

知 无线控制器V5升级V7典型案例

软件升级 陈铮 2015-06-11 发表

无线控制器ComwareV5版本升级V7

不涉及

将Comware V5上当前运行的配置保存至设备存储。

```
save
```

```
The current configuration will be written to the device. Are you sure? [Y/N]:y
```

```
Please input the file name(*.cfg)[cfa0:/startup.cfg]
```

```
(To leave the existing filename unchanged, press the enter key):
```

```
cfa0:/startup.cfg exists, overwrite? [Y/N]:y
```

```
Validating file. Please wait...
```

```
Saved the current configuration to mainboard device successfully.
```

将配置文件备份到PC (IP地址: 192.168.100.14) 上。注意V5升级V7配置需要参考配置和命令手册先翻译。

```
tftp 192.168.100.14 put startup.cfg
```

```
File will be transferred in binary mode
```

```
Sending file to remote TFTP server. Please wait... \
```

```
TFTP: 1914 bytes sent in 0 second(s).
```

```
File uploaded successfully.
```

重启设备, 当出现“Press Ctrl+B to enter extended boot menu...”时, 键入, 进入Comware V5 BootWare菜单。

```
System is starting...
```

```
Press Ctrl+D to access BASIC-BOOTWARE MENU
```

```
Booting Normal Extend BootWare..
```

```
The Extend BootWare is self-decompressing.....
```

```
Done!
```

```
*****
```

```
*                                     *  
*           H3C WCMD BootWare, Version 2.04           *  
*                                     *  
*****
```

```
Copyright (c) 2010-2014 Hewlett-Packard Development Company, L.P.
```

```
Compiled Date   : Nov 19 2014
```

```
CPU Type        : XLR732
```

```
CPU L1 Cache   : 32KB
```

```
CPU Clock Speed : 950MHz
```

```
Memory Type    : DDR2 SDRAM
```

```
Memory Size    : 2048MB
```

```
Memory Speed   : 533MHz
```

```
BootWare Size  : 512KB
```

```
Flash Size     : 4MB
```

```
cfa0 Size      : 1047MB
```

```
CPLD Version   : 005
```

```
PCB Version    : Ver.B
```

```
BootWare Validating...
```

```
Press Ctrl+B to enter extended boot menu...
```

```
BootWare password: Not required. Please press Enter to continue.
```

```
Password recovery capability is enabled.
```

```
Note: The current operating device is cfa0
```

Enter < Storage Device Operation > to select device.

```
=====
|<1> Boot System                               |
|<2> Enter Serial SubMenu                       |
|<3> Enter Ethernet SubMenu                     |
|<4> File Control                               |
|<5> Restore to Factory Default Configuration   |
|<6> Skip Current System Configuration         |
|<7> BootWare Operation Menu                   |
|<8> Clear Super Password                       |
|<9> Storage Device Operation                   |
|<0> Reboot                                     |
=====
```

Ctrl+Z: Access EXTEND-ASSISTANT MENU
Ctrl+F: Format File System
Enter your choice(0-9):
按Ctrl+F完成存储介质的格式化
Warning:All files on cfa0 will be lost! Are you sure to format? [Y/N]Y.....

.....
Format success.
完成存储介质的格式化之后, 重新进入Bootware主菜单:

```
=====
|<1> Boot System                               |
|<2> Enter Serial SubMenu                       |
|<3> Enter Ethernet SubMenu                     |
|<4> File Control                               |
|<5> Restore to Factory Default Configuration   |
|<6> Skip Current System Configuration         |
|<7> BootWare Operation Menu                   |
|<8> Clear Super Password                       |
|<9> Storage Device Operation                   |
|<0> Reboot                                     |
=====
```

Ctrl+Z: Access EXTEND-ASSISTANT MENU
Ctrl+F: Format File System
Enter your choice(0-9): 3
在BootWare主菜单下选择<3>可以进入以太网操作子菜单:

```
=====
|Note:the operating device is cfa0           |
|<1> Download Application Program To SDRAM And Run |
|<2> Update Main Application File               |
|<3> Update Backup Application File             |
|<4> Update Secure Application File            |
|<5> Modify Ethernet Parameter                 |
|<0> Exit To Main Menu                         |
|                                               |
=====
```

