

INSTRUCTION MANUAL

KVM-TEC KVM – SWITCHING MANAGER

TABLE OF CONENTS

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1. Introduction	3
1.1 System requirements	3
2. Installation	4
3. Connecting the PC to the KVM-Extender Network	8
4. First start and setup	8
5. Connecting, disconnecting and sharing	10
5.1 Connecting	10
5.2 Disconnecting	11
5.3 Sharing	13
5.3.1 Disconnecting a shared connection	14
6. Naming KVM-Extender/Extender Information	15
7. Toolbox	16
7.1 General Settings	16
7.2 Update manager	17
7.2.1 Supported Firmware	18
7.2.2 Choosing a Firmware file	18
7.2.3 Transmitting and Updating the Firmware	20
7. 3 Extender Settings	21
7. 4 User Login	221
8. Support	26

1. INTRODUCTION

The KVM – SWITCHING MANAGER is a Software that helps managing a KVM-Network. It provides a wide variety of functions that help maintaining the Network.

This manual demonstrates the administration of the KVM – SWITCHING MANAGER as well as some concrete examples of controlling the KVM-Network.

A detailed guide on setting up and maintaining a KVM-Network can be found in the Switching Option Manual. Information about compatible Hardware (Switches, Ethernet cables) and a setup guide is provided in the manual of the used kvm-tec KVM-Extender.

If there are any questions or issues linked to the KVM – SWITCHING MANAGER or another kvm-tec product, please get in touch with the kvm-tec support Team:

Tel.: +43 2253 81912

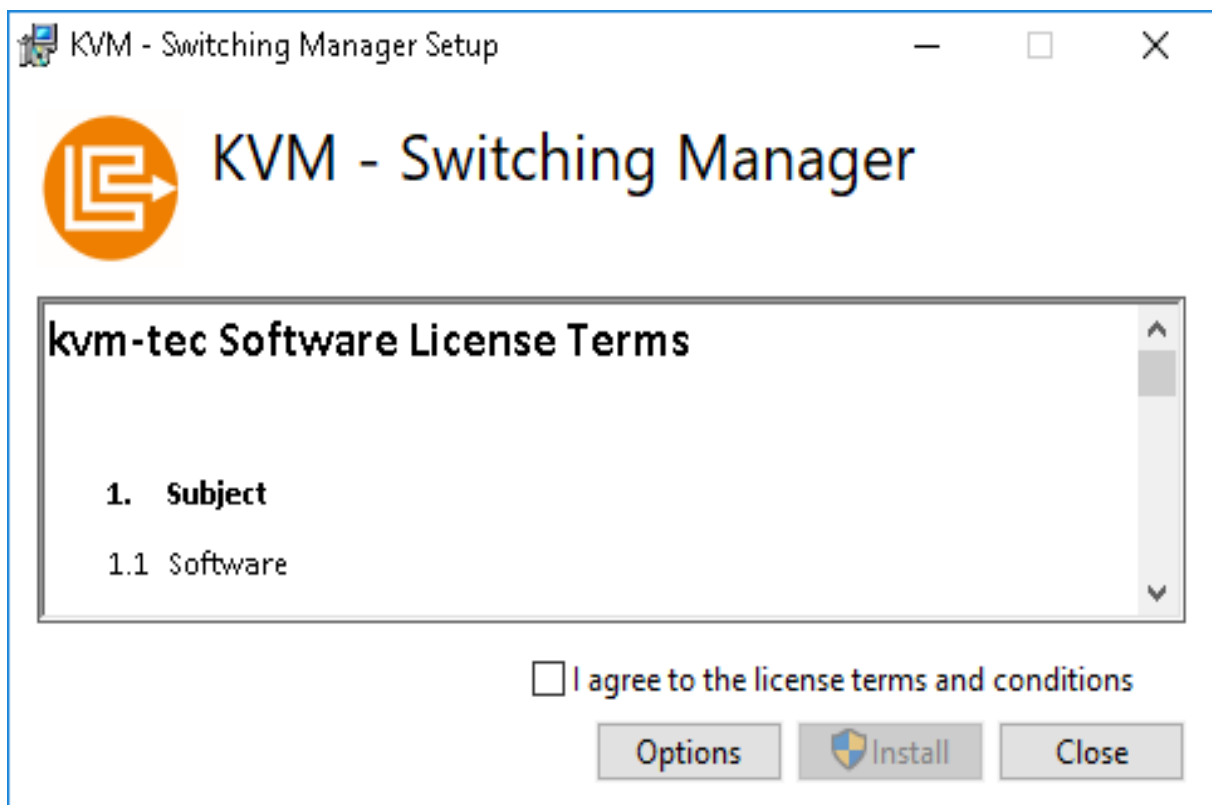
1.1 SYSTEM REQUIREMENTS

- Windows 7 (32bit/64bit) or higher
- 1 GB RAM
- 50 MB free storage
- 1 Gbit dedicated network interface

2. INSTALLATION

The current version of the KVM – SWITCHING MANAGER can be acquired from your licensed kvm-tec sales partner.

Depending on your hardware platform run the either the KVMSwitchingManagerSetup_x86_xxxx.exe or KVMSwitchingManagerSetup_x64_xxxx.exe.

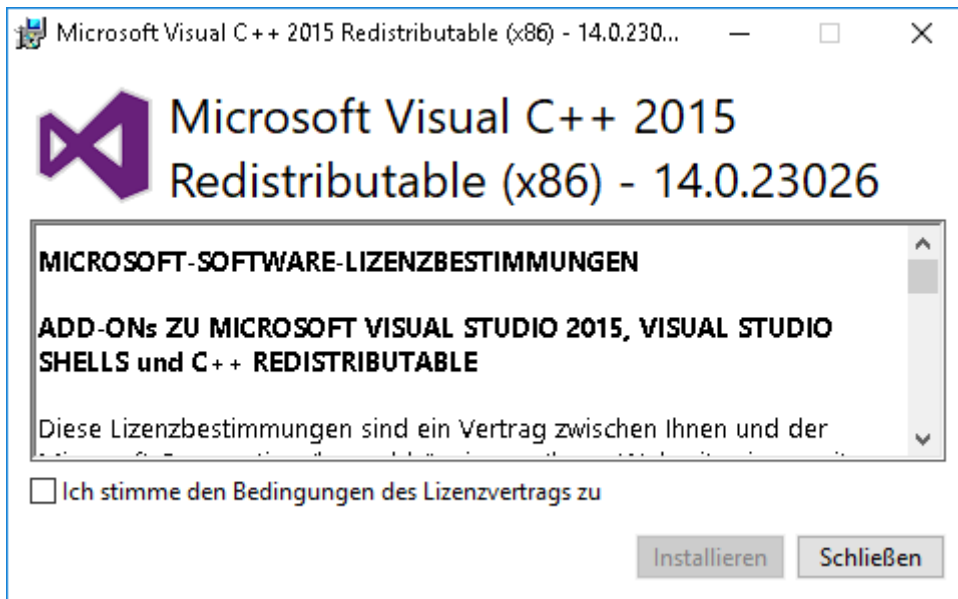


Picture 1: Installation license agreement

Read and agree to the license of terms and press "Install". In order to run the installation, administrator rights are required (see picture 1).

2. INSTALLATION

During the first instance of the setup process the required software packages “.net 35” and the “Microsoft Visual C++ Redistributable” are installed (see picture 2).



Picture 2: C++ Redistributable Installation

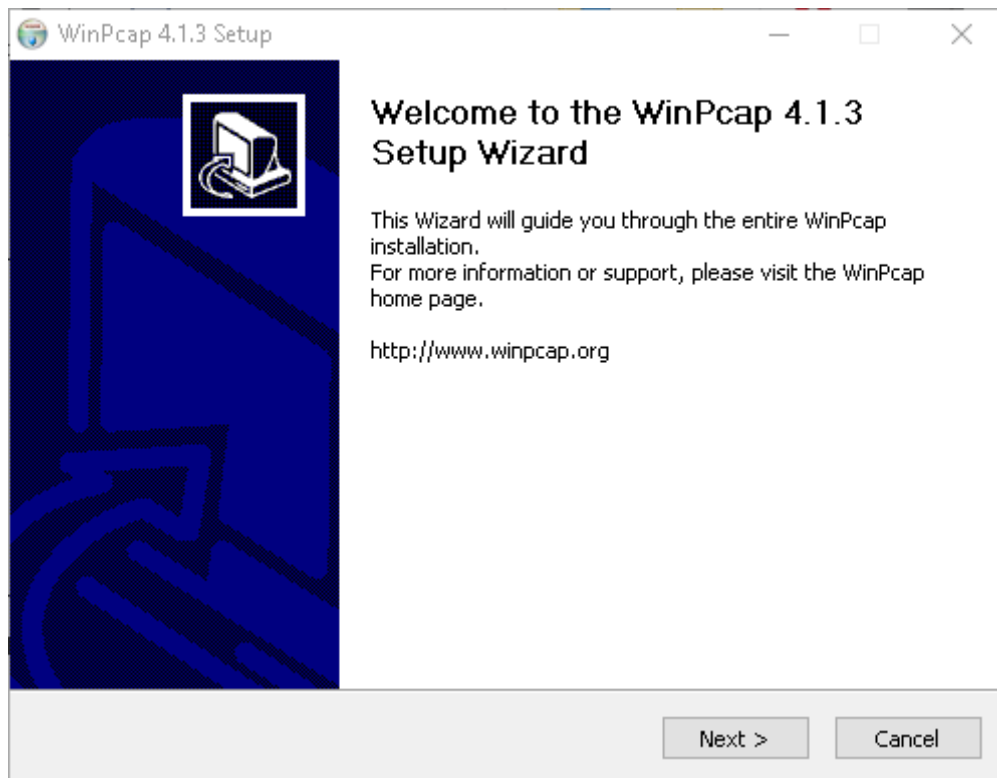
Read and agree to the license of terms and press “Install”.

