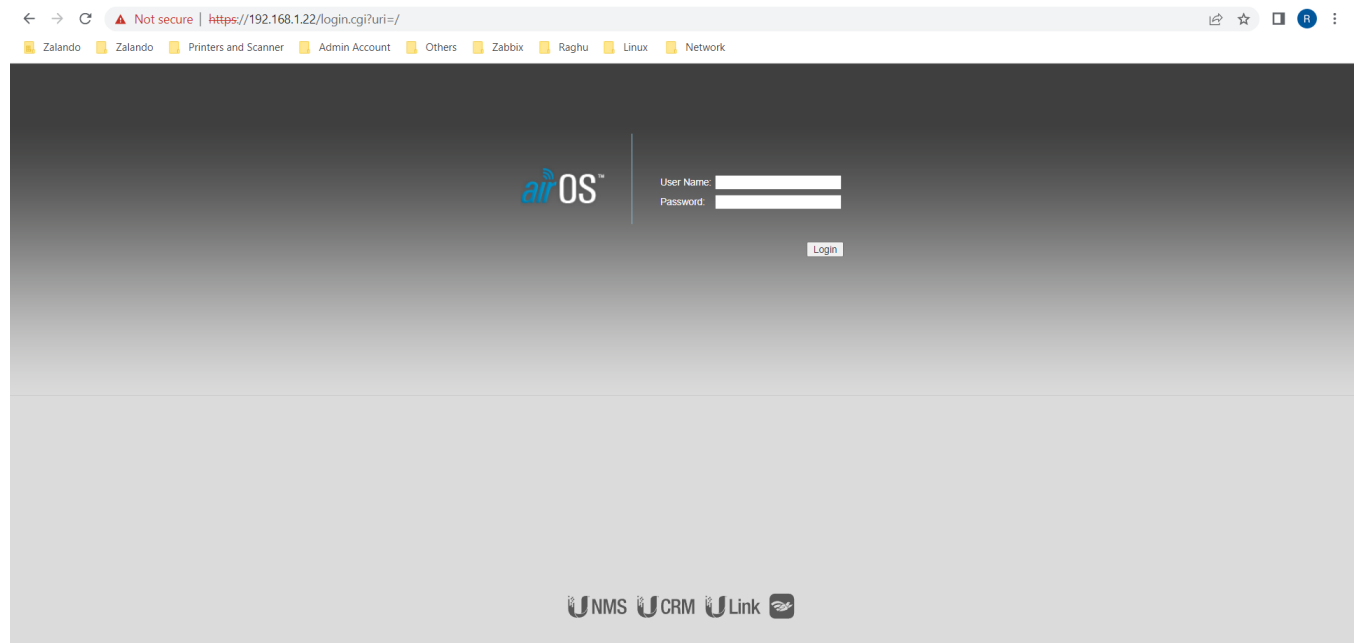


Point to Point Nano Station M5 (Access and Station point) Configuration

How to Configure Access Point

Step 1:

Login the Device in web browser using IP address and Password



Step 2:

Go to the **SYSTEM**

- Firmware Update:
 - Check the Latest Version is Updated or not. If its not Must have to Update [Latest Firmware Nano Station](#) .
- Device:
 - Set the Device Name, Language and Time Zone.
- System Accounts:
 - Change the default Password

NanoStation loco M5

airOS™

MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS

Tools:

Logout

Firmware Update

Firmware Version: XW.v6.3.11

Build Number: 33396

Check for Updates: ☐ Enable

Check Now

Upload Firmware:

Choose File

 No file chosen

Device

Device Name:

W-0039

Interface Language:

English

Date Settings

Time Zone:

(GMT+01:00) Central Eu

Startup Date: ☐ Enable

Startup Date:

System Accounts

Administrator User Name:

admin

Read-Only Account: ☐ Enable

Miscellaneous

Reset Button:

[?]

☒ Enable

Location

Latitude:

Longitude:

Change

Device Maintenance

Reboot Device:

Reboot...

Support Info:

Download...

Configuration Management

Back Up Configuration:

Download...

Upload Configuration:

Choose File

 No file chosen

Reset to Factory Defaults:

Reset...

