touchONE

touchONE-concentrator
Setup Guide

for firmware 20

Contents

# Introduction

Description

The touchONE is a meeting room and workplace reservation system. For workplace booking the touchONE-desk-55 interfaces are used. These interfaces are installed on a workplace desks and show its state. The touchONE-concentrator unit communicates with calendar servers and makes it possible to manage centrally all reservation desk units using web-browser. Each touchONE-concentrator unit can serve for up to 100 desk interfaces touchONE-desk-55.

Following picture describes how workplace reservation works.
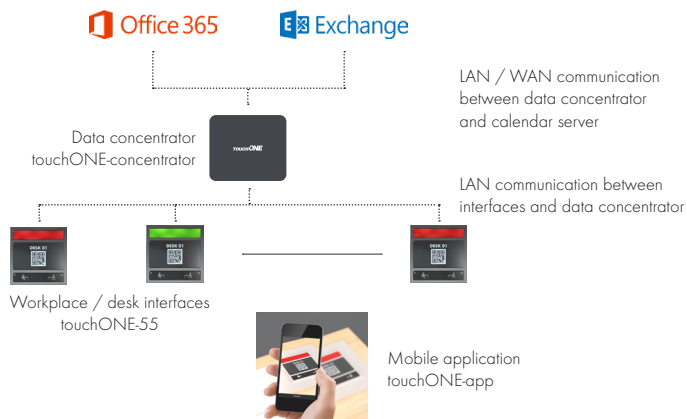
The desk interfaces provide the following information:

- Showing whether the particular workplace is occupied or available, which is indicated by large indicator - green for a free workplace and red for an occupied one.
- It is possible to reserve the workplace for the next available time in the calendar.
- If a workplace is reserved, it is possible to finish reservation directly from the interface
- If a workplace is free, it is possible to reserve workplace directly from the interface (unless another reservation is scheduled afterwards).

All units are connected to Ethernet. Desk interfaces communicate with data concentrator unit only. Data concentrator unit serves for system setup and it communicates with calendar servers. All desk interfaces are connected using one-cable Ethernet delivering data and power supply. touchONE-app allows to reserve desk from iOS or Android mobile device. Desk is identified by QR code and user is identified by credentials stored in mobile device. After reservation, desk is reserved in appropriate calendar and interface goes to occupied state.

Important notes:

- The touchONE-concentrator must be connected to the same local area network as all desk interfaces touchONE-desk-55.
- touchONE-desk-55 units requires PoE power supply.
- Following ports must be enabled on local area network for communication between data concentrator and desk interfaces:
  - TCP unicast on port 53128
  - UDP unicast on port 53129
  - UDP broadcast on port 33333

The touchONE-concentrator cooperates with the following servers or services where the room calendars are saved:

- Microsoft Exchange Server 2007, 2010, 2013, 2016. Exchange Web Services (EWS) is used for communication with Exchange server.
- Microsoft Office 365 subscription (any Business, Education, Enterprise or Government plan with Exchange Online service and with support of resource/room mailboxes; home and personal plans are not supported). Microsoft Graph platform is used for communication with Office 365 servers.

It is therefore also possible to use the default applications of these services to make a workplace reservation (Outlook, web interface, mobile applications).

For easy administration of touchONE-desk-55 units, these units are linked to a group called **reservation suite**. The entire reservation suite is centrally managed through the web interface of the touchONE-concentrator unit. The touchONE-concentrator must be plugged into the same LAN as the other units of the Reservation Suite.

The procedure for setup using web interface is described in this guide.

Network infrastructure and other hardware requirements

For the proper functioning of the touchONE-concentrator unit it is necessary to ensure the following:

- Server access (Exchange Server, Office 365) via HTTPS (TCP port 443). touchONE supports the following cryptographic standards for HTTPS access: TLS 1.1, TLS 1.2., TLS 1.3. Supported encrypting includes AES-GCM, AES-CBC, ChaCha20-Poly1305.
- For Exchange Server, it is necessary to have enabled service EWS (Exchange Web Services). This service is enabled by default.
- The EWS service is provided on the Exchange server using the Internet Information Services (IIS) Web server. IIS must be in version 7.5 or later.
- For Office365, it is necessary to register application for Microsoft Graph platform using Azure Active Directory.
- NTP (Network Time Protocol) servers access (UDP port 123).
- Functional DNS servers.
- Correctly set time zones for all required accounts (i.e. rooms).
- An open TCP port 80 (HTTP) and 443 (HTTPS) within the local network for the administration of touchONE units by means of Admin Web.
- An open unicast TCP port 53128, unicast UDP port 53129 and broadcast UDP port 33333 within the local network for communication between touchONE units. Communication between units is encrypted using AES-256.
- The touchONE-concentrator and the other units of the reservation suite must be on one LAN subnet.
- An open UDP port 53 for communication with DNS server and for conversion of domain names to IP addresses.
- An open UDP ports 67 and 68 for communication with DHCP server and for IP address assignment, if DHCP is used.
- An open UDP port 1900. Opening this port is not mandatory, it is used to make the reservation system units visible in the Windows File Explorer. This port uses UPnP technology (Universal Plug and Play), which makes it possible to make the reservation system units in the file explorer visible as other network devices. This technology must also be enabled on a given computer.
- An open proxy server port if a proxy server is used to access HTTPS servers.
- Access the server my.cuesystem.com over HTTPS (TCP port 443). This access is not mandatory, it is used to update the firmware.
- Free LAN sockets on Ethernet switches for all touchONE units.
- CAT5 or higher LAN cables leading from an Ethernet switch to the place where you want to install touchONE units.
- The use of PoE (Power over Ethernet) of the Ethernet switches is recommended as it will simplify the necessary cabling. In case your switches do not support the PoE technology, use the PoE injectors and connect them between the Ethernet switch and the touchONE-desk-55 interfaces. TouchONE-concentrator is powered by a stand-alone power supply unit and PoE is not required.
- The network card of touchONE-concentrator unit supports speeds up to 1 Gbit/s. If you are using a faster LAN, set up ports intended for these units on your switch to auto negotiate or to 1 Gbit/s.
- The network card of touchONE-desk-55 interfaces supports speeds up to 100 Mbit/s. If you are using a faster LAN, set up ports intended for touchONE panels on your switch to auto negotiate or to 100 Mbit/s.
- Check that no security programs or functions (such as fire-walls, proxy servers, domains etc.) block straight HTTP/HTTPS communication between the touchONE units and servers with room calendars.
- The touchONE-desk-55 interfaces are connected to LAN using a single cable, which also provides power supply thanks to PoE (Power over Ethernet) technology.

Type	Standard	Class
touchONE-desk-55	IEEE 802.3af	Class 0

- The touchONE-concentrator requires 110-230 VAC power supply.

The setup procedure

In order to set the workplace reservation system, it is necessary to perform the following steps:

1. Prepare accounts on the Microsoft Office 365 or Exchange 2007/2010/2013/2016. The procedure for setting up specific types of servers is described in the following documents.
   - touchONE - Setup Guide - Microsoft Exchange Server
   - touchONE - Setup Guide - Microsoft Office 365
2. Do the basic setup of the touchONE-concentrator unit (IP settings, date and time).
3. Create a reservation suite in the touchONE-concentrator.
4. Set the servers, accounts, timetables and resources in the touchONE-concentrator.
5. Scan and add interfaces touchONE-desk-55 units to the reservation suite configuration in the touchONE-concentrator. **All desk interface must be connected and online to provide this step.**

The touchONE-concentrator unit is managed using the Admin Web pages. There you can do the following:

- Setup the touchONE-concentrator unit (IP address, date and time, etc.)
- Create a reservation suite
- Manage a list of servers, accounts, timetables and resources
- Manage list of touchONE desk interfaces connected to the reservation suite
- Setting up the resource and touchONE units parameters
- Etc.