If the “Microsoft Visual C++ Redistributable” is already installed, the setup tool might return the error “0x80070666”. In this case hit “close” and continue the KVM – SWITCHING MANAGER installation.

Next the driver “WinPcap” will be installed on the PC. If the driver is already installed, the installer will ask if the installation should be forced. This is only necessary if the versions are different.

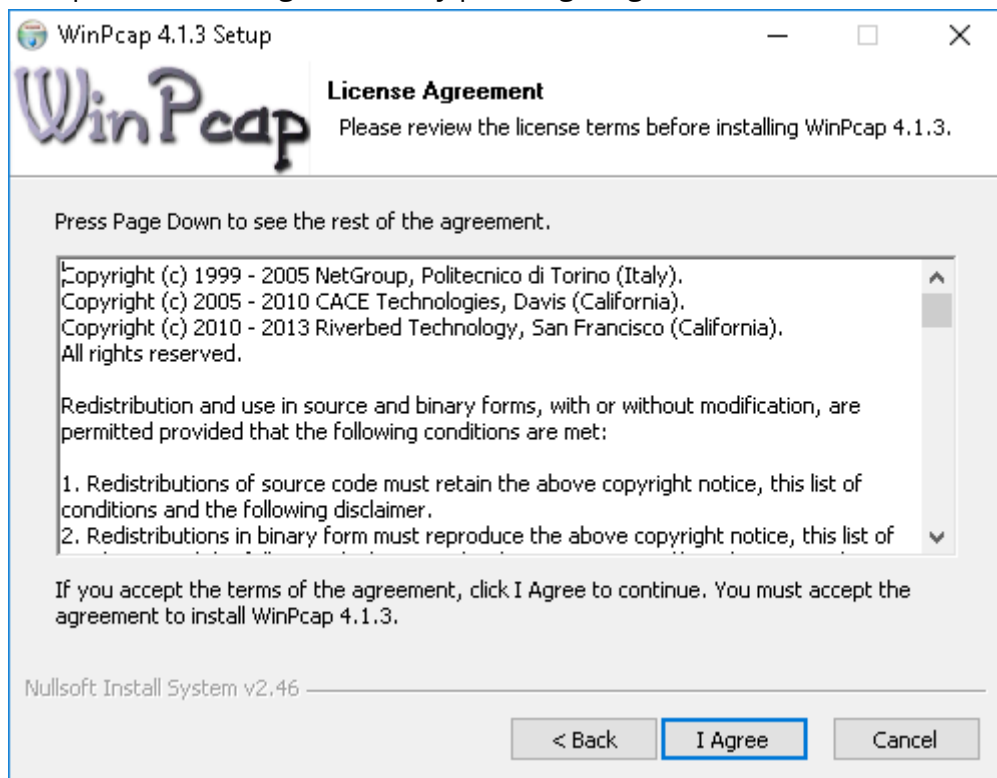
To run the WinPcap installation select “Next”.

2. INSTALLATION



Picture 3: WinPcap installation welcome screen

Accept the license agreement by pressing "I Agree".

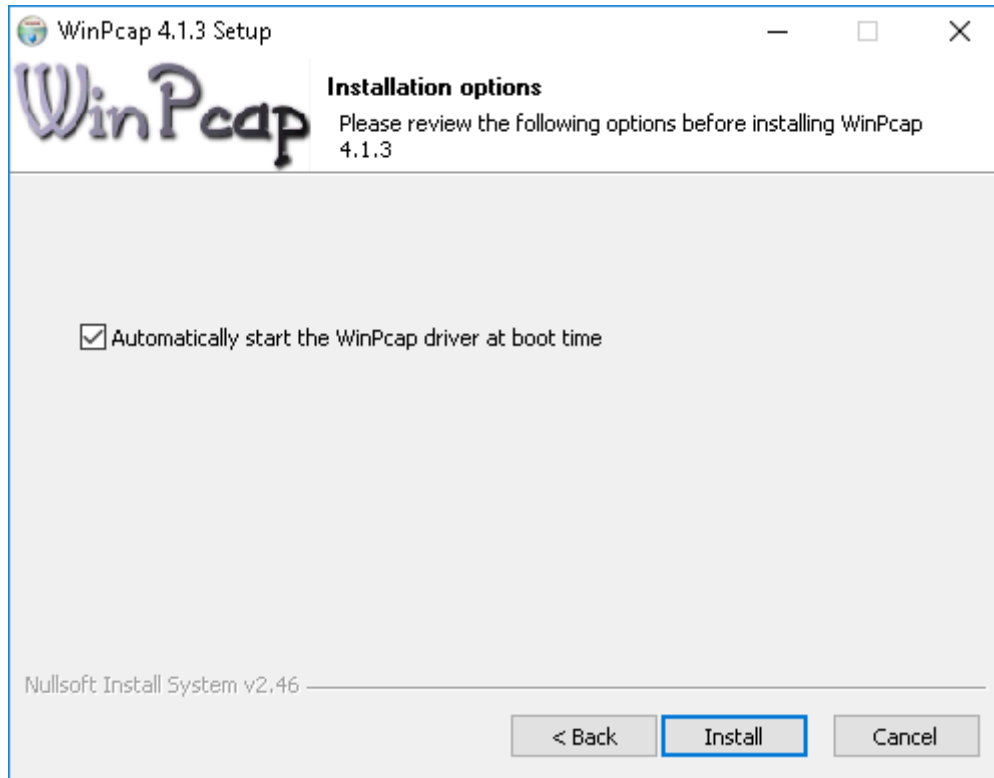


Picture 3: WinPcap installation welcome screen

2. INSTALLATION

Accept the license agreement by pressing "I Agree".

Activate "Automatically start the WinPcap driver at boot time" and press "Install".



Picture 5: WinPcap installation options

After the successful installation close the window by hitting "Close".

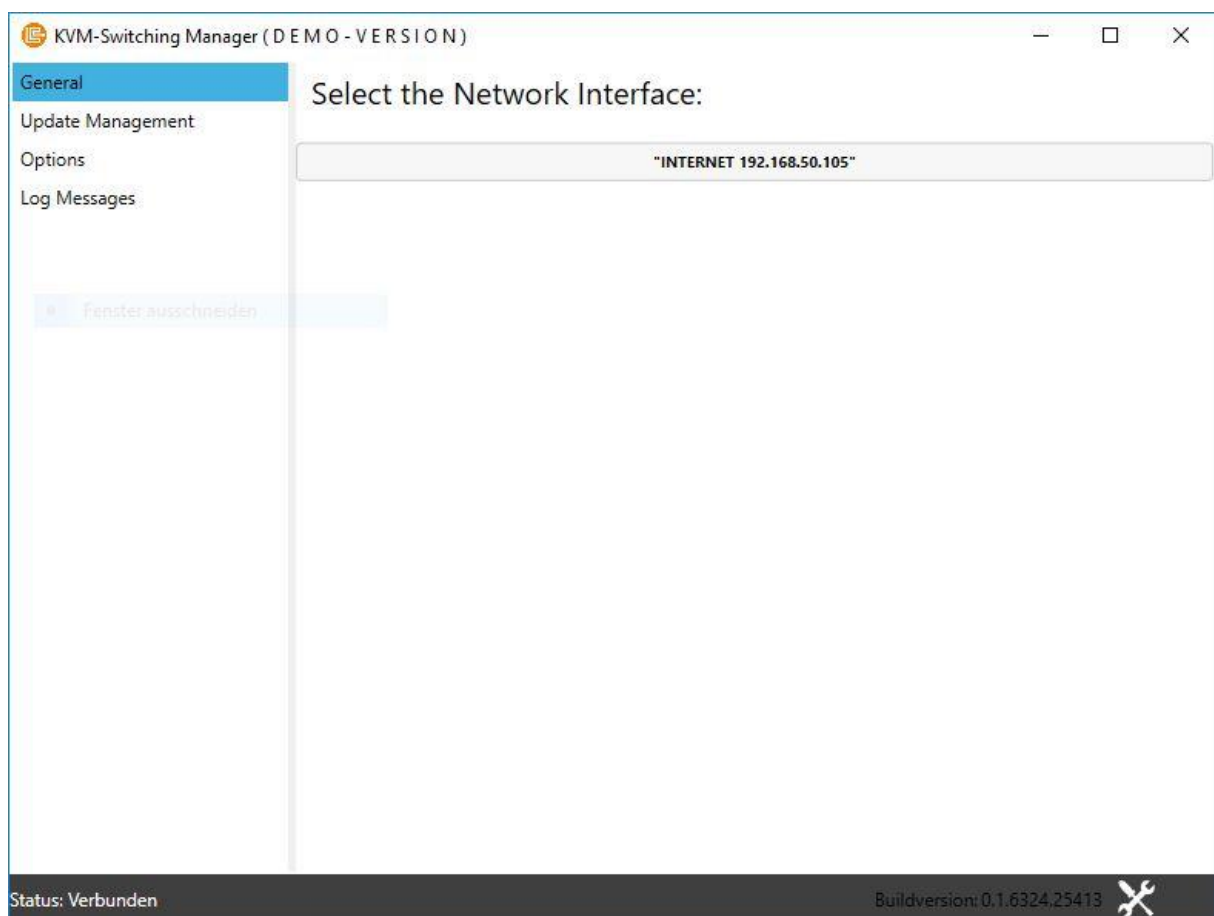
3. CONNECTING THE PC TO THE KVM-EXTENDER NETWORK

