NIAGARA DATA SERVICE™
Features Overview

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niagara cloud SUITE™

Niagara Cloud Suite is a scalable cloud-based solution that provides secure, remote building management services in accordance with Tridium's model of open and extensible integration among devices, services, and applications.

PREREQUISITES & HOSTING:

- Niagara Framework® Supported Versions
- Active Software Maintenance Agreement
- Hosted on Microsoft Azure

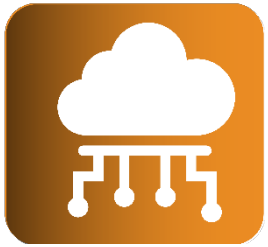
COMMITMENT TO ‘OPEN’ RESTS ON 5 TENETS

Niagara Cloud Suite enables Niagara Framework to meet/exceed Niagara Community demands along each of its Five Dimensions of Growth & Innovation

DEPLOYMENT EASE

VISUALIZING DATA/ INTEROPERABILITY

CONNECTIVITY



CYBER DEFENSE

COMPLIANCE

Niagara Data Service supports and advances Niagara along every dimension.

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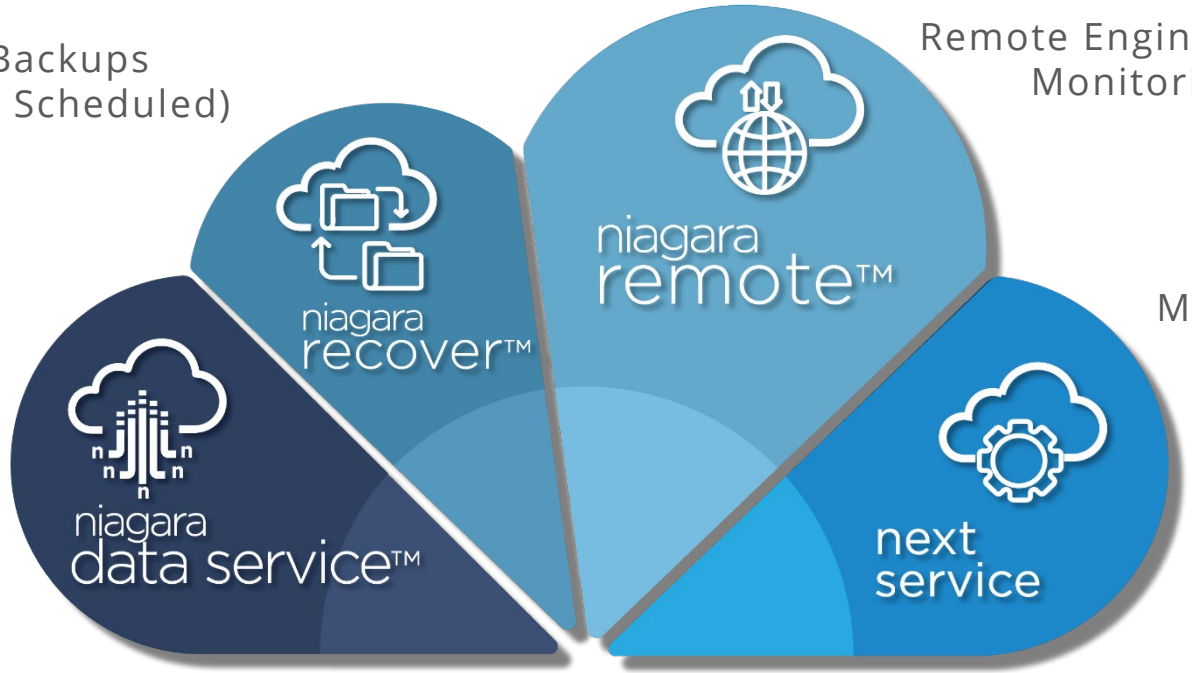
NIAGARA CLOUD APPLICATIONS

Cloud Backups
(Baseline & Scheduled)

Remote Engineering &
Monitoring



- Contextualized Data
- Cloud Historian
- **Interactive Realtime Data *NEW***
- 3rd-Party App Access

More to Come

Designed to simplify your journey to the cloud

Designed for cyber security and protection of your data

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niagara data service™

- API Architecture: Enables easy connection to 3rd-party applications
- Contextualized Data for Trend Analysis — Supports Data Interoperability
- Live Read & Write of Data via API

