

# Enhanced WiFi@Work

## *User Guide*



suddenlink<sup>®</sup>  
business™



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# CHAPTER 1

## Enhanced WiFi@Work Quick Start

### Topics:

- Enhanced WiFi@Work Quick Start Checklist
- Logging In to Enhanced WiFi@Work Locally
- Enhanced WiFi@Work Common Features
- Enhanced WiFi@Work Status Screen
- Customizing Enhanced WiFi@Work LAN Settings
- Customizing Enhanced WiFi@Work Wireless
- Local Configuration File Backup
- Local Configuration File Restore

Suddenlink Enhanced WiFi@Work gives your business reliable wireless Internet access using a wireless Hitron CGNM-2252 cable modem gateway with enhanced features including firewall and port forwarding. The Enhanced WiFi@Work Quick Start explains the initial steps to set up your Suddenlink gateway.



## Enhanced WiFi@Work Quick Start Checklist


The Enhanced WiFi@Work Quick Start Check List presents the steps to set up Enhanced WiFi@Work in list format. For expanded details about a step, click the link in the step.

1. [Log in](#) to Enhanced WiFi@Work.
2. View device information on the [Status](#) screen.
3. Customizing Enhanced WiFi@Work [LAN](#) settings.
4. Customizing Enhanced WiFi@Work [Wireless](#) settings.
5. [Backup](#) settings to a local file.
6. [Restore](#) configuration files.

## Logging In to Enhanced WiFi@Work Locally

1. Type <http://192.168.0.1> in the browser address bar to access the Login screen.

A screenshot of a web browser login page. The page has a dark header with the text "CGNM-COM-SDL LOGIN" on the left and the "hitron" logo on the right. Below the header, there are two input fields: "Username:" followed by a text box, and "Password:" followed by a text box. At the bottom of the form, there is a blue "Login" button and a checkbox labeled "Remember me on this computer".

CGNM-COM-SDL LOGIN 

Username:

Password:

Remember me on this computer

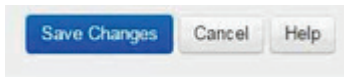
2. Enter the user name. The default login is cusadmin.
3. Enter the password. The default password is password.

# Enhanced WiFi@Work Common Features

All Enhanced WiFi@Work screens include the same features: Save Changes, Pending message, Success message, and Leave page question.

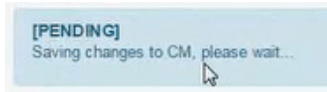
## Save Changes, Cancel, Help

After adding or editing information on a screen, click Save Changes. To cancel a transaction, click Cancel. For more information about the fields on a screen, click Help.



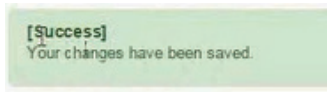
## Pending Message

A Pending message appears as changes are saved.



## Success Message

A Success message appears after changes are saved. The time between the Pending message and the Success message is usually minimal.



## Leave Page

An unsaved changes message appears if you attempt to leave a page without saving changes.





# Enhanced WiFi@Work Status Screen

The Status screen contains information about a device. Items marked in service indicate active items.

Note: Some items may be configurable, but not supported by Suddenlink.

## Status

This menu show the status of the device

- Overview
- System Information
- DOCSIS Provisioning
- DOCSIS WAN
- DOCSIS Event
- Wireless

### Overview

This menu displays important information of the device

System Overview	
Hardware Version	1A
Software Version	4.5.8.17
Gateway Serial Number	251147035771
System Time	Fri, 21 Aug 2015 12:37:52
LAN Up Time	000 days 02h:55m:07s
WAN Up Time	000 days 02h:53m:12s
WAN IP	74.194.254.5/26
WAN DNS	208.180.42.68 /208.180.42.100

### Wireless Overview

johhheintzhiron <span>In service</span>	Broadcast SSID	Enabled
	Security Mode	Open
suddenlink.net-88C0-5G <span>In service</span>	Broadcast SSID	Enabled
	Security Mode	WPA2-AES
	Security Key	251147035771

