VYKON

by TRIDIUM

niagara 4.15

FEATURES OVERVIEW

AGENDA

01 Niagara 4.15 Overview

02 Deployment

03 Interoperability

04 Connectivity

05 Cyber Defense

06 Compliance

niagara 4.15

ALWAYS EVOLVING ACROSS FIVE DIMENSIONS

DEPLOYMENT

- HTML5 Px Editor
- HTML5 Relation Manager
- JACE-9000 WiFi Support
- Access Control Badge Printing

INTEROPERABILITY

- Driver Updates | Modbus, Mbus, OPC-UA, SNMP, BACnet

CONNECTIVITY

- Fox over WebSocket
- kitControl Refresh
- Niagara Access

CYBER DEFENSE

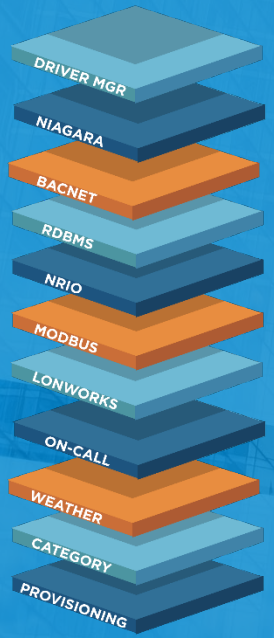
- CAC Authenticator Support (Browser)
- User Login History
- Encrypted Hashed Passwords

COMPLIANCE

- BACnet Protocol Revision 18
- QNX 7.1 Upgrade for JACE-8000 + Edge-10

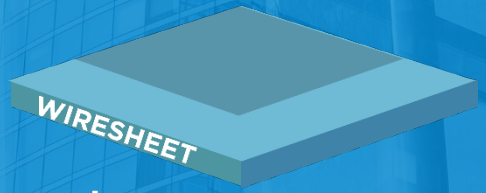
VYKON by TRIDIUM

NEW HTML5 WEB VIEWS



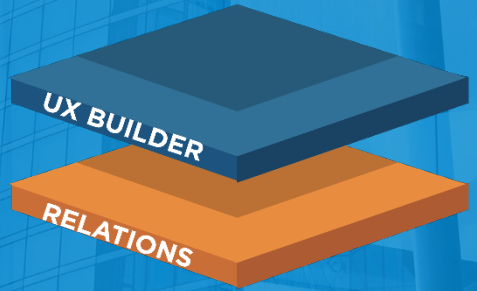
niagara 4.14

+



niagara 4.15

+



niagara remote™

=

A Significant Step-Up in

DEPLOYMENT EASE

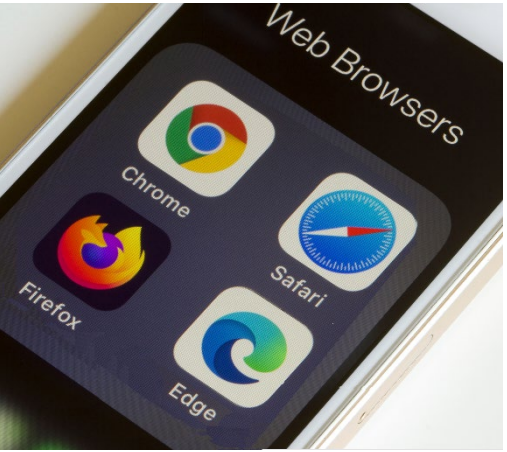
DATA MANAGEMENT & VISUALIZATION

INTEROPERABILITY & CONNECTIVITY

VYKON by TRIDIUM

niagara cloud SUITE™

niagara remote™



DO MORE REMOTELY!

4.15's new HTML5 Web Views expand what can be done remotely through a browser, strengthening the value proposition of a Niagara Remote subscription.

- **Troubleshoot a Niagara deployment**
- **Do regular engineering and maintenance work**
- **Check the status of Niagara stations across a Niagara-based network**
- **Design/edit Graphics and UI**
- **Do regular engineering and maintenance work**

No additional hardware, gateways or VPNs needed!

Payback measured in fewer truck rolls!

VYKON by TRIDIUM


Any *Tech*, Any Station, Anywhere...
niagara
remote™
No Added
GATEWAY
No VPN

DEPLOYMENT EASE/ FLEXIBILITY

MORE HTML5 WEB VIEWS

Engineer Niagara Stations through a web browser client.
Save Time!

