



# NIAGARA DATA SERVICE™

## Features Overview



# 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**



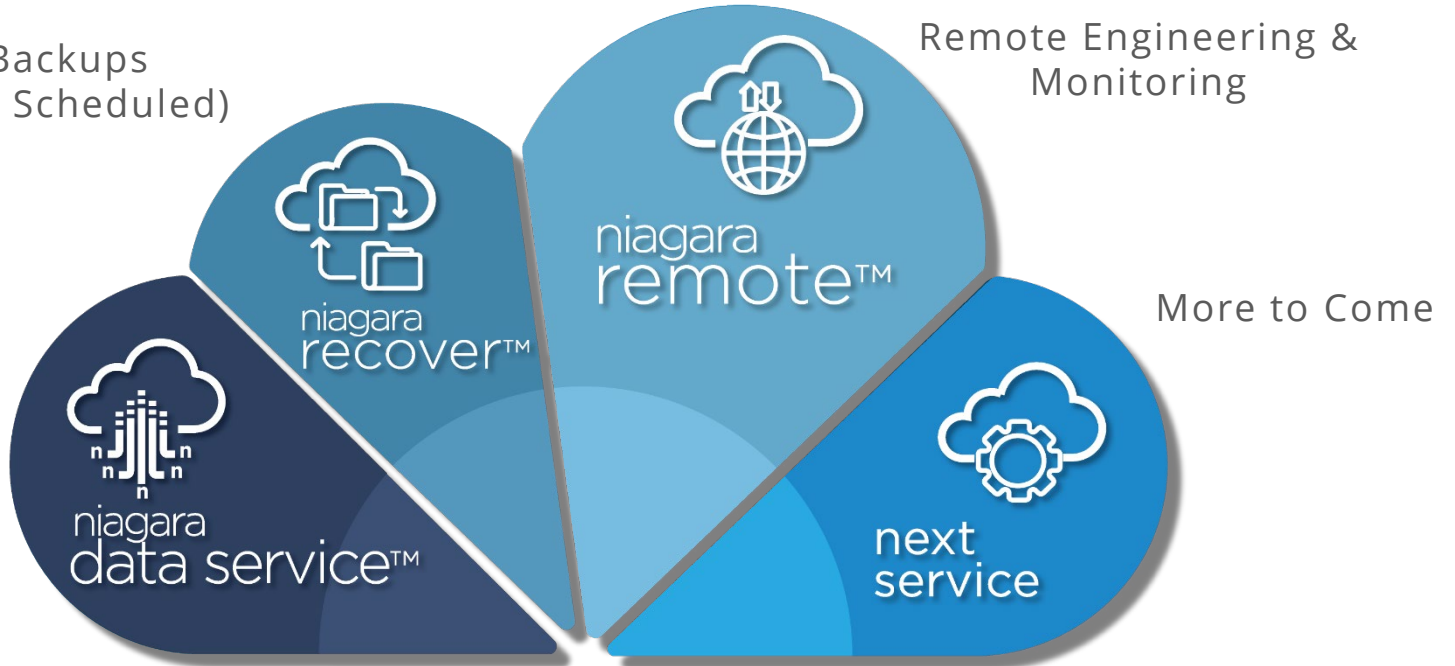
*Niagara Data Service supports and advances Niagara along every dimension.*



# NIAGARA CLOUD APPLICATIONS

Cloud Backups  
(Baseline & Scheduled)

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



Remote Engineering &  
Monitoring

More to Come

Designed to simplify your  
journey to the cloud

Designed for cyber security  
and protection of your data

# 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

## NOTABLE FEATURE #1: API Architecture



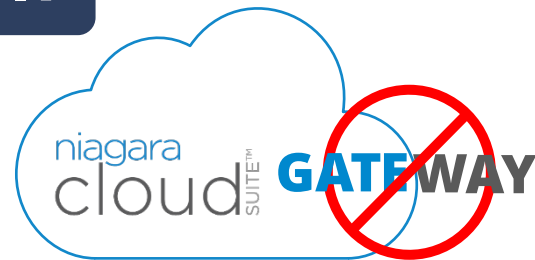
### KEY BENEFITS:

- 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.