Step 3:

Go to the **WIRELESS**

- Basic Wireless Settings
 - Wireless Mode **Change to Access Point**
 - WDS (Transparent Bridge Mode) **Enable the Option**
- Wireless Security:
 - Security Which authentication we need to choose and configure

NanoStation loco M5

airOS™

MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS

Tools:

Logout

Basic Wireless Settings

Wireless Mode: Access Point

WDS (Transparent Bridge Mode): ☒ Enable

SSID: ENIT-Bridge-0018 ☒ Hide SSID

Country Code: Germany

IEEE 802.11 Mode: A/N mixed

Channel Width: 40 MHz

Frequency, MHz: auto ☐ Hide Indoor Channels

Extension Channel: None

Frequency List, MHz: ☐ Enable

Calculate EIRP Limit: ☒ Enable

Antenna: Built in (2x2) - 13 dBi

Output Power: 23 dBm

Data Rate Module: Default

Max TX Rate, Mbps: MCS 15 - 270/300 ☒ Auto

Wireless Security

Security: WPA2-AES

WPA Authentication: PSK

WPA Preshared Key: ***** ☐ Show

MAC ACL: ☐ Enable

Change

GENUINE PRODUCT

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Step 4:

Go to the **NETWORK**

- Network Role
 - Network Mode **Choose Bridge**
 - Disable Network **None**
- Configuration Mode
 - Configuration Mode **Choose Simple**
- Management Network Settings
 - Management IP Address **Choose Static and Enter IP Address details**

NanoStation loco M5

MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS™

Tools: ▾

Logout

Network Role

Network Mode: Bridge ▾

Disable Network: None ▾

Configuration Mode

Configuration Mode: Simple ▾

Management Network Settings

Management IP Address: ☐ DHCP ☒ Static

IP Address: 192.168.1.22

Netmask: 255.255.255.0

Gateway IP: 192.168.1.1

Primary DNS IP:

Secondary DNS IP:

MTU: 1500

Management VLAN: ☐ Enable


Auto IP Aliasing: ☒ Enable

STP: ☐ Enable

IPv6: ☒ Enable

IPv6 Address: ☐ Static ☒ SLAAC


Change



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Step 5:

ADVANCED No Need to change anything.



MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS

Tools: ▼

Logout

Advanced Wireless Settings

RTS Threshold: [?] ☒ Off

Distance: [?] miles (0.6 km) ☒ Auto Adjust

Aggregation: [?] Frames Bytes ☒ Enable

Multicast Data: [?] ☒ Allow

Multicast Enhancement: [?] ☒ Enable

Installer EIRP Control: [?] ☐ Enable

Extra Reporting: [?] ☒ Enable

Client Isolation: [?] ☐ Enable

Sensitivity Threshold, dBm: [?] ☒ Off


Advanced Ethernet Settings

LAN0 Speed: [?] ▼

Signal LED Thresholds

| | LED1 | LED2 | LED3 | LED4 |
|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Thresholds, dBm: [?] | <input type="text" value="-94"/> | <input type="text" value="-80"/> | <input type="text" value="-73"/> | <input type="text" value="-65"/> |

Change



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Step 6:

Go to the **SERVICE**

- There are some services that are offered by default and if we need, activate the service.

MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS

Tools:

Logout

Ubiquiti Network Management System

UNMS: ☐ Enable
Url: -
Key:

Ping Watchdog

Ping Watchdog: ☐ Enable

IP Address To Ping:

Ping Interval: seconds

Startup Delay: seconds

Failure Count To Reboot:

Save Support Info: ☐

SNMP Agent

SNMP Agent: ☐ Enable

SNMP Community:

Contact:

Location:

Web Server

Web Server: ☒ Enable

Secure Connection (HTTPS): ☒ Enable

Secure Server Port:

Server Port:

Session Timeout: minutes

SSH Server

SSH Server: ☒ Enable

Server Port:

Password Authentication: ☒ Enable

Authorized Keys:

Telnet Server

Telnet Server: ☐ Enable

Server Port:

NTP Client

NTP Client: ☐ Enable

NTP Server:

Dynamic DNS

Dynamic DNS: ☐ Enable

Service:

Host Name:

System Log

System Log: ☒ Enable

Remote Log: ☐ Enable

Remote Log IP Address:

Example: SSH Server

- With this service we can access the device via Putty

192.168.1.22 - Putty

login as: admin

admin@192.168.1.22's password:

BusyBox v1.24.2 (2023-04-25 16:29:26 EDT) built-in shell (ash)
Enter 'help' for a list of built-in commands.

XX.v6.3.11# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue state UNKNOWN
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
inet6 ::1/128 scope host
valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
link/ether 60:22:32:c1:51:4d brd ff:ff:ff:ff:ff:ff
3: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo_fast state DOWN qlen 1000
link/ether 62:22:32:c1:51:4d brd ff:ff:ff:ff:ff:ff
10: vif0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 2286 qdisc mq state UNKNOWN qlen 511
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
11: act0: <BROADCAST,MULTICAST,ALLMULTI,PROMISC,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
12: br0: <BROADCAST,MULTICAST,ALLMULTI,UP,LOWER_UP> mtu 1500 qdisc noqueue state UNKNOWN
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
inet 192.168.1.22/24 brd 192.168.1.255 scope global br0
inet 169.254.147.199/16 brd 169.254.255.255 scope global br0
inet6 fe80::6222:3fff:fe05:14d4/64 scope link
valid_lft forever preferred_lft forever
XX.v6.3.11#

192.168.1.23 - Putty

login as: admin

admin@192.168.1.23's password:

BusyBox v1.24.2 (2023-04-25 16:29:26 EDT) built-in shell (ash)
Enter 'help' for a list of built-in commands.