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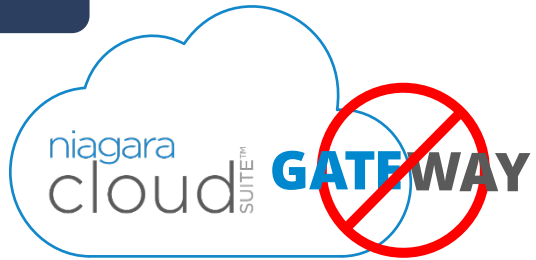
NOTABLE FEATURE #1: API Architecture

KEY BENEFITS:

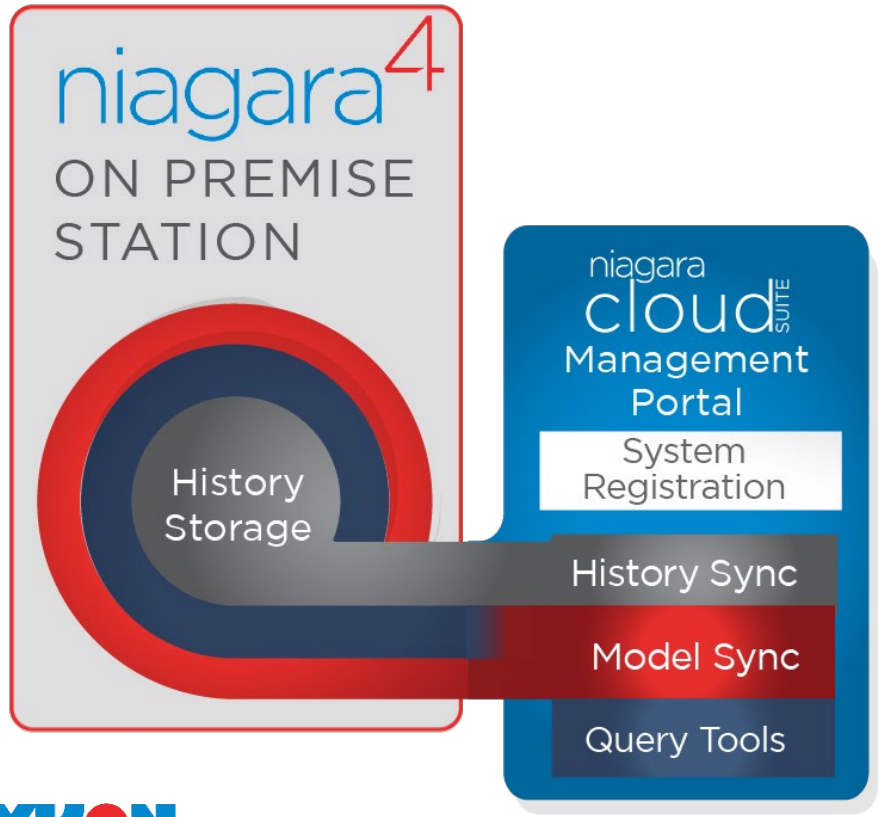
- Built-in **APIs** support secure extraction and import of Niagara data to customer-preferred BMS overlays (e.g. Automated FDD, Tenant Amenity, energy modeling, etc.)
- One cloud storage location allowing for multiple third-parties to access Niagara fully contextualized data. Preserves data ownership.
- Predefined JSON payloads for cloud export. Saves time. Makes it scalable. Reduces errors.

CYBER DEFENSE BENEFIT

- No need for another Gateway; Addresses most Common IT Objection to Smart Building Tech



USER TESTIMONIAL



"By pushing operational data from Niagara to the cloud, Tridium has simplified the acquisition and normalization process allowing us to seamlessly integrate our AI-based intelligent building solutions in a fraction of the time."

Jeff Kimmel
CEO of Elipsa

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NOTABLE FEATURE #2: Contextualized Data for Trend Analysis

KEY BENEFITS:

Eases Data Normalization and Integration for all Downstream applications

- Upload, store, analyze Niagara histories with model data

Flexibility & Performance

- View histories on-demand from anywhere
- Increase performance of on-prem Niagara devices by seamlessly archiving data to Cloud

COMPLIANCE BENEFIT:

Meet Data Ownership Requirements

- Copy of data can be stored locally and managed as archive, up to user's discretion. Tridium does not own the end user's data

niagara cloud SUITE™

NOTABLE FEATURE #3: Live Read & Write of Data via API

KEY BENEFITS:

Developers are empowered to seamlessly integrate with the Niagara platform in real time via these APIs:

- Gain unparalleled flexibility and speed when building custom applications, automating workflows, or enhancing existing features
- Receive and analyze live data in the app overlay and push changes in near real-time to Niagara supervisory control
- Program a cloud-hosted overlay app to adjust set-points etc. in response to observed conditions

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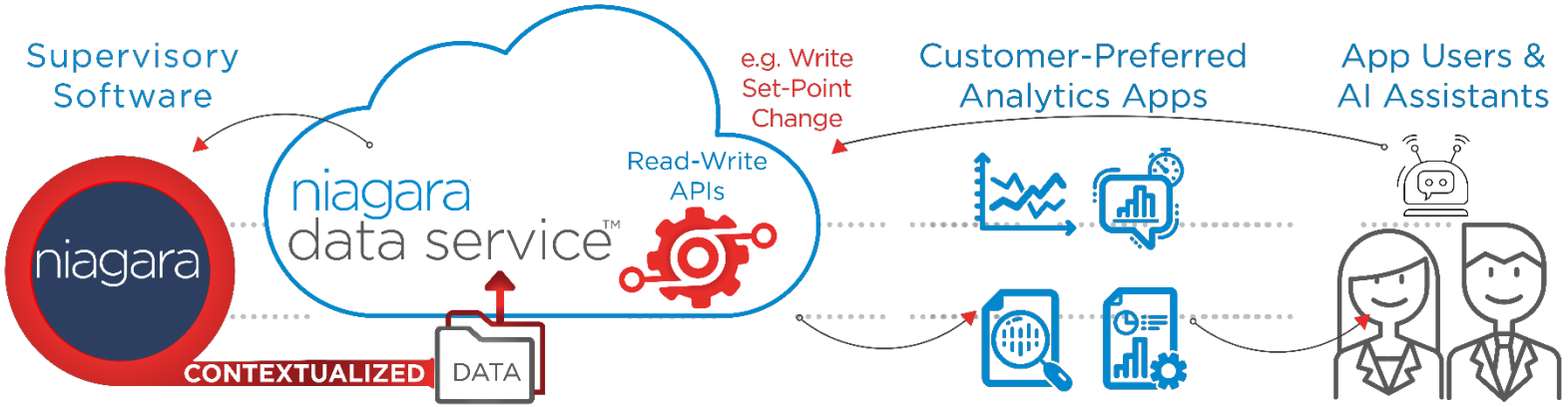
NEW! INTERACTIVE REALTIME DATA



Instant Data Access via Read-Write API:

- Retrieve live data on-demand

Dynamic updates:

- Push changes directly to your Niagara system, eliminating delays and manual updates.

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NIAGARA DATA SERVICE ADVANTAGES

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- Easy integration of a Niagara network with the Niagara Cloud and archived historical data
- Automatically detects and sends all historical data OR user can pick and choose which histories to send
- Contextualized by the Niagara data model. Tagged data example: 72 [RTU1, degrees, Fahrenheit, Richmond, VA, Outside Air, Building 51]
- Automatic configuration of Niagara Archive History Provider
- 3rd Party applications can access Niagara Data Service via cloud (API)

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NIAGARA DATA SERVICE

ORDERING INFORMATION

Part Number	Volume
NCS-NDS-GOLD	600 GB
NCS-NDS-SILVER	300 GB
NCS-NDS-BASIC	150 GB

Based on query volume (Egress)

Should the annual data egress limit be exceeded, data overages are allowed at the list price/GB per month.

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SUMMARY: MAJOR NIAGARA PLATFORM EVOLUTION

DEPLOYMENT EASE

- Removes Budget Obstacles
  - SaaS: Pay-as-you-Go
  - OpEx, not CapEx
- Flexibility & Productivity
  - For the SI
  - For the end-user

INTEROPERABILITY

- Moves and stores Niagara Histories = Trend Data Enriched with Tagging
  - Contextualized data is ready for visualization, analytics and ML/AI applications
- Live read and write of data allow for fast retrieval & updates/override

CONNECTIVITY

- API-First Architecture
- Connects to Any Customer-Selected BMS Overlay Software or Business App
- End-customer investment in data is protected when switching overlays

CYBER DEFENSE

- No Add-on Gateways Needed

COMPLIANCE

- Supports standards
- Preserves customer's ownership of data and investment in data engineering
- Supports partner collaborations
- Keeps Future Growth Paths ***Open***