### Service Filter

Active

Host Name	Protocol	Port Range	Managed Time	Managed Weekdays
test	TCP	80-80	From 00:00 To 23:59	Sun Mon Tue Wed Thu Fri Sat

### Trusted PC List

Device Name	IP Address	Status
-------------	------------	--------

### Device Filter

Allow All

Host Name	MAC Address	Managed Time	Managed Weekdays
-----------	-------------	--------------	------------------

### Keyword Filter

Inactive

Keyword	Blocked Time	Blocked Weekdays
---------	--------------	------------------

### Trust PC List

Device Name	IP Address	Status
-------------	------------	--------

Note: The highlighted area is your public IP address.



# Customizing Enhanced WiFi@Work LAN Settings

The default LAN subnet is 192.168.1.0/24. On the Private LAN Setting screen, you can change the IP subnet for your organization.

Select Basic > LAN Setup.

The Private LAN Setting screen displays.

## Basic Settings

This menu shows the basic settings of the device.

LAN Setup | WAN Setup | Gateway Function | Port Forwarding | Port Triggering | DMZ | DNS

### Private LAN Setting

Private LAN IP Address	<input type="text" value="192.168.0.1"/>
Subnet Mask	<input type="text" value="255.255.255.0"/>
LAN DHCP Status	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled <a href="#">DHCP Reservation</a>
Lease Time	<input type="text" value="1 week"/>
DHCP Start IP	<input type="text" value="192.168.0.10"/>
DHCP End IP	<input type="text" value="192.168.0.200"/>

[Save Changes](#) [Cancel](#) [Help](#)

[Connected Devices](#) [Show](#)

Note: Click Show to see all the devices on your LAN, both wired and wireless.

# Customizing Enhanced WiFi@Work Wireless

The Wireless screen shows the default wireless settings and the options to customize your wireless settings such as SSID name, passphrase, security parameters. Your Hitron CGNM-2252 gateway has two radio types: 2.4G and 5G. Each radio is customized independently.

## Enhanced WiFi@Work Wireless 2.4GHz Settings

The 2.4G radio has greater range but is more susceptible to interference. For example, microwave, Bluetooth®, and most wireless monitors use the same channels as 2.4G.



## Wireless

This menu show the wireless settings

Basic Settings | Access Control | Advanced | IP Setting

2.4G | 5G | WPS

### Basic Settings

Wireless Enabled	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Wireless Mode	802.11 b/g/n mixed
Channel BandWidth	20/40 MHz <input checked="" type="radio"/> 20 MHz
Wireless Channel	Auto (8)
WPS Enabled	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF

### Multiple SSID Settings

2.4G Primary SSID

Network Name (SSID)	tplink
Enable	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Broadcast SSID	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
WMM(QoS)	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Security Mode	WPA-Personal
Auth Mode	WPA2-PSK
Encrypt Mode	AES
Pass phrase	251147035771

2.4G Secondary SSID

2.4G Multiple SSID

## Enhanced WiFi@Work Wireless 5GHz Settings

The 5G radio allows greater speeds, has more useable channels, and has less interference with other devices; however, it typically has less range than 2.4G and has more loss going through objects like walls and doors.

## Wireless

This menu show the wireless settings

Basic Settings | Access Control | Advanced | IP Setting

2.4G | 5G | WPS

### Basic Settings

Wireless Enabled	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Wireless Mode	802.11ac
Channel BandWidth	80 MHz <input checked="" type="radio"/> 40 MHz <input type="radio"/> 20 MHz
Wireless Channel	Auto (26)
WPS Enabled	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF

### Multiple SSID Settings

5G Primary SSID

Network Name (SSID)	tplinknet-5G
Enable	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Broadcast SSID	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
WMM(QoS)	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
Security Mode	WPA-Personal
Auth Mode	WPA2-PSK
Encrypt Mode	AES
Pass phrase	251147035771

5G Secondary SSID

5G Multiple SSID

## Local Configuration File Backup

Back up settings to a local file.

