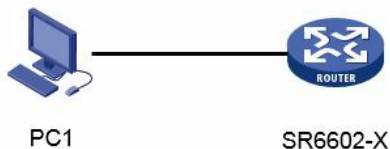# SR66SR66-X系列路由器V5升级V7操作指导

软件升级　何理　2014-10-22 发表

一、 组网需求：

SR66SR66-X系列路由器部分设备V7版本已经陆续发布，其中SR6600系列路由器需要更换支持V7平台的RPE-X3主控以及BKEC扩展板，而SR6602-X以及SR66-X路由器可以平滑升级至V7版本不需要更换硬件，但是需要单独将V5 Bootware升级到V7 Bootware。下面为大家介绍一下SR66系列路由器V5升级V7步骤。

二、 组网图：

三、 配置步骤：

升级V5 Bootware到V7 Bootware

(1) 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。

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+C: Display Copyright

Ctrl+F: Format File System

Enter your choice(0-9): 7

(2) 对于SR6602-X路由器，需要在BootWare主菜单下键入F>，格式化Flash再进行下一步操作。

Ctrl+Z: Access EXTEND-ASSISTANT MENU

Ctrl+C: Display Copyright

Ctrl+F: Format File System

Enter your choice(0-9):

Warning:All files on flash will be lost! Are you sure to format? [Y/N]Y.....

....

Format success.

     (3)   在BootWare主菜单下选择<7>可以进入BootWare操作子菜单：

```
=============================================
|Note:the operating device is cfa0            |
|<1> Backup Full BootWare                      |
|<2> Restore Full BootWare                     |
|<3> Update BootWare By Serial                   |
|<4> Update BootWare By Ethernet                  |
|<0> Exit To Main Menu                        |
===============================================================================
```

Enter your choice(0-4):4

     (4)   在BootWare操作子菜单选择<4>，进入以太网口配置菜单：

```
==================================
|<1> Update Full BootWare                     |
|<2> Update Extend BootWare                    |
|<3> Update Basic BootWare                     |
|<4> Modify Ethernet Parameter                  |
|<0> Exit To Main Menu                        |
===============================================================================
```

Enter your choice(0-4):4

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

Protocol (FTP or TFTP) :tftp
Load File Name   :SR66V3.bin
             :RSE-X2-CMW710.btw
Target File Name   :SR66V3.bin
             :RSE-X2-CMW710.btw
Server IP Address   :192.168.100.4
Local IP Address   :192.168.100.11
Gateway IP Address   :192.168.100.11
FTP User Name   :liujunjie
FTP User Password   :1

表1-1 以太网参数设置说明

显示	说明
'.' = Clear field	快捷键："."表示清除当前输入
'-' = Go to previous field	快捷键："-"表示返回到前一个参数域
Ctrl+D = Quit	快捷键：表示退出参数配置界面
Protocol (FTP or TFTP)	使用的传输协议，可以为FTP或者TFTP
Load File Name	下载文件名，要与下载的实际文件名一致
Target File Name	存储的目标文件名。建议与服务器端文件名一致
Server IP Address	TFTP/FTP服务器的IP地址。
Local IP Address	本地IP地址，为TFTP/FTP客户端设置的IP地址
Gateway IP Address	网关IP地址。当与服务器不在同一网段时需要配置网关地址。
FTP User Name	FTP用户名，传输协议为TFTP时，忽略此选项
FTP User Password	FTP用户密码，传输协议为TFTP时，忽略此选项

     (5)   选择<1>，下载Comware V7版本BootWare文件。

```
========================================
|<1> Update Full BootWare                     |
|<2> Update Extend BootWare                    |
|<3> Update Basic BootWare                     |
```

```
|<4> Modify Ethernet Parameter                    |
|<0> Exit To Main Menu                    |
===============================================================================

Enter your choice(0-4): 1
Loading................Done!
675268 bytes downloaded!
Updating Basic BootWare? [Y/N]Y
Updating Basic BootWare...............Done!
Updating Extend BootWare? [Y/N]Y
Updating Extend BootWare..........Done!
```

