NEW: REMOTE HMI V7 AND REMOTE DEVICE MANAGER

Two software packages for Thin Client management in the process industry

THE STRONGEST LINK.

STAHL

A BRILLIANT DUO –
THE NEW REMOTE HMI V7 AND
THE REMOTE DEVICE MANAGER

THE NEW REMOTE HMI V7

SOFTWARE TAILORED TO MEET THE REQUIREMENTS OF THE PROCESS INDUSTRY

Over 10,000 installed applications make our REMOTE HMI an industrial-grade Thin Client firmware, developed for on-site operation of the distributed control system (DCS), the manufacturing execution system (MES) and others. Our software concept has been tailored to meet the requirements of the process industry. It is compatible with all distributed control systems and supports all major Thin Client technologies such as RDP, VNC or HTML browser.

The REMOTE HMI V7 is based on the highly secure Windows 10 IoT Enterprise LTSC 2021 operating system, with security updates guaranteed by Microsoft until 2031. It is a "closed system", where the on-site operator can only operate systems and activities parameterised by the administrator, without being able to access the Windows operating system. **Compared to the V6 version, the current REMOTE HMI V7 from 2024 features the following new functions:**

- Integrated HTML5 browser.
- Display of IP camera images and operation of IP cameras.
- Keyboard & mouse sharing.
- Permanent SSD status monitoring.
- A DIRECT SUPPORT option via QR code.
- Portrait mode and fluid design across all display sizes.

THE REMOTE DEVICE MANAGER

TIME SAVING ADMINISTRATION FROM THE CONTROL ROOM

The associated REMOTE DEVICE MANAGER has been developed for the administration and maintenance of R. STAHL Thin Clients from the control room. Time-consuming on-site inspections of hazardous areas for the administration of HMIs are no longer necessary.

Via the REMOTE DEVICE MANAGER, the same parameterisation functions are available centrally on the maintenance workstation as well as on the local client.

Full remote access to the REMOTE HMI V7 is granted, except for the Windows system. With only a few clicks, all parameters set on a Thin Client can be deployed to hundreds of other Thin Clients via the REMOTE DEVICE MANAGER.
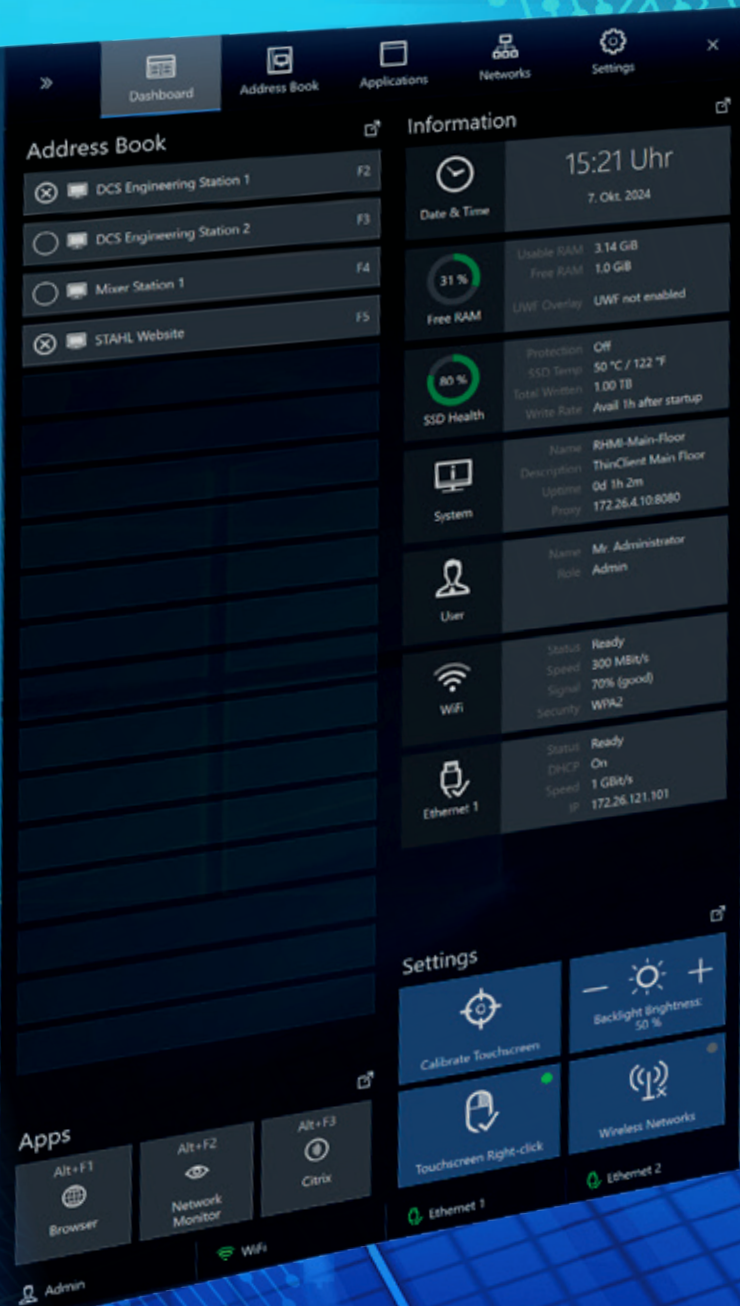
The REMOTE DEVICE MANAGER is suitable for the maintenance of Thin Clients from the REMOTE HMI V6 version onwards.