The Admin Web pages are available in the English language only.

Admin Web
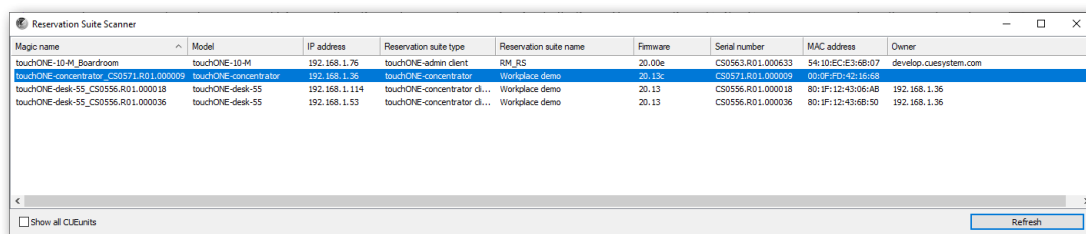
Accessing

In the default setting, the unit is enabled to get the IP address and DNS servers using the DHCP of your network. Check whether the IP address, gateway and DNS servers correspond to your network. In the "DHCP" item you can check whether the IP address has been acquired through DHCP (On) or not (Off). If the setting is not suitable for you, it can be changed later – for description how to do this see the chapter **Basic configuration of the touchONE-concentrator unit - IP Settings**.

To access the Admin Web of touchONE units you need a computer with an internet browser. The computer must be connected to the same LAN network as the touchONE units. The Admin Web pages can be opened in one of the following ways.

Option 1: Reservation Suite Scanner

On a computer that is in the same LAN as your reservation suite, run Reservation Suite Scanner.exe, which you can download from www.touchone.eu. This application does not require installation. Reservation Suite Scanner searches the network and lists all reservation system units. Double clicking on the selected touchONE unit will launch the default web browser and open the Admin Web of that unit.
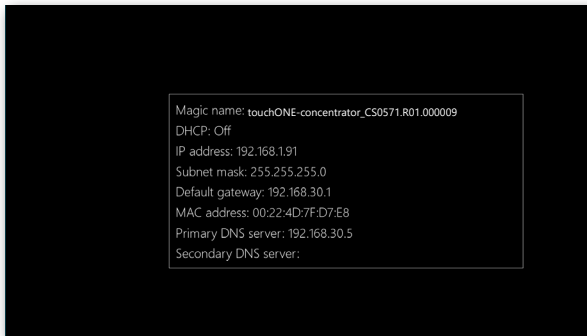

Option 2: File Explorer

Run File Explorer on your computer and select "Network" in the left part of the screen. On the right you will see a list of devices found in your network. The units of the touchONE systems can be found in the section "Other devices". If you double click the desired touchONE unit, the internet browser will start running, the unit IP address will be entered automatically and the Admin Web of the given panel will open in the browser. To enable your computer to find the touchONE units, network identification has to be switched on your computer. In Windows 10 this can be done in the following manner: Start / Settings / Network & Internet. Then select Wi-Fi (if your computer has a wireless connection to the network) or Ethernet (if your computer is connected through a cable) in the left half of the screen. If you are connected by cable, click on your network connection in the right part. If you are using Wi-Fi, click on the item "Advanced options" below the list of available Wi-Fi networks. Then set the item "Make this PC discoverable" to "On").
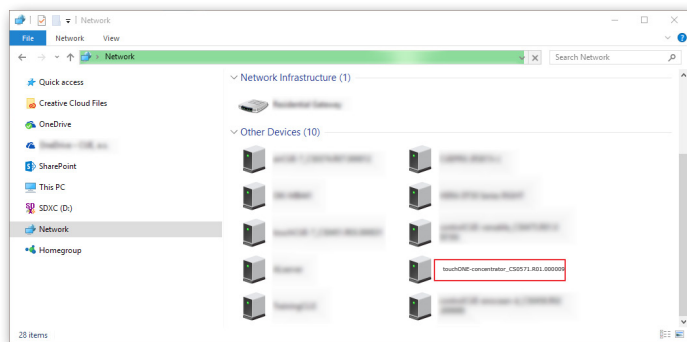
Option 3: IP settings on the monitor

Connect any monitor to the HDMI output of the touchONE-concentrator. Your monitor must be capable of displaying FullHD resolution (1920 x 1080). You will see the current IP settings on the monitor. In the "IP address" line, the current IP address is shown. Run the Internet browser on your PC and type in the touchONE-concentrator unit IP address.


Magic name: touchONE-concentrator_CS0571.R01.000009
DHCP: Off
IP address: 192.168.1.91
Subnet mask: 255.255.255.0
Default gateway: 192.168.30.1
MAC address: 00:22:4D:7F:D7:E8
Primary DNS server: 192.168.30.5
Secondary DNS server:

Login

If the touchONE-concentrator unit has reservation suite defined, you need to log in to gain access to Admin Web. Enter the reservation suite password where indicated and click on "Login". Note that the password entry is case sensitive. This takes you to the Admin Web home pages. If the touchONE-concentrator unit has not the reservation suite defined, there is no need to log in and you find yourself right on the home page.

touchONE-concentrator
CS0571.R01.000007

password

Login
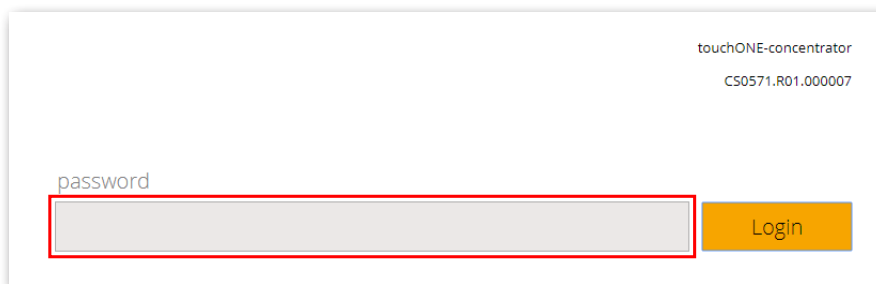
Home page

Use Home page to select reservation suite administration or touchONE-concentrator unit configuration. You can provide logout too.

touchONE-concentrator
CS0571.R01.000009

Administration   This unit configuration   Logout

Logout from Admin Web

Go to touchONE-concentrator unit configuration

Go to reservation suite administration
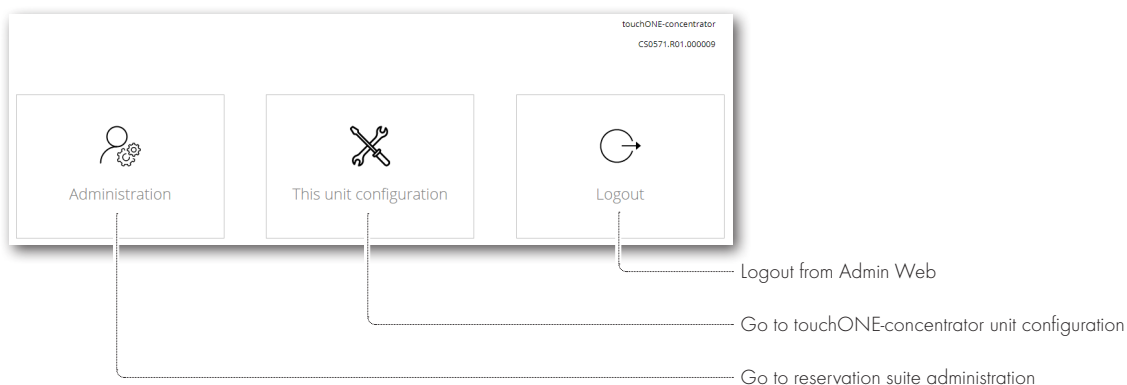
Reservation suite administration

Overview

This part of touchONE-concetrator Admin Web allows to administrate workplace reservation suite. In order to set the workplace reservation system, it is necessary to perform the following steps:

1. Prepare accounts on the Microsoft Office 365 or Exchange 2007/2010/2013/2016. The procedure for setting up specific types of servers is described in the following documents.

