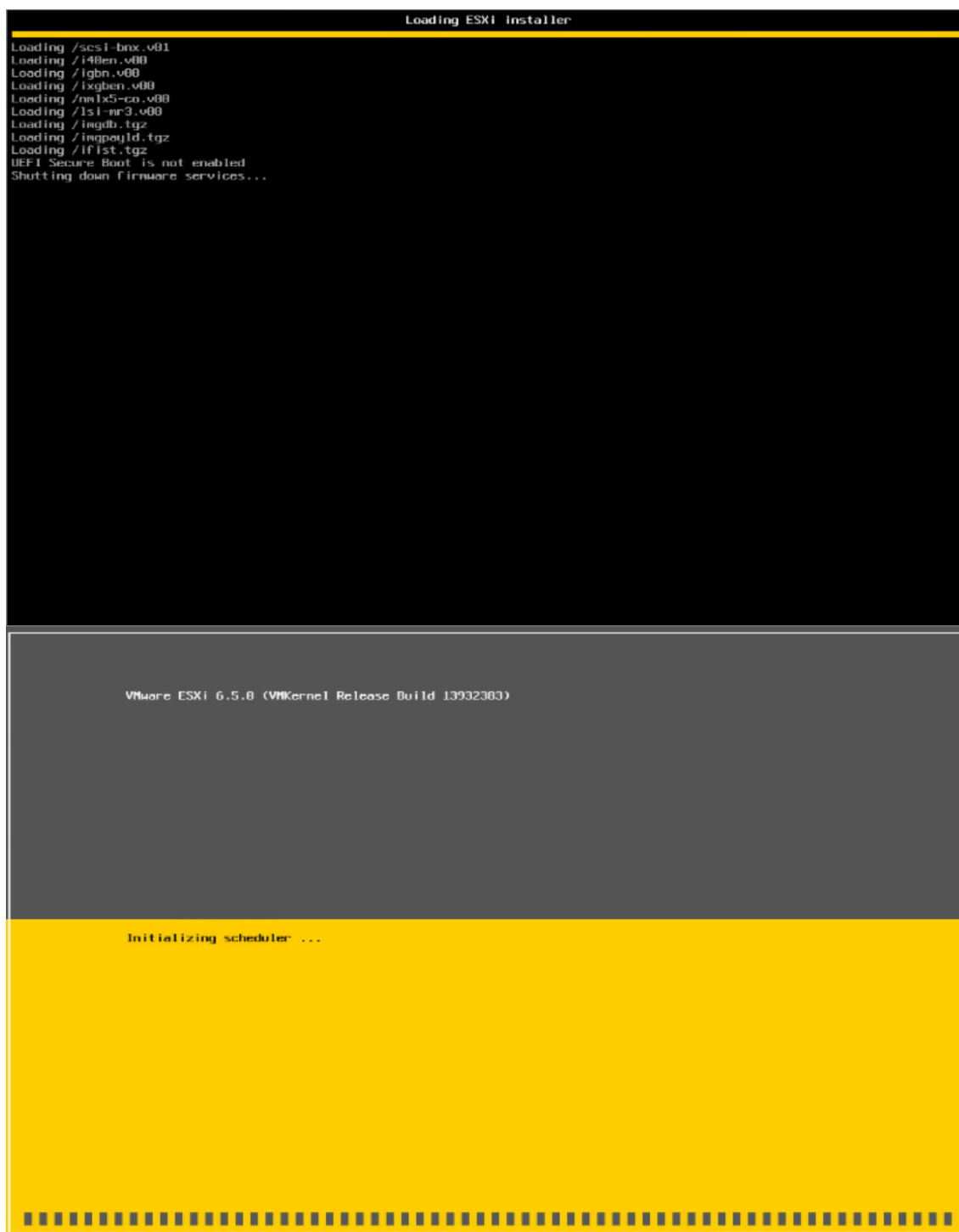
[Done]
[Done]
[Done]