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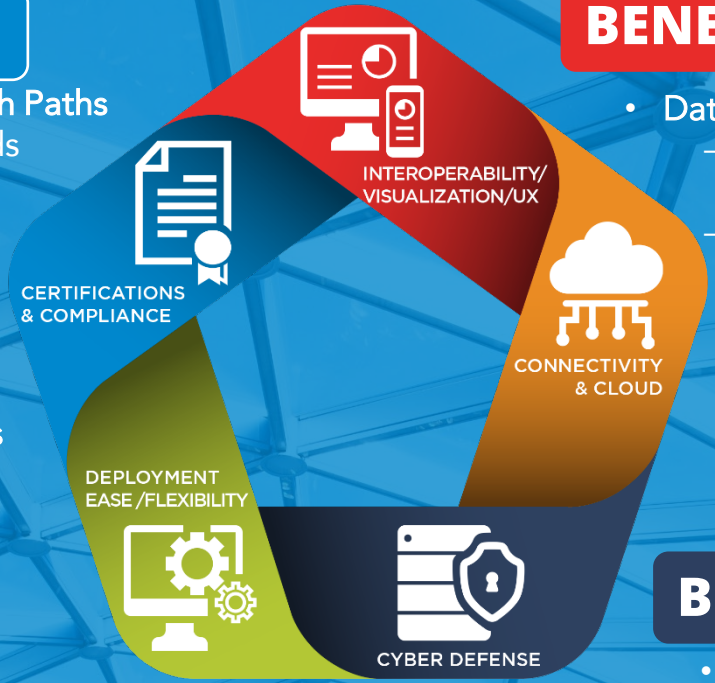
THANK YOU

To learn more about how to purchase and start using the Niagara Data Service, please contact your Tridium account manager or Niagara partner.

niagara cloud SUITE™ = MAJOR NIAGARA PLATFORM EVOLUTION

BENEFITS:

- Opens Future Growth Paths
  - Supports standards
  - Supports partner collaborations



BENEFITS:

- Data Interoperability
  - Moves and stores Niagara Histories = Trend Data Enriched with Tagging
  - Contextualized data is ready for analytics and AI applications

BENEFITS:

- Removes Budget Obstacles
  - SaaS: Pay-as-you-Go
  - OpEx, not CapEx
- Flexibility & Productivity
  - For the SI
  - For the end-user

BENEFITS:

- Connects to Any Customer-Demanded Application
  - API-First Architecture

BENEFITS:

- No Add-on Gateways Needed

Niagara Framework is always evolving along five dimensions.

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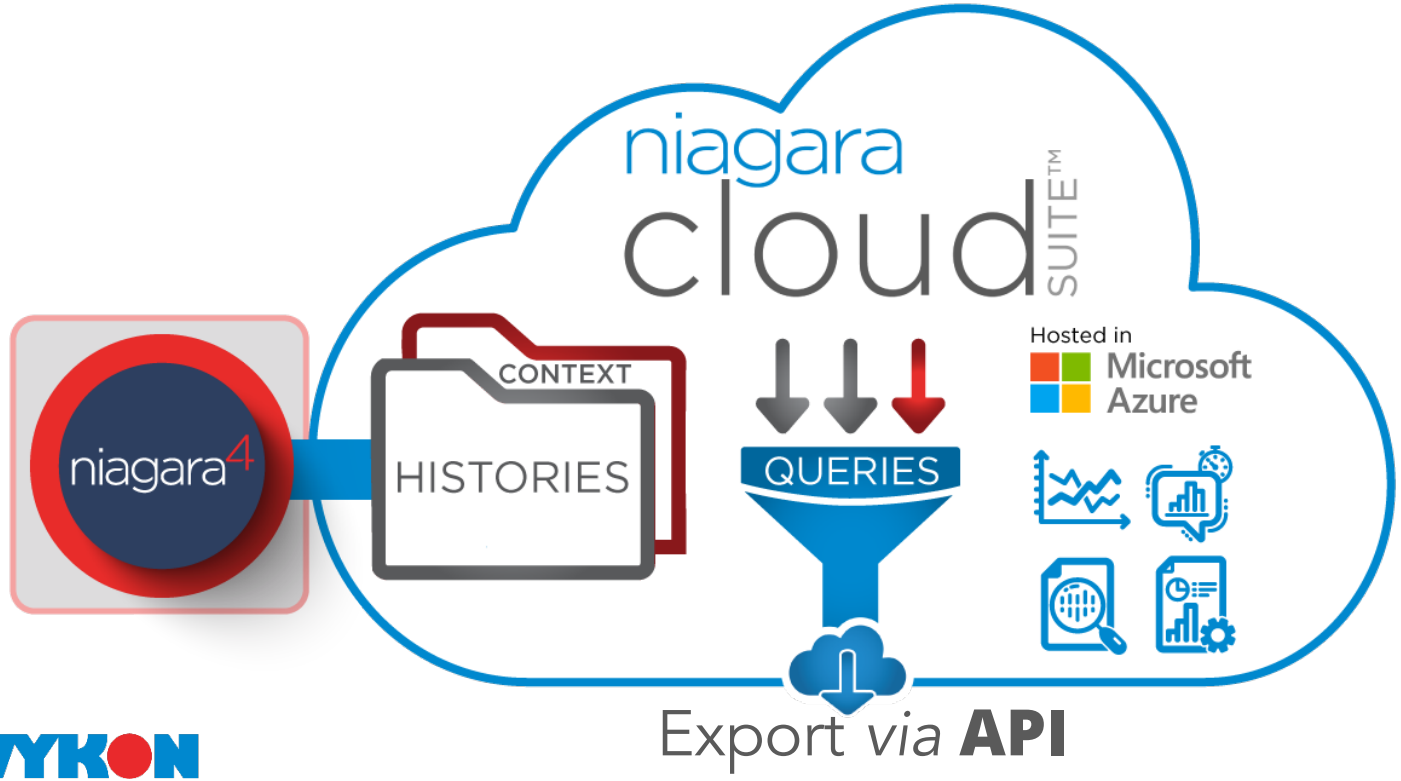
More about: # API Architecture



