THERMO SYSTEMS
INDUSTRIAL AUTOMATION & INFORMATION

Automation System Protect Overview

What is Automation System Protect?

Automation System Protect (ASP) is a secure, reliable, on-demand system that allows Thermo Systems' support team to reliably and automatically backup customer Industrial Customer System (ICS) assets on-premise and offsite for disaster recovery.

How does it work?

Thermo Systems can integrate and utilize ASP backup servers at a customer site for secure, reliable, and automated backups of ICS assets. Through a custom-built policy, a backup of the ICS assets, such as Historical Data, SCADA Configuration, Server OS Images, Flat Files and Folders, Virtual Machine Images and PLC/IO/Network Device Configurations, will be stored onto an on-premise ASP backup server. Once the backups are stored onto the on-premise ASP backup server, a replication is conducted of the ASP backup server onto optional redundant ASP backup servers located either on-premise or offsite. The backup policy will be assigned to schedule regular backups to ensure that updates on the customer ICS are reflected on the stored backups. With the implementation of Thermo Systems' Automation InView (AIV) remote VPN solution, an optional additional backup of the ICS assets is stored to a dedicated offsite ASP storage server located at a Thermo Systems office.
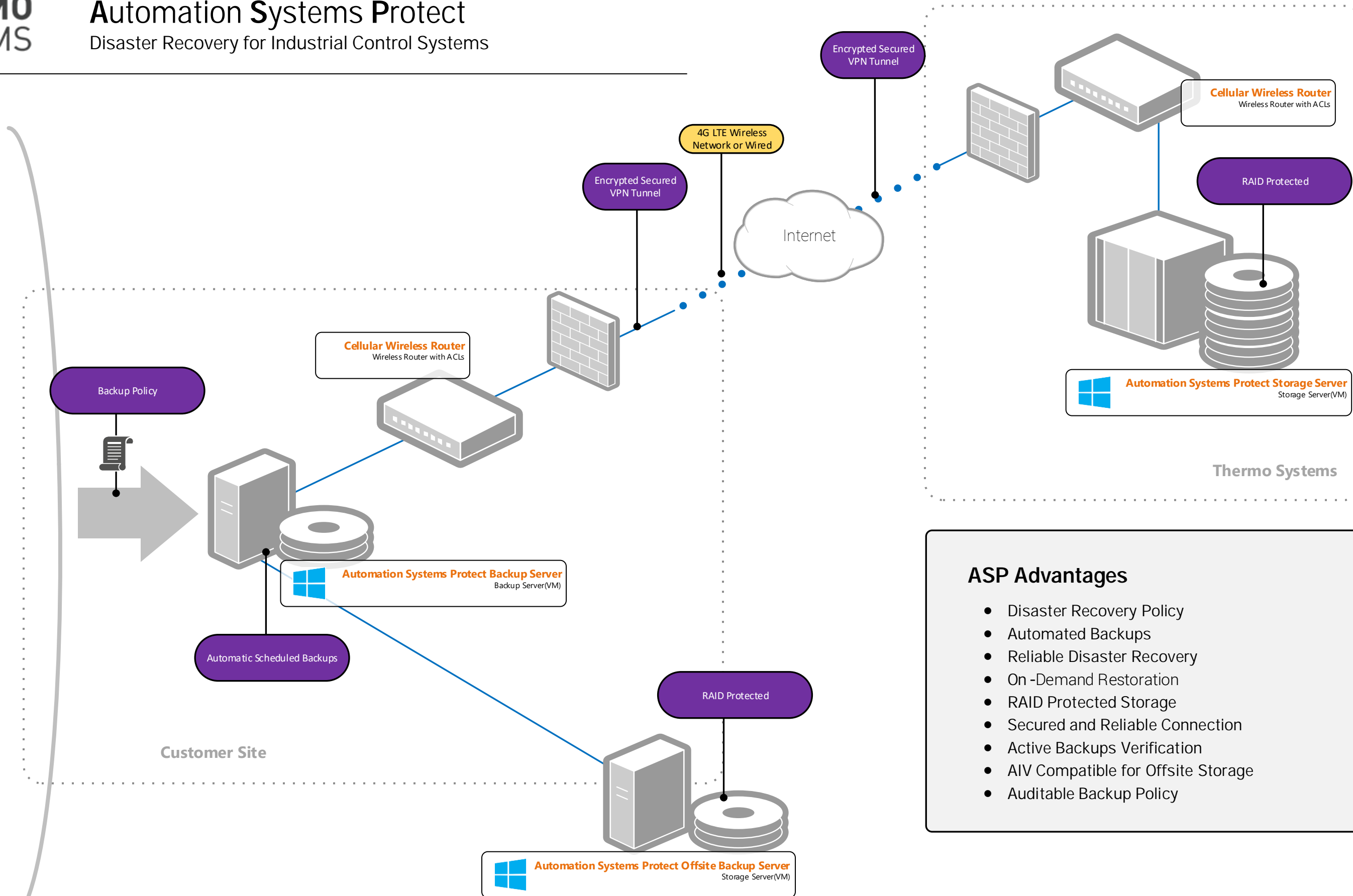
How reliable is it?

The customer will be provided configured ASP backup servers. These servers are configured with RAID protected storage to ensure that the backups are highly reliable and to prevent corruption of transferred files to the servers. By utilizing ASP backup servers for the sole task of manually and automatically collecting and storing backups of the ICS assets, both the customer and the Thermo support team will have access to up to date files from several secured locations. This provides an optional layer of redundancy for the stored backups, which allows the customer to feel reassured that the system backups are available for onsite restoration.

What are the benefits?

