

# KRAMER



# INSTALLATION MANUAL

## KRAMER NETWORK 1.0.6

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# 1 Introduction

Download the up-to-date **KRAMER NETWORK** installation package (kn-installation-wizard-1\_0\_6.zip) from: [www.kramerav.com/support/product\\_downloads.asp?pid=3279](http://www.kramerav.com/support/product_downloads.asp?pid=3279), unzip the file and install the kn-installation-wizard-1\_0\_6.exe file.

**KRAMER NETWORK** supports uninstall/install/repair/upgrade modes.

The installation package installs the following software:

- Visual C++ Redistributable for Visual Studio 2012
- Visual C++ Redistributable for Visual Studio 2013
- WAMP (Apache)
- KDS-EN3\_Manager\_64
- Dante API (DAPI)
- DAPI Controller
- Kramer Network components
- Kramer Network Administrator Utilities

Before you begin installing **KRAMER NETWORK 1.0.6**, review the installation prerequisites ([Section 2.1](#)).

---

## 2 KRAMER NETWORK Installation Prerequisites and Specifications

This section describes the **KRAMER NETWORK** 1.0.6 software installation prerequisites and specifications.

### 2.1 Installation Prerequisites

The following are the **KRAMER NETWORK** prerequisites for installation.

#### 2.1.1 Server Hardware Spec

The server hardware spec encompasses the following:

For a small system including up to 30 streaming devices and up to 30 controlled devices:

- CPU i5, 8GB RAM, 100GB Disk-space

For a medium system, up to 100 streaming devices and up to 100 controlled devices:

- CPU i7, 16GB RAM, 100GB Disk-space

#### 2.1.2 Server OS Language

English

#### 2.1.3 Server Operation System

**KRAMER NETWORK** 1.0.6 supports the following standard or virtual server operating systems:

- Windows 7 Pro / Enterprise, 64 bit, fresh install
- Windows 10 Pro / Enterprise, 64 bit, fresh install
- Windows Server 2008, 64 bit
- Windows Server 2012, 64 bit

In order for **KRAMER NETWORK** to recognize KDS-EN3 and KDS-DEC3 encoders and decoders, set the UPnP service and the SSDP Discovery service Startup Type to Automatic and verify that the Status of each service is started.

#### 2.1.4 Server Firewall Ports

If you are using a firewall or an anti-virus application on the server make sure that the following ports are opened:

**For Dante:**

- UDP port 319, 320 PTP (address: 224.0.0.129-132)
- UDP port 5353 mDNS (address: 224.0.0.251)
- UDP port 8700 – 8708 Control and monitoring (address: 224.0.0.230 – 232)

**For Dante and KDS-3 auto-discovery:**

- UDP port 5353 for the Bonjour/multicast DNS (mDNS) protocol

**For Web Socket/Client:**

- TCP Port 9000

**For Kramer Pro AV (Matrices, Scalers, and so on):**

- TCP Port 5000
- UDP Port 50000

**Ports in use for Room Control:**

- TCP Port: 4000-5000 (range)

**For internal use:**

- TCP Port: 3333-3334



These ports are not included by-default in the firewall rules, and may therefore be blocked.

## 2.2 Specifications

This section describes the **KRAMER NETWORK 1.0.6** specifications. For information about server requirements, see [Section 2.1](#)

### 2.2.1 Client Operation System

- Google Chrome
- Mozilla Firefox
- Microsoft Internet Explorer 10 and higher
- Microsoft Windows 10 Edge

### 2.2.2 Network

- Kramer Network scan devices and auto-detect on LAN or on a single VLAN
- The requirement for the network is L2 IP switching
- For streaming the network should support Multicast

### 2.2.3 Concurrent Clients

- Up to 10 concurrent clients (logged in users) recommended

### 2.2.4 Streaming

- KDS-EN3 H.264 encoder, KDS-DEC3 H.264 decoder
- KDS-EN4 H.264/MJPEG encoder, KDS-DEC4 H.264/MJPEG decoder
- KDS-EN6 4K, HDCP encoder, KDS-DEC6 4K, HDCP decoder
- FC-404 NET, Dante streamer
- Up to 100 streaming devices

### 2.2.5 Pro-AV Kramer Devices

- Kramer Pro-AV devices that support p3K, auto-detection, virtual matrix, monitoring and launch web-interface – practically unlimited

### 2.2.6 IP Devices

- IP devices, manually added, launch web-interface - practically unlimited

### 2.2.7 Control

- Virtual server, based on K-Config 3.0
- Up to 100 controlled devices or 10 rooms recommended

### 2.2.8 Users

- Super User: single
- Admin level: practically unlimited
- User level: practically unlimited

### 2.2.9 User Levels

- Built-in three levels, with fine-tune option in two of them

### 3 Installing KRAMER NETWORK 1.0.6

The Kramer Network installation Wizard-1.0.6 installs all the software required for running the **KRAMER NETWORK** application. When the Kramer Network installation Wizard-1.0.6 prompts you to install external applications, leave all default values selected.



Before installing the program it is important that you:

- Use the default options to prevent problems during installation.
- Make sure that you have **administrator permissions**.
- Allow access to all the programs included in this installation on the Windows Security Alert (Firewall).



If this is the first time you are installing **KRAMER NETWORK** the wizard asks you to install a list of programs. If you are updating **KRAMER NETWORK**, the wizard asks you to either repair (install a new version if required) or skip (and move to the next program to be installed) a program installation. The following installation process refers basically to the installation process with notes regarding the upgrade process.

To install the **KRAMER NETWORK** application:

1. Go to the **KRAMER NETWORK** web page and download the “kn-installation-wizard-1\_0\_6.zip” file from the DOWNLOADS section ([www.kramerav.com/support/product\\_downloads.asp?pid=3279](http://www.kramerav.com/support/product_downloads.asp?pid=3279)).
2. Run the “kn-installation-wizard-1\_0\_6.exe” file as administrator. The Kramer Network installation Wizard-1.0.6 appears (see [Figure 1](#)).



Figure 1: Kramer Installation Wizard Preparation

3. The Kramer Network installation Wizard-1.0.6 may prompt you to install .NET 4.5:
  - Follow the onscreen instructions to complete the installation.
  - You can also obtain the software from the .NET 4.5 Internet page.



You need to be connected to the Internet for this installation.

4. Select Install (or Upgrade to upgrade to the latest revision).



There is no need to uninstall the program before you install the new revision.  
Use Uninstall only if you want to remove the program.



Figure 2: Kramer Installation Wizard – First-time Installation



Figure 3: Kramer Installation Wizard – Upgrade



When upgrading **KRAMER NETWORK** some of the software programs that are already installed on your PC are automatically skipped; for other programs that are included in the Installation package you will be asked to either repair or skip the programs as required.

5. Click **Next>>**. The end-user license agreement appears (for first time installation):

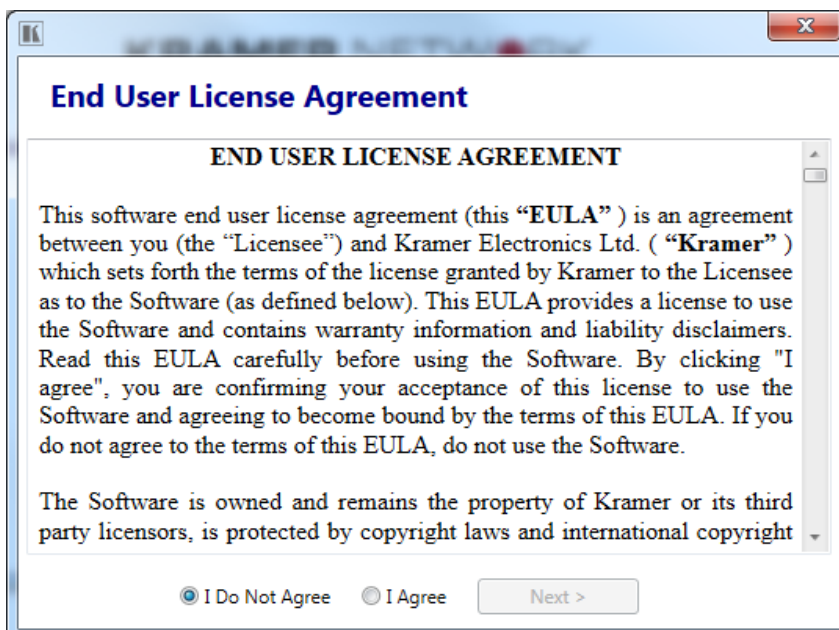



Figure 4: Kramer Installation Wizard – End User License Agreement

6. Check **I Agree** and click **Next>**.  
The installation wizard shows the list of programs that need to be installed.

 [Figure 5](#) shows the installation wizard.

