



niagara⁴

Kaiterra Cloud Integration for
Tridium Niagara 4
Technical Guide

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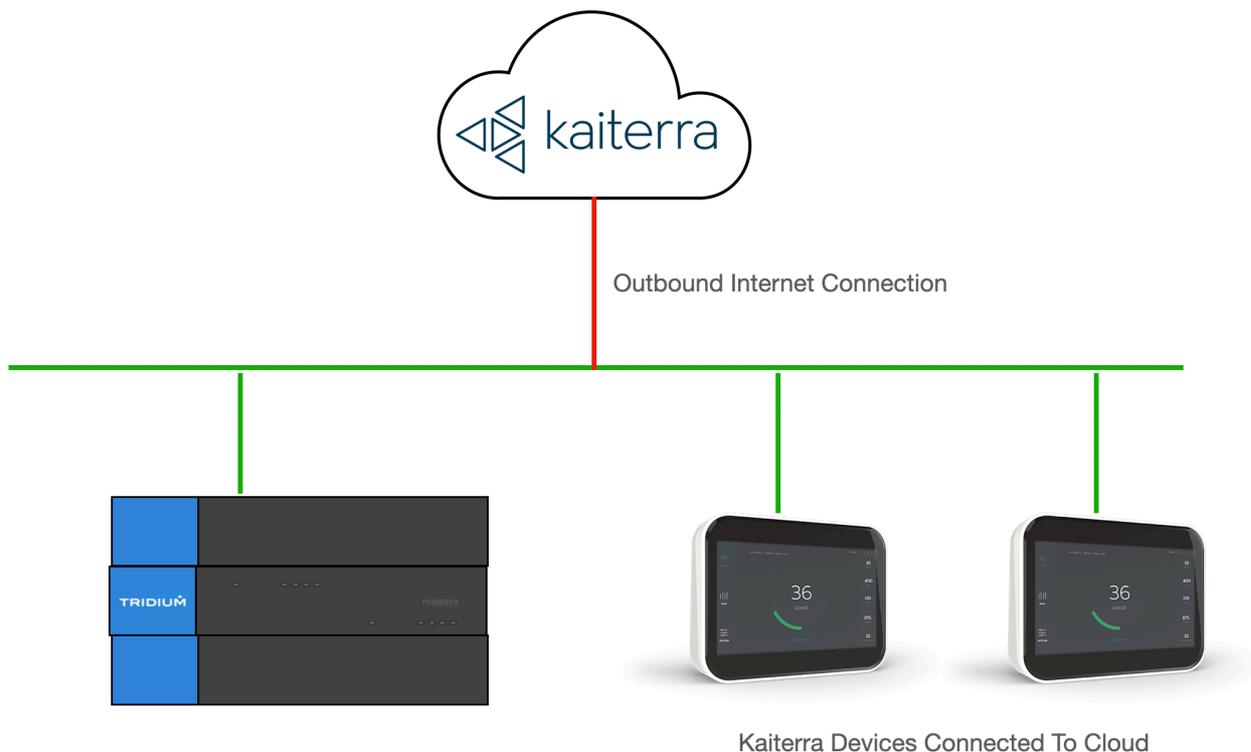
INTRODUCTION

The Kaiterra Cloud driver allows access to the data reported by your Kaiterra devices to the Kaiterra Cloud Dashboard. Supported devices include:

- ▶ Sensedge
- ▶ Sensedge Mini
- ▶ Lase Egg
- ▶ Square

Your Kaiterra systems should be fully configured and working before starting the Niagara integration.

The Niagara device (Controller / Web Supervisor) will require an outbound internet connection to connect the Kaiterra Cloud.



LICENSING & SOFTWARE MAINTENANCE

The Kaiterra Cloud driver is licensed based on the number of Kaiterra devices being imported to a Niagara Station.