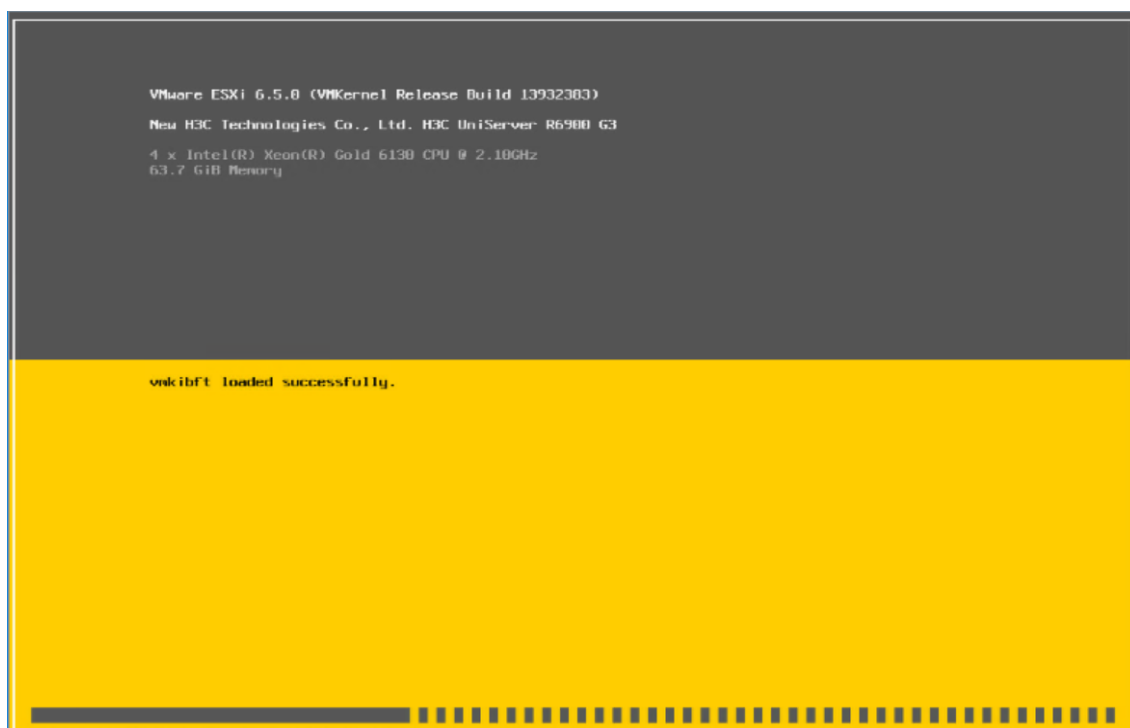
HDM Shared IPv6: NA
HDM Dedicated IPv6: ::



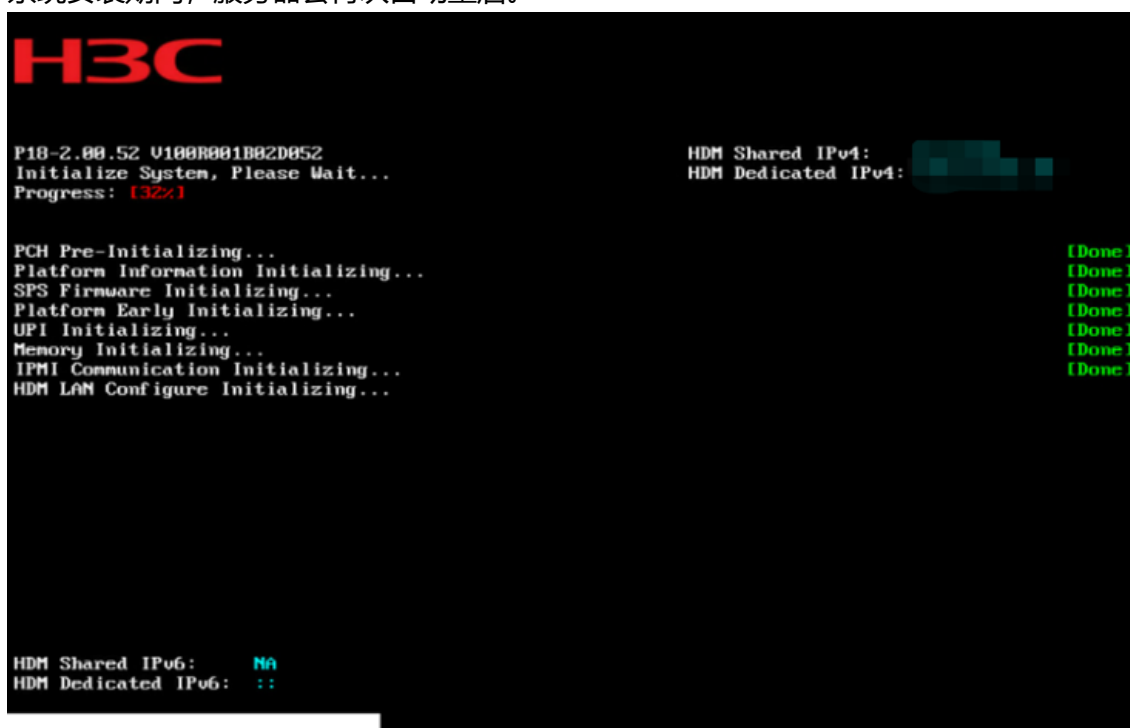
4.3 自检完成后，将自动加载 ESXi 安装程序。等待安装过程，无需人为干预。







4.4 系统安装期间，服务器会再次自动重启。





4.5 自检结束后，再次加载 ESXi 系统，此过程不需要人为干预。



4.6 系统初始化，并完成安装。

