SimApp Server
Licenses - Installation - Maintenance
Edition 21.12.2009

Content

1 Purpose of this document

The purpose of this document is to give general information about *SimApp Workstation Server* and *SimApp Light Server* of the version 2.6 or higher family and to help system administrators to install and maintain the software system.

2 Introduction

Both server editions *SimApp Workstation Server* and *SimApp Light Server* allow the installation of the application on a local network server machine and to use them on a license-dependent number of workstations.

The standard editions *Workstation* and *Light* cannot be operated over a local network. They can only be operated on PCs where they are directly installed. The executable file (simapp.exe) must reside on the same machine where the user is working. Accordingly the server editions cannot be operated locally. The executable file must reside on another machine.

A school operating a local network and wanting to buy some licenses for their teachers at home must buy the server edition as well as the local edition or setup a VPN (Virtual Private Network) connection from the teacher's home PC to the school's LAN.

The advantage of operating SimApp on the LAN is the more convenient maintenance of the software. Once installed, updates and upgrades are simply and quickly carried out.

3 License types

The following license options are available for *SimApp Workstation Server* and *SimApp Light Server* .

3.1 Enterprise

The Enterprise license is suitable for big companies or schools with many servers and a large number of users. The Enterprise license can be installed on any number of servers and used simultaneously by any number of users in a company or institution. It is purchased by special contract.

3.2 Site

The Site license is suitable for customers with one single server but a large and varying number of users and workstations.   The Site license can only be installed on one single server machine which is registered in the license by its computer ID. The number of simultaneous users are not restricted.   It is purchased by special contract.

3.3 Floating

The floating license is suitable for clients running one single server but wanting to stay flexible in regard to the use of their workstations.

The Floating license is also restricted to one dedicated server and a fixed maximum number of workstations being allowed to operate SimApp Server simultaneously. The workstations must simply have access to the executable on the server but are not registered in the license and so may vary freely.

3.4 Client

The client license is suitable for clients operating one single license on a smaller LAN or if the computers on which SimApp can be operated is explicitly denoted.

The Client or non-floating license is the most affordable license type but is also subject to the most restrictions.
The software can only be launched from one single dedicated server. The number of workstations is restricted but initially unregistered. They are automatically registered on the server by the first launch of SimApp. If the maximum number of self-registered workstations are reached no more launches are possible on additional workstations regardless of whether the software is operated simultaneously or deferred. The system administrator can manually remove registered workstations from the list to make room for unregistered workstations.

The Client license does not restrict workstations from using SimApp but requires some administration effort to change the authorized workstations.

3.5 Summary

The differences between the four license types are highlighted here:

License type/ Features	Server	Number of workstations	Use of workstations
Enterprise	any number	unlimited	unrestricted
Site	fixed	unlimited	unrestricted
Floating	fixed	limited	unrestricted
Client	fixed	limited	administered

4   System description

In order to operate *SimApp Server Workstation* or *Light* over the LAN the system administrator must install three executables on the server machine:

- **SimApp Server user application (Workstation or Light)**
  This is the executable that is loaded by the workstations from the server over the LAN.

- **SimApp Network Service**
  SimApp Network Service is a background program - a Windows Service - on the server without a user interface. It is started automatically after installation and when the Windows operating system is restarted. This service serves as a license manager and controls the running instances on the workstations. Each single SimApp instance on the workstations sets up a TCP/IP channel to the SimApp Network Service, which is open during the whole SimApp session on that workstation. Closing the TCP/IP channel by any means also shuts down the SimApp instance on the workstation.

- **Network Service Manager**
  This application serves as a graphical user interface for the *SimApp Network Service*. The manager is only launched from a client on the network as needed and allows the loading of the license code and the management of the workstation Client license. Furthermore, it provides buttons for stopping and starting the *SimApp Network Service* and changing the port on the server for the TCP/IP connection between the SimApp instances on the workstations and the *SimApp Network Service*.

