



A MITEL
PRODUCT
GUIDE

Unify OpenScape 4000

BLF-Win 3.0 R19

Busy Lamp Field-Win BLF-Win 3.0

Service Manual

10/2022

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1 Important Information

1.1 Safety Information

The following information is intended for service personnel and authorized specialists. **Only** these persons are permitted to work on the installation.

Read through all information on the equipment carefully, and follow all safety instructions. Make sure you know the emergency numbers.

Always contact your supervisor before starting work if the necessary safety measures do not appear to be in place (e. g. risk of gas explosion, humidity).

Safety symbols

This manual uses the following symbols to indicate potential hazards:



This symbol warns that a situation may cause death or serious injury.



This symbol indicates hazard which may lead to serious injury.



This symbol indicates a risk of damage to hardware or software.

NOTE: This symbol identifies useful information.

Further symbols for defining the source of danger in greater detail¹:



Electricity



Weight



Heat



Fire



Chemicals



ESD*



Laser

* Electrostatically Sensitive Devices

1. These symbols are not generally used in this manual. They're an explanation of the symbols that can be depicted on the systems.

1.1.1 Safety Information: Danger

- Before starting the installation and connecting the subscribers, the installation must be correctly connected to the protective conductor.
Never operate the equipment with the ground wire disconnected.
- Voltages above 30 V AC (alternating current) or 60 V DC (direct current) are dangerous.
- If the power cable appears to be damaged, replace it immediately.
- Immediately replace any damaged safety equipment (covers, labels and protective cables).
- If maintenance work requires the power supply of the system to be shut down,
 - use the shut-off switch to disconnect the system from the power supply circuit and secure the disconnect device mechanically so that it cannot be used by other persons.
 - Attach a sign reading “DO NOT OPERATE” to the disconnect device.
A disconnect device can be a shut-off switch (main switch) or circuit-breaker (fuse/automatic circuit-breaker).
 - Before starting any work on the installation, find out where the system’s disconnect device is located.
- If you are performing work on circuits with hazardous voltages, always work together with a partner who is familiar with the location of the switch for the power supply.
- Always ensure adequate insulation when touching powered circuits.
- Ensure that the installation is not powered by an additional power supply, or protected via an additional fuse or additional main switch.
- Before starting any work, check whether the corresponding circuits are still on power. Never take it for granted that all circuits have reliably been disconnected from the power supply when a fuse or a main switch has been switched off.
- During a thunderstorm, you should not connect or remove telephone lines or boards.
- Expect to encounter leakage current from the telecommunication network.
- Ensure that, whenever work is carried out on an open installation, the installation is never left unsupervised.

1.1.2 Safety Information: Warning

- There is the risk of an explosion if the lithium battery is not replaced correctly. The lithium battery must be replaced only by the same or equivalent types recommended by the dealer.
- Be aware of additional dangers with low voltages and large cross-sections. Cables with a large cross-section generally have lower voltages, although the current strengths are higher. This is particularly dangerous, e.g. in the event of short circuits.
- When working on the installations, never wear loose clothing and always tie back long hair.
- Never wear jewelry, for example or metal watch straps, metal fittings or metal rivets on items of clothing. There is a risk of injury and short circuits.
- The surface of a mirror is conductive. Never touch powered components with a mirror; you may injure yourself and/or at least cause short-circuit damage.
- Always wear the necessary eye protection whenever appropriate.
- Always wear a protective helmet where falling objects might injure you.
- Always disconnect the power supply when you are working directly next to a power supply unit or direct current converter, unless the work instructions expressly permit you to work without shutting off the power.
- Never try to lift heavy objects without assistance.
- Never look directly at a laser beam.

1.1.3 Safety Information: Caution

- Check the nominal voltage set for the equipment (operating instructions and type plate).
- As long as the power supply is switched on, always observe the greatest caution when performing measurements on powered components and maintenance work on plug-in cards, boards and covers.
- To protect electrostatically sensitive devices (ESD):
 - Wear a wristband before carrying out any work on PC boards and modules. Connect the alligator clip at the end of the electrostatic wristband wire to a grounded object.
 - Transport PC boards only in suitable protective packaging.
 - Always place PC boards on a grounded conducting base, and do not work on the PC boards anywhere else.

- Only use grounded soldering irons.
- Only use tools and testers suitable for the job. Do not use broken tools and testers, inspect them regularly.
- Locate the main switch for the power supply and follow the instructions affixed to it.
- Cables should be installed so that they do not pose an accident risk (i.e. will not trip anybody up) or are damaged.

1.1.4 General Information

- If the installation is brought into the operating site from a cold environment, condensation may occur. Wait until the temperature of the installation has adjusted to the ambient temperature and until the installation is absolutely dry before you start it up.
- Before starting wall assembly, check whether the load-bearing capacity of the wall is adequate, e. g. in the event of plasterboard walls.
- When the installation or maintenance is completed, replace all safety equipment in the correct location.
- Check your tools regularly. Only use intact tools.
- Close the doors after finishing testing, maintenance, or installation.
- All cables and lines which leave a system cabinet must be screened at least between the connection point in the cabinet and the point at which the cable leaves the cabinet.
Use a clip and pressure screw to contact all shield fabric to the cabinet outlet. This also applies to permanently connected service equipment.
- Cables should only be connected to the specified connection points.
- Do not install any external modems in the installation cabinets.
- Do not allow flammable materials to be stored near the installation or in the installation room.
- Ensure good lighting at the workplace.
- Untidiness at the workplace involves the risk of injuries.

1.1.5 What To Do in an Emergency

- In the event of accidents, remain calm and controlled.
- Always switch off the power supply before you touch an accident victim.
- If you are not able to switch off the power supply immediately, only touch the victim with non-conducting materials (e. g. a broom handle made of wood), and first of all try to isolate the victim from the power supply.
- You must be familiar with first-aid practices in the event of electricity injuries. A fundamental knowledge of the various resuscitation methods if the victim has stopped breathing or if the victim's heart is no longer beating, as well as first aid for treating burns, is absolutely necessary in such emergencies.
- If the victim is not breathing, immediately perform mouth-to-mouth or mouth-to-nose resuscitation.
- If you have appropriate training, immediately perform heart massage if the victim's heart is not beating.
- Immediately call an ambulance or the emergency doctor. Provide the following information in the following sequence:
 - Where did the accident take place?
 - What happened?
 - How many people were injured?
 - What type of injuries?
 - Wait for questions.

1.1.6 Reporting Accidents

- Immediately report all accidents, "near accidents" and potential sources of danger to your manager.
- Report all electrical shocks, no matter how small.

1.2 Data Protection and Data Security

This system also processes and uses personal data, e.g. for call charge metering purposes, displays and for recording subscriber data.

In Germany, the processing and use of such personal data are subject to various regulations, including the regulations of the Federal Data Protection Law (Bundesdatenschutzgesetz = BDSG). Observe all applicable laws in other countries.

The aim of data protection is to ensure that the rights of individuals are not infringed upon through the use of their personal data.

By protecting data against misuse during all stages of processing, privacy legislation also protects the material interests of the individual and of third parties.

Members of Unify and Unify Rolm staff are required to observe business and data secrecy as a result of the company's work rules.

In order to ensure that the statutory requirements during service – (whether on-site or remote) – are consistently met, you should always observe the following rules. This safeguards the interests of the customer and offers added personal protection.

Contribute to data protection and data security with your conscientious action:

- Ensure that only appropriately authorized persons have access to customer data.
- Take full advantage of password allocation options; do not inform unauthorized persons of passwords, e.g. by means of a written note.
- Ensure that no unauthorized person is able to process (store, modify, transmit, disable, delete) or use customer data in any way.
- Prevent unauthorized persons from gaining access to data media, e.g. on backup diskettes or log printouts. This applies to service calls as well as to storage and transport.
- Ensure that data media which are no longer required are completely destroyed. Ensure that documents are not generally available.

Work together with your contacts at the customer's company: this creates mutual confidence and reduces your own workload.

1.3 Typographical Conventions

For the sake of clarity the following typographical conventions have been used throughout this manual:

	indicates important information on the correct handling of the system.
bold font	indicates commands or menu items
<i>italic font</i>	indicates paths or program names
1. 2.	lists steps that you must execute

2 Introduction

BLF-Win (*Busy Lamp Field*) is a control and display program that provides information on the status of the subscribers or subscriber groups configured in a telephone system.

2.1 General Information

The *Busy Lamp Field* program displays the ringing states of the configured subscribers and subscriber groups.

The main functions of the BLF-Win client are:

- Color status indicator of the subscriber line:
 - Idle
 - Ringing
 - Out of service
 - Busy
 - not existing
- Customized configuration and design of the program window
- Configuration of subscribers and subscriber ranges
- Call forwarding
- Note function provided when subscribers and subscriber ranges are created. The note appears in the fast tip.
- Networkwide solution:
 - One BLF-Win Server can handle more switches in corporation with CAP V3.0 SCCP interface. Note, that the iBLF server can only handle the switch it is running on.
 - One BLF-Win Client can handle more switches in corporation by connecting to multiple iBLF and BLF-Win servers.

Note:

BLF-Win 3.0 does not support

- Hunt groups
- Executive/Secretary combination

- ISDN-access

For a detailed description of the functions, please refer to the BLF-Win operating manual.

