

PointGrab

niagara⁴

PointGrab Cloud Integration for Tridium Niagara 4 Technical Guide

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TYRRELL PRODUCTS LTD

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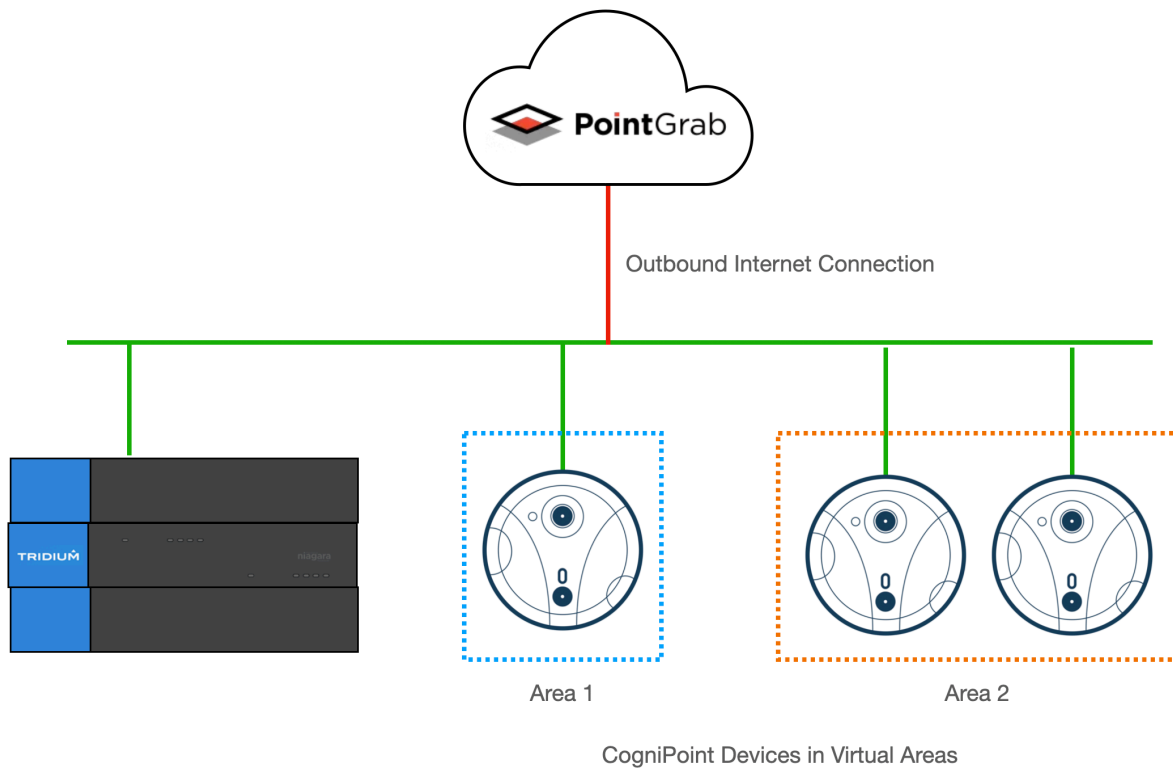
INTRODUCTION

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

Your PointGrab system 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 PointGrab Cloud.

The PointGrab driver allows for the easy integration of **CPMS Areas** that have been configured in the CogniPoint Management System (CPMS) and provides the occupancy count of those Areas. The Niagara driver does not allow for individual CogniPoint devices to be connected directly (on the basis that an Area will have at least one CogniPoint device within it).



LICENSING & SOFTWARE MAINTENANCE

The PointGrab Cloud driver is licensed based on the number of PointGrab Devices & Areas 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 PointGrab Cloud driver has been expanded to cover the number of new PointGrab devices being added.

You will need to ensure that your Niagara Station (JACE or Web Supervisor) has adequate Tridium Global Capacity points for the PointGrab Areas 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 PointGrab 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

PointGrab License Packs:

Product Code	Description
PointGrab010	PointGrab Cloud Driver For 10x PointGrab Devices & Areas
PointGrab025	PointGrab Cloud Driver For 25x PointGrab Devices & Areas
PointGrab050	PointGrab Cloud Driver For 50x PointGrab Devices & Areas
PointGrab100	PointGrab Cloud Driver For 100x PointGrab Devices & Areas
PointGrab001-UPG	PointGrab Cloud Driver Upgrade 1x PointGrab Device & Areas
PointGrab005-UPG	PointGrab Cloud Driver Upgrade 5x PointGrab Device & Areas
PointGrab010-UPG	PointGrab Cloud Driver Upgrade 10x PointGrab Device & Areas
PointGrab010-NUPG	PointGrab Cloud Driver 10x Devices Niagara Version Upgrade
PointGrab025-NUPG	PointGrab Cloud Driver 25x Devices Niagara Version Upgrade
PointGrab050-NUPG	PointGrab Cloud Driver 50x Devices Niagara Version Upgrade
PointGrab100-NUPG	PointGrab Cloud Driver 100x Devices Niagara Version Upgrade

The driver will also consume Global Capacity points from the Tridium license, this will be one global capacity point per Area.