The interactions of the three applications on the LAN is shown here:
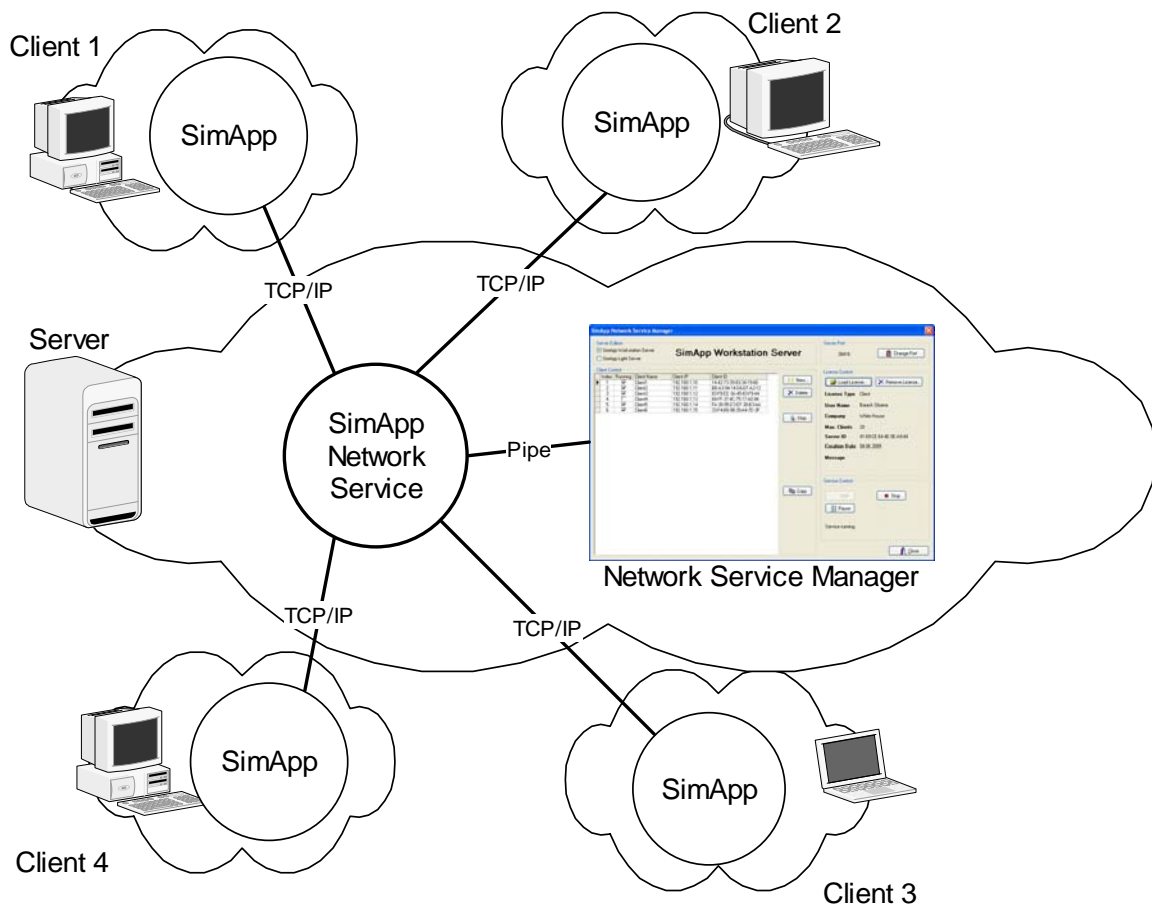
The *Network Service* and the Network *Service Manager* allows the simultaneous operation of one *Workstation* and one *Light* license.

5   Ordering and delivery

After ordering *SimApp Workstation Server* or *SimApp Light Server* you will get the applications described above on a CD or by downloading an installer. Additionally you will receive a license code by email which has to be loaded just after the installation of the *SimApp Network Service*.

5.1   Which data are needed for a license?

The license is shipped as a code - a character string - or a file. Both options are equivalent.
We need the following data in order to issue a license:

1.   Desired license type (*Enterprise*, *Site*, *Floating* or *Client*)

2.   Maximum number of workstations on which SimApp can be operated simultaneously (not applicable for the *Enterprise* and *Site* license).

3.   Server ID (not applicable for *Enterprise*)
     The server ID can be determined by the tool *GetComputerID.exe* which you can download from the SimApp website. The ID consists of eight double-digit hyphen delimited hex numbers.
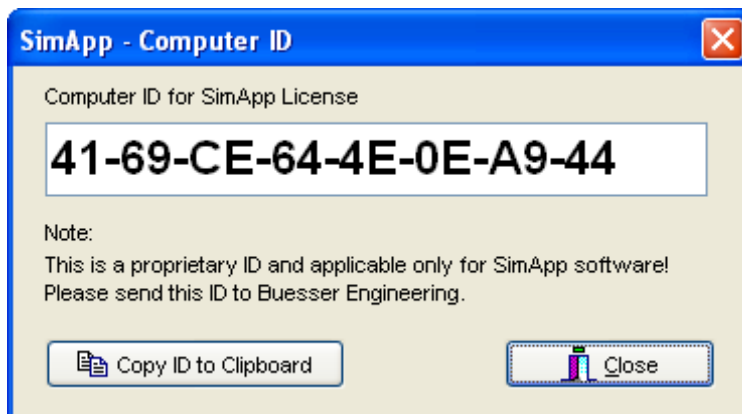
4.   First and last name of the system administrator

5.   Name of company or institution.

5.2   Deployment media and formats

SimApp Workstation Server and *SimApp Light Server* and both service applications can be obtained on CD-ROM as well as by download.

