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Multicast-upgrade Guide for E5170s-22

（Internal Open）

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Contents

[1 Overview 4](#_Toc347428255)

[1.1 Upgrade Instruction 4](#_Toc347428256)

[1.2 Nomenclature 4](#_Toc347428257)

[2 Pre-upgrade Checklist 4](#_Toc347428258)

[2.1 Obtaining Upgrade Script Package and Tools 4](#_Toc347428259)

[2.2 Database Tables 4](#_Toc347428260)

[2.3 Configuration Files 4](#_Toc347428261)

[3 Performing the E5170s-22’s Multicast-upgrade 4](#_Toc347428262)

[3.1 Pre-upgrade work 4](#_Toc347428263)

[3.1.1 Operating System\Database Configuration Files\Kernel Parameter\ Running Status 4](#_Toc347428264)

[3.1.2 Backing Up Important Configuration Data of Operating System and Database 5](#_Toc347428265)

[3.1.3 Obtaining and Verifying the Upgrade Flies 5](#_Toc347428266)

[3.1.4 Obtaining Upgrade Software and Tools 5](#_Toc347428267)

[3.2 Performing the Upgrade and Verifying the Result 5](#_Toc347428268)

[3.2.1 Different Connecting Network methods of E5170s-22 5](#_Toc347428269)

[3.2.2 Setting the IP Address of PC 6](#_Toc347428270)

[3.2.3 Opening the Multicast Upgrade Software 6](#_Toc347428271)

[3.2.4 Choosing the PC’s Network Card connecting the E5170s-22 7](#_Toc347428272)

[3.2.5 Configuring the Multicast Upgrade Software 7](#_Toc347428273)

[3.2.6 Verifying the Product Version of Upgrade File 8](#_Toc347428274)

[3.2.7 Verifying the force upgrade is done or not 9](#_Toc347428275)

[3.2.8 Starting to Send Multicast Packages 9](#_Toc347428276)

[3.2.9 Turning on Power to Upgrade E5170s-22 10](#_Toc347428277)

[3.2.10 The LED Showing during the Upgrade 11](#_Toc347428278)

[3.3 Dealing with the Abnormity during the Upgrade 12](#_Toc347428279)

[3.3.1 Checking Steps to Deal with the Abnormity during the Upgrade 12](#_Toc347428280)

[3.3.2 Debugging\Testing\Eluding Steps with the Abnormity during the Upgrade 12](#_Toc347428281)

[3.4 Rolling Back to the Source Version when Upgrading Unsuccessfully 12](#_Toc347428282)

[3.5 Neatening Steps after Upgrading successfully 12](#_Toc347428283)

[4 Fixing Parts 13](#_Toc347428284)

[4.1 Preparation before fixing 13](#_Toc347428285)

[4.2 Fixing Steps 13](#_Toc347428286)

[4.3 Fixing Check 13](#_Toc347428287)

# Overview

## Upgrade Instruction

This document describes how to carry out the multicast-upgrade for E5170s-22 of V200R001 version, in order to guide the upgrade for production.

## Nomenclature

NA.

# Pre-upgrade Checklist

## Obtaining Upgrade Script Package and Tools

|  |  |
| --- | --- |
| **文件** | **描述** |
| B710C0update\_21.236.07.00.00.gz.bin | E5170s-22 upgrade script package. The first characters of package name are B710C0update which are generated according to MBB’s criterion of product name. The follow-up parts are decided by pack-making method. |
| Multicast\_upgrade\_tool.exe | Multicast sending packet tool: supporting the upgrade files with the style of ‘ bin’. |

**Table 1 Upgrade files and multicast sending packet tool**

## Database Tables

NA.

## Configuration Files

NA.

# Performing the E5170s-22’s Multicast-upgrade

## Pre-upgrade work

Operating System\Database Configuration Files\Kernel Parameter\ Running Status

It could be used on Windows XP/Vista/Win7（Chinese or English）operating system.

Backing Up Important Configuration Data of Operating System and Database

NA.

Obtaining and Verifying the Upgrade Flies

Prepare the files in Table 1 as above.

Obtaining Upgrade Software and Tools

Preparing the PC; HUB（recommending the ‘Quidway S2300 Series 24’ switchboard） and several direct-connect netting twines.

## Performing the Upgrade and Verifying the Result

This section introduces the upgrade methods with the multicast sending packet tool. There are two schemes: single or several CPE upgrade. Except the connecting network method, They are the same during the upgrade. Several CPE upgrade scheme is usually used in production.