Brand Agnostic

Client Version Agnostic

Connect via IT-Friendly HTTPS

VYKON by TRIDIUM

HTML5 PX EDITOR

Create and edit graphics through the browser. UI Design no longer requires Workbench. NextGen UI/UX Builder

HTML5 Graphics Editor

Create and Edit Graphic Pages

VYKON by TRIDIUM

HTML5 PX EDITOR

Enables editing graphics and designing custom GUIs remotely.

VYKON by TRIDIUM

HTML5 RELATION MANAGER

Define relationships through the browser. Relationship tagging no longer requires Workbench.

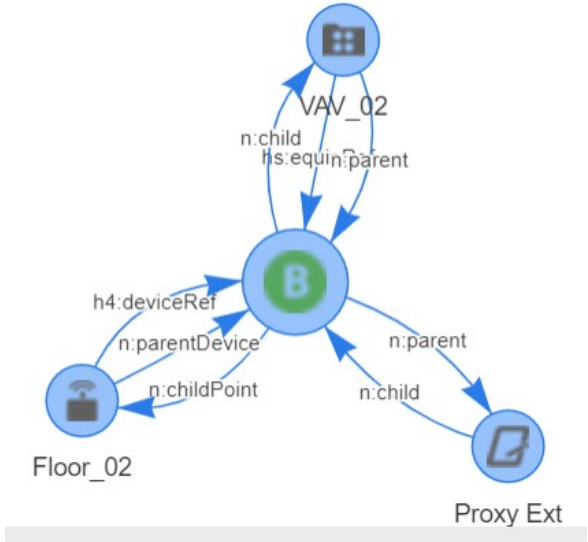
HTML Relation Sheet

View, create, edit, and delete relations

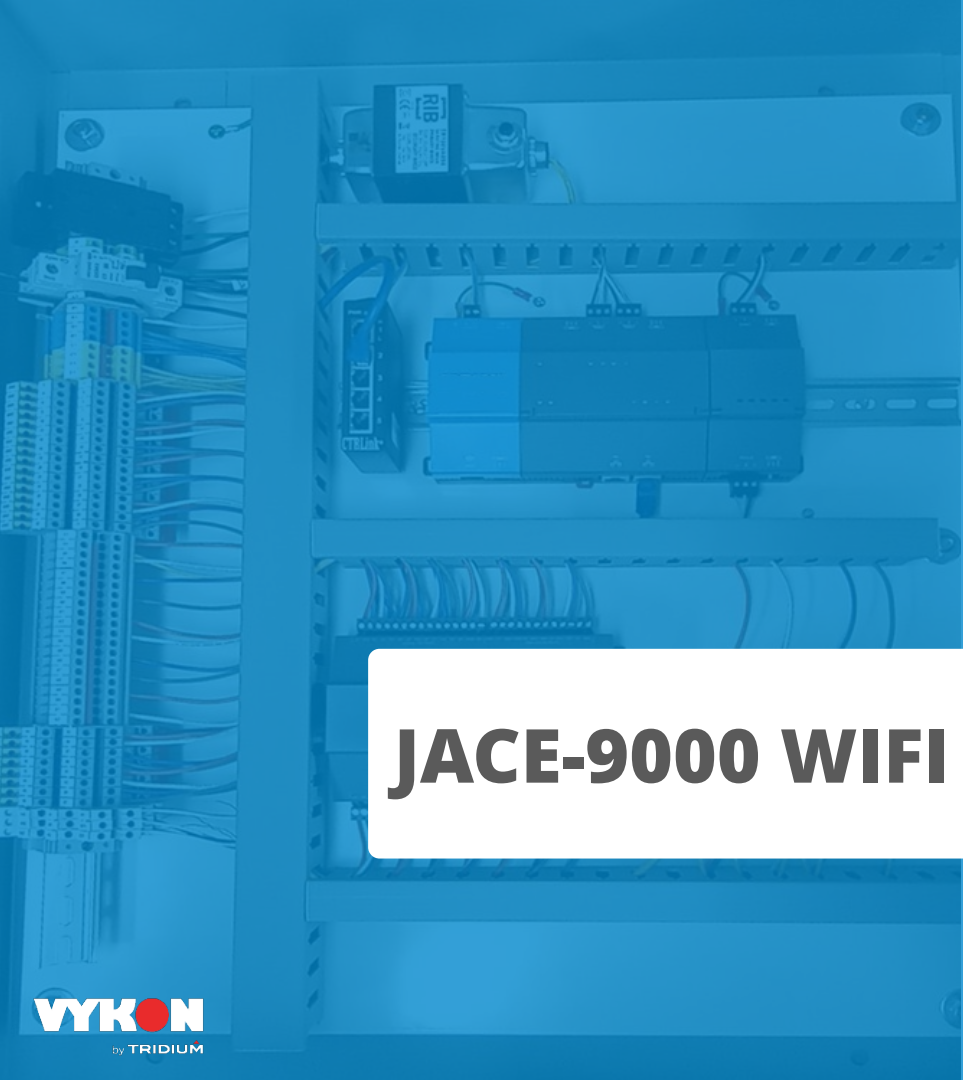
VYKON by TRIDIUM

HTML5 RELATION MANAGER

Relation Manager Web View enables defining relationships remotely.



VYKON by TRIDIUM



JACE-9000 WIFI SUPPORT

Now You Can Order WiFi-Enabled JACE 9000!

VYKON by TRIDIUM

JACE 9000 WiFi

niagara 4.15

- **Supports WiFi 5 (802.11ac)**
- **Supports IEEE 802.11a/b/g/n/ac networks**

VYKON by TRIDIUM

ACCESS CONTROL TRANSFORMS WITH NIAGARA 4.15

VYKON by TRIDIUM

ACCESS CONTROL UPDATE

niagara access™ is now in beta!

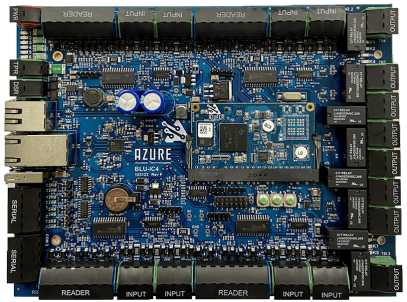
- **Niagara Access™ is a powerful access control solution supporting the latest innovations in physical security and access control.**
  - ***New access control solution for Niagara***
- **4.15 Adds Native Badge Design**
  - **Users can now create card templates in Workbench, take or import photos, and print customized badges from Niagara Access™ Supervisor with browser access.**

Your unified platform to integrate access control with BMS!

VYKON by TRIDIUM

NIAGARA ACCESS™

- Built on an open framework
- Supports integration with multiple 3rd party Open Supervised Device Protocol (OSDP-verified) access control hardware
- TCP/IP smart controllers with multiple options (1 door, 2 doors, 4 doors)
- 12 VDC
- POE
- Connectivity
  - Ethernet
  - Wi-Fi
- Support OSDP & Weigand Protocols
- Support Multi-class readers
- Native badge design