2.2 BLF-Win Documentation

The BLF-Win documentation describes version 3.0 R19 and consists of two parts:

- BLF-Win Client Operating Instructions
- BLF-Win Server Service Manual (this manual)

The service manual covers the following:

- Instructions on how to set up the connection to the CAP server
- Instructions on how to install *BLF-Win*
 - Hardware and software requirements
 - Installation of the BLF-Win server and client software
- An overview of the BLF-Win server functions

2.3 Overview of the BLF-Win 3.0 Product

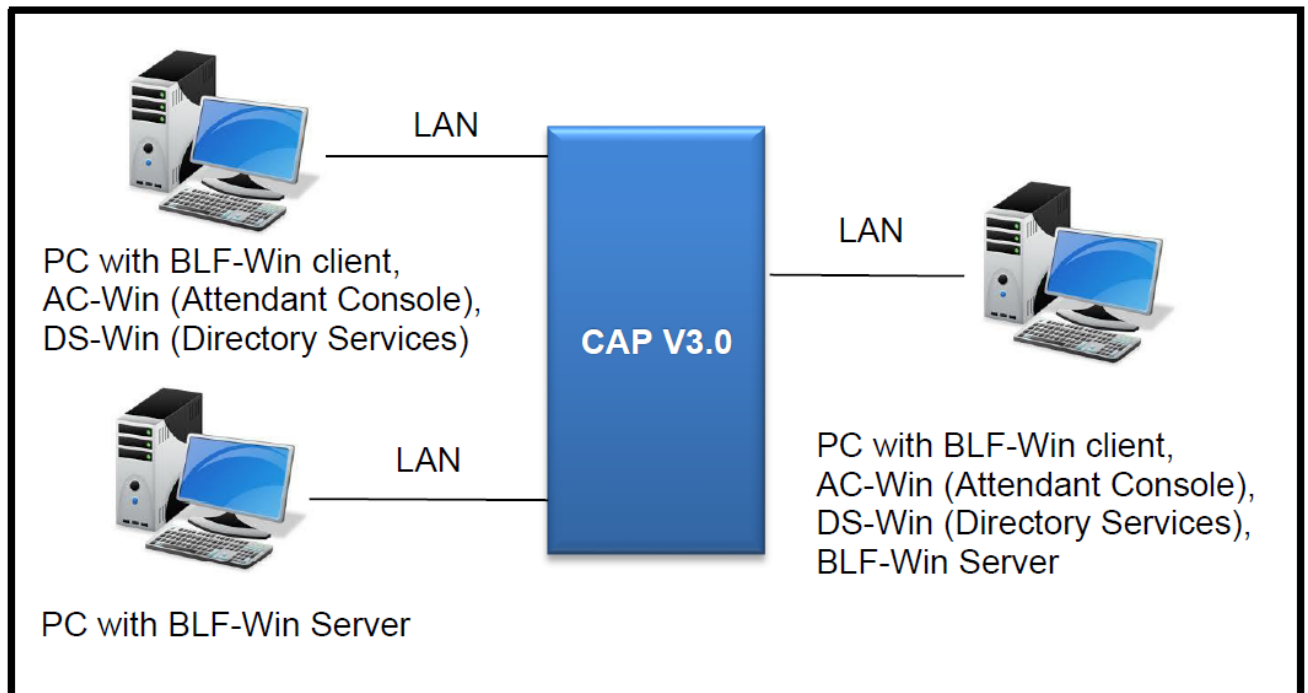
This overview refers to version 3.0 of the product described in this Service Manual:

Feature	<i>BLF-Win 3.0</i>
Telephone systems	supported by CAP V3.0
Operating systems	Please see the Release Notes for current supported Windows versions.
CAP V3.0 connection	LAN interface

2.4 Configuring BLF-Win 3.0

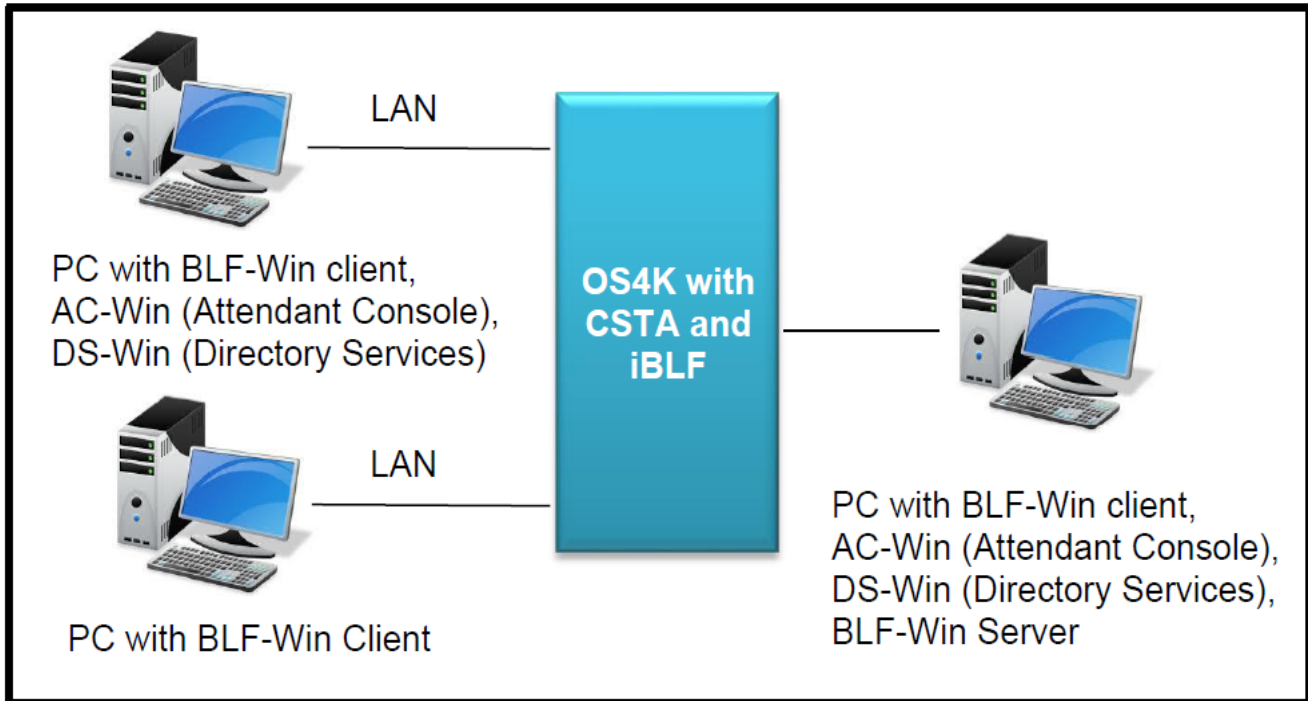
2.4.1 Configuring BLF-Win 3.0 using CAP V3.0

The BLF computer is connected to a CAP system via a LAN interface. The BLF-Win server can run on the same PC as the BLF client, AC-Win and DS-Win. But it can also run on a different PC.



2.4.2 Configuring BLF-Win 3.0 using iBLF

The BLF computer is connected to OpenScape 4000 with enabled iBLF via a LAN interface. In this case, the BLF server is integrated into the OpenScape 4000 system.



2.4.3 Implementing Windows

Throughout this manual we assume that you are familiar with Windows and how to use it. For further information on the functions of Windows, please refer to the *Windows User Manual*.

3 Hardware and Software Installation

3.1 General Information

- A BLF PC only supports communication type (LAN).
- The power-save mode must not be enabled on the BLF PC (BIOS setup). A screen resolution of at least 1280 x 1024 is recommended as certain dialog boxes are not fully visible with lower resolutions.
- Use the „TrueColor“ setting to ensure a correct color display.

3.2 Installing the BLF-Win PC

3.2.1 PC Hardware (Minimum Requirements)

- Processor speed: 1GHz (required for .NET framework)
- RAM: 1GB (512MB for .NET framework, 512MB for BLF Server +Client, AC+DS-Win)
- 1 LAN interface
- Disk space: 1.2 GB min.
- Optical drive: CD-ROM drive 16xspin
- Graphics controller 1 MB on board (True Color)
- Monitor resolution of 1280x1024
- KBPC B keyboard
- MS compatible mouse (PS2)

3.2.2 PC-Software

- AC-Win SL 2Q V3.0, AC-Win SL MQ V3.0
- DS-Win V4
- Bios settings:
 - Boot Plug and Play OS=No
 - Power=APM=Disabled

3.2.3 LAN Card

An Ethernet network card of the type Ether Link 3COM Combo (S26361-F1952-L1) must be installed in the PC for connecting via Ethernet. The network card should be supported by the operating system with the relevant driver software or the drivers should be supplied by the card manufacturer.

NOTE: You must ensure that surfeits do not occur with other hardware with regard to interrupts and I/O addresses.

One LAN card is required for the BLF-Win server PC:

1. For the connection to the CAP V3.0 and to the customer LAN (to support BLF-Win Clients)

3.3 Installing licenses for BLF-Win using OpenScape CTI

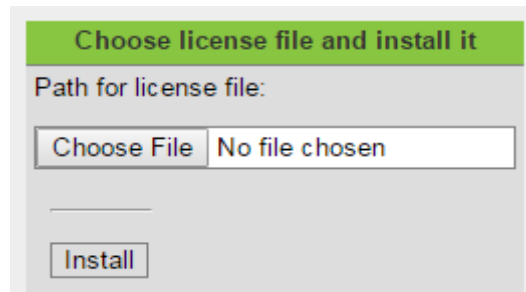
When the BLF-Win Client is connecting to a BLF-Win Server instead of the integrated BLF Server (iBLF), then a license is required to monitor the stations. License management functions are provided under the License Management menu in OpenScape CAP Management. The administrator can manage licenses for using the OpenScape CTI system: install license keys, display available licenses, assign licenses to users, and uninstall license keys. Every BLF-Win Client is delivered with 1000 licenses. This means that it is possible to monitor up to 1000 station using one BLF-Win Client. If more than 1000 stations have to be monitored, additional BLF-Win Clients have to be ordered.

3.3.1 Install Licenses

Licenses are installed via license files. These license files are to be obtained from the same source as the OpenScape CAP software. For Unify customers, this normally will be the factory delivering the CDs. Based on the purchase and delivery information, the administrator will be able to contact a web site at the factory to have license files generated for download. In order to prevent misuse, license keys are tied to the MAC ID of the OpenScape CAP Management host. This is why that MAC ID must be provided as well for license generation.

Please note that demo licenses are provided with the OpenScape CAP delivery; these are not tied to a specific MAC ID, and are valid for a limited time period only.

1. Obtain the license file and store it locally at any convenient place.
2. Select **Licenses**, and activate **Install** in the navigation frame.



