

Discover and mitigate the operational issues holding back your business

To learn more about how to purchase, install and start using VYKON Integrated Analytics, contact your VYKON partner. The global community of certified Niagara professionals can serve your unique business needs across any industry or geographic region.



vykon.com

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2018-0013VK



VYKON Integrated Analytics

data-driven
performance

x: 0.0001

take control of your data

KNOW MORE

As the industry's first truly open software platform, the Niagara Framework® helps users connect and control disparate devices and systems, and harness the power of the Internet of Things. Through the advanced arsenal of tools found in our next-generation Niagara 4, users have gained unprecedented operational insight.

DO MORE WITH WHAT YOU KNOW

VYKON Integrated Analytics takes the robust analytics capabilities of Niagara to a whole new level. Fully compatible with Niagara 4, VYKON Integrated Analytics gives you the real-time business intelligence you need to make smarter, swifter decisions and improve operations with less time, less work, less waste and less expense.

HOW IT WORKS

As your devices and systems communicate with each other, they generate data. VYKON Integrated Analytics gives that data power by simplifying the implementation of advanced analytic algorithms. Those algorithms can proactively identify problems and provide more contextual information so you can mitigate the issue at both the local and enterprise levels. Because the analytics rules can be configured to run based on your needs, corrective actions often can be implemented automatically without requiring the intervention of skilled personnel.

VYKON Integrated Analytics can be utilized locally using real-time data in an embedded controller for energy optimization, or for data analysis using historical information you've already saved, making your staff more effective and your buildings more efficient. As soon as VYKON Integrated Analytics is installed, you can simply drop in an algorithm from the library, update the algorithm data source tags to match your application tags and run reports and generate analytic alerts.

Because our technology is open, it's effectively agnostic. You can run VYKON Integrated Analytics for a variety of applications and industries, including energy, manufacturing, data centers and more.

Our advanced analytics require no special programming skills, and our open API supports third-party apps. And, as always, your business is backed by a global community of certified Niagara developers and system integrators available for support before, during and after implementation.

key advantages

INTEGRATED NIAGARA APPLICATION

- Design time reduction by leveraging Niagara 4 histories, hierarchies and tags

DEFINED BASE ALGORITHMS LIBRARY

- Variety of predefined algorithms provided
- Building blocks for custom algorithms

INTUITIVE PROGRAMMING

- Familiar Niagara Framework wiresheet programming

REAL-TIME, ON-PREMISE ANALYTIC CONTROL

- Full analytics functionality on embedded controllers such as JACE® 8000s
- Supports real-time energy optimization

AUTOMATED CONTROL STRATEGIES

- Advanced alarming
- Fault detection and diagnostics (FDD)

POWERFUL VISUALIZATIONS

- HTML5-based
- User-specific dashboards

move from reactive to proactive

NIAGARA 4 DATA MODEL

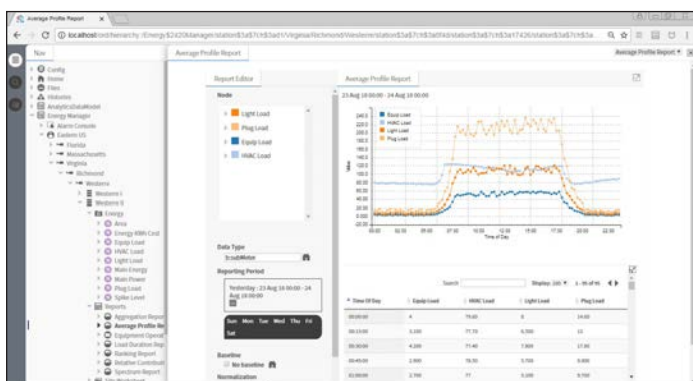
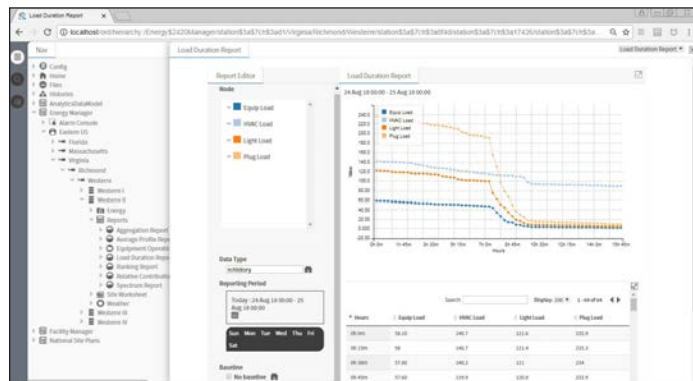
Typical analytics applications require designers to spend a large percentage of their time creating a data model before beginning the actual analytics application. Because a Niagara 4 application most likely has the data model designed as part of the end-user navigation, designers can usually skip the data modeling phase completely and go right to building an effective analytics solution. VYKON Analytics leverages Niagara 4 tagging and hierarchies—including Niagara 4 dictionaries such as Haystack—thus establishing a common data model. Niagara Analytics uses Niagara histories, so no external database configuration is required.