You will need to provide your Niagara 4 Host ID as part of your purchase. If you are expanding your system in the future you will need to ensure that your Kaiterra Cloud driver has been expanded to cover the number of new Kaiterra devices being added.

You will need to ensure that your Niagara Station (JACE or Web Supervisor) has adequate Tridium Global Capacity points for the Kaiterra devices you will be adding to the system.

Once the license has been generated you can re-import your niagara license files from the Platform > License Manager providing you have an internet connection, alternatively you can be emailed a copy of the new license files.

The Kaiterra Cloud driver includes a software maintenance feature. Every new purchase of the driver will support the current release of Niagara 4 and the next release of Niagara 4, any subsequent upgrades will require a software maintenance license to be purchased.

As an example the current release of Niagara 4 is N4.11, a new driver purchase will cover you for N4.11 and a future upgrade to N4.12. Any further upgrades, for example to N4.13 or above, will require a software maintenance license to be updated. The software maintenance license would then cover you for the now current release of Niagara 4 (as an example N4.13). You can upgrade from any previous release with a single software maintenance purchase.

Ensure the target Host License Manager is up to date with a Tyrrell.license and Tyrrell.certifcate containing the required license features.

Any questions or queries in relation to this item should be sent to sales@tyrrellproducts.com

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Kaiterra License Packs:

Product Code	Description
Kaiterra001	Kaiterra Cloud Driver For 1x Kaiterra Device
Kaiterra010	Kaiterra Cloud Driver For 10x Kaiterra Devices
Kaiterra025	Kaiterra Cloud Driver For 25x Kaiterra Devices
Kaiterra050	Kaiterra Cloud Driver For 50x Kaiterra Devices
Kaiterra100	Kaiterra Cloud Driver For 100x Kaiterra Devices
Kaiterra001-UPG	Kaiterra Cloud Driver Upgrade 1x Kaiterra Device
Kaiterra005-UPG	Kaiterra Cloud Driver Upgrade 5x Kaiterra Device
Kaiterra010-UPG	Kaiterra Cloud Driver Upgrade 10x Kaiterra Device
Kaiterra010-NUPG	Kaiterra Cloud Driver 10x Devices Niagara Version Upgrade
Kaiterra025-NUPG	Kaiterra Cloud Driver 25x Devices Niagara Version Upgrade
Kaiterra050-NUPG	Kaiterra Cloud Driver 50x Devices Niagara Version Upgrade
Kaiterra100-NUPG	Kaiterra Cloud Driver 100x Devices Niagara Version Upgrade

The driver will also consume Global Capacity points from the Tridium license, this will depend on the number of points provided from each type of device and any custom sensing packages. Refer to the next page for further details.

Example Global Capacity Point Usage:

Sense Edge	Sense Edge Mini	Laser Egg	Laser Egg + Chemical	Laser Egg + CO2
Temp	Temp	Temp	Temp	Temp
RH	RH	RH	RH	RH
CO2	CO2	AQI	AQI	AQI
TVOC	TVOC	PM2.5	PM2.5	PM2.5
PM2.5	PM2.5		TVOC	CO2
O3*	O3*			
Custom*	Custom*			
5+ Points	5+ Points	4 Points	5 Points	5 Points

*Point Usage Dependent on Ozone Sensor Package & Custom Sensors Packages

KAITERRA DRIVER INSTALLATION

The Kaiterra Cloud driver supports Niagara 4.10 and above.

NOTE:

If your installation is running an older version of the Niagara software then it must be upgraded to meet the above requirements to run this driver.

Any future updates to the Kaiterra Cloud driver will be available for the current release and previous Niagara 4 release. All other releases will become legacy and unsupported.

Niagara 4 Installation:

You will need the version specific JAR files for your Niagara 4 installation. These can be downloaded from the Customer Portal or alternatively contact support.

To install the driver copy the below JARS to the following directory

- ▶ Kaiterra-rt.jar
- ▶ Kaiterra-wb.jar

c:\niagara\niagara 4.x.xx\modules

Once the files have been put into the correct directory close your workbench, and relaunch. Any running Stations on the local machine will have to be re-started to make use of the Kaiterra Cloud driver.