5.2.1   CD-ROM

All required programs reside on the CD-ROM as uncompressed files. The Setup application is a tool with a graphical user interface which allows the easy installation of the *SimApp Server Application, the SimApp Network Service* as well as the *Network Service Manager*.

5.2.2   Self-extracting archive

The self-extracting Archive is suitable for the purchase of SimApp Server by download. All necessary files are packed into a single executable which decompresses its contents into a temporary folder and lets the user launch the installation process by pressing the Setup button.

5.2.3   zip-archive

The zip-archive contains all necessary files in a compressed form. To perform the installation, the files must first be unpacked into a folder followed by launching Setup.exe. The archive is unpacked with the WinZip packer (www.winzip.com) or another packer which can deal with zip-files.
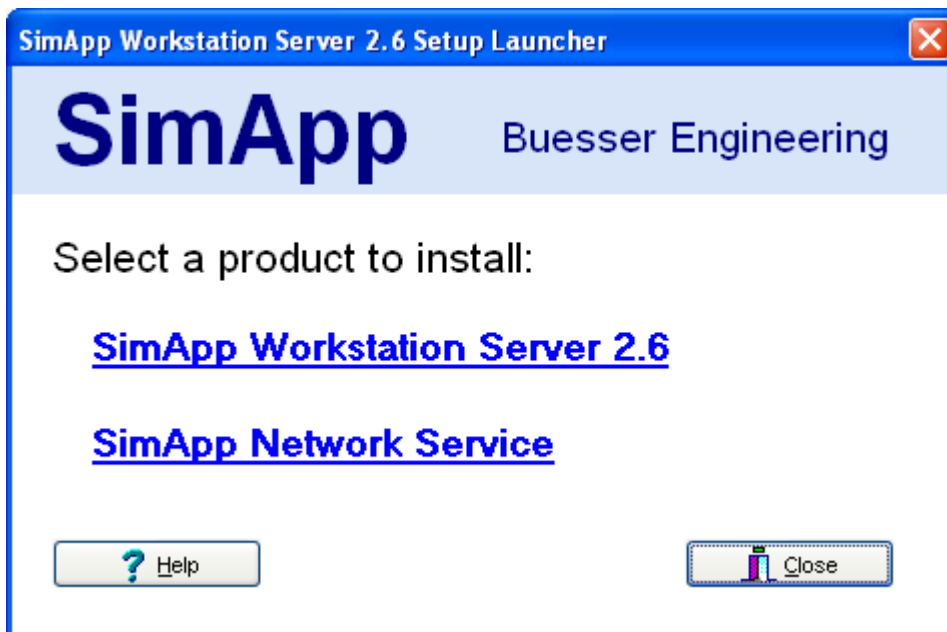
6 Installation

As explained in the preceding chapter SimApp Server can be obtained in three different formats (CD-ROM, self-extracting archive and zip-archive). But after launching Setup.exe - *SimApp Server Setup Launcher - they are equivalent.*

The server requirements are very modest. SimApp Server runs on any Windows XP or Windows Server 2003 and later.

6.1 SimApp Server Setup Launcher

The *SimApp Server Setup Launcher* is started by the Setup.exe application. By using this tool you don't have to take care of the individual installers. First click the upper link and start the installer for the SimApp application and then the lower link for the installation of the *SimApp Network Services* which comprises of the Windows service and the service manager.


Show the readme file by clicking the help button which explains some important details about the installation.

6.2 Installation of the SimApp Server application

The installer for the SimApp application (*Workstation* or *Light*) is launched by clicking the upper link in the *Setup Launcher*. The installation process is largely self-explanatory so that only the most important details are explained hereafter:

Enter the license key after launching the installer:
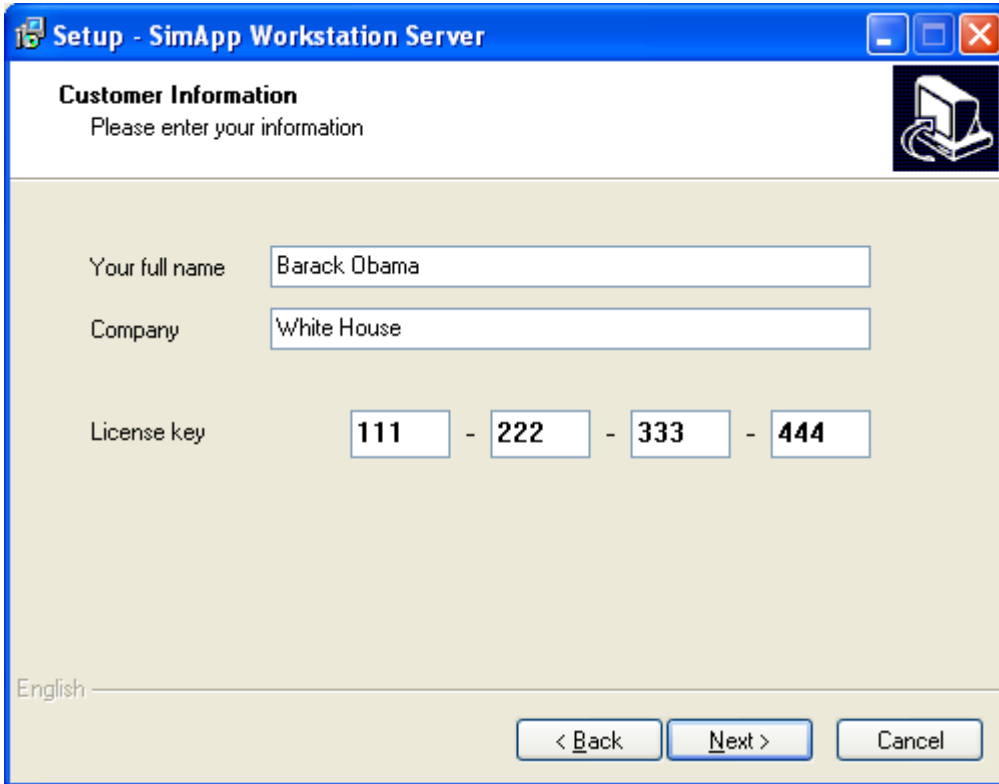
Enter the license key you got during purchase. This key is visible in your personal download area on the SimApp website to which you get access by entering your personal login code. (Username and password.) Each purchased application is accompanied by its license key in the right column. This key is strictly personal and not transferable to others persons and must be kept secret.

6.3 Installation of the Network Service and the Service Manager

By clicking the lower link in the *Setup Launcher* window, the *SimApp Network Service* and the *Service Manager* are installed. After installation the *SimApp Network Service* is automatically started. The *Service Manager* is launched at the very end of the installation. After, you no longer have to be concerned with the SimApp Network Service. The *Service Manager* is used for loading the server license (not to be confused by the license key) and eventually for changing the port number.

The Windows operating system should show the following message box after the installer has completed and started the SimApp Network Service. (At this time the installer is still running).
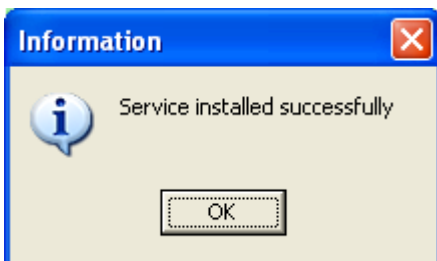
After successfully installing and starting the *SimApp Network Service,* the port for the connection to the SimApp instances on the client workstations is opened. This process could trigger your firewall which would block the port at once. Depending on the firewall you are using you will see a warning box of the firewall which reports the opening of the port and asks actions to be taken. Unblock the SimApp Network Service (SimAppNetworkService.exe) for that port or enable it for all port accesses. If you don't see any message boxes you first have to open the firewall to make the

necessary settings. If you enable the Network service only for the currently used port number, the firewall will fire again if you change the port again. Whether the TCP/IP connection is really working can only be tested by launching the SimApp application on a workstation. If the SimApp instance on the workstation cannot find the port, it shows an error message and then shuts down.

