

# Xanadu@home

## QUICK INSTALLATION AND CONFIGURATION



- (1) Connect Xanadu@home to network
- (2) Log in website of Xanadu@home
- (3) Basic configuration
- (4) Set firewall or NAT router
- (5) extension configuration
- (6) configure SIP endpoint, calling test
- (7) FXO configuration(optional)
- (8) SIP Trunk configuration(optional)

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**Note:** Before the primary configuration, please careful reading the install handbook, strictly carries on the configuration according to the sequence of operation, like this can reduce the problem in the operating process. If your network or requirement will be changed, you will change configuration of Xanadu@home after you has inquired reseller of Hanlong or engineer of Hanlong. System must be reboot after basic configuration of Xanadu@home has been changed; otherwise it will not be valid. If you want to know more about details of Xanadu@home, Please download our latest official User Manual from <http://www.hanlongtek.com>.

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# 1 Connect Xanadu@home to Network

## 1.1 The Xanadu@home package contains

- One Xanadu@home
- One Universal Power Adaptor
- One Ethernet Cable
- One Quick Installation Guide

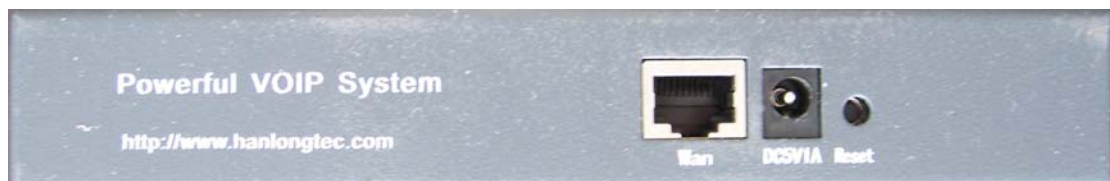
Open package, take out Xanadu@home, Power Adaptor, and Ethernet Cable;

**WARNING: use only the power adapter included in the Xanadu@home package. Using an alternative power adapter may permanently damage the unit.**

## 1.2 Connecting the Xanadu@home

Before using the Xanadu@home, a few connections are required:

- 1) Connect the included Ethernet Cable from the WAN port of the Xanadu@home to the RJ-45 socket of a hub/switch or a router (LAN side of the router).
- 2) Connect the 5V or 9V DC output plug into Xanadu@home's power jack; plug another side of the power adapter into electrical outlet to power on the Xanadu@home.
- 3) The power LED and WAN LED will bright and The Run LED will flash.
- 4) The Xanadu@home is ready for further configuration. Depend on static IP, once the Xanadu@home has its IP address, further configuration can apply via web browser.



Xanadu@home rear view



Xanadu@home Front view

## 2 Log in website of Xanadu@home

Use another Ethernet cable to connect your PC to the same hub that Xanadu@home is connected. Assign your PC to a static IP that is within the same subnet of IP address of Xanadu@home. Launch web browser and type IP address of Xanadu@home at Address of web browser. This will let you to connect to build-in web server of Xanadu@home.


## Hanlong Xanadu Configuration Manager

User Name

Password

Reseller of Hanlong or Hanlong will tell you User name and password of Xanadu@home.

If user name and password is correct, you will log in the Xanadu@home:



- Xanadu Overview
  - Xanadu Licensing
  - Architecture
- Basic Configuration
- Extension Configuration
- SIP Trunk configuration
- FXO Trunk configuration
- Data Base Management
- Device Management
- Customer Services
- Logout

More About Xanadu,  
Please Click>>

## Xanadu WebServer

### Xanadu V1.0.2.1 Overview

**Xanadu** V1.0.2.1 is a fully-featured, embedded SoftSwitch server.Xanadu is the core control device of the **iMediaNet system**.

#### iMediaNet Main Features

- iMediaNet is a powerful system that enables VOIP communications for all workers in a enterprise.
- As well as being a comprehensive solution, the iMediaNet system is easy to install, use, and maintain.
- The system combines the functions of an IP PBX, Internet gateway, network server, and application server.
- By using standard protocols, it is interoperable with phones, gateways, and devices from other manufacturers.
- With the iMediaNet, workers are accessible on a central communication system from any location with an Internet connection.
- Direct connectivity among all users is easily achieved, regardless of their location within a building, campus, city, country, or region.
- Users of the system can log in from the office, from home, while traveling, or from a different site and still have full access to all system features.
- All users, regardless of role within the organization, get a high quality voice system and access to productivity tools that increase their ability to get more done in less time.
- iMediaNet is designed specifically to connect Internet Telephony service providers (ITSPs) using SIP. This allows customers to realize the full benefits of VoIP and save money because of the superior rates offered by ITSPs.