The Kaiterra Cloud driver is now ready to use in a local station or to commission / update a JACE. To install the service on a JACE use the Commissioning Wizard on the platform of the target device.

PRE REQUISITES

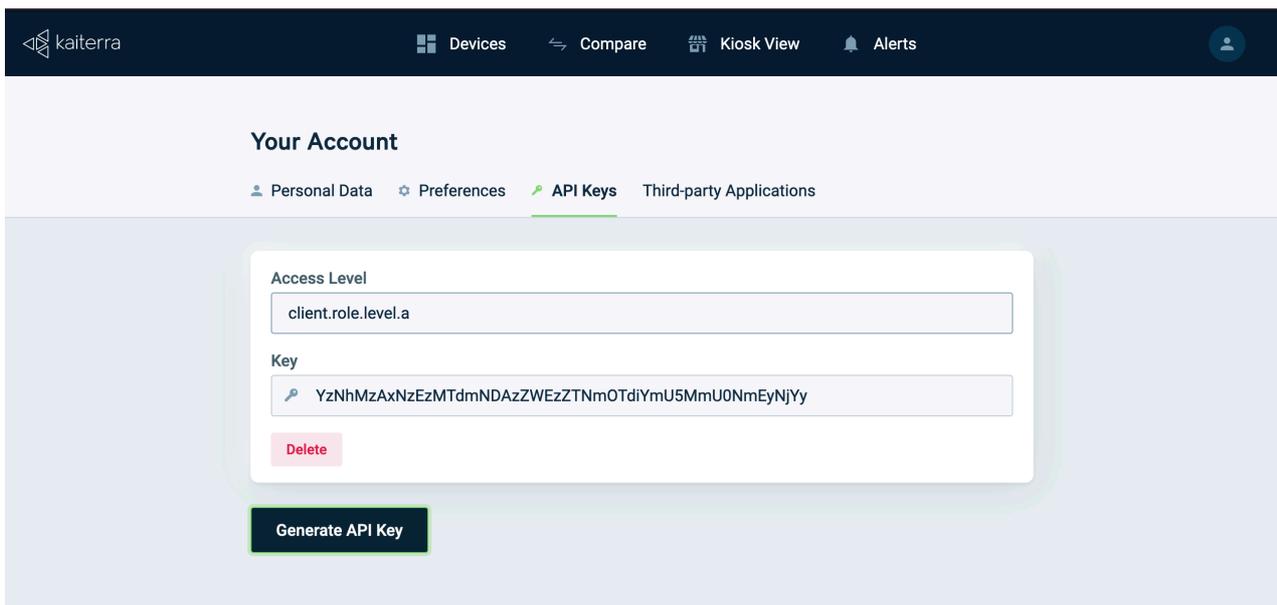
Before proceeding you should ensure the following:

- ▶ Kaiterra Cloud Dashboard Account has been created.
- ▶ All Kaiterra devices are online and reporting.
- ▶ You have the API Key for your Dashboard Account
- ▶ You have a list of all the Unique Device IDs (UDIDs) of your Kaiterra devices.

The API key and UDIDs can all be obtained from the Kaiterra Dashboard. The UDIDs can also be found from each Kaiterra device using the Kaiterra Enterprise App.

The API Key can be obtained from the Kaiterra dashboard (dashboard.kaiterra.com)

Navigate to **Account Settings > API Key** and **Generate an API Key**.



Copy the Key for use in your Niagara Station.

DRIVER CONFIGURATION

Connect to the Niagara station where you intend to configure the Kaiterra Cloud driver.

Expand **Config > Drivers** container and add a new **Kaiterra** driver, this can alternatively be dragged in from the **Kaiterra Palette**.

Navigate to the AX Property Sheet view of the driver.