- Occupant Mobile Apps
- Machine Learning Apps
- Business Intelligence Tools
- Other 3rd-Party Applications

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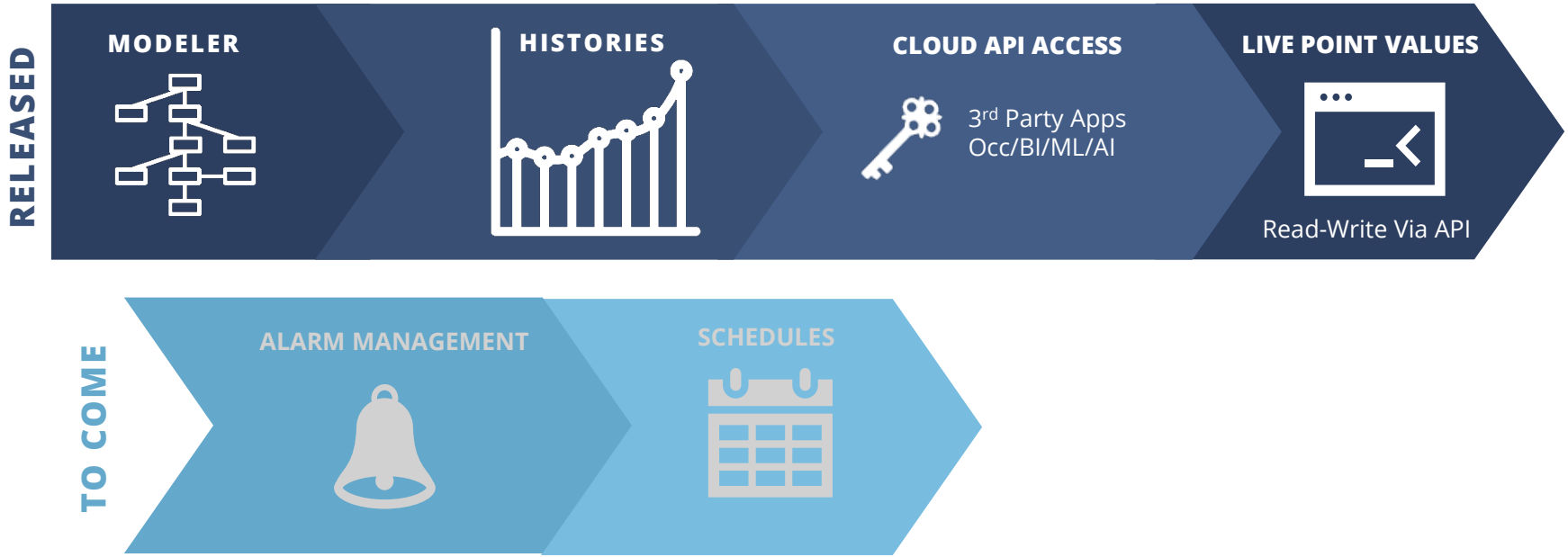
NIAGARA DATA SERVICE ROADMAP



