

Installation Prerequisites and Hardware Requirements for HänelSoft-N

#### Overview

The installed software package, HänelSoft-N, is a compact system, with all dependencies (Application, HyperSQL Database, Java, Jetty Web Server) installed within one directory structure (typically C:\haenel\HSN (and corresponding subdirectories) or D:\haenel\HSN (and corresponding subdirectories). Depending on customer requirements and range of functions licensed, the volume of data may vary from customer to customer and increase over time, but is generally 100 – 200 MB in size. The configuration of the hardware on which HänelSoft-N is installed should therefore be dedicated to the application and have sufficient resources, as detailed below to ensure the storage management software can operate smoothly and productively.



#### Installation

During installation, the Hänel Systems Integration specialist requires **local** administrator rights on the PC/server. IT personnel with the corresponding rights and authorizations must be on hand to provide support if problems arise.

HänelSoft-N can be installed as a service, running as Local System. In the case, where data is exchanged with a higher-level WMS/ERP/MRO system, two options exist:

- A local directory on the HänelSoft-N server is shared, with the higher-level system connecting and sending data to that share. In this case, the service can continue running as Local System, as the directories are local to the HänelSoft-N application.
- HänelSoft-N also supports UNC paths. In this case, it must be ensured that a service account, with non-expiring password is assigned to the service. This service account must have the necessary permissions to the specified paths.

### **Network Communication, Firewalls, Antivirus**

Communication between server and clients takes place via a web application and a web browser.

Call links for web application:

- When called from the server (local): http://locahost:8095/
- When called from the client PC: http://<IP-ADDRESS-SERVER>:8095/

#### Windows Firewall

To display the dialogs on the MP 12N controller, a Jetty web server is installed. The web server communicates via **port 8095**. **port 80** is utilized. **Port 9091** is used to close the server locally and therefore must be enabled on the server.

Therefore, if the Windows firewall is activated, rules are created upon installation for the above and the following programs below:

Inbound rule for a program, program path (local): ...\haenel\jre\bin\java.exe: Allow connections

Inbound rule for a program, program path (service): ...\haenel\HSN\_WindowsService.exe: Allow connections

#### **Virus Scanners**

If a virus scanner is installed to monitor computer communications in addition to the firewall, the same rules, as above, may need to be defined. We also recommend excluding the installation directory of HänelSoft-N (...\haenel) completely from scans made by the virus scanner, as there is potential, under certain circumstances, for simultaneous/barred access to the database files of HänelSoft-N.

# **Modifying IP Addresses**

Once HänelSoft-N is installed, if modifications are made to the IT infrastructure, such as mapping of drives and/or the IP address of the server, the HänelSoft-N server service **must always be closed manually** beforehand! Following modifications to the server IP address, the start URL on the Hänel storage units and all client PCss must be changed accordingly.

### **Data Backup**

HänelSoft-N has an integrated backup solution with which it is possible to create x number of backups within a defined time interval on a local or UNC path. When the defined number of backups has been reached, the oldest backup is overwritten. Hänel Storage Systems does not assume any liability for the functioning of the backups created. It is the responsibility of the customer to check for the creation of backups from time to time. If the defined backup path is unavailable for any reason, the backup is saved locally on the PC/Server.

#### **Hardware Requirements**

- Dedicated PC or server (64 bit)
- IMPORTANT: Only the characters A Z, a z, 0 9, dot (period) and hyphen (minus) are permitted in the computer name
- Virtualized operating systems must be operated physically at the site and be connected via the LAN. WAN connections are not supported due to the real-time nature of the application.
- Any Windows operating system (64 bit) is possible if it has the latest service packs and a graphical
  user interface installed.
- Quad-core CPU with, at a minimum, 4x2.5 GHz processing power
- Total PC/Server Memory: 16GB. Working memory for HänelSoft-N is at least 8GB. 4GB are required for HänelSoft-N to start.
- At a minimum, 20 GB hard disk (10 GB free space)
- Gigabit network connection
- 24<sup>n</sup> screen and graphics card with, at a minimum, a 1920 x 1080 resolution, for both server and client PCs. The application is accessed through a modern browser (Google Chrome, Mozilla Firefox, Microsoft Edge. Resolutions less than 1920 x 1080, especially on a client PC, will not be able to see the entire, intended interface.

## Integration of the Hänel Storage Units in the IT Infrastructure

Each Hänel storage unit (Lean-Lift, Multi-Space and Rotomat) is integrated directly into the customer's existing network via Ethernet cabling with a fixed IPv4 address. The infrastructure required for this, up to the storage device (cables, sockets, etc.), must be provided by the customer and ready for use on the day of installation. Hänel Storage Systems accepts no liability for any downtime resulting from a lack of infrastructure. It is also possible to operate in a private "island" LAN using the storage unit's integrated network switch. The necessary WLAN infrastructure must be provided by the customer and ready for use on the day of installation.

## **Training**

The staff members attending training must have a basic knowledge of Windows. We recommend a group size of no more than 3 or 4 participants per training session.

## **Remote Maintenance**

We use "TeamViewer" software for remote maintenance. We include the TeamViewer QuickSupport software in the installation directory of the HänelSoft-N server. No download is necessary. Provided TeamViewer cannot be used within your company, we will work with your IT personnel to determine the best method for remote maintenance. Some form of remote maintenance, to provide ongoing support, is advisable.