PROPERTY	DESCRIPTION
Status	Driver status should always be OK
Enabled	Enable / Disable the Driver
Server URL	api.kaiterra.com
API Key	<i>Obtain From Kaiterra Dashboard*</i> <i>See the above information on API Keys</i>

Note the **Server URL** is region specific. The above example of **api.kaiterra.com** is correct for the UK. If this URL does not work then the correct URL should be requested from Kaiterra's technical support for you country.

Once the Server URL and API Key have been entered the driver will come out of fault and enter a normal & healthy state.

Driver Manager				
Name	Type	Status	Enabled	Fault Cause
 NiagaraNetwork	Niagara Network	{ok}	true	
 KaiterraNetwork	Kaiterra Network	{unackedAlarm}	true	

ADDING DEVICES

Open the **Kaiterra palette**.

Drag a **Kaiterra Device** from the Palette to the **AX Property Sheet** of the Kaiterra driver.

The device can be re-named to reflect the physical location where the device is installed.

PROPERTY	DESCRIPTION
Status	Device status should always be OK
Enabled	Enable / Disable the Device
Device ID	Unique ID fo the Kaiterra Device <i>Obtain From Kaiterra Dashboard*</i> <i>Obtain from the Kaiterra Enterprise Mobile App*</i> <i>See the following page(s).</i>
Poll Frequency	Slow / Normal / Fast Polling frequencies are managed from the PollScheduler at the Driver level. Polling frequencies apply to the entire device and not individual points within the device.

Notes on Polling frequencies:

- ▶ Fast Rate = 1 min (by default)
- ▶ Normal Rate = 5 mins (by default)
- ▶ Slow Rate = 15 mins (by default)

To obtain the Device ID:

Kaiterra Dashboard

Login to the Kaiterra Dashboard and locate the device you are looking to add.

Press the Information Icon on the device and UDID will be displayed.

 Device Information	
	60518d8c-7482-43df-8187-a3f22aa76dd1
Firmware	2.3.2
Wifi MAC	44efbf08f3b2
Model	SE-200P
Serial Number	VG20D11189

Copy the **UDID** and paste into the **Device ID** field in the AX Property Sheet of the **Kaiterra Device**.

In the above example this is (60518d8c-7482-43df-8187-a3f22aa76dd1)

Kaiterra Enterprise App

From your mobile device connect to the WiFi network of the Kaiterra Device (refer the Kaiterra instructions for full details).

NOTE: If the sensor is online & configured you may need to reboot to enable the internal SSID

Launch the Kaiterra Enterprise App.



Copy the **UDID** and paste into the **Device ID** filed in the AX Property Sheet of the Device.

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Once the device is configured it will automatically create and populate the available points from the device.

▼  Sensedge_Mini	Kaiterra Device
<input type="radio"/> Status	{ok}
<input type="radio"/> Enabled	<input checked="" type="checkbox"/> true ▼
<input type="radio"/> Fault Cause	
▶  Health	Ok [22-Feb-22 9:12 AM GMT]
▶  Alarm Source Info	Alarm Source Info
<input type="radio"/> Device ID	60518d8c-7482-43df-8187-a3f22aa76dd1
<input type="radio"/> Poll Frequency	Normal ▼
▼  Points	Kaiterra Points
▶ <input type="radio"/> Discovery Preferences	N Discovery Preferences
▶ <input checked="" type="radio"/> carbon_dioxide	594 ppm {ok}
▶ <input checked="" type="radio"/> humidity	39.47 % {ok}
▶ <input checked="" type="radio"/> temperature	22.95 °C {ok}

NOTE: All available data points are created and polled. You cannot remove unwanted points as they will be automatically re-created on the next polling cycle.

The device also has an action of **Request Data** which will preform a manual poll.

REVISION HISTORY

REVISION	DESCRIPTION
1.0	Draft Release For Approval
1.1	Kaiterra Sensor Range Point Usage Added