3. Specify the absolute path of the license file in the dialog box.
4. Click **Install** to have the license file analyzed and the new licenses activated.

Hardware and Software Installation

Installing licenses for BLF-Win using OpenScape CTI

3.3.2 Display Licenses

Select **Licenses**, and activate **Show** in the navigation frame.

A summary is displayed as shown below.

The Overview table contains information on licensed applications, number of installed licenses and number of licenses in use / available, per application. The Details table shows specific data on each of the installed license keys.

The MAC ID FF-FF-FF-FF-FF-FF is used to identify demo license keys. The period of validity is started by first application of a demo key; accordingly, the remaining period of validity is displayed in the overview table in brackets, following the number of available licenses.

Overview licenses

Application	Installed licenses	Used licenses	Available licenses
● CAP-E	100	0	100
● CAP-S	100	2	98 (05/31/2017 17:57)
● CAP-A	100	2	98 (05/31/2017 18:29)
● ComAssistant	100	0	100
● CAP-L	100	4	96 (05/31/2017 17:57)

License keys installed

Vendor	Application	Version	Customer	Date	Valid until	Installed licenses	MAC-Adr. / Serialno.
● ICN EN	CAP-E	V2.0	Evaluation	04/29/2003		100	FF-FF-FF-FF-FF-FF
● ICN EN	CAP-S	V2.0	Evaluation	04/29/2003		100	FF-FF-FF-FF-FF-FF
● ICN EN	CAP-A	V2.0	Evaluation	04/29/2003		100	FF-FF-FF-FF-FF-FF
● ICN EN	ComAssistant	V1.0	Evaluation	04/29/2003		100	FF-FF-FF-FF-FF-FF
● COM ESY	CAP-L	V3.0	Evaluation	06/07/2006		100	FF-FF-FF-FF-FF-FF

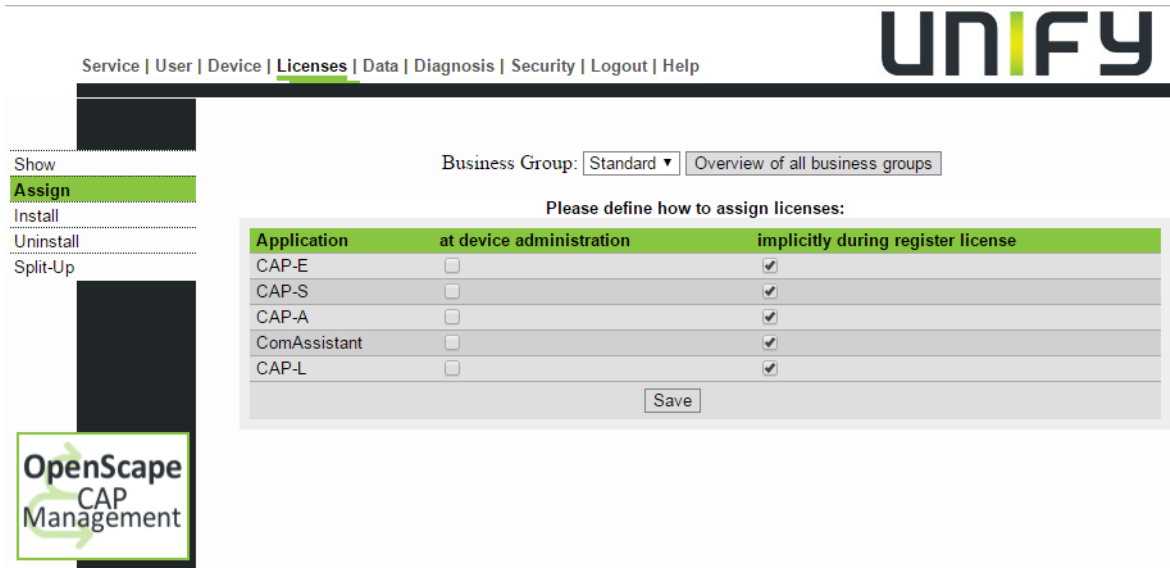
3.3.3 Assign Licenses

For assigning available licenses to individual users, two approaches are supported.

By default, users are granted a license implicitly when they log on to the system for the first time. The license is taken from the pool of available licenses and is assigned to the user (via user ID in OpenScape User Management) from now on. If no license is available any more, the user cannot log on.

Alternatively, devices can be assigned licenses explicitly when they are created in OpenScape Device Management (see [Chapter 3, "Connection to CAP User management"](#)) by the administrator. If no license is available any more, the administrator receives an error message during device creation.

1. Select **Licenses**, and activate **Assign** in the navigation frame to select the assignment policy.



Service | User | Device | **Licenses** | Data | Diagnosis | Security | Logout | Help

Business Group: Standard ▼ Overview of all business groups

Please define how to assign licenses:

Application	at device administration	implicitly during register license
CAP-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CAP-S	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CAP-A	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ComAssistant	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CAP-L	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Save

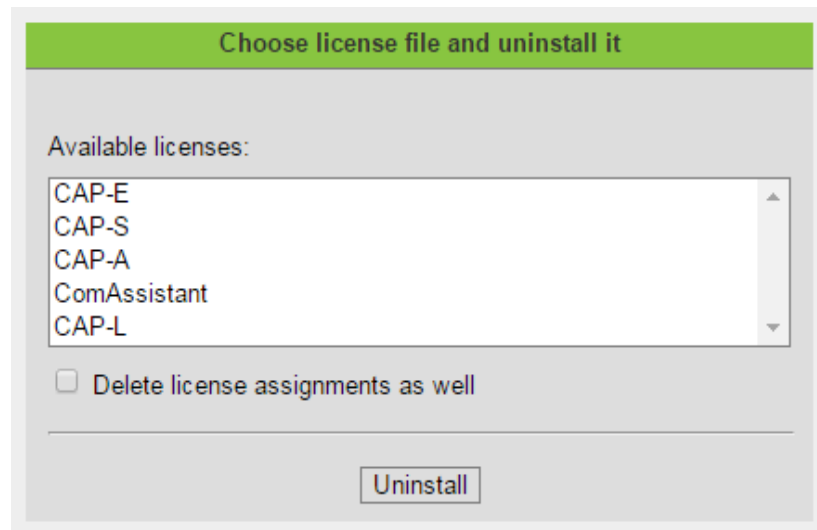
OpenScape CAP Management

2. For any of the available license keys / applications, tick "implicitly during register license" to specify implicit assignment (first come - first served), or tick "at device administration" to specify explicit assignment (by administrator).
3. Click **Save** to confirm the selection.

3.3.4 Uninstall Licenses

It may be reasonable at some point in time to remove license keys that have been installed before.

1. Select **Licenses**, and click on **Uninstall** in the navigation frame to uninstall licenses.



2. Select the application for which the license key is to be uninstalled.
3. In case you want to retrieve the licenses about to be uninstalled from the users who might have been assigned these licenses before, tick "*Delete license from users*".
4. Click **Uninstall** to confirm the action.

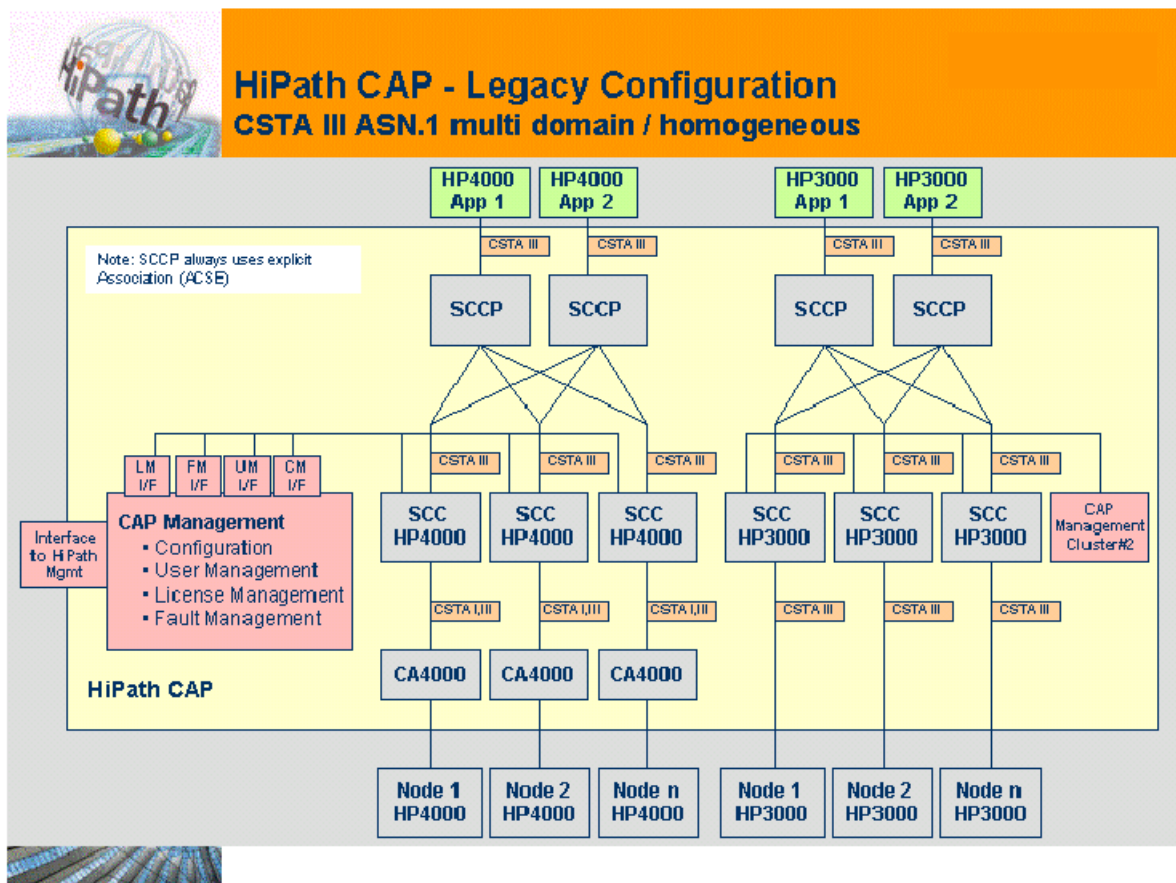
3.4 Installation and Administration of CAP V3.0

In order to operate BLF-Win 3.0 you need to install the software CAP V3.0 before.

