SIEMENS
Ingenuity for life

SIMATIC Virtualization as a Service

Technology-based services for a greater competitive edge

Minimum downtime and the optimum use of staff and resources are key to sustainable success in industry. Siemens provides the basis for greater productivity, flexibility, and efficiency with technology-based services throughout the lifecycle of an industrial plant – reliably, globally, and around the clock. In-depth technology and product knowledge as well as industry expertise within Siemens' global network of experts ensure a considerable competitive edge.

The challenge:

Optimum maintenance and modernization of PC-based control systems

Apart from the maintenance of the hardware platform, updates and maintenance of the installed software components are particularly crucial for the lifecycle costs of a PC-based control system.

The customer needs are concentrated especially on the following items:
- Optimum use of existing hardware
- Simple system expansions/updates
- Central administration and maintenance
- Fast and competent service
- Solutions from a single source
- High plant availability

An efficient update, maintenance, and modernization of the system components, therefore, include a substantial potential for optimization.

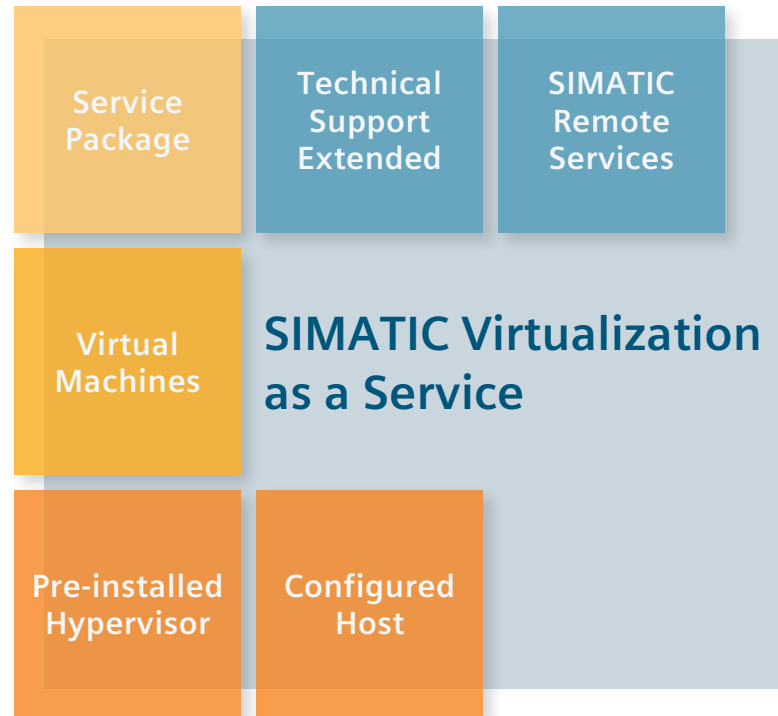**usa.siemens.com/services**

The solution:

SIMATIC Virtualization as a Service

The integration of IT technologies into the industrial environment opens up innovative concepts, such as system virtualization. SIMATIC Virtualization as a Service facilitates the customers' introduction to this future-oriented technology. The customers receive the Lifecycle Service required for the virtualization solution, including the suitable software and hardware components, perfectly coordinated from Siemens Industry Services.
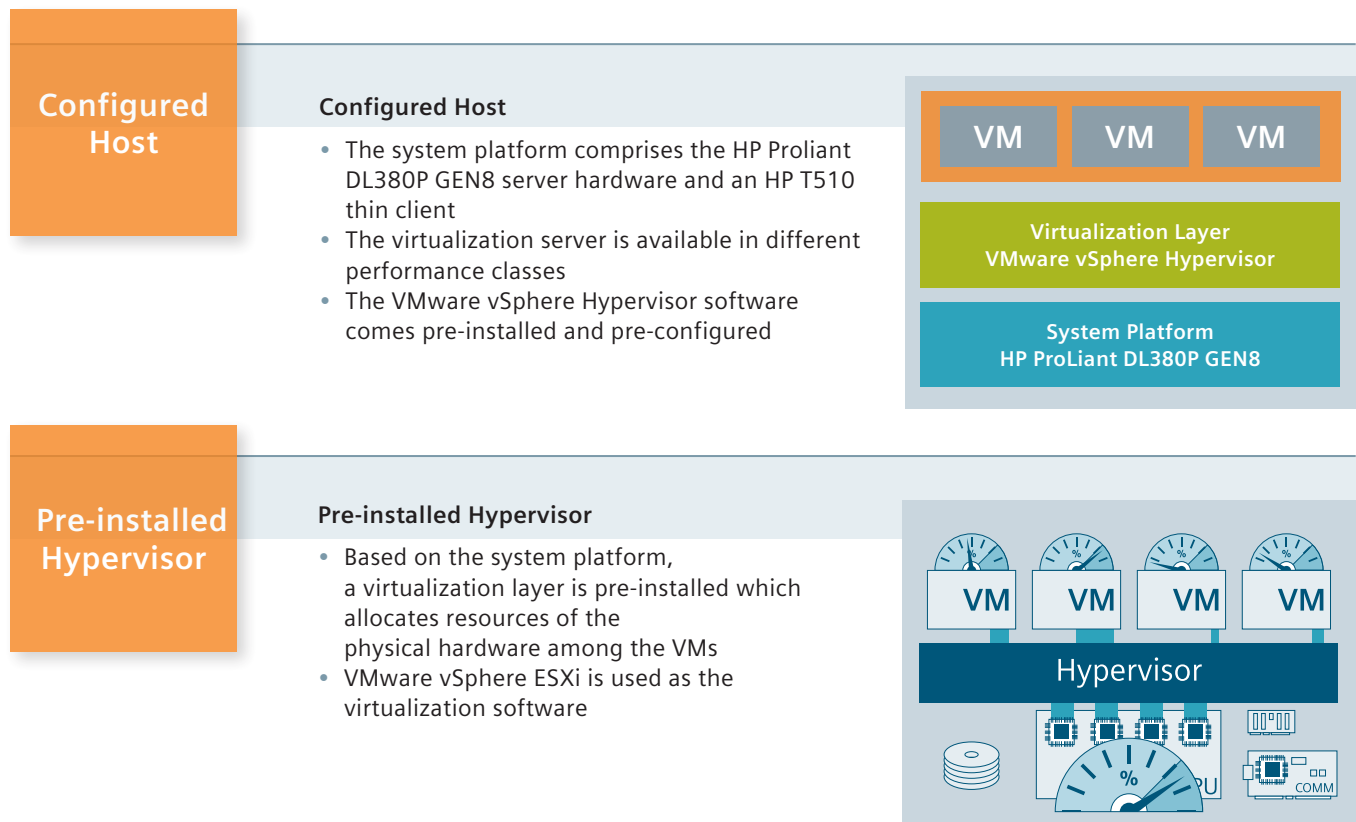
SIMATIC Virtualization as a Service includes:
- Setup of the virtualization server
- Configuration of the virtual machines
- Installation and configuration of the operating system
- Installation of the SIMATIC software ready for use

Siemens Industry Services also provides comprehensive support during the lifecycle of the virtualization system. Technical Support offers customers assistance for all technical questions on the function, use, and management of the system components. More extensive system-specific consultation can be provided efficiently within the scope of SIMATIC Remote Services (SRS).

Service Package	Technical Support Extended	SIMATIC Remote Services

Virtual Machines	**SIMATIC Virtualization as a Service**

Pre-installed Hypervisor	Configured Host

The portfolio: SIMATIC Virtualization as a Service

Configured Host

Configured Host

- The system platform comprises the HP Proliant DL380P GEN8 server hardware and an HP T510 thin client
- The virtualization server is available in different performance classes
- The VMware vSphere Hypervisor software comes pre-installed and pre-configured

VM	VM	VM

Virtualization Layer
VMware vSphere Hypervisor

System Platform
HP ProLiant DL380P GEN8

Pre-installed Hypervisor

Pre-installed Hypervisor

- Based on the system platform, a virtualization layer is pre-installed which allocates resources of the physical hardware among the VMs
- VMware vSphere ESXi is used as the virtualization software

VM	VM	VM	VM

Hypervisor

Virtual Machines

Virtual Machines

- Based on the system platform, a VM is delivered in ready-to-run condition.