...and many more Hardware Options. Learn more in the Connectivity Section of this presentation.

VYKON by TRIDIUM

INTEROPERABILITY ENHANCEMENTS

VYKON by TRIDIUM

MODBUS UPDATE

Ping more than 2 registers at a time when addressing Modbus devices

- **Latest Modbus meters have data types that call for addressing 4 registers at a time**
- **Support for a 48-bit unsigned long data type was added and factored**

VYKON by TRIDIUM

OPC-UA UPDATE

- **Added bi-Direction point types for OPC UA Server enabling actions on server points**
  - **One point manages both incoming and outgoing data values (i.e. bi-directional)**
- **Enhancements to support OPC UA Client Arrays in a nested structure when discovering OPC points**

Integrate more easily with one of the most basic and familiar protocols used in industrial automation.

VYKON by TRIDIUM

Integrate more easily with one of the most basic and familiar protocols used in data centers.

SNMP UPDATE

- Ability to configure an export type for SNMP export folders.
  - For example, if the user exports as the integer type, the backing SNMP type will also be an integer.
- An "Index Value" column has been added to the SNMP table view. This includes displaying both the OID representation of a row as well as the index of the row in the order of other rows in the table.

VYKON by TRIDIUM

ASHRAE Standard 135 open communication protocol of choice for field devices

BACNET REVISION 18

Implementing the Revision 18 continues the progress towards the most recent revision and adds additional features requested from BACnet focused markets:

- **Value Source – view the source device or process of a write or command on BACnet writable points**
- **Network Port Object – allows users to view and configure the BACnet device's network settings through Niagara**

CONNECTIVITY ENHANCEMENTS AND UPDATES

VYKON by TRIDIUM

Niagara Access™ is built on an open framework by Z9 Security. Integrates with multiple OSDP-verified access control vendors.

