

Use Case: Connected Pharmaceutical Factory/IoT Edge

Situation

A pharmaceutical manufacturer upgraded its connected factories as part of an overall digital transformation strategy. This upgrade enabled the organization to operate as a predictive plant of the future and increase visibility across its supply chain.

While upgrading its systems the organization has adopted a Microsoft Azure IoT Edge Gateway infrastructure that requires a robust and automated Identity Lifecycle Management solution utilizing x.509 Certificates to provide device and data protection. This presents unique challenges in connecting both online and offline Edge devices in a nested parent-child configuration up to the cloud.

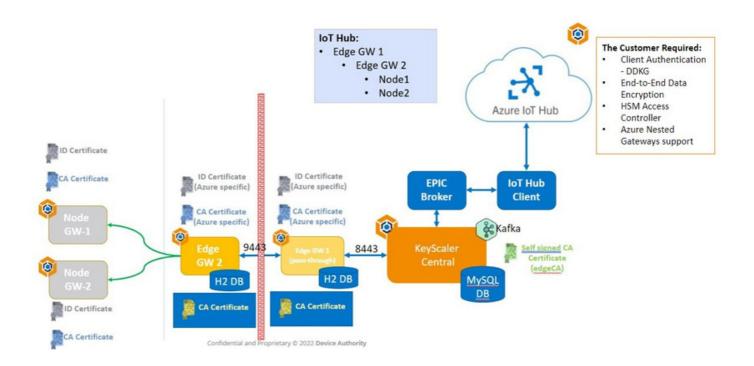
Solution

Device Authority KeyScaler is used to provide:

- Dynamic Device Key Generation (DDKG) is used to establish device root of trust and enable Automated Device Provisioning into the cloud
- KeyScaler PKI Services for IoT integrates with existing corporate PKI utilizing x.509 Certificates
- KeyScaler Edge provides full Identity Lifecycle Management for multi-layer IoT Edge Nested Gateways and leaf devices enabling offline devices to integrate with the overall network
- KeyScaler Security Suite for Microsoft Azure automates device registrations with Azure IoT Hub and provides additional integrations with important Azure services
- The ability to keep devices offline while securely reporting critical device data to the cloud supports
 the customer's commitment to the Purdue Manufacturing model while still allowing them to realize
 the benefits of IoT



Industrial IoT: Connected Pharmaceutical Factory/IoT Edge



Conclusion

Overall the organization was able to take advantage of KeyScaler's pre-built integrations to the Microsoft Azure IoT platform and with their existing enterprise PKI platform, giving them faster time to value.

The implementation of KeyScaler streamlined device security by automatically provisioning secure identities, enabling a Zero Trust framework for their IoT infrastructure, unifying IT/OT security policy.

These updates improved operational efficiencies, eliminating manual processes and reducing administrative burden, thereby freeing up internal FTEs to handle other essential duties.

KeyScaler's automation helps prevent compromise and speeds incident response, minimizing customer disruption, protecting brand reputation, and reducing potential liability.

Finally, these upgrades also help the organization to easily stay compliant with changing industry regulations and achieve greater visibility across their manufacturing supply chain.



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