  (6) 返回BootWare主菜单，选择<0>，重启设备。

```
====================================
|<1> Update Full BootWare                 |
|<2> Update Extend BootWare                    |
|<3> Update Basic BootWare                 |
|<4> Modify Ethernet Parameter                 |
|<0> Exit To Main Menu                |
===============================================================================

Enter your choice(0-4): 0


=================================================
|Note:the operating device is cfa0               |
|<1> Backup Full BootWare                 |
|<2> Restore Full BootWare                 |
|<3> Update BootWare By Serial                 |
|<4> Update BootWare By Ethernet                  |
|<0> Exit To Main Menu                 |
===============================================================================

Enter your choice(0-4): 0
=====================================================
|<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+C: Display Copyright
Ctrl+F: Format File System
Enter your choice(0-9):0
```

加载Comware V7版本文件

  (7) 设备重启后直接进入Comware V7 BootWare主菜单。

```
BootWare Validating...
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

(8)　　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   :HSR68_Bootware_V5.btw

              :sr66x1-rse.ipe

Target File Name   :HSR68_Bootware_V5.btw

              :sr66x1-rse.ipe

Server IP Address   :192.168.100.4

Local IP Address   :192.168.100.13

Subnet Mask   :255.255.255.0

Gateway IP Address   :192.168.100.13

FTP User Name   :123456

FTP User Password   :******

(9) 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.

256792576 bytes downloaded!

Image file sr66x1-cmw710-boot-A720101.bin is self-decompressing...

Saving file cfa0:/sr66x1-cmw710-boot-A720101.bin ....

....

....

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

Image file sr66x1-cmw710-system-A720101.bin is self-decompressing...

Saving file cfa0:/sr66x1-cmw710-system-A720101.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

    (10) 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 EXTEND-ASSISTANT MENU

Ctrl+C: Display Copyright

Ctrl+F: Format File System

Enter your choice(0-9): 1

Loading...

....

....

....

....

....

....

....

....

....

....

....

....

......Done.

256792576 bytes downloaded!

Loading file sr66x1-cmw710-boot-A720101.bin...Done!

copy file sr66x1-cmw710-boot-A720101.bin(pkgcode:1) to

0x22e9800@0xe0001000

Loading file sr66x1-cmw710-system-A720101.bin...Done!

copy file sr66x1-cmw710-system-A720101.bin(pkgcode:2) to

0xd1fa400@0xe22eb000

Image file sr66x1-cmw710-boot-A720101.bin is self-decompressing.............

....

....

....

....

....

....

....

....

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

System image is starting...Cryptographic Algorithms Known-Answer Tests are runni

ng ...

CPU 0 of slot 0 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.

Starting Known-Answer tests in the engine.

Known-answer test for SHA1 passed.

Known-answer test for HMAC-SHA1 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 engine passed.

Cryptographic Algorithms Known-Answer Tests passed.

Line con0 is available.

Press ENTER to get started.

(11) 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, Version 7.1.054, A720101

Copyright (c) 2004-2014 Hangzhou H3C Tech. Co., Ltd. All rights reserved.

H3C SR6605-F uptime is 0 weeks, 0 days, 0 hours, 5 minutes

Last reboot reason : User reboot

Boot image: mld:/boot.bin

Boot image version: 7.1.054, A720101

Compiled May 21 2014 12:47:12

System image: mld:/system.bin

System image version: 7.1.054, A720101

Compiled May 21 2014 12:47:12

Slot 0: RSE-X2 uptime is 0 week, 0 day, 0 hour, 5 minutes

CPU type: FREESCALE P2020 1000MHz

4096M bytes DDR3 SDRAM Memory

8M bytes Flash Memory

128K bytes NVRAM

Basic   Logic Version: 134.0

Extend   Logic Version: 138.0

Basic   BootWare Version: 2.00

Extend BootWare Version: 2.00

[FIXED PORTS] Console   (Hardware)Ver.A, (Driver)1.0, (Cpld)138.0

[FIXED PORTS] AUX   (Hardware)Ver.A, (Driver)1.0, (Cpld)138.0

[FIXED PORTS] MGE   (Hardware)Ver.A, (Driver)1.0, (Cpld)138.0

四、 配置关键点：

1. SR6602-X设备V5升级V7 Bootware时，需要先格式化Flash，而SR66X设备不需要格式化Flash
；

2. SR6602-X的Bootware与SR66-X的Bootware不一样，两者不可混用；

3. 如果升级失败，希望回退V5版本，按照上述步骤，将V7 Bootware回退为V5 Bootware，然后加载V5软件版本即可；