Different Connecting Network methods of E5170s-22

According to the number of E5170s-22 which need upgrade, we can connect the network with Figure 1 or Figure 2.

It is used the second method hereinafter. Firstly, connect the PC and HUB correctly. Then turn on the PC and HUB, and use the netting twines to connect PC\HUB\ E5170s-22 respectively. Please don’t turn on E5170s-22.

PC( connecting E5170s-22 network card’s IP address:192.168.1.5）

E5170s-22

**Figure1** The connecting method of single CPE upgrade

PC( connecting HUB network card’s IP address:192.168.1.5）

HUB

E5170s-22 No.1

。。。

。。。

E5170s-22 No.2

E5170s-22 No.3

E5170s-22 No.4

E5170s-22 No.n

**Figure2** The connecting method of several CPE upgrade

Setting the IP Address of PC

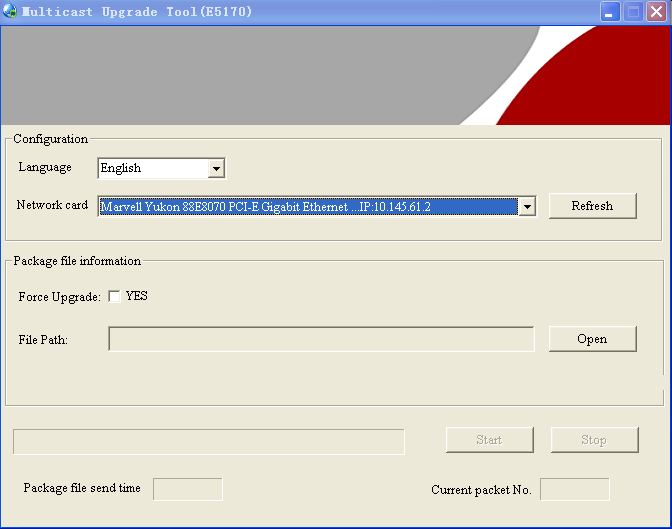
Please set the network card’s IP address manually which is connected with HUB 192.168.1.5（It could be used as ‘192.168.1.\*’; \* is an arbitrary number which is between 2 and 254; so it is in the same network with E5170s-22’s gateway 192.168.1.1）,as below Figure 3 showing.



**Figure 3** Setting the IP address

Opening the Multicast Upgrade Software

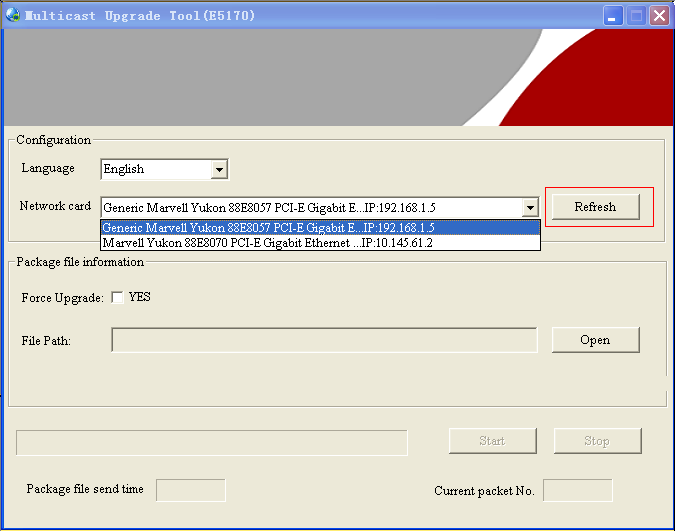
As Figure 4 showing:



**Figure 4** The face of multicast upgrade software

Choosing the PC’s Network Card connecting the E5170s-22

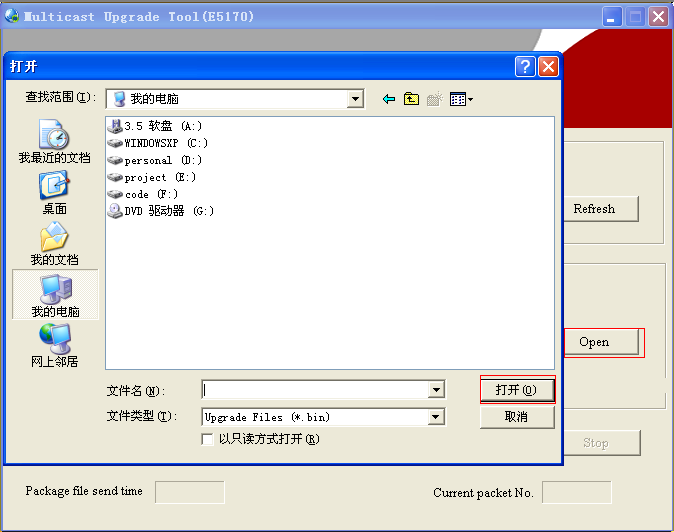
Click the button ‘Refresh’ to refurbish the network card; then choose the card with the IP address 192.168.1.5 as Figure 5 showing.



**Figure 5** Choosing the correct network card（according to setting IP address manually in 3.2.2）

Configuring the Multicast Upgrade Software

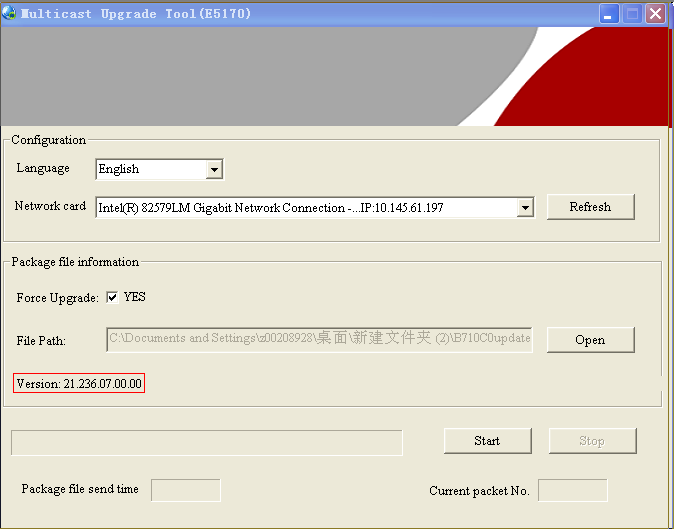
Click the button ‘Open’ to get the dialog box of choosing upgrade files. Then select the right one and click the button ‘Open’ in the dialog box to return to the main face of the multicast software. We should make sure the upgrade file is correct and what you want to update! It’s showed as below in Figure 6.



**Figure 6** Choosing the correct upgrade file

Verifying the Product Version of Upgrade File

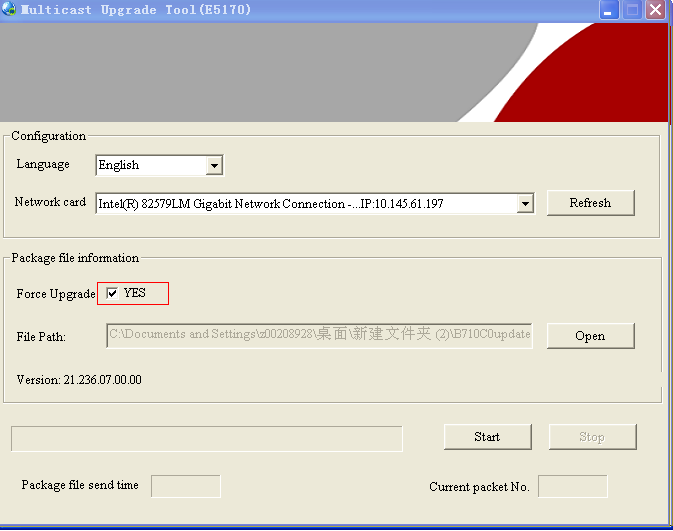
The product version is showed below the file content box. The version is the external release code. If it is showing error such as ‘Error file version...’ or ‘Analyse time-out…’, the upgrade file isn’t correct. Please choose it again. It’s showed as below in Figure 7.



**Figure 7** Showing the product version of upgrade file

Verifying the force upgrade is done or not

If the CPE is in equipment mode and the LT station isn’t carry on, we also can use multicast upgrade, but don’t forget to choose the ’Force Upgrade’ as showed in Figure 8.

