

Orbit GT User Group meeting

Hyatt Regency Aurora Conference Center, Denver February 8th, 2018 