Enter your choice(0-4): 5
在以太网操作子菜单选择<5>, 进入以太网口配置菜单:

```
=====
|Note:  '.' = Clear field.                     |
|        '.' = Go to previous field.           |
|        Ctrl+D = Quit.                         |
|                                               |
=====
```

Protocol (FTP or TFTP) :tftp
Load File Name :host
:UWWM20-BootWareUpdate-V001.bin
Target File Name :target

:UWWM20-BootWareUpdate-V001.bin

Server IP Address :192.168.100.14

Local IP Address :192.168.100.122

Gateway IP Address :0.0.0.0 255.255.255.0

选择<1>, 下载Comware V7版本BootWare文件。

```
=====
|Note:the operating device is cfa0          |
|<1> Download Application Program To SDRAM And Run          |
|<2> Update Main Application File          |
|<3> Update Backup Application File          |
|<4> Update Secure Application File          |
|<5> Modify Ethernet Parameter          |
|<0> Exit To Main Menu          |
|          |
=====
```

Enter your choice(0-4): 1

Loading.....Done!

374784 bytes downloaded!

Extend BootWare Version is not equal,updating? [Y/N]Y

Updating Extend BootWare...Done!

BootWare updated,System is rebooting now.

BootWare版本更新后将自动重启。

设备重启后直接进入Comware V7 BootWare主菜单。

System is starting...

Press Ctrl+D to access BASIC-BOOTWARE MENU...

Booting Normal Extended BootWare

The Extended BootWare is self-decompressing.....Done.

```
*****
*                                     *
*          H3C UWWM20 BootWare, Version 3.03          *
*                                     *
*****
```

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Compiled Date : Nov 25 2014

CPU Type : XLR732

CPU L1 Cache : 32KB

CPU Clock Speed : 950MHz

Memory Type : DDR2 SDRAM

Memory Size : 2048MB

Memory Speed : 533MHz

BootWare Size : 512KB

Flash Size : 4MB

cfa0 Size : 999MB

CPLD Version : 005

PCB Version : Ver.B

Use default net params.

BootWare Validating...

Backup Basic BootWare not exist

Begin to Update the Backup Basic BootWare.....Done.

Normal Extended BootWare Version is newer than Backup Extended BootWare!

Begin to Update the Backup Extended BootWare.....Done.

Image program does not exist.

Password recovery capability is enabled.

Note: The current operating device is cfa0

Enter < Storage Device Operation > to select device.

```
=====
|<1> Boot System |
|<2> Enter Serial SubMenu |
|<3> Enter Ethernet SubMenu |
|<4> File Control |
|<5> Restore to Factory Default Configuration |
|<6> Skip Current System Configuration |
|<7> BootWare Operation Menu |
|<8> Skip Authentication for Console Login |
|<9> Storage Device Operation |
|<0> Reboot |
=====
```

Ctrl+Z: Access EXTENDED ASSISTANT MENU

Ctrl+F: Format File System

Enter your choice(0-9): 3

在BootWare主菜单下键入<3>可以进入以太网口子菜单，然后键入<5>就可以进入以太网口配置菜单：

```
=====
|Note:the operating device is cfa0 |
|<1> Download Image Program To SDRAM And Run |
|<2> Update Main Image File |
|<3> Update Backup Image File |
|<4> Download Files(*.*) |
|<5> Modify Ethernet Parameter |
|<0> Exit To Main Menu |
| |
=====
```

Enter your choice(0-5): 5

```
=====
|Note: '.' = Clear field. |
| '.' = Go to previous field. |
| Ctrl+D = Quit. |
=====
```

```
Protocol (FTP or TFTP) :tftp
Load File Name :host
:UWWM20.ipe
Target File Name :target
:UWWM20.ipe
Server IP Address :192.168.100.14
Local IP Address :192.168.100.122
Subnet Mask :0.0.0.0 255.255.255.0
Gateway IP Address :0.0.0.0
```