At the very end of the installation you can choose if you want to open the Service Manager immediately.
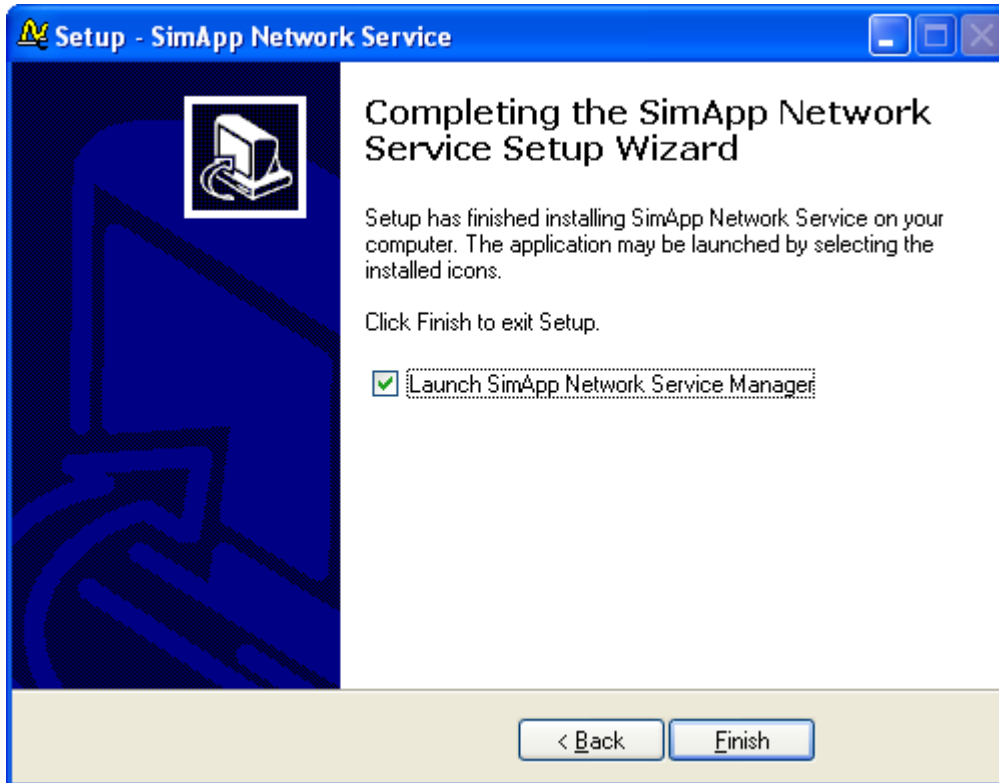

Follow the advice if you have already installed the SimApp Server application as you first need to load the license before launching the SimApp application on the workstations. If you still haven't installed the SimApp application, do so and then start the *Service Manager*.

6.4 Loading the license

You can use SimApp on the workstation only after loading the server license. The license is shipped as character string or file by email which is strictly personal.

As long as the license is not loaded the *Service Manager* window shows the following:
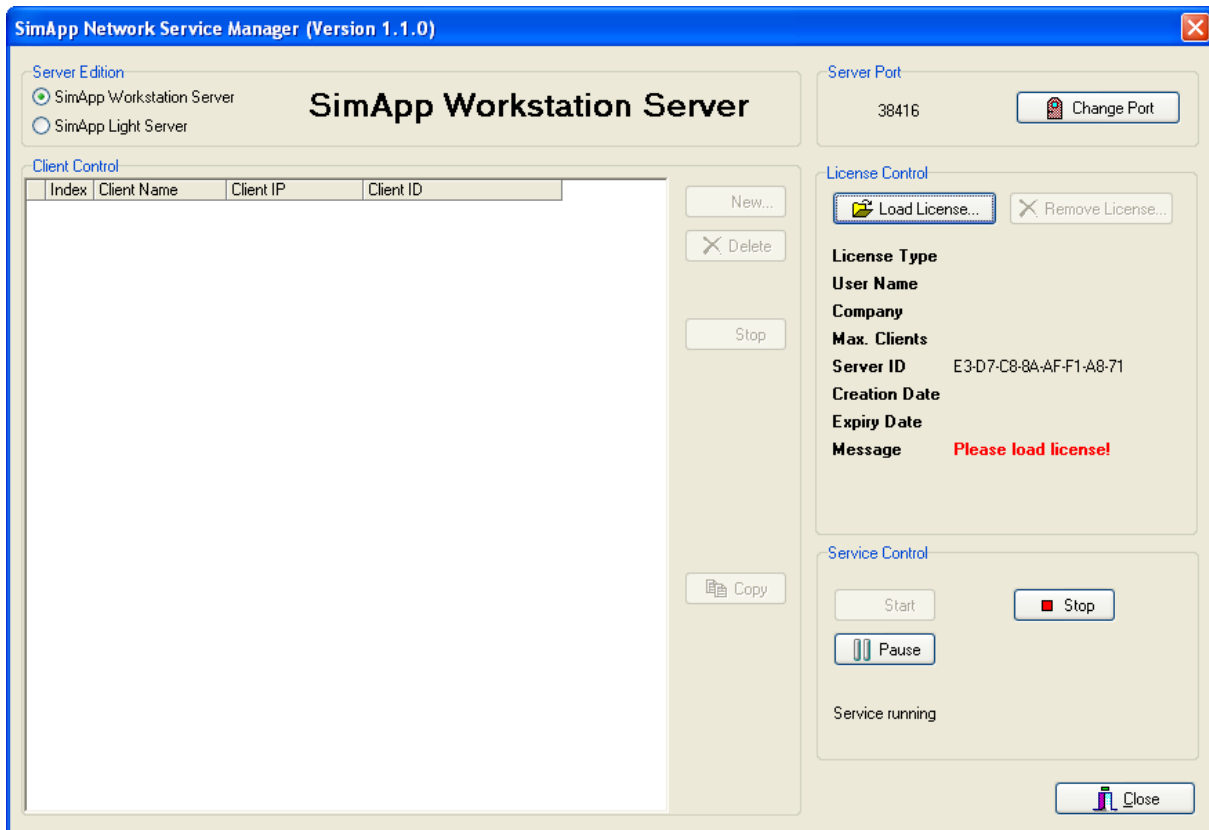
The ID of the server is already displayed.

