

ACCESSING YOUR POWER CONTROLLER FROM THE INTERNET

This paper assumes that you have already configured the power controller to work inside your network. It also assumes that the Same Subnet Only option is un-checked in the network setup your power controller.

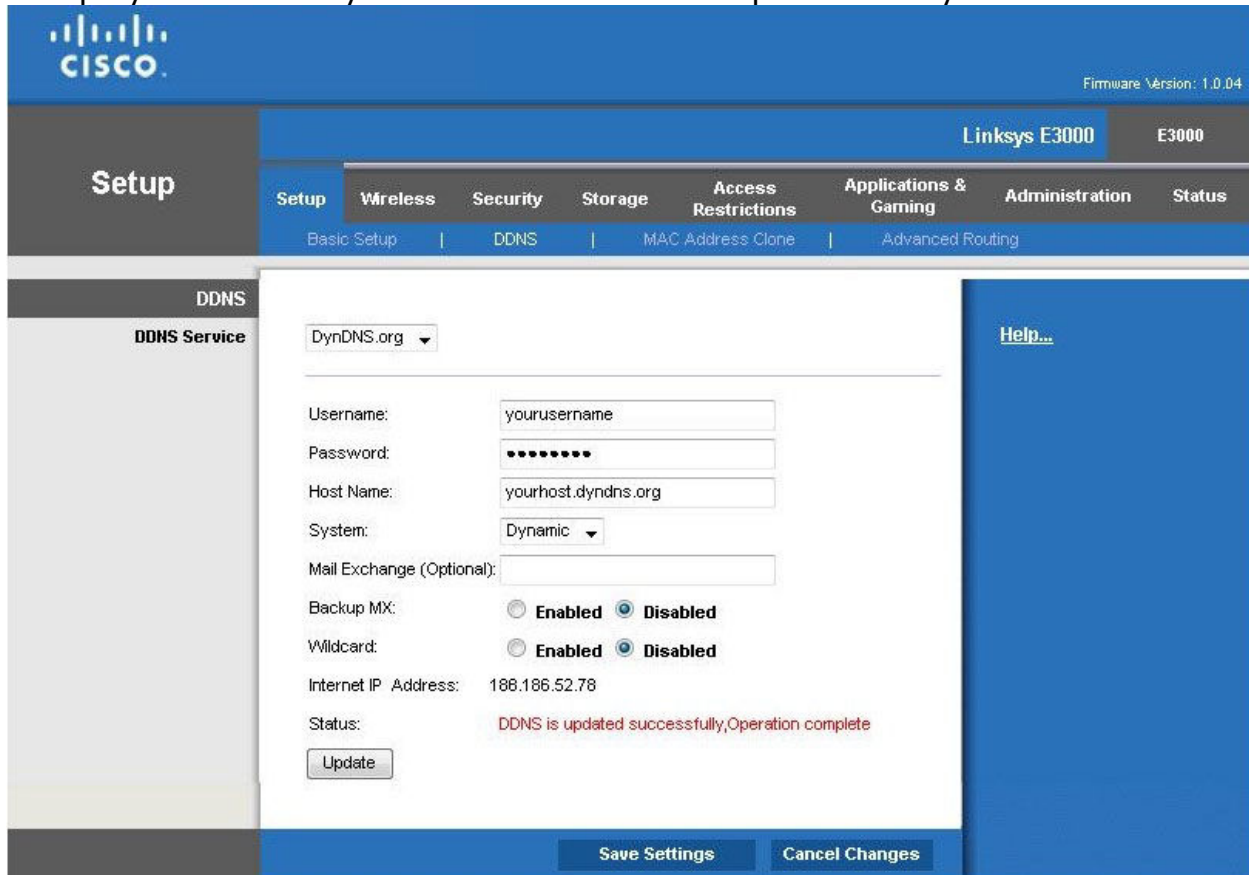
DYNAMIC DNS

Do you know where your network is?

If you do not have a static IP address for network, your IP address may change over time. To ensure access from anywhere, you need to set up a dynamic name service.

There are several service providers and some are free. <http://dyn.com/dns/> and <http://www.tzo.com/> are two popular providers.

Set up Dynamic DNS in your router. Here is an example in a LinkSys E3000 Router



The screenshot shows the Cisco LinkSys E3000 router's web interface. The top navigation bar includes 'Setup', 'Wireless', 'Security', 'Storage', 'Access Restrictions', 'Applications & Gaming', 'Administration', and 'Status'. The 'Setup' menu is expanded to show 'Basic Setup', 'DDNS', 'MAC Address Clone', and 'Advanced Routing'. The 'DDNS' section is active, showing the 'DDNS Service' configuration. The 'DynDNS.org' service is selected. The configuration fields are: Username: yourusername, Password: (masked with dots), Host Name: yourhost.dyndns.org, System: Dynamic, Mail Exchange (Optional): (empty), Backup MX: Disabled, Wildcard: Disabled, Internet IP Address: 188.186.52.78. A status message reads 'DDNS is updated successfully, Operation complete'. There are 'Update', 'Save Settings', and 'Cancel Changes' buttons.

If your router does not support dynamic DNS, then you'll need to install a dynamic DNS updater program which will be provided by the service provider that you choose.

PORT FORWARDING

If you have a dynamic IP address, then you will need to set up port forwarding on your router.

The way to set up port forwarding will vary from manufacturer to manufacturer and model to model, but the concept is the same.

You'll likely want your power controller on a non-standard port so that it is not too easy to find by the troublemakers on the Internet. I will assume in this paper that you set up your power controller at port 366.

Go into your Router Setup and look for Port Forwarding or Applications and Gaming. You'll want to choose single port forwarding if given a choice.

Make an entry for your power controller. The external port is the Internet Port and the Internal Port is the port used in the network setup of the power controller. The IP Address is the IP address of your power controller. Some Port Forwarding configurations only offer an external port option and assume that the internal port will be the same.

The screenshot shows the Cisco Linksys E3000 router's web interface. The 'Applications & Gaming' section is selected, and the 'Single Port Forwarding' tab is active. A table lists several port forwarding rules. The 'LPC' rule is highlighted in red.

Application Name	External Port	Internal Port	Protocol	To IP Address	Enabled
None	---	---	---	192.168.11.0	<input type="checkbox"/>
None	---	---	---	192.168.11.0	<input type="checkbox"/>
None	---	---	---	192.168.11.0	<input type="checkbox"/>
None	---	---	---	192.168.11.0	<input type="checkbox"/>
None	---	---	---	192.168.11.0	<input type="checkbox"/>
LPC	366	366	TCP	192.168.11.9	<input checked="" type="checkbox"/>
Wake On LAN	9	9	UDP	192.168.11.10	<input checked="" type="checkbox"/>
VPDU	365	365	TCP	192.168.11.8	<input checked="" type="checkbox"/>
Minecraft	25565	25565	Both	192.168.11.14	<input checked="" type="checkbox"/>
Ventrillo	3784	3784	Both	192.168.11.14	<input checked="" type="checkbox"/>

Once configured, attempt to access your power controller from the external IP address via the dynamic DNS name or the IP address.

In this example, on this page, <http://188.186.52.78:366> or <http://yourhost.dyndns.org:366>

If you are able to access via the dynamic DNS name, then you are properly configured for dynamic DNS as well.