## 3 Basic configuration

After click on “Basic Configuration” on the left of web page:

<ul style="list-style-type: none"> <li>+ Xanadu Overview</li> <li>+ <b>Basic Configuration</b></li> <li>• Extension Configuration</li> <li>• SIP Trunk configuration</li> <li>• FXO Trunk configuration</li> <li>• Data Base Management</li> <li>+ Device Management</li> <li>• Customer Services</li> <li>• Logout</li> </ul> <p>More About Xanadu, Please Click&gt;&gt;</p>	Xanadu Domain Name	<input type="text" value="home.xanadu.hanlongtec.cn"/>
	Xanadu Address Mode	<input checked="" type="radio"/> Domain(Dynamic IP) <input type="radio"/> Domain(Static IP) <input type="radio"/> Static IP
	IP Addresss	<input type="text" value="192.168.0.7"/> (Xanadu IP Address)
	Subnet Mask	<input type="text" value="255.255.255.0"/> (Xanadu IP Subnet Mask)
	Default Router	<input type="text" value="192.168.0.1"/> (Xanadu Default Router IP Address)
	DNS Server 1	<input type="text" value="218.2.135.1"/> (First DNS Server Address)
	DNS Server 2	<input type="text" value="192.168.0.1"/> (Second DNS Server Address)
	SNTP Server	<input type="text" value="207.46.130.100"/> (URI or IP address)
	Xanadu SIP Port 1	<input type="text" value="5060"/>
	Xanadu SIP Port 2	<input type="text" value="26666"/>
	Xanadu SIP Port 3	<input type="text" value="53"/>
	Max. Media Server Port amountount	<input type="text" value="10"/>
	MS Base Port	<input type="text" value="20000"/>
	Conference Access Number 1	<input type="text" value="90000"/>
	Conference Access Number 2	<input type="text" value="90001"/>
	Conference Access Number 3	<input type="text" value="90002"/>
	MAC Address	<input type="text" value="08:00:3E:00:00:07"/>
	<input type="button" value="Submit"/>	

**Please check parameters of Basic Configuration carefully. These parameters have been configured carefully according to your network and requirement before leave factory because it is so important to system. You can't change it at random. If your network or requirement will be changed, you will change configuration of Xanadu@home after you has inquired reseller of Hanlong or engineer of Hanlong.**

## 4 Set firewall or NAT router

Firewall or NAT router of enterprise must change some configuration:

- The UDP Port of “Xanadu@home SIP Port 1” will be forward to the corresponding UDP Port of the Xanadu@home.
- The UDP Port of “Xanadu@home SIP Port 2” will be forward to the corresponding UDP Port of the Xanadu@home.
- The UDP Port of “Xanadu@home SIP Port 3” will be forward to the corresponding UDP Port of the Xanadu@home.
- UDP Port between **MS Base Port** to **(MS Base Port + Max. Media Server Port amount count \*4)** will be forward to the corresponding UDP Port range of the Xanadu@home.
- Assigned a TCP port which it will be forward to 80 TCP port of the Xanadu@home. This will let you to connect to build-in web server of Xanadu@home even from Internet.

## 5 Extension configuration

Click on “Extension Configuration”:



# Xanadu WebServer

Extension No.	Extension Name	Extension Description	Extension Control
1	86000	William's	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
2	86001		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
3	86002	William	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
4	86003	Navy	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
5	86004		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
6	86005		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
7	86006		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
8	86007		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
9	82004		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
10	82005		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
11	82006		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
12	82007		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
13	82008		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
14	82009		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
15	82010		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
16	82000		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
17	82001		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
18	82002		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
19	82003		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
20	86008		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
21	86009		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
22	86010		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
23	86011		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
24	86012		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
25	86013		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
26	86014		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
27	86015		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
28	86016		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
29	86017		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
30	86018		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
31	86019		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
32	86020	Navy's	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
33	86021		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>

