

conanair

Example of  
automatic mode setting

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# Introduction

This document provides a basic example of how to set up conanair automatic mode.

Please refer to the manual for details.

Please adapt the directory paths and applications to your environment.

What you can do by following the steps described in this document

## PC

- Wi-Fi Connection
- Connect automatically if in range On
- Private Network
- DHCP

## conanair

- DHCP
- Measurement schedule : Default setting (every hour)
- Measurement data file : cna , csv
- Language : Japanese

## Applications to use

- Windows Defender Firewall
- Google Chrome
- Notepad
  - cna\_base\_st (Base Station Application Japanese)

# Preparation

## Network

conanair Network Specifications

IEEE802.11 b/g/n(Wi-Fi 4) 2.4GHz 54Mbps max.

WPA/WPA2 PSK

A network that can connect to conanaair and a PC is required.

Use a network router or existing network.

Set the default gateway.

Note the SSID and password.

## PC

Windows 10 version 21H1 or later

New Chromium-based Microsoft Edge or Google

Chrome 91 or later

Ability to connect to a user-provided network

Prepare PCs that are not used in other operations.

## Reset Network

Set PC Date and Time

Display file name extensions

Off command prompt simple edit mode

Open a command prompt

Open "Console Window Properties" and set

Right click on the title bar > Defaults

Option tab > ☐ Simple Edit Mode > OK

Close command prompt

## Install Base Station Application

From the Attached CD

\Application\Base Station Application for automatic

mode\cna\_base\_setup\_3\_0\_4

\cna\_base\_setup\_3\_0\_4.exe

start up the above and follow the on-screen instructions.

## Copy conf file

C o p y        app\_root.conf LANG.conf

schedule.conf tags.conf in C:\conanair\Auto

\cna\_base\CAIR\_ROOT\sample.conf to C:

\conanair\Auto\cna\_base\CAIR\_ROOT

## Connection

### Authentication key file

Connect conanair and a PC

Start conanair

Display available network

Select conanair SSID > ☒Connect automatically > Connect

[1][9][9][2][0][1][1][2] > Next

“Other PCs and devices on this network~” → Yes (or No)

Switch to the automatic mode→Download authentication key file

Access <http://192.168.5.1/mode> on Web browser

Click **“Please create the authentication key file because it doesn’t exist”** to display the download screen.

Click [/cnf/cna ??????.key](#) to download.

Note the name of the downloaded key file.

### Connect conanair to the network

Access <http://192.168.5.1> on Web browser

Enter the network SSID and password in  
SSID and Pass

☐ Use Static IP > IP: Mask: GW:

Click the “Blank Send”

## Copy authentication key file

Copy the downloaded key file to

C:\conanair\Auto\cna\_base\CAIR\_ROOT\connection\_keys

## Editing tags.conf

Open

C:\conanair\Auto\cna\_base\CAIR\_ROOT\tags.conf in a memo pad.

Switch IME input mode to single-byte alphanumeric characters.

Enter an arbitrary name(foo) to conanair(cna\_??????) in the following format.

foo, cna\_??????

## Launch

Connect a PC to a network.

Display of available networks.

Select SSID of the prepared network > automatically connect> connect

Enter the connected network

password > Next

“Other PCs and devices on this network are~” → Yes

Start Base Station application

Start from desktop shortcut or cnaBase in Start menu.

Allow communication(receiving) of base station application

[Windows Defender Firewall] Blocked by Firewall When dialog displayed

☒Private network > Allow the accesse

Start conanair

Start conanair with a magnet

↑ About 30 seconds

```
++UDP: foo(ID=cna_XXXXXX) ~
yyy-MM-dd hh:mm:ss ~
Vbat = x.xxx [V], dt: ~
$$! Data not saved...

>> foo=cna_????? ~

※Display example
```

↑ About 3 mins

```
++UDP: foo(ID=cna_XXXXXX) ~
++TCP: foo(ID=cna_XXXXXX) ~
$$! 2nd. Init: Data not saved...

>> foo=cna_????? ~

※Display example|_____.
```

When 2nd.Init: Data not saved...  
is displayed on cnaBase window,  
startup is complete.

↓

It measures every hour at the next hour.

## Remove conanair connection

Remove conanair SSID(cna\_?????) connection from the list of known networks.

## Base station application

### Key assign

- [ Q ] End ([Q]→[Y]→[N]→any key)
- [Ctrl]+[Break] End without confirmation
- [Ctrl]+[C] Reload settings
- [C] Display of settings reports
- [P] Display parameter lists
- [S] Display all status reports
- [B] Display problem status reports

### Measurement data files

#### File type

- yyyyMMddhhmmss.cna (binary)
- yyyyMMddhhmmss.csv (CSV)

#### File storage location

##### original data

- C:\conanair\Auto\cna\_base\CAIR\_ROOT\data\+plus\_cna\foo (binary)
- C:\conanair\Auto\cna\_base\CAIR\_ROOT\data\foo (CSV)

##### Original data and synchronized data

- C:\conanair\Auto\cna\_base\APP\_ROOT\+plus\_cna\foo (binary)
- C:\conanair\Auto\cna\_base\APP\_ROOT\foo (CSV)

### Part of cnaBase window display

- Vbat : Battery voltage
- RSSI : Radio wave strength
- DevTmp : conanair circuit board temperature

# Installation

Example of installation procedure

Network Preparation

Check a radio wave strength.

Connect a PC with the base station application installed to a network.

Check the radio wave strength.

Start the base station application

Start conanair(if the power is off)

Check the radio wave strength

Simplified check of radio wave strength, and the standard

**RSSI values do not take noise(interference)into account**

**Even if the radio wave strength is good values, it may not be fast enough.**

Network

It may be displayed on the Wi-Fi router's configuration screen.

2.4GHz = -65dBm or higher(conanair)

5GHz = -60dBm or higher(Pif used with PC)

Windows

Start a command prompt and execute the following commands.

netsh wlan show interface

Check the signal line and set it to a value greater than 90%.

conanair

Check the RSSI value in the cnaBase window and set it to -65.0 or higher.

# Operation

## configuration file

If changed, it will reflect by restarting the base station application or reloading the configuration.

## conanair(re)connect

Reconnection with battery replacement

No special operation required

May require activation by a magnet

## Reconnection by browser (initialized or added)

Turn off "Connect automatically" if the network settings are within the range of the PC used for the work.

Turn it back on after work is finished.

Use another PC not operating to make settings without interrupting the measurement.



Update History

December 27, 2023	v1.0.0	First Edition
January 10, 2024	v1.0.1	OS and Browser Version Change