



BROCHURE

Octave Alto Twin



Overview

Managing the intricate infrastructure that powers oil, gas or chemical refineries and production facilities, heavy equipment manufacturing, large sea or river ports, airports and other complex sites and facilities requires modern, easily adaptable and performant solutions.

Octave Alto Twin (formerly HxGN Smart Sites), a real-time location intelligence and data visualization solution, seamlessly integrates with existing enterprise systems and workflows to turn closed, complex environments with critical infrastructure into smart sites. By combining any type of real-time, dynamic and static data into a 3D common operating picture (COP), Alto Twin allows users to quickly digest information. With interactive maps and automated notifications, Alto Twin turns data into usable information and brings shared situational awareness to all stakeholders.

Support on-site teams

Safety and efficiency are crucial in any complex facility with critical assets. Workforces in these industries are exposed to a variety of potential risks — from heavy equipment to hazardous materials.

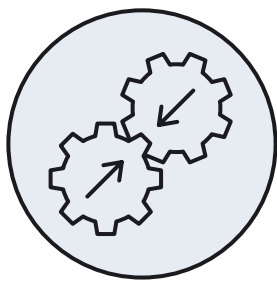
Organizations need to ensure on-site teams can effectively perform their jobs and react immediately to unforeseen events. Key to this is access to necessary information, visualized in real time in a single application that is intuitively accessible from anywhere on-site at any time.



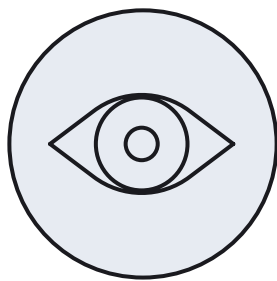
Combine any type of real-time, dynamic and static data into a 3D common operational picture with Alto Twin.

Alto Twin provides these capabilities and enables better, faster and safer decision-making by:

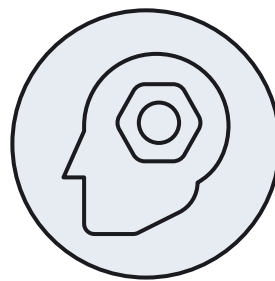
- Incorporating geospatial data and **location intelligence** into site operations
- Integrating with **existing systems** to streamline workflows
- Equipping site teams with **real-time** location tracking and visualization
- Providing a system to handle permits for increased **security**