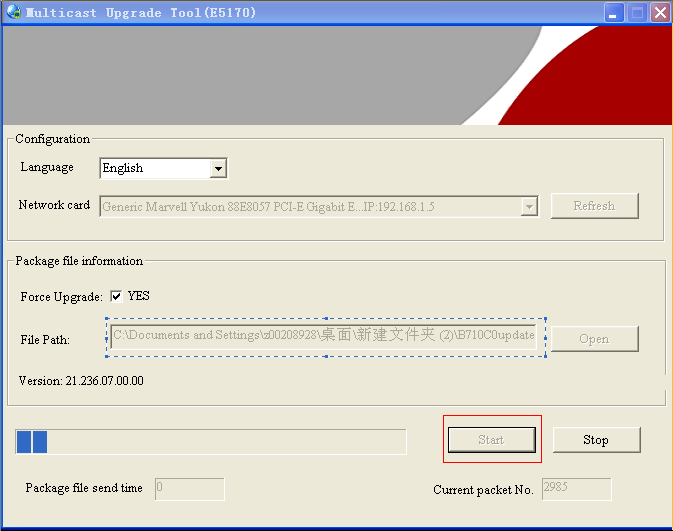


**Figure 8** Force upgrade

**Attention**：If the CPE’s IMEI codes are all 0 and it is in equipment mode(the first digit of NV52110 is 31), please choose ’Force Upgrade’; otherwise we can’t use multicast upgrade( it means the LT station hasn’t been done in the production line).

Starting to Send Multicast Packages

Click the button ‘Start’ to begin to send the multicast packages.



**Figure 9** Starting to Send Multicast Packages

Turning on Power to Upgrade E5170s-22

1. Before turning on the power, the icon of PC network card is showed as Figure 10.



**Figure10** The icon of PC network card before turning on the power of E5170s-22

1. After turning on the power, the icon of PC network card is showed as Figure 11.



**Figure 11** The icon of PC network card after turning on the power of E5170s-22

The LED Showing during the Upgrade

According to《E5170s-22 LED Showing Criterionv.xlsx》, it is listed below:

|  |  |  |
| --- | --- | --- |
| □ | The first LED twinkling green(On 0.2, OFF 0.3s, Period 0.5s） | While it’s no force upgrade and in equipment mode during the multicast upgrade, twinkling the first LED when checking the LT station is failed. It means that doing the UT(multicast upgrade) without the LT station passed in production line.  WiFi,Battery,SMS LED twinkling green |
| ■■ | The first LED showing green and the second LED showing blue | Beginning to upgrade  WiFi,Battery,SMS LED running horse effect |
| ■■ | The first LED and the second LED showing green | The upgrade file has been downloaded successfully  WiFi,Battery,SMS LED showing green |
| ■□ | The first LED showing green and the second LED twinkling green | The upgrade file has been downloaded s unsuccessfully  WiFi,Battery,SMS LED twinkling green |
| ■■■ | The first and the second LED showing green and the third LED showing blue | Beginning installing the upgrade file  WiFi,Battery,SMS LED running horse effect |
| ■■■ | The three LED showing green | The upgrade file has been installed successfully  WiFi,Battery,SMS LED showing green |
| ■■□ | The first two LED showing green,and the third winkling green | The upgrade file has been installed unsuccessfully  WiFi,Battery,SMS LED twinkling green |
| □□□ | The three LED twinkling blue. | Nv restore successfully  WiFi,Battery,SMS LED showing green |
| □□□ | The three LED twinkling green. | Nv restore successfully  WiFi,Battery,SMS LED twinkling green |

## Dealing with the Abnormity during the Upgrade

Checking Steps to Deal with the Abnormity during the Upgrade

When using the method to upgrade file as described in 3.2, if the network is blackout, please make sure that the netting twines are connected correctly. Then try upgrade again with method in the 3.2.

Debugging\Testing\Eluding Steps with the Abnormity during the Upgrade

When using the method to upgrade file as described in 3.2, if the connection is broken(the netting twines connected PC and the CPE are disconnection or the CPE is off) during uploading, please try upgrade again with method in the 3.2.

## Rolling Back to the Source Version when Upgrading Unsuccessfully

Please use the escape way. Click the assembled buttons WPS+WLAN, turn on the CPE and wait the LED 1-3 showing. That means the escape way is working and rolling back to the source version.

## Neatening Steps after Upgrading successfully

Step1 Click the button ‘Stop’ to stop sending the multicast packets;

Step2 Close the multicast sending packet tool;

Step3 Turn off HUB;

Step4 Turn off PC;

Step5 Turn off E5170s-22 and restart it.



**Figure12** Stop sending the multicast packets

# Fixing Parts

## Preparation before fixing

NA.

## Fixing Steps

NA.

## Fixing Check

NA.