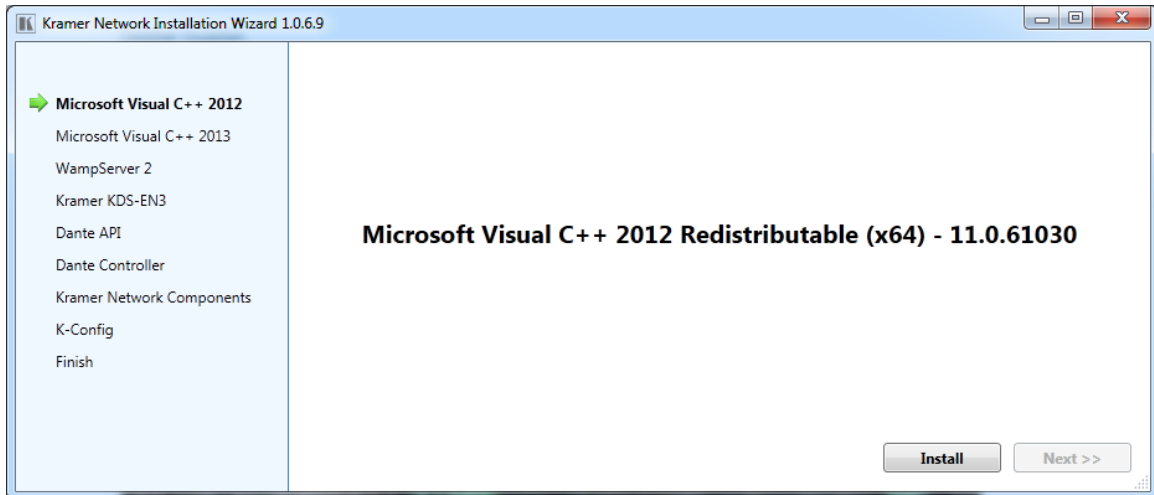


Figure 5: Kramer Installation Wizard – Microsoft Visual C++ 2012 (Install)

7. Click **Install** (Repair or Skip) and follow the instructions:

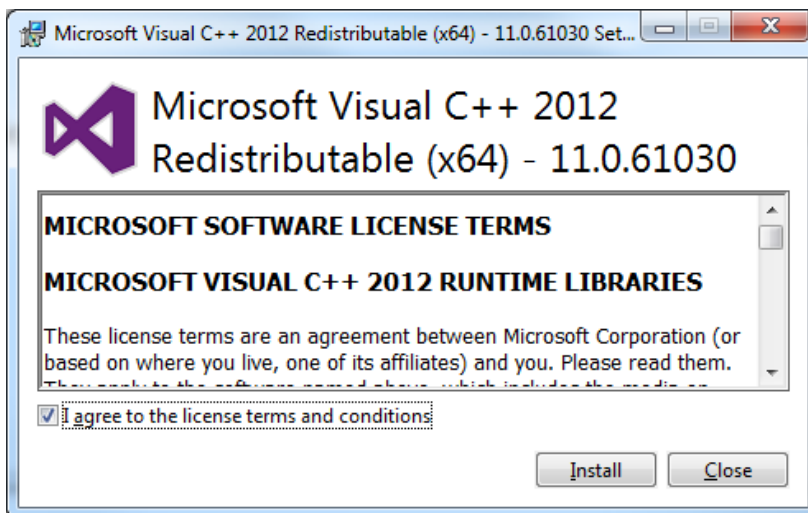


Figure 6: Kramer Installation Wizard – Installing Microsoft Visual C++ 2012

8. Click **Install**.

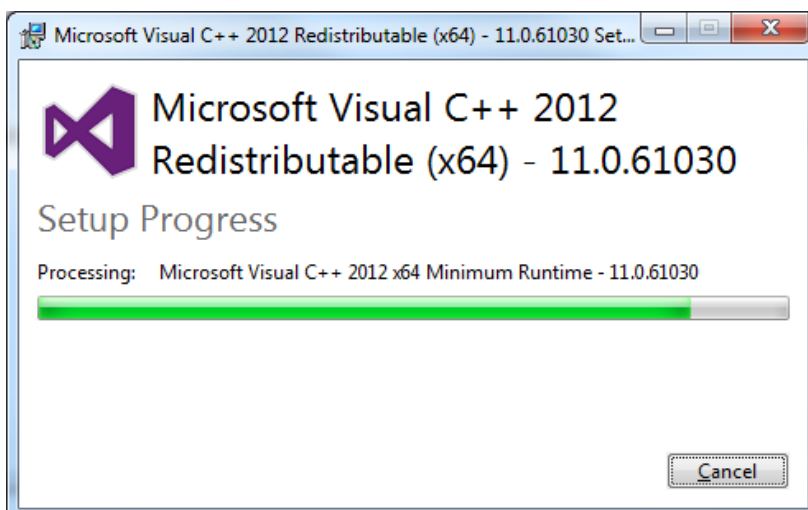




Figure 7: Kramer Installation Wizard – Installing Microsoft Visual C++ 2012

9. Wait until the following window appears.

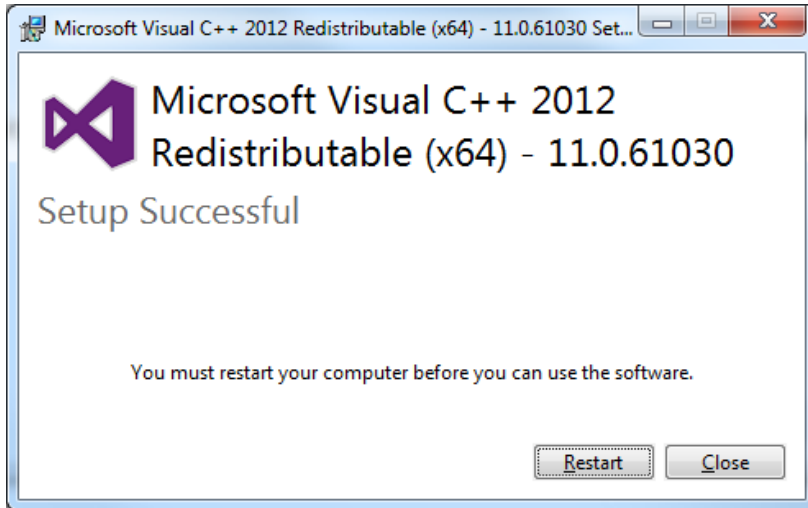


Figure 8: Kramer Installation Wizard –Microsoft Visual C++ 2012 Successful Setup

10. Click **Close**.



Note that you can restart your computer, if required, after installation is complete.

11. Repeat the same process for Microsoft Visual C++ 2013:

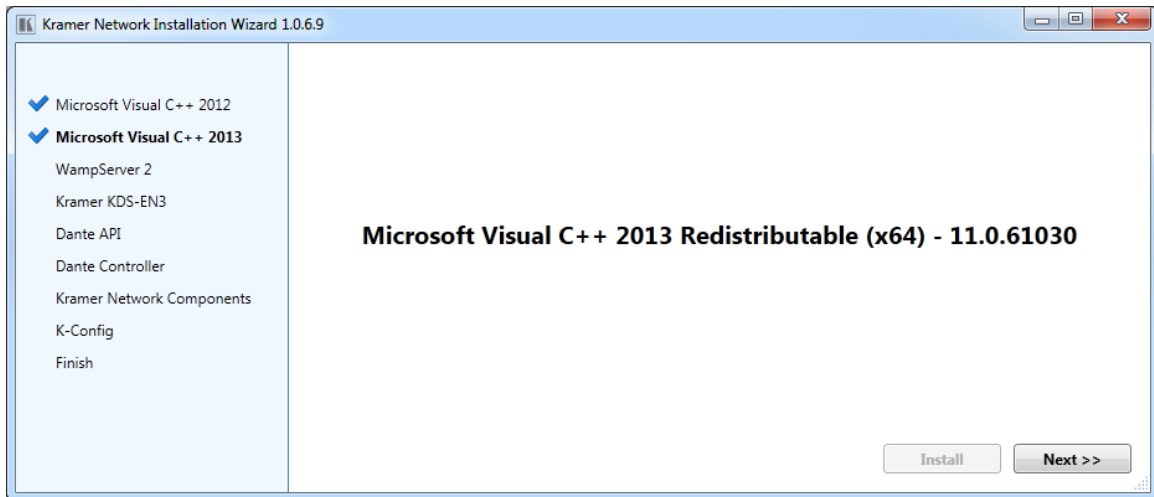


Figure 9: Kramer Installation Wizard – Microsoft Visual C++ 2013 Installation Complete



Note that you can restart your computer, if required, after installation is complete.

12. Click **Next>>**.

13. **Install** (Repair or Skip) the WampServer:



Figure 10: Kramer Installation Wizard – Installing WampServer 2

14. Click **Install** (Repair or Skip).

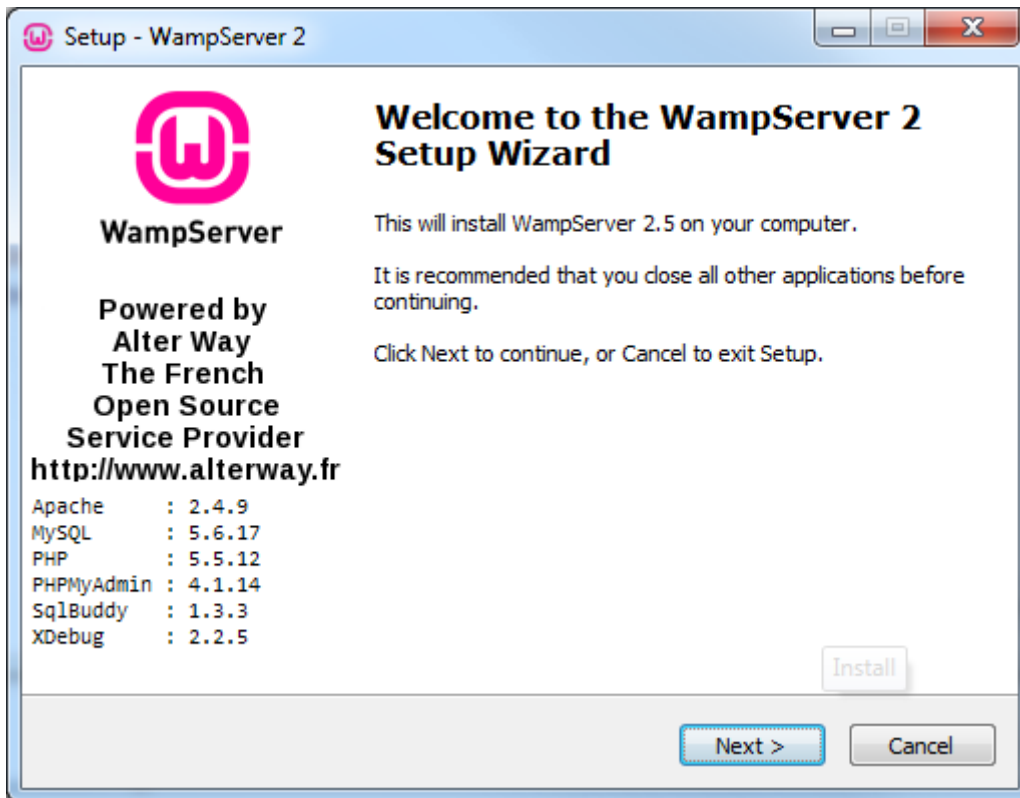


Figure 11: Kramer Installation Wizard – WampServer2 Setup Wizard

15. Follow the WampServer setup and installation instructions:

- Check the agreement.
- Set the folder to which WampServer will be installed.
- Create Quick Launch icon and/or Desktop icon, if required.
- Choose a default browser (if you are not sure click Open).
- Specify the SMTP server (optional).

