Webspike 1.0 User's Manual

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Introduction

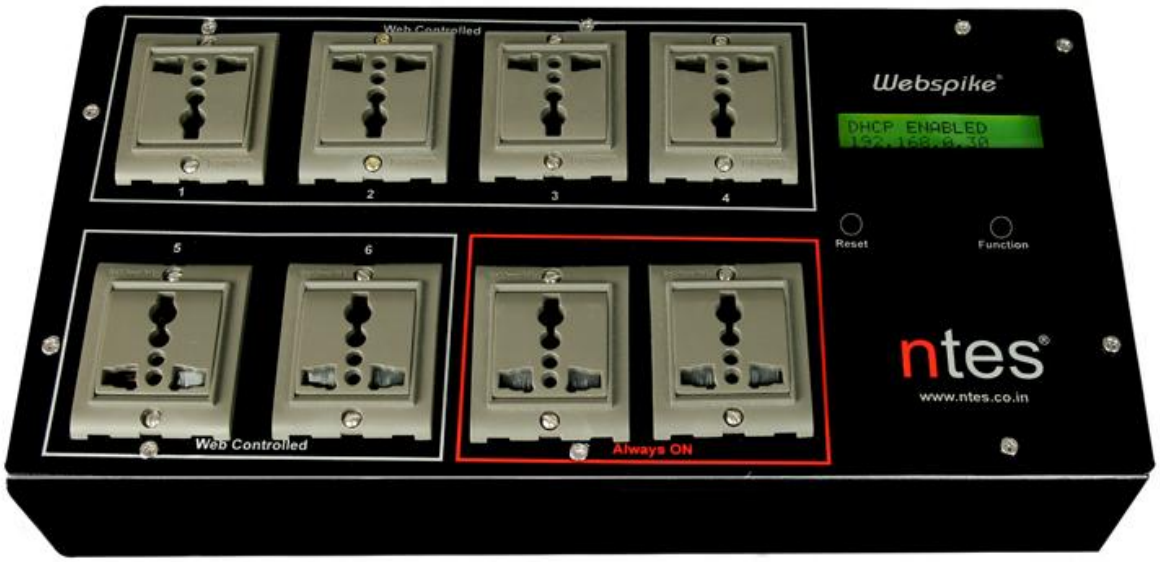
Webspike provides the flexibility to power on, power off or reboot IT Infrastructure from a remote site. Webspike lets you remotely control servers, routers, network switches and other electrical equipment securely through any web browser. Webspike lets you manage your equipment through laptop, desktop, Mobile or a Tablet. This manual describes the features, specifications and functionality of Webspike version 1.0.

Webspike 1.0 features

- Manage IT infrastructure and electrical equipment remotely through web.
- Remotely switch off Equipment during idle times to save on power bills.
- Easy to setup and use.
- No requirement of additional software needed for using the product.
- Provides password authenticated access to Webspike.
- Supports up to eight users.
- Control user access to individual power outlets.
- Backlit 2X16 LCD displays Network Configuration.
- Six power outlets which can be controlled through web.
- Two power outlets which are always powered on.
- RS232 Serial port interface for network configuration.
- User defined labels for power outlets for ease of management.
- Supports up to 1300 watts of power.
- Supports static and DHCP IP address assignment.
- Reset and function buttons provide the capability to reset Webspike to factory default settings.

Webspike 1.0 specifications

- External casing made of high quality aluminium with powder coating.
- All plastics are made of high quality fire retardant material.
- 10Base-T Ethernet Connectivity provided through high quality Pulse MAGJACK.
- High quality fire retardant internal PVC Cabling capable of handling currents up to 10A 230V AC.
- 6A 230V AC MCB made of highly fire retardant material provides protection against high currents.
- Internal plastic sheets layering for extra safety.
- PCB made of Lead free FR4 material.
- 13A International Power sockets made of highly fire retardant material.
- High quality main power cord capable of handling currents up to 10A 230V AC.
- Backlit 2X16 LCD display.
- RS232 Serial port operating at 19200 bits/second and 8bits-No Parity-1 Stop bit setting can be used for configuring network.