1. Click Admin > Backup.
2. Click Backup to back up the gateway settings to a local file.

### Backup Your Settings

You can backup your settings to a local file and restore the settings from a local file here.

Backup your settings locally	<input type="button" value="Backup"/>
Restore settings form a local file	<input type="button" value="Browse..."/> <input type="button" value="Restore"/>
Upload settings to ftp server	<input type="text" value="06.76.44.38"/> <input type="text" value="84948C3988C0.cfg"/> <input type="button" value="Upload"/>

*Important: Click Upload to save backed up settings.*

## Local Configuration File Restore

Restore the old configuration back to the device. The CRC checksum checks the configuration file. If the file is corrupted or not formulated correctly, it is discarded. After restoring the configuration file, the device reboots.

1. Click Admin > Backup.
2. Click Browse to select a local file.
3. Click Restore to restore settings from a local file.



## CHAPTER 2

# Enhanced WiFi@Work Configuration Guide

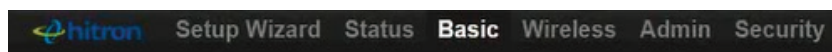
### Topics:

- Enhanced WiFi@Work Menu
- Enhanced WiFi@Work Basic Settings Screen
- Enhanced WiFi@Work Wireless Device Filter
- Enhanced WiFi@Work Administration Screen
- Enhanced WiFi@Work Security Screen

Suddenlink Enhanced WiFi@Work gives your business reliable wireless Internet access using a Wireless cable modem gateway with enhanced features including firewall and port forwarding. The configuration guide helps customize the gateway for your business.

## Enhanced WiFi@Work Menu

The Enhanced WiFi@Work Menu includes: Setup Wizard, Status, Basic, Wireless, Admin, and Security.



- The [Status](#) screen contains information about a device.
- Use the Basic Settings screen to [customize a LAN](#), add [port forwarding](#) or [port triggering](#) rules, and enable or disable [DMZ](#) settings.
- Use the [Wireless](#) screen to view default wireless settings and connected devices and block or allow network access for specified devices.
- Change a password on the [Administration](#) screen.
- Control firewall settings on the [Security](#) screen.

# Enhanced WiFi@Work Basic Settings Screen

The Basic Settings screen includes Port Forwarding, Port Triggering, DMZ, and DNS.

## Enhanced WiFi@Work Port Forwarding

Enhanced WiFi@Work Port Forwarding redirects inbound traffic from the Internet to the appropriate server(s) in the internal network.

### Basic Settings

This menu show the basic settings of the device

LAN Setup WAN Setup Gateway Function Port Forwarding Port Triggering DMZ DNS

#### Port Forwarding Options

All Port Forwarding Rules  Enabled  Disabled

Port Forwarding rules	Public	Private	Protocol	Local IP Address	Remote IP Address	Status	Manage	Action
<a href="#">Add Rule</a>	<a href="#">Save Changes</a>	<a href="#">Help</a>						

## Add an Enhanced WiFi@Work Port Forwarding Rule

Enhanced WiFi@Work Port Forwarding includes options to add new port forwarding rules.

1. Click Add Rule.

The Add Rule section expands. In the example, we are configuring port forwarding to forward port 80 (web) to the local IP 192.168.10.3.

#### Add a rule for port forwarding services by user

Application Name	HTTP
Protocol	TCP
Public Port Range	80 ~ 80
Private Port Range	80 ~ 80
Local IP Address	192.168.10.3
Remote IP	<input checked="" type="radio"/> Any <input type="radio"/> Specific
Rule Status	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
<input checked="" type="button" value="Apply"/> <input type="button" value="Close"/>	

2. Add or select the appropriate information.
3. Click Apply.



## Enhanced WiFi@Work Port Triggering

Port Triggering enables specific Internet applications to access computers on a local area network. The triggering creates three or more sessions from the Internet to the local PC. In this case, a port triggering rule enables a session that is in the port range setup.