16. Click **Finish** to exit setup and check Launch WampServer 2 now, if required.

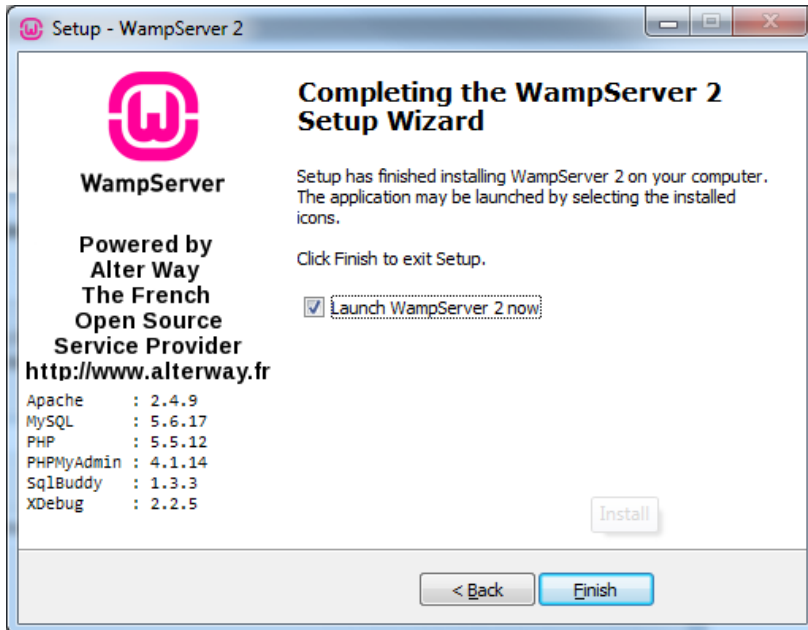


Figure 12: Kramer Installation Wizard – WampServer 2 Completion of Installation

17. Click **Next>>** to install the Kramer KDS-EN3 Manager.



18. Click **Install** (Repair or Skip) to install the KDS-EN3 Manager.

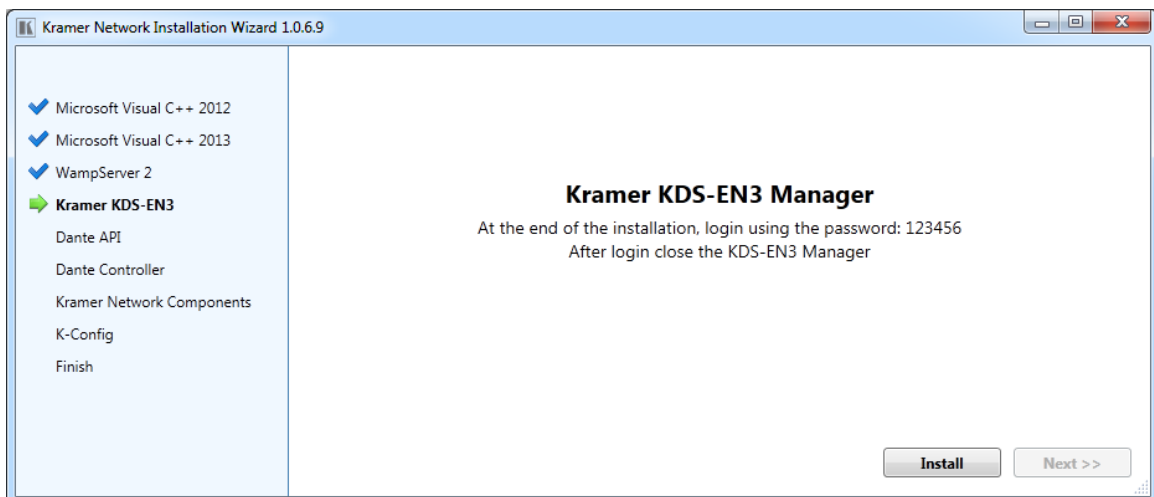


Figure 13: Kramer Installation Wizard – Installing Kramer KDS-EN3 Manager

19. Set the password for your units (use the 123456 password, see [Figure 13](#)).

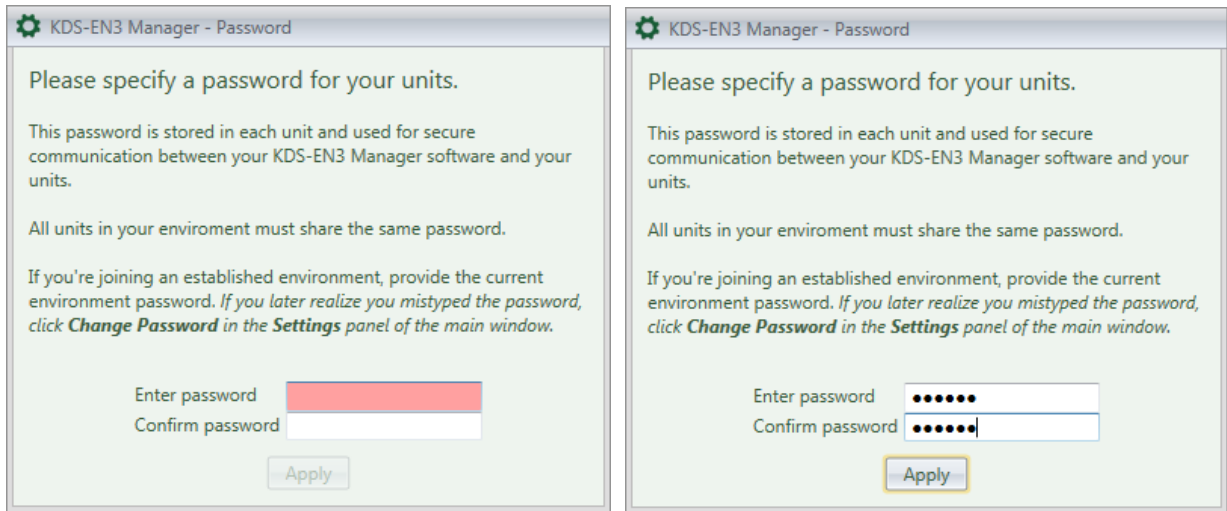


Figure 14: Kramer Installation Wizard – Setting the KDS-EN3 Manager Password)

20. Click **Apply**.

The KDS-EN3 Manager appears –close it if you do not need to use it.

