

# UNATTENDED INSTALLATION OF INDUSTRIAL PCS

The process visualization team of a special machine builder used images to automatically perform the client installation on the installed industrial PCs in their machines. However, with the increasing number of variants and the shortened software lifecycles, the effort required to create, maintain and update the images was becoming ever greater. This was remedied by the use of ondeso SR.

After initially installing industrial PCs manually, groninger successfully transitioned to using Golden Images, an exact copy of the system during installation. However, the increasing variety of system versions and the simultaneously shortened lifecycle of the software products posed a challenge to the automation team. They faced a growing need for customisation and maintenance across different image versions and configurations. Despite the use of images, many steps still had to be manually completed and documented for each variation afterwards. In search of a more efficient and streamlined process, they looked for an automated solution. This led to the introduction of Stefan Hiemeyer, Team Lead Automation SCADA at groninger, to Sebastian Pfaller, Head of Product Management at ondeso. After discussing alternatives to image deployment, the Installation & Configuration Packages from ondeso SR were identified as the ideal solution, enabling unattended installation and reliably addressing the growing challenges faced by groninger.

## CLIENT INSTALLATION MADE EASY

The existing base image served as the starting point for the ondeso SR Installation & Configuration Packages, but was significantly streamlined. Two options were created for starting the automated and unattended installation: The offline variant, via boot stick and the online variant via the Preboot Execution Environment (PXE). In order to keep the requirements for the production environment as low as possible, the special machine manufacturer initially decided to use the offline variant.

The installation process is straightforward: after booting, one of the configured variants can be selected via the ondeso SR Start Center. The Start Center is a central application within ondeso SR, which can be customised as needed.

From there, predefined workflows can be started with a single click. The required details for the installation target are gathered through a customised input form. Subsequently, the necessary installation and configuration steps are executed fully automatically and immediately documented, providing an additional advantage over using images or manual installation.

## AT A GLANCE



### SECTOR

Special mechanical engineering  
Manufacture of filling and closing machines

### REQUIREMENTS

Replacement of manual image creation  
and maintenance for different variants

### SOLUTION

Minimal basic image for basic installation  
via ondeso SR for use both offline and online



Picture:  
groninger group

**COMPLETE  
INSTALLATION IN**

**1.5 h**

**EASILY  
EXPANDABLE**

**TO NEW VARIANTS  
IN THE FUTURE**

**COMPLETE  
DOCUMENTATION**

**– PRACTICAL  
FOR AUDITS**

## PERFECT FOUNDATION FOR AUDITS

Comprehensive documentation is particularly crucial for use in regulated industries, such as the pharmaceutical sector, as it provides a complete record of the entire machine lifecycle – the perfect basis for potential process audits. For groninger, whose clients include leading global pharmaceutical companies, this is a key factor.

Thanks to the predefined variants and required software components, the latest versions of these components can be automatically retrieved, installed, and configured. This includes standard products like a PDF reader, as well as custom software components and projects developed by groninger that need to be installed. Additionally, various system settings, such as printer configurations, registry keys, and customisations of the desktop and start menu, must be adjusted for each variant.



**Stefan Hiemeyer**

Team Lead Automation SCADA at groninger

**"Previously, image creation took around two days. With ondeso SR, we can now fully install and configure the clients in just 1.5 hours, with significantly less manual effort required."**

## LESS EFFORT, MORE SECURITY

Stefan Hiemeyer, responsible from groninger's side, summarises: "Previously, image creation took around two days. With ondeso SR, we can now fully install and configure the clients in just 1.5 hours, with significantly less manual effort required."

Another advantage for groninger when using ondeso SR for installing industrial PCs is that operating system updates approved by the respective component manufacturers can be automatically retrieved and installed according to the IEC 62443-2-3 standard. This further enhances the security of the machines.

In addition, the foundation is laid for future updates at customer sites. As a preventive measure, a backup of the delivery state can also be created, which can be used to quickly restore operations in the event of a failure.

## SETTING THE COURSE FOR THE FUTURE

Sebastian Pfaller, Head of Product Management at ondeso and lead on this project, states: "The team's relief from routine tasks, along with the higher quality through consistency and built-in documentation, is particularly noteworthy." While there is an initial effort to create and test even the unattended installation through ondeso SR, maintaining the variants has become much simpler and more time-efficient due to the generic process description. This also allows for easy future adjustments to new versions or variants.

groninger has since expanded its collaboration with ondeso. Together with ondeso, the groninger team has approached COPA-DATA, the manufacturer of a software platform also used in groninger's products, to integrate update approvals according to the IEC 62443 standard. As a result, updates can now be automatically installed via policy, significantly reducing the company's testing and implementation efforts. The automatic retrieval and application of updates is handled by our software, ondeso SR.



**Sebastian Pfaller**

Head of Product Management at ondeso

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ondeso develops software products especially in the field of operational technology and Industry 4.0 and supports the automation of OT client management in production. For years, plant operators as well as machine and plant manufacturers have trusted in ondeso products, which are suited for all industries and can be used across the entire range of production systems and processes. Whether management systems, HMIs or controls – ondeso manages the lifecycle of industry PCs and offers custom fitted products on the highest technological and conceptual level – 100% made in Germany.

### Do you want to make the client management of your industrial PCs more efficient?

Contact us now and arrange a free software demo to get an idea of ondeso SR.

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