Connect a free 1Gbit network interface of the PC with a network switch inside the Extender-Network. It is not required to configure the network interface inside of Windows.

To ensure a good connection, Cat5 or better Ethernet cable is recommended for connecting the PC to the switch.

4. FIRST START AND SETUP

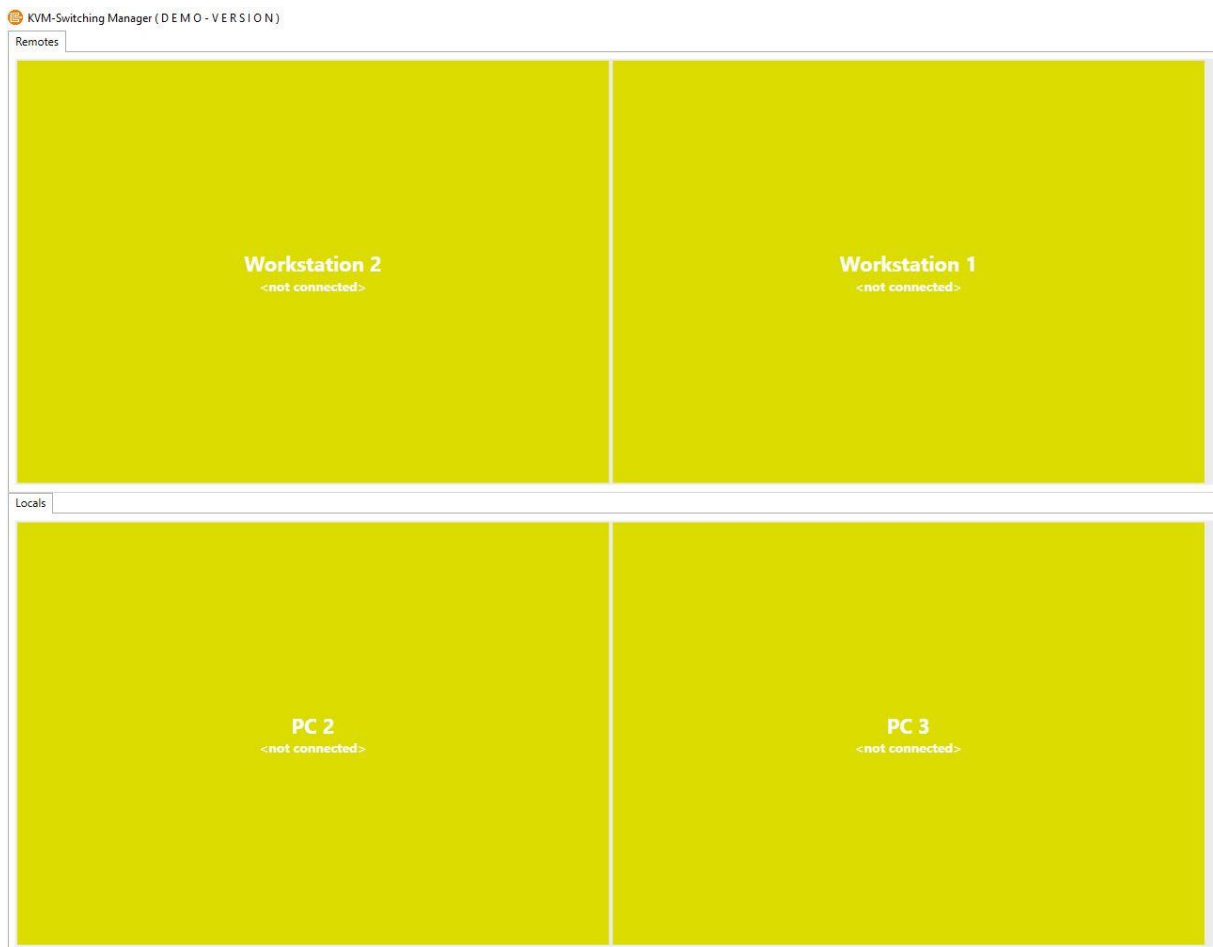
Run the KVM – SWITCHING MANAGER using the linkage on the desktop. At the first start the manager will display the “General Settings”. Here the network interface which is connected to the Extender-Network can be selected. The network interfaces can be identified by their IP-Address (see picture 6).



Picture 6: General Settings

4. FIRST START AND SETUP

After selecting the interface, the KVM – SWITCHING MANAGER switches to the network overview (see picture 7). It will take some time until all Extenders are displayed. With an increasing number of endpoints on the network, the time until all Extenders are detected also gets longer. In MVX/SVX networks with the max size of 48 endpoints it can take up to a minute until all Extenders are displayed.



Picture 7: Extender Network overview

5. CONNECTING, DISCONNECTING AND SHARING

The three basic commands of the KVM-Extender-Network are connect, disconnect and share.

5.1 CONNECTING

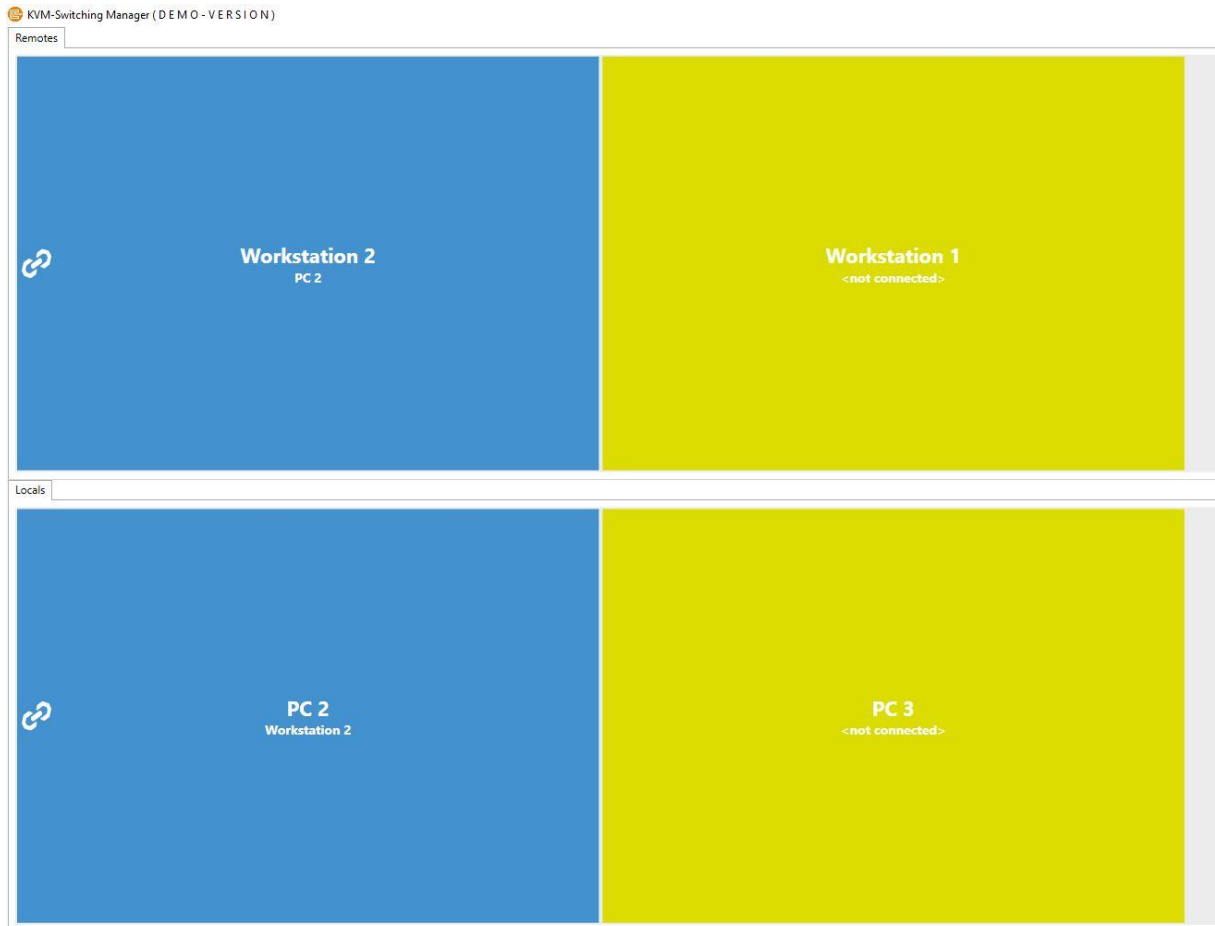
In order to connect two Extenders select one Extender by clicking on it. A selected Extender will change its colour to green and the menu buttons appear (see picture 8).