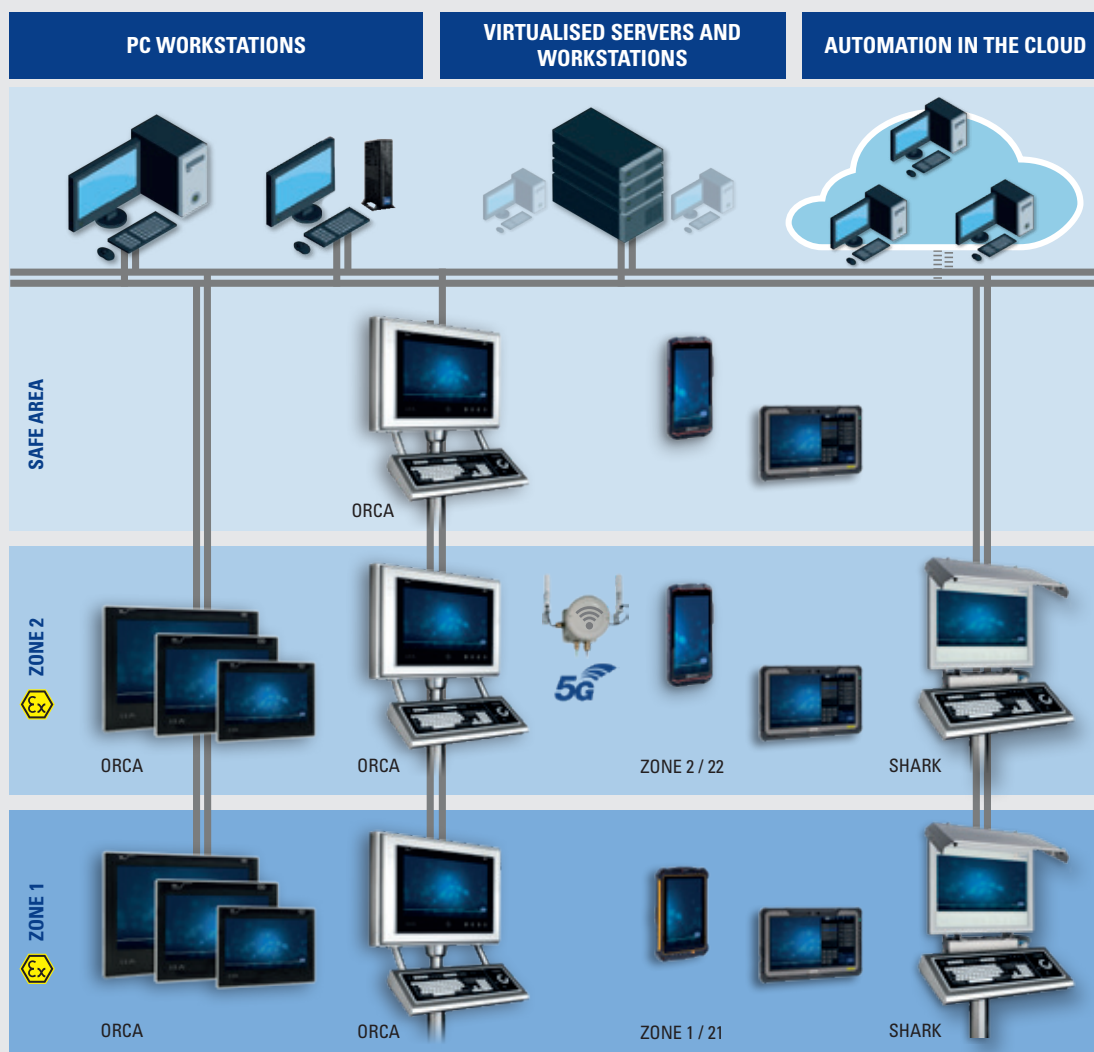OUR THIN CLIENT END-POINT MANAGEMENT OF THE FUTURE.