Package contents

Item	Number of Units
Webspike 1.0 Unit	1
10A 230V AC Power cord	1
Ethernet Cross Cable	1
RS232 Serial Cable	1
Product catalogue	1

Default factory settings

Network settings

DHCP Enabled	Yes
IP Address	192.168.0.30
Net Mask	255.255.255.0
Default gateway	192.168.0.1

Login credentials

User name	admin
Password	Webspike

Power outlet labels

Sequence number	Power outlet name
1	PSOCK1
2	PSOCK2
3	PSOCK3
4	PSOCK4
5	PSOCK5
6	PSOCK6

Power outlets states after power recycle

Sequence number	Power outlet state
1	OFF
2	OFF
3	OFF
4	OFF
5	OFF
6	OFF

Note: Please enable pop-ups from Webspike. For every operation Webspike reports back the success or failure through pop-ups. Disabling them will prevent the users from knowing the status of an operation.

Getting started

Connect the power cord to 3 pin connector. Plug in the power cord to a power outlet with a capacity of 6A 230V AC. To start using Webspike, first network should be configured. Network configuration can be done in three ways.

1) DHCP enabled

If you are using Webspike at home or in a small office and use a router for setting up internal network, then chances are high that DHCP is enabled in your network. If are using Webspike at office or in a corporate network check with network administrator whether DHCP is enabled. For checking whether DHCP is enabled on Windows 7 systems perform the following actions.

1) Go to

   Control Panel → Network and Internet → Network and Sharing centre → Change Adapter Settings

2) Right click and select properties for connection with name "Local Area Connection".
3) Select "Internet Protocol Version 4 (TCP/IPv4)" from the list of connections and click properties button. If you see the option "obtain an IP address automatically" selected, then DHCP is enabled in your network.

If DHCP is enabled in your network then connect an Ethernet patch cable to the Ethernet port on Webspike. Plug in the other end of patch cable to a router or switch port or any free Ethernet port. Power on the Webspike and you should see a message "DHCP ENABLED" on first row of LCD display. Second row of the LCD display contains the IP address that was assigned to Webspike by DHCP server. Ping the IP address that is displayed in second row of LCD display. If the ping succeeds then network is properly configured on Webspike. If the ping test does not succeed then try to configure it using the methods described in DHCP disabled or configuring through serial port sections.

2) DHCP Disabled

In networks where DHCP is disabled Webspike should be assigned a static IP address explicitly. A Laptop or desktop can be used for performing this network configuration through following steps.

1) Go to

   Control Panel ⟶ Network and Internet ⟶ Network and Sharing centre ⟶ Change Adapter Settings

2) Right click and select properties for connection with name "Local Area Connection".
3) Select "Internet Protocol Version 4 (TCP/IPv4)" from the list of connections and click properties button. Note down the IP Address, Subnet Mask and Default gateway values.
4) Plug in an Ethernet cross cable to the Ethernet port on laptop.
5) Connect other end of cross cable to Ethernet port on Webspike.
6) Change the IP Address, Subnet mask and default gateway of the Laptop to following values.

IP Address	192.168.0.31
Net Mask	255.255.255.0
Default gateway	192.168.0.1

7) Press the reset button on Webspike.
8) Open a browser and enter the IP address 192.168.0.30 in the address bar.
9) Enter the login credentials **admin/Webspike**.
10) Click Configure button under Network Settings.
11) Unselect "Enable DHCP" check box.
12) Change the values for IP Address, Subnet mask and default gateway of Webspike.
13) Webspike will be reset and after booting new network settings will be applied.
14) LCD will display the message DHCP DISABLED on first row and the second row will contain the static IP of Webspike.
15) Revert back the IP Address, Subnet mask and default gateway of the laptop to original values.

16) Ping the static IP of Webspike from Laptop. If ping does not succeed then configure it through the steps mentioned in configuring through serial port section.