Picture 8: selected Extender with menu buttons

After selecting the first connection partner click on the second one. Directly after the second partner is selected the two Extenders will connect. Possibly ongoing connections of the two participating Extenders are terminated.

5. CONNECTING, DISCONNECTING AND SHARING



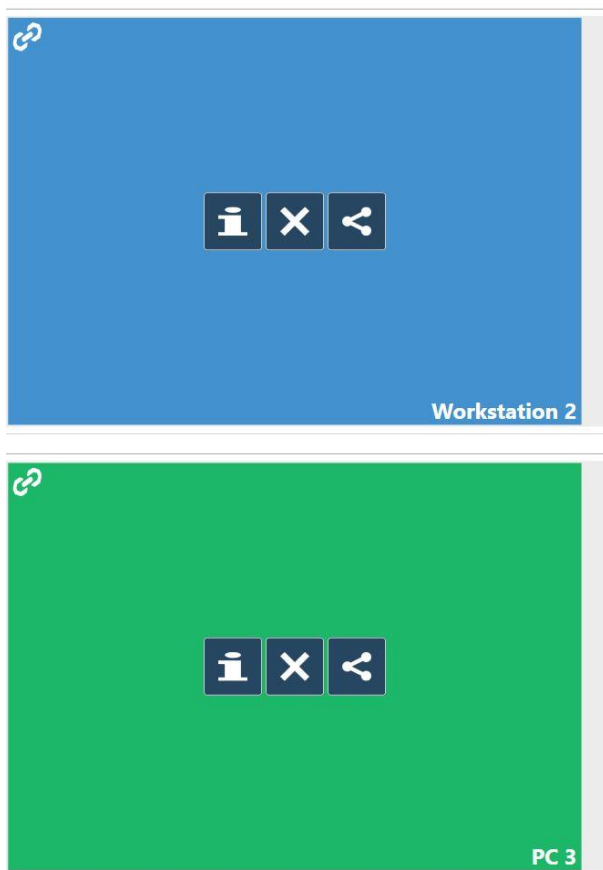
Picture 9: Extender Network overview

Connected Extenders are colored blue and have the name of their partner displayed under their own (see picture 9). Also, the connection is represented by the chain symbol on the left.

5.2 DISCONNECTING

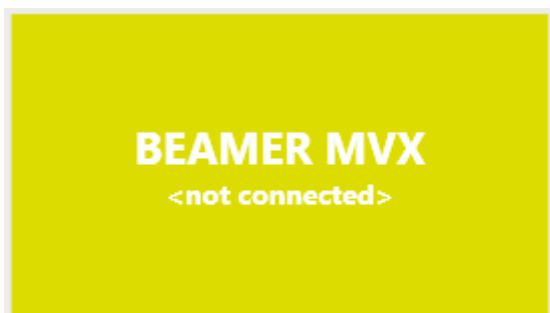
To terminate a connection between two Extenders, select the Extender which should be disconnected. A selected Extender will change its colour into green and the menu buttons appear (see picture 8). The partner Extender will stay blue but also show the menu buttons (see picture 10).

5. CONNECTING, DISCONNECTING AND SHARING



Picture 10: Disconnecting

Now in order to disconnect the Extenders from each other hit the menu button with the “X” symbol on one of the Extenders. After a successful disconnect the Extenders will change their colour to yellow and display “<not connected>” instead of their partner’s name (see picture 11).



Picture 11: Extender with no partner

5. CONNECTING, DISCONNECTING AND SHARING

5.3 SHARING

To use sharing, it has to be enabled in the network settings of every Extender. This setting can be accessed from every remote Extender using the onscreen display. To get more information about changing the network settings and the functionality of sharing, please consult the Switching option manual.

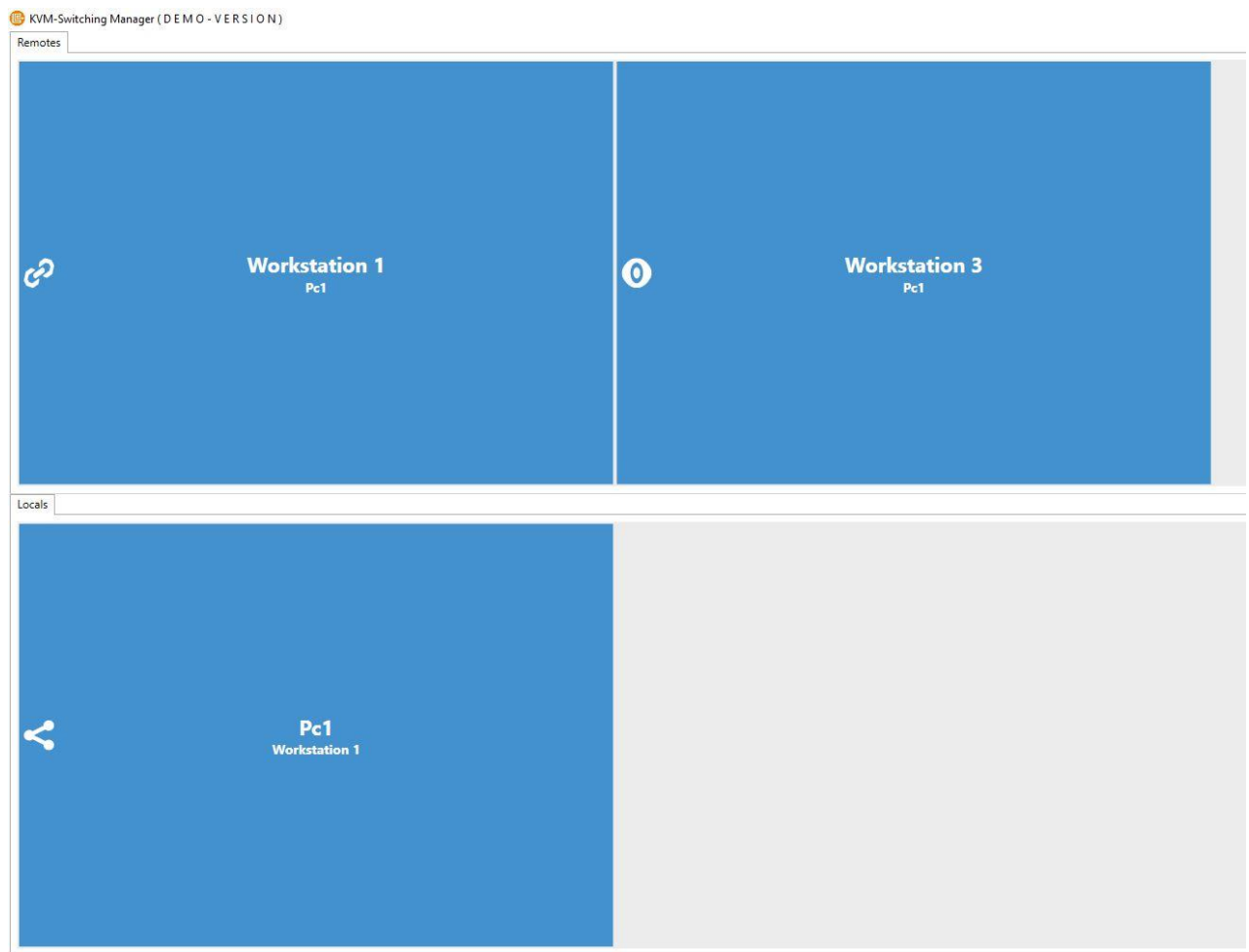
To share the video signal from one source with multiple monitors, at first a standard connection has to be established. This connection will transmit all information whereas a shared connection will just transmit the video signal. In order to share the video of an ongoing connection, select one of the participating Extenders. Now hit the share icon (see picture 12).