REMOTE HMI V7 – DEVELOPED ON THE BASIS OF THE FOLLOWING STANDARDS: SECURE – SIMPLE – RELIABLE

REMOTE HMI V7 – ON-SITE ACCESS TO ALL THIN CLIENTS AND MOBILE DEVICES

PC WORKSTATIONS	VIRTUALISED SERVERS AND WORKSTATIONS	AUTOMATION IN THE CLOUD

SAFE AREA

ORCA

ZONE 2

ORCA   ORCA   5G   ZONE 2 / 22   SHARK

ZONE 1

ORCA   ORCA   ZONE 1 / 21   SHARK

Our REMOTE HMI V7 is the solution for industrial Thin Clients on-site – from safe areas to hazardous areas, Zone 2, Zone 1. The server applications and data can be accessed via RDP, VNC or browser. Also, any type of apps can be executed on the Thin Clients. A mobile version is also available for our Windows-based tablets. On the market for over 20 years, the software can be used in a great variety of applications.

The REMOTE HMI V7 is available as a BASIC or PRO version:

REMOTE HMI V7 BASIC:
BASIC licence with RDP, VNC and HTML5 browser, configurable and pre-installed on the Thin Clients. It is part of the field system.

REMOTE HMI V7 PRO:
PRO licence featuring the following additional functions:

- App support.
- Multi-session.
- IP camera viewer.
- Keyboard and mouse sharing for dual Thin Clients.
- The PRO licence is activated by the customer on the Thin Client via the Remote Device Manager.

SECURE – MAKING YOUR DATA SOLELY YOUR OWN

CYBER SECURITY is one of the key issues both in today's software environment and in the process industry. As early as the development stage, we put great store by cyber security for the REMOTE HMI firmware.

WINDOWS 10 ENTERPRISE LTSC

BASED ON ENTERPRISE LTSC
- Windows 10 IoT Enterprise LTSC is one of the most secure operating systems.
- Security patches guaranteed by Microsoft until 2031.
- Full update control, without forced updates during production.
- Including integrated Windows firewall.
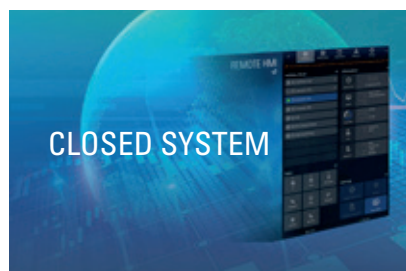
CLOSED SYSTEM

CLOSED SYSTEM
- Our REMOTE HMI V7 runs on the Thin Client in what is known as "kiosk mode".
- Users can only carry out those activities and operate only those server programs and apps on the local machine that the administrator has parameterised.
- Also, users do not have access to the Windows desktop.

CUSTOMISED SOLUTIONS

SITE-SPECIFIC SECURITY CONCEPT
- We support you with the development of individual security concepts that are tailored to the requirements of your system.

