

The background of the advertisement is a photograph of a server room. Two men, one in a grey shirt and the other in a dark suit with a red tie, are standing in front of a large server rack. The man in the suit is pointing at the server components. Overlaid on the image are several horizontal bands of binary code (0s and 1s) and glowing yellow lines that suggest data flow or network connections. The Siemens logo is in the top left corner.

**SIEMENS**

*Ingenuity for life*

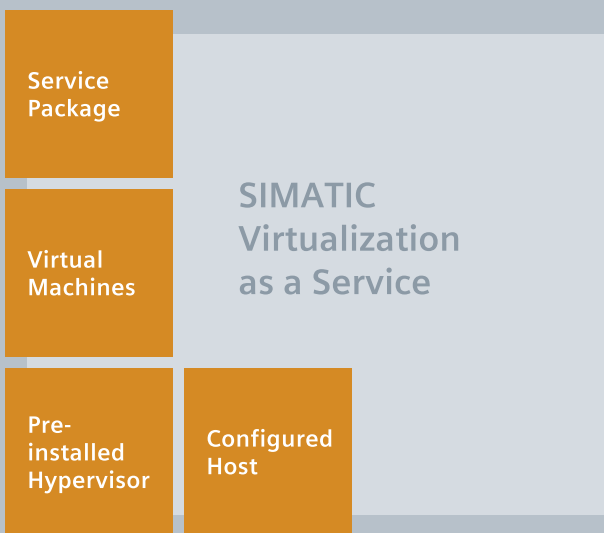
## SIMATIC Virtualization as a Service

Efficient for virtualization

[siemens.com/sivaas](http://siemens.com/sivaas)



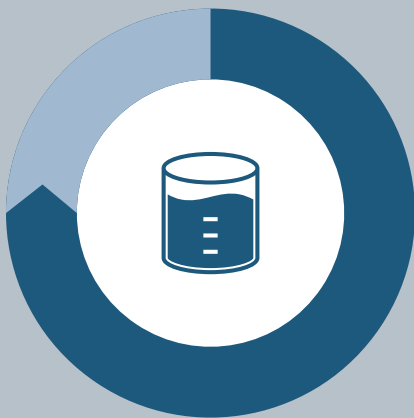
# Future-proof modernization of process control systems



Apart from the preventive maintenance of the hardware platform, it is particularly the maintenance and care of the installed software components which is decisive for the lifecycle costs of a PC-based control system. The integration of IT-technologies into the industrial environment enables innovative concepts here as well, such as system virtualization.

“SIMATIC Virtualization as a Service” offers a simple introduction into this forward-looking technology.

# Virtualization benefits



Up to 75%  
energy savings



Up to 80%  
less space required



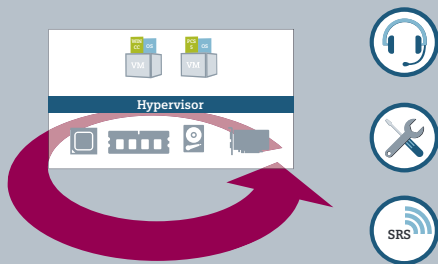
100% lifecycle services  
from a single source

- Ready-to-use systems make installation easy
- Ready-to-run templates allow you to upgrade system components fast and cost-effectively
- Optimized utilisation of existing hardware resources
- Low effort for system upgrades/updates
- Higher system availability and flexibility
- Easy system management and comprehensive support in combination with SIMATIC Remote Services and Managed Support Services



# Efficient service and maintenance

## SIMATIC Virtualization as a Service



Siemens Industry Services provide the lifecycle services and the suitable hardware and software components for your virtualization solution - all perfectly compatible and from a single source

### Preconfigured host system

The system platform consists of the HP ProLiant server hardware and a management console.

The host server is available in different performance classes.

### Preinstalled hypervisor

A virtualization layer that distributes the resources of the physical hardware to the virtual machines (VMs) is installed on the system platform.

VMware vSphere is used as the virtualization software.

VMware vCenter Server is available for the optimum management of multiple host systems.

### Virtual machines

The ready-to-run virtual machines are delivered on the preconfigured system platform.

Microsoft Windows Server with an activated license is preinstalled on each virtual machine.

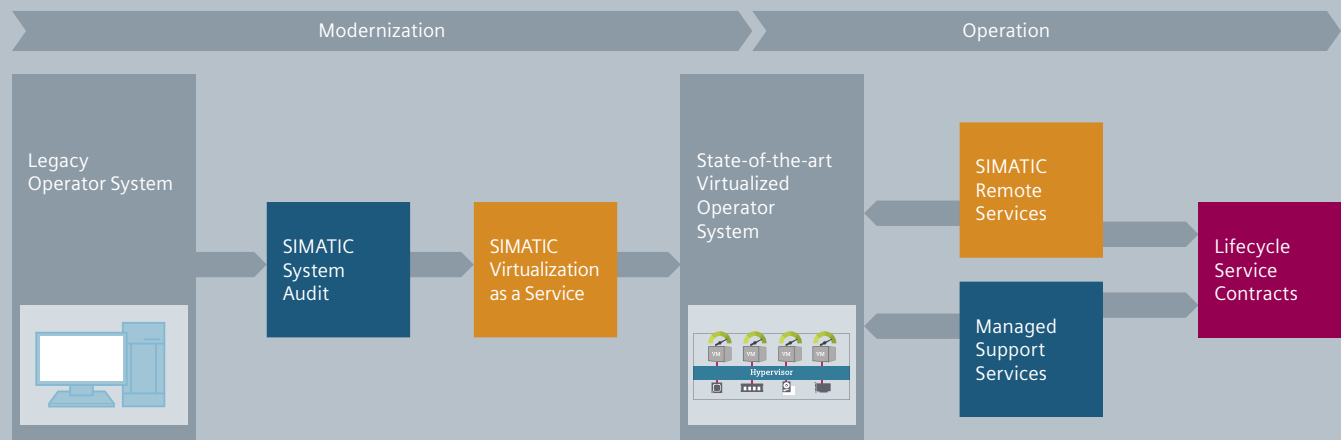
The virtual machines can include individually configurable, unlicensed installations of SIMATIC PCS 7 and SIMATIC WinCC software.