XX.v6.3.11# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue state UNKNOWN
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
inet 127.0.0.1/8 scope host lo
inet6 ::1/128 scope host
valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
3: eth1: <BROADCAST,MULTICAST> mtu 1500 qdisc pfifo_fast state DOWN qlen 1000
link/ether 62:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
10: vif0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 2286 qdisc mq state UNKNOWN qlen 511
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
11: act0: <BROADCAST,MULTICAST,ALLMULTI,PROMISC,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
12: br0: <BROADCAST,MULTICAST,ALLMULTI,UP,LOWER_UP> mtu 1500 qdisc noqueue state UNKNOWN
link/ether 60:22:32:b6:93:c6 brd ff:ff:ff:ff:ff:ff
inet 192.168.1.23/24 brd 192.168.1.255 scope global br0
inet 169.254.147.199/16 brd 169.254.255.255 scope global br0
inet6 fe80::6222:3fff:fe05:14d4/64 scope link
valid_lft forever preferred_lft forever
XX.v6.3.11#

Step 7:

Once the changes have been made, select Changes and Apply

Note: The Device will Restart Automatically

How to Configure Station Point ?

- System
- Network
- Advanced
- Services
 - All are same steps like Access Point Configuration
- WIRELESS
 - Basic Wireless Settings
 - Wireless Mode **Change to Station**
 - WDS (Transparent Bridge Mode) **Enable the Option**
 - SSID **Choose the Select option**
 - Then select the access point (which access point should communicate)

Site Survey

Scanned Frequencies:

5.18GHz 5.185GHz 5.19GHz 5.195GHz 5.2GHz 5.205GHz 5.21GHz 5.215GHz 5.22GHz 5.225GHz 5.23GHz 5.235GHz 5.24GHz 5.26GHz 5.265GHz 5.27GHz 5.275GHz 5.28GHz 5.285GHz 5.29GHz 5.295GHz 5.3GHz 5.305GHz 5.31GHz 5.315GHz 5.32GHz 5.325GHz 5.33GHz 5.5GHz 5.505GHz 5.51GHz 5.515GHz 5.52GHz 5.525GHz 5.53GHz 5.535GHz 5.54GHz 5.545GHz 5.55GHz 5.555GHz 5.56GHz 5.565GHz 5.57GHz 5.575GHz 5.58GHz 5.585GHz 5.59GHz 5.595GHz 5.6GHz 5.605GHz 5.61GHz 5.615GHz 5.62GHz 5.625GHz 5.63GHz 5.635GHz 5.64GHz 5.645GHz 5.65GHz 5.655GHz 5.66GHz 5.665GHz 5.67GHz 5.675GHz 5.68GHz 5.685GHz 5.69GHz 5.695GHz 5.7GHz 5.765GHz 5.77GHz 5.775GHz 5.78GHz 5.785GHz 5.79GHz 5.795GHz 5.8GHz 5.805GHz 5.81GHz 5.815GHz 5.82GHz 5.825GHz 5.83GHz 5.835GHz 5.84GHz 5.845GHz 5.85GHz 5.855GHz 5.86GHz

Scanning...