Select in the *Server Edition* box (top left) the SimApp edition for which you want to load the license.
Check in the *Service Control box* (bottom right) if the *SimApp Network Service* is really running.
Press the button *Load License…* to load the license code or the license file.

After successfully loading the license you should see the full license data:
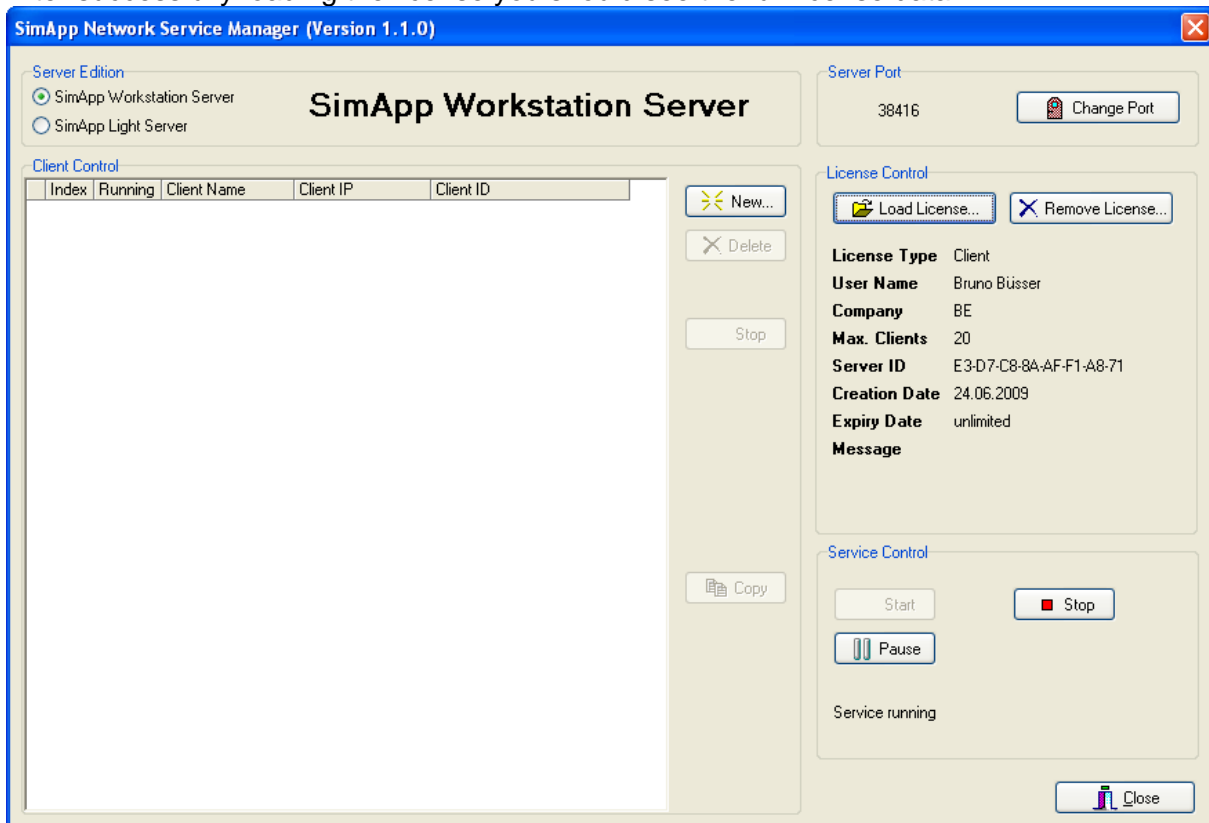
Server ID always shows the actual ID of the server and is not dependent of the license type.

6.5 Changing the port number

The *Server Port* box shows the port number that is used by the SimApp Server application on the workstations to build up a connection to the *SimApp Network Service*.
The selected port is not automatically tested. Test the proper function by launching SimApp Server on a workstation.

6.6 Installing SimApp Server on the workstations

The installer installs SimApp Server on the server only. The activation of SimApp on each single workstation must be done by the system administrator and then clients can use the program..

The files are copied into the server program folder *c:\Programme\Buesser Engineering* by default. This folder contains the executable *SimApp.exe*.

To make *SimApp.exe* accessible to workstations you must do the following steps:

1. Share the SimApp program folder on the server. The workstations need read access.

2. Map a drive letter on the workstation to the program folder on the server.

3. Make a shortcut on the desktop or program menu of each workstation to SimApp.exe on the server.

4. Register the SimApp file types on each workstation. This is not mandatory but automatically launches   SimApp   when   the   user   double-clicks   a   SimApp   file. This registration is executed within the SimApp application in the help (?) menu: *Register SimApp file types…*. You must be logged in as administrator or have launched SimApp in administrator mode to perform this action.

Warning messages when SimApp is launched on the workstations
If the execution of SimApp on a workstation is interrupted by a dialog box "*The publisher could not be verified. Are you sure you want to run this software*" requiring user confirmation to run the file, go to *Control Panel >Internet Options > Security > Local Intranet Zone > Sites > Advanced and add* the name of the server computer from which SimApp should be loaded.

6.7 Installation of the SimApp Network Service on a special license server

In companies and institutions it is often preferable to install the license software with *Network Service* and *Service Manager* on a special license server which is separate from user application servers. For example, the SimApp application may be installed on a file server and the license software on a domain controller. Special port configuration instructions apply in these types of situations.

At installation of the SimApp application, the file *netconfig.ini* is copied into the program folder. This file specifies the port to be used by the application. The port setting in this ini-file is automatically updated when it is changed in the *Network Service Manager* user interface. But this automatic configuration is not possible if the application is not on the same machine as the license software. In this case the port setting in the ini-file must be edited by the system administrator. In addition, the IP address of the license server must be specified.

The notation is   port="IP:port*"*. For example:

[config]
port=192.168.1.2:38416

Note:
The port setting must be performed in two different places:
1. Change the port for the *Network Service* in the *Network Service Manager* user interface.
2. Change the port and IP address for the user application in the *netconfig.ini* file.

7 Administration and Maintenance

Except for the Client license to administer the workstations or for occasional updates and upgrades SimApp server needs no regular maintenance.

Generally the Service Manager is needed only once just after installation to load the license.

7.1 SimApp Network Service Manager

7.1.1 Introduction

You must have the *Service Manager* just after the installation of SimApp Server for loading the server license. In most cases you will not use it again.
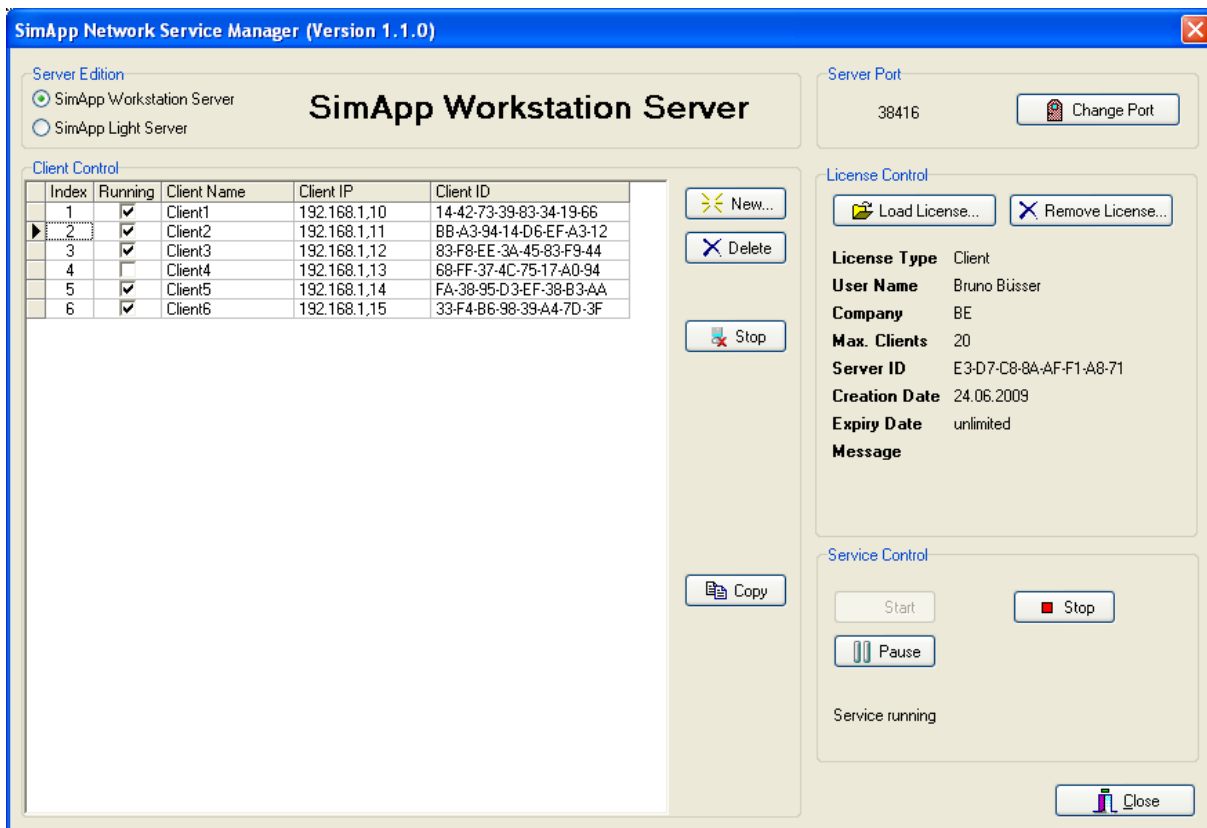
The Service Manager provides the following functions:
- Loading and removing of the server license.
- Changing the port number.
- Starting, stopping, pausing and resuming the *SimApp Network Service.*
- Occasionally administering the workstations if you own the *Client* license.

7.1.2 Functional description

7.1.2.1 Server Edition

The *SimApp Network Service* can manage a *SimApp Light Server* license as well as a *SimApp Workstation Server* license simultaneously. So before launching any action you must first select the proper server license.

7.1.2.2 License Control

First select the right Server edition and press *Load License….* You got the license either as *.ldf file or as a character string. After successfully loading the license, the license data are immediately displayed. The server ID is independent of the license and is composed with the server hardware

and Bios. After loading a license you can load another license at any time without removing the old one.

Press *Remove License…* to unload the current license. Notice that all running SimApp instances are closed automatically if no valid license is loaded. -

7.1.2.3   Server Port

The connection between the SimApp Network Service and the SimApp Instances on the workstation runs through the specified port. The connection is open during the whole SimApp session on the workstation. The default port number is 38416. If you encounter any problems with other applications using the same port you may change the port number in the range 1024..65535. This should only be necessary in exceptional cases.

7.1.2.4   Service Control

The Service Control box displays the current state of the service. It must be running to be able use the other functions and to launch SimApp on the workstations.
The three buttons are only useful in special cases if you encounter any problems. They are disabled if you are not logged in as administrator.

7.1.2.5   Client Control

The Client Control table displays all workstations on which SimApp is currently running or - if you own the *Client* license - are currently registered for launching SimApp. This list cannot be longer than stated under *Max. Clients*.

The list will be empty if you don't have the *Client* license and SimApp is not running on any workstation. This list is continually updated to the current situation.

If you own the Client license, the list can only grow but never shrink. Removing single workstations needs your intervention. Each launch of SimApp of any workstation will automatically and permanently register the workstation if the allowed maximum number of clients is not reached.

Client Control button descriptions:

New…
This button is only applicable for the *Client* license.
Each workstation on which SimApp is launched is automatically registered and never disappears again even when the SimApp instance is shut down. By pressing this button you may also register a workstation without starting SimApp on that workstation or without turning on the workstation hardware. For this manual registration you only need to know the name of the workstation.

Delete
Immediately delete a workstation from the list. The SimApp instance running on that workstation is automatically closed. You need this function if you own the client license and want to register new workstations but have no open spaces remaining.

Stop
The SimApp instance on the corresponding workstation is immediately closed.

Copy
Copy the table content as text into the Windows clipboard. Columns are separated by tabs.

8 Updates and Upgrades

Updates and Upgrades do not require you to first uninstall the existing program. You can simply install it into the same folder. In this way, your current settings are remembered.

SimApp Network Service does not distinguish between the different SimApp 2.x versions. Hence you may operate older and newer versions simultaneously.