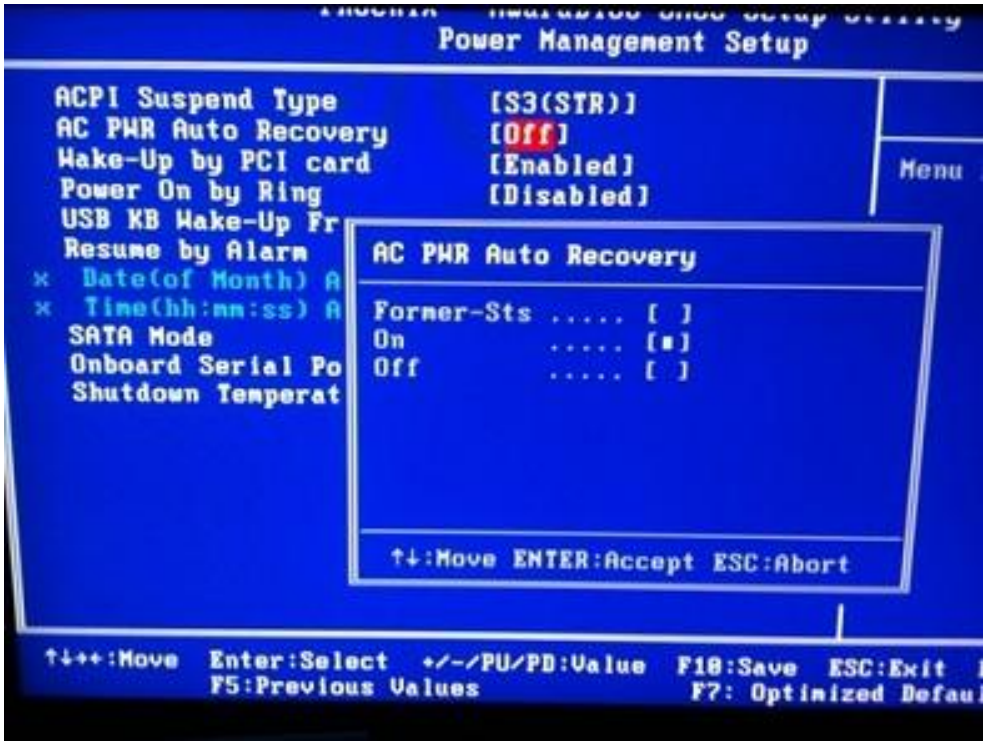
3) Configuring through serial port

Webspike network can also be configured through serial port by following the below steps.

1) Connect the serial port of Webspike to a desktop's serial port through serial cable.
2) Run a putty or HyperTerminal serial connection on the desktop with the following settings: 19200 bits/second, 8bits-No Parity-1 Stop bit
3) Hold the function button on Webspike.
4) Press and release Webspike reset button.
5) Release the function button after 1 second. Remember if you continue to hold the function button for more than 5 seconds then all the settings will be lost and will be initialized to factory default settings.
6) Webspike network configuration menu will be displayed on the serial connection.
7) Depending upon whether DHCP is enabled or disabled, the settings should be changed.
8) If DHCP is disabled then set IP Address, Subnet mask, Default gateway and name server.
9) After changing the settings enter 0 to exit from connection manager.
10) Webspike will be reset and after booting new network settings will be applied.

