

Evolution of CENTUM VP Integrated Production Control System

CENTUM VP Release 5.01

Yokogawa released the CENTUM VP integrated production control system in 2008 to realize the VigilantPlant concept.

The CENTUM VP Release 5 offers fully enhanced functions to provide a platform of a production control system without any bottlenecks. The CENTUM VP offers increased system flexibility and improved system integration capability.

FEATURES

■ **New Field Control Station (FCS) with large capacity and high performance**

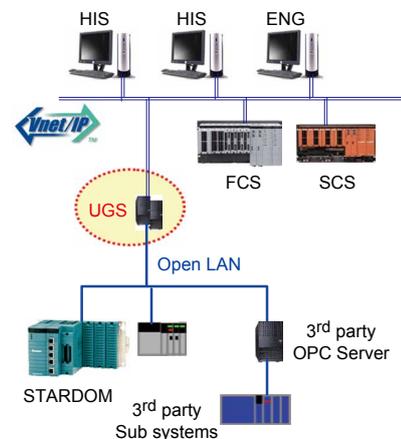
The new FCS retains high reliability and availability, and the pair & spare redundant architecture of previous CENTUM systems. Here are the main features.

- 1) Up to 13 I/O nodes can be connected to the new FCS. The FCS's application capacity and processing performance have been significantly enhanced in comparison with the previous FCS. This means that the CPU load is reduced, thus allowing stable process control. Furthermore, by reducing the number of FCSs, the initial investment cost is also reduced.
- 2) The I/O signal processing function has been enhanced. Device data for maintenance from field digital devices, such as HART and FF-H1 devices, is processed separately from the control communications, which ensures high-performance communication for both control and maintenance.
- 3) I/O nodes can be installed remotely at distances of up to 50 km with high-speed response by adopting the ESB bus with optical fiber. This enables I/O nodes to be installed closer to the field devices. Both the star and the chain topologies are available and the FCS can be applied to widely distributed plants such as upstream applications in the oil industry.

■ **Unified Gateway Station (UGS)**

A new UGS allows CENTUM VP to be integrated with a wide variety of subsystems that use different protocols such as Modbus RTU, Modbus TCP, EtherNet/IP, and OPC DA. The data of subsystem controllers are mapped on and accessed via UGS faceplate blocks, and the data can be treated as tags of the CENTUM VP field control stations (FCS). This means that the operation and monitoring of those tags can be handled on the Human Interface Stations (HIS) with their own graphic views, trend views, and so on.

For integration with Yokogawa's STARDOM system, the configuration information of function blocks is automatically converted and allocated on the UGS.



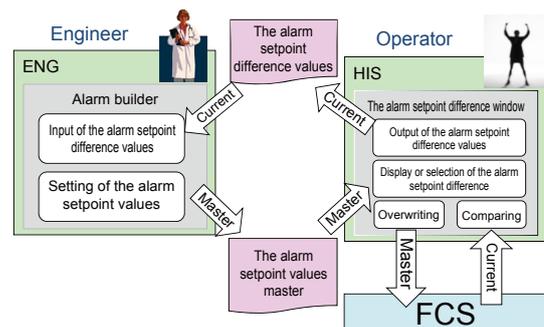
System configuration of UGS

■ **Functional enhancement of the consolidated alarm management software package**

The functions of the consolidated alarm management software package have been enhanced.

The alarm configuration database, provided as a part of the engineering functions, enables alarm setpoint information to be uniformly managed.

Operators can check the difference between the master setpoint values on the database and current alarm setpoint values, and overwrite the values if necessary. They can also finely adjust the master setpoint values by overwriting them by the current setpoint values through the alarm setpoint improvement activities.



Contact us

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<http://www.yokogawa.com/dcs/dcs-index-en.htm>

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