You can find a description of the Installation and Administration of CAP V3.0 on the BLF-Win 3.0 CD in the document CAP30_SA_en.pdf.

3.4.1 Configuration of CAP and the Connectivity Adapter

BLF Win V3.0 is a CSTA III ASN.1 multi domain / homogeneous application.

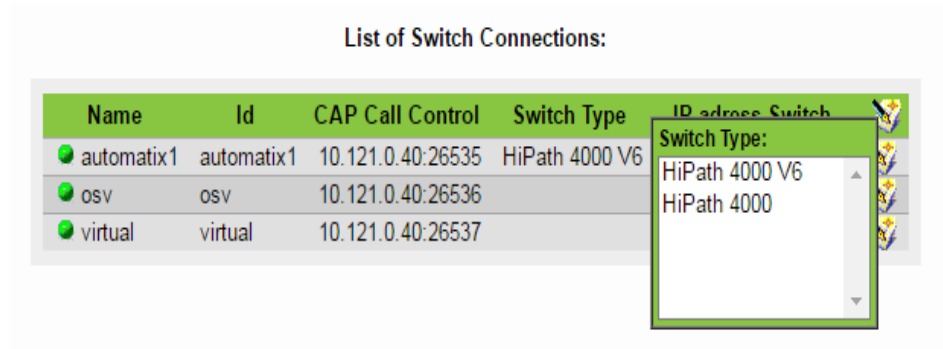



In the following only general steps are described to install BLF Win V3.0.

The detailed configuration steps of CAP and of the Connectivity Adapter are described in the service manuals "CAP Administration-Installation and "Installation and Problem Determination Guide for CA4000".

3.4.1.1 Adding a switch connection

1. Choose the **Service** tab of the main page, and the **switch connection** menu on the left side.



2. Click on the "Add new entry"  icon.
3. Choose the type of the switch you want to connect to. (For example: "HiPath 4000 V6")

SCC configuration

1. Specify the SCC data in the following window (optional fields are marked).

The screenshot shows a window titled "Add entry : HiPath 4000 V6". It has three tabs: "SCC", "CA", and "Switch". The "SCC" tab is selected. The form contains the following fields and options:

- SCC Name:
- SCC Id: (optional)
- SCC host name:
- SCC IP address:
- SCC Port: (optional)
- ASN1 Single Domain Native Mode: (dropdown)
- ☐ CALL ID Management for TAPI
- ☐ E.164

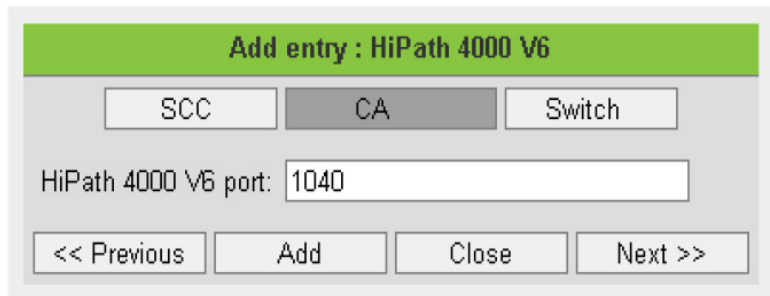
At the bottom, there are three buttons: "Add", "Close", and "Next >>".

The field *SCC-Id* may need special attention.

2. Click on **Next>>**.

Switch dependent configuration

1. Specify the CA port.



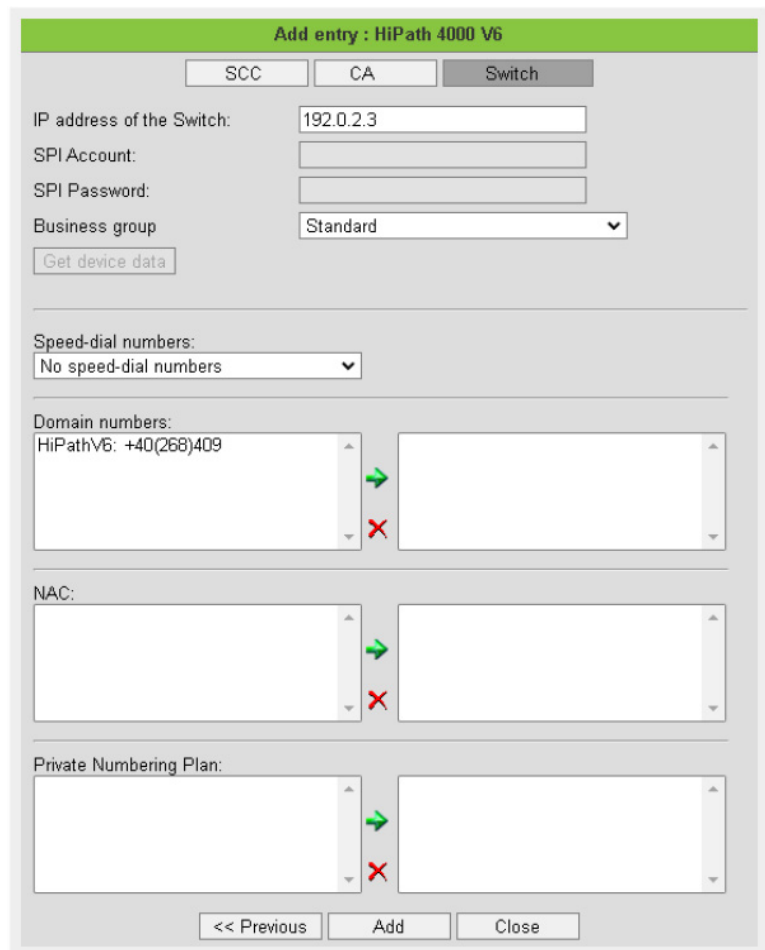
Add entry : HiPath 4000 V6

SCC CA Switch

HiPath 4000 V6 port: 1040

<< Previous Add Close Next >>

2. Click on **Next>>**.



Add entry : HiPath 4000 V6

SCC CA Switch

IP address of the Switch: 192.0.2.3

SPI Account:

SPI Password:

Business group: Standard

Get device data

Speed-dial numbers:
No speed-dial numbers

Domain numbers:
HiPathV6: +40(268)409

NAC:

Private Numbering Plan:

<< Previous Add Close

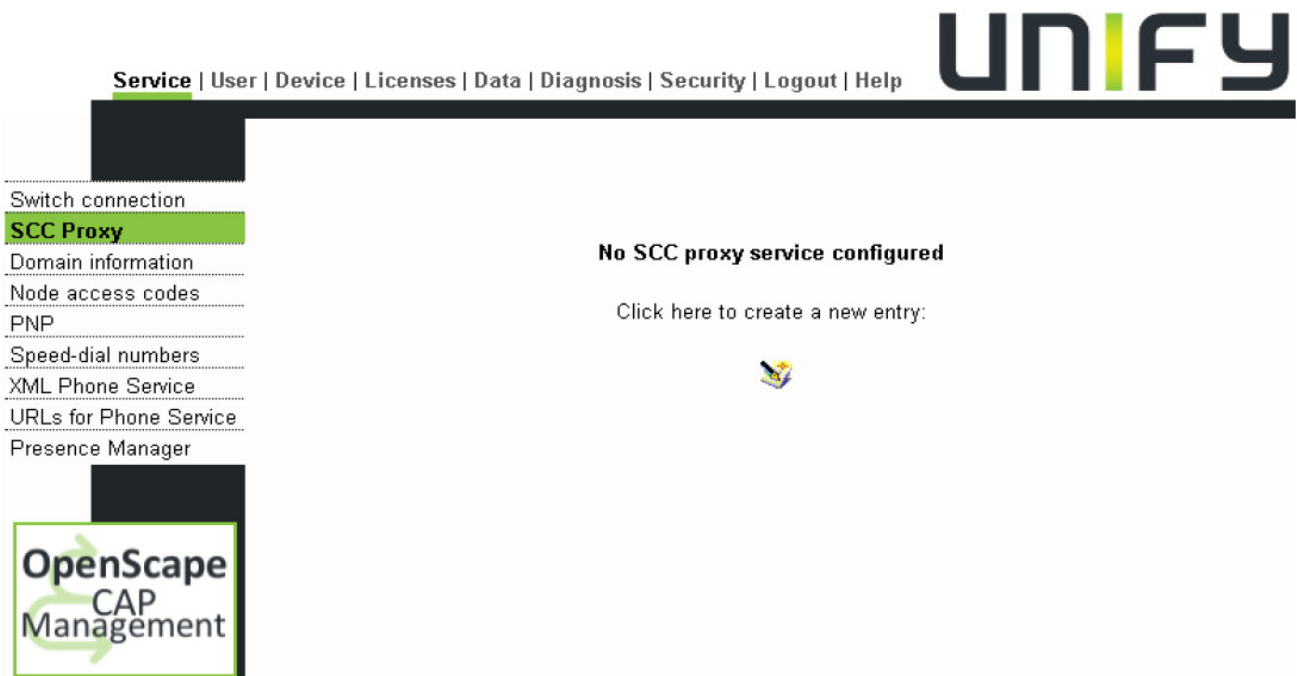
The fields *IP address of the Switch*, *Outside line access*, *Country code*, *Area code* and *Main number* may need special attention.

3. Click **Add**.

NOTE: To synchronize the database with OS4K, after adding the switch connection, edit the switch connection, set the SPI (PBX Information Service) username and password, and then click "Get device data". For more information about SPI, see the OpenScape CAP V3.0 Service Manual.