21. Click **Next>>**.

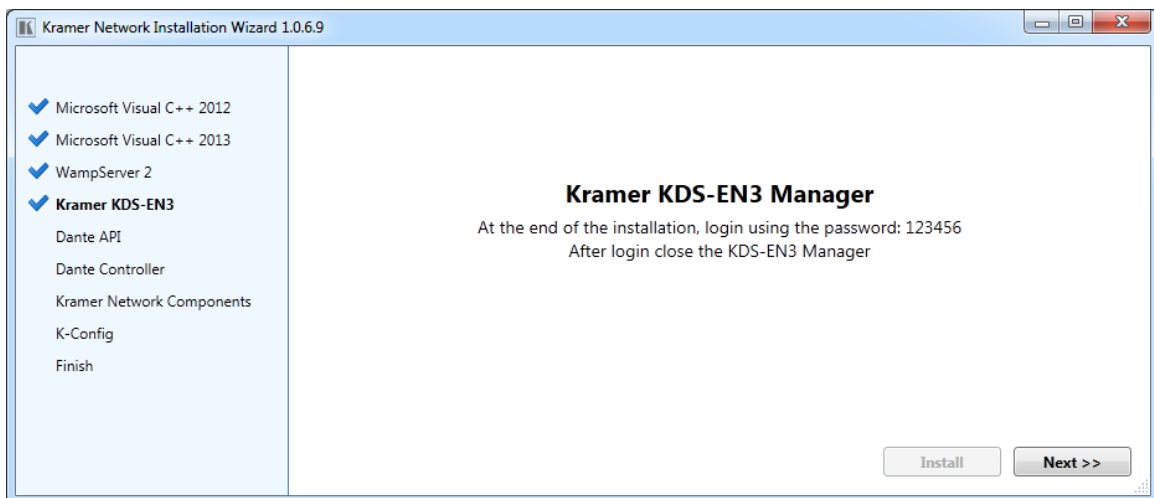


Figure 15: Kramer Installation Wizard – Moving to Dante API Installation

22. Click **Install** (Skip or Repair) to install Dante API.

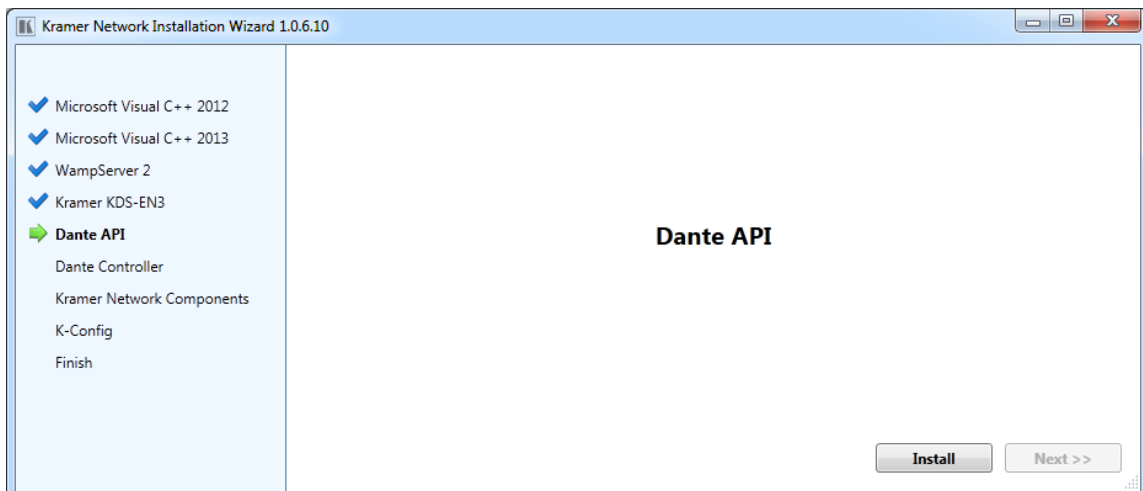


Figure 16: Kramer Installation Wizard – Installing Dante API

23. Follow the installation instructions and then click **Next>>** to continue to DANTE Controller installation.

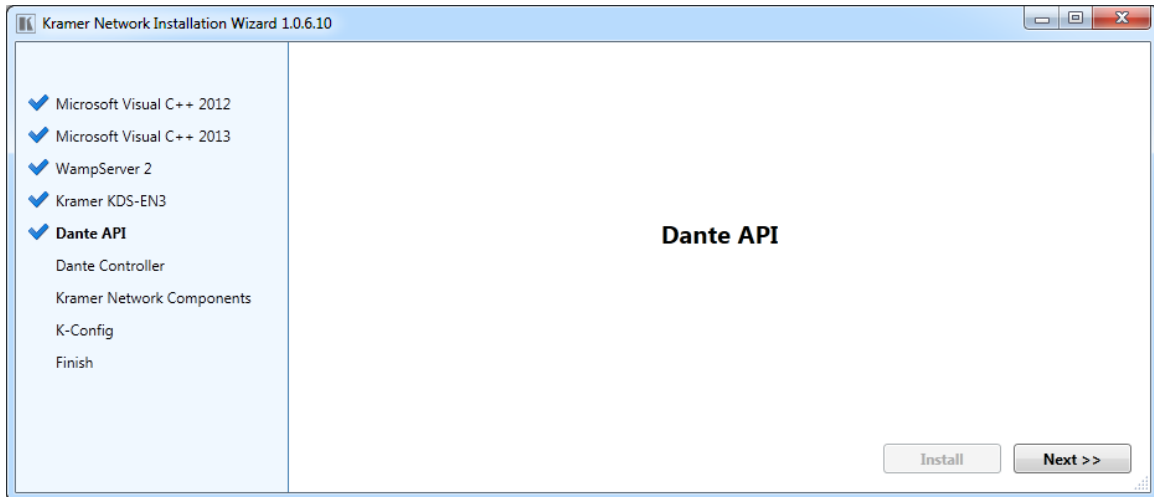


Figure 17: Kramer Installation Wizard – moving to Dante Controller Installation

24. Click **Install** (Repair or Skip).

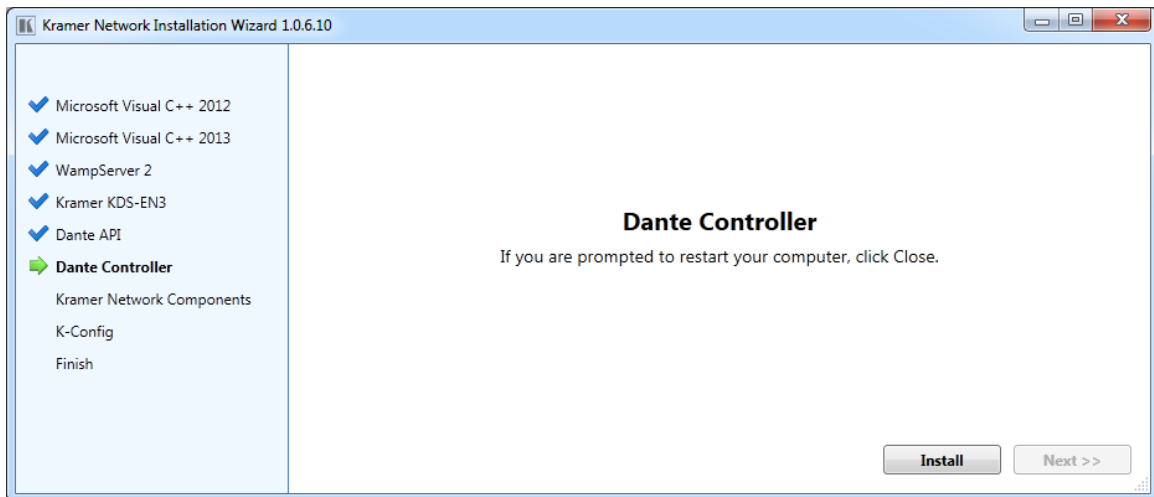


Figure 18: Kramer Installation Wizard – Installing Dante Controller

25. Follow the installation instructions. Upon completion of the setup, the following message appears:

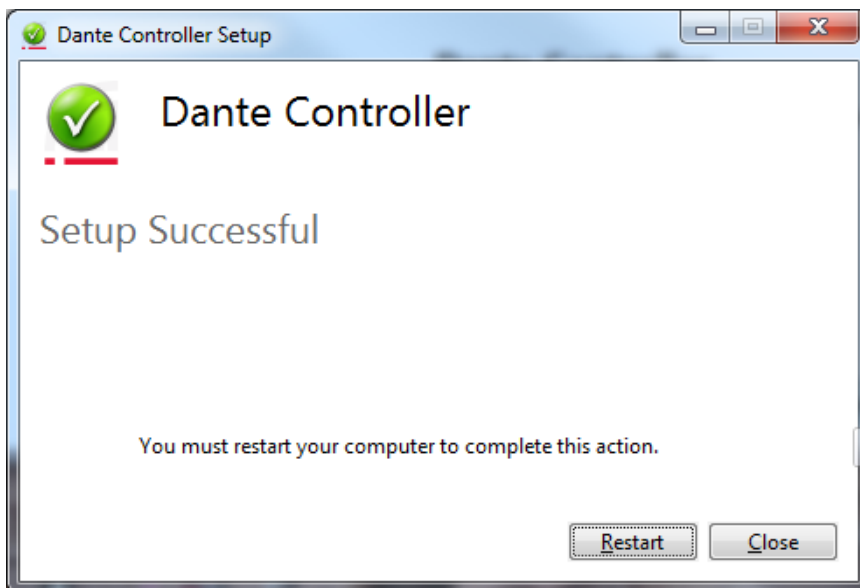


Figure 19: Kramer Installation Wizard – Dante Controller Setup Message

26. If you are prompted to restart the Computer **do not** do so and click **Close**.

27. Click **Next>>** to continue to the Kramer Network Installation.

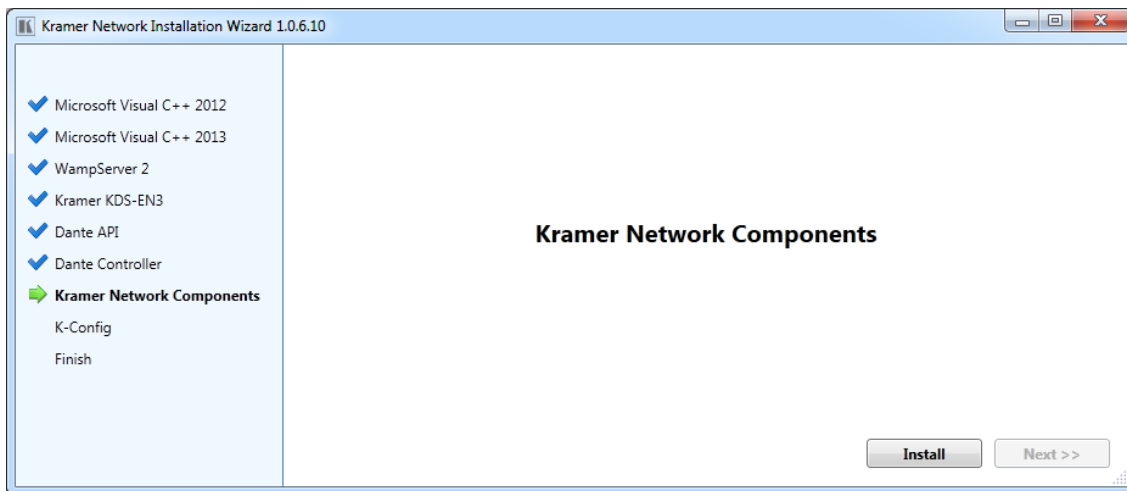


Figure 20: Kramer Installation Wizard – Kramer Network Components

28. Click **Install** (Upgrade or Skip).

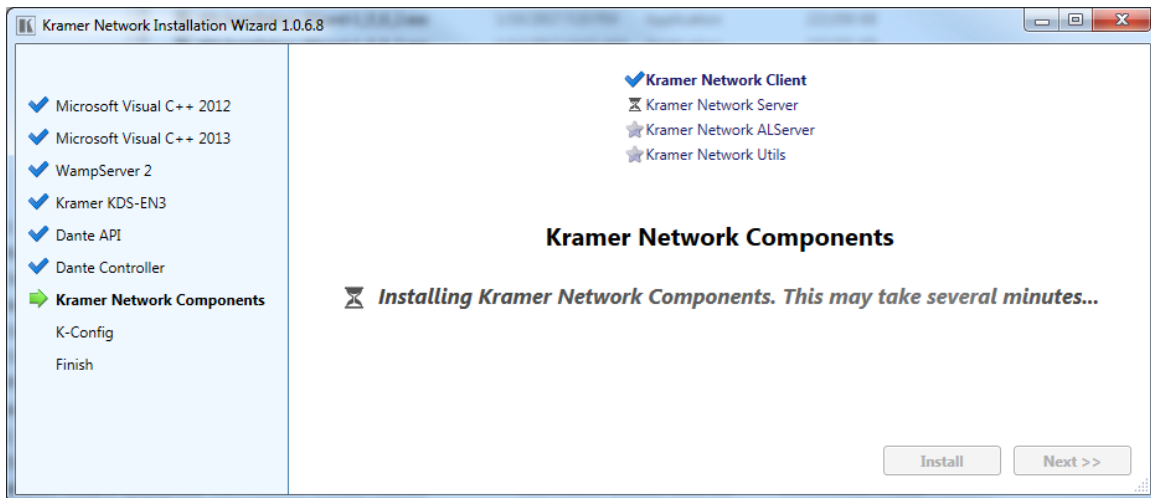


Figure 21: Kramer Installation Wizard – Kramer Network Components Installation

29. Wait until all Kramer Network components are installed.

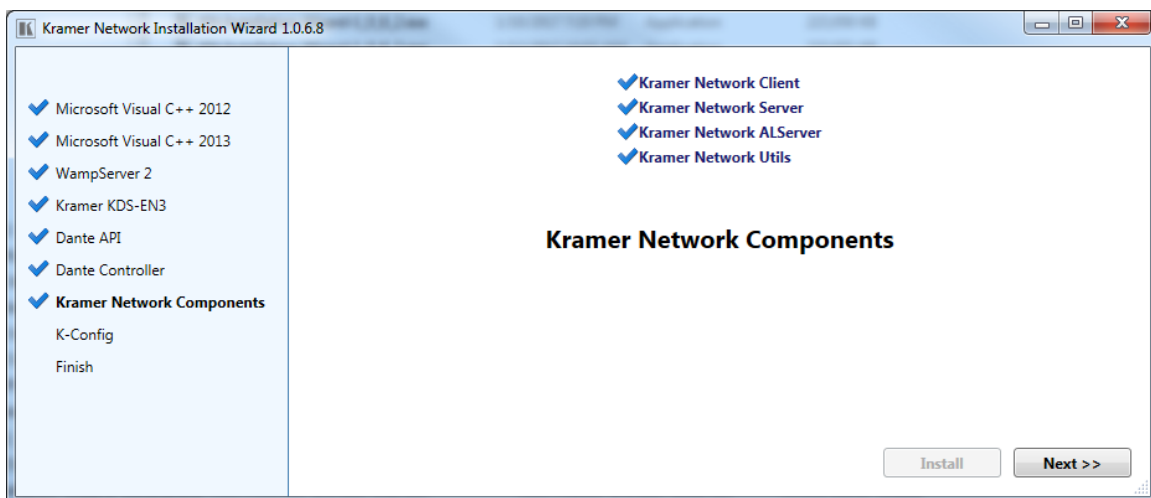


Figure 22: Kramer Installation Wizard – Kramer Network Components Installation Completion