POINTGRAB DRIVER INSTALLATION

The PointGrab 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 PointGrab 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

- ▶ PointGrab-rt.jar
- ▶ PointGrab-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 PointGrab Cloud driver.

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

PRE REQUISITES

Before proceeding you should ensure the following:

- ▶ PointGrab CPMS Dashboard Account has been created.
- ▶ All PointGrab devices are online and reporting to the CPMS Dashboard.
- ▶ You have the API Key for your Dashboard Account

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

The API Key can be obtained from the PointGrab dashboard (<https://cpms.pointgrab.com>)

In order to use the CogniPoint API, you'll need an "**application user**", which you define in the CogniPoint Sensing Platform. Only a user with administrator permissions can create an app user. The admin user for your account will either be someone on your own team, or the vendor from whom you acquired the CogniPoint Sensing Platform.

The admin user creates a CogniPoint application user, and sends you a user ID and a secret key. You use both these values when requesting an access token. Your application then passes the access token to all CogniPoint API calls.

For more detailed information please refer to CogniPoint Sensing Platform - User Guide.

DRIVER CONFIGURATION



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

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

Navigate to the AX Property Sheet view of the driver.

PROPERTY	DESCRIPTION
Status	Driver status should always be OK Initially this will be in Fault as some configuration will be required.
Enabled	Enable / Disable the Driver
Use HTTPS	This should always be True
Server URL	cpms.pointgrab.com
Server Port	Default is 443
Application ID	<i>Obtain From PointGrab CPMS*</i> <i>See the above information on Application Users</i>
Application Key	<i>Obtain From PointGrab CPMS*</i> <i>See the above information on Application Users</i>

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

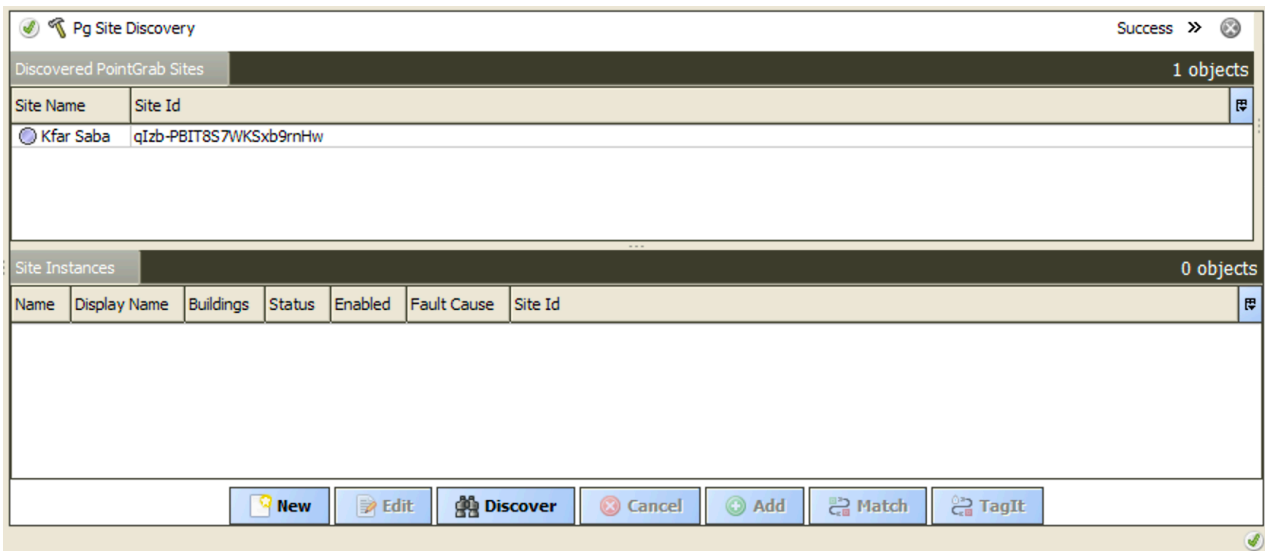
Driver Manager				
Name	Type	Status	Enabled	Fault Cause
 NiagaraNetwork	Niagara Network	{ok}	true	
 PointGrabNetwork	PointGrab Network	{unackedAlarm}	true	

ADDING SITES

Navigate to the **PointGrab Network** and the Site Manager View will be presented.

The Driver supports automatic discovery of components within the Systems (Sites, Buildings, Floors, Areas etc).