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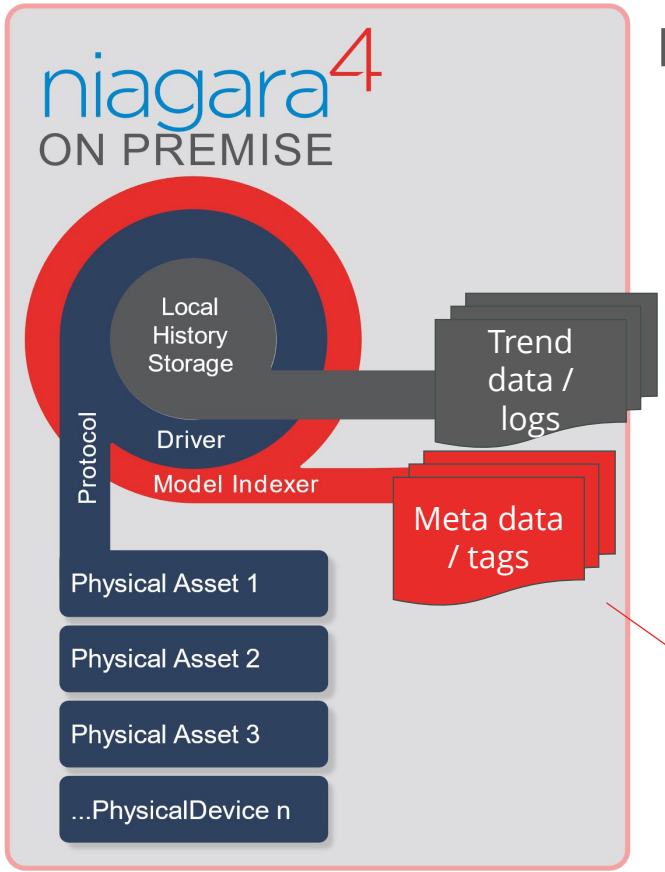
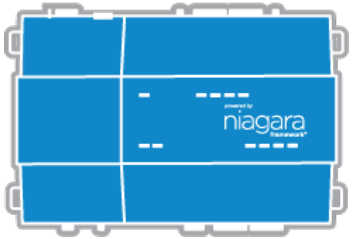
All items and schedules subject to change at Tridium's discretion



NIAGARA DATA SERVICE PREREQUISITES

SUPERVISOR



JACE

- Niagara Framework® Supported Versions
- Requires active Software Maintenance Agreement (SMA)

The work of data tagging and modeling happens in the Niagara Station by the system integrator, typically during deployment. This future-proofs the investment in data engineering, i.e. the customer maintains ownership of its data as cloud-hosted BMS Overlay Software is replaced and augmented over time.

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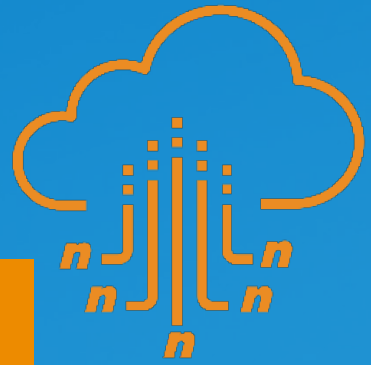
NIAGARA DATA SERVICE™

Provides the "easy-button" for exporting and retrieving semantically enriched trend data from the cloud using APIs



API connection to BMS Overlay software and IoT apps

Contextualized Histories; Modeler Maintained with Trend Data

niagara cloud SUITE™ **Management Portal**

More on these to Come....