   - touchONE - Setup Guide - Microsoft Exchange Server
   - touchONE - Setup Guide - Microsoft Office 365

2. Create a reservation suite in the section "Setup".
3. Add servers where workplace calendars are located. Use section "Servers".
4. Add service accounts in the section "Service accounts". This accounts must have appropriate calendar access permissions.
5. Add timetables in the section "Timetables". Timetebles are used for workplace booking from the desk interface.
6. Add resources in the section "Resources". Every workplace requires one resource with calendar. Resource is identified by email. In manuals **touchONE - Setup Guide - Microsoft Exchange Server** and **touchONE - Setup Guide - Microsoft Office 365** resources are treated as room accounts.
7. Scan and add desk interfaces in the section "Units. **All desk interface must be connected and online to provide this step.**

Setup

First it is necessary to create the reservation suite in the touchONE-concentrator unit. If reservation suite is not defined, pop-up window "Setup" is displayed automatically.

Here you can enter:

- Name of the reservation suite with a minimum of 4 characters.
- Password with a minimum of 6 characters. You need to confirm the password by entering it twice ("Password" and "Reenter Password"). The entered passwords must be identical.

The reservation suite name and password serve for mutual identification of units. The password is also used for accessing the units' settings.
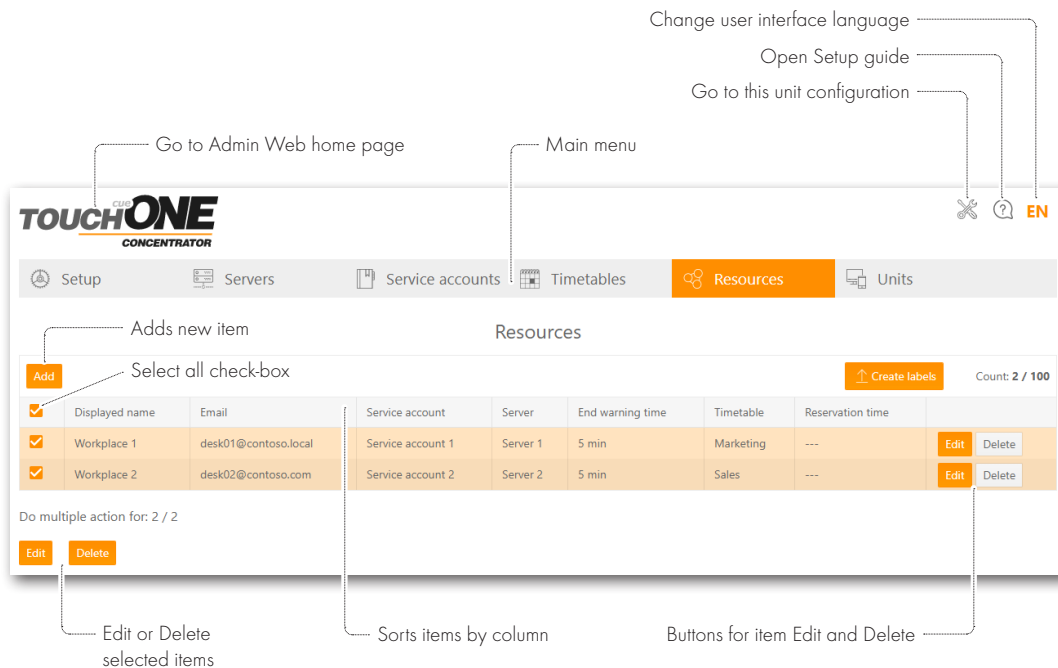
Click "Save" to save the changes.

If you need to edit setup, click on the button [Edit]. Pop-up window "Setup" is displayed and you can edit "Name" and "Password" again.

User interface description

Administration web consists of the parts described in the picture.

On the top right side are placed buttons for following basic functions:

- Open this unit configuration
- Open Setup guide - PDF describing complete setup and administration.
- Language selection.

From the main menu it is possible to navigate individual setup sections.

Most of sections typically consists of the table (grid) including items (lines). Every table allows item selection as well as multi-selection to provide bulk changes in more items. Tables can be sorted by selected column ascending or descending.

Every item can be edited using pop-up window which is activated by button "Edit". Button "Delete" located in the line serves for item deletion.

The item is typically edited using pop-up window. Required items are marked * and must be filled. Button "Save" stores data immediately and updates appropriate data structures. By button "Cancel" you can leave pop-up window and all changes are lost (not stored).

Important note

- Current Admin Web version supports only one client. In case of more clients are connected to the unit and provide changes, they can lost some data and some changes are not stored.
- It is strictly recommended to provide changes from just one client PC at the same time.

Servers

To add or edit server in the reservation suite, click on the menu button "Servers". List of servers is displayed. You can change the server parameters using button Edit or delete the server using button Delete .
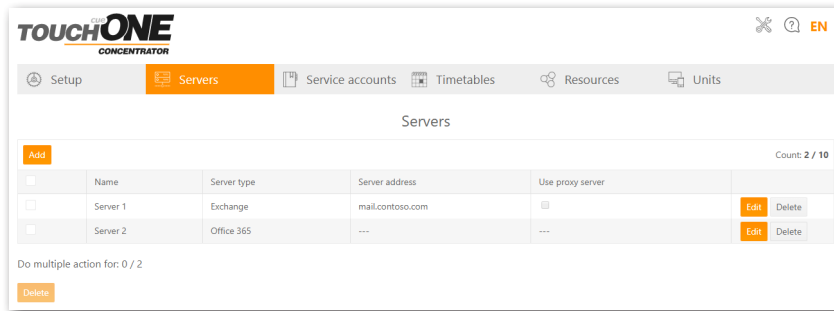
Use button Add or Edit to open server pop-up window. Fill server "Name", select "Server type" and click "Save" to save the changes.

The next procedure varies depending on the type of used reservation server.

Microsoft Exchange Server

It the field "Server type" choose "Exchange".

Enter server address in the field "Server address". You can either enter:

- Public IP address (if the server is accessible at this address, e.g. "123.45.67.89")
- Internal IP address in LAN network (e.g."192.168.1.2.)
- Local name of the server (e.g. "mail.contoso.local")
- Global name of the server (if there is a DNS record for it, e.g. "exchange.contoso.com").

If proxy server is required for the access to your exchange server, check the box "Use proxy server". You can test the connection with server by pressing "Test". Click "Save" to save the changes.

Microsoft Office 365

It the field "Server type" choose "Office 365". No other settings is required for Office 365 server. You can test the connection with server by pressing "Test". Click "Save" to save the changes.