MORE SAFETY FEATURES

ADDITIONAL SECURITY FEATURES
- In addition to the pre-installed Microsoft Defender virus protection, a write protection filter further safeguards system integrity.
- The write filter (UWF) inhibits unintentional writing and eliminates registry and data system corruption by cyber attacks. In addition, all USB interfaces can be deactivated and can be restricted to certain USB devices.

SIMPLE – AS EASY AS POSSIBLE

All functions of our REMOTE HMI V7 are extremely easy to operate, leaving users free to concentrate fully on the information on display, whilst also keeping an eye on the distributed control system.

INTUITIVE OPERATION

- Ready to run, without the need for training.
- One-click operation without submenus or further windows.
- The PRO version features an additional app concept.

SIMPLIFIED DISPLAY

- The display shows only what is necessary for the current operation.
- The REMOTE HMI screen only partly covers the process image, and is transparent.
- All process-relevant images remain on display at all times.

PERMANENT NETWORK CONNECTION

- Immediate error analysis after network disconnect.
- Prompt reconnection possible to keep system downtime to a minimum.

OTHER FEATURES

- Very simple menu structure.
- Direct access to address book.
- Direct access to system settings.
- Direct access to the REMOTE DEVICE MANAGER.
- Easy multi-monitor operation.

RELIABILITY AS AN ABSOLUTE MUST

A high degree of reliability is an absolute must in the process industry, and this was our guiding principle when developing the REMOTE HMI firmware.

It is designed for 24/7 operation, and can run non-stop for years.

ETHERNET REDUNDANCY

- RDP and VNC communication can be designed redundantly.
- If one connection fails, the system automatically switches to the other one.

DETAILED DIAGNOSIS

- In the unlikely event that a function fails, the REMOTE V7 will immediately show the source of the error.
- All error messages adhere to the traffic-light principle: GREEN - AMBER - RED.
- The diagnosis options are designed such that we achieve the greatest possible level of availability of the REMOTE HMI system.

MULTI-SESSION MODE

- Time-saving multi-session operation is possible.
- A great many different applications work in parallel, independently of one another.
- Process-relevant changes can be started at any time.

OTHER FEATURES

- Automatic reconnect.
- Network test.
- Calibration / cleaning function
- Multi-monitoring.

NEW

EASY INTEGRATION OF IP CAMERAS

IP cameras are frequently used to monitor processes and systems. However, the display of images from these cameras in distributed control systems or other applications is frequently complicated if not impossible.

Following popular demand by our customers, we have integrated a viewer for IP cameras into our REMOTE HMI V7. The integration of an IP camera takes only a few clicks, and the image can be shown as a floating window at any position on the display. If required, the user can also move the window
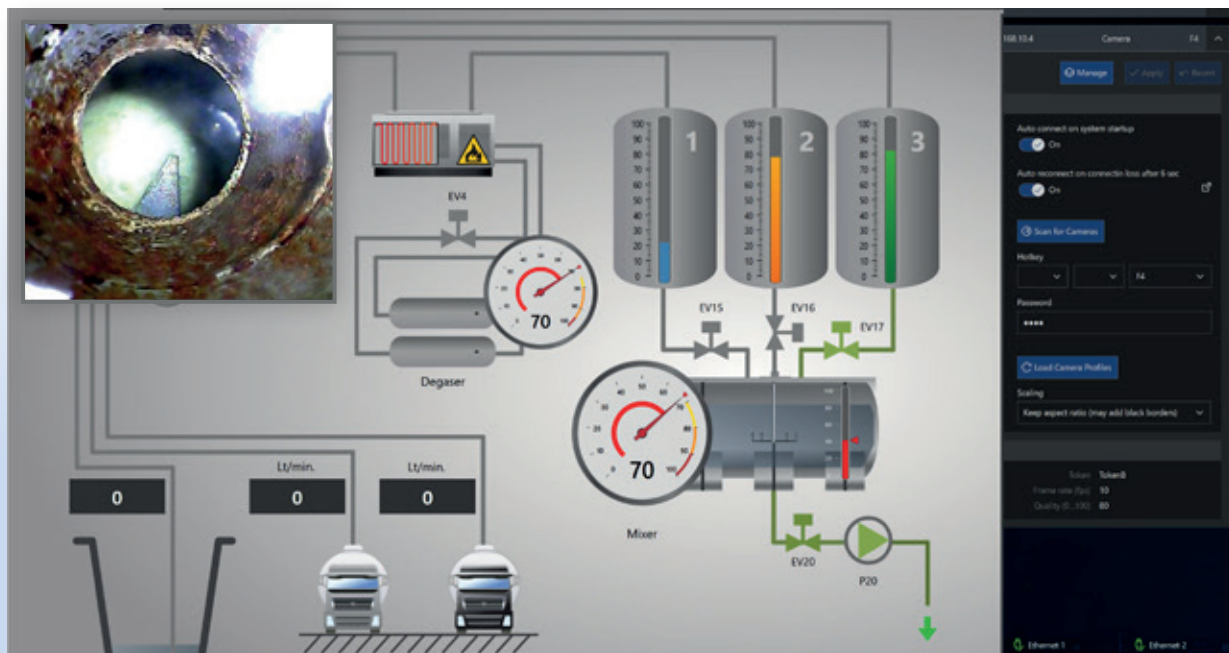
ONVIF®