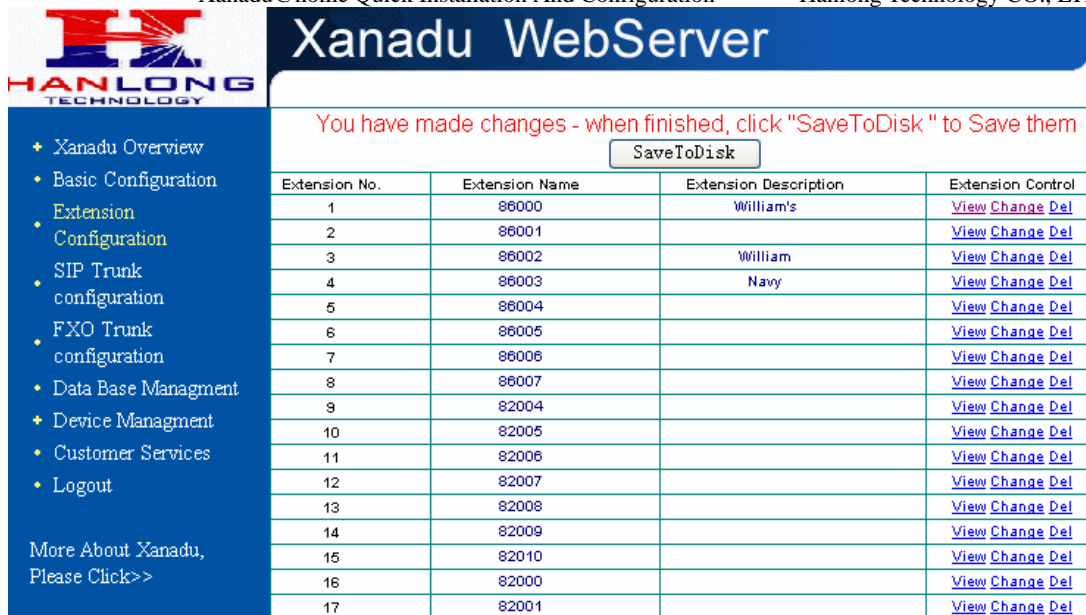
- + Xanadu Overview
- Basic Configuration
- Extension Configuration
- SIP Trunk configuration
- FXO Trunk configuration
- Data Base Management
- + Device Management
- Customer Services
- Logout

More About Xanadu, Please Click>>

Click “Add” or “Change”, you can add or change extension.

Extension NO.	<input type="text" value="1"/>
SIP User ID	<input type="text" value="86000"/> (the user part of an SIP address)
Authenticate Password	<input type="password"/> (purposely not displayed for security protection)
Domain Name	<input type="text" value="home.xanadu.hanlongtec.cn"/>
User Right	Outbound - Allow <input type="button" value="v"/>
Service Attribute	<input type="text"/> (optional)
CFU Number	<input type="text"/>
User Group	Unallocated <input type="button" value="v"/>
Extension Description	<input type="text" value="William's"/>
<input type="button" value="Submit"/> <input type="button" value="Cancel"/> <input type="button" value="Back"/>	

Type in the number of extension, the assigned password and the other parameter and then click on “Submit”:



**Xanadu WebServer**

You have made changes - when finished, click "SaveToDisk " to Save them

Extension No.	Extension Name	Extension Description	Extension Control
1	86000	William's	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
2	86001		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
3	86002	William	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
4	86003	Navy	<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
5	86004		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
6	86005		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
7	86006		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
8	86007		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
9	82004		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
10	82005		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
11	82006		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
12	82007		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
13	82008		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
14	82009		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
15	82010		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
16	82000		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>
17	82001		<a href="#">View</a> <a href="#">Change</a> <a href="#">Del</a>

Click on “SaveToDisk”



**Xanadu WebServer**

**You changes have been saved**

**Please wait 5 second and then reboot the device**

Click on “Continue”, you can continue to configure other extension.

After you finish configuration, you can click on “Reboot”, it will reboot Xanadu@home and the new configuration will be valid.

## 6 Configure SIP endpoint, calling test

We have configured two extensions on Xanadu@home, and then we will configure two of SIP endpoint for calling test. For example, we configure Unicorn 2101 -- ATA product of Hanlong.