| MAC Address | SSID | Device Name | Radio Mode | Encryption | Signal / Noise, dBm | Frequency, GHz / Channel |
|--|--------------------|-------------|----------------|------------|---------------------|--------------------------|
| 60:22:32:C0:51:4D | | W-0039 | 802.11n airMAX | WPA2 | -49 / -97 | 5.185 / 37 |
| <input checked="" type="radio"/> 60:22:32:C0:51:4D | ENIT-Bridge-0018 | W-0039 | 802.11n airMAX | WPA2 | -49 / -97 | 5.185 / 37 |
| <input type="radio"/> 60:22:32:C0:51:0C | ENIT-Bridge-0017 | W-0037 | 802.11n airMAX | WPA2 | -61 / -96 | 5.18 / 36 |
| <input type="radio"/> 00:4E:35:88:1B:F0 | pick_mde | | 802.11ac | WPA2 | -59 / -96 | 5.2 / 40 |
| <input type="radio"/> 00:4E:35:88:1B:F2 | Zalando_Operations | | 802.11ac | WPA2 | -59 / -96 | 5.2 / 40 |
| <input type="radio"/> 7C:57:3C:CF:24:54 | pick_mde | | 802.11ac | WPA2 | -79 / -96 | 5.26 / 52 |
| <input type="radio"/> 7C:57:3C:CF:24:50 | Zalando_Air | | 802.11ac | WPA2 | -79 / -96 | 5.26 / 52 |
| <input type="radio"/> 7C:57:3C:CF:24:53 | Zalando_Guest | | 802.11ac | NONE | -78 / -96 | 5.26 / 52 |
| <input type="radio"/> 00:4E:35:85:9E:F0 | Zalando_Air | | 802.11ac | WPA2 | -71 / -96 | 5.3 / 60 |
| <input type="radio"/> 00:4E:35:85:9E:F4 | pick_mde | | 802.11ac | WPA2 | -71 / -96 | 5.3 / 60 |
| <input type="radio"/> 00:4E:35:85:9E:F3 | Zalando_Guest | | 802.11ac | NONE | -71 / -96 | 5.3 / 60 |
| <input type="radio"/> E8:26:89:4D:1A:92 | Zalando_Operations | | 802.11ac | WPA2 | -90 / -96 | 5.32 / 64 |
| <input type="radio"/> 7C:57:3C:CF:62:D0 | Zalando_Air | | 802.11ac | WPA2 | -89 / -96 | 5.52 / 104 |
| <input type="radio"/> 7C:57:3C:CF:62:D4 | pick_mde | | 802.11ac | WPA2 | -85 / -96 | 5.52 / 104 |
| <input type="radio"/> 7C:57:3C:CF:62:D3 | Zalando_Guest | | 802.11ac | NONE | -84 / -96 | 5.52 / 104 |
| <input type="radio"/> 00:4E:35:86:FF:30 | Zalando_Air | | 802.11ac | WPA2 | -84 / -96 | 5.58 / 116 |
| <input type="radio"/> 00:4E:35:85:D0:B0 | Zalando_Air | | 802.11ac | WPA2 | -64 / -96 | 5.58 / 116 |
| <input type="radio"/> 00:4E:35:86:FF:31 | Zalando_Operations | | 802.11ac | WPA2 | -84 / -96 | 5.58 / 116 |
| <input type="radio"/> 00:4E:35:86:FF:34 | pick_mde | | 802.11ac | WPA2 | -85 / -96 | 5.58 / 116 |
| <input type="radio"/> 00:4E:35:85:D0:B3 | Zalando_Guest | | 802.11ac | NONE | -62 / -96 | 5.58 / 116 |
| <input type="radio"/> 00:4E:35:86:FF:33 | Zalando_Guest | | 802.11ac | NONE | -84 / -96 | 5.58 / 116 |

Selectable SSID's must be visible and have compatible channel bandwidth and security settings.

Lock to AP Select Scan

-
- Select the Lock to AP.
- Wireless Security:
 - Security Which authentication we need to choose and configure

NanoStation loco M5

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MAIN

WIRELESS

NETWORK

ADVANCED

SERVICES

SYSTEM

UNMS Tools: Logout

Basic Wireless Settings

Wireless Mode: Station

WDS (Transparent Bridge Mode): ☒ Enable

SSID: ENIT-Bridge-0018 Select...

Lock to AP: 60:22:32:C0:51:4D

Country Code: Germany

IEEE 802.11 Mode: A/N mixed

Channel Width: [?] Auto 20/40 MHz

Frequency Scan List, MHz: ☐ Enable

Hide Indoor Channels: ☐ Enable

Calculate EIRP Limit: ☒ Enable

Antenna: Built in (2x2) - 13 dBi

Output Power: 23 dBm

Data Rate Module: Default

Max TX Rate, Mbps: MCS 15 - 130/144.4 [270] ☒ Auto


Wireless Security

Security: WPA2-AES

WPA Authentication: PSK

WPA Preshared Key: ☐ Show

Change



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- When all steps are complete, select Change and then Apply.

Note: The Device will Restart Automatically

Verification:

- **Once everything is done, we need to pass on the device's MAC address to the Berlin network team, which will then integrate the device into our Zalando network and enable Internet access.**
 - IP can able to ping


```
C:\Users\rmurugesan>ping 192.168.1.22 -t

Pinging 192.168.1.22 with 32 bytes of data:
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=1ms TTL=64
Reply from 192.168.1.22: bytes=32 time=10ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=7ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=1ms TTL=64
Reply from 192.168.1.22: bytes=32 time=7ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=3ms TTL=64
Reply from 192.168.1.22: bytes=32 time=4ms TTL=64
Reply from 192.168.1.22: bytes=32 time=7ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=2ms TTL=64
Reply from 192.168.1.22: bytes=32 time=1ms TTL=64
```

- Both Device LED light is blinking

