TRiD!UM® TALK

Selling

Powered by @niagara FRAMEWORK™
Basics
Value
Next Steps
Basics
Value
Next Steps
Terms

“The Tridium”

Niagra
JACE
Java Application Control Engine
Tridium = Company
Niagara Framework = Technology
JACE Controller = Java application control engine
So What is IT?
So What is IT?

Universal Building Automation Software that integrates building systems and enterprise applications into one automation infrastructure for daily operation, maintenance, and engineering.
The Niagara Framework - connects:

- Multiple systems
  - HVAC, Energy, Security, Laboratory, Lighting, Electrical, Plumbing, Irrigation, Access, Enterprise, CMMS
- Multiple protocols
  - LON, BACnet, Modbus, Legacy, Databases, etc.
- Multiple products
  - JCI, Honeywell, Siemens, TAC, Andover, and many others

So What is IT?
Adopted by major equipment and control systems providers
Value Proposition

The Problem

- Integration of disparate legacy systems
- Access to obscure data
- New complimentary distribution model
- Niagara Community

The Solution
The “JACE”
Java Application Control Engine

2 Ethernet Ports

RS485  RS232

Analog and Digital Input / Output

Expandable Communication Cards

• Web Server
• Building Control
  ✓ Schedule
  ✓ Alarm
  ✓ Set Point Control
• Equipment Control
  ✓ Sequence of Operations
  ✓ Programmable

• Networkable
  ✓ Legacy Drivers
  ✓ New Data Formats
  ✓ Niagara Network
“The answer is Yes, what’s the question?”
Basics

Value

Next Steps
Adding Value

Benefits are not real unless the customer perceives value.
Your value must be RELEVANT to your buyer and it must be an exclusive (meaning only you offer it) value-ADD.
One Customer
Many Stake Holders
Many Roles

Title
• Maintenance
• Engineering & Projects
• Facility Manager(s)
• Safety Director
• IT Director
• Energy Manager
• VP Facilities
• CTO
• CFO
• CEO

Customer Role
• Problem/Issue Owner
• Solution Provider
• Budget Holder
• Technology Influence
• Sponsor
• Decision Voter
• Possible Negative
Value is in the eye of the buyer, not the seller

What you think has value, may not have *relevant* value to the buyer.

Buyers assume value is a given...what they really want is VALUE-ADD.

Look for things you offer that add exclusive, yet relevant value, but are included in your price. Make those value-add things a tangible part of your messaging!
Leverage Technology & Value

Card Access, Event Scheduling

Weather, Leaks

Weather, Demand Response

Pilferage, Food Safety

Vandalism, Leaks
San Francisco Public Utilities Commission

- LEED Platinum
- Exterior sun shades
- Natural ventilation with the use of operable windows
- Wind turbines along the façade
- Three roof top solar platforms with 684 panels
- 45% daylight harvesting
- Living machine wastewater recycling for flushing use
- Rain harvesting for irrigation

*uses 55% percent less energy and consumes 32% less electrical demand than the ASHRAE baseline standard.*
13,500 Points
450 Dashboards
Rain harvesting for irrigation
Elevator Monitoring
Waste Water Treatment System
Direct Digital Controls
Digital Network Lighting Controls
Power Monitoring and Control System
Fire Alarm and Detection System
Solar Energy Collector Metering
Wind Energy Power Generator Metering
Interior & Exterior Shade Control System
Weather Station Monitoring System
Window Washing System
Water Reclamation

- Public information & Education
- Demand Response
- Alarm management
- Building Analytics
C-Store, QSR

Benefits

• Energy & Operational Savings
• Reduced Equipment Downtime
• Reduced Risks
• Better Customer Experience
• Higher Profits
Use Your Facility as a Selling and Learning Lab
Energy & Emissions Dashboard

**Today**
- Live Kwh: 24.7 kW
- Kwh Today: 213.7 kW-hr

**Week to Date**
- Total: 914.4 Kwh

**Month to Date**
- Total: 798.1 Kwh

**Year to Date**
- Total: 33211.3 Kwh

**15-Min Demand**
- 15-Min Demand: 26.8 kW
- Active Co2 Emissions: 33.3 lb/hr

**Normalized Consumption Data**

**EMISSIONS DATA**

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<th>Acres of Forest Required</th>
<th>Urban Trees Required</th>
<th>Gal. of Gasoline</th>
<th>Miles Driven</th>
<th>Barrels of Oil</th>
<th>Train Cars of Coal</th>
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<td>476.2</td>
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<td>63.8</td>
<td>1755.9</td>
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<td><strong>This Year</strong></td>
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<td>2656.9</td>
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Basics
Value
Next Steps
Energy/Data Center Infrastructure Management