Picture 12: Sharing menu-button

Next click on the remote-Extender you want the video to be shared with. The Extender turns blue and on the left side the “eye” symbol appears (see picture 13). The local-Extender’s icon also changes to the “share” symbol.

5. CONNECTING, DISCONNECTING AND SHARING



Picture 13: Extender Network overview with sharing

5.3.1 DISCONNECTING A SHARED CONNECTION

To end the video sharing just select the Extender you want to remove from the share and hit the “X” menu button.

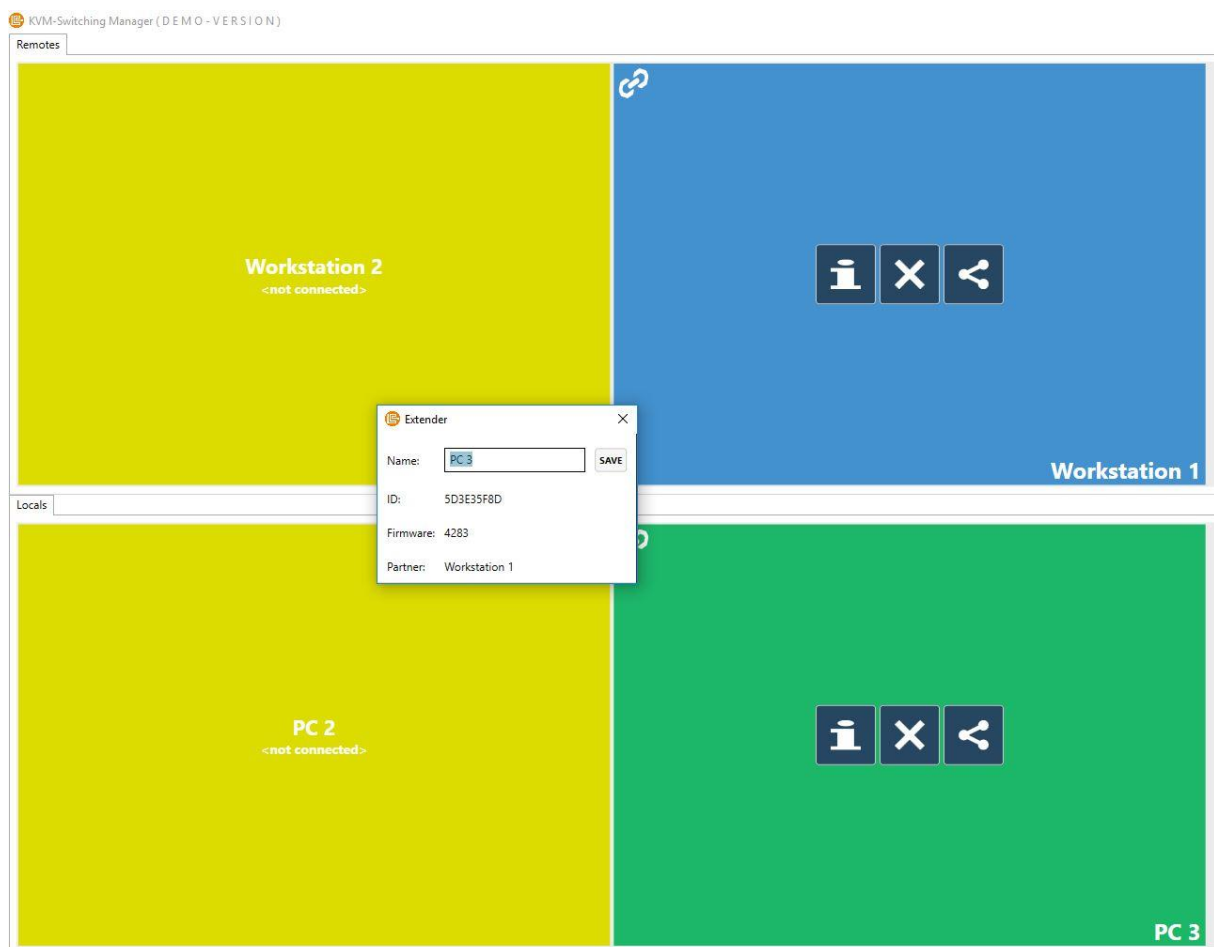
ATTENTION! If the main connection between local and remote Extender is terminated all sharing-connections will also be disconnected.

6. NAMING KVM-EXTENDER/EXTENDER INFORMATION

To maintain a clear view, naming the endpoints of the Extender-Network is key. In order to rename an Extender, open the Extender information window by selecting the Extender and clicking on the “i” menu button. The appearing window displays information like

- the name of the Extender,
- the ID,
- the currently running firmware and
- the name of the partner (if it's connected).

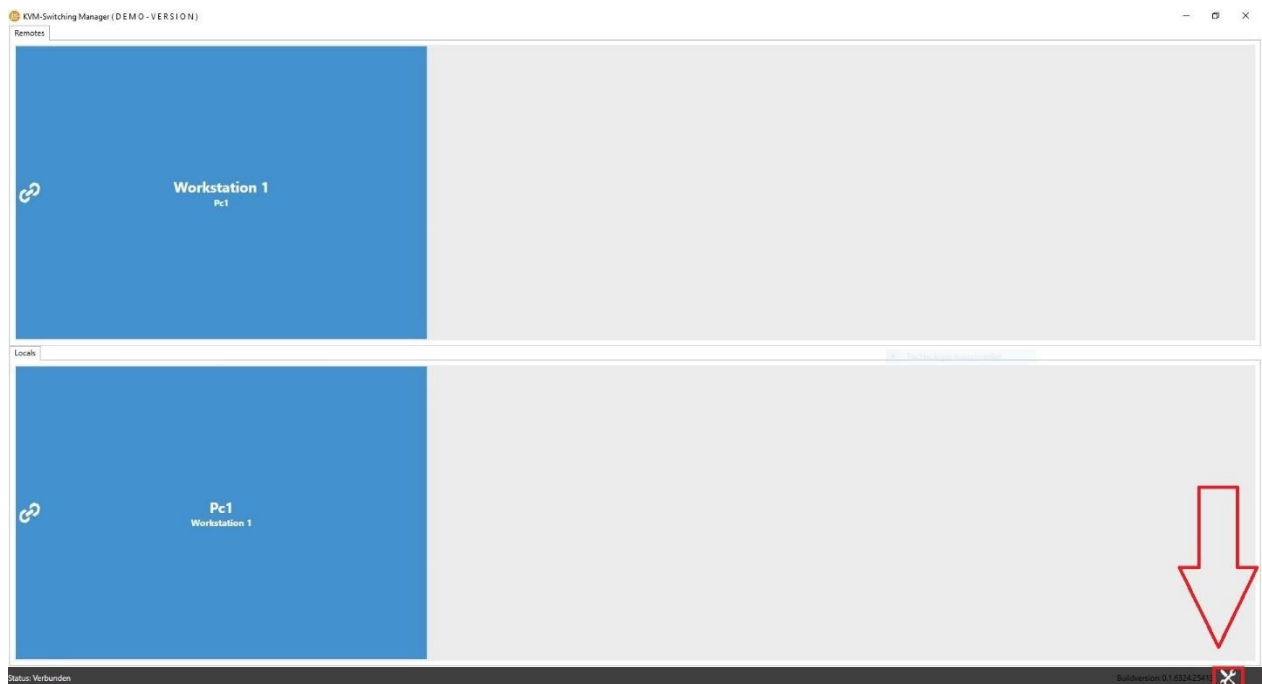
Now to rename the Extender, type the new name into the “Name” input box (see picture 14). To save the new name hit the “SAVE” button. The name is stored inside the KVM-Extender, which means that the name also gets updated in the OSD menu of the Extenders.



Picture 14: Extender information window

7. TOOLBOX

The toolbox contains utilities and options to help the user manage the KVM Network. To enter the toolbox, click the tool symbol in the right bottom corner (see picture 15).

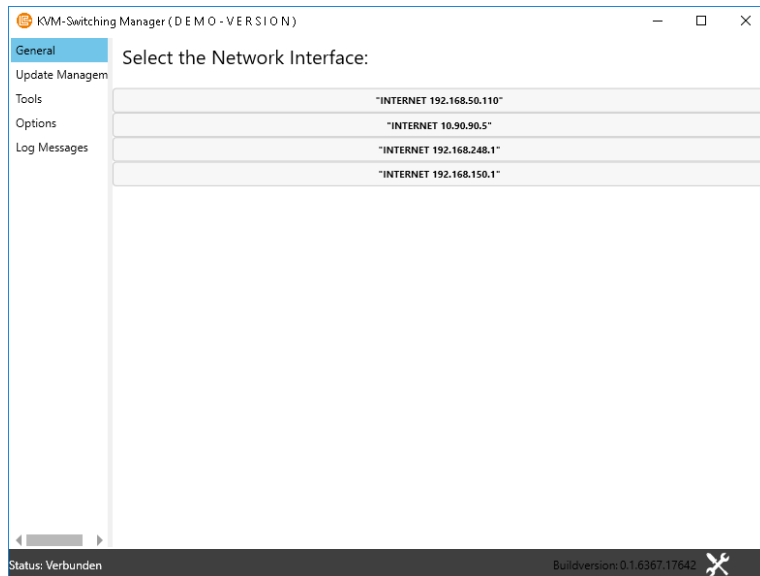


Picture 15: Toolbox button

7.1 GENERAL SETTINGS

In here the network interface can be selected or changed. Interfaces are named by their IP address. The IP of the network interface has no influence on the behaviour of the KVM-Extender.