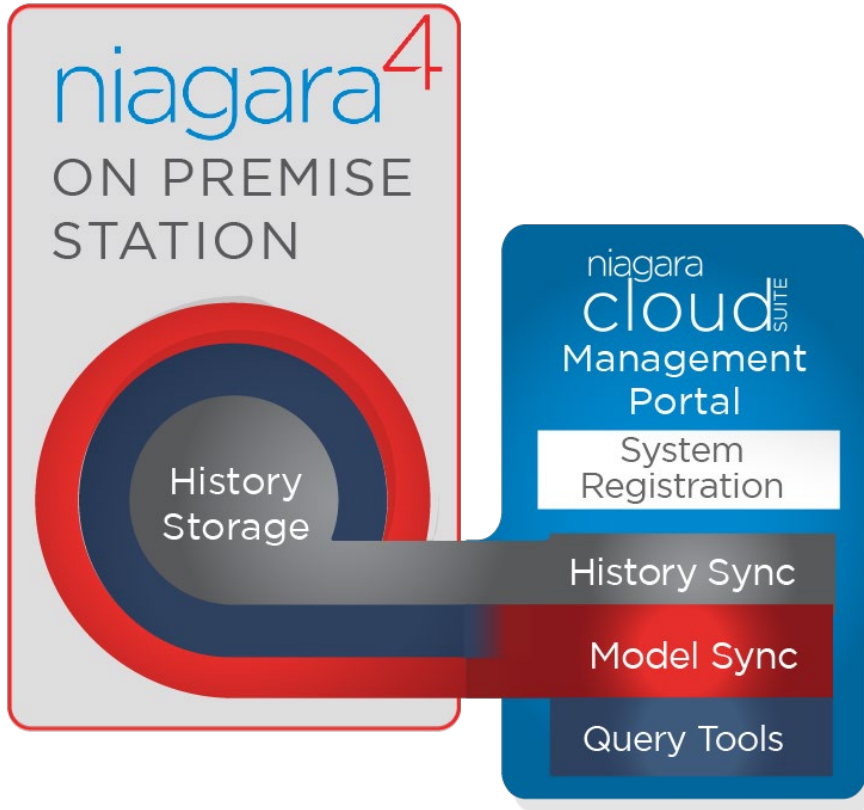


### CYBER DEFENSE BENEFIT

- 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**

## 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



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

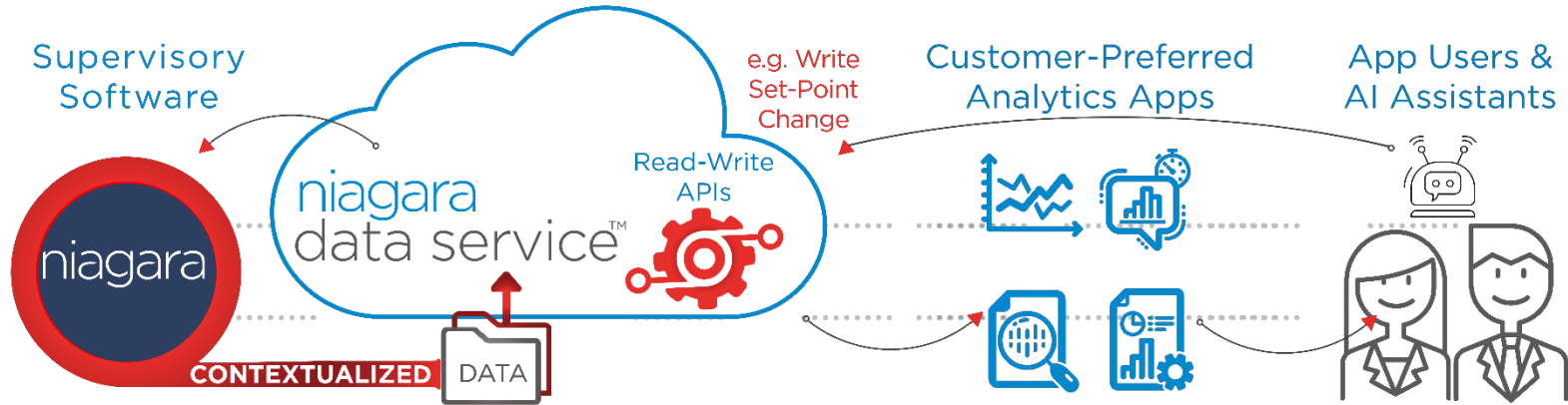


### KEY BENEFITS:

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

# 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.

# NIAGARA DATA SERVICE ADVANTAGES

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)

niagara  
cloud

SUITE™