Configuring Server for remote management

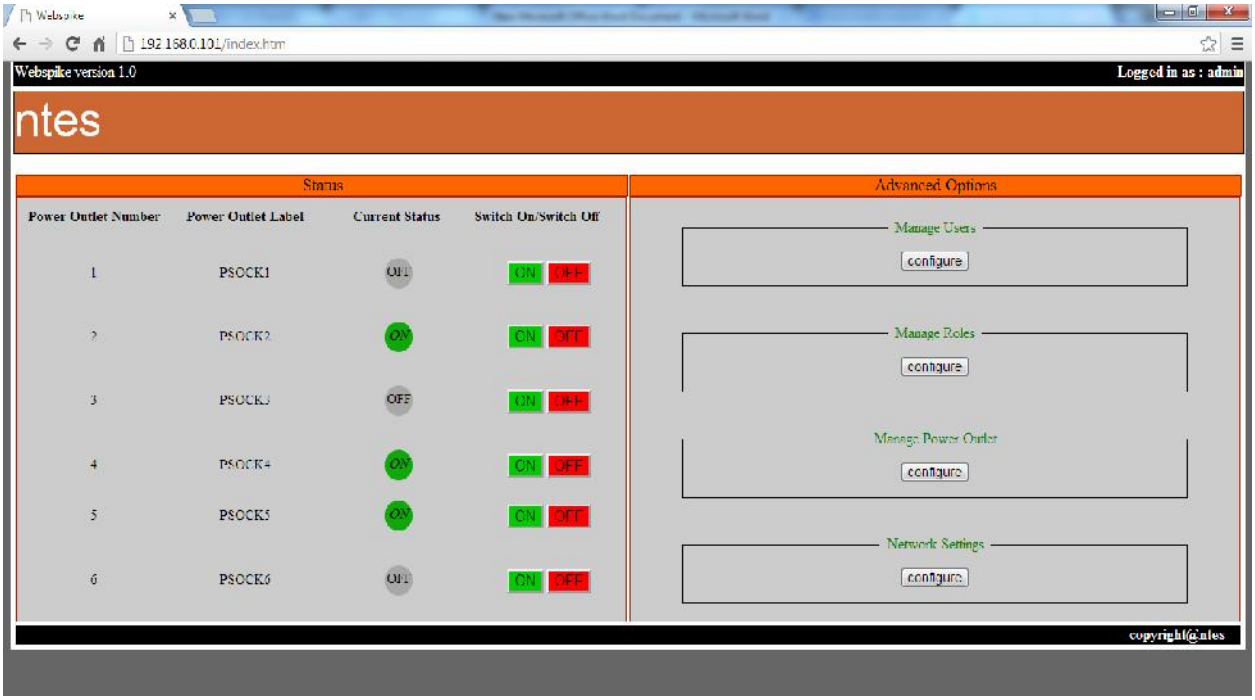
For powering on or powering off a server remotely BIOS settings should be changed. AC power auto recovery setting should be set to ON. Below screen shots explain the procedure for enabling this. Depending upon the kind of system BIOS the menu names and placement may vary across different systems.



Webspike operation

Webspike has eight power outlets of which two are always connected and the remaining six can be switched on or switched off through web. Enter the IP address of the Webspike in URL field of the browser. Enter the login credentials to log in to the Webspike. The home page provides options to Switch off or switch on a power outlet. After a power recycle all the six power outlets will be set to user defined default states.