7. TOOLBOX

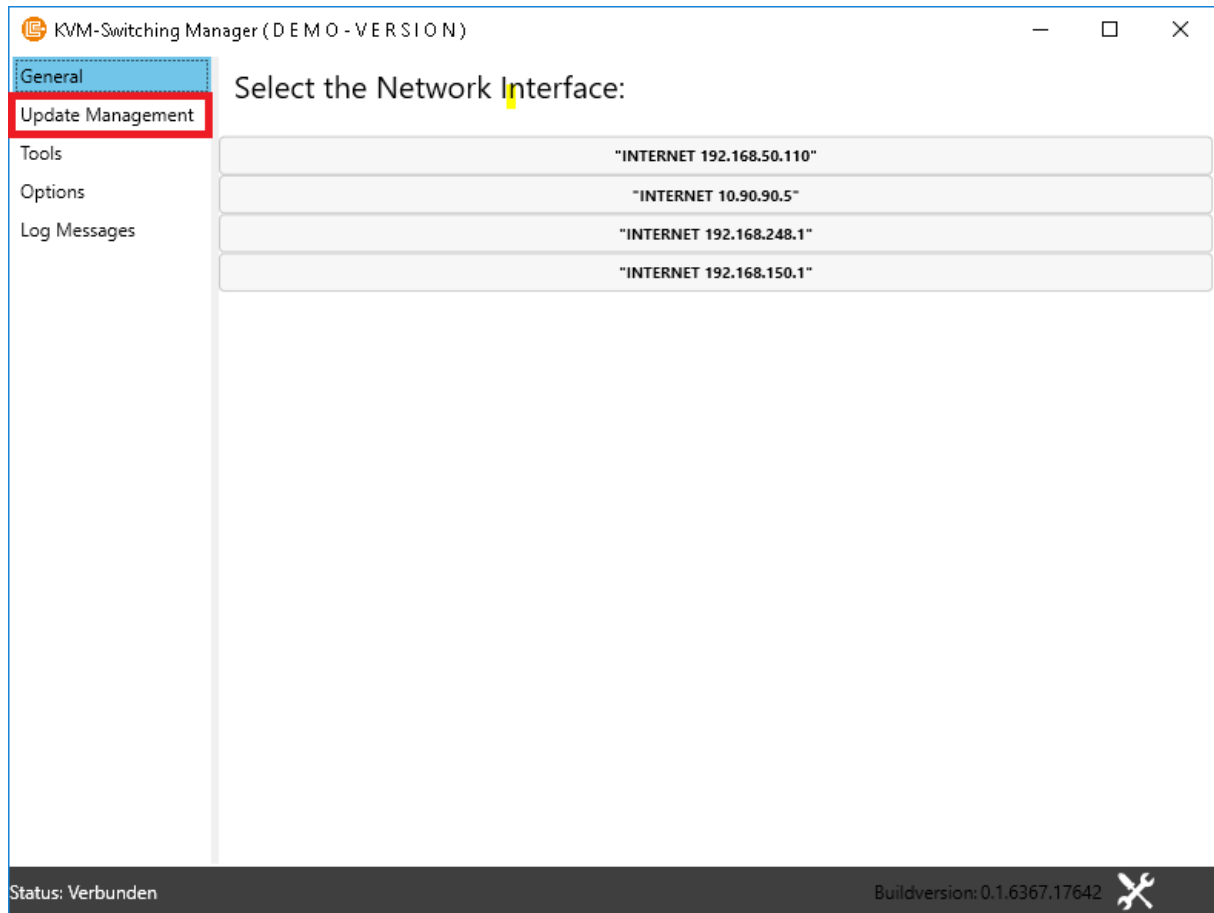


Picture 16: Network interface selection

7.2 UPDATE MANAGER

The update manager is a tool for updating KVM-Extenders on the Extender-Network. It is possible to update a single Extender or an entire network. An Extender can also be updated if it's directly connected to the PC. The update manager can be accessed inside the Toolbox on the left side under "Update Management" (see picture 17).

7. TOOLBOX



Picture 17: Update management menu entry

7.2.1 SUPPORTED FIRMWARE

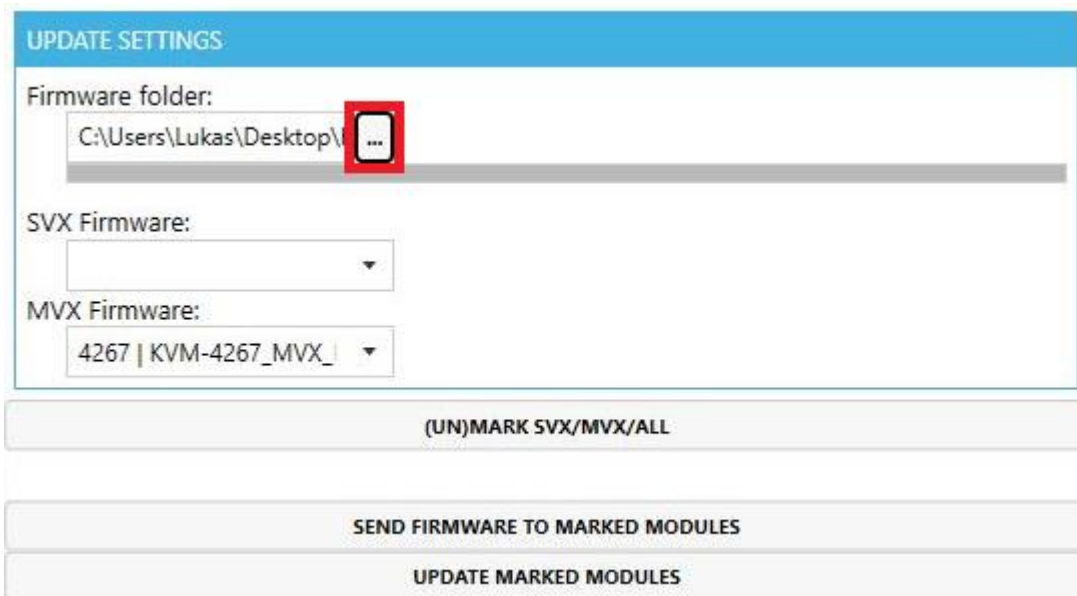
The KVM – SWITCHING MANAGER currently supports all 42XX firmware versions (SVX and MVX).

7.2.2 CHOOSING A FIRMWARE FILE

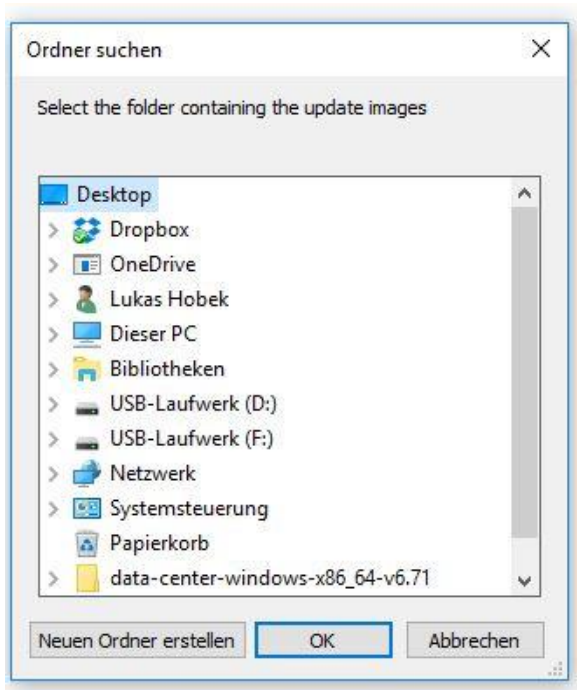
The first step of the update process is choosing the firmware file. The KVM – SWITCHING MANAGER uses the same bitmap files as the KVM-Extender use to update themselves. In

7. TOOLBOX

order to select a file, hit the “...” button in the “Update Settings” menu on the right (see picture 18).