# 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.



# 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**



# 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.

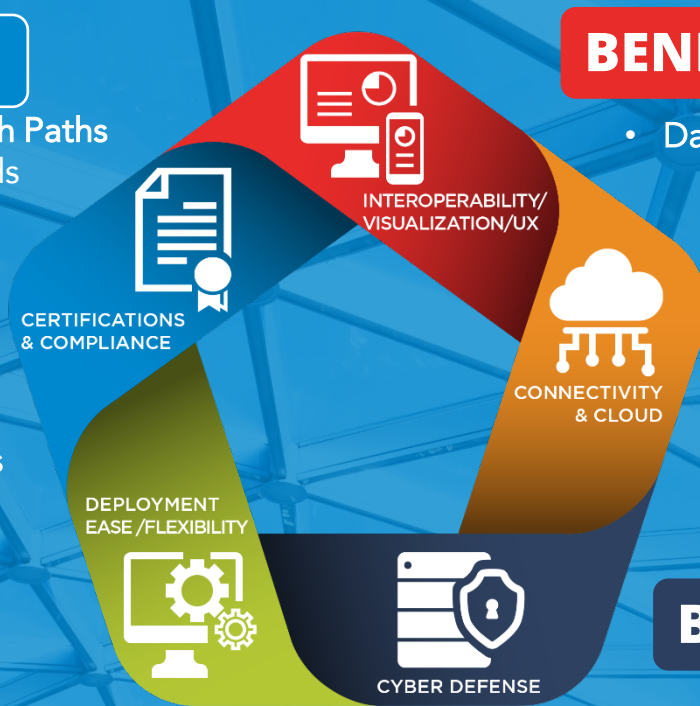
# niagara cloud SUITE™ = MAJOR NIAGARA PLATFORM EVOLUTION

## BENEFITS:

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

## BENEFITS:

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



## BENEFITS:

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

## BENEFITS:

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

## BENEFITS:

- No Add-on Gateways Needed

*Niagara Framework is always evolving along five dimensions.*

More about:

# API Architecture



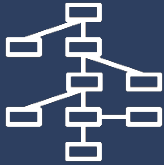


# NIAGARA DATA SERVICE ROADMAP



RELEASED

MODELER



HISTORIES



CLOUD API ACCESS



3<sup>rd</sup> Party Apps  
Occ/BI/ML/AI

LIVE POINT VALUES



Read-Write Via API

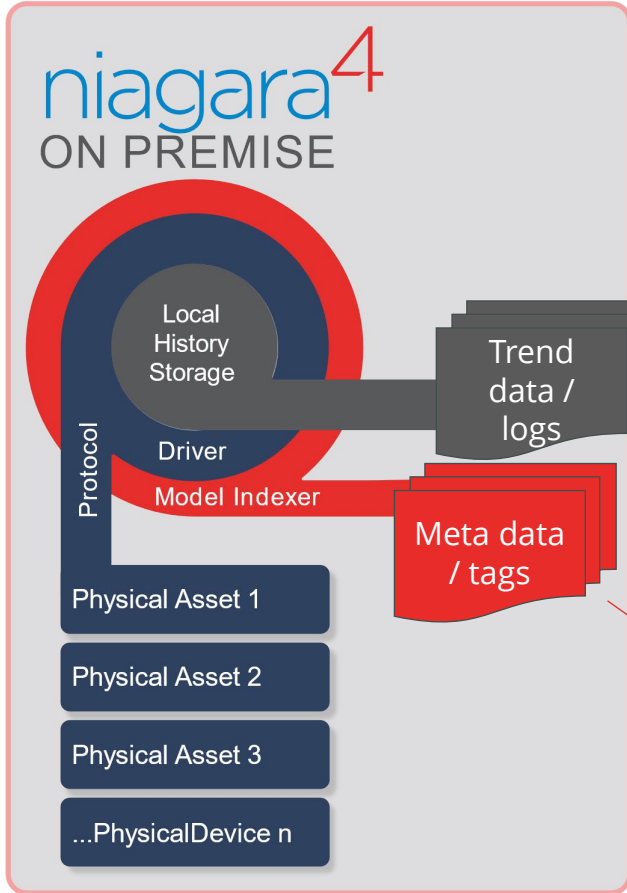
TO COME

ALARM MANAGEMENT



SCHEDULES



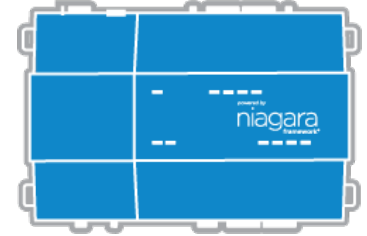


## NIAGARA DATA SERVICE PREREQUISITES



### SUPERVISOR

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

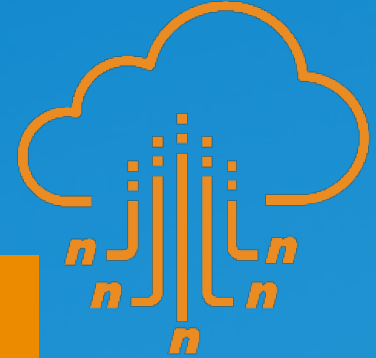


### JACE

*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.*

# 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...

- Management by customer, by user and by role

niagara cloud

**Craigs Controls**

ALL CUSTOMERS  [+ Create New Customer](#)

<b>VIDYA</b> 2 Projects   20 Devices	<b>VIDYA2</b> 0 Projects   0 Devices	<b>NEERAJ</b> 1 Projects   0 Devices	<b>CGTEST1</b> 1 Projects   5 Devices
<b>LOS POLLOS HERMANOS</b> 4 Projects   2 Devices	<b>TEST_CUSTOMER</b> 1 Projects   0 Devices	<b>TEST JULY</b> 0 Projects   0 Devices	<b>TEST-NEW-CUSTOMER</b> 1 Projects   0 Devices

- Customer views also supported

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CUSTOMER **Vidya**

PROJECTS (2)  [+ Create New Project](#)

DEVICE/HOST ID	PROJECT/LOCATION	SUBSCRIBED SERVICES
msstagedevice1 N4\msncstage:Tst-C47F-2A58-44DC-CAB8	Vidya-Project	<a href="#">Data Service</a>
Tst_Host_1 N4\NcsStation0A1:Tst-4579-7ET2-8CED-985F	Vidya-Project	<a href="#">Data Service</a>
NcsStation3 N4\NcsStation3:Tst-41A4-E7E5-F83E-0419	Vidya-Project	<a href="#">Data Service</a>

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- Credentials consistent with Niagara Community profile

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**Users and Roles**

ALL USERS

NAME	EMAIL	ROLE
Nagendra Setty	nagendra.setty@honeywell.com	Partner Admin
Neeraj Bhawsar	neeraj.bhawsar@honeywell.com	Customer User