Index (Home) Page

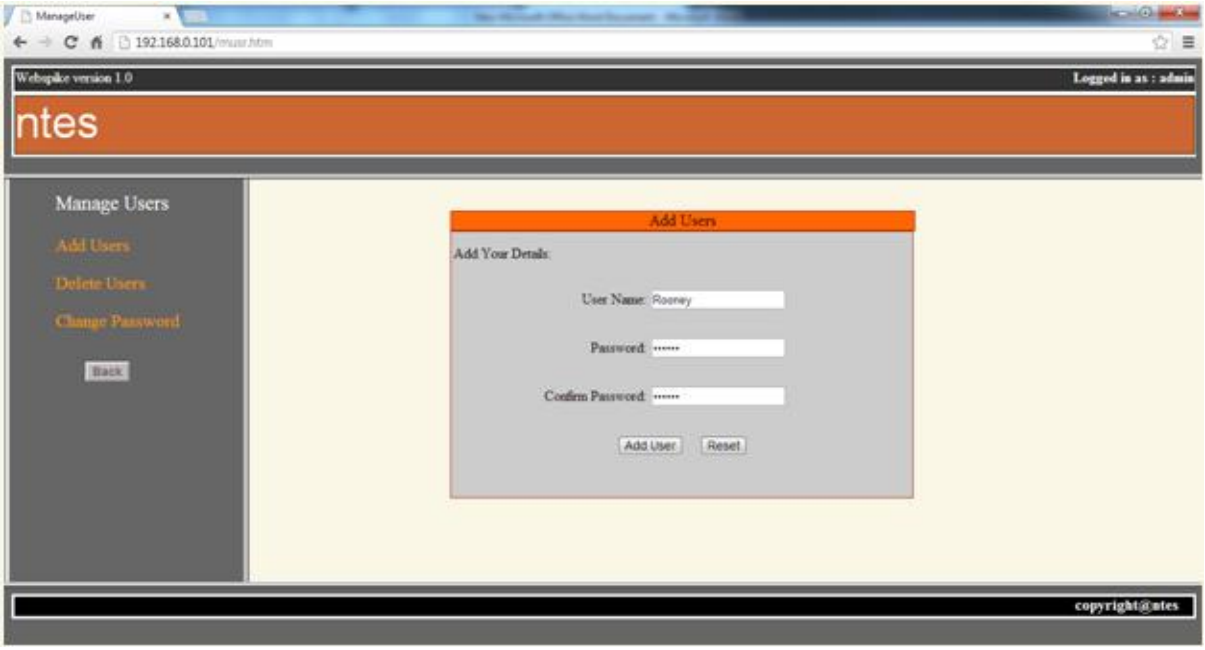


Managing users

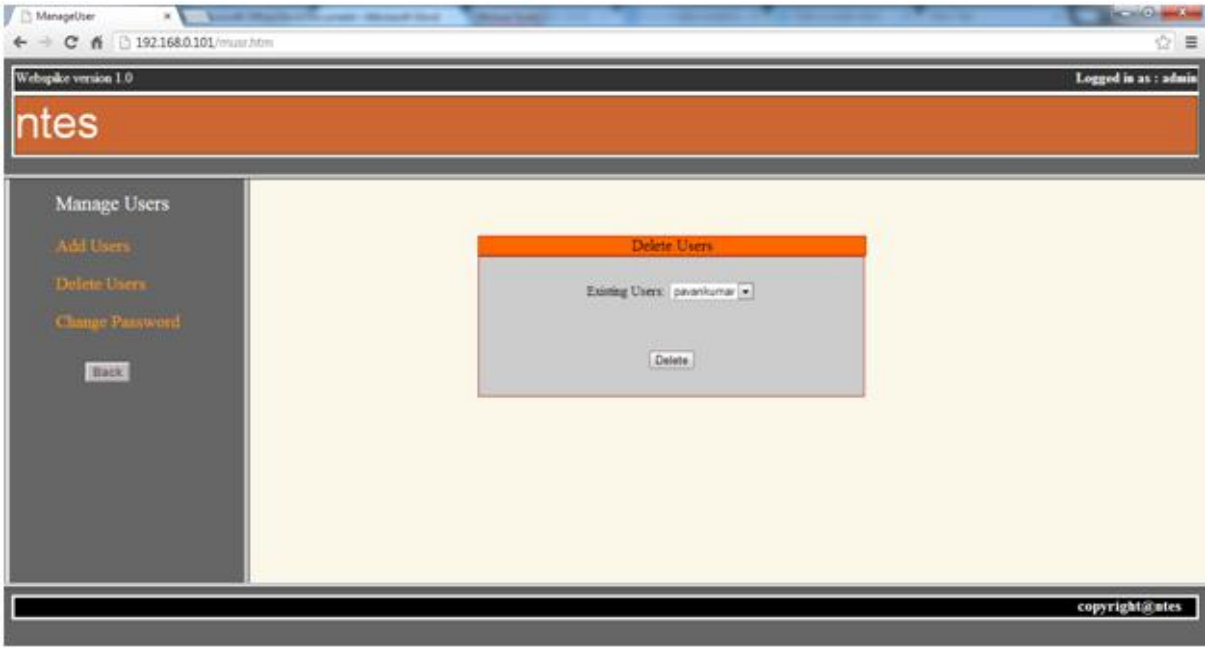
Webspike allows a maximum of eight users to be configured. The factory default settings define a single user admin. admin user has privileges to switch off or switch on any power outlet. Only the admin user can create or delete users. By default when a new user is created, the user does not have privilege to switch on or switch off any power outlet. Privileges on individual power outlets should be provided by admin for any newly created user. The following matrix explains the capabilities provided to different kinds of users.

	admin	Other user's
Add user	**Yes**	**No**
Delete user	**Yes**	**No**
Change password	**Yes**	**Yes**