Configuration example of extension “86000”:

<p><b>HANLONG</b></p> <p><i>VOIP Device Configuration</i></p> <p>+ DEVICE STATUS</p> <p>+ BASIC OPTIONS</p> <p>- SUPER OPTIONS</p> <p><a href="#">SIP Settings</a></p> <p><a href="#">Audio Settings</a></p> <p><a href="#">Dial Settings</a></p> <p><a href="#">Other Settings</a></p>	<b>SUPER OPTIONS --&gt; SIP Settings</b>	
	SIP Server Address	home.xanadu.hanlongtec.cn:26666 (IP address or URL)
	Outbound Proxy	192.168.0.100 (IP address or URL,if any)
	SIP User ID	86000 (Assigned user ID or phone number)
	Account ID	86000 (Can be same as or different from <b>SIP User ID</b> )
	Authentication Password	•••• (For security,password does not display)
	Name	(Optional)
	Home NPA	
	Use DNS SRV	<input type="radio"/> Yes <input checked="" type="radio"/> No
	User ID is phone number	<input type="radio"/> Yes <input checked="" type="radio"/> No
	SIP Registration	<input checked="" type="radio"/> Yes <input type="radio"/> No
	Unregister On Reboot	<input type="radio"/> Yes <input checked="" type="radio"/> No
	SIP INFO Safety	<input type="radio"/> Yes <input checked="" type="radio"/> No (*Yes*,Enable incoming SIP messages from SIP server only)
	Register Expiration	1 Minutes (Default is 1 hour, max 45 days)
	Local SIP Port	5060 (Default 5060)
	Local RTP Port	5004 (1024-65535, default 5004)
	Use Random Port	<input type="radio"/> Yes <input checked="" type="radio"/> No
	NAT Traversal	<input checked="" type="radio"/> No <input type="radio"/> Yes, STUN server is:
	Keep Connected Interval	20 Seconds (Default 20 seconds)
	Use NAT IP	(If specified, this IP address is used in SIP/SDP message)
Proxy-Require	(If specified, the content will appear in Proxy-Require header)	

In this case, we assume Unicorn 2101 which extension number is “86000” and the Xanadu@home are in the same LAN. So “Outbound Proxy” of Unicorn will be set to IP address of the Xanadu@home.

Configuration example of extension “86001”:

<p><b>HANLONG</b></p> <p><i>VOIP Device Configuration</i></p> <p>+ DEVICE STATUS</p> <p>+ BASIC OPTIONS</p> <p>- SUPER OPTIONS</p> <p><a href="#">SIP Settings</a></p> <p><a href="#">Audio Settings</a></p> <p><a href="#">Dial Settings</a></p> <p><a href="#">Other Settings</a></p>	<b>SUPER OPTIONS --&gt; SIP Settings</b>	
	SIP Server Address	home.xanadu.hanlongtec.cn:26666 (IP address or URL)
	Outbound Proxy	(IP address or URL,if any)
	SIP User ID	86001 (Assigned user ID or phone number)
	Account ID	86001 (Can be same as or different from SIP User ID)
	Authentication Password	•••• (For security,password does not display)
	Name	(Optional)
	Home NPA	
	Use DNS SRV	<input type="radio"/> Yes <input checked="" type="radio"/> No
	User ID is phone number	<input type="radio"/> Yes <input checked="" type="radio"/> No
	SIP Registration	<input checked="" type="radio"/> Yes <input type="radio"/> No
	Unregister On Reboot	<input type="radio"/> Yes <input checked="" type="radio"/> No
	SIP INFO Safety	<input type="radio"/> Yes <input checked="" type="radio"/> No ("Yes",Enable incoming SIP messages from SIP server only)
	Register Expiration	1 Minutes (Default is 1 hour, max 45 days)
	Local SIP Port	5060 (Default 5060)
	Local RTP Port	5004 (1024-65535, default 5004)
	Use Random Port	<input type="radio"/> Yes <input checked="" type="radio"/> No
	NAT Traversal	<input checked="" type="radio"/> No <input type="radio"/> Yes, STUN server is: _____
	Keep Connected Interval	20 Seconds (Default 20 seconds)
	Use NAT IP	(If specified, this IP address is used in SIP/SDP message)
	Proxy-Require	(If specified, the content will appear in Proxy-Require header)
	Send DTMF	<input type="radio"/> In-Audio <input checked="" type="radio"/> Via RTP (RFC2833) <input type="radio"/> Via SIP INFO
	DTMF Payload Type	101

In this case, we assume Unicorn 2101 which extension number is “86001” and the Xanadu@home aren’t in the same LAN. So “Outbound Proxy” of Unicorn will not be set .