OSDP™

niagara access™ will support:

- OSDP & Wiegand Protocols
- Multi-class card readers
- Multiple TCP/IP smart controllers with PoE, Onboard-IO, Wi-Fi and Ethernet connectivity

VYKON by TRIDIUM

The Open Supervised Device Protocol (OSDP) is an access control communication standard further developed by the Security Industry Association (SIA) to facilitate secure communication between access control systems.

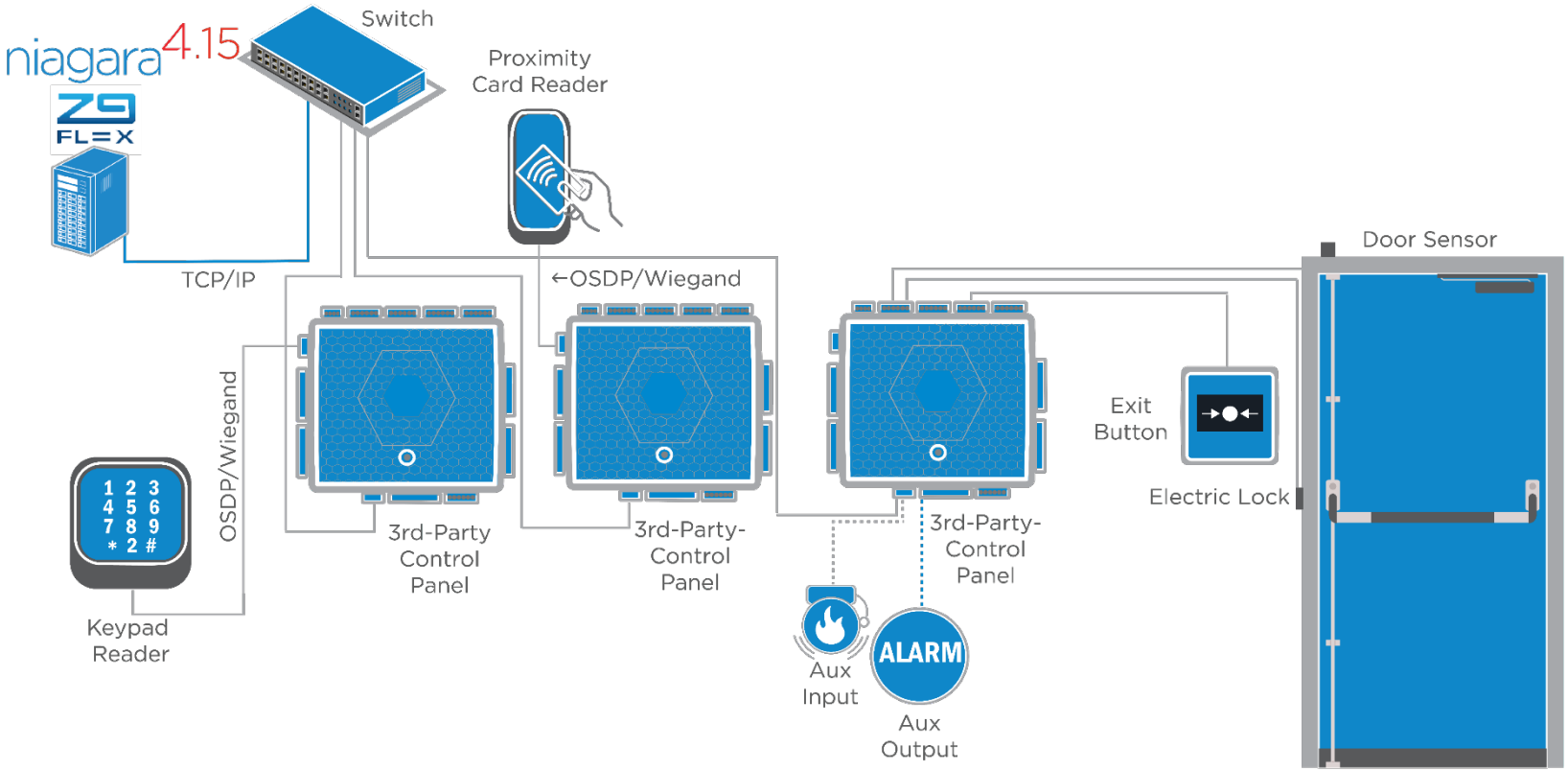
In 2008, the Open Supervised Device Protocol (OSDP) access control communications standard was created to improve interoperability among access control and security products and donated to the Security Industry Association (SIA), a not-for-profit trade organization.