Picture 18: Update settings



Picture 19: Update folder selection

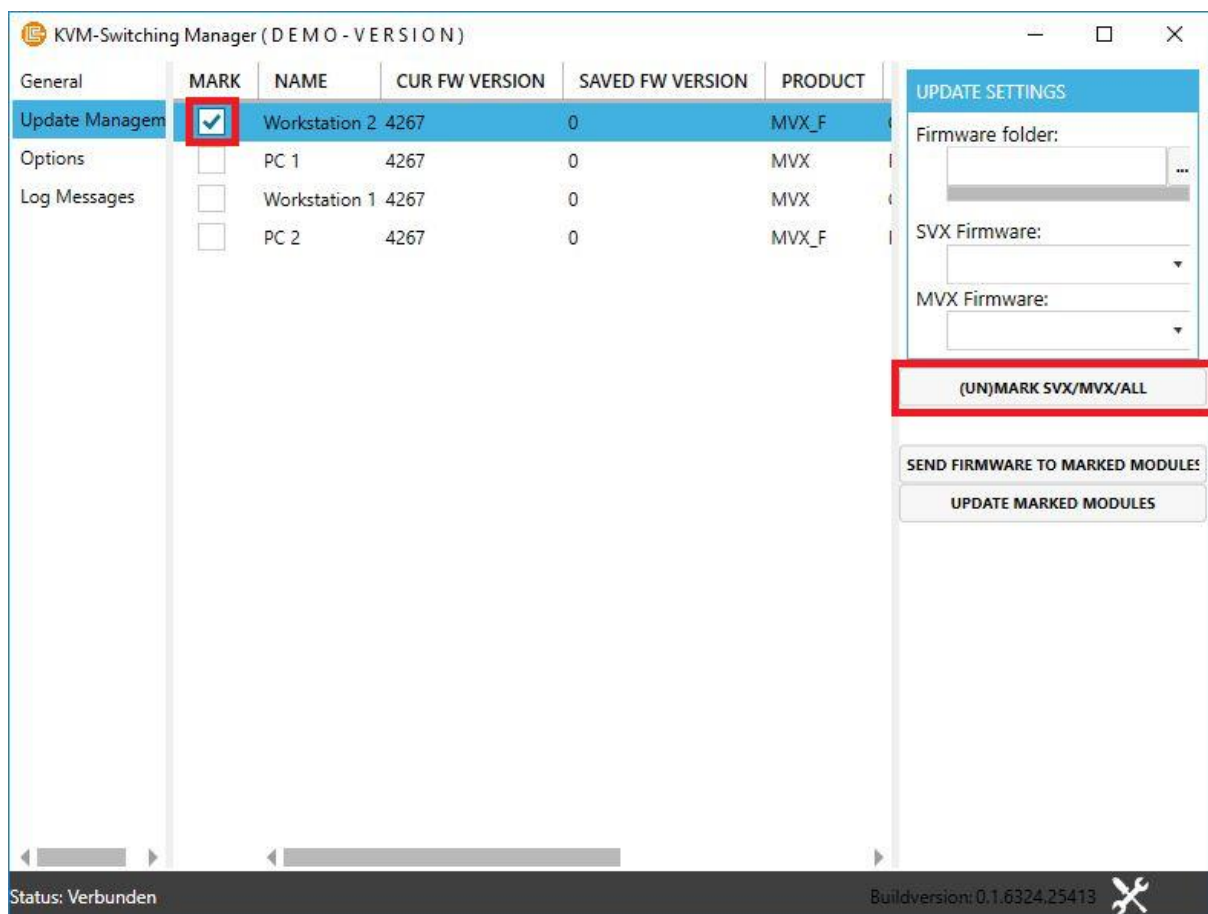
Choose the folder containing the bitmap files (see picture 19).

7. TOOLBOX

After the folder is selected all compatible files will be listed in the dropdown menu corresponding to their Extender type. Select the firmware version which should be installed on the Extenders.

7.2.3 TRANSMITTING AND UPDATING THE FIRMWARE

The update process is divided into two parts. At first the firmware information is sent to the Extenders into the "Save Partition". To do this mark the units that should receive the firmware either by checking the marks or hitting the "(UN)MARK ALL" button, if all Extender should get the new firmware (see picture 20).



Picture 20: mark Extenders

7. TOOLBOX

To start the transmitting process, click “SEND FIRMWARE TO MARKED MODULES”. The update manager indicates that the information is sent by a blue progress bar in the column “UPDATESTATUS” (see picture 21). After the transmission all Extenders have the new firmware version displayed in the “SAVED FW VERSION” column.

KVM-Switching Manager (D E M O - V E R S I O N)

General	MARK	NAME	CUR FW VERSION	SAVED FW VERSION	PRODUCT	TYPE	ID	STATUS	ALERTS	UPDATESTATUS
Update Manager	<input checked="" type="checkbox"/>	PC 2	4267	0	MVX_F	PC	D77CA3F1B	Free		<div><div></div></div>
Options	<input checked="" type="checkbox"/>	PC 3	4267	0	MVX	PC	5D3E35F8D	Connected		<div><div></div></div>
Log Messages	<input checked="" type="checkbox"/>	Workstation 2	4267	0	MVX_F	Con	806711A2C	Connected		<div><div></div></div>
	<input checked="" type="checkbox"/>	Workstation 1	4267	0	MVX	Con	528FF8109	Free		<div><div></div></div>

Picture 21: Update status

In the second part of the update the Extender will copy the firmware form the “Save Partition” to the “CURRENT” Partition, which is the actual update. To start the copying process hit “UPDATE MARKED MODULES”.

The Extenders will start the update, reboot and after the update has finished, the new firmware is shown in the “CUR FW VERSION” column.

7. 3 EXTENDER SETTINGS

KVM-Switching Manager (D E M O - V E R S I O N)

General	NAME	CUR FW VERSION	PRODUCT	TYPE	ID	DDC	USB MEM	RS232	VGA	SOUND	SWITCHING
Update Manager	Elvis AP SVX	4309	SVX	Con	CDAB8F9C	FX1920x1080	Yes	No	No	No	Yes
Extender Settings	Elvis PC SVX	4309	SVX	PC	67C2EE8D	FX1920x1080	Yes	No	No	No	Yes
Tools	LukasB APm	4310	MVX	Con	81EF440B3	RemoteDDC	Yes	Yes	Yes	Yes	Yes
Options	LukasB APs SVX	4309	SVX	Con	A90E8A6D	RemoteDDC	Yes	No	No	No	Yes
Log Messages	Julia APm MVX	4310	MVX	Con	3FC67E570	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	LukasB AP MVX	4310	MVX	Con	1D51D2E8B	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	ALI AP SVX15	4309	SVX	Con	B8C80FFC	FX1920x1080	No	No	No	No	Yes
	Christoph PC MVX	4310	MVX	PC	57B94C7BF	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	BEAMER MVX	4310	MVX	Con	69F51910C	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	FS main PC MVX	4310	MVX	PC	5B6AC17BF	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	FS main AP MVX	4310	MVX	Con	1A0D09D5	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	Nikol Mon MVX	4310	MVX	Con	8CE6A8CC	RemoteDDC	Yes	Yes	Yes	Yes	Yes
	Marlies AP MVX	4310	MVX	Con	1E2E19A3A	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	Sterli PC MVX	4310	MVX_F	PC	4F4688D0	FX1920x1080	Yes	No	No	No	Yes
	Thomas AP SVX	4309	SVX	Con	223F9F99	FX1920x1080	No	No	No	No	Yes
	Marlies PC MVX	4310	MVX	PC	70AFD3E4	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	LukasB PCs MVX	4310	MVX	PC	635607487	RemoteDDC	Yes	No	No	No	Yes
	LukasB PC MVX	4310	MVX	PC	89F734DE	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	CONFERENCE MVX	4310	MVX	PC	34C170792	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	ALI PC SVX15	4309	SVX	PC	32909885	FX1920x1080	No	No	No	No	Yes
	Sterli AP SVX	4309	SVX	Con	268D0FCD	FX1920x1080	Yes	No	No	No	Yes
	Dietmar PC MVX	4310	MVX	PC	D3657B3A8	RemoteDDC	Yes	Yes	Yes	Yes	Yes
	LukasB PCm	4310	MVX	PC	1194E0221	RemoteDDC	Yes	Yes	Yes	Yes	Yes
	Nicole PC SVX	4309	SVX	PC	49721F117	RemoteDDC	Yes	Yes	Yes	Yes	Yes
	Alex AP SVX	4309	SVX	Con	8646FF949	FX1920x1080	No	No	No	No	Yes
	Julia APs MVX	4310	MVX	Con	346EC8610	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	Thomas PC SVX	4309	SVX	PC	26260229	FX1920x1080	No	No	No	No	Yes
	Alex PC SVX	4309	SVX	PC	2AR098D4	FX1920x1080	No	No	No	No	Yes
	Julia PCs SVX	4309	SVX	PC	DC44B41AE	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	Julia PCm MVX	4310	MVX	PC	8F2D18599	FX1920x1080	Yes	Yes	Yes	Yes	Yes
	Dietmar AP MVX	4310	MVX	Con	67F48C489	RemoteDDC	Yes	Yes	Yes	Yes	Yes
	Christoph AP MVX	4310	MVX	Con	33F368D09	FX1920x1080	Yes	Yes	Yes	Yes	Yes

EXTENDER SETTINGS

SET NAME

0

SET V-CLOCK DELAY

Enter Unlock Code

UNLOCK

Missing

SET DDC

Status: Verbunden

In Extender Settings it is possible to change many Settings of the Extender. It also gives information about the most important information of the Extenders (ID,DDC and unlocked Options).