3.4.1.2 Adding an SCC Proxy

1. Select **SSC Proxy** menu and click on the "Add New entry"  icon.



2. Select the SSC Proxy data.

The screenshot shows a dialog box titled "Add entry to Scc Proxy service list" with a green header bar. The dialog contains several input fields and a checkbox. The fields are labeled as follows: "SCC Proxy Name:" with the value "BLF"; "SCC Proxy Identifier:" which is empty and marked as "(optional)"; "SCC Proxy hostname:" with the value "dls-server"; "SCC Proxy IP address:" with the value "10.100.111.11" and marked as "(optional)"; and "SCC Proxy port:" with the value "2205" and marked as "(optional)". Below these fields is a checkbox labeled "Disable AP Emergency" which is currently unchecked. At the bottom of the dialog are two buttons: "Add" and "Close".

Add entry to Scc Proxy service list	
SCC Proxy Name:	BLF
SCC Proxy Identifier:	(optional)
SCC Proxy hostname:	dls-server
SCC Proxy IP address:	10.100.111.11 (optional)
SCC Proxy port:	2205 (optional)
<input type="checkbox"/> Disable AP Emergency	
<div>Add Close</div>	

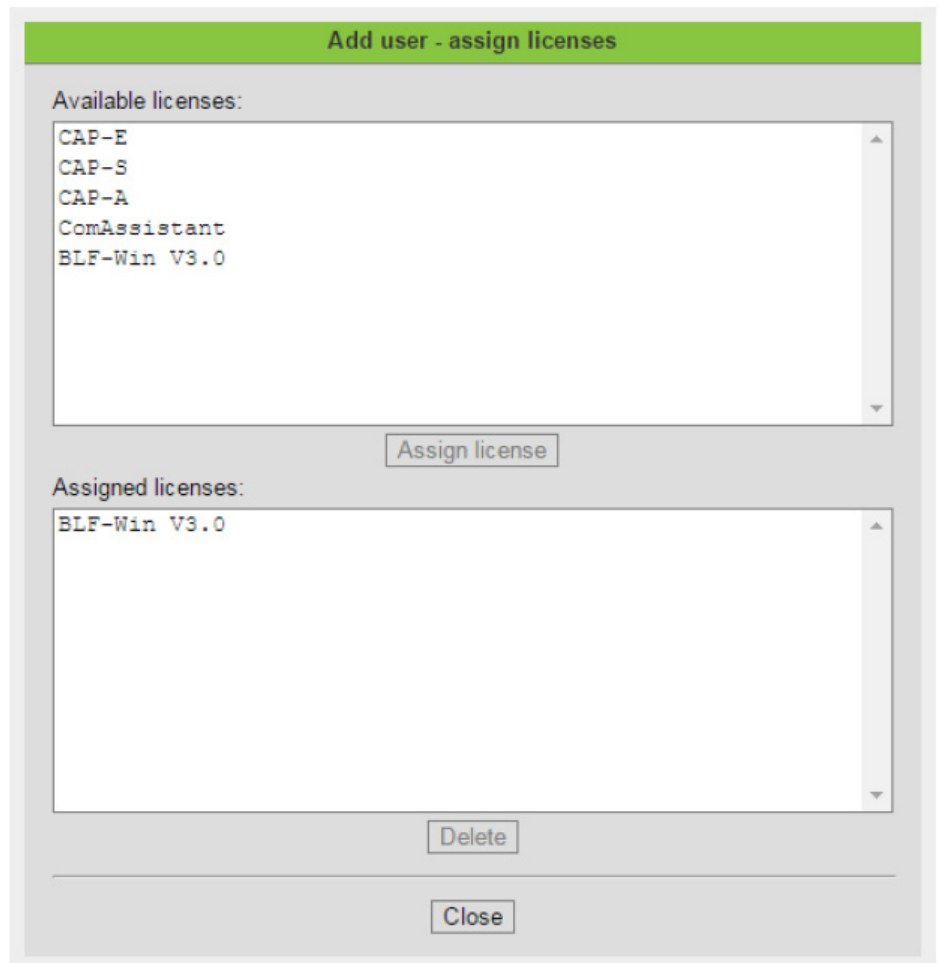
3.4.1.3 Adding devices

1. On Device tab of the main page select **Add**.

The screenshot shows the 'Add device' form with the following fields and options:

- SCC ID:** A dropdown menu with 'HiPathV6' selected.
- Emergency (HiPath4000 only):** An empty dropdown menu.
- Business group:** A dropdown menu with 'Standard' selected.
- Device type:** A dropdown menu with 'Phone' selected.
- ISDN number:** A dropdown menu with '40(268)409' selected.
- Extension:** A text input field containing '1234'.
- PNP number:** An empty dropdown menu.
- Node access code:** An empty dropdown menu.
- XML Phone Service:** An empty dropdown menu.
- XML Phone Settings:** A button.
- License granted to:** An empty dropdown menu.
- Assign licenses...:** A button.
- Assigned users:** An empty text input field.
- Direct call buttons:** An empty dropdown menu.
- HiPath 4000 only:** A label.
- Direct call buttons settings:** A button.
- Add:** A button at the bottom right.

2. Select the SCC ID from the drop-down. This is the switch connection added in [Chapter 3, "Adding a switch connection"](#).
3. Type the extension number in the Extension field.
4. Select a user in the **Assigned users** field. This field will be the subscriber's name in BLF Client.
5. As default *implicit licensing* is used for BLF. Click on **Add**.
6. If *explicit licensing* is used for BLF, click on **Assign licenses...**



7. Select *BLF-Win V3.0* in the section Available licenses.
8. Click on **Assign license..**
9. Click on **Close** to close the license window.
10. Click on **Add** to add the specified extension.

3.4.1.4 Adding users

There are two types of users, that can be added:

- CTI user (this is the recommended one) or
- application user

1. Click on **Users** tab of the main page, then select the **Add** menu. Check the user to be added in the *Roles* field (either CTI User or Application).

The screenshot shows the 'Add user' form with the following fields and options:

- User id:** A text input field.
- Business group:** A dropdown menu with 'Standard' selected.
- Display name:** A text input field.
- Roles:** A group of checkboxes where 'CTI User' is selected, and 'Administrator', 'Business group administrator', and 'Application' are unselected.
- Authentication by:** A dropdown menu with 'CTI Login' selected.
- Alias:** A text input field.
- Password:** A text input field.
- Confirm password:** A text input field.
- Devices:** A list box with a scroll bar, currently empty. To its right are buttons 'Set first device' and 'Edit device...'. Below the list box is a button 'Assign devices ...'.
- User group:** A dropdown menu.
- Time zone:** A dropdown menu.
- Add:** A button at the bottom center of the form.

2. Specify a **Display name** for the user. This will be used as the subscriber name in BLF Client.
3. Click on **Assign devices** and assign the device for the user.

- Click on the **Add** button.

Device:

Search result devices: 16

Device	Type	SCC1	License
+40 (268) 409-1100	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1101	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1102	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1103	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1104	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1105	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1170	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1171	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1172	Phone	HiPathV6	BLF-Win V3.0
+40 (268) 409-1173	Phone	HiPathV6	BLF-Win V3.0

Assign device Search device

Assigned devices:

Device	Type	SCC1	License
--------	------	------	---------

Delete

Close

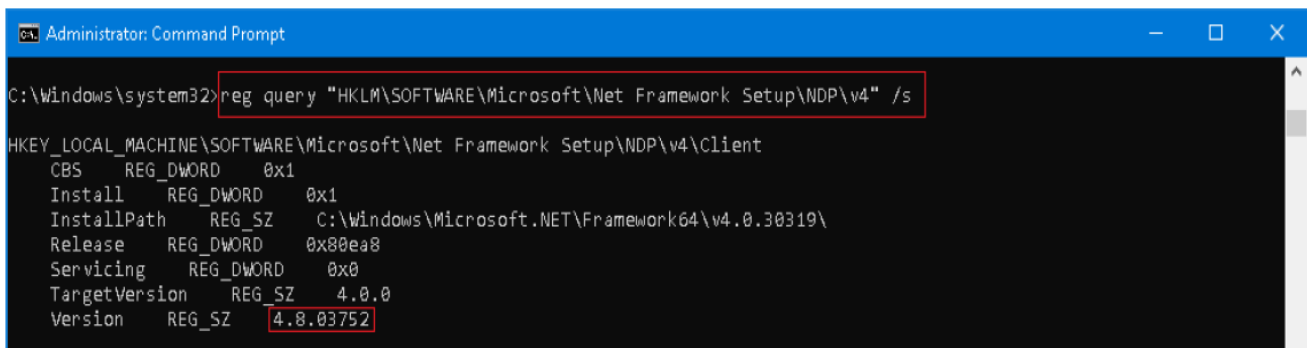
- Select the devices you want to assign to the user and click on the **Assign device** button or click on the **Search device** button if the device is not listed in the *Search result devices* field.
- Click **Close**.

Additional information can be found in the *OpenScope CAP V3.0 Service Manual*.