键入<2>，下载Comware V7启动文件：

```
=====
|Note:the operating device is cfa0 |
|<1> Download Image Program To SDRAM And Run |
|<2> Update Main Image File |
|<3> Update Backup Image File |
|<4> Download Files(*.*) |
|<5> Modify Ethernet Parameter |
|<0> Exit To Main Menu |
| |
=====
```

Enter your choice(0-5): 2

Loading.....
.....

.....
.....
.....
.....

.....Done.
90542080 bytes downloaded!
Image file UWWWM20-cmw710-boot-a5201p03.bin is self-decompressing...
Saving file cfa0:/UWWWM20-cmw710-boot-a5201p03.bin

.....
.....
.....
.....

.....Done.
Image file UWWWM20-cmw710-system-a5201p03.bin is self-decompressing...
Saving file cfa0:/UWWWM20-cmw710-system-a5201p03.bin

.....
.....
.....
.....Done.

```
=====
|Note:the operating device is cfa0          |
|<1> Download Image Program To SDRAM And Run |
|<2> Update Main Image File                 |
|<3> Update Backup Image File              |
|<4> Download Files(*.*)                   |
|<5> Modify Ethernet Parameter            |
|<0> Exit To Main Menu                    |
|          |                               |
=====
```

Enter your choice(0-5): 0
选择<0>, 返回BootWare主菜单。选择<1>, 引导系统, 完成升级。

```
=====
|<1> Boot System                            |
|<2> Enter Serial SubMenu                   |
|<3> Enter Ethernet SubMenu                |
|<4> File Control                           |
|<5> Restore to Factory Default Configuration |
|<6> Skip Current System Configuration     |
|<7> BootWare Operation Menu               |
|<8> Clear Super Password                  |
|<9> Storage Device Operation              |
|<0> Reboot                                |
=====
```

```
Ctrl+Z: Access EXTENDED ASSISTANT MENU
Ctrl+F: Format File System
Enter your choice(0-9): 1
Loading the main image files...
Loading file cfa0:/UWWWM20-cmw710-system-a5201p03.bin.....
.....
.....
.....Done.
Loading file cfa0:/UWWWM20-cmw710-boot-a5201p03.bin.....
.....
.....
.....
```

.....Done.
Image file cfa0:/UWWM20-cmw710-boot-a5201p03.bin is self-decompressing.....

.....
.....
.....
.....
.....Done.

System image is starting...
Cryptographic Algorithms Known-Answer Tests are running ...
CPU 0 of slot 1 in chassis 0:
Starting Known-Answer tests in the user space.
Known-answer test for SHA1 passed.
Known-answer test for SHA224 passed.
Known-answer test for SHA256 passed.
Known-answer test for SHA384 passed.
Known-answer test for SHA512 passed.
Known-answer test for HMAC-SHA1 passed.
Known-answer test for HMAC-SHA224 passed.
Known-answer test for HMAC-SHA256 passed.
Known-answer test for HMAC-SHA384 passed.
Known-answer test for HMAC-SHA512 passed.
Known-answer test for AES passed.
Known-answer test for RSA(signature/verification) passed.
Known-answer test for RSA(encrypt/decrypt) passed.
Known-answer test for DSA(signature/verification) passed.
Known-answer test for random number generator passed.
Known-Answer tests in the user space passed.
Starting Known-Answer tests in the kernel.
Known-answer test for SHA1 passed.
Known-answer test for HMAC-SHA1 passed.
Known-answer test for AES passed.
Known-answer test for random number generator passed.
Known-Answer tests in the kernel passed.
Cryptographic Algorithms Known-Answer Tests passed.

Startup configuration file does not exist.
Performing automatic configuration... Press CTRL_C or CTRL_D to break.

