

The Virtual Test Function evolves  
your plant into a VigilantPlant

## Efficient and uninterrupted production

**CENTUM<sup>®</sup>VP**  
Virtual Test Function

**A complete PC-based control logic and HMI emulator that enables quick process changes while maintaining quality**

### Typical situations

- A process unit and its instrumentation must be added that requires changes to graphics and control logic.
- The schedule is always tight. Risks that lead to production delays or loss of quality must be kept to a minimum.

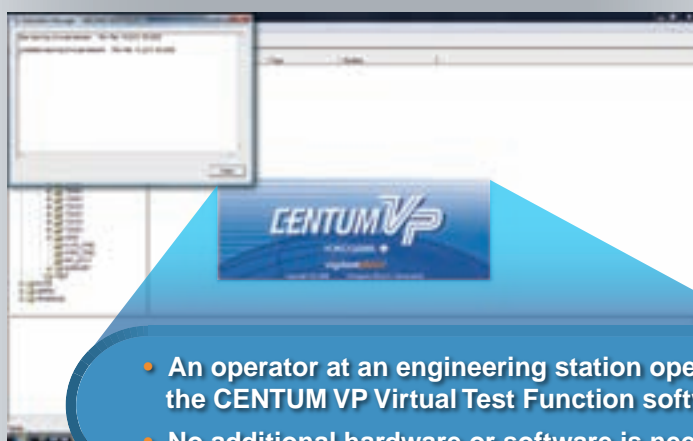
### Typical frustrations

- The need to install additional hardware and perform settings whenever changes are made.
- Existing configuration data cannot be utilized because the configuration tools are incompatible.
- Safety controllers are not handled in the same way.

### Traditional approach



### No extra hardware/work necessary



<http://centum.jp>

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[www.yokogawa.com](http://www.yokogawa.com)

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The clear path to operational excellence

**YOKOGAWA** ◆



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## Efficient and uninterrupted production

### Traditional approach

We found the hardware and  
now need to duplicate the currently  
running configuration,  
including the operator interface.

This is getting  
complicated...



### No change to operator work environment

**CENTUM VP**



The Virtual Test Function lets you  
use an existing configuration and  
choose which operator station to  
emulate.

Have the same user interface and  
control logic, all using the same  
engineering configuration tool.

### Traditional approach

Oh...!  
It looks like we'll need to  
change our safety logic  
configuration, too.

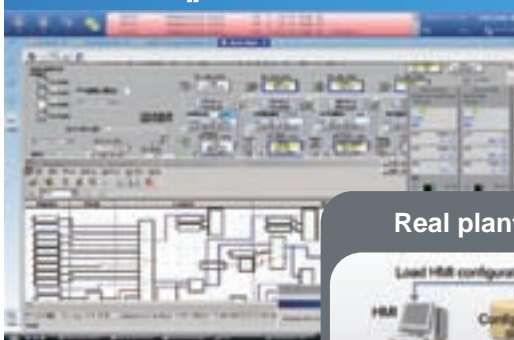
Can we locate  
hardware for that?

With so little time,  
that would be  
difficult...



### Safety controller supported in the same way

**CENTUM VP**

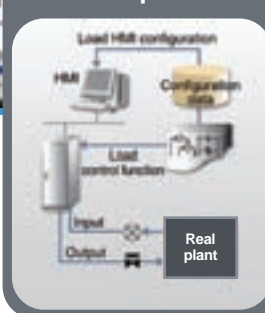


All safety functions can be tested  
and debugged in advance.

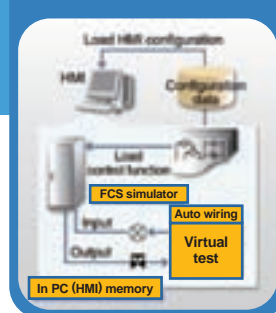
## How it works

- All logic in the controllers and the HMI (human machine interface) are emulated on one or more PCs. The emulator is configured using the actual plant database.
- The Virtual Test Function provides a highly mobile environment that is useful for test, training and engineering.

#### Real plant



#### Virtual test



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The clear path to operational excellence

SEE  
CLEARLY

KNOW  
IN ADVANCE

ACT  
WITH AGILITY

VigilantPlant is Yokogawa's automation concept for safe, reliable, and profitable plant operations. VigilantPlant aims to enable an ongoing state of Operational Excellence where plant personnel are watchful and attentive, well-informed, and ready to take actions that optimize plant and business performance.

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