Service accounts

To add or edit service accounts, click on the menu button "Service accounts". List of this accounts is displayed. You can change the account parameters using button `Edit` or delete the account using button `Delete` .
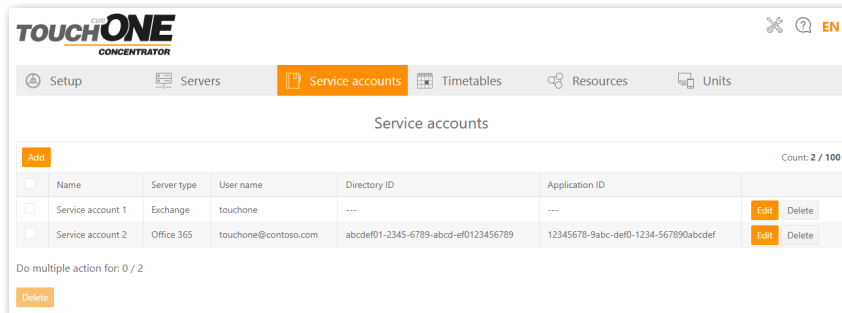
Use button `Add` or `Edit` to open server dialog box. Fill Name and under "Server type" choose which type of server the service account is intended for (Exchange / Office 365).

For **Exchange** enter the following credentials:

- User name - enter the service account user name (e.g. "touchone"). It is also possible that the user name will need to be entered in the domain/user account format (e.g. "contoso/touchone"), depending on the Exchange server settings.
- Password for service account
- Select appropriate server defined in the section Servers.

For **Office 365** Shared Secret authentication is used in this touchONE-concentrator version. For setup you need following credentials:

- User name - enter the service account email (e.g. "touchone@contoso.com").
- Password for service account
- Directory ID
- Application ID
- Client secret

You can test the service account by means of the "Test" button. Tap "Save" to save changes.

Timetables

It is possible to create many week timetables describing workplace reservation plans. Every timetable is dedicated for one week incl. weekend. Every timetable day consists of time slots which serves for reservation from desk interface. If someone reserves free workplace from desk interface using the button Reserve , workplace is reserved up to end of current time slot. Occupied workplace can be reserved for following slot. Typically various time tables can be defined for different company departments.

Example
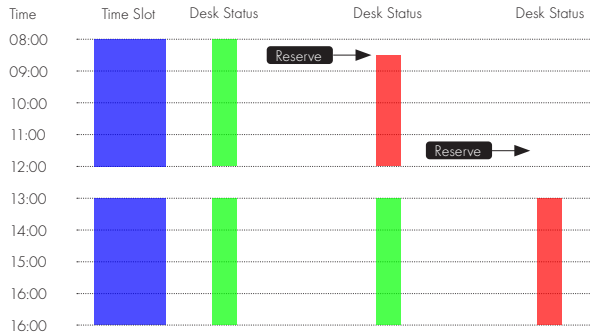
Important note

- Time slots are used for reservation from desk interface only. From Outlook you can reserve workplaces independently on time slots.

To add or edit timetables, click on the menu button "Timetables". List of timetables is displayed. You can change the timetable parameters using button Edit or delete the timetable using button Delete .
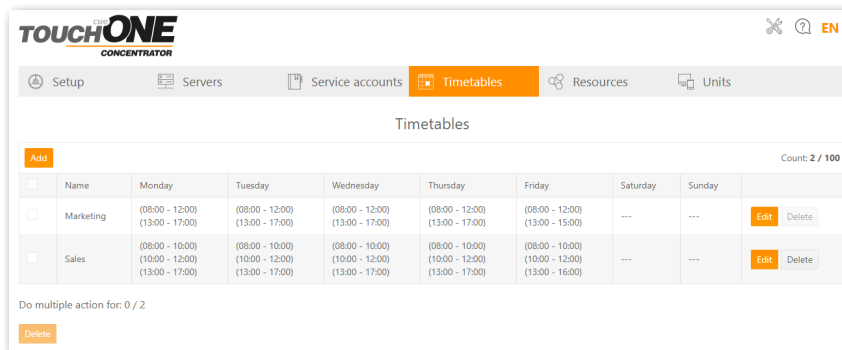
Use button Add or Edit to open timetable edit pop-up window.
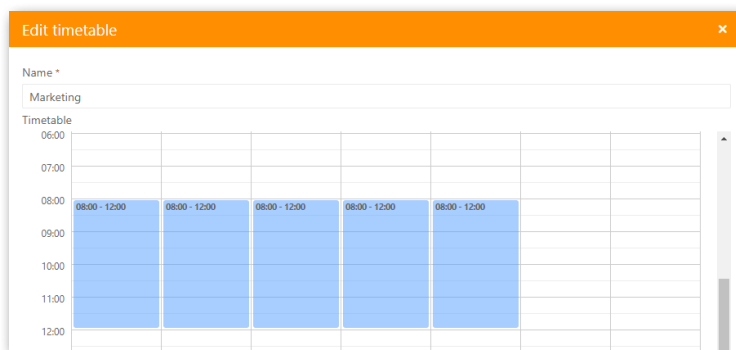
Click to time grid to create time slot. By dragging you can define length of the slot. Step is 30 minutes.

If you click existing time slot, it is possible to fill slot title or remove slot. Every slot can be duplicated for all days up to end of the week.

Tap "Save" to save changes and apply them to the whole reservation suite.

Resources

An Exchange or Office 365 resource is a unique account that appears as a calendar item, allowing staff to book meeting rooms, workplaces, equipment, etc. Every resource is identified by mail address and must be created for every workplace.

Current touchONE-concentrator firmware version allows to add resources manually, e.g. by copying resource email from Active Directory. Direct bulk import is not implemented now.

To add or edit resources, click on the menu button "Resources". List of resources is displayed. You can change the resource parameters using button [Edit] or delete the resource using button [Delete] .
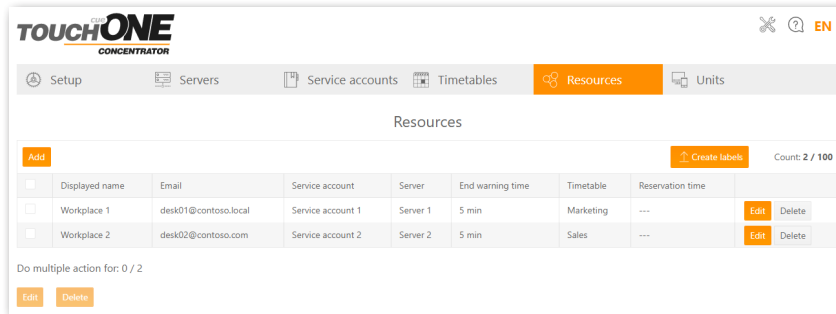
Use button [Add] or [Edit] to open resource edit pop-up window.