Segment Growth*

- Large Internal
  - 7.7% CAGR (No. of Data Centers)
  - 3.4% CAGR (Sq. Ft. Growth)

- Large Service Providers
  - 22.2% CAGR (No. of Data Centers)
  - 12.5% CAGR (Sq. Ft. Growth)

The Problem

-need for integration between multiple disparate systems
- large energy spend driving need for high-value applications

Value Proposition

Niagara integrates disparate, best of breed solutions using open and legacy protocols to provide best-in-class data availability and energy efficiency.

- Need for integration between multiple disparate systems
- Large energy spend driving need for high-value applications

Competitors

- Liebert – Site Scan
- Eaton – Foreseer
- Andover
- APC

*IDC US Data Center 2012-2016 Forecast #237070 Volume 1
Energy / Data Center –

- **The Problem**
  - Integration of disparate computer room environmental systems combined with facilities systems.
    - Alarm & Threat Management
    - Remote Monitoring
    - Multi-site Integration
    - Complex Thermal Management
    - Physical Access Security

- Data Centers are expected to expand 100MM sq. ft. in the US by 2016.

- **Segment Trends**
  - **Large Data Centers** Public and Private Clouds and smaller facilities are being consolidated:
    - 12% CAGR
    - Energy spend -10% of DC TCO
    - 53% not focused on energy usage

- **Where We Play Today**
  - A national bank, chose Niagara when they needed a solution to manage their DC. They needed a flexible solution that would manage Best-of-Breed components:
    - Computer room cooling management
    - Remote IT system monitoring
    - Power system monitoring and management
  - A Niagara systems integrator, has built advanced control and monitoring solutions by working with equipment in and outside of the compute environment.
  - A Data Center designer and services provider, has built a Data Center Infrastructure Management (DCIM) package using Niagara:
    - Energy analytics
    - Infrastructure management
    - Remote power and cooling management

Key decision makers:
- DC designers
- Commissioning agents
- Construction firms
- Professional Services
Software Maintenance

• A reason to go back to your customers
• IT Executives want their infrastructure up to date
  – Security
  – Technology
  – Latest OS Compliance
  – Consistency across the enterprise

• Niagara Software Maintenance
  – New scalable model
  – Volume and multi-year programs

• Working on adding new IT requested features
  – Documentation
  – Online help
  – Forums
Next Generation Investments for Building Automation

**NEXT GENERATION SOFTWARE**
- Scalability
  - Scale up to cloud and down to device
- Usability
  - Improved workflows
  - User interface
- Device Management
- Maintainability
  - Niagara Central refresh
  - Easier commissioning
  - Standard Software Maintenance
- Application marketplace

**NEXT GENERATION HARDWARE**
- Optimized for Niagara 4
- Modular
- Flexible architecture for future development
- Improved installation experience
  - Faster installation time
  - Easier licensing

[Image of Niagara 4]
Resources

Welcome To Niagara Central

• Tridium Team
  – Sales Support
  – Speakers Bureau

• Niagara Central
  – Forums
  – Knowledge Base
  – IT Security and Hardening Guides
  – Guide Specification

• Web Site
  – Library
  – Case Studies
  – Axdemo.tridium.com
  – Tridium Talk Archive

Niagara Software
Access the latest build of the Niagara Framework and download the latest software updates. Stay up to date with version documentation available.

Niagara Community
Join your fellow Niagara Framework practitioners and share ideas, solve problems and gather support. Joining the forums puts the wealth of knowledge that is the Niagara Community at your fingertips.

Niagara Licensing
Managing your licenses, whether updating, renewing or adding options, is just a click away. Log in to review the current status of your licenses.

Mark Your Calendar
Hold the date for the largest gathering of the Niagara Community in 2014 as it returns to Las Vegas, NV. The 2014 Niagara Summit will be held at the Cosmopolitan of Las Vegas, April 27 – 29, 2014. Join Tridium and your fellow members of the Niagara Community as we share ideas, connect with colleagues and meet new ones at the premier event dedicated to all things Niagara Framework.

Latest News
Tridium maintains a list of Tridium developed and third party developed drivers. This document provides a wealth of information on different drivers that work with Niagara AX, including version numbers, platform and connection type.

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