Automatic configuration attempt: 1.
Interface used: M-GigabitEthernet0/0/0.
Enable DHCP client on M-GigabitEthernet0/0/0.
Automatic configuration is aborted.
Line con0 is available.

Press ENTER to get started.
设备启动后, 使display version命令查看设备版本, 显示如下类似信息表示升级成功:

```
display version
H3C Comware Software,
Copyright (c) 2010-2014 Hewlett-Packard Development Company, L.P.
UWWM20 uptime is 0 weeks, 0 days, 0 hours, 1 minutes
Last reboot reason : User soft reboot
```

```
Boot image: cfa0:/UWWM20-cmw710-boot-a5201p03.bin
Boot image version: 7.1.061,
  Compiled Nov 26 2014 09:38:00
System image: cfa0:/UWWM20-cmw710-system-a5201p03.bin
System image version: 7.1.061,
  Compiled Nov 26 2014 09:38:00
```

Solt 1

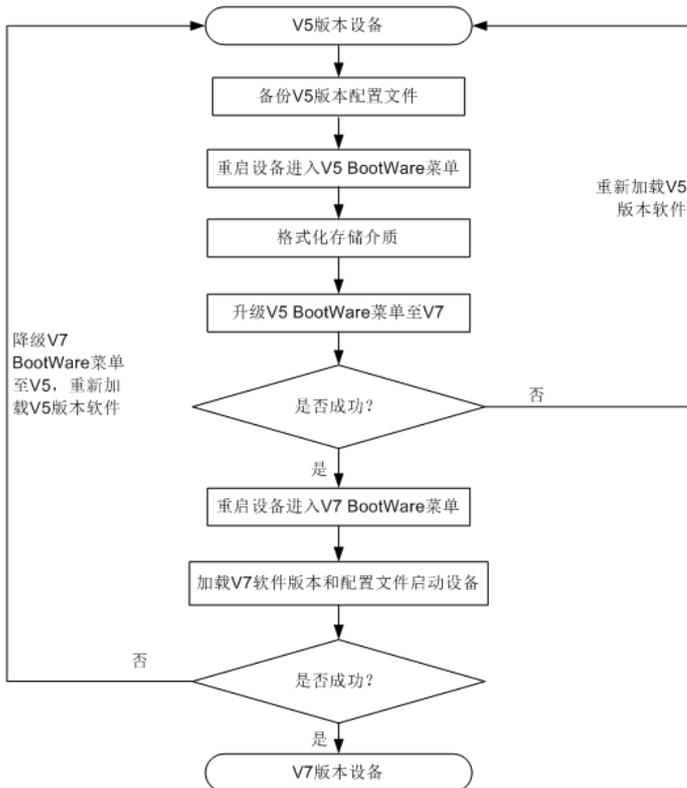
with 1 RMI XLR732 950MHz Processor
2048M bytes DDR2
8M bytes NorFlash Memory
999M bytes CFCard Memory

Hardware Version is Ver.b
FPGA Hardware Version is Ver.a
CPLD Version is 005
FPGA Logic Version is 319
Basic Bootrom Version is 3.03
Extend Bootrom Version is 3.03
[Subslot 0]LSU3WCMD0 Hardware Version is Ver.b

Comware V5的软件包只有一个“.bin”文件，但是Comware V7的软件包包括两个“.bin”文件和一个“.ipe”文件：

- Boot程序（.bin文件）：包含了Linux操作系统的内核，可以提供进程管理、内存管理、文件系统管理和应急shell。格式为“XXXX-cmw710-boot-XXXXX.bin”
- System程序（.bin文件）：包含了设备操作和网络业务相关的模块，包括设备管理、接口管理、配置管理和无线配置。格式为“XXXX-cmw710-system-XXXXX.bin”
- IPE文件：Comware V7的软件包在实际发布的时候，会把boot程序和system程序文件打包成一个IPE文件。格式为“XXXXX.ipe”

升级流程图如下：



注意V5升级V7配置需要参考配置和命令手册先翻译。