Fill following items:

- Display name - enter the workplace name. Typically it is the same name printed on desk interface label.
- Email - identifies workplace. It is unique identifier used for communication with the server. Check carefully email correctness. For Exchange the email has to be entered in the same format in which it was shown in the item User Logon Name / User Principal Name during the creating of the account, i.e. do not use the public email address (e.g. "~~desk01@~~ ~~contoso.com~~"), if this public address is not identical with the user logon name. For Office 365 enter the room account email.
- Service account - select service account used for the given workplace. The procedure for adding this accounts was described in the section "Service accounts".
- Server - select the server on which the room calendar is stored. The procedure for adding servers was described in the section "Servers".
- End warning time (min) - defines moment, when desk interface starts indication the approaching end of the reservation. For example if you set 5 minutes, then desk interface indicator will start blinking 5 minutes before end of reservation.
- Use timetable - this check box defines how reservation by desk interface button is implemented
    - If not checked - reservation is created for time defined in "Reservation time (min)"
    - If checked - reservation is based on selected "Timetable" defined in the section "Timetable".
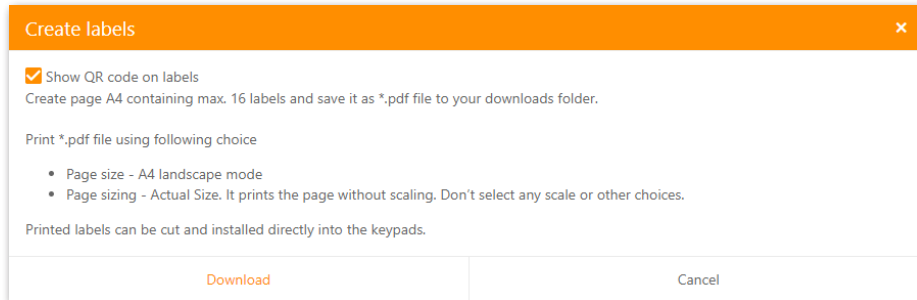
You can test the room account by tapping "Test".

Tap "Save" to save changes and apply them to the resource.

Creating labels for touchONE-desk-55

Use the button [Create labels] on page Resources to create and download a PDF file containing labels for units touchONE-desk-55. This file can be printed using a standard printer. The label includes crop marks for easy and accurate cuts. Cut out labels can then be installed directly to the touchONE-desk-55 units.

The following pop-up window is displayed.

Check the appropriate checkbox to choose whether or not a QR code with the workplace identification should be displayed on the label and press Download. The file will be stored in your downloads folder. The filename, e.g. Workplace demo_2020-01-24-1415.pdf consists of ReservationSuiteName_Export date and time and an extension pdf.

Carefully follow the instructions explaining how to print a downloaded file:

• Page size - A4 landscape mode

• Page sizing - set to Actual Size. It prints the page without scaling. Don't select any scale or other choices.

An example of a label file:
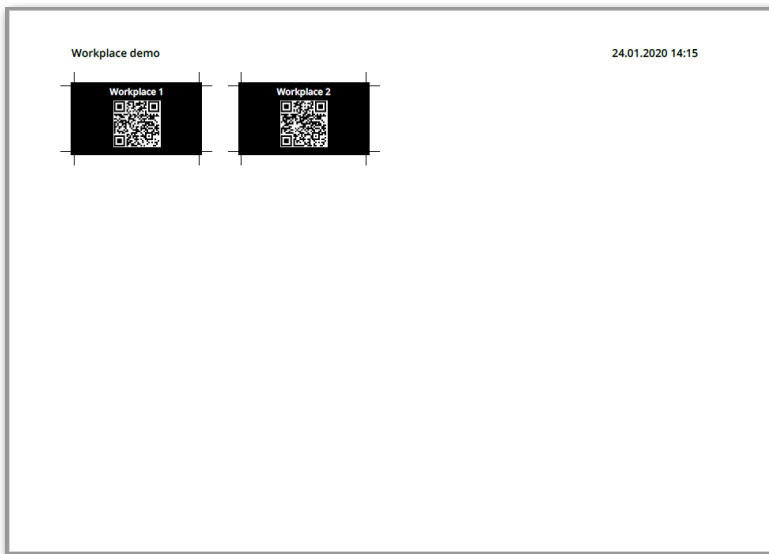
Units

In this section you can manage the units (desk interfaces touchONE-desk-55) connected to the touchONE-concentrator. Interfaces cannot be added manually using web interface, but it is necessary to scan real units connected to the network. That means before starting of unit management it is necessary to connect all desk interfaces to the **same** network as touchONE-concentrator.

Important notes:

- All desk interfaces and touchONE-concentrator must be connected to the same network.
- All managed units must be connected and online before you start scanning and editing.
- Only interfaces in factory default state can be scanned. Interfaces connected to the other reservation suite can not be scanned and add to another suite. First they must be deleted from reservation suite where they are connected. By other words, if connected, interface cannot be stolen by other touchONE-concentrator.
- If you delete unit (desk interface) from the list, desk interface is set to Factory default state automatically (if the interface is online). If interface is offline, unit is deleted from touchONE-concentrator internal memory and then it is necessary to set desk interface to factory default state using desk interface web site.

To add or edit units, click on the menu button "Units". List of units is displayed. You can add units using button `Add`, change the unit parameters using button `Edit` or delete the unit using button `Delete`.
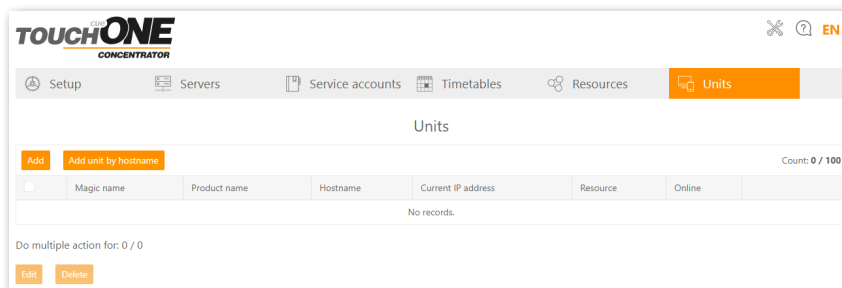
Use button `Add` to scan connected units (desk interfaces). All units, which are online and are not connected to other touchONE-concentrator, are displayed in the following list. Check units you want to add and click "Add". If you want to refresh scan, e.g. after connecting another new unit, tap button `Refresh`.
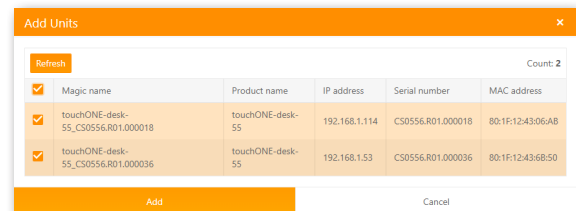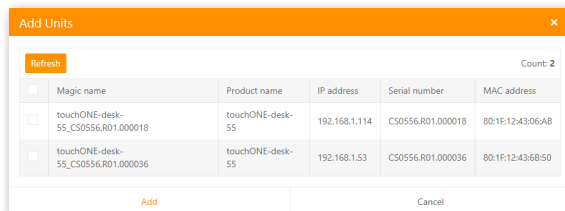
Selected units were added to the unit list.

In the column "Online" the list displays unit connection status - green means online, red means offline.
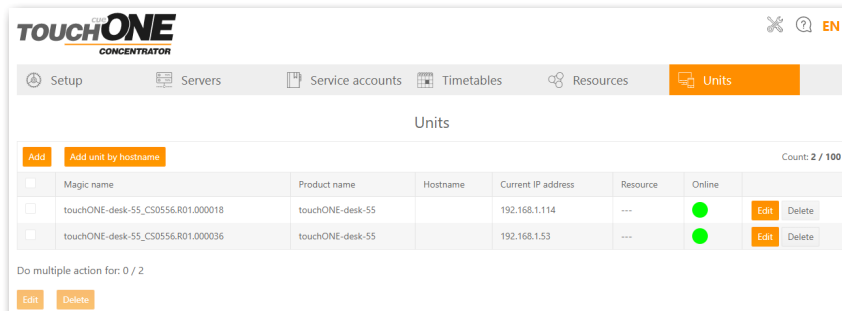
Alternatively, you can add units manually by pressing the [Add unit by hostname] button and entering the host name of the unit. The host name is derived from the magic name and can be found in the admin web of the unit. The host name entered to the touchONE-concentrator may need to be followed by the name of domain, where unit is located (fully qualified domain name), depending on the network organization.