3.5 Installing BLF-Win software

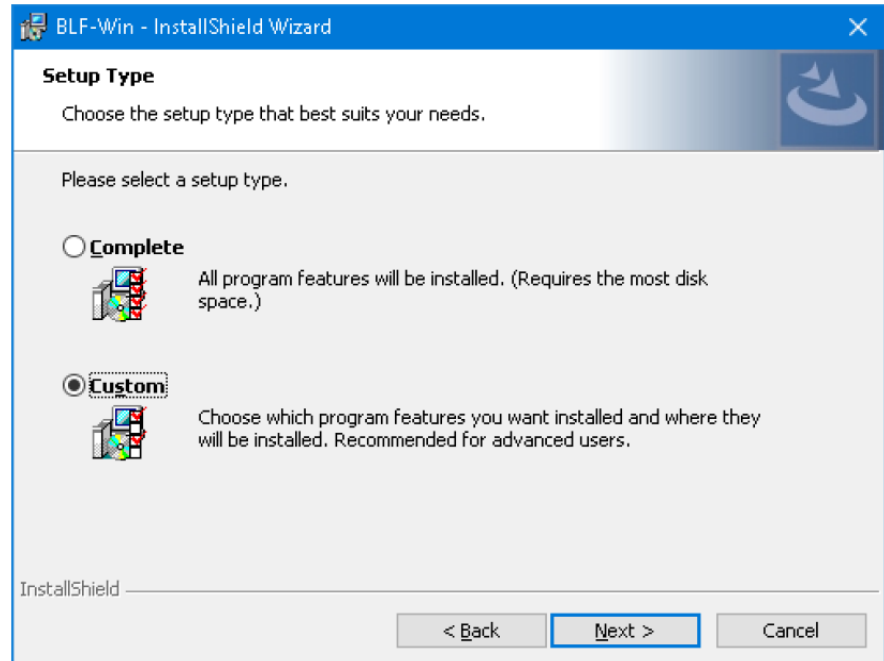
Prerequisites:

Before the BLF-Win software installation, make sure that the Microsoft .NET Framework 4.7.2 or higher is installed on your system. The framework is delivered with the Windows operating system. The version can be checked in the Command Prompt (as administrator) with the following command: `reg query "HKLM\SOFTWARE\Microsoft\Net Framework Setup\NDP\v4" /s`



```
Administrator: Command Prompt
C:\Windows\system32>reg query "HKLM\SOFTWARE\Microsoft\Net Framework Setup\NDP\v4" /s
HKLM\SOFTWARE\Microsoft\Net Framework Setup\NDP\v4\Client
    CBS REG_DWORD 0x1
    Install REG_DWORD 0x1
    InstallPath REG_SZ C:\Windows\Microsoft.NET\Framework64\v4.0.30319\
    Release REG_DWORD 0x80ea8
    Servicing REG_DWORD 0x0
    TargetVersion REG_SZ 4.0.0
    Version REG_SZ 4.8.03752
```

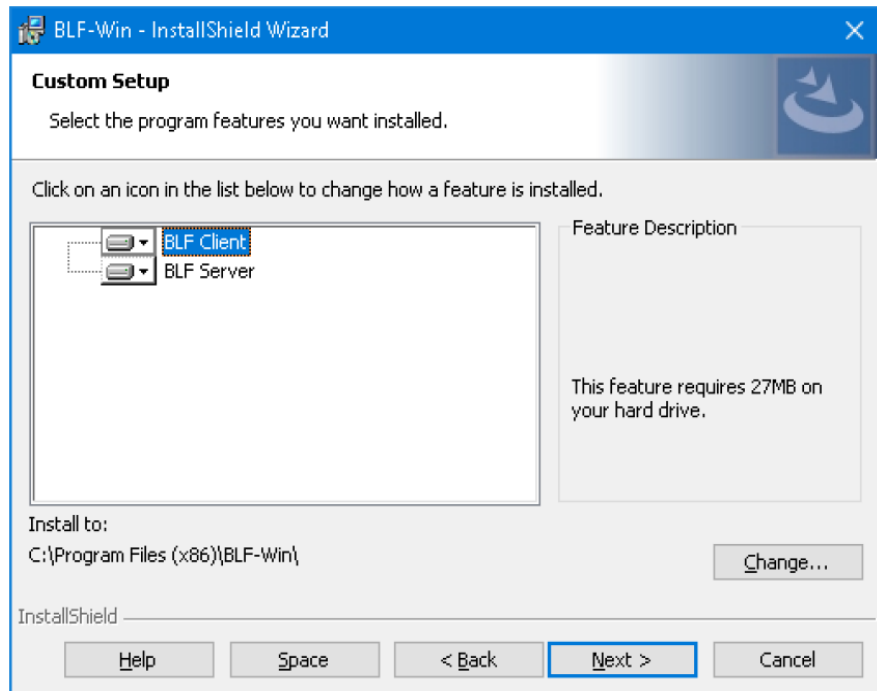

1. Run the *BLF-Win setup.exe* executable file **as administrator** from BLF-Win package. This will extract the setup files into a temporary location and it will launch the setup automatically. The setup and application language are English, the application language can be changed after the installation.



2. Select what **components** you want to install: Client, Server or both. A destination folder for installing BLF-Win is suggested. It can be changed by clicking on Change button.

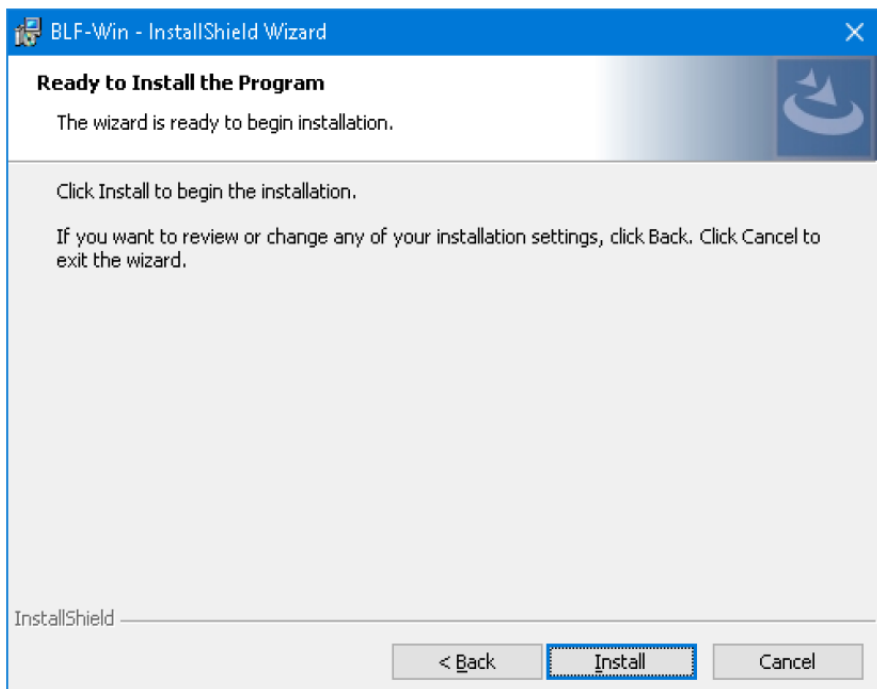
Hardware and Software Installation

Installing BLF-Win software



NOTE: If iBLF is used, install only the BLF Client component.

3. Click **Install**.



The installed files with the default locations are:

- C:\ProgramData\BLF
 - Settings – used for configuration files: BLF.ini, *.blf, passfile
 - Logs – the logs will be created here
 - Database – the PERSPORT database will be downloaded here
- C:\Program Files (x86)\BLF-Win\BLF Client\ – location of the BLF Client executable file
- C:\Program Files (x86)\BLF-Win\BLF Server\ - location of the BLF Server executable file

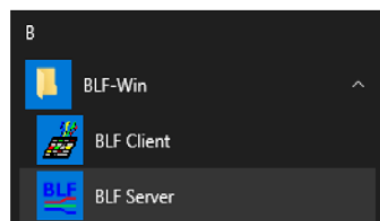
NOTE: if the application is launched as a non-administrator user, then the settings are stored in:

C:\Users\<Username>\AppData\Local\Virtual-Store\ProgramData\BLF\Settings\

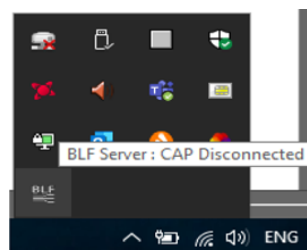
3.5.1 Connection setup of BLF-Win Server

If you selected the BLF Server component to be installed, proceed with following steps:

1. Start the BLF Server from Windows Start menu.



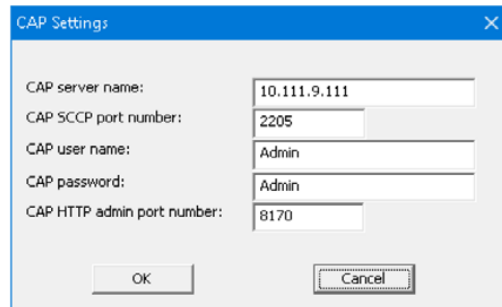
2. A gray icon of BLF Server will appear in the system tray. The icon changes to color when the CAP is connected. Double click on the icon to open the BLF Server window.



Hardware and Software Installation

Installing BLF-Win software

3. Select Configuration > CAP Settings.



The CAP Settings dialog box contains the following fields and values:

Field	Value
CAP server name:	10.111.9.111
CAP SCCP port number:	2205
CAP user name:	Admin
CAP password:	Admin
CAP HTTP admin port number:	8170

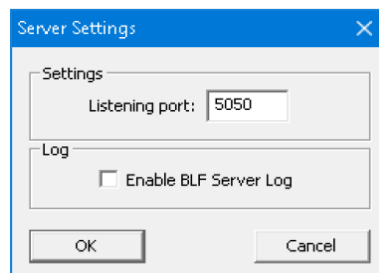
Buttons: OK, Cancel

4. Fill in the **CAP server name**, **SCCP port number** (default value is 2205), **CAP user name**, **CAP password** and **CAP HTTP administration port number** (default value is 8170). Click on **Next>**.

NOTE: The SCCP port address (communication between CAP V3.0 and BLF-Win Server) **must be the same** as the one defined in CSTA Application Configuration.

The administration port number is used to receive user management information from CAP server.

5. CAP V3.0 and BLF-Win Server can be installed on the same PC or on different ones (see [Chapter 2.4.1](#)).
Select **Configuration > Server settings**.