A choice of the following VMs is available:

Microsoft Windows Server	SIMATIC PCS 7 OS Server	SIMATIC PCS 7 Web Server
Microsoft Windows	SIMATIC PCS 7 ES / OS Client	SIMATIC PCS 7 OS Client

Service Package

Service Package

- Pre-installation and configuration of the servers is included in the scope of deliveries
- System documentation includes documentation of the employed HW and SW components, technical manuals, instructions, and examples of applications
- Technical Support can be extended for a year at a time after two years
- A contact person for all questions
- Custom support from experienced experts (phone/email)

- Optional: SIMATIC Remote Support for fast, efficient support
- Handling of questions about functions and use of systems
- Coverage of all employed technologies, products and systems (server hardware, operating systems, SIMATIC products, VMware (VM = virtual machine))
- Coordination of support activities for components from third-party providers

Technical Support	User System Documentation	Installation & Configuration

SIMATIC Remote Services

SIMATIC Remote Services

- Efficient: Experts can connect with the system directly, worldwide, without call-out or travel time
- Capable: Excellent support from suitable experts

- Modular: SRS can be adjusted in stages to actual needs
- Complete: The remote infrastructure is provided, associated support and maintenance are included

Technical Support Extended

Technical Support Extended

- If a technical question is expected to go beyond one hours of handling time, the case is treated as Technical Support "Extended."
- The assigned Siemens Service Specialists have extensive expertise in engineering, system commissioning and system testing
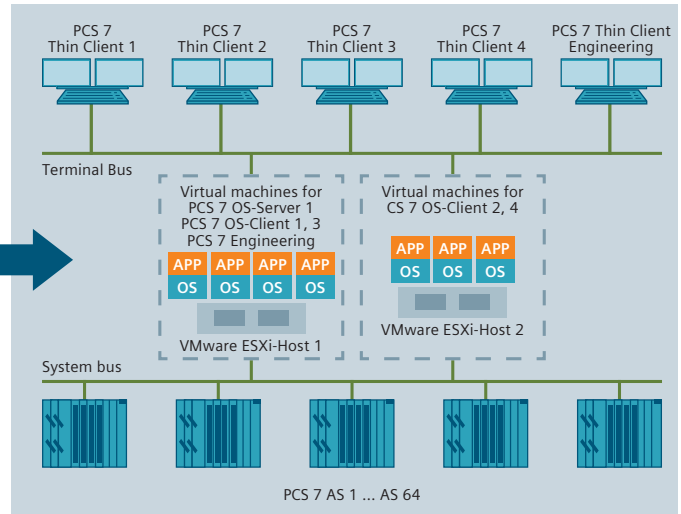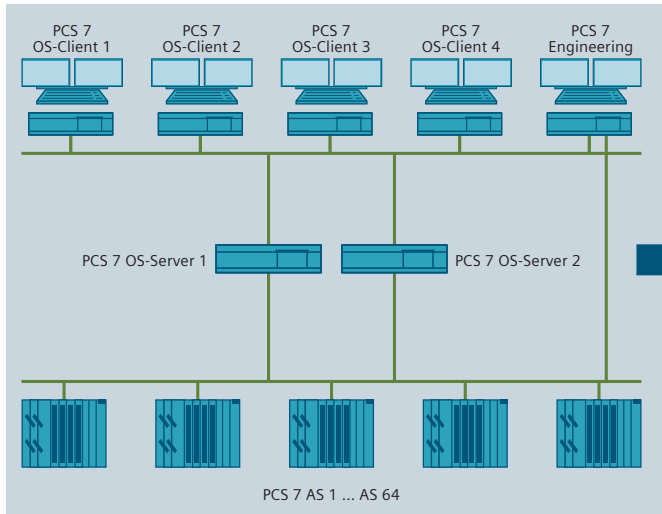
Technical Support

Basic	Priority	24h
	Mature Products	Remote Classic

Extended	Support Contracts

Example: Automation system before and after virtualization
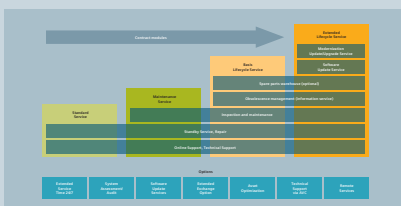
One-Stop-Shop

Virtualization solution via MLFB

Pre-installation and configuration

Technical Support

Lifecycle Service

Customer benefits:

Siemens Industry Services helps customers find the right virtualization solution reliably, quickly, and at optimal costs

- Lifecycle services for SIMATIC products, VMware, hardware and software from a single source
- Simple implementation of a virtualization solution, with prefabricated, configured, ready-to-use, tested systems
- Cost-effective and fast expansion of system components with ready-to-run templates

- Optimum use of existing hardware resources
- Greater system flexibility and availability
- Lower expense and effort for system upgrades & updates
- Easy system management and all-inclusive support in conjunction with SIMATIC Remote Services (SRS)
- Reduction of lifecycle costs of the system through improved energy efficiency

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TECHNOLOGY ALLIANCE