Press the **Discover** button and the available Site(s) will be discovered.



Add the required Site(s) to the PointGrab database.

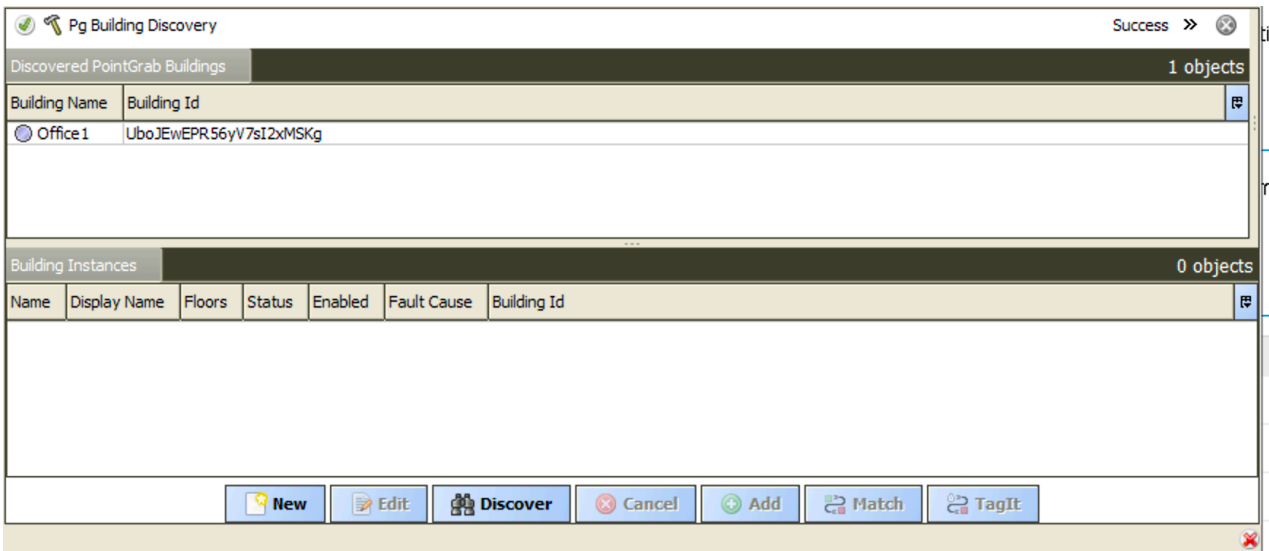
The Site supports a Building extension.

ADDING BUILDINGS

Navigate to the **Buildings** container and the Building Manager View will be presented.

The Driver supports automatic discovery of components within the System (Sites, Buildings, Floors, Areas etc).

Press the **Discover** button and the available Building(s) will be discovered.



Add the required Buildings to the Site database.

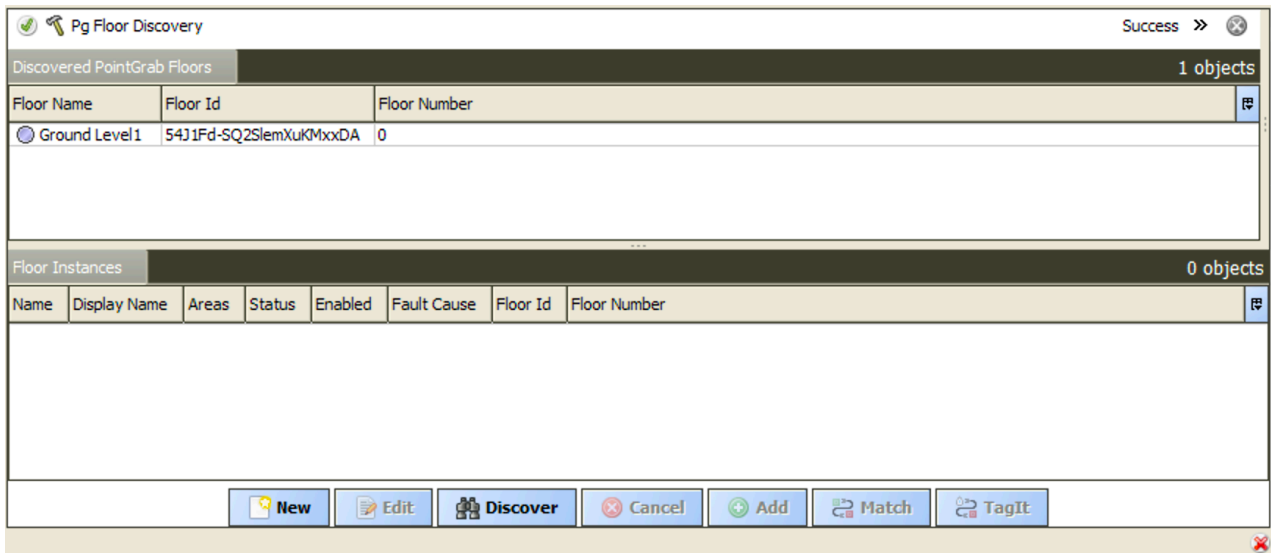
The Building supports a Floors extension.

