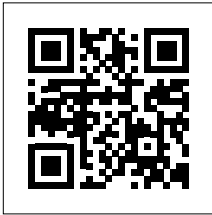


There's more to it:  
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In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions only form one element of such a concept.

For more information about industrial security, please visit:  
[siemens.com/industrialsecurity](https://www.siemens.com/industrialsecurity)



A man and a woman are looking at a laptop. The woman is wearing glasses and has her hand on the laptop. The man is also wearing glasses and has a beard. There are digital overlays of binary code and circuitry in the background.

**SIEMENS**

*Ingenuity for life*

# SIMATIC Software Platform as a Service

Software engineering –  
efficient and flexible

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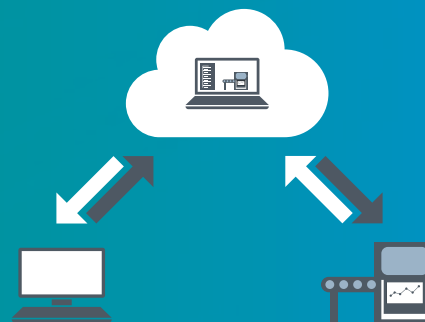


Tapping potential with cloud computing – the technology trend in IT – also for design and operation of control systems.

## Customized engineering infrastructure

Cloud computing makes it possible to provide virtual resources according to demand – in a central IT infrastructure (cloud) – and to bill resources actually required, such as computing power, duration of use and bandwidths, according to use.

Combined with the various cloud service models, Platform as a Service (PaaS) is the ideal cloud service for efficiently providing programming environments and developer tools.



Cloud-based engineering

# Cloud computing applications and services

IT infrastructures are made available in a pool via a network using cloud computing, so that computer resources such as memory, applications or services can be accessed quickly from anywhere.



## Individual cloud application models

### Private cloud

Provided for a single organization and operated inside or outside the building.

### Public cloud

Available to the public and can be used by any person or any company.

### Hybrid cloud

Consists of a private, public and/or community cloud. Hardware and software are used differently, depending on the type of services.

### Virtual private cloud

Allows providers to appropriately manage private cloud computing in a public cloud environment.

## Cloud services for different service models

### SaaS

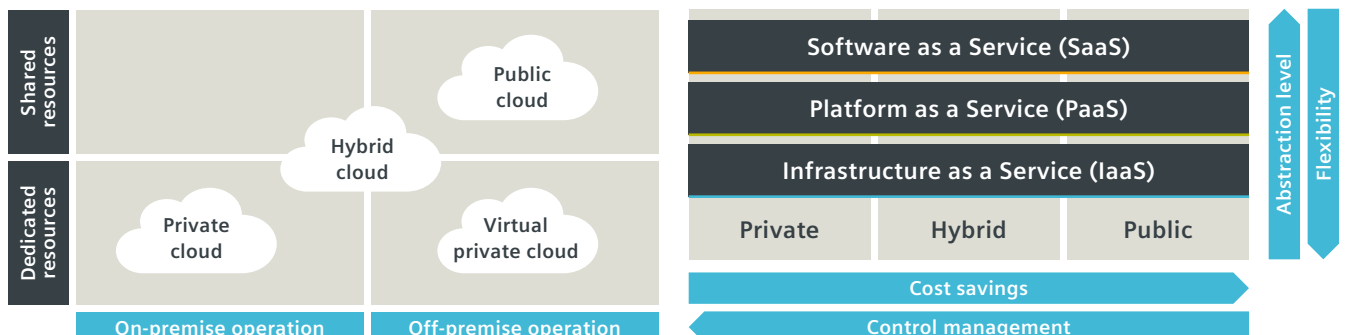
User access to software collections and application programs.

### PaaS

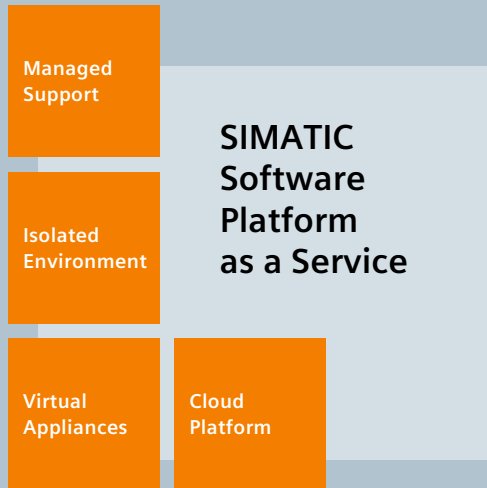
User access to programming or runtime environments with flexible, dynamically adaptable computing and data capacities.

### IaaS

User access to virtualized computer hardware resources such as computers, networks and memory.



# Engineering – efficient and flexible



SIMATIC Software Platform as a Service offers a cloud-based IT infrastructure with pre-installed and fully configured SIMATIC software.

This engineering environment for the SIMATIC PCS 7 process control system allows a short-term and flexible use, which is limited in time.

## Cloud Platform

### Cloud Platform

The virtual IT infrastructure in the data center of the cloud service provider provides all necessary resources, such as computing power, memory, networks, etc.

User-friendly tools are also available for managing the service.

The cloud platform provides functionally separated zones for different tasks while the service is being used.

