System Advisor – Process Safety

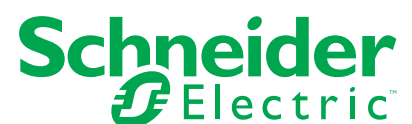## PSS 41S-4TRIAUD

Product Specification

March 2024

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Overview

In many industries, plant operations require staff to have positive knowledge of the safety system's configuration and to have access to accurate and up-to-date documentation. EcoStruxure™ System Advisor - Process Safety helps improve operational integrity and insight by providing enhanced configuration documentation, change tracking, and I/O management for EcoStruxure Triconex™ systems.

System Advisor - Process Safety is compatible with TriStation™ 1131 Developer's Workbench 4.7.0 – 5.7.0.
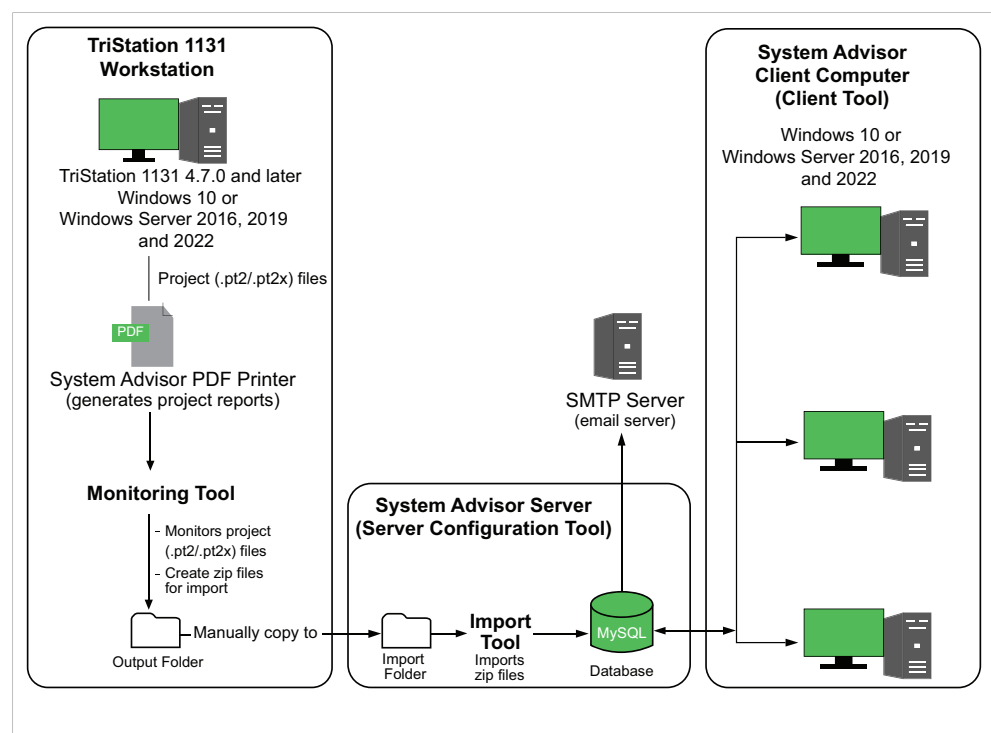
Benefits

System Advisor - Process Safety helps you:

- Verify correct database configuration and optimize resource utilization and system performance.
- Reduce audit costs for regulatory compliance.
- Reduce costs associated with managing documentation updates.
- Improve reliability.
- Improve process performance.

Architecture

System Advisor - Process Safety is based on a client-server architecture. Information flows from the Triconex control network stations to System Advisor.

Figure 1 - Typical Setup with System Advisor - Process Safety

Features

System Documentation

- Provides complete I/O documentation.
- Documents all tagname references and uses icons to indicate the tagname's data type (input, output, or memory).
- Documents CEMPLE (CEM), Structured Text, Ladder, and Function Block Diagram (FBD) logic.
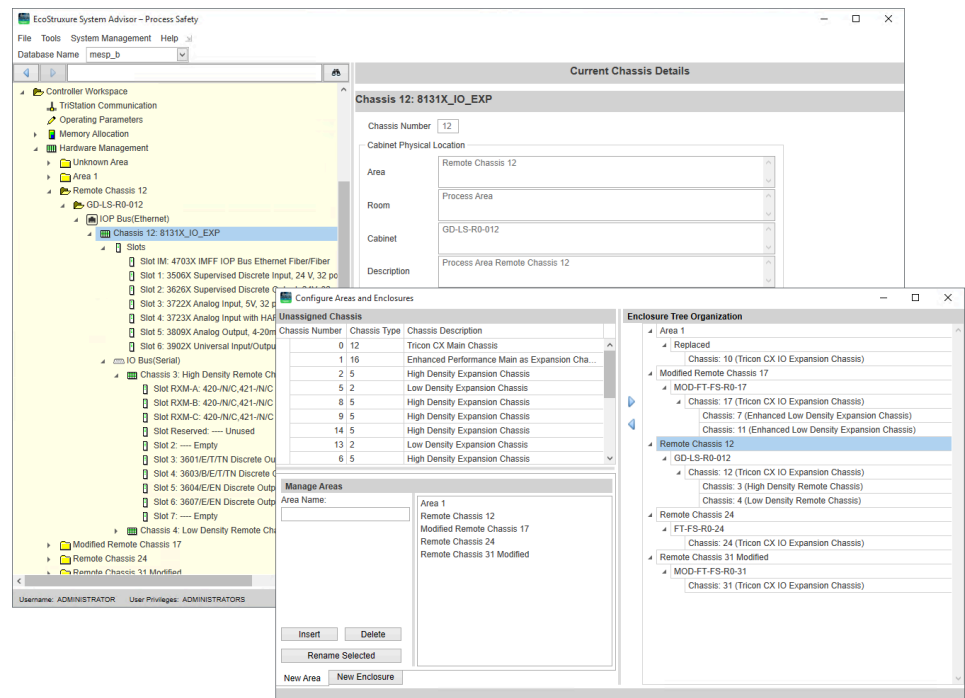
Change Tracking

- Tracks a range of TriStation 1131 configuration changes, including:
  - Logic
  - Tagnames
  - User Privileges
  - Cross-references
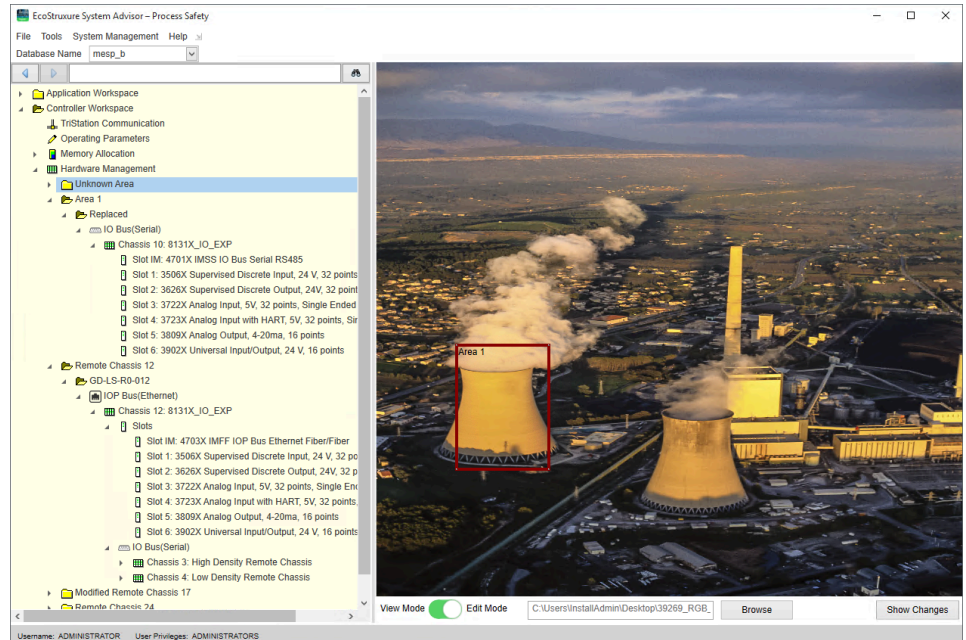 - Hardware, execution order, and SOE configuration

Hardware Management

- Supports all Triconex controllers — Tricon™, Trident™, Tri-GP, and Tricon CX.
- For Tricon CX systems, supports configurations with Tricon CX I/O modules and Tricon I/O modules (referred to as a mixed system).
- Displays the chassis segregated by their serial (IMSS) and Ethernet (IMFF) connections.
- Allows you to assign unassigned chassis and create new areas and enclosures.

  Automatically creates and assigns areas and enclosures for Tricon CX chassis based on the TriStation 1131 configuration.

- Enables you to associate physical areas to hardware assets with an image of your facility.

I/O Management

- Documents I/O.
- Finds spare I/O.
- Reserves I/O.

Advanced Queries

- Provides standard queries.
- Allows customized queries.
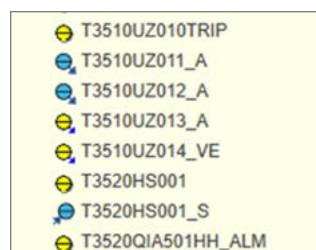- Allows querying for multiple System Advisor databases.

Reporting

- Stores all historical information in a server database.
- Provides historical view by date and change.
- Allows customized views by filtering and sorting.

Connect System Advisor - Process Safety and System Advisor - Process Control

When you set up communication between System Advisor - Process Safety and System Advisor - Process Control:

- Enables you to open System Advisor - Process Control from inside System Advisor - Process Safety and System Advisor - Process Safety from inside System Advisor - Process Control.
- Uses blue icons to indicate shared tagnames that communicate with both the Triconex and Foxboro DCS systems.

Regulatory Position

System Advisor - Process Safety is a response to practices required by OSHA 1910, IEC 61511, IEC 61508, IEC 61131, and other global regulations and rules. These regulations require that changes made to the safety system be documented and distributed to all affected parties, especially to the process operators and their supervisors, and that access to the system be controlled and monitored.

Although System Advisor - Process Safety provides support for these regulations, it is not sufficient by itself to verify that any given installation is compliant.

Certification of any given installation as compliant is achieved not only through the application of hardware and software products like System Advisor - Process Safety, but also through external review, internal procedures, and a variety of other mechanisms.

System Requirements

System Advisor - Process Safety operates with all Triconex hardware that uses TriStation 1131 Developer's Workbench version 4.7.0 – 5.7.0.

System Advisor - Process Safety is supported in virtual environments that meet the minimum workstation and server requirements.

The minimum requirements for the System Advisor server and System Advisor client are listed in Table 1 and Table 2 respectively.

Table 1 - System Advisor - Process Safety Desktop and Servers

Computer	Desktop or Server
Operating System	• Windows 10 (version 1607 and above) • Windows Server 2016 (32-bit or 64-bit) • Windows Server 2019 (64-bit) • Windows Server 2022 (64-bit)
CPU	Intel or equivalent 2.2 GHz. Multi-core enabled with at least 4 cores.
Memory	8 GB RAM or greater
Hard Drive	100 GB available space in hard drive

Table 2 - System Advisor - Process Safety Clients

Computer	Desktop or Server
Operating System	• Windows 10 (version 1607 and above) • Windows Server 2016 (32-bit or 64-bit) • Windows Server 2019 (64-bit) • Windows Server 2022 (64-bit)
CPU	Intel or equivalent 1.5 GHz. Multi-core enabled with at least 4 cores.
Memory	2 GB RAM or greater
Hard Drive	100 GB available space in hard drive
Monitor Resolution	1280 x 1024

Related Documents

Document Number	Document Name
B0750HG	*EcoStruxure™ System Advisor - Process Safety User's Guide*
B0750SQ	*EcoStruxure™ System Advisor - Process Safety Release Notes*
B0750HA	*EcoStruxure™ System Advisor - Process Control User's Guide*
PSS 41S-4SYSAUD	*EcoStruxure™ System Advisor - Process Control Product Specification*
9720150-xxx	*EcoStruxure™ Triconex™ TriStation™ 1131 Developer's Workbench Developer's Guide 5.x*
9720100-xxx	*EcoStruxure™ Triconex™ TriStation™ 1131 Developer's Workbench Developer's Guide 4.x*
9792155–xxx	*EcoStruxure™ Product Release Notice for TriStation™ 1131 5.x*

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