After you have added units to the configuration, you can edit them. Tap the button [Edit] to open unit pop-up window.

This window allows to:

- Change "Magic name" of the desk interface. The "Magic name" is read from the unit. For unit in factory state, magic name is combination of product name and serial number. If you change the "Magic name", the new one is stored in the unit after press of "Save". That means if you scan unit again, new magic name will be displayed.
  It is recommended to set "Magic name" to name which identifies workplace,. e.g. Sales Desk 01, Support Desk A, etc.
- Set "Resource" used on the given workplace (desk interface). The procedure for adding resources was described in the section "Resources".
- Check "Beep on button enabled" if you want to confirm interface button press by beep. "Beep Volume" can set in the range from 10% to 100%.

The window displays current Mac address, IP settings, product name, firmware version and serial number of edited unit. These values cannot be edited.

Tap "Save" to save changes and apply them to the unit settings. After "Save" procedure, all data are stored in the touchONE-concentrator as well as in given interface (if online).

The basic configuration of the reservation suite is now complete.

You can continue to set the touchONE-concentrator unit itself (IP settings, date and time, etc.).

The touchONE-concentrator unit configuration

Overview

This section describes touchONE-concentrator unit configuration. At first check IP settings and date and time settings of the unit. Click on the button "This unit configuration" placed on the home page.
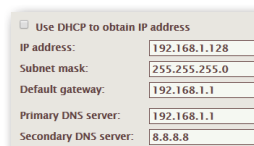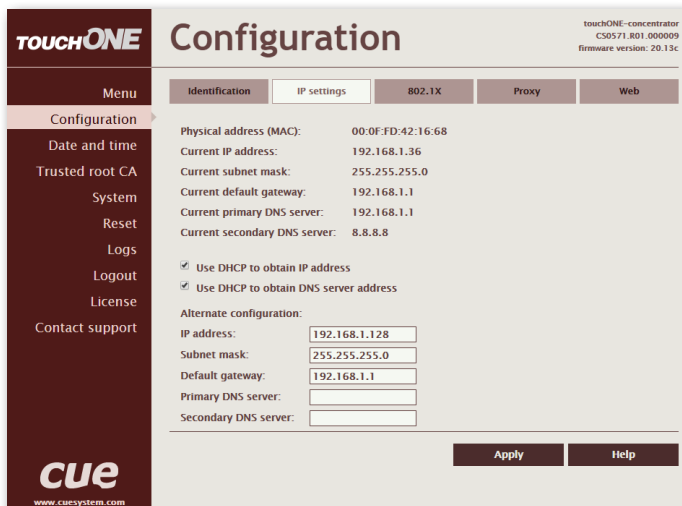
IP settings

In the left part, choose "Configuration". If you select "Identification" in the upper left part, you can change the "Magic name". "Magic name" is a unique name of a unit used in communication between reservation suite units. It is factory-set and there is usually no need to change it. If you, however, need to change it, you must ensure the new name is unique in the specific local network.
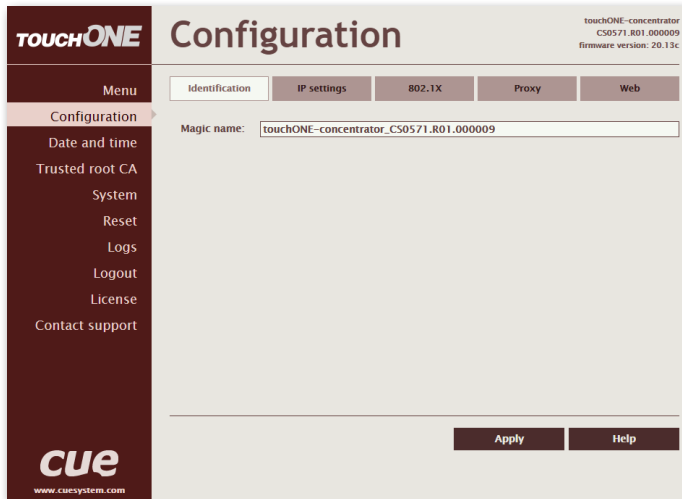
All changes made in Admin Web need to be confirmed by clicking [Apply] before leaving the selected page, otherwise changes will not become effective. To change IP addresses, select "IP settings" on top of the screen. The currently used setting is displayed in the upper part of the page. By the checkbox "Use DHCP to obtain IP address" you enable automatic assignment of an IP address through the DHCP server. By the checkbox "Use DHCP to obtain DNS server address" you enable automatic setting of DNS server addresses through DHCP. If you do not enable the automatic assignment of DNS server addresses, you need to set them in the bars "Primary DNS server" or "Secondary DNS server". You can also enter the IP address, the subnet mask, the default gateway as well as the primary and secondary server DNS of your network. If the assignment of IP address through DHCP is enabled, the entered setting of the IP address, mask etc. is taken as alternate configuration, i.e. configuration used in case the DHCP server is not available. If you are not using DHCP to assign the IP address, all items (IP address, subnet mask, default gateway and the primary and secondary DNS servers) have to be set for your network.

To save changes, press the [Apply] button.

In changing the IP settings, you need to reset the touchONE-concentrator unit. Confirm the changes in the setup by clicking "Yes" on the next page. This will also initiate the reset.

If your LAN is secured using 802.1X, select the "802.1X" tab at the top. Supported authentication methods are MD5 and TLS.

Type "Device identity" in the appropriate box.

If you are using MD5 authentication, check the appropriate checkbox and enter the password for MD5 authentication.

If you are using TLS authentication using certificate, check the appropriate checkbox. Then tap the "Choose file" button next to "User certificate", select the user certificate file and upload it. The following certificate types are supported: PKCS #12 and x509 (PEM, DER). You can also upload a private key file if the private key is not part of the user certificate. If the user certificate or private key is encrypted, enter the password to decrypt it in the "Password (optional)" box.

In the CA certificate entry, upload the Radius server CA Certificate.

Click [Apply] to save the changes.

If the proxy server is mandatory to access HTTPS servers on your network, select the "Proxy" tab on the top.

Enter Address and Port of the proxy server. If the proxy server requires authentication, enter the credentials for the proxy server in "Login" and "Password". Click **Apply** to save the changes.

On the "Web" tab, you can choose the level of access security to the AdminWeb page.

You can enable unsecured HTTP access (port 80) and secure HTTPS access (port 443) using the "HTTP & HTTPS" option. If you choose "HTTPS only," websites will only be accessible through secure HTTPS. For HTTPS access, a self-signed certificate is installed by default. Click **Apply** to save the changes.

At present, self-signed certificates are not considered as secure. Therefore, on this page you can upload your own certificates for the HTTPS admin web server in this unit. Certificate, private key and intermediate certificate in PEM format are supported. Private key password must be specified if private key is encrypted. Tap the "Choose file" button next to appropriate items, select the file and upload it. Then upload new certificate using **Upload** button.

Press "Use" button in the certificates list to activate required certificate. Press "Delete" button in the certificate list to delete obsolete certificate.

Date and time settings

If you need to set the time of the unit, choose "Date and time" in the left half. To set the current time, click on "Current date and time" in the upper part of the screen. The current date, time and time zone are shown on the "Current time" line. The applicable boxes can be selected to enter changes to the:

- date: day/month/year
- time: hour/minute/second

Be sure to click the [Apply] button for any changes to become effective.