Cloud Resources



## Virtual Appliances

### Virtual Appliances

A virtual application consists of a pre-configured operating system and the desired application software.

SIMATIC Software Platform as a Service currently offers different SIMATIC PCS 7 versions as fully configured virtual appliances.

A virtual appliance can also be adapted to individual needs during use, e.g. by installing additional software.

Customer Project App



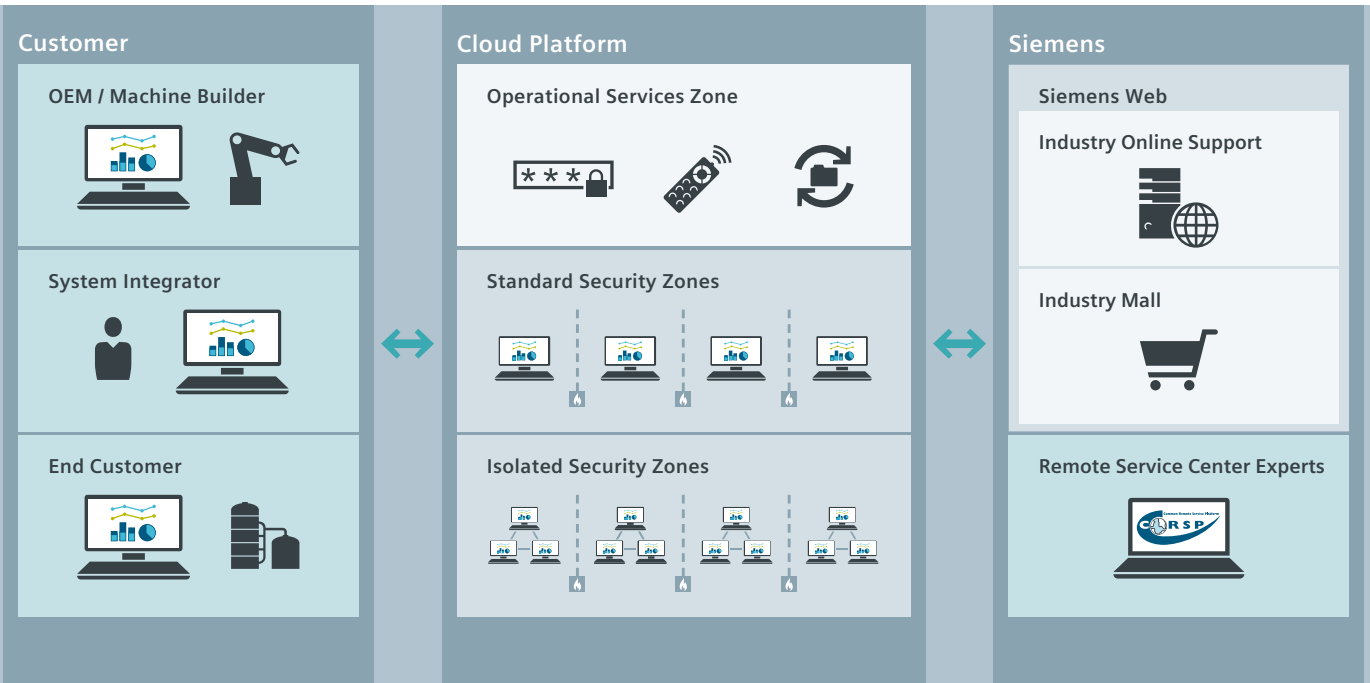
SIMATIC SW



Windows



# – implemented with innovative cloud technologies



Cloud platform – structure and functions

Isolated Environment

## Isolated Environment

A virtual appliance and the corresponding customer access are made available in the standard security zone as standard practice.

If the customer needs to be able to use multiple virtual appliances together and at the same time, they can be set up in an isolated environment.

The customer can set up a virtual network between the virtual appliances in this isolated security zone either on his own or with support from a Siemens expert.

### Isolated Security Zones



Managed Support

## Managed Support

### Administration

- Order execution
- Access control
- User management
- Software / template management

### SIMATIC remote support

The Siemens experts in the Remote Service Center are happy to provide assistance while the service is being used and answer all questions related to the SIMATIC engineering software.

### Remote Service Center Experts



# Your benefits in the applications

## Engineering and test environments

A large number of SW versions are necessary for the maintenance, upkeep and upgrading of existing automation systems and to ensure a long plant lifecycle. It can be very time-consuming and costly to install the software components, including the legacy Microsoft operating systems, on PC hardware.

With SIMATIC Software Platform as a Service, you can quickly and simply use ready-to-run engineering environments.



## Software migration and upgrades

To upgrade a SIMATIC application to a new software version, one or multiple intermediate versions must be used temporarily, installed and configured, depending on the initial version – often only for a short period of time.

You can benefit from the central provision of this software, with no installation required.

## Operator training systems

Equipment operators are often not trained on the real equipment but on an operator training system (OTS), which is also used to train engineers and product developers in various tasks.

Individual simulation software makes it possible to simulate the entire process based on stored process engineering modules.



# Benefit from cloud computing

Ready to run



The availability of a standardized test and development environment cuts costs for setting up and configuring the infrastructure.

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Flexible use



The flexible use of distributed engineering resources permits multi-project and multi-user engineering independently of location.

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Pay per use



A demand-oriented price model reduces the investment costs to the actual use.