Endless data integrations



Unmatched visualization and analytics



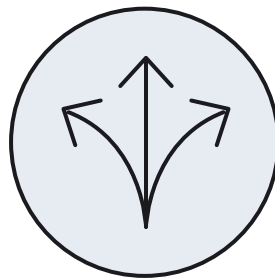
Full situational awareness



Secure data access

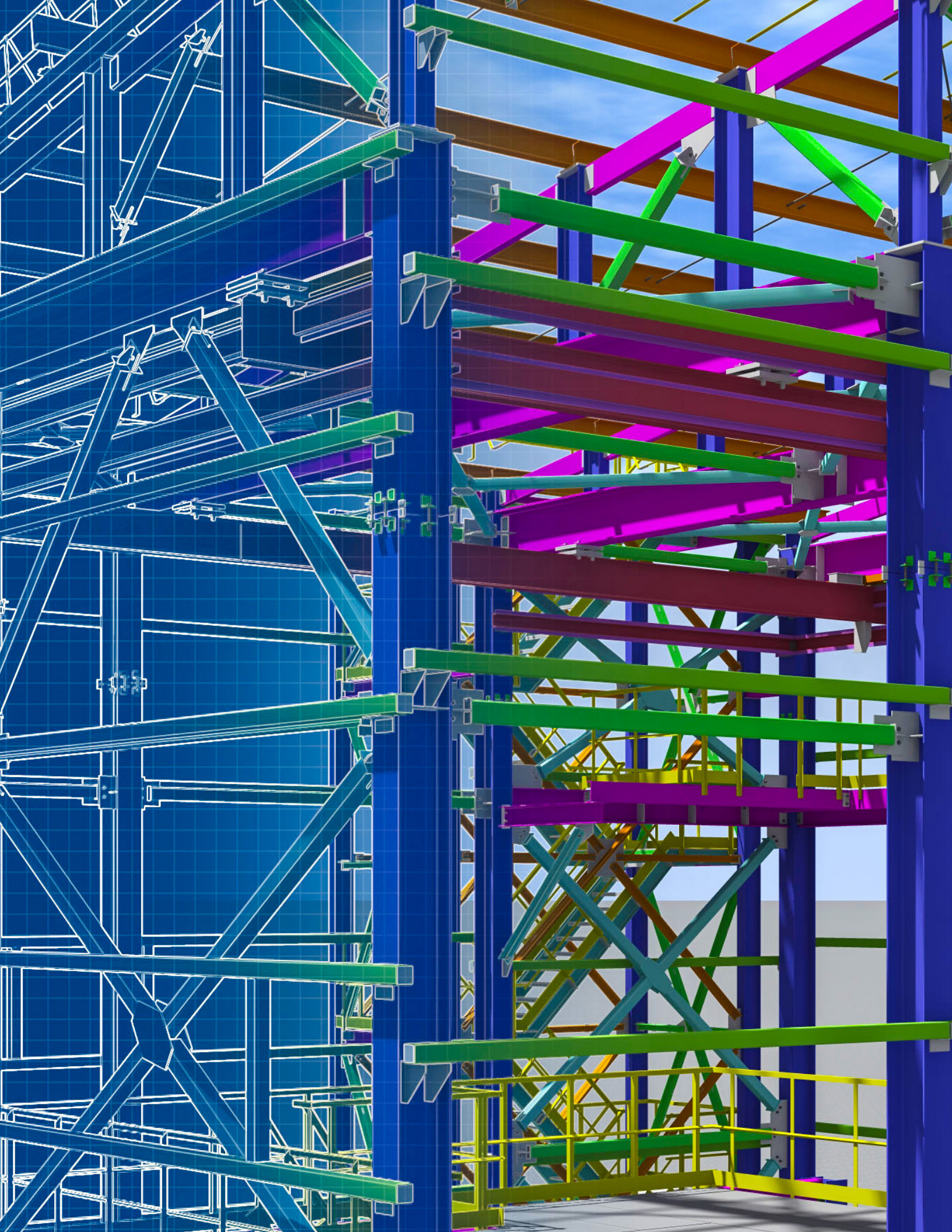


Intuitive user interface



Flexible deployments

Capabilities



From multiacre sites to a single asset

Alto Twin offers a visual, sitewide overview of real-time, dynamic and static data through a georeferenced map turned into usable information. With its extensive support for visualizing data from various formats, Alto Twin offers cost-effective federation of siloed data.

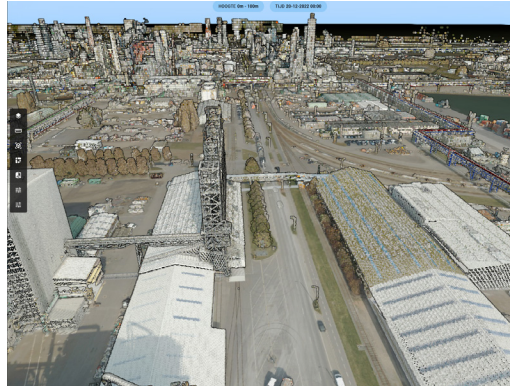
The browsable data catalog with built-in authentication and authorization maintains the access controls defined by your organization, while ensuring all users have access to the same version of available datasets. Through the data catalog, various datasets coming from different parts of an organization in different formats can be labeled based on user preference. The labels can be used to create different views of your data accessed by dimensions, allowing you to easily filter through data properties.

With the intuitive dimensions-based user interface of Alto Twin, you can have a bird's eye view of your site and still interact with a single pipe, for example, to see the type of material it contains and the last maintenance date in the same view.



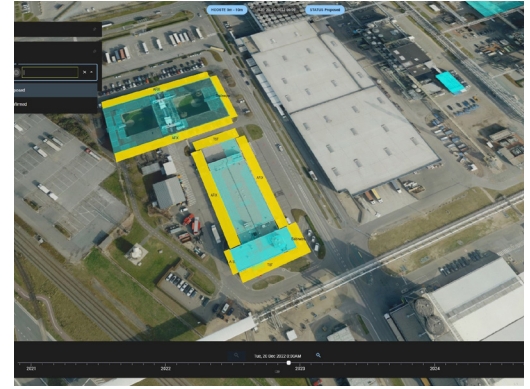
Alto Twin offers a visual, sitewide overview through a georeferenced map.

Features



Data support

Alto Twin supports various data formats — including CAD / BIM formats, raster and vector formats, point clouds, reality meshes, 360 panoramic imagery and data coming through OGC data exchange standards — and makes it available to users via a browsable data catalog. It can also ingest data from existing systems through customconnectors.



Dimensions-based interface

Alto Twin exploits the dimensions of your data to allow interaction with relevant parts. The time dimension is used to filter data via a timeline, while its position-related dimensions are used for geospatial filtering. Relevant data can be visualized using custom dimensions based on specific attributes.



Data visualization

GPU-optimized maps in Alto Twin display data in a 2D or 3D view. You can style raster and vector data, as well as point clouds and meshes. You can also create labels based on relevant attributes and use clustering and decluttering algorithms to easily understand dense datasets.