After configuration are finish, you hook off phone which is connect to Unicorn2101, and then dial “#00\*”, you will hear voice such as “caller number is 86000” or “caller number is 86001”, it mean extension configuration of Xanadu@home and configuration of Unicorn2101 are right. You can try calling test between “86000” and “86001”.

**If you want to know more about details of Unicorn2101, Please download our latest official User Manual of Unicorn2101 from <http://www.hanlongtek.com>.**

## 7 FXO configuration

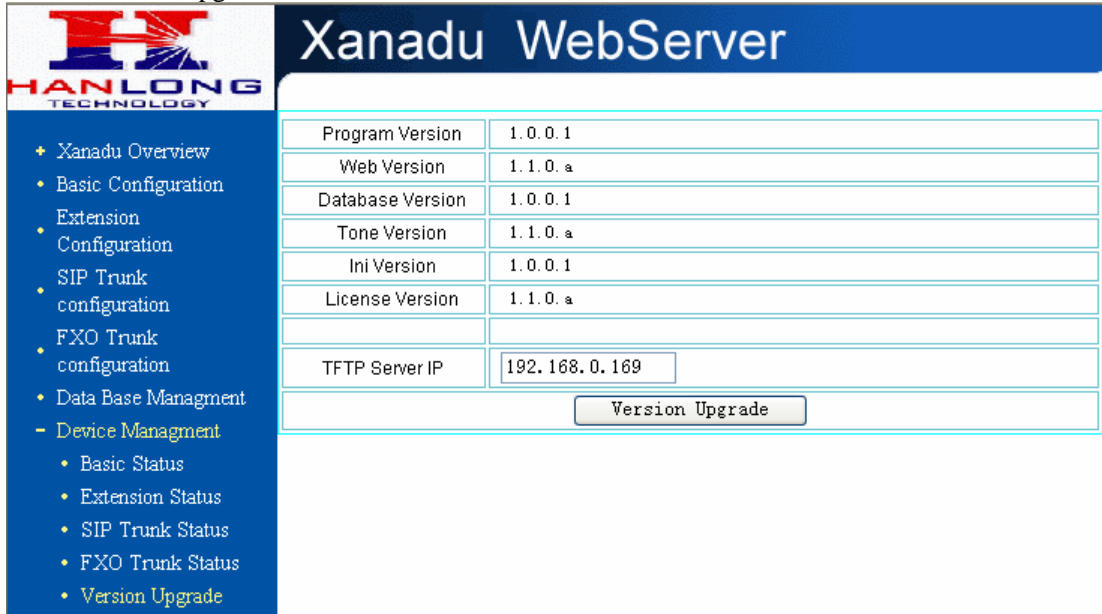
**Note: About FXO Trunk disposition method, please in detail refer to Xanadu@home's user manual, we do not make the description here.**

## 8 SIP configuration

**Note: About SIP Trunk disposition method, please in detail refer to Xanadu@home's user manual, we do not make the description here.**

## 9 Appendix A - Local TFTP Upgrade Guide

Click "Version Upgrade":



Xanadu WebServer	
Program Version	1.0.0.1
Web Version	1.1.0.a
Database Version	1.0.0.1
Tone Version	1.1.0.a
Ini Version	1.0.0.1
License Version	1.1.0.a
TFTP Server IP	<input type="text" value="192.168.0.169"/>
<input type="button" value="Version Upgrade"/>	

Software upgrade can be done via TFTP.

Firmware upgrade may take as long as 1 to 20 minutes over Internet, or just 20+ seconds if it is performed on a LAN. **It is recommended to conduct firmware upgrade in a controlled LAN environment if possible.**

Alternatively, user can download a free TFTP server and conduct local firmware upgrade. A free windows version TFTP server is available for download from <http://support.solarwinds.net/updates/New-customerFree.cfm>.

Our latest official release can be downloaded from <http://www.hanlongtek.com>. Unzip the file and put all of them under the root directory of the TFTP server.

Put the PC running the TFTP server and the Xanadu@home in the same LAN segment. Please go to File -> Configure -> Security to change the TFTP server's default setting from "Receive Only" to "Transmit Only" for the firmware upgrade.

Start the TFTP server, in the Xanadu@home web Version Upgrade page, configure the TFTP Server IP address with the IP address of the PC, and then click button "Version Upgrade".

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