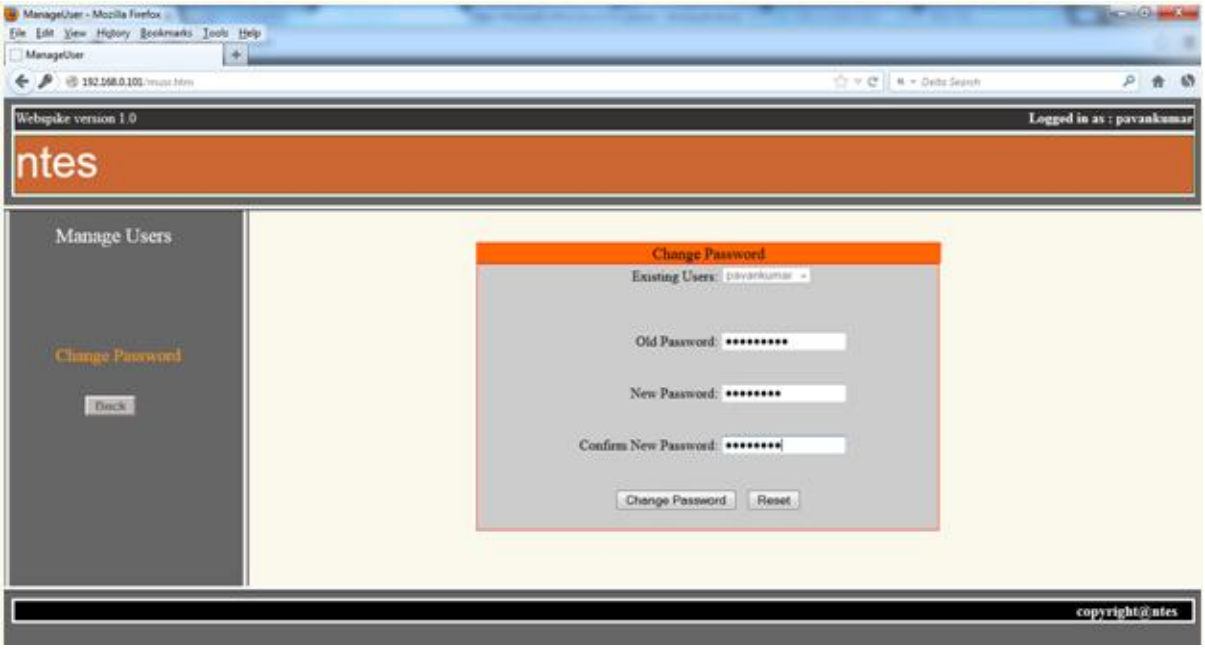
Adding a new user



Deleting an existing user



Changing password for an user



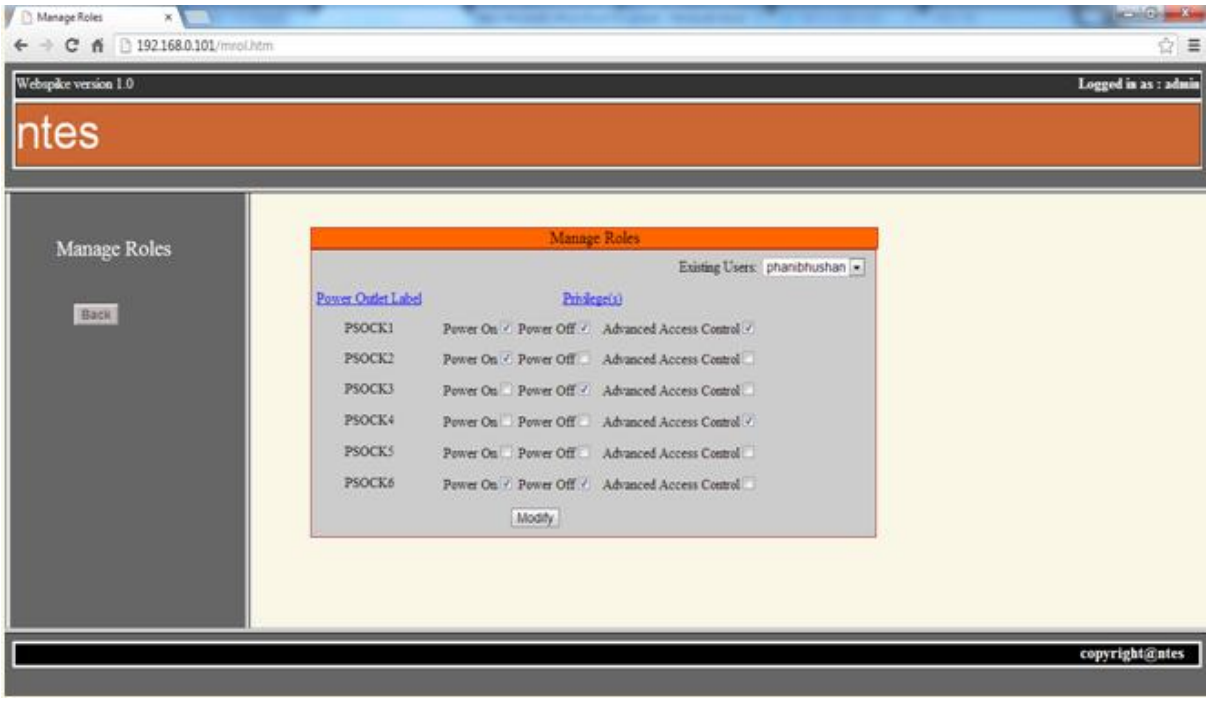
Managing roles

Only admin user can modify the privileges assigned to individual users. Three kinds of privileges can be provided to each user.

Privilege	Meaning
Power on	A user can switch on a power outlet
Power off	A user can switch off a power outlet
Advanced access control	A user can change power outlet properties like name

