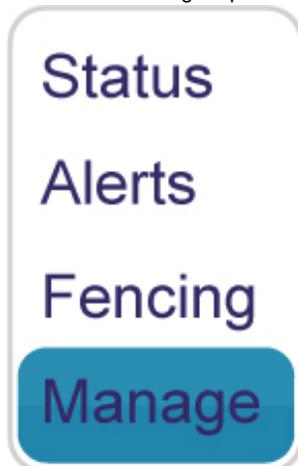# FreePBX HA-Managing Nodes

> **Note**
>
> Before swapping the roles of the nodes, ensure that the replication has finished! Attempting to set a node to standby before it has finished replicating will **break your cluster** and require manual intervention to fix.

If you would like to force your cluster to switch which node is active, follow these steps:

- On your Master Node (Floating IP Address), click on the **High Availability** module under Settings.
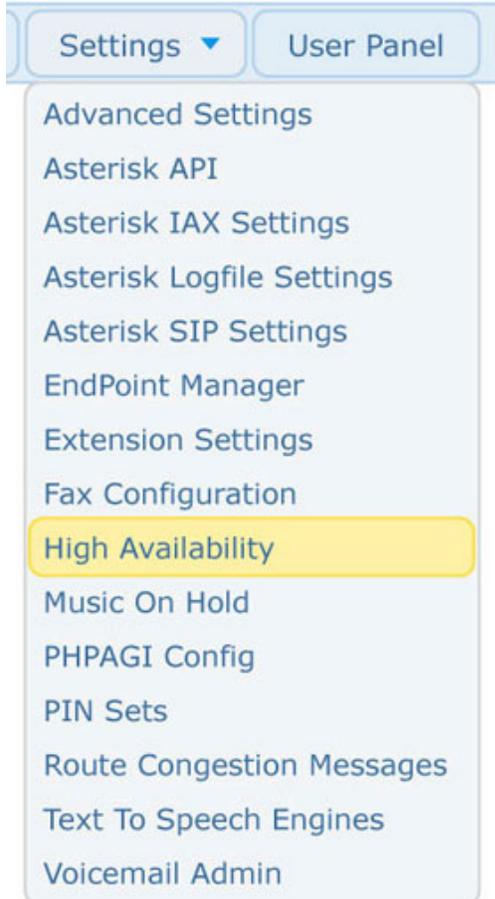
- Click on the "Manage" option.

- Here, you can see which nodes are online at the top. You can choose to put the Master Node into standby mode, which will force the cluster to move all the services over to the Slave Node and bring it up as the Master.

FreePBX HA Management

This node is: **freepbx-a (Online)**
Other node is: **freepbx-b (Online)**
Management tools:

This Host (freepbx-a) | Standby | Details |

Other Host (freepbx-b) | Standby | Details |

Cluster Management:

Cluster health check | Run |

- Click the **Standby** button next to the node you want to put in standby. Generally it would be **This Host,** since you would normally be logged into the floating IP address that points to the Master Node. Please note, this will take the active server offline. The server will no longer receive syncs until you re-enable it. All active calls will be lost, so only do this during down time.

Warning: This will cause an outage

Setting the current node to standby will interrupt any calls in progress. It is not advisable to do so during production hours. The server will attempt a graceful shutdown of the services (eg, it will try to wait until there are no active calls) but will do a hard shutdown of asterisk after 30 seconds.
Are you sure you want to proceed?
   Yes, proceed   No, abort

- You'll now see that freepbx-a is in standby mode and freepbx-b is online.

FreePBX HA Management

This node is: **freepbx-b (Online)**
Other node is: **freepbx-a (Standby)**
Management tools:

This Host (freepbx-b) | Standby | Details |

Other Host (freepbx-a) | Online | Details |

Cluster Management:

Cluster health check | Run |

- The **Status** page will show that freepbx-b is the current active Master and freepbx-a is not being synced.

FreePBX HA Status

This node is: **freepbx-b (Online)**
Other node is: **freepbx-a (Standby)**

Service Status:

MySQL Database	(mysql)	✔ ✔ ✔
The Asterisk service	(asterisk)	✔ ✔ ✔ ✔
Apache Web Server	(httpd)	✔ ✔ ✔

DRBD Stuff

freepbx-a

mysql: **NodeDown**
Volume not registered. Possibly Node is in Standby?
asterisk: **NodeDown**
Volume not registered. Possibly Node is in Standby?
httpd: **NodeDown**
Volume not registered. Possibly Node is in Standby?

freepbx-b

mysql: **WFConnection**
My/Other Connection state: **Primary/Unknown**
My/Other Data State: **UpToDate/DUnknown**
asterisk: **WFConnection**
My/Other Connection state: **Primary/Unknown**
My/Other Data State: **UpToDate/DUnknown**
httpd: **WFConnection**
My/Other Connection state: **Primary/Unknown**
My/Other Data State: **UpToDate/DUnknown**

WFConnection   *This means that this node is waiting for the other node to become available*
NodeDown   *This machine is unable to reach the other node*

- If you go back to the **Manage** option, you can now re-enable freepbx-a to bring it back online. It will start syncing from freepbx-b to get up-to-date with any changes and become the active slave. Please note, if a node is in standby mode, it can not become active in the event that your Master Node crashes, so it's not recommended to leave a node in standby mode. You want it online and in sync. Press the **Online** button to bring the node back online.

FreePBX HA Management

This node is: **freepbx-b (Online)**
Other node is: **freepbx-a (Standby)**
Management tools:

This Host (freepbx-b)   [Standby] [Details]

Other Host (freepbx-a)   [Online] [Details]

Cluster Management:

Cluster health check   [Run]

- You can now see both servers are back online.

FreePBX HA Management

This node is: **freepbx-a (Online)**
Other node is: **freepbx-b (Online)**
Management tools:

This Host (freepbx-a)   [Standby] [Details]

Other Host (freepbx-b)   [Standby] [Details]

Cluster Management:

Cluster health check   [Run]

- Go back to the **Status** page and you'll see it shows that both nodes are online and in sync.

FreePBX HA Status

This node is: **freepbx-b (Online)**
Other node is: **freepbx-a (Online)**

Service Status:

MySQL Database	(mysql)	✔ ✔ ✔
The Asterisk service	(asterisk)	✔ ✔ ✔ ✔
Apache Web Server	(httpd)	✔ ✔ ✔

DRBD Stuff

freepbx-a		**freepbx-b**	
mysql: **Connected**		mysql: **Connected**	
My/Other Connection state:	Secondary/Primary	My/Other Connection state:	Primary/Secondary
My/Other Data State:	UpToDate/UpToDate	My/Other Data State:	UpToDate/UpToDate
asterisk: **Connected**		asterisk: **Connected**	
My/Other Connection state:	Secondary/Primary	My/Other Connection state:	Primary/Secondary
My/Other Data State:	UpToDate/UpToDate	My/Other Data State:	UpToDate/UpToDate
httpd: **Connected**		httpd: **Connected**	
My/Other Connection state:	Secondary/Primary	My/Other Connection state:	Primary/Secondary
My/Other Data State:	UpToDate/UpToDate	My/Other Data State:	UpToDate/UpToDate

Connected   *The connection between nodes has been successfully established*