The Server Settings dialog box contains the following sections and values:

Section	Field	Value
Settings	Listening port:	5050
	Log	<input type="checkbox"/> Enable BLF Server Log

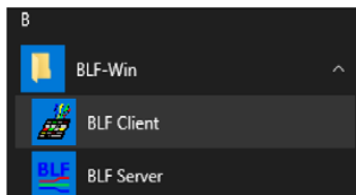
Buttons: OK, Cancel

6. Specify the **Listening port** which will be used for BLF Client connection.

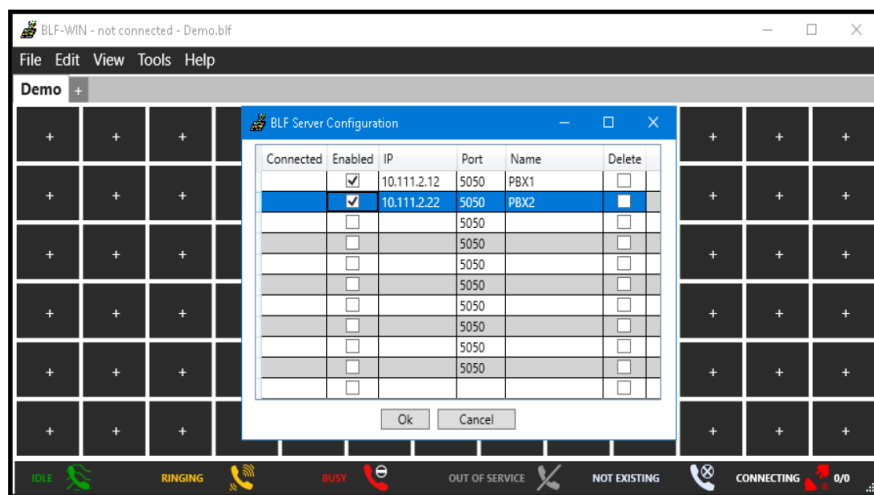
3.5.2 Connection setup of BLF-Win Client

If you selected the BLF-Win Client component to be installed, proceed with following steps:

1. Start the BLF Client from Windows Start menu.



2. Enter the **IP address**, **port number of the BLF Server**, give a **Name** for the connection and check **Enabled** to establish the connection after the window is closed. Click **Ok**.



NOTE: The bottom right corner of the BLF Client will show how many connections are established from the BLF Server connection list.



3.5.3 Uninstalling BLF-Win Client/Server

The uninstallation is always performed depending on the installed components, i.e. server, client or both components will be uninstalled.

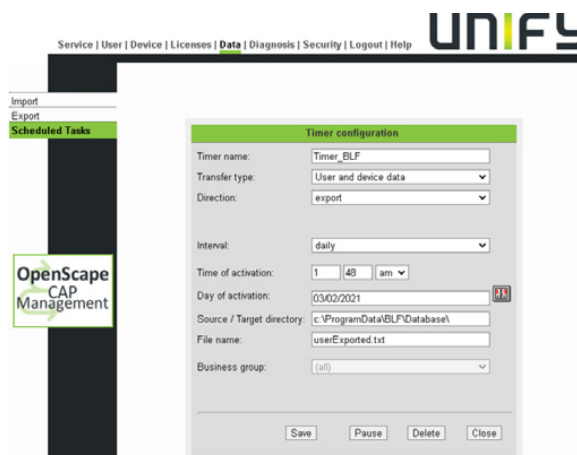
1. Click on **Start** and select **Control Panel**. Depending on your OS, go to the Programs and Features section.
2. Select **BLF-Win** and click **Uninstall**.
3. If you run the program as administrator, then the configuration directory is C:\ProgramData\BLF. If you run the program as a User, then the configuration files are stored in C:\Users\Aron\AppData\Local\VirtualStore\ProgramData\BLF. These files must be manually deleted.

3.6 Connection to CAP User management

CAP V3.0 User Management information is taken over by the BLF-Win Server.

You have to setup a daily export from the CAP User Management.

1. Start the CAP Management (default: http://<cappcname>:8170).
2. Click on **Data** in the top menu.
3. Choose the 'Scheduled Tasks' in the side menu.
Now you see a list of scheduled tasks (or an empty list).
4. You have to create new tasks by clicking on the '**Create new timer**' icon on the title bar.
5. Specify the fields, like you see in the following picture:



6. Source / Target directory must be the "Database" folder from of the BLF Server configuration directory. If the BLF Server is installed on a different PC, then this path must be a network location which points to the "Database" folder.
7. File name must be "userExported.txt". This file is processed by the BLF Server, then transferred to each BLF client. If a different name than "userExported.txt" is used, then it has to be specified in the BLFServer.cfg from the BLF Server configuration directory. The CAPDatabaseFile parameter is the filename.
8. Save the settings. The file 'userExported.txt' will be created at the time of activation.

NOTE: The database exported by CAP can be different from the database exported by the iBLF server running on the same 4K system, because the "User and device data" Transfer type uses different parameters than iBLF.

NOTE: It is recommended to run the BLF-Win Server and CAP on the same PC. If CAP and the BLF-Win Server are running on different machines you have to make one more change:

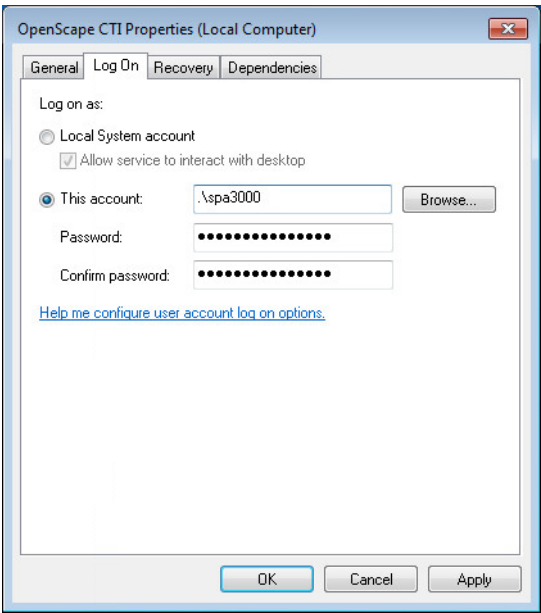
To access this network share you have to modify the CAP service 'Log on' parameter.

Please follow these steps on the CAP Server to set these necessary parameters:

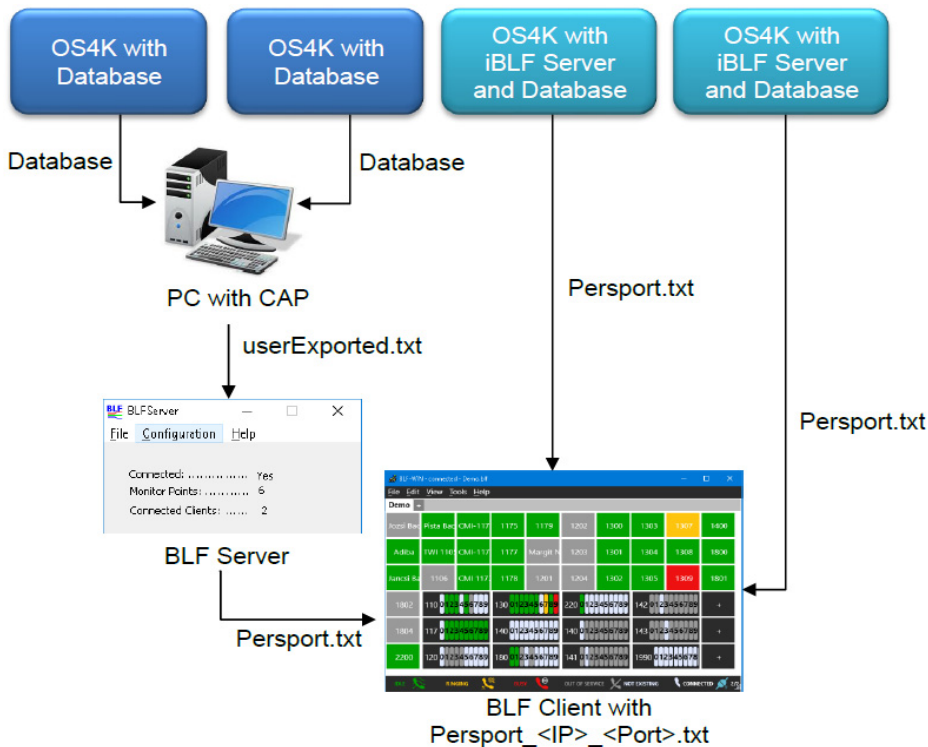
1. Windows **Start->Settings->Control Panel->Administrative Tools->Services**
2. Select the service "**OpenScape CTI**"
3. Activate with the pull down menu and select "**Properties**"
4. Select "**Log on**" and define an account which has administrator rights for the local machine and right to access the BLF-Win Database share

Hardware and Software Installation

Database update with CAP User Management and iBLF



3.7 Database update with CAP User Management and iBLF



The picture above shows the interaction of the BLF Client with the CAP-User-Management and describes which BLF modules have access to the database.

1. Using BLF-Win Server and CAP:

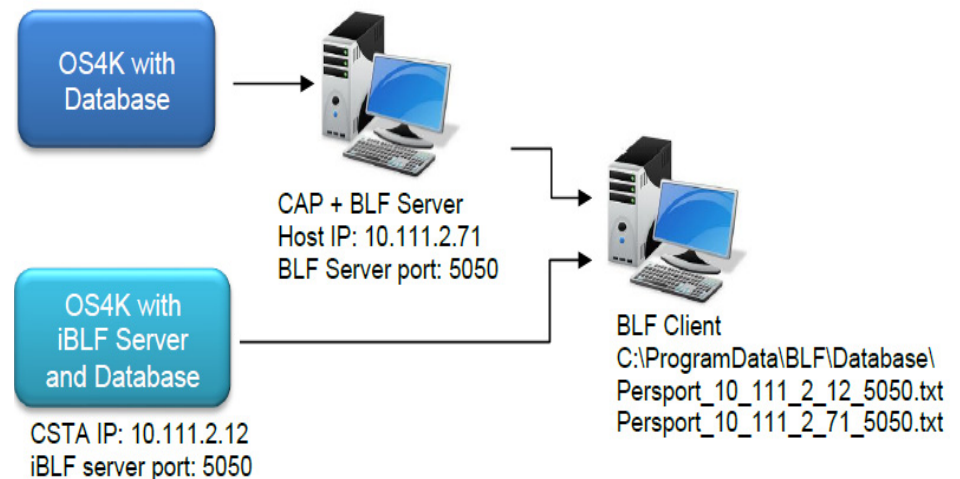
- CAP synchronizes the database with OS4K systems via the PBX Information Service (SPI) or uses the current database of CAP management and creates the `userExported.txt` file daily.
- The BLF server converts the file `userExported.txt` to `Persport.txt` every time its content changes and sends it to the BLF Client.
- The BLF Client renames the file to `Persport_<CAP IP>_<BLF Server Port>.txt` and uses it.