ASP provides a secure, reliable, and automated process to backup and localize ICS assets to dedicated RAID protected storage servers. This provides on-demand access of the most recent backups for the customer's ICS assets, as well as the option for on-demand restoration of any particular asset. The service provides an advantage for reliable disaster recovery within the system tolerance, in the case there is relevant hardware or software failure of the customer's ICS assets. Furthermore, active backup verifications will be conducted during routine preventive maintenance support to ensure that the automated backups are up to date. The additional ASP servers located either on-premise or offsite, also ensures the customer that the backups are redundant and available from several dedicated and secured locations.

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Automation Systems Protect
Disaster Recovery for Industrial Control Systems

Historical Database
Historical Data

Application
Typical ScADA

Servers OS
Typical SCADA Servers OS

Files and Folders
Flat files and folders

Virtual Machine
VM Image

Device Configuration
Configuration/Code

Backup Policy

Cellular Wireless Router
Wireless Router with ACLs

Encrypted Secured VPN Tunnel

4G LTE Wireless Network or Wired

Internet

Encrypted Secured VPN Tunnel

Cellular Wireless Router
Wireless Router with ACLs

RAID Protected

Automation Systems Protect Storage Server
Storage Server(VM)

Thermo Systems

Automation Systems Protect Backup Server
Backup Server(VM)

Automatic Scheduled Backups

Customer Site

RAID Protected

Automation Systems Protect Offsite Backup Server
Storage Server(VM)

ASP Advantages

- Disaster Recovery Policy
- Automated Backups
- Reliable Disaster Recovery
- On -Demand Restoration
- RAID Protected Storage
- Secured and Reliable Connection
- Active Backups Verification
- AIV Compatible for Offsite Storage
- Auditable Backup Policy

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COMPANY OVERVIEW

Thermo Systems is a global, full-service control systems integration partner, providing world-class automation solutions within the District Energy, Life Sciences, and Mission Critical markets.

We excel at managing and delivering turnkey projects to our EPC & AE partners while also specializing in customized direct-to-owner solutions, focusing on industries where we can offer unmatched domain knowledge to deliver the best possible services and technologies for your needs. By investing in our people, we provide a project team with the skill and expertise to overcome your biggest industrial automation and information challenges. To reinforce our commitment to serving our customers locally, we have offices located globally.
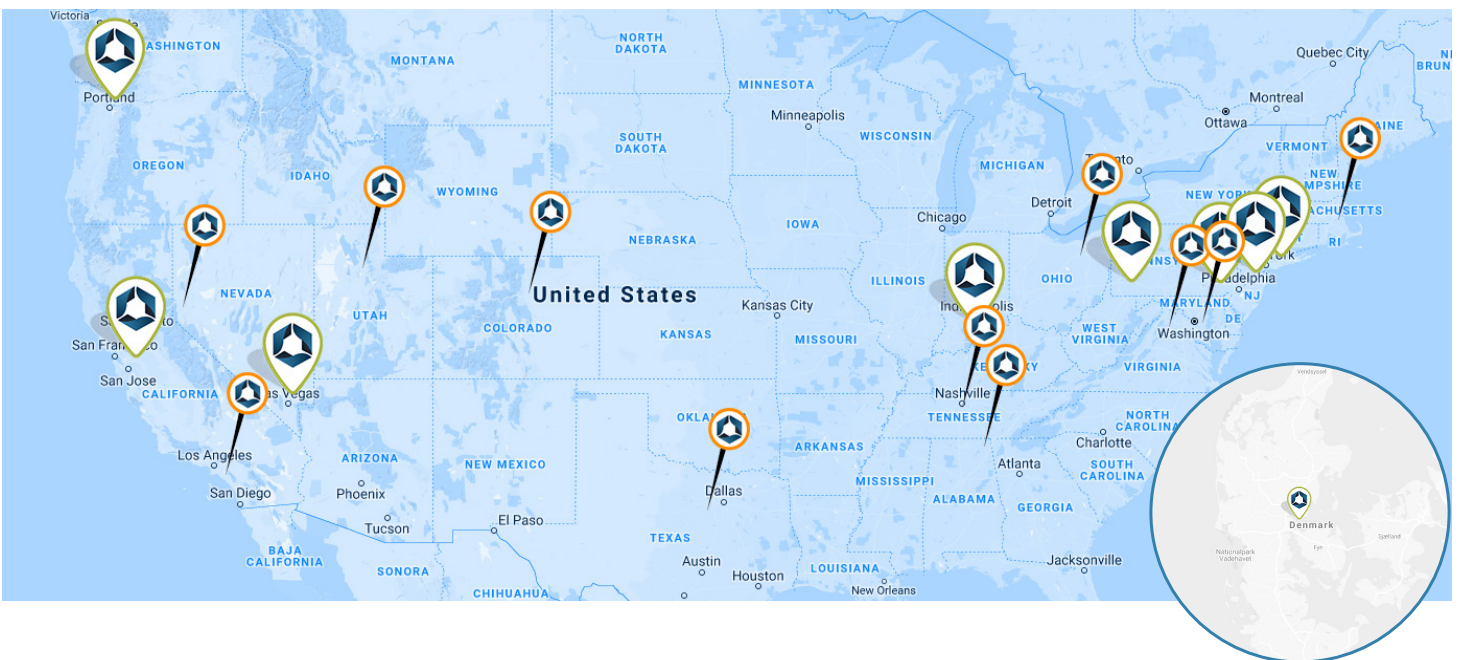
Thermo is constantly expanding, both technologically and geographically, to better serve and support our clients. From our growing number of office locations, Thermo Systems designs and deploys automation projects worldwide.

To arrange a free consultation, schedule a plant tour, or receive a list of references, give us a call at **609.371.3300** or email **sales@thermosystems.com**.