### Basic Settings

This menu show the basic settings of the device

[LAN Setup](#) [WAN Setup](#) [Gateway Function](#) [Port Forwarding](#) [Port Triggering](#) [DMZ](#) [DNS](#)

#### Port Triggering Options

All Port Triggering Rules  Enabled  Disabled

Port Triggering Rules

Application Name	Trigger	Target	Protocol	Timeout(ms)	TwoWay Status	Status	Manage	Action
<a href="#">Add Rule</a>	<a href="#">Save Changes</a>	<a href="#">Help</a>						

### Add an Enhanced WiFi@Work Port Triggering Rule

From the Port Triggering Options screen:

1. Click Add Rule.

Port Triggering Add/Edit

Port Triggering rule

Application Name	<input type="text"/>
Trigger Port Range	<input type="text"/> - <input type="text"/>
Target Port Range	<input type="text"/> - <input type="text"/>
Protocol	<input type="text"/> <input checked="" type="checkbox"/>
Timeout (ms)	<input type="text"/>

[Apply](#) [Close](#)

2. Add or edit information about the rule.
3. Click Apply.

### Enhanced WiFi@Work DMZ

Demilitarized Zone (DMZ) allows the selected computer to bypass the firewall features of the gateway and permits unrestricted access from the Internet to that computer. If a local client PC cannot run an Internet application properly behind the NAT firewall, set up that client to unrestricted two-way Internet access by the DMZ Host. Adding clients to the DMZ may expose the local network to a variety of security risks, so please use this setting with care.

# Basic Settings

This menu show the basic settings of the device

LAN Setup WAN Setup Gateway Function Port Forwarding Port Triggering DMZ DNS

### DMZ Settings

Enable DMZ	Enabled Disabled
DMZ Host	Connected Devices

Save Changes Cancel Help

## Enhanced WiFi@Work LAN DNS Settings

By default, the DNS servers are populated from Suddenlink using DHCP. Configure LAN DNS settings on the LAN DNS Settings screen.

# Basic Settings

This menu show the basic settings of the device

LAN Setup WAN Setup Gateway Function Port Forwarding Port Triggering DMZ DNS

### LAN DNS Settings

Configure your LAN DNS settings.

LAN DNS Obtain:	Auto Manual
LAN DNS Proxy Status:	Enabled Disabled
Domain Suffix	hitronhub.home
Proxy Hostname1	
Proxy Hostname2	

Save Changes Cancel Help

Click Manual for LAN DNS Obtain. Two new DNS server fields are added for entering the custom DNS IP addresses.



## Enhanced WiFi@Work Wireless Device Filter

Wireless Device Filter shows connected devices. You can block or allow network access for specified devices.

### Wireless

This menu show the wireless settings

Basic Settings Access Control **Advanced** IP Setting

#### Device Filter

You can block/allow the network access for specified devices here.

Connected Devices [Show](#)

Host Name	IP Address	MAC Address	Type	Interface	Status	Action
-----------	------------	-------------	------	-----------	--------	--------

Managed Devices

Block Rules: [Allow All](#) [Allow Listed](#) [Block Listed](#)

Host Name	MAC Address	Action
-----------	-------------	--------

[Save Changes](#) [Add Managed Device](#) [Help](#)

## Enhanced WiFi@Work Administration Screen

The Enhanced WiFi@Work Administration screen includes Setting Username and Password and Device Reset.

### Enhanced WiFi@Work Setting a Password

Change the default password on the Setting Username and Password screen.

1. Click Admin > Management.
2. Select the cusadmin username.

### Administration

Administration settings

Management Remote Management Diagnostics Backup Time

#### Setting Username and Password

You can change your password here

Username

New Username

Old Password

New Password

Confirm New Password

Min Time

[Save/Cancel](#) [Cancel](#) [Help](#)



3. Enter the old password.
4. Enter a new password.
5. Enter the new password again to confirm.
6. Click Save Changes.

## Enhanced WiFi@Work Security Screen

The Enhanced WiFi@Work Security screen includes Firewall Settings, Service Filter, and Device Filter.

