EcoStruxure™ Virtual Engineering

PSS 41S-1VIRTENG

Product Specification

July 2022

Schneider Electric™

https://www.se.com

Legal Information

Overview

EcoStruxure Virtual Engineering is an offline system that allows you to engineer, replicate, test, and train on a copy of your production system's configuration. Additionally, you can test the latest available software before implementing it on your live system. It is located in a fully supported Schneider Electric private cloud. The cloud is accessible from anywhere with an internet connection, allowing you to collaborate with your own colleagues around the world, as well as Schneider Electric experts.

The Virtual Engineering environment can provide:

- Global Access to a private virtual engineering environment for Schneider Electric Foxboro DCS and Triconex TriStation products.
- Cybersecurity with full user access control to segregated project environments backed with virus and intrusion protection systems.
- A digital twin of the Foxboro DCS or Triconex system can be built in the environment together with the option to provide tie back simulation using AVEVA simulation tools.
- Connection to remote assistance with Schneider Electric experts, to help improve engineering and support.
- Access to training for operations staff using the Virtual Engineering environment. This includes operations, engineering, and maintenance staff training.

Features

- Agility - Cloud infrastructure can be scaled up or scaled down, adding or removing virtual machines, on demand.
- Disaster Recovery - The Virtual Engineering environment is hosted across multiple data centers in different regions which back up their data to one another. In the event of inaccessibility to one location, all data can be recovered and quickly brought online.
- Customer Isolation - Each project and customer has its own completely isolated environment. Each environment has its own access control and can support multiple projects.
- Network Isolation - Cloud has the inherent ability to restrict connections (via software firewalls), allowing a network architecture that can fully isolate the different virtual systems.
- Global Access - Virtual Engineering environment can be accessed from anywhere with an internet connection, using a computer with a secure HTTPS connection via the internet.
- Pre-built Standard Images - Pre-built versions of Foxboro DCS and Triconex TriStation at different revision levels are available in catalogs upon request, to allow quick instantiation of systems for test.

Access Prerequisites

You must have an up-to-date supported browser (see Browser Support, page 4) and the ability to run Microsoft's Remote Desktop application.

Internet and Firewall

- As the connection to the Virtual Engineering environment is via the internet, the user requires access to the internet.
- If the users are connecting from their own corporate environment, then the corporate firewalls will have to allow VPN traffic on port 443 outbound to be open for VMware® remote console connections.
- vCloud Director requires clients to use TLS 1.2 as a minimum.

Browser Support

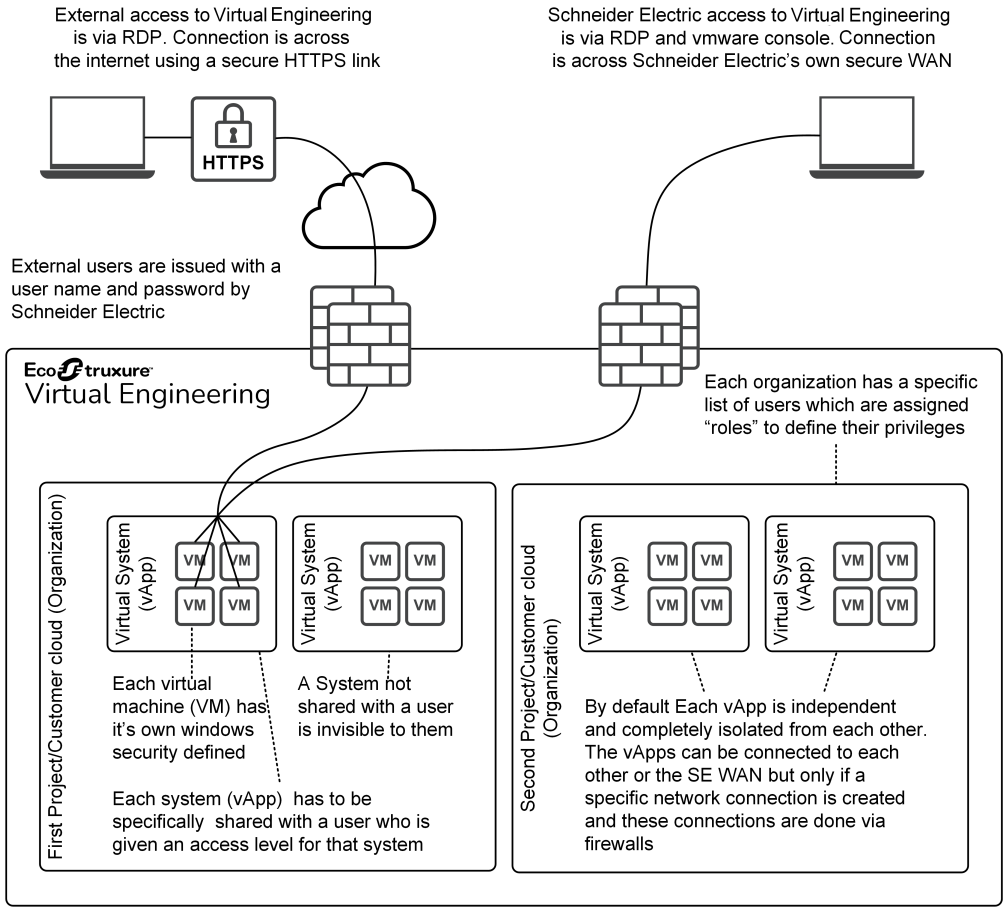
- Mozilla Firefox
- Microsoft Edge
- Chrome

Security

Security is enforced by:

- A comprehensive access control system which controls who has access to which cloud and system.
- An integrated intrusion protection and reporting system.
- An inbuilt virus protection system which monitors all the virtual machines running in the environment.

Figure 1 - Virtual Engineering Security Diagram



Schneider Electric performs the configuration upload. Files can be transferred via the RDP. A simple check sum can be performed on the file before and after transfer to help guarantee no corruption.

Technical Support

To submit a support request for the Virtual Engineering environment, please contact your Schneider Electric project manager.

For additional support, visit https://pasupport.schneider-electric.com (registration required).

⚠ **WARNING**: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.p65warnings.ca.gov/.

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As standards, specifications, and design change from time to time, please ask for confirmation of the information given in this publication.

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