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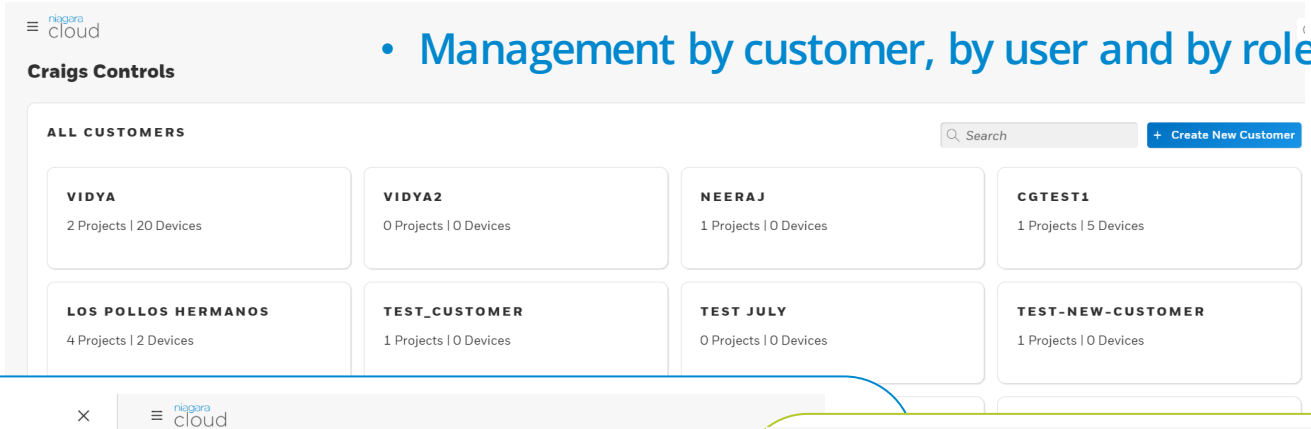
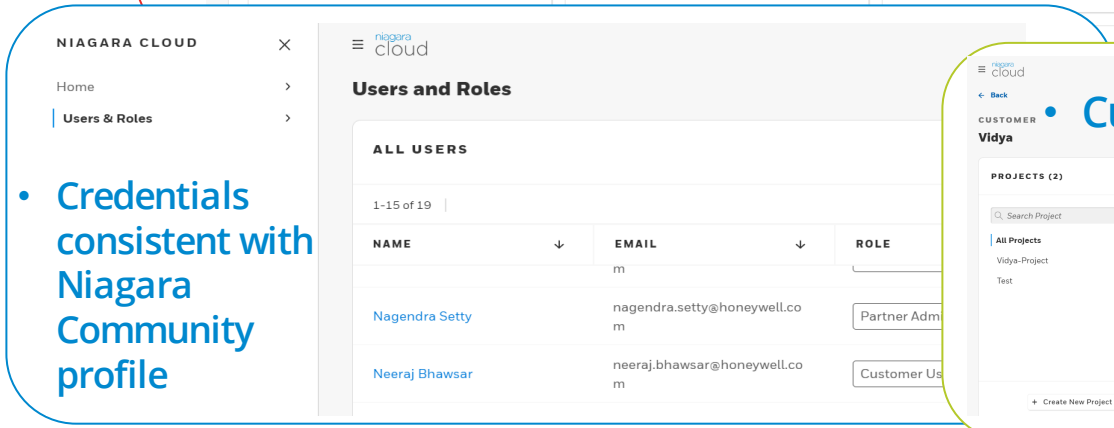
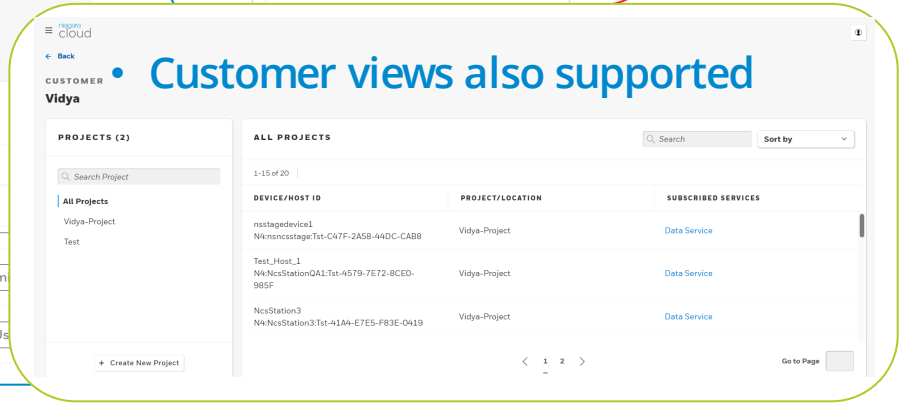
niagara cloud SUITE™ Management Portal



- Management by customer, by user and by role



- Credentials consistent with Niagara Community profile



- Customer views also supported

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