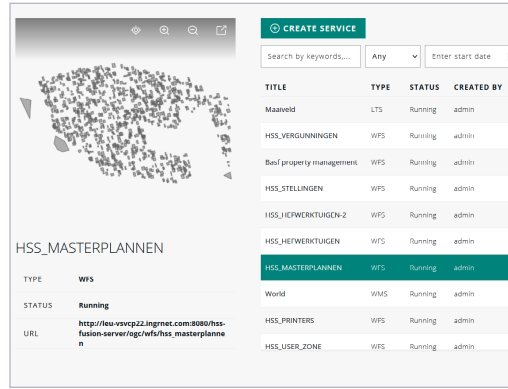


Analytical tools

Alto Twin offers multiple analytical tools. The cross-section view enables visual interpretation of the heights of a dataset while the measurement tool performs accurate measurements synchronized with the main map. Use the slicing tool to visually filter your data so you can focus on and understand larger datasets, and use the slider to compare multiple datasets side by side on the map.

User management

The built-in authorization and authentication controls in Alto Twin can connect to your organization's user management system to ensure secure access to up-to-date data based on permitted users and roles.



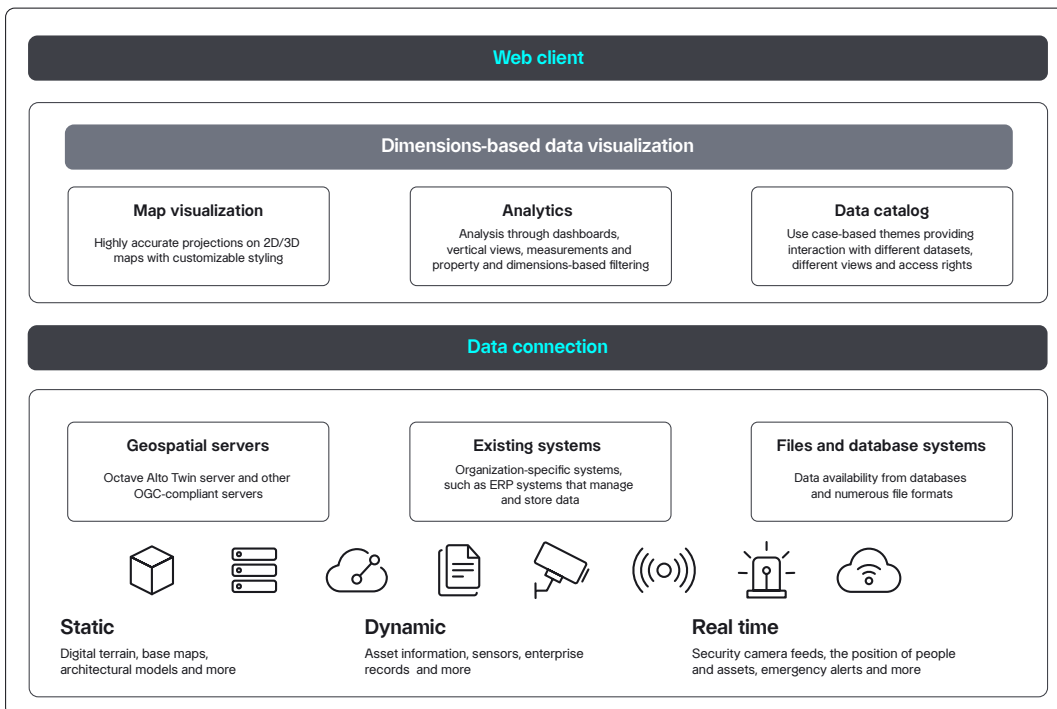
The screenshot shows a web interface with a map of the Netherlands on the left and a table of services on the right. The table has columns for TITLE, TYPE, STATUS, and CREATED BY. The service 'HSS_MASTERPLANNEN' is highlighted in green.

TITLE	TYPE	STATUS	CREATED BY
Maanveld	LTS	Running	admin
HSS_VERGUNNINGEN	WFS	Running	admin
Buif property management	WFS	Running	admin
HSS_STELLINGEN	WFS	Running	admin
HSS_HEFWERKTUIGEN-2	WFS	Running	admin
HSS_HEFWERKTUIGEN	WFS	Running	admin
HSS_MASTERPLANNEN	WFS	Running	admin
World	WMS	Running	admin
HSS_PRINTERS	WFS	Running	admin
HSS_USER_ZONE	WFS	Running	admin

Below the table, details for 'HSS_MASTERPLANNEN' are shown:

- TYPE: WFS
- STATUS: Running
- URL: http://seu-vsvcp22.ingrnet.com:8080/hss-fusion-server/ogc/wfs/hss_masterplannen

Components



About Octave

Octave is a leader in enterprise software, turning data into decisive action and intelligence into your edge. Our software solves for and simplifies complexity, from the design and build to operations and protection of people, property and assets – for any scope, at any scale. For decades, we've partnered with customers to sharpen performance, elevate efficiency and amplify results. From factory floors to entire cities, our solutions are tuned to scale up what's possible from day one onward.

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