After creating a new user admin must assign privileges for newly created user. A newly created user by default does not have any kind of privilege.

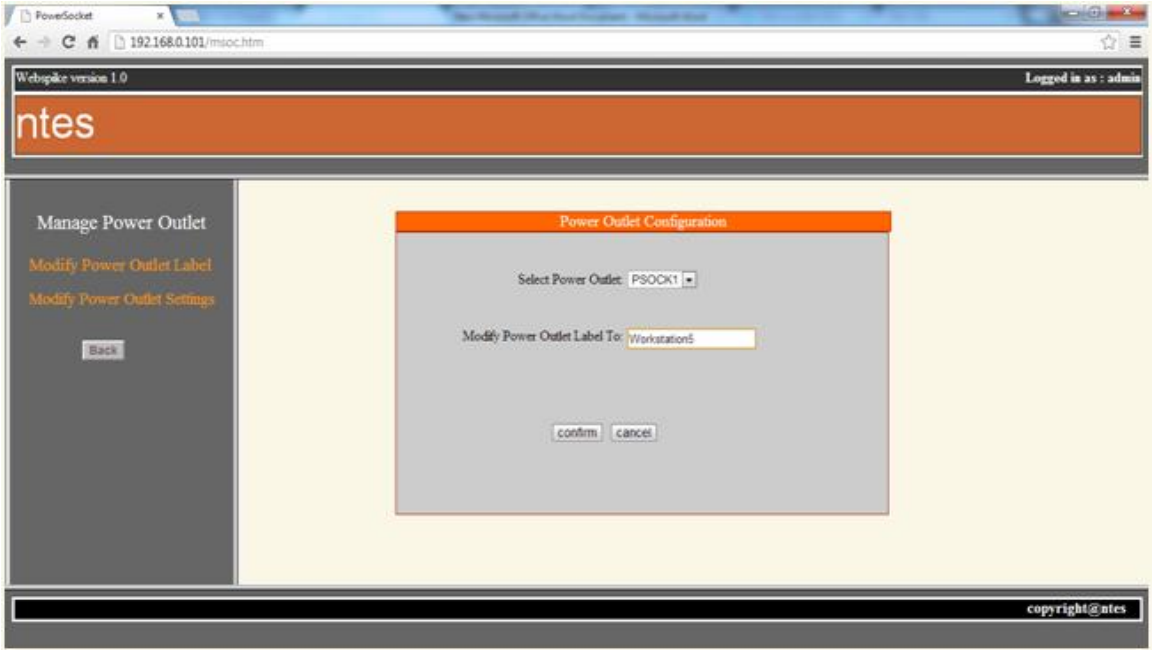
Assigning privileges to an user



Managing power outlets

Modifying power outlet label

Users with advanced access control privilege on a power outlet can change the label associated with a power outlet. This provides an easy way of remembering a power socket rather than by labels like PSOCK1 etc. This label will now replace the reference to the power outlet names like PSOCK1 in all the webpages associated with Webspike.