DEFINED BASE ALGORITHMS LIBRARY

With VYKON Integrated Analytics, you never have to repeat the same effort. Our algorithm library has a wide range of predefined algorithms that can be customized and extended to meet the specific needs of the deployment. There are more than 40 functional and mathematical blocks to help you design and create your own custom algorithms, or modify as needed. Design an algorithm to evaluate one piece of equipment or all pieces of equipment in your enterprise. Then save your entire analytics operation as a template to redeploy as often as needed.

INTUITIVE PROGRAMMING

VYKON Integrated Analytics uses the same approach to programming as the Niagara Framework, making it easy to use immediately, without the learning curve of mastering a new programming language. Users can drag and drop function blocks onto the wiresheet from a comprehensive Niagara Analytics palette.



REAL-TIME, ON-PREMISE ANALYTIC CONTROL

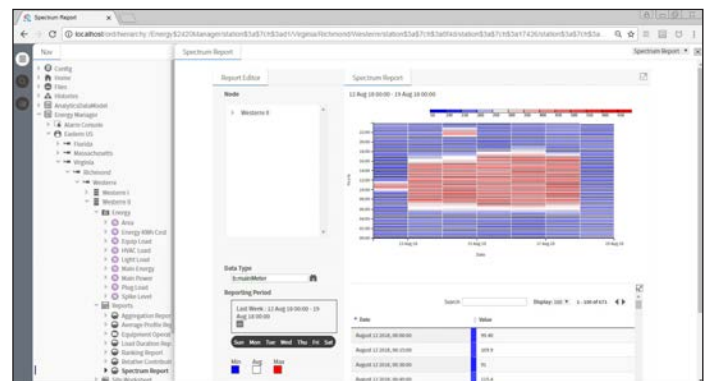
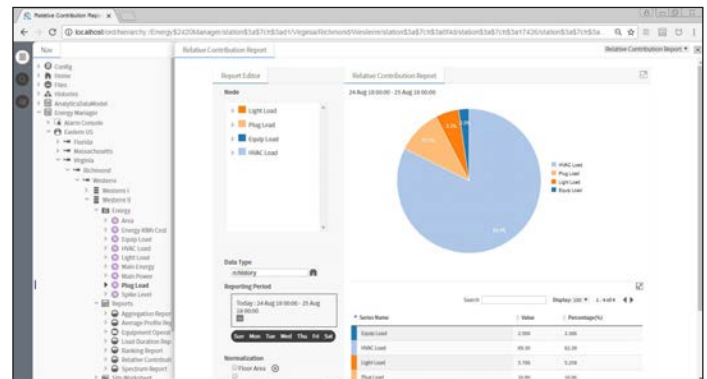
Now you can run on-site analytics directly on an embedded controller such as the JACE 8000 to identify a situation and make an immediate change in real time. This enables you to make faster decisions while conserving computing power. Results can then be pushed up to the server to make changes across the enterprise.

AUTOMATED CONTROL STRATEGIES

VYKON Integrated Analytics makes data work for you, not the other way around. Advanced alarming can collect data from multiple real-time data sources and make intelligent decisions based on custom algorithms, thus providing a more sophisticated off-normal analysis. This process can eliminate many end-user nuisance alarms. FDD determines when equipment and systems need servicing based on their actual condition, rather than a scheduled date.

POWERFUL VISUALIZATION

With enhanced HTML5 visualization, interpreting and organizing information is easier than ever. VYKON Integrated Analytics lets you chart analytical points, alerts and algorithm outputs visually. Choose from a robust library of standard reports or use widgets to build custom dashboards and reports on anything from energy usage to cost ranking to equipment operation.



Identify data anomalies and increase efficiencies