INTEGRATION OPTION FOR ALL IP CAMERAS

- ONVIF ® is the standardised network protocol for CCTV and cameras.
- It can be used to integrate 99 % of all network cameras.
- It supports PTZ (pan tilt zoom) and various camera resolutions.
- Integrating a camera only takes a few steps and can easily be found in the network.

TWO SCREENS AND ONE KEYBOARD OR ONE MOUSE

There is a growing need for information on-site, and one screen is often no longer enough. Which method is suitable depends on whether t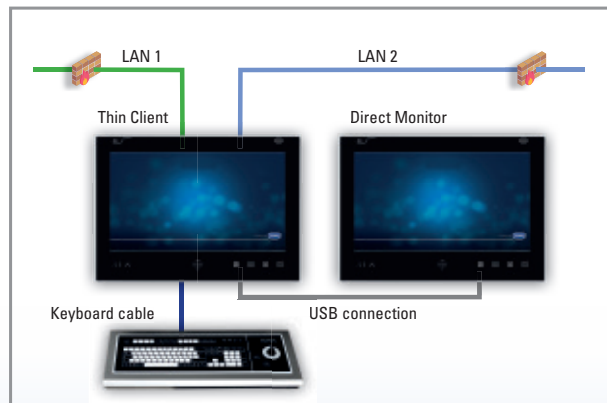here are different, separated IP networks and whether these can be connected to one terminal at different ports. This in turn depends on a company's individual network security concept.
We offer two different methods:

## Keyboard and mouse sharing
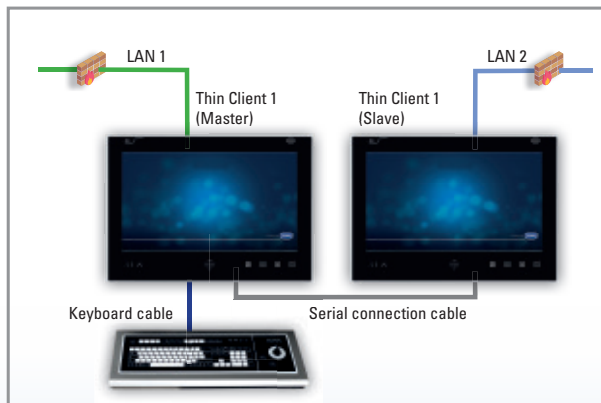
Multi-monitor method

Method	Keyboard & Mouse Sharing	Multi-Monitor
HMI and software	Two Thin Clients connected via a serial cable, with the REMOTE HMI V7 firmware (new from version 7)	One Thin Client with one or several direct monitors connected to the Thin Client via USB
HMI device platforms	ORCA, SHARK, MANTA	ORCA
Focus on one application	Yes, with an automatic keyboard change	Yes
Sharing of peripheral devices function (RFID, barcode scanner, etc.)	Not possible	Yes
Drag & Drop, Copy & Paste	Only possible with one Thin Client	Yes
Completely separate networks	Yes, IP connection not possible	Separate ports, IP connection possible