30. Click **Next>>**. The following message appears.

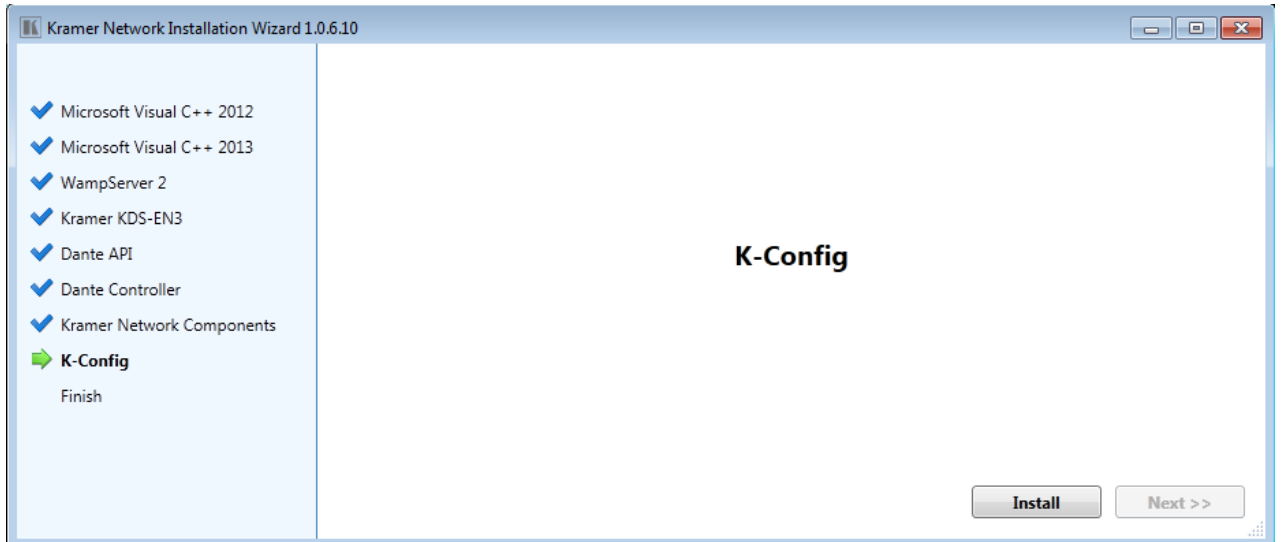


Figure 23: Kramer Installation Wizard – Installing K-Config

31. Click **Install** (Upgrade or Skip).

Immediately after the installation of Kramer Network Components and while **K-Config** is installed, **KRAMER NETWORK** database is created (or updated) and the following info message appears:

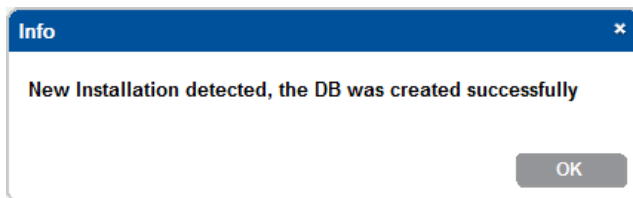


Figure 24: Info Message

32. Click **OK**.
33. Wait for Kramer Network to finish the updating process.

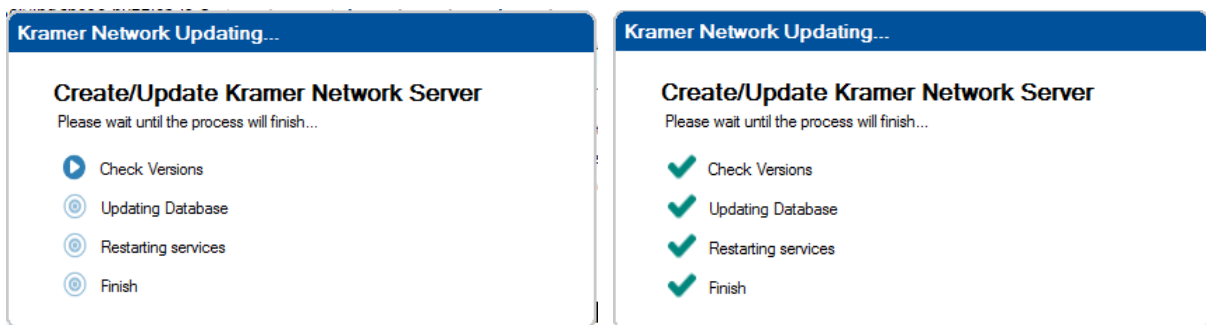


Figure 25: Kramer Network Updating

34. When finished, click **OK**.



Figure 26: DB Update Complete Message

35. Click **OK**.

The **KRAMER NETWORK** Administrator Utilities program appears:

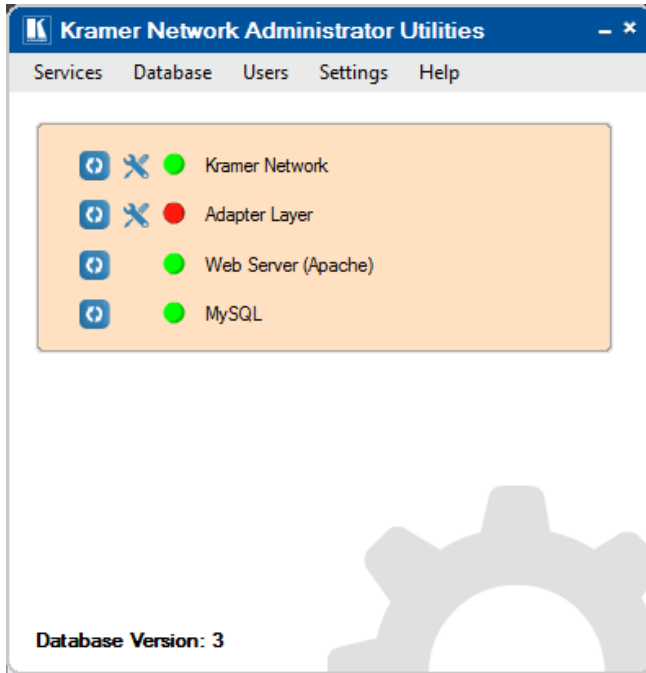


Figure 27: Kramer Network Administrator Utilities Window

In the background **K-Config** is installed. When complete, the following message appears:

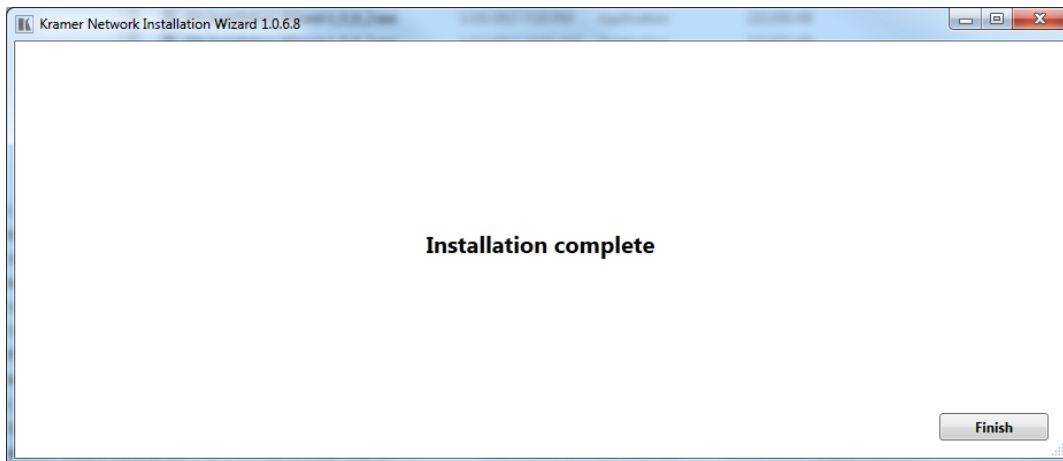


Figure 28: Kramer Installation Wizard – Installation Complete

36. Click **Finish**.

**KRAMER NETWORK** is installed.

For information about the Kramer Network Administrator Utilities, see [Section.4](#)



## 4 Kramer Network Administrator Utilities Menus

Kramer Network Administrator Utilities can be used by IT Managers to monitor and detect problems in the system. It includes restart buttons for each item, port setting buttons for Kramer Network and the adapter layer, and status indicators for each item (see [Figure 30](#)).