In May 2020, OSDP was approved as an international standard by the International Electrotechnical Commission (IEC 60839-11-5). In December of the same year, SIA OSDP v2.2 was released based on the IEC 60839-11-5 standard. SIA continues to refine and update the standard to maintain maximum flexibility and to keep ahead of evolving security threats.

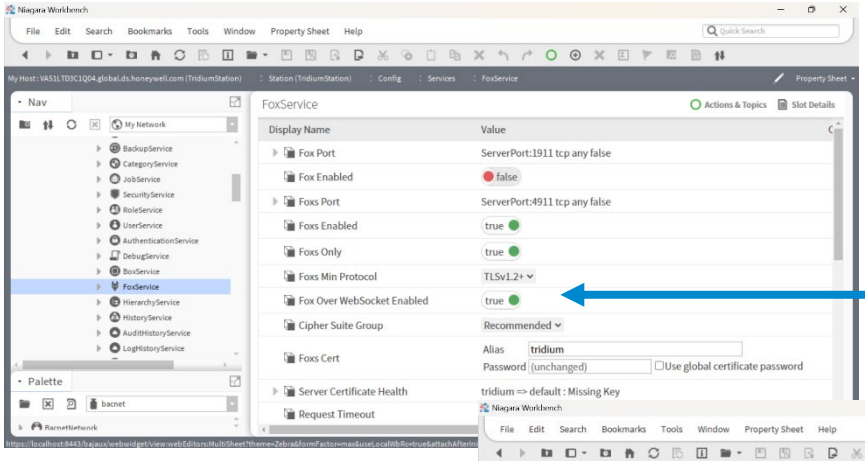
OSDP MANUFACTURERS

Armatura
Global Solutions

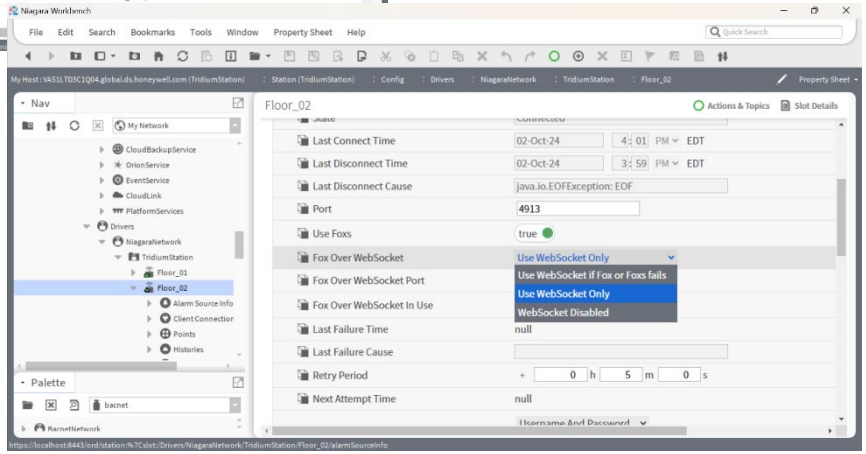
EXAMPLE NETWORK ARCHITECTURE



FOX OVER WEBSOCKET



New Client Connection Property in the Fox Service