ADDING FLOORS

Navigate to the **Floors** container and the Floor Manager View will be presented.

The Driver supports automatic discovery of components within the System (Sites, Buildings, Floors, Areas etc).

Press the **Discover** button and the available Floor(s) will be discovered.



Add the required Floors to the Building database.

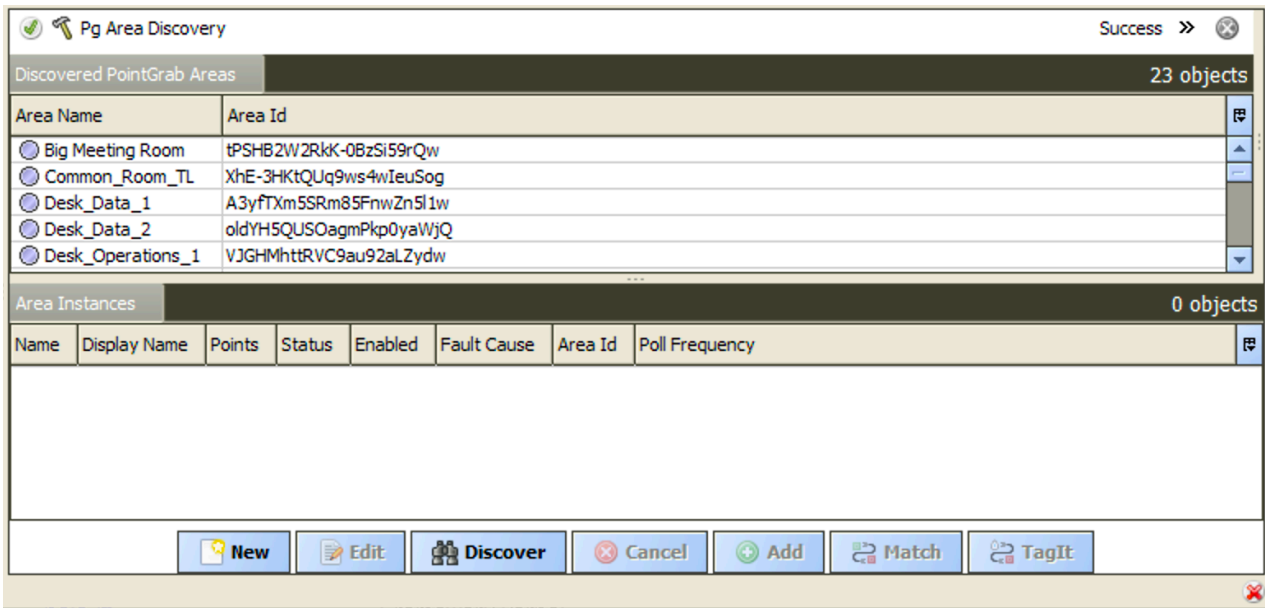
The Floor supports an Areas extension.

ADDING AREAS

Navigate to the **Areas** container and the Area Manager View will be presented.

The Driver supports automatic discovery of components within the System (Sites, Buildings, Floors, Areas etc).

Press the **Discover** button and the available Area(s) will be discovered.




Add the required Areas to the Floor database.

The Areas will automatically populate with a NumericPoint representing the occupation level of the Area at the next polling cycle. Refer to the next section on configuring the polling frequencies for more information.

POLL SCHEDULER

Each Area has an assigned polling frequency, by default this will be Normal but can be adjusted to either Fast / Normal / Slow speeds.

The polling frequencies of the Poll Scheduler can be adjusted for the **AX Property Sheet** of the **PointGrab Network**.

▼  Poll Scheduler		PointGrab Poll Scheduler
<input checked="" type="radio"/> Poll Enabled	<input checked="" type="checkbox"/> true	
<input type="radio"/> Fast Rate	<input type="text" value="00000h 01m 00s"/> [15 seconds - +inf]	
<input type="radio"/> Normal Rate	<input type="text" value="00000h 05m 00s"/> [30 seconds - +inf]	
<input type="radio"/> Slow Rate	<input type="text" value="00000h 15m 00s"/> [1 minute - +inf]	

The default settings are:

- ▶ Fast - 1 min
- ▶ Normal - 5 min
- ▶ Slow - 15 min

REVISION HISTORY

REVISION	DESCRIPTION
1.0	Draft Release For Approval