2. Using iBLF Server:

- The iBLF Server synchronizes the database daily with the OS4K it runs on and sends the `Persport.txt` to the BLF Client.
- The BLF Client renames the file to `Persport_<CSTA IP>_<BLF Server Port>.txt` and uses it.

NOTE: The BLF Client periodically compares the checksum of the local and remote database and retrieves the database from the BLF server if necessary. Furthermore, the database can be updated manually from BLF Client, selecting Tools / Request Database.

Example:



Details of the CAP database:

The CAP database consists of devices added in CAP (see [Chapter 3, “Adding devices”](#)). The resulting fields are used by the BLF Client as follows:

- name – for subscriber's name (see [Chapter 3, "Adding users"](#))
- countryCode, areaCode, number – for subscriber's prefix
- nac – reserved field for future development
- extension – for subscriber's number

Details of the iBLF database:

iBLF synchronizes with the Assistant's PERSPORT table once a day. The resulting fields are used by the BLF Client as follows:

- displayName – for subscriber's name
- isdn_cc, isdn_ac, isdn_lc – for subscriber's prefix
- vnac – reserved field for future development
- extension – for subscriber's number

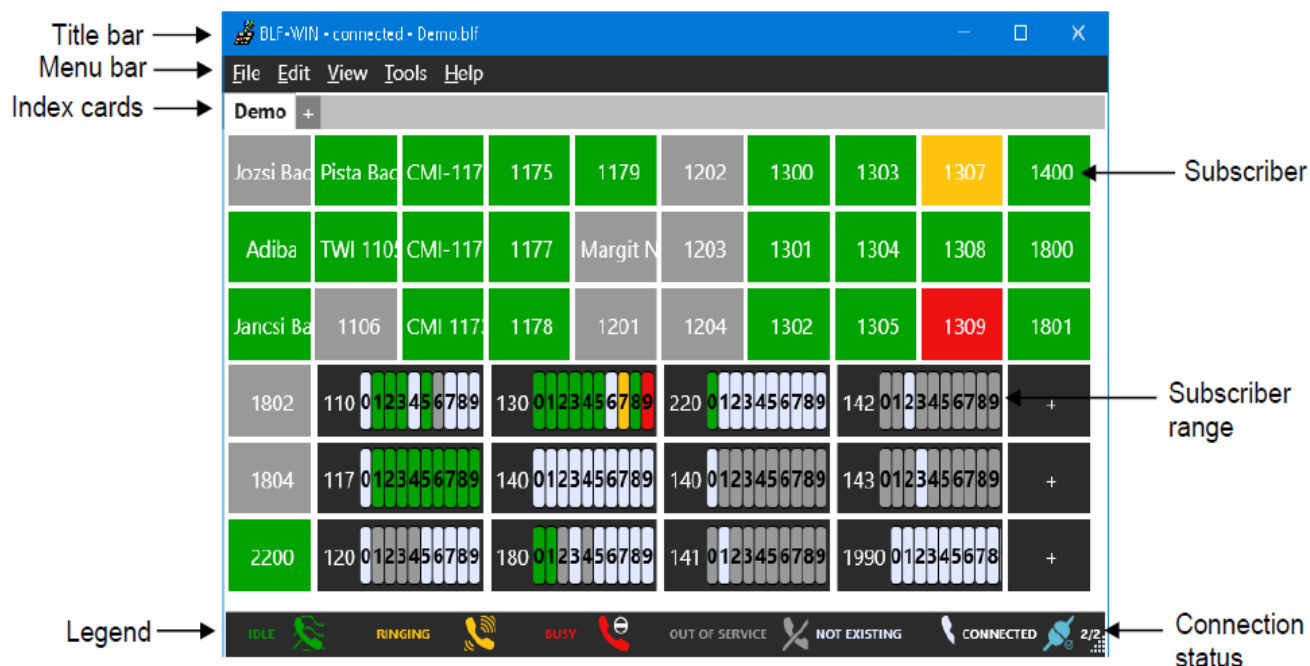
3.8 iBLF Configuration

Please check OpenScape 4000 CSTA and Phone Services, Service Documentation, for more information about the iBLF Configuration.

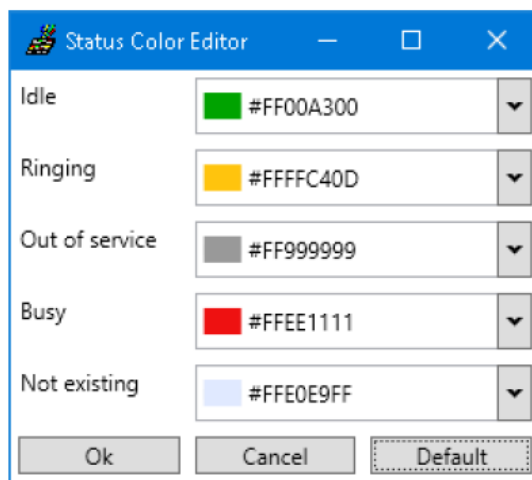
4 BLF-Win Client

4.1 Main BLF Window

The elements of the main BLF window are presented in the figure below.



The different states are indicated by different colors, which can be changed from **Tools > Options > Colors**:



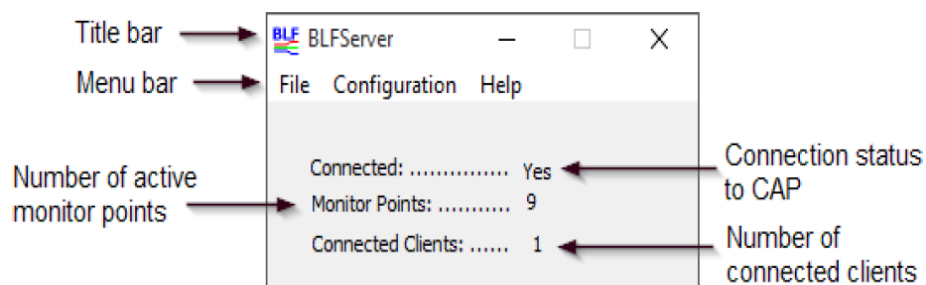
You can arrange both the subscribers and the subscriber ranges in the display field according to your requirements using drag & drop.

You can change the color setting and arrange the subscribers within a subscriber range to suit your needs. The BLF-Win user guide contains detailed information on this topic.

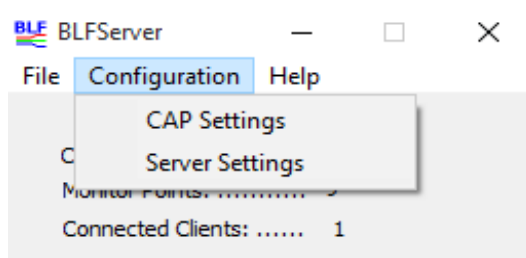
5 BLF-Win Server

5.1 Main Window

BLF-Win Server can be started from Start / Programs / BLF / BLF Server.



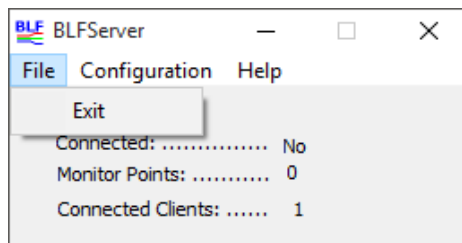
5.2 Configuration



BLF-Win Server configuration is split in two section, CAP settings and Server settings. For more details, see [Chapter 3, "Connection setup of BLF-Win Server"](#).

5.3 Exiting BLF-Win Server

To exit the program, click **File > Exit**.



BLF-Win Server

Exiting BLF-Win Server

6 Appendix

6.1 Logging Diagnostic Data

6.1.1 Activate logging for BLF-Win V3.0

To activate logging for **BLF Client**, change the property `ClientLogEnabled` to **YES** in `C:\ProgramData\BLF\Settings\BLF.ini` **OR** open the BLF Client, and select **Tools / Options / Log settings**. For more information read the *BLF-Win User Guide*, section 3.6, “Log Settings”.

To activate logging for **BLF Server**, change the property `ServerLogEnabled` to **YES** in `C:\ProgramData\BLF\Settings\BLF.ini` **OR** open the BLF Server, and select **Configuration / Server Settings** then tick **Enable BLF Server Log**.

NOTE: The BLF Client has a log rotation mechanism, where the file size and file number can be changed from the BLF Client log settings. The BLF Server creates new log files at every startup.

NOTE: To activate logging for iBLF, see OpenScape 4000 CSTA and Phone Services, Service documentation.

6.1.2 Activate logging for CAP V3.0

In many cases, it can also be helpful to provide information to the BLF development department with the CAP logs. For information about modifying the configuration files to get detailed traces, see the **CAP Service Manual Section 7.7.7**.

The following configuration files must be modified:

<CAP install directory>/config/<PC name>/sccp_<SCCP name>/Telas.cfg

<CAP install directory>/config/<PC name>/telasServer_<SCC name>/Telas.cfg

<CAP install directory>/config/<PC name>/CA4000_<SCC name>/ca4000.cfg
(for HiPath4000)

Change the following entries:

Appendix

Logging Diagnostic Data

`log.level = 5` (must be set to "5" in all of the configuration files mentioned above)

`cstaLogEnabled = 1` (no change for ca4000.cfg)

`debugLevel = 9` (no change for ca4000.cfg)

Section **7.7.10 Saving diagnostic data** contains information about you save a zipped version of CAP logs.

Invoke with

Internet Explorer > CAP management > Diagnostics > Download Data

Section A.2 of the CAP Service Manual includes a description of the configuration files.

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