To set the time zone, choose "Time zone" in the upper part of the screen. The current date, time and time zone are shown on the "Current time" line. The Time zone box can be selected to enter changes to the time zone. Be sure to click the [Apply] button for any changes to become effective.
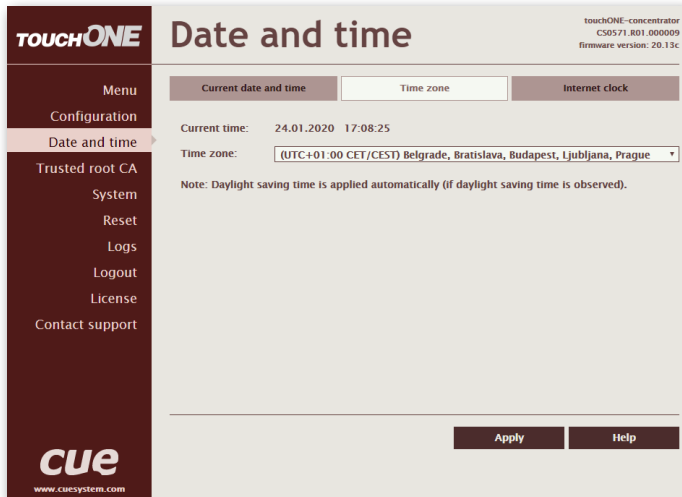

The touchONE-concentrator unit requires automatic synchronization of its clock with the internet (NTP) servers. If you want to change the setting of the internet time servers, select "Internet clock". Here you can change the names or IP addresses of the primary NTP server and the secondary NTP server. The default setting of the servers is "time.nist.gov" and "tak.cesnet.cz". Be sure to click the [Apply] button for any changes to become effective.
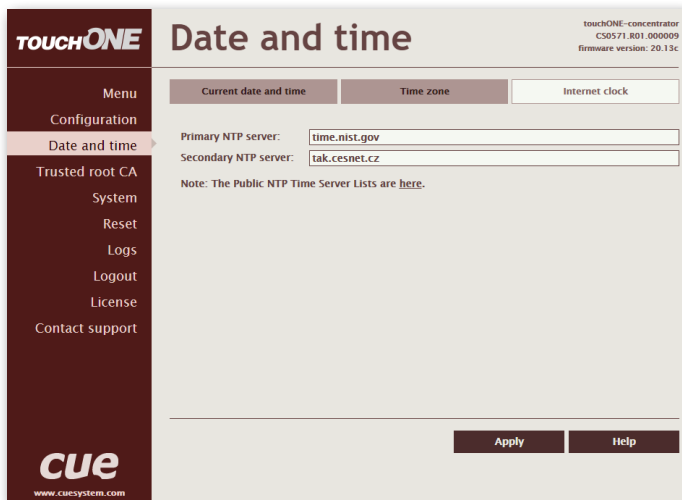
You can go back to the home page with the „Menu" button or you can continue with other settings as described below.

Trusted root CA

A list of publicly available trusted root certification authorities is built into the firmware of the touchone units. If you need to access HTTPS services from servers that do not have a certificate signed by these authorities and you need to verify these servers' certificates, you can use this page to upload the certificates of your own trusted root certification authorities.
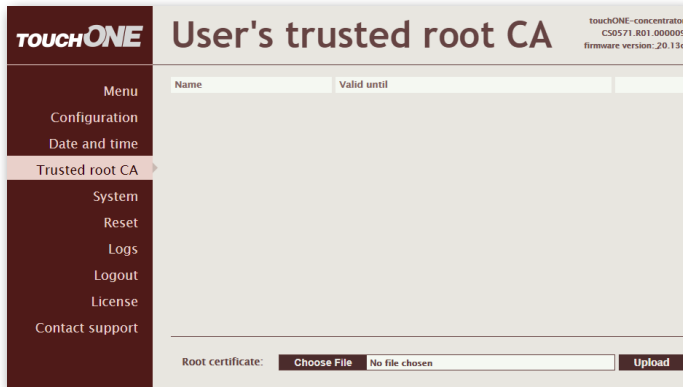
The trusted root CA certificate must be in PEM format. To upload the certificate, tap the "Choose file" button next to "Root certificate" and select the rusted root CA certificate file. Then upload new certificate using [Upload] button.

Upgrading firmware

To upload more recent firmware to the touchONE-concentrator unit, select the item "System" in the left column and then click on "Firmware" in the upper part of the screen. If your computer network is connected to the internet, you can check the availability of newer firmware by clicking the button "Check for new firmware". The touchONE unit verifies whether newer firmware is available on the update server my.cuesystem.com. If there is, it gets downloaded.

You can also download firmware files into your computer on the website http://www.touchone.eu/downloads.htm. The downloaded firmware file is the ZIP type and includes firmware for all touchONE units. Unzip the file into a suitable directory in your computer. The firmware files are in the CVCF format. Then press the button "Choose file", select the file with firmware for your touchONE unit and press "Upload". In selecting the right CVCF file, check the name and serial number of your unit in the upper right part of the web page, e.g. **touchONE-concentrator, CS0571.R01.000009**. The firmware file has to correspond to the name and first two parts of the serial number. For example, to upgrade to firmware version 20.13c select the file **touchONE-concentrator_ CS0571.R01_Firmware_20.13c.cvcf** for the above-mentioned unit.e.
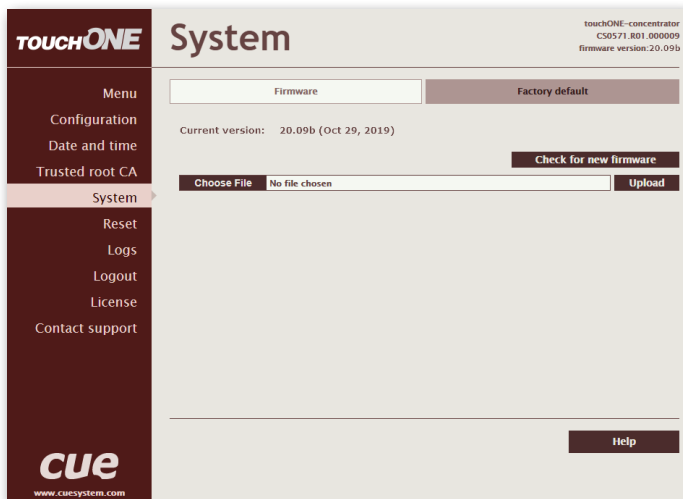
After the file with new firmware is uploaded into the unit, the following screen will come up. Apply new firmware by clicking "Update".
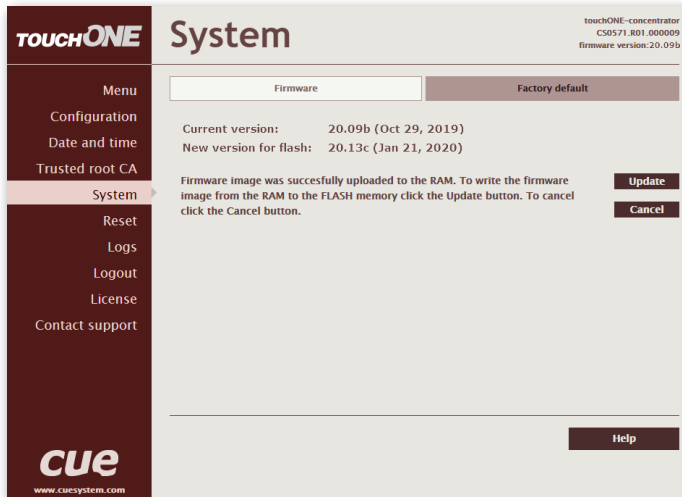

The firmware upgrade takes about one minute and then the unit restarts. Do not shut down or disconnect the power (LAN) during the update, as this might damage the unit. If upgrade has been successful, the following screen will come up.
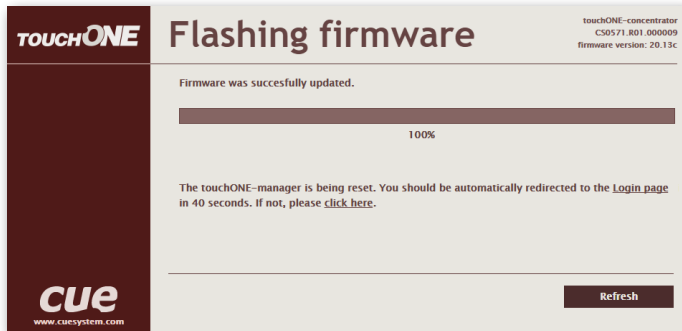
Note: After the firmware upgrade on the touchONE-concentrator, this unit automatically updates the firmware on all slave devices touchONE-desk-55.

