

NOLIMITS

Object-Oriented, Distributed Control

Web-enabled

Standardized, Open System

Multi-Platform

Multi-Operating System

Compatible with Multiple Device Protocols

Plug-and-Play Interoperability

Real-Time Access & Control

Integrate Heterogeneous Devices

Scalable

• *Powered by*
n *niagara*
FRAMEWORK™

*A fully Internet-enabled distributed infrastructure for
real-time access, automation and control of embedded devices.*

Now there's one automation infrastructure for all your embedded control devices.



The revolutionary Niagara Framework™ is here. And with it, you now have a single, standardized infrastructure that unleashes the power of the embedded, "smart" automation devices housed within your control systems.

The Niagara Framework establishes a fully Internet-enabled, distributed architecture for real-time access, automation and control of embedded devices. Whether you're controlling homes, buildings, energy or industrial processes, Niagara ties both new and legacy system components together, regardless of manufacturer, platform or operating system, into a common control system. Now you can select the best devices for your application and, regardless of the manufacturer, you can efficiently and cost effectively integrate them into legacy systems to optimize your control system investment and results.

Plug-and-Play, Object-Oriented Architecture

The foundation of Tridium's patent-pending Niagara Framework technology is its enhanced JavaBean™ object modeling. Object modeling creates a powerful architecture that alleviates the need for gateways. By converting devices into software "objects" for constructing applications, Niagara can talk to smart devices using their native protocol and respective networks, regardless of make, model and manufacturer. Niagara integrates these devices so you can read real-time data, send commands to the device, and utilize programming tools to reconfigure and reprogram them easily and inexpensively.

Platform and Operating System Neutral

The Framework operates on a wide variety of hardware platforms from low-cost controllers to high-end workstations, NT servers, PCs, Tridium JACE™ Java-based controllers or any other Java-enabled platform. And, the architecture supports a wide range of operating systems. Critical real-time applications run on real-time operating systems such as Wind River's VxWorks® RTOS, while robust server applications run on operating systems such as Microsoft® Windows NT®, Linux™ or UNIX®.

Web-Enabled Access and Control

Niagara's underlying technology utilizes enterprise-level software standards such as Java™, TCP/IP, HTTP and XML to allow access to your control system via any standard Web browser. In addition to anytime, anywhere access to information via a common interface, you can now control all your devices via the Web while achieving true interoperability across a wide range of automation products. Furthermore, a complete set of desktop tools facilitates unique object-oriented application development and system administration.

Unprecedented Interoperability and Functionality

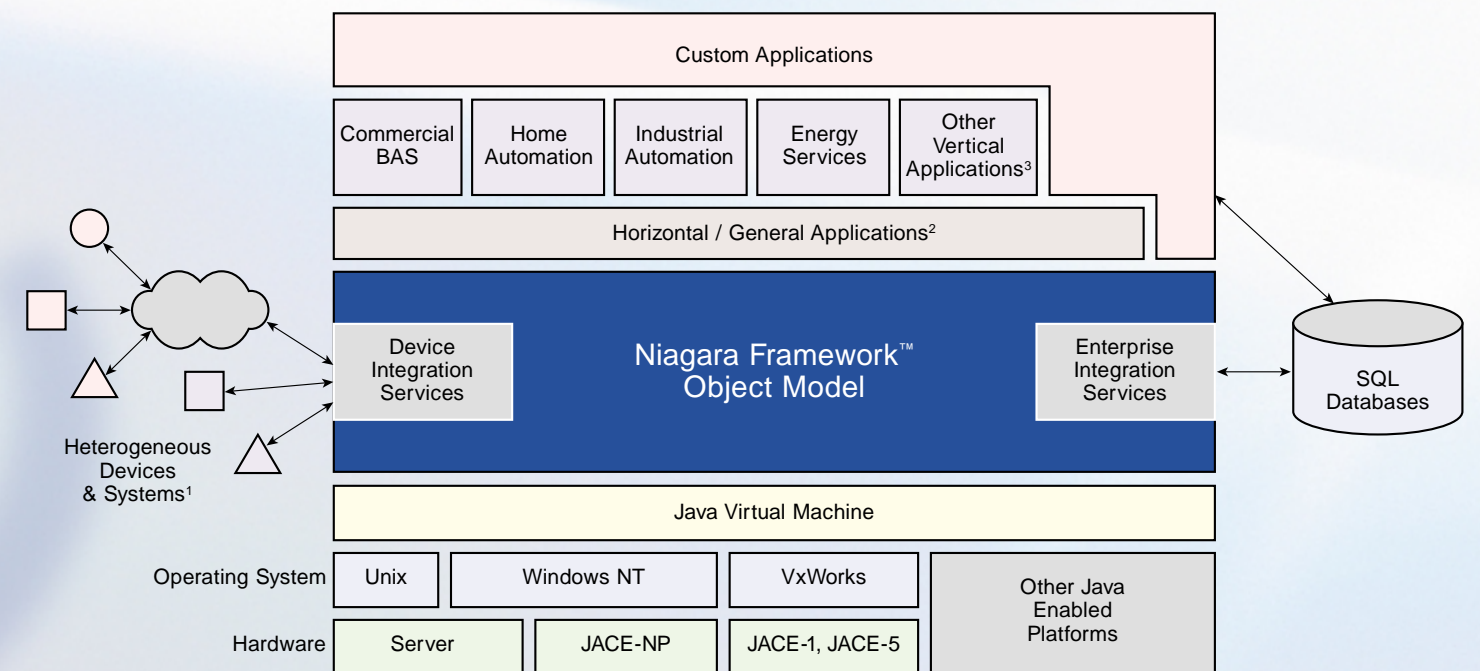
Through the use of fundamental Internet software standards and open industry standards, the Niagara Framework creates a common environment that connects and shares information among heterogeneous devices, legacy systems, open system protocols – such as BACnet®, LonWorks® and Modbus® – the Internet and enterprise information systems. Niagara provides powerful and unrestricted access to the wealth of information that can be gleaned from control devices and then mined for use by enterprise level systems to provide insightful, decision-making information.

Common Development Environment

With a standardized open environment, you no longer have to be held hostage by existing, proprietary control systems. With the Niagara Framework, you can select best-of-breed devices to enhance system performance and optimize your investment in legacy systems. You can be secure in knowing that the Niagara Framework provides you a common development environment for all your application and customization needs.

Finally, there is a fully Web-enabled, standardized open system architecture that provides complete freedom to build the best control system applications – with the flexibility to inexpensively change to meet your emerging application needs.

Niagara Framework™ Architecture



1. BACnet, LonWorks, Modbus, DeviceNet, OPC, Field Foundation, Profibus, Electric & Gas Meters, PBXs, etc.
 2. Web Access, Security, Historical Data Collection and Analysis, Alarming, etc.
 3. Remote Monitoring & Diagnostics, Maintenance Management, Asset Management, etc.



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niagara
FRAMEWORK™

TRIDIUM™
revolutionary://software.solutions™

3951 Westerre Pkwy, Suite 350 · Richmond, VA 23233-1313

TEL 804.747.4771 · FAX 804.747.5204

www.tridium.com

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