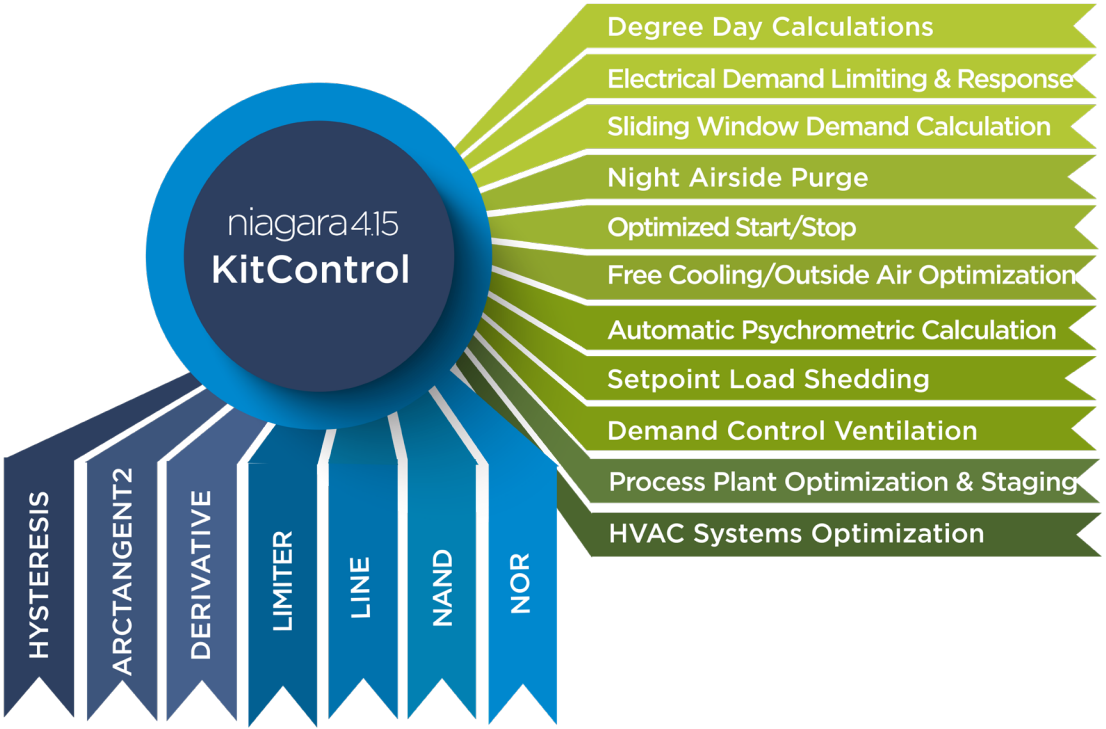


Fox over WebSocket is a new option for Station-to-Station connections when Foxs is not available.

For use when IT restricts ports 1911 and 4911.

VYKON by TRIDIUM

ADDITIONAL KITCONTROL OBJECTS



New AHSRAE 231p CDL Standard Elementary Blocks

VYKON Blocks by TRIDIUM

DOE-led Control Design Language (CDL) Initiative

OpenBuildingControl

U.S. DEPARTMENT OF ENERGY
Office of Energy Efficiency & Renewable Energy

Aligns with ASHRAE 231p

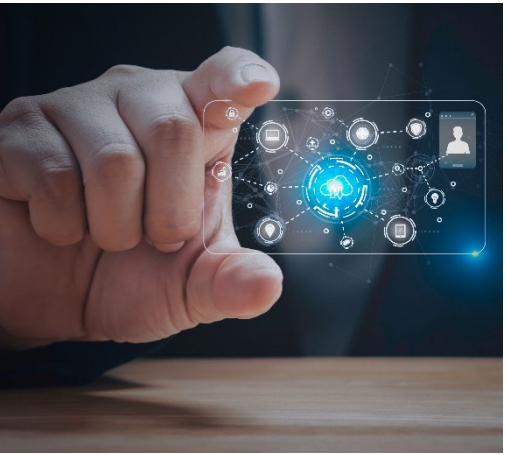
Goal = a unified CDL for Building Environmental Control Sequences