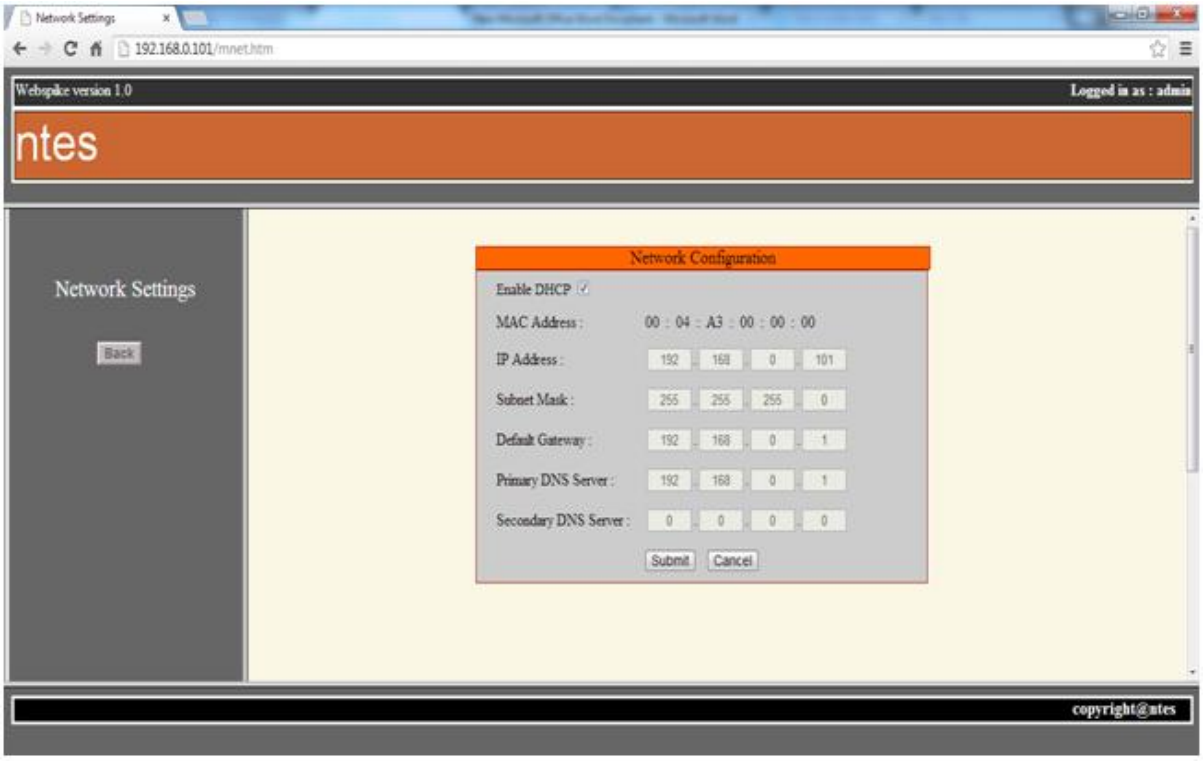
Modifying power outlet settings

By default each power outlet will be switched off after a power recycle. This default state after power recycle is configurable for each individual power outlet. The user can chose what should be the initial state after reboot for each power outlet.

Configuring network settings

Only admin can change the network settings of Webspike. Clicking configure button under network settings on home page will open the Network configuration page. No manual power recycle is required after changing the network settings as Webspike will be automatically power reset after changing the settings. By default DHCP is enabled. Static IP can be assigned so that Webspike will continue to have a well-known IP and can be accessed from remote location with ease.

Network settings



How to restore factory default settings?

If admin password is changed from default password to a different one and is lost, then the only way to access Webspike is by restoring the settings to factory default values. This requires physical access to the Webspike and can be done through below steps.

1) Hold the function button on Webspike.
2) Press and release the reset button on Webspike.
3) Continue to hold the function button for five seconds.

The Webspike will then reset the settings to factory default values. When the settings are being reset LCD will display the message "Erasing".