### Service package

- Server preinstallation and configuration
- Technical support for all installed components
- Documentation for the hardware/software components, technical manuals, user instructions and application examples

We also recommend: SIMATIC Remote Services and Managed Support Services

# Lifecycle services for virtualized engineering and operator systems



The “Services for Virtualized Engineering and Operator Systems” program combines the recommended service offerings for a virtualized system, with SIMATIC Virtualization as a Service as a core element and optional auditing with SIMATIC System Audit. As a result, you are well prepared, for example for any upcoming modernization work.

SIMATIC Remote Services are available during the operating phase, giving you fast and efficient support over a secure remote connection. With our Managed Support Services, a dedicated support manager prioritizes, monitors and coordinates all necessary service and support activities and acts as a central point of contact for efficient flow of information.

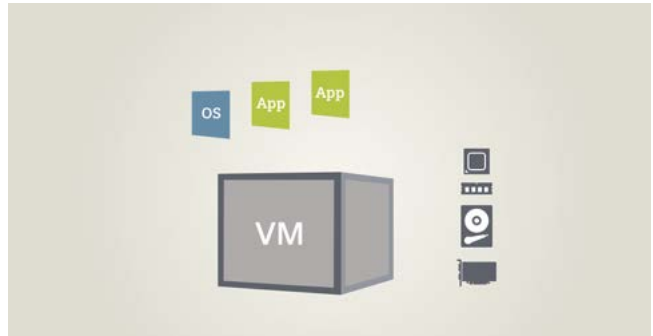
Finally, a Lifecycle Service Contract allows you to flexibly combine individual service offerings into a modular overall package that is perfectly tailored to the requirements of your virtualized system.



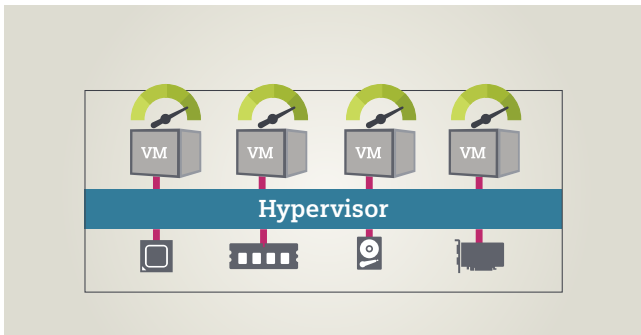
# What is virtualization?



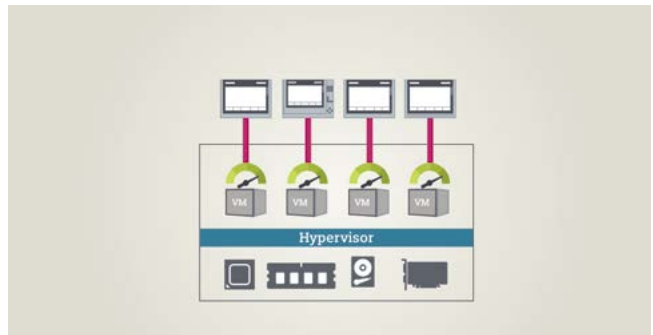
Virtualization decouples a computer's **operating system** and **application software** from its **hardware**



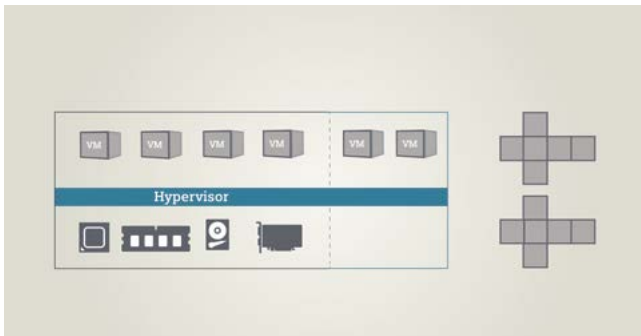
The operating system and the application software are made available in form of a **virtual machine (VM)**



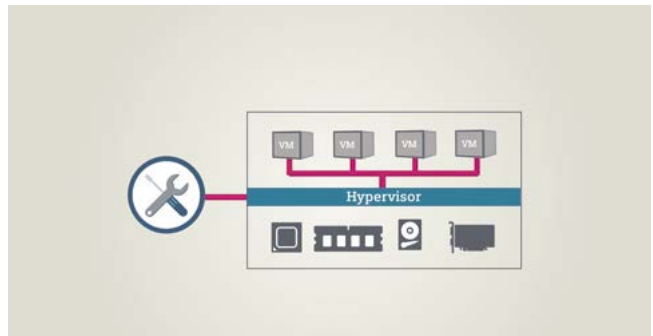
The **hypervisor** handles the dynamic distribution of the hardware resources to the virtual machines



The virtual machines are operated via energy-saving and cost-efficient **thin clients**



**System upgrades** can be implemented quickly and efficiently with preconfigured VM templates



The great advantage of a virtualized system lies in its **central administration, diagnosis and maintenance**



**Comprehensive support from a single source** – for all installed components





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**Watch a short video to see how  
virtualization works.**

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Just click on  
the link or  
scan the QR  
code!