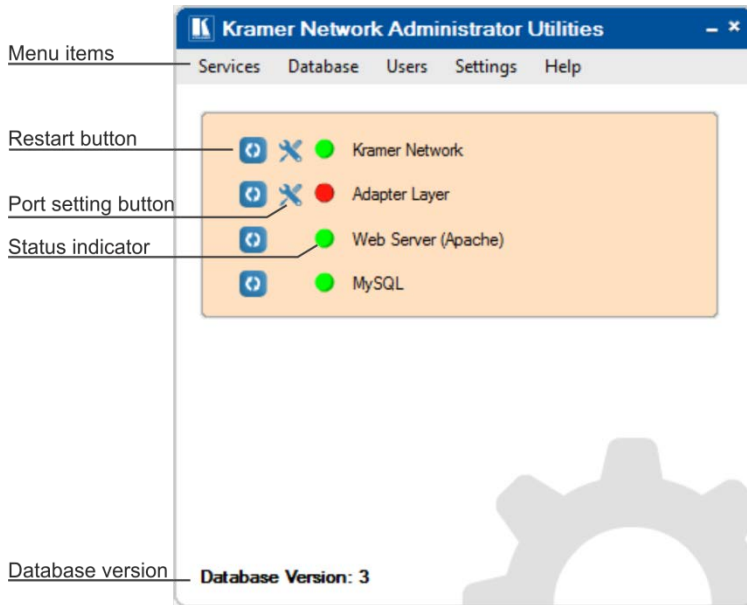


Figure 29: Kramer Network Administrator Utilities

### 4.1.1 Services Menu

Use the Services menu to display the system log and restart all or individual services.

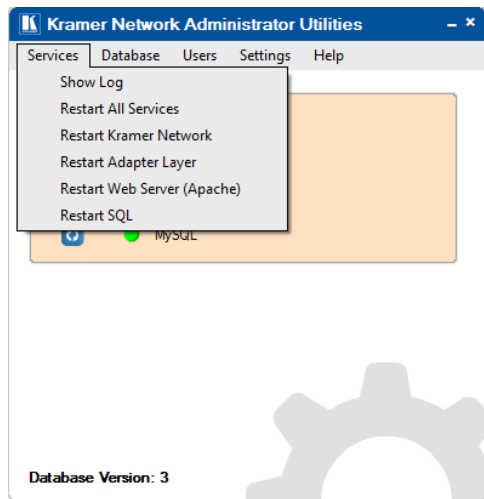


Figure 30: Services Menu

[Figure 32](#) shows the logs.

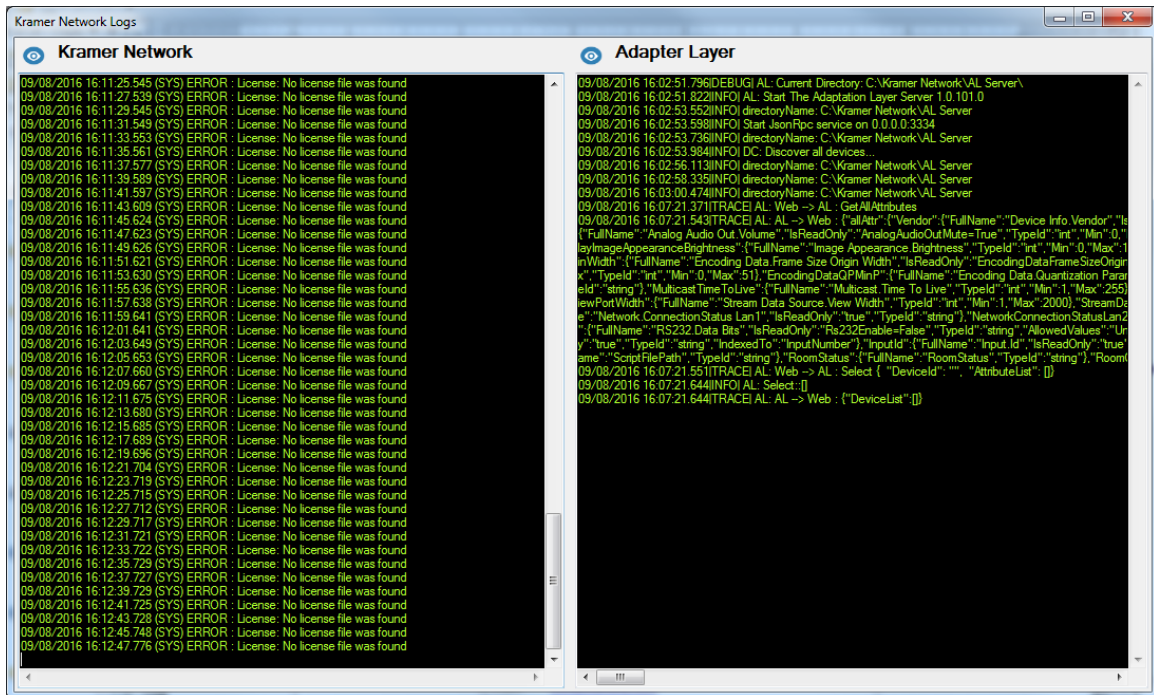


Figure 31: Kramer Network Logs

Click the eye icon (👁️) to save the log and send it to Kramer Support ([info@kramerel.com](mailto:info@kramerel.com)) for analysis in case of a problem.

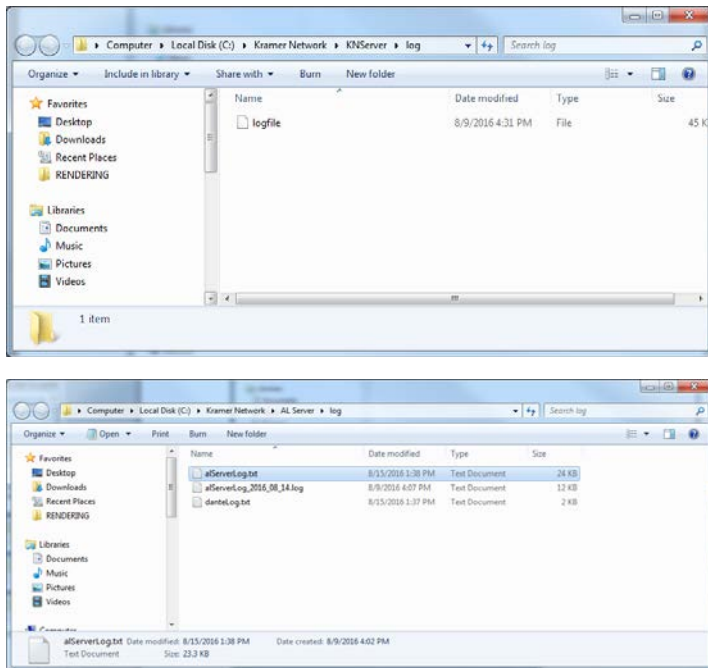


Figure 32: Saving the Log

[Figure 34](#) Shows an example of a Log file.

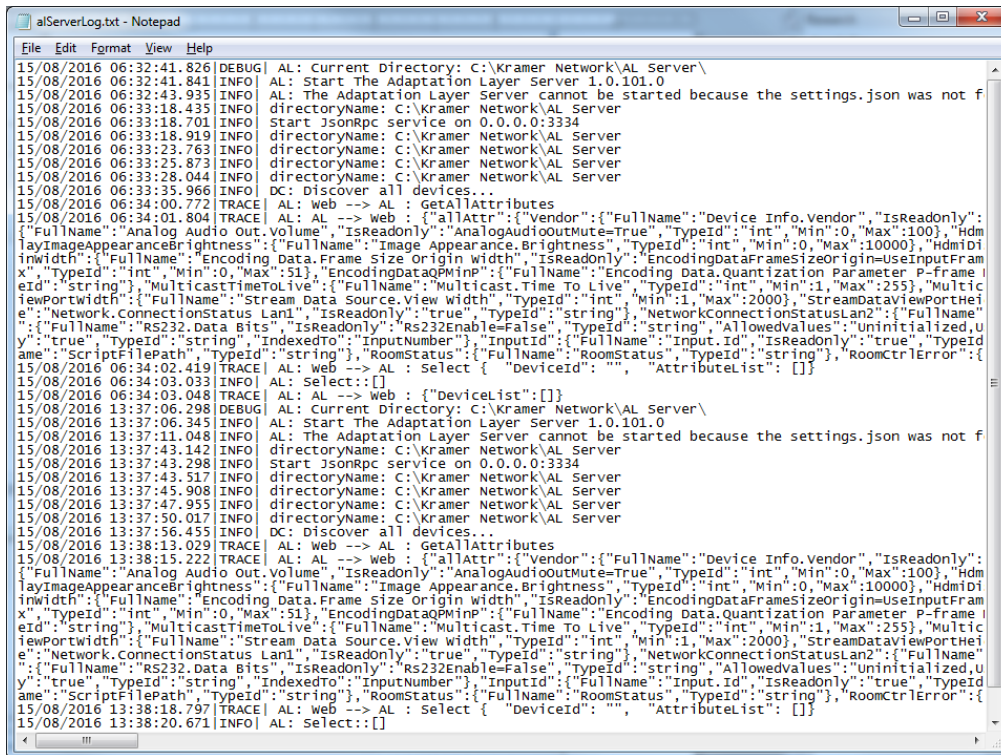


Figure 33: Log File

#### 4.1.2 Database Menu

Use the Database menu to backup and restore the database. The database comprises the entire project. You can also reset the database, thus deleting the entire project.