CYBER DEFENCE UPGRADES

VYKON by TRIDIUM

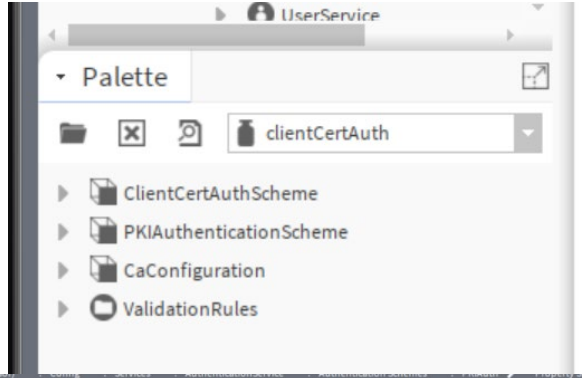
PKI AUTHENTICATION FOR BROWSER

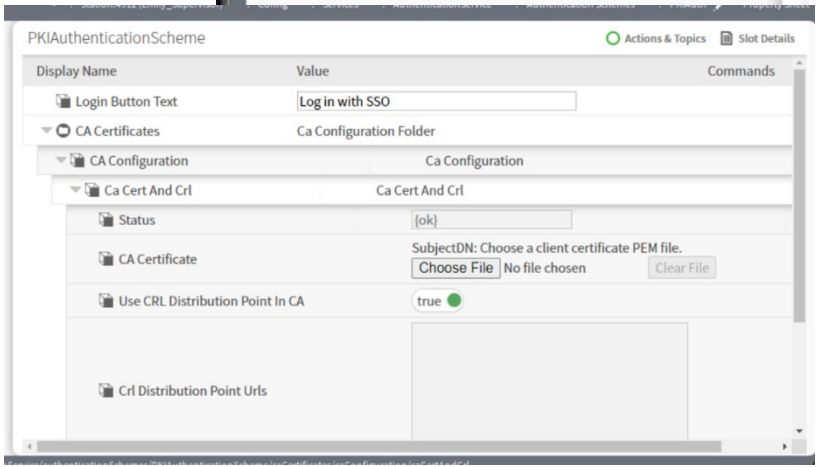
Authenticate With Common Access Card when accessing Niagara through a browser!



New ClientCertAuth Scheme:

Simplifies authentication process for organizations (such as government org's) who utilize PKI-based authentication

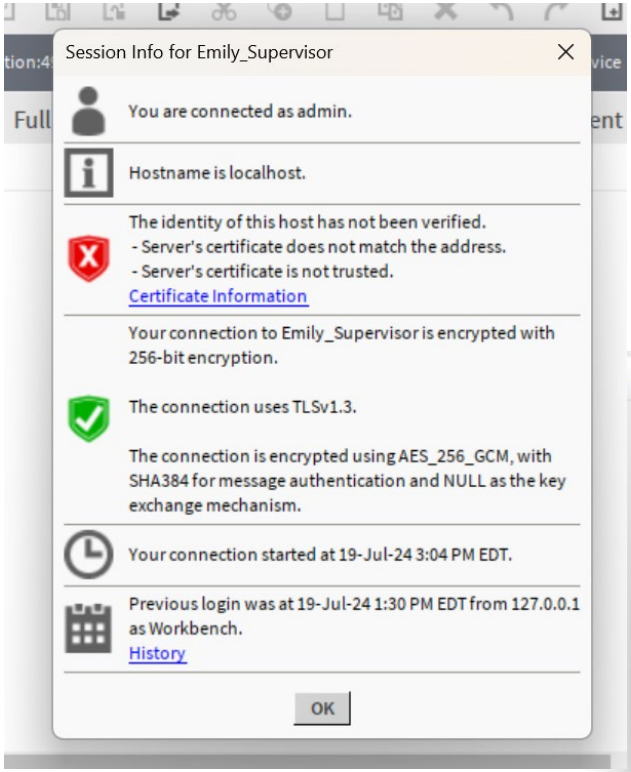




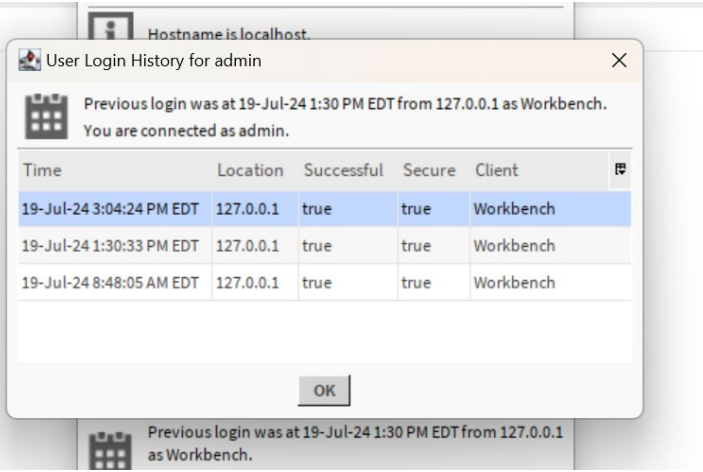
VYKON by TRIDIUM

USER LOGIN HISTORY

Now users can check their login history for both the platform and the station.



Users can ensure that they recognize all logins to their account, helping detect potential attacks on the system.