### Enhanced WiFi@Work Security Firewall Settings

Protect a network from unauthorized access with firewall settings.

#### Security

Firewall and parental control settings

Firewall
Service Filter
Device Filter
Keyword Filter
Logs

#### Firewall Settings

Protect your network from unauthorized access by using the firewall controls listed below.  
Keep the default Minimum Security (Low) settings if you are unfamiliar with configuring firewall settings.

Firewall Level

Maximum
Typical
Minimum
Custom

**Minimum Security (Low):**  
No application or traffic is blocked. This is the default configuration.

**Allow (WAN-To-LAN):** all

**Blocked**  
ID: enabled  
IDENT (port 113)

Ping From WAN

Allow
Deny

Save Changes
Cancel
Help

### Enhanced WiFi@Work Security Service Filter

Service filtering blocks certain ports from leaving the internal network.

#### Security

Firewall and parental control settings

Firewall
Service Filter
Device Filter
Keyword Filter

#### Service Filter

Service filtering is used to block certain outbound traffic which is destined to specific target port or port range from specific computers in the internal network.

**Managed Services**

Filter Enabled  Enabled  Disabled

Host Name	Protocol	Port Range	Managed Weekdays	Managed Time	Status	Manage	Action
<span style="margin-right: 10px; border: 1px solid #ccc; padding: 2px;">Add Managed Service</span> <span style="margin-right: 10px; border: 1px solid #ccc; padding: 2px;">Save Changes</span> <span style="border: 1px solid #ccc; padding: 2px;">Help</span>							

**Trusted PC List**

Host Name	IP Address	Status	Manage	Action
<span style="margin-right: 10px; border: 1px solid #ccc; padding: 2px;">Add Trust Device</span> <span style="margin-right: 10px; border: 1px solid #ccc; padding: 2px;">Save Changes</span> <span style="border: 1px solid #ccc; padding: 2px;">Help</span>				



## Enhanced WiFi@Work Device Reset

Use the Device Reset screen to reboot the device or reset all settings to the factory default.

1. Click Admin > Device Reset.
2. Click Factory Reset to restore factory default settings.

## Administration

Administration settings

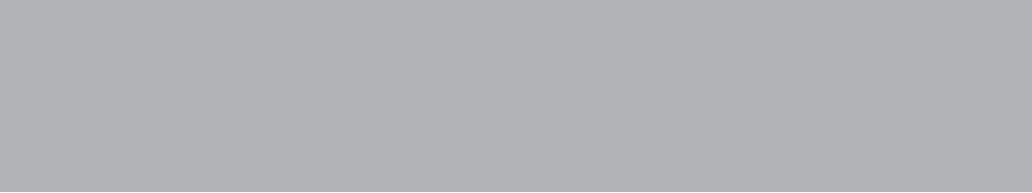
[Management](#) [Remote Management](#) [Diagnostics](#) [Backup](#) [Time Setting](#) [USB Storage](#) [Device Reset](#)

### Device Reset

You can reset all your settings to factory default values by **Factory Reset**

Reboot Device	<a href="#">Reboot</a>
Restore Factory Default Settings	<a href="#">Factory Reset</a>

[Help](#)



The logo for SuddenLink Business is positioned in the bottom right corner of a white semi-circular area. The word "sudden" is in a green, lowercase, sans-serif font. A thin green line arches over "sudden" and extends to the top of the letter "l" in "link". The word "link" is in a blue, lowercase, sans-serif font, with a small white starburst icon above the letter "i". Below "link" is the word "business" in a green, lowercase, italicized sans-serif font. A registered trademark symbol (®) is located to the upper right of the "k" in "link".

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