Niagara 4
The Next-Generation Open Platform
Agenda

• Niagara 4 overview
• Niagara AX-Niagara 4 compatibility
• Software maintenance (SMA)
• Licensing
• Get started!
• Q&A
Cutting-edge user interface

Find, visualize data to maximize building efficiency

Shorter integration time

Easily create secure systems

Improved developer experience
User interface

UX framework

• Modern design language
  - Clean and crisp
  - Deliberate use of color

• HTML5 technology
  - Common end user views
  - No browser plug-in required
User interface

Mobile

- Common design language
- Unified experience between desktop, tablet and phone

- HTML5 technology
  No native app required
User interface

SVG Graphics Library
User interface
SVG Graphics Library
User interface

SVG Graphics Library
Find and visualize data

Tagging and search

• Quickly search for data using tags
• Drag ‘n’ drop data into other views
• Supports any dictionary
  – Niagara entities implicitly tagged
  – Multiple dictionaries allowed
  – Create custom dictionaries
• Supports relationships between tags

Niagara search pane
Find and visualize data

Navigation

• Navigation hierarchy based on tags
  - Tag relationships define structure
  - Multiple hierarchies to match user role
• Devices / points auto-populate
Find and visualize data

Dashboards

• Drag ‘n’ drop data onto dashboard in real time
• Supports web browser as a widget
• Users can save custom dashboards to view later
Find and visualize data

Charts

- Drag ‘n’ drop data onto charts
- Easily compare multiple points
- Point status visible on chart
- Save charts for later use
- Data cleanser for handling bad data
Faster integrations

Workbench improvements

- Re-designed property sheet
- Integrated search
- Fewer clicks; more intuitive dialogs
- Important data stands out
Faster integrations

Templates

- Create templates for common integrations
  - Tags, graphics and logic can be embedded in templates
- Deploy templates to save time
  - Template configuration wizard
  - External links suggested based on tags
Security: new features

- Tridium module code signing
  - Verify module author and that code hasn’t been altered or corrupted
- Role-based access control
  - Manage user roles and permissions with tags
Extensible platform

Developer support

- UX framework based on open web technology
  - HTML5, CSS3, JSON, etc.
  - BajaScript v2.0
- Improved public APIs
- Historian DB API
- Queryable tags enables app community
- Improved documentation and examples:
# Niagara 4 Features Summary

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<th>Features</th>
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<td><strong>UI / visualization enhancements</strong></td>
<td>• Move away from JAVA applet – convert key end user views</td>
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<td>• Hierarchical navigation (via tags)</td>
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<td></td>
<td>• New UX framework (HTML5) and design language</td>
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<td>• Workbench workflow improvements</td>
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<td>• Improve UI developer experience (BajaScript v2.0)</td>
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<td>• Advanced charting</td>
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<td>• Local Niagara station search/queries</td>
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<td><strong>Niagara AX migration</strong></td>
<td>• Station migration tool</td>
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JACE is a registered trademark of Tridium Inc.
Niagara AX-Niagara 4 compatibility

- **Network compatibility**
  - Systems can have mix of Niagara AX and Niagara 4 JACE® controllers
  - Niagara network will work between Niagara AX and Niagara 4
    - v3.6u4, v3.7u1, v3.8R required

- **Station conversion tool**
  - Tridium will offer tool to convert Niagara AX stations to Niagara 4 stations
  - 3rd party modules can be converted when vendors provide Niagara 4 versions of their content
  - Converted stations may not work without updated 3rd party modules

- **Developer APIs**
  - Rare opportunity to make breaking changes to Niagara APIs
  - Developers will have to re-compile/re-factor their modules for Niagara 4
  - Most modules will only require minor re-factor for developers
  - N-driver driver framework supported – older driver frameworks deprecated

- **Hardware**
  - Runs on any JACE w/ hotspot VM (J3E, J6, J6E, J7)
  - Runs on the JACE 8000
Niagara AX to Niagara 4 upgrade path
Software maintenance

Program summary
• 18 months required with every license (additional years can also be purchased up front)
• Gap charges apply if SMA purchases after expiration (5-year max)
• All update builds, patches and upgrades are provided as part of SMA

Value propositions
• Many end users explicitly ask for a maintenance program to reduce risk
• Distributors no longer worry about out-of-date versions sitting in stock
• System integrators can add SMA to service programs – additional value

Support period for Niagara AX
• Standard release: 4 years from release
• Long-term release: 7 years from release
• Niagara AX v3.8 is designated a long-term release
• Tech support available until product EOL
Simple capacity-based licensing

Niagara AX portfolio: 3 hardware platforms

- JACE 7 (~200 devices)
- JACE 6E+Mem (~80 dev)
- JACE 6E (~40 dev)
- JACE 3E+Mem (~20 dev)
- JACE 3E (~10 dev)

Drivers: Ad hoc
- BACnet
- Modbus
- LON
- KNX
- SNMP
- CCN

Niagara 4 portfolio: 1 hardware platform: JACE® 8000

Software license

- 8200 (200 devices)
- 8100 (100 devices)
- 8025 (25 devices)
- 8010 (10 devices)
- 8005 (5 devices)

Software license

50 points per device

Drivers: Standard included
- BACnet
- Modbus
- LON
- KNX
- SNMP
- CCN

Drivers: Special – Ad hoc

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Niagara 4: The Next-Generation Open Platform
Simple capacity-based licensing

Niagara AX portfolio: *Ad hoc drivers*
- Supervisor-UNL
- Supervisor-100
- Supervisor-3
- SoftJace
- WorkBench

Drivers:
- BACnet
- LON
- Modbus
- KNX
- SNMP
- DB drivers

Niagara 4 portfolio: *Consistent capacity packs*
- Supervisor-UNL
- Supervisor-100
- Supervisor-10
- Supervisor-3
- Supervisor-2
- Supervisor-1
- Supervisor-0

Drivers:
- BACnet
- LON
- Modbus
- KNX
- SNMP
- DB drivers
- Special IP – Ad hoc
  - 10, 25, 50, 100 device packs (50pts / device)

Add JACEs or devices as needed

Device managed

TridiumTalk
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Getting started

Several options for Niagara 4 certification training

• **Niagara AX certified**
Niagara 4 Cross-Over Web-based training and certification course; self-paced, completed online anytime, anywhere

• **New users or not certified**
Niagara 4 Technical Certification Program (TCP); 5-day, instructor-led program offered worldwide this fall

• **Coming Soon:**
N4 Cross-Over for Developers
Niagara 4 Developer Training and Certification for those who are Niagara AX certified. Focuses on new, improved Niagara 4 capabilities

Niagara Developer Training
Developer Training for new developers

www.tridiumuniversity.com
Thank You!

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