To change settings simply select an Extender.

[illegible]

Now on the right hand side you can change the settings of the Extender by selecting or tipping the new settings and kicking the button according to the value to be set. After the Extender has rebooted the new settings are set. NOTE: Changing the V-Clock Delay requires the FW-Version 4311 or higher.

EXTENDER SETTINGS

Elvis PC SVX

SET NAME

0

SET V-CLOCK DELAY

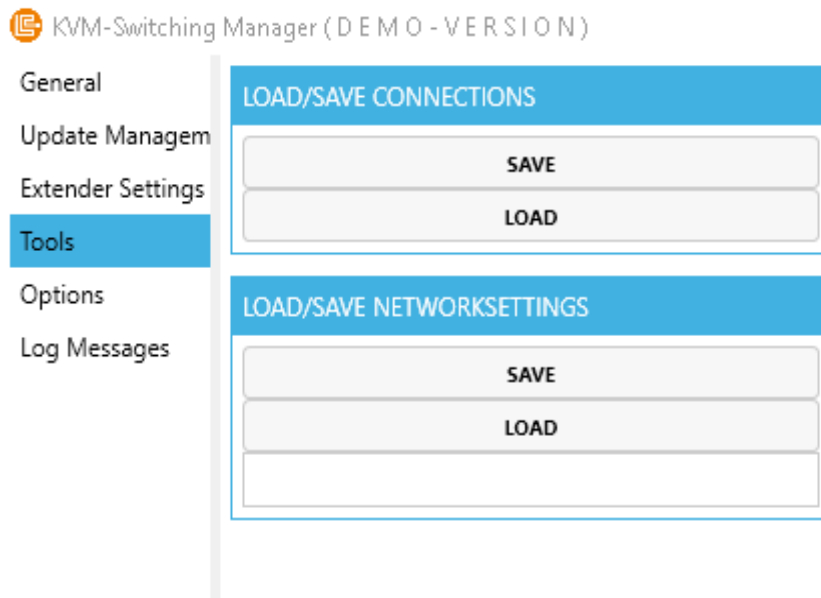
Enter Unlock Code

UNLOCK

FIX1920x1080

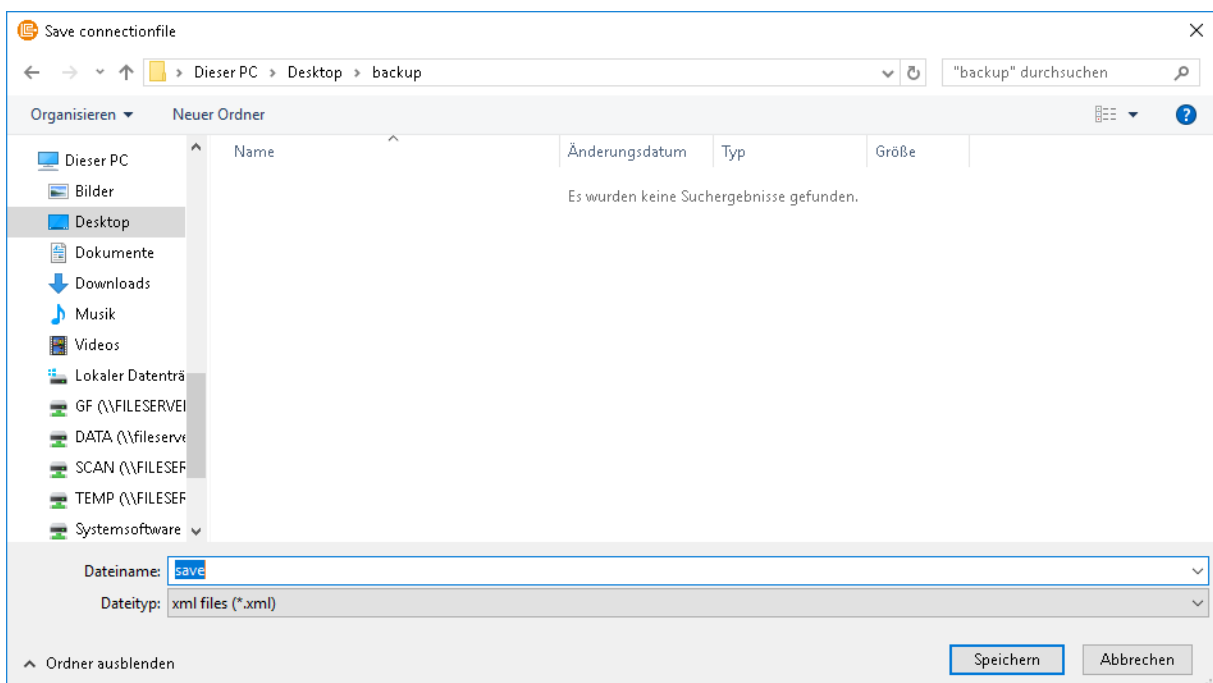
SET DDC

In the section Tools it is possible to SAVE and LOAD configurations and settings of the network.



LOAD/SAVE Connections:

Here you can back up the current state of connections in the network. Click the SAVE button.



And save the file.

When loading the file back all connections will be re-established.

Under LOAD/SAVE NETWORKSETTINGS all Extenders in a Network can be saved and loaded into a new Extender Network.

7. 4 USER LOGIN

The Switching Manager uses a simple User Management System.

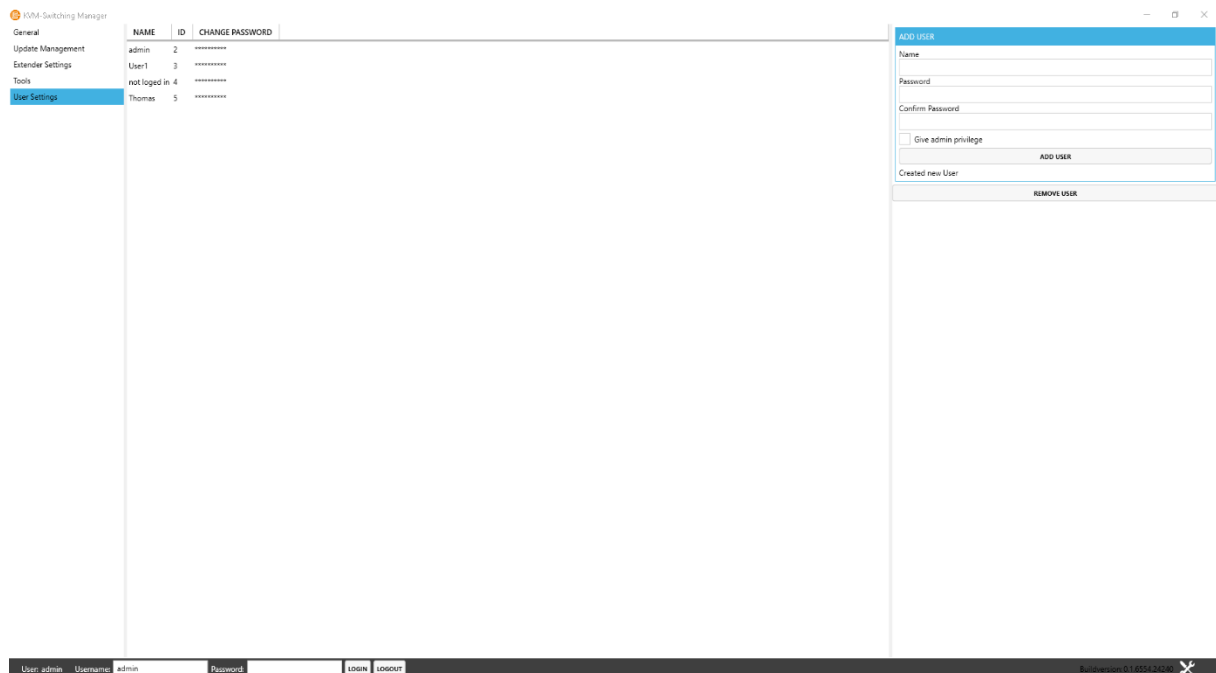
The Default Administration Login is **User:admin PW:Admin**.

To Login Type the Username and Password into the Input boxes in the left bottom Corner.



To Logout Click the Logout Button.

The users can be managed in the User Settings menu



Here Users can be added and removed by the operator.

There are 3 types of Users

Not logged in: Is not allowed to see anything

User: Can view Settings and Extender Informations.

Admin: Can change Settings; Add/Remove Users; Run Updates

8. SUPPORT

If you have any questions about kvm-tec products, please contact us.

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