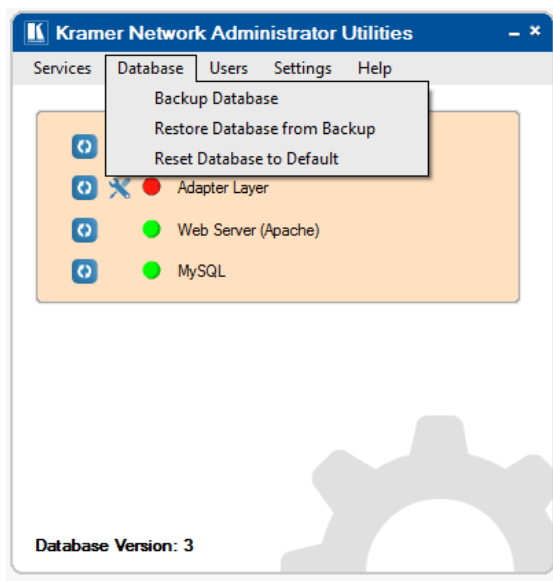


Figure 34: Database Menu

Before resetting your database, the following warning message appears:

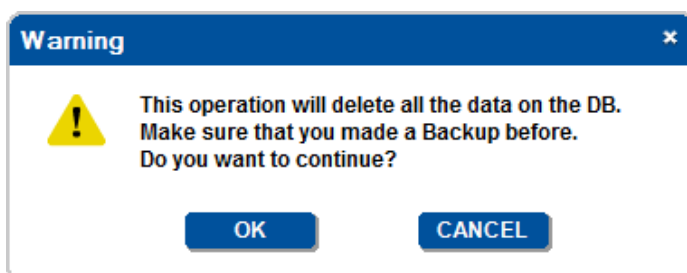


Figure 35: Database Reset Warning

Click OK to reset the database.

We recommend that you back up the database file (\*.knb) to your computer before upgrading the firmware.



The database backup can be restored only to the same firmware version. You cannot restore the database to a new version of the firmware.

When upgrading to a newer firmware version, the project automatically keeps the database so there is no need to restore the database to the latest version.

When backing up the database, record the database version number (2 in this example, in the lower part of the Utilities window) in case you need to restore from this backup. When restoring the database, the database version must match the firmware version.

If you encounter a problem with the software upgrade procedure, you need to install the previous software version and only then restore the database.

### 4.1.3 Users Menu

The Users menu enables resetting the Super password (the Super password cannot be changed from within **KRAMER NETWORK**) and viewing the current logged-in users.

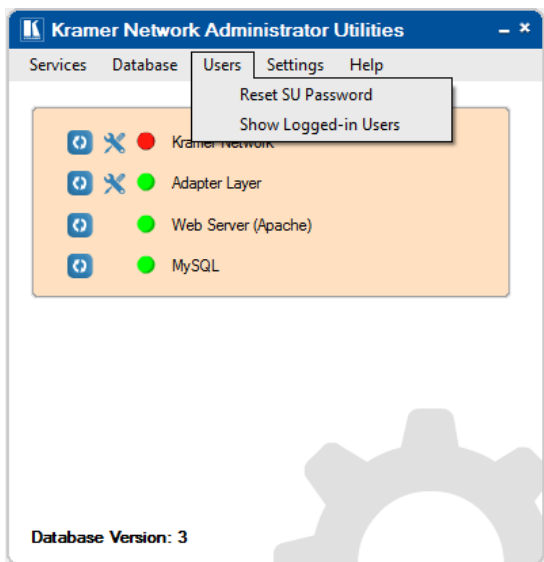


Figure 36: Users Menu

### 4.1.4 Users Menu

The Settings menu lets you filter out repeated events.

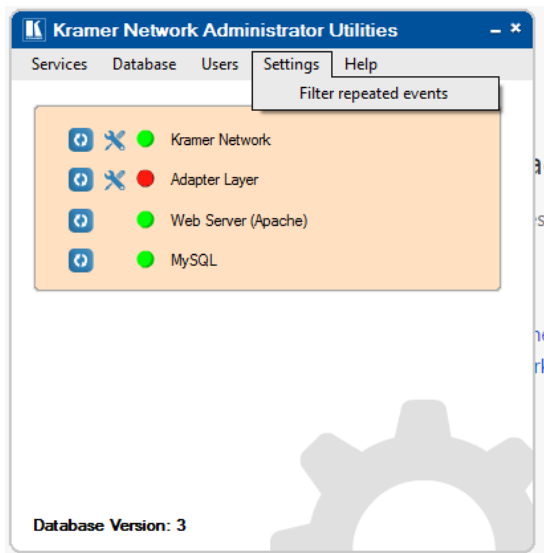


Figure 37: Settings Menu

## 4.1.5 Help Menu

The Help menu shows the Administrator Utilities version and Kramer contact details.

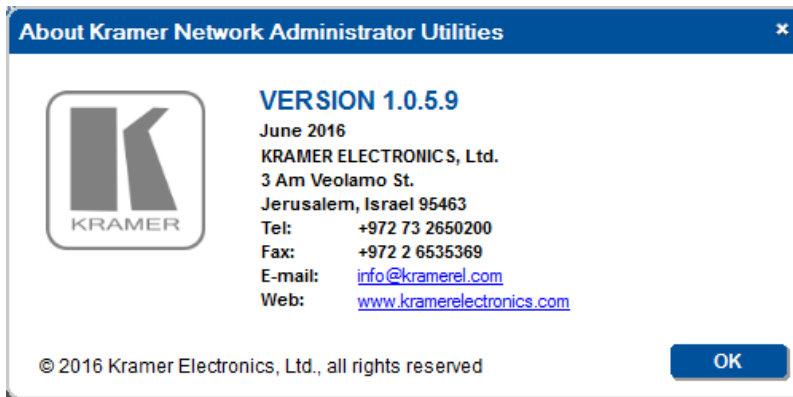


Figure 38: Help Menu

## 5 Opening KRAMER NETWORK 1.0.6 Client

Before opening the **KRAMER NETWORK** Client, make sure that the **KN Server** is running.

Open a web browser and type <http://localhost/> in the URL.

### 5.1 Request License Form

When you first open the **KRAMER NETWORK** Client a registration form appears:

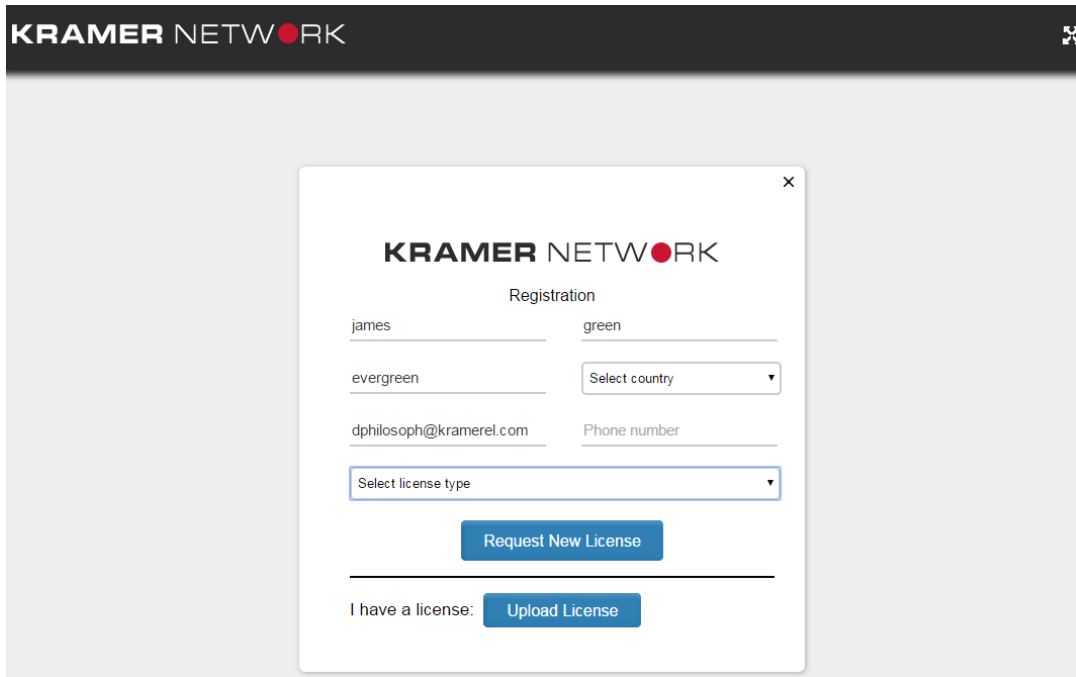


Figure 39: Kramer Network Registration Form

Fill in all the fields in the form and click **Request New License**. The license request window appears:

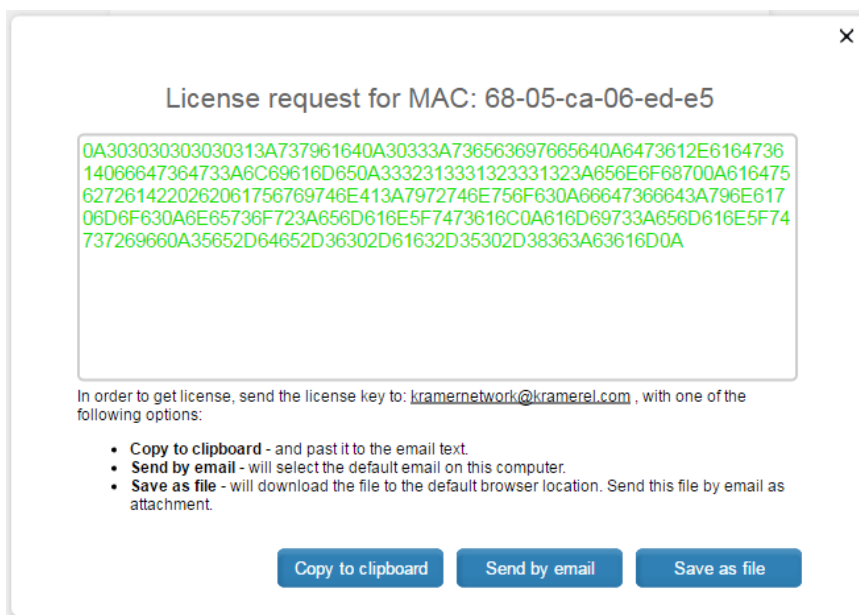


Figure 40: License Request Window

## 5.2 Login to Kramer Network 1.0.6 Client

Once the file is uploaded, the client prompts you to login:

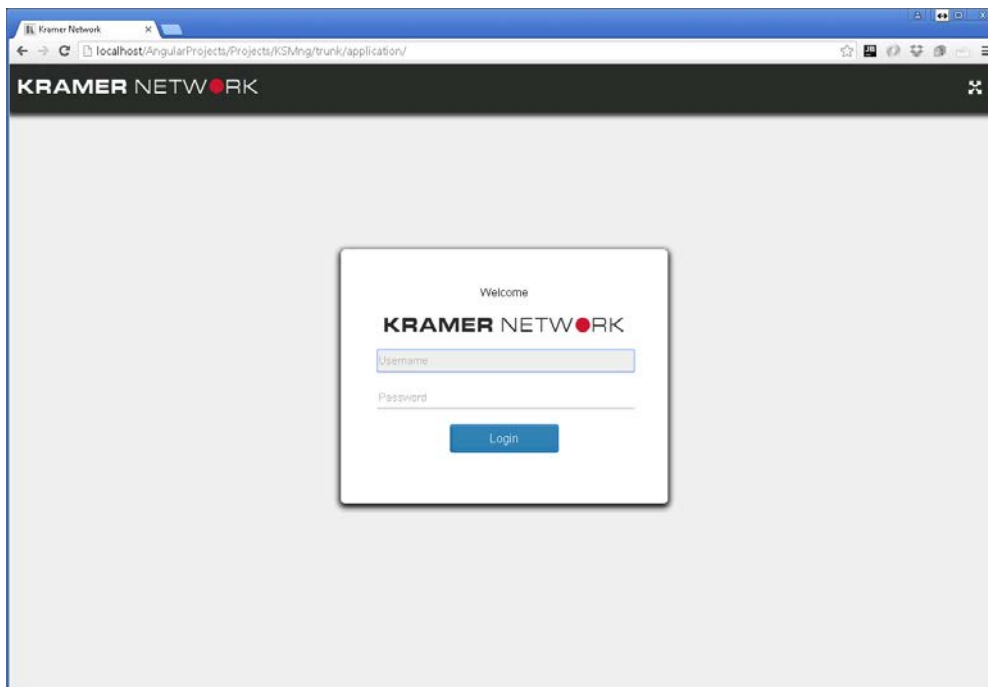


Figure 41: KRAMER NETWORK Login

Enter the default super user login information:

- **User:** super
- **Password:** 12345

After login you are prompted to change the password.

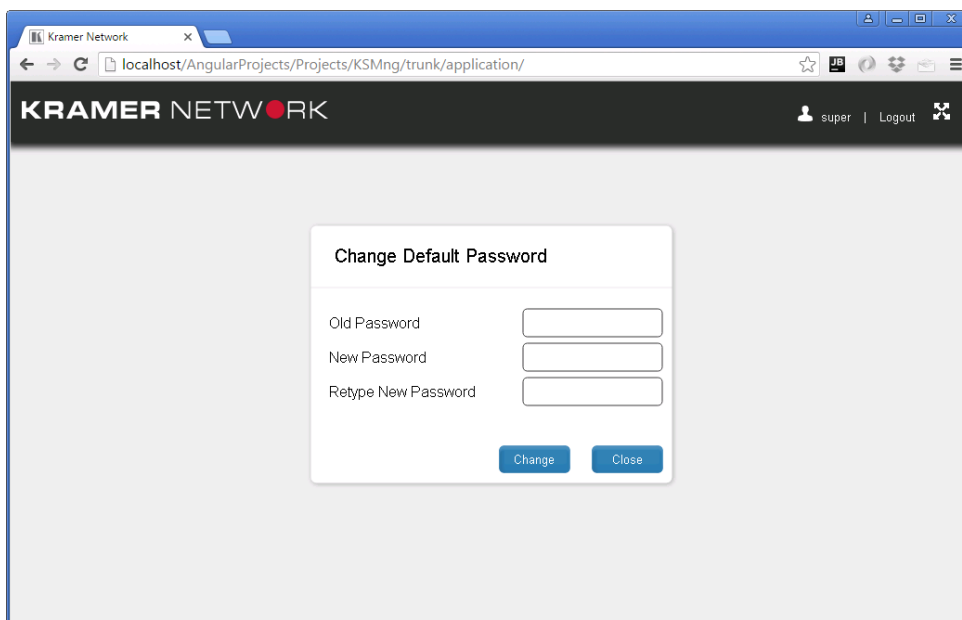


Figure 42: Changing the Default Password



Note that after server restart, all the services are automatically started.

## 6 Basic Troubleshooting

Generally the Utility menu monitors the **KRAMER NETWORK** system. When a problem occurs, the specific status indicator turns red.

When an indicator turns red:

1. Click the refresh icon (or refresh via the Services menu).  
If the status indicator turns green, the problem is solved. If not continue to step 2.
2. Open the Services menu and select Show Log.
3. Click the eye icon (👁️) to save the log.
4. Contact Kramer Support ([info@kramerel.com](mailto:info@kramerel.com)) and send them the KN log.
5. If recommended by Kramer Support, click the port setting button (⚙️) to set the ports.

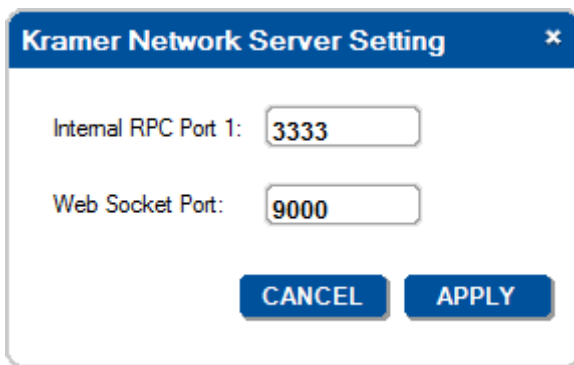


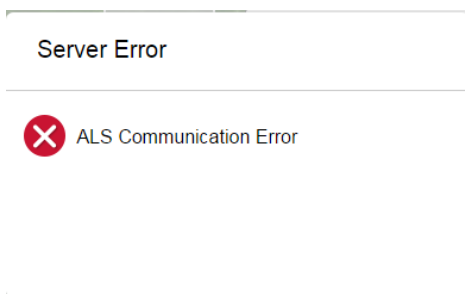
Figure 43: Server Setting Window

⚠️ Do not change the port settings unless Kramer Support recommends doing so.

### 6.1 Common Serving Error Messages

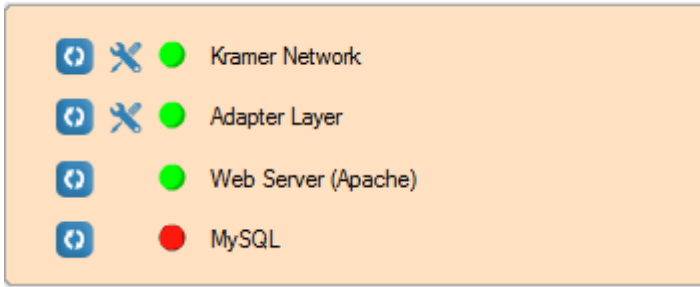
This section describes common server error messages and their solutions.

1. **Error:** ALS Communication problem

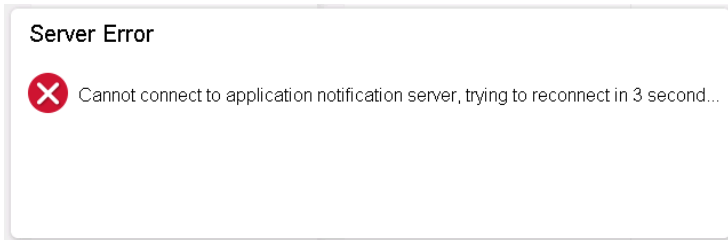


**Solution:** Go to the Administrator Utilities program and restart the Adapter Layer.

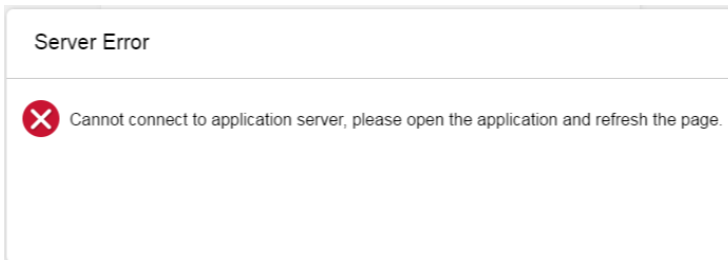




2. **Error:** Kramer Network Server is down

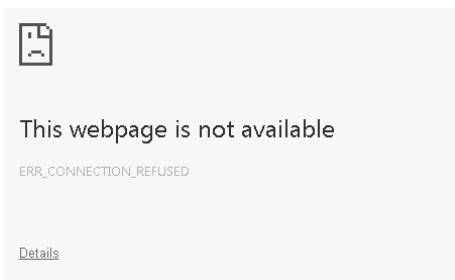


Or



**Solution:** Go to the Administrator Utilities program and restart **KRAMER NETWORK**.

3. WAMP Server is down.



**Solution:** Go to the Administrator Utilities program and restart the Web Server and MySQL.