VYKON by TRIDIUM

ENCRYPTING HASHED PASSWORDS

- **Passwords in the bog file will be encrypted, salted, and hashed**
- **Users will need to use the passphrase and station copier to successfully keep user passwords functional**

No longer can users gain access to a Niagara station via unprotected offline bog file.

VYKON by TRIDIUM

COMPLIANCE UPGRADES

VYKON by TRIDIUM

BACNET TEST LABS CERTIFICATION

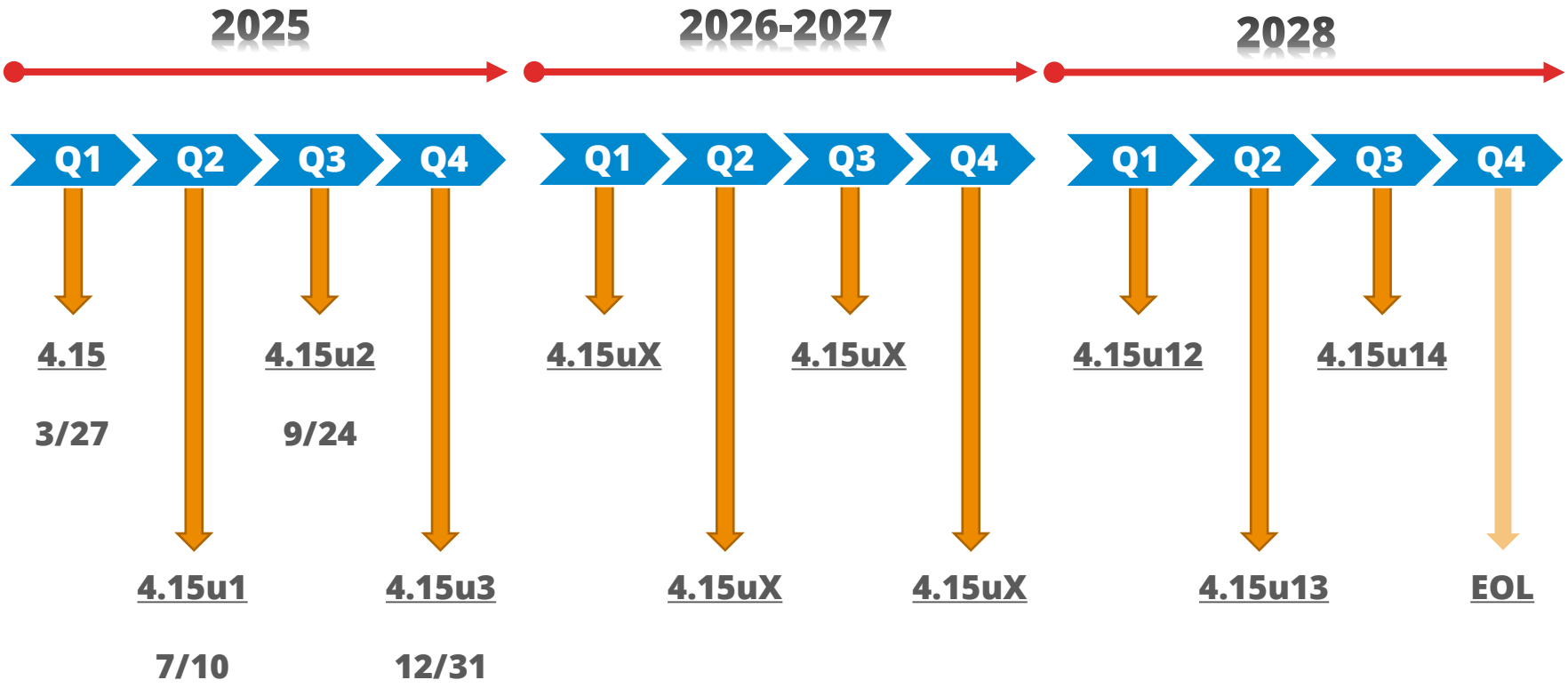
ASHRAE Standard 135 open communication protocol of choice for field devices

BACnet International

- **B-BC Profile for Jace 9000, & Jace 8000**
  - **with BACnet Secure Connect link layer!**
- **AWS Profile for Supervisors**
- **Protocol Revision 18 Certification Testing Coming Soon**

VYKON by TRIDIUM

4.15 – UPDATE BUILD CADENCE & DATES



VYKON by TRIDIUM