# Other settings of the touchONE-concentrator unit

If you need to reset the unit, choose "Reset" in the left menu and then click the "Reset" button in the right part of the screen. If you need to put the touchONE-concentrator unit into the factory default mode, delete all user settings and leave the reservation suite, choose "System" in the left menu, then "Factory default" in the upper part, and then click the button "Set factory default". Confirm the deletion by the "Yes" button or cancel it by the "Cancel" button.
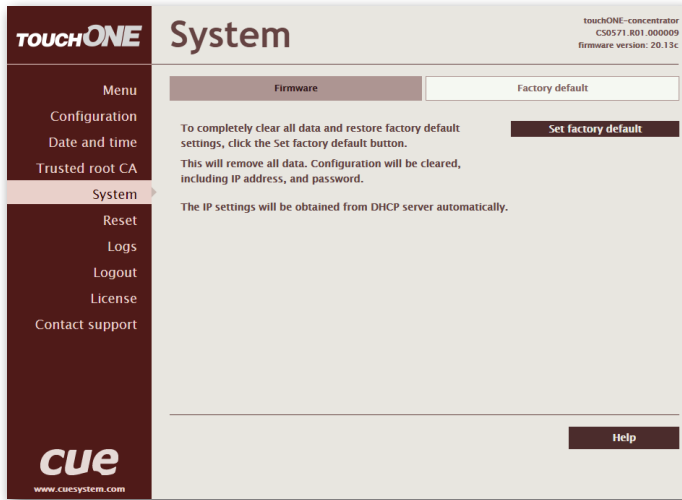

If you choose "License" in the left menu, you will see a page describing the EULA software license. Selecting "Contact support" enables you to send an email message to CUE support through the email program in your computer.

Tools

The touchONE-concentrator unit has built-in additional tools for easier management and collection of statistical data. To access this tools, open the admin web, login and select "Administration".
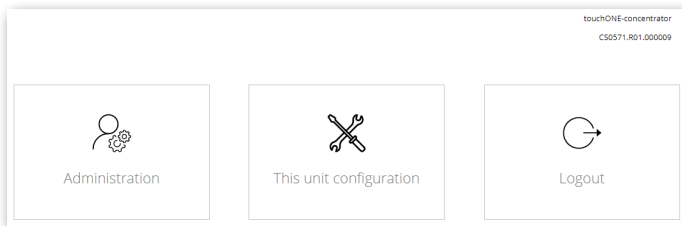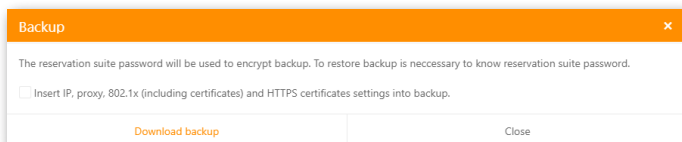

Then select "Setup" from the main menu. Tools are available at the bottom of this page.
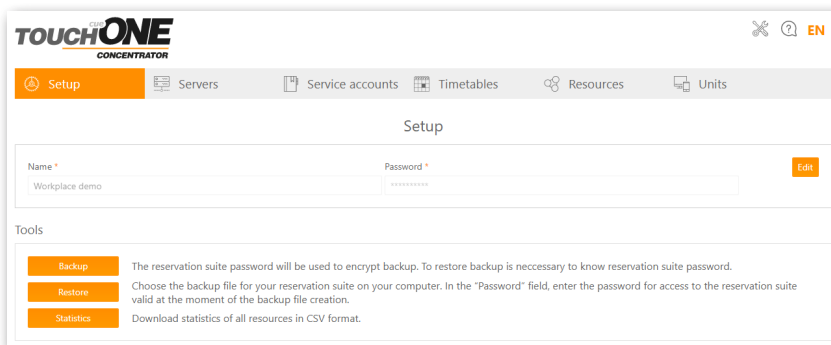

Backup and restore

From firmware version 20, it is possible to save and restore touchONE-concentrator / whole reservation suite configuration using a backup file.

To create a backup file, click Backup button. The following pop-up window opens.

If you want to save the IP settings of the touchONE-concentrator (including proxy settings and security settings 802.1x incl. certificates) in the backup file, tick the appropriate checkbox. You will create a backup file using the "Download backup" button. Once created, the backup file will automatically be downloaded to your computer and saved to the downloaded file folder. The name of this file is in the "ReservationSuiteName_date_time.backup" format. The file is encrypted and protected using password to access the reservation suite administration. Therefore keep your current password in a safe place, as without a password the configuration can not be restored.

To restore the configuration from the file, click Restore button.
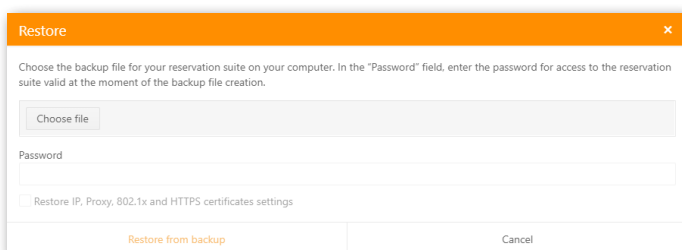
Then press the "Choose file" button and choose the backup file for your reservation suite on your computer. In the "Password" field, enter the password for access to the reservation suite (valid at the moment of the backup file creation). If you want to restore the IP settings of the touchONE-concentrator (including proxy settings and security settings 802.1x incl. certificates) from the backup file, tick the appropriate checkbox. Then confirm the restoration with the "Restore from backup" button. The restoration takes about 60 seconds and then the unit is reset.

Statistics

One of the main functions of the touchONE-concentrator unit is to collect statistical data. With it you will get decision-making data regarding the efficiency of resource usage, which can help you to plan the appropriate numbers and types of resources.

To access statistical data, open the admin web, login and select "Administration". Then select "Setup" from the main menu. Statistics download is available in the tools section at the bottom of this page.

The statistical data are in a CSV (Comma-separated values) file. All available event data from the resources managed by the touchONE-concentrator unit will be exported to this file. Click the [Statistics] button to download the file with statistics data.

Confirm the download by pressing the "Download statistics" button. Once created, the CSV file will automatically be download to your computer and saved to the downloaded file folder. The name of this file is in the format "ReservationSuiteName_statistics_ date_time.csv". You can then evaluate the data from this file with any analytic tools such as Microsoft Excel. To import CSV file to Excel (version 2016), we recommend the following steps:

- Create a new empty workbook
- On the "Data" tab, select "From Text / CSV"
- Choose CSV file
- In the next window, verify the format in which the data will be imported and confirm with "Load".