Quickly growing and rapidly evolving cyber security risks and threats demand fast reactions. Automation systems in particular require the highest level of industrial security to protect their highly complex production networks from unauthorized access from untrusted cyber networks (e.g. office or internet).

Our Solution: Automation Firewall Next Generation

With the Automation Firewall Next Generation, Siemens provides a tested and valid standard firewall based on Palo Alto Networks Next Generation Firewalls. This solution is not only a network component with security functions that controls incoming and outgoing network traffic based on defined security rules. It is also a security solution that goes beyond protocols and port inspection of classic firewalls and facilitates data analysis at the application level. This process filters malware out of network-based communication.

Our solution also includes a firewall service to support with engineering, installation and commissioning of the firewall as well as definition and review of the firewall configuration.

Your benefits

- Tested and approved for PCS 7
- Protection against known and unknown threats
- Very good price/performance ratio
- Best in class firewall solution for IT/OT network segmentation based on IEC 62443 zones and conduits model
- Time saving, as many application protocols are integrated as a standard

siemens.com/iss
Palo Alto Networks Next Generation Firewalls

The firewalls are available in different performance categories for various application areas. Siemens recommends the following three appliances:

<table>
<thead>
<tr>
<th>Firewall throughput</th>
<th>Palo Alto 220</th>
<th>Palo Alto 820</th>
<th>Palo Alto 850</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gbps</td>
<td>2 Gbps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use cases</td>
<td>Small automation networks with copper interfaces only (8 x copper)</td>
<td>Mid-size automation networks with copper interfaces (4 + x SFPs) plus (fiber) SFPs optional</td>
<td>Big automation networks with copper interfaces (4 + x SFPs) plus (fiber) SFP(+)s optional</td>
</tr>
</tbody>
</table>

1 measured with App-ID and logging enabled, using 64 KB HTTP transactions

Product features

- Application layer and stateful inspection firewall
- Classifies all applications, on all ports, all the time
- Enforces security policies for any user, at any location
- High availability (active/active and active/passive modes)
- Redundant power input for increased reliability (PA-220 and PA-850)
- Hardened operating system (PanOS is Linux based)
- Capable of inspecting layer 7 traffic such as S7 protocol (detecting: start, stop, read, write) or OPC
- Secure System Architecture

Service and support

Service by Siemens

- Review of plant network layout
- Creation of a Perimeter Firewall concept
- Installation and configuration of perimeter firewall in automation systems
- Documentation of firewall configuration

Support by Palo Alto Networks (3 or 5 years)

- Premium support hours: 24/7
- Next business day shipment for parts and hardware replacement
- Feature releases and software updates, subscription services updates
- Documentation and FAQ, online customer-support portal

Security information

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens’ products and solutions constitute one element of such a concept. For more information about industrial security, please visit siemens.com/industrialsecurity.