



Hot Standby

Applicable to Coovox-U100 Only

1.General Introduction

Hot Standby, is a popular function for enterprise to use two same devices to avoid any failure of the system. During the telephony industry, the IP PBX need to meet the requirement as well. That is, two sets CooVox-U100 connected together via LAN port directly, share the configuration files and data together. One of U100 can be defined as master, and the other one can be defined as slave. When the master is broke down, the slave will continue working instead of the master.

After configuring two set U100, virtual IP of the two devices is the public IP, you can visit them by virtual IP. And IP Phones need to register on the virtual IP.

When start them after configuration, the master system will use the configuration of separate partition/dev/drbd0, so the configuration in slave system is empty, unless it's transferred to master system.

The slave system need to be configured when the working status is well after the master system has finished configuration.

You cannot change anything about Hot Standby after it's enabled. Please disable this function before change if necessary.

2.Settings on GUI

Initial value of Hot Standby is shown below:

Hot Standby

Hot Standby
Hot Standby Log

Hot Standby Settings

Enable:	<input type="checkbox"/>
Hot Standby Mode:	Slave ▾
Local Hostname:	<input style="border: 1px solid red;" type="text"/>
Remote Hostname:	<input style="border: 1px solid red;" type="text"/>
Local IP:	<input style="border: 1px solid red;" type="text"/>
Local Heart Line Port:	7789
Local Port:	7788
Remote IP:	<input style="border: 1px solid red;" type="text"/>
Remote Heart Line Port:	7790
Remote Port:	7788
Virtual IP:	<input style="border: 1px solid red;" type="text"/>
SYNC Network Rate:	100Mbps ▾
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	<input type="text"/>

Save
Cancel

Status: Disabled

Pic.1 Hot standby (Initial)

Item	Explanation
Hot Standby Mode	Select the mode: Master or Slave
Local Hostname	Fill in the host name(Can be customized defined. Two device host name cannot be same, nor whole figure; otherwise, it cannot be enabled)
Remote Hostname	Fill in the remote host name
Local IP	Fill in the local LAN IP(not the same net segment with WAN)
Local Heart Line Port	Fill in the heart line port of this device (Modify on the default port and keep the port of two hosts opposite; Local Heart Line Port of the master must be same as the Remote Heart Line Port of the slave.
Local Port	Fill in the local port(Keep default, and same local port on two hosts)
Remote IP	Fill in the LAN IP of remote slave host
Remote Heart Line Port	Heart line port of remote slave host (modify on the default port and keep the port of two hosts opposite; Local Remote Heart Line Port of the slave must be same as the master.
Remote Port	Fill in the remote port(Keep default, and same local port on two hosts)
Virtual IP	Virtual IP (Public IP of two hosts. IP phone need to register to this IP

	address)
SYNC Network Rate	Synchronize the network rate (Keep default)
Status Fresh Time(sec)	Frequency to refresh (Keep default)
Remote Link Timeout(sec)	Timeout for remote link (Keep default)
Administrator Email	Administrator's Email (When remote host is abnormal, there will be warning message sent to this email. You need to finish the SMTP settings to send email)

3. Example of Settings

1) Configure PBX A by visiting 192.168.1.163. See below dialog:

Hot Standby Settings

Enable:

Hot Standby Mode: Master ▾

Local Hostname: testA

Remote Hostname: testB

Local IP: 192.168.1.163

Local Heart Line Port: 7790

Local Port: 7788

Remote IP: 192.168.1.162

Remote Heart Line Port: 7789

Remote Port: 7788

Virtual IP: 192.168.3.60

SYNC Network Rate: 100Mbps ▾

Status Fresh Time(sec): 5

Remote Link Timeout(sec): 15

Administrator Email: 52858398@qq.com

Save Cancel

Status: Role:Primary (Modify configuration on primary)
Connection:WFCConnection

Pic.2 Master

The Asterisk will reboot automatically after clicking Save.

If the Status is shown as above red blank, the configuration is successful and you can continue configuration on the slave.

(For detail information of the status and handling ways, please refer to chapter 4. Status Explanation.)

2) Continue configuration on PBX B by visiting 192.168.1.162
Hot Standby

Hot Standby Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	Slave ▾
Local Hostname:	testB
Remote Hostname:	testA
Local IP:	192.168.1.162
Local Heart Line Port:	7789
Local Port:	7788
Remote IP:	192.168.1.163
Remote Heart Line Port:	7790
Remote Port:	7788
Virtual IP:	192.168.3.60
SYNC Network Rate:	100Mbps ▾
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	52858398@qq.com

Save Cancel

Status: Disabled

Pic.3 Slave

The Asterisk will reboot automatically after clicking Save. When login again, you will see the Pic.4 Slave (Success) shows connection succeeded.

Hot Standby

Hot Standby Hot Standby Log

Hot Standby Settings

Enable:	<input checked="" type="checkbox"/>
Hot Standby Mode:	Slave ▾
Local Hostname:	testB
Remote Hostname:	testA
Local IP:	192.168.1.162
Local Heart Line Port:	7789
Local Port:	7788
Remote IP:	192.168.1.163
Remote Heart Line Port:	7790
Remote Port:	7788
Virtual IP:	192.168.3.60
SYNC Network Rate:	100Mbps ▾
Status Fresh Time(sec):	5
Remote Link Timeout(sec):	15
Administator Email:	452858398@qq.com

Save Cancel

```
Status: Role:Secondary (Modify configuration on primary )
Connection:SyncTarget
```

Pic.4 Slave (Success)

The red blank above shows the status of the slave, which means the data of master is synchronizing to the slave and the synchronization will last for about 20 seconds.

4. Status Explanation

Status is shown at the bottom of System→Hot Standby, see it from red blank in the above Pic. 5. Status is not displayed in time, but refresh per 5 second. (So it may be same status in a short time after the status is actually changed)

```
Status: Role:Primary (Modify configuration on primary )
Connection:Connected
```

Pic.5 Primary (The host is master)

```
Status: Role:Secondary (Modify configuration on primary )
        Connection:Connected
```

Pic.6 Secondary (The host is slave)

```
Status: Role:Secondary (Modify configuration on primary )
        Connection:Connected
```

Pic.7 Connected (This host is connected with the remote device.)

```
Status: Role:Primary (Modify configuration on primary )
        Connection:WFConnection
```

Pic.8 WFConnection (Waiting for remote connection)

Pic.8 WFConnection: the configuration is successful, and hot standby is enabled, the host is waiting for the remote connection.

```
Status: Role:Primary (Modify configuration on primary )
        Connection:StandAlone
```

Pic.9 StandAlone

Pic.9 StandAlone: the initial connection is failed, and the host stands alone. You need to configure again and reboot the IP PBX.

```
Status: Role:Secondary (Modify configuration on primary )
        Connection:SyncTarget
```

Pic. 10 SyncTarget

Pic.10 SyncTarget: The master is synchronizing the configuration file with the slave

Note: All Asterisk configuration files must be configured after login with virtual IP(Can only be configured on the Master device), otherwise the configuration is invalid.