NEW

# SSD MONITORING AND SUPPORT VIA QR CODE

SSD STATUS MONITORING

Solid State Disks, SSDs for short, have replaced hard disks. The life cycle of an SSD is limited by the amount of write cycles a memory cell can undergo. While current SSDs can achieve millions of write cycles, but in terms of years their usage time is nonetheless limited. We have integrated status monitoring in our REMOTE HMI V7 so that the end of the SSD's life cycle does not come as a surprise. This new function permanently monitors the status and temperature of the SSD. Also, all energy cycles, the write rate and the status of the write filter are monitored to ensure the longest possible life cycle of the SSD.
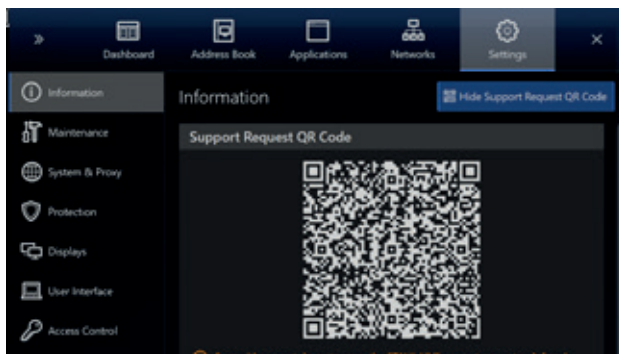
SUPPORT VIA QR CODE

Despite our careful selection of materials and device design there might still be the extremely rare case of a device malfunctioning or ceasing to work altogether. To simplify communication with our experts, we have implemented the SUPPORT REQUEST function. A QR code is shown under the Maintenance menu item. By scanning this QR code the customer can request support in a matter of seconds. The QR code contains all relevant device information including the serial number, enabling us to provide our support for all software and hardware problems without delay.
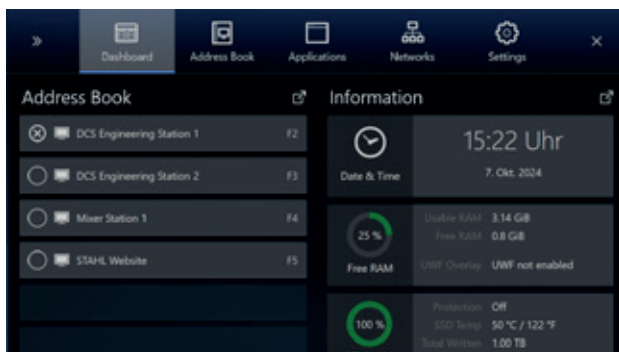
OVERVIEW DOWN TO THE LAST DETAIL

The dashboard provides an overview of the relevant brief information concerning our software, with all issues visible at a glance. From there, users can navigate to all subordinate issues without losing the overview. The REMOTE HMI screen is transparent and does not obstruct the view of the distributed control system.

FLUID DESIGN, USER LOGIN AND MORE

FLUID DESIGN

Our FLUID DESIGN was developed for the optimum operation of our Thin Clients with any display size. The layouts can be adjusted for displays of all sizes from 800 x 600 to 4 K.

SWITCHING BETWEEN PORTRAIT AND LANDSCAPE MODE

All of our fixed HMIs as well as our tablet PCs can be operated both in portrait and in landscape mode. The switch between the two is automatic for our tablets and can be selected from the menu for our HMIs.

BARCODE READERS

Many areas of the process industry make use of barcode readers for efficient, failsafe and trackable data input, for example to meet requirements according to FDA and GAMP. As an option, all Thin Client operator stations can be fitted with barcode scanners, both wired and wireless.
Our REMOTE HMI firmware makes the transfer of the barcode data to the workstation very easy via an integrated keyboard wedge.

USER LOGIN AND ELECTRONIC SIGNATURE VIA RFID

It is increasingly necessary for users to log on securely and uniquely to the distributed control systems. An efficient way to meet this requirements is the use of personalised RFID cards or key fobs. As an option, all Thin Client operator stations can be equipped with RFID readers, and the RFID cards and key fobs are available as optional extras. The REMOTE HMI V7 firmware ensures transparent data transfer to the workstation.

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