



PSE Operator

Electricity company uses AppGate to secure critical systems

Engineering | Secure Application Access & Extranet Security | AppGate



"The AppGate system is relatively easy to use but the key issue is that it is very powerful. It is possible to define so many different profiles for different people with very different needs. We couldn't find any other system that allows us to define such a variety of different profiles for all our different users."

Tomasz Szudejko
Director SCADA/EMS
PSE Operator



Background

PSE Operator is the Transmission System Operator for Poland, responsible for meeting the country's domestic and cross-border demands for electricity. As well as managing and developing the extensive network of power transmission lines and substations across Poland, the company's responsibilities also include the national security of the electricity supply, managing cross-border connections, and operating the power market 'balancing mechanism', buying and selling balancing energy effectively in real-time to balance power flows in the transmission system.

The complex nature of the business means that many user groups need access to PSE Operator's systems and resources: employees, electricity companies/traders, contractors, 3rd party suppliers. To protect the company's mission critical systems and protect the sensitive information being handled on the electricity market, PSE Operator needed powerful yet flexible network security. The company turned to AppGate Network Security for the solution.

Requirements

Access control for a wide range of user groups:

To provision access for a large number of users with diverse requirements, administrators needed to be able to define many individual roles quickly and easily, and have precise control over individual access rights: eg. electricity market players submitting bids to buy/sell electricity; employees using or supporting central control systems; employees needing access to mail and office applications; 3rd party suppliers providing online remote system support and maintenance.

Strong user authentication and encryption:

Unauthorized access to some areas of the network could have potentially

catastrophic results: from manipulation of the energy markets to control of substations leading to blackouts across the country. Therefore all communications needed to be encrypted, and strong user authentication would be required to protect critical systems.

24/7 access: "We needed secure access 24/7", says Tomasz Szudejko, Director for PSE Operator. "SCADA and EMS applications are working 24 hours a day. No downtime is allowed so it is important for our employees at home or after hours to be able to log in and fix any problems – and to be able to do it in a secure way."

Solution

PSE Operator selected Cryptzone's AppGate as it met the full set of requirements, combining strong authentication, authorization, encryption and access control in one comprehensive solution.

AppGate's technology is flexible and scalable making it easy and cost effective for PSE Operator to start with a smaller installation and then add additional servers as requirements changed. Initially one AppGate security server was installed but that has now been upgraded to support increasingly complex requirements. Two clustered Ax2 security servers provide internal access to key systems such as SAP and the energy market. A second cluster provides external access for electricity market traders, and for technical support personnel so they have remote access in case of emergency. A third cluster provides remote access for employees to access the mail server and office applications when working away from the office.

AppGate is designed to cluster several servers together for high availability. Alternative IP addresses for the other clustered servers are automatically distributed to users' machines so, in the event that the usual server is unavailable,

"We work very closely with the AppGate team in Sweden and have found them to be very responsive, for instance when we have needed them to develop additional functionality. We think it's a very flexible, powerful and stable system for the professional and demanding environment. So we would be happy to recommend it."

Tomasz Szudejko
 Director SCADA/EMS
 PSE Operator

connections are immediately routed to the good server. It is also possible to connect two different ISPs to the clustered servers so if one ISP fails then users can still access the network through the other ISP/server.

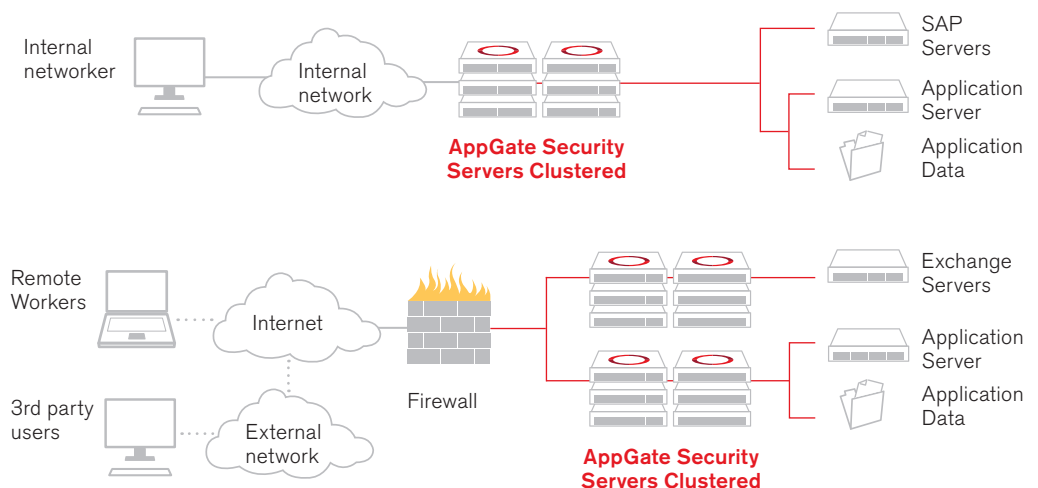
Powerful rules and roles management provides administrators with precise control over which network resources each user can access and under what circumstances. End points can be measured so for example only corporate owned machines can connect to particular applications. Services that the user is not authorized to use are invisible thus making it impossible for them to see or attack other corporate assets. In addition AppGate can automatically configure machines that have never connected to the PSE Operator network before. So if an external trader or supplier uses a different PC, the client is provisioned and configured without having to wait for an administrator's input.

Future

For PSE Operator the goal now is to build a consistent environment across the company and AppGate has been chosen to be the main system for controlling access to important systems. The company's new award winning HQ in Warsaw features new control systems and technologies and the immediate focus will be to integrate AppGate with this new infrastructure, as well as provisioning secure access for any remaining areas of the business not currently using AppGate eg. branch offices that need access to data exchange, mail and other applications.

Key benefits

- Secure encrypted communications end-to-end as standard
- Support for two-factor authentication
- Powerful and flexible controls for managing profiles for many users with very different needs, and granular control over which network resources each user can access
- Secure remote access enabling key users to have 24/7 access to key systems and applications from any location
- Flexibility and scalability ensuring easy integration with existing infrastructure and ability to support business needs as they change
- User friendly interface so users can access applications easily and quickly, and need little training and support



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Cryptzone solutions mitigate information security risks in the key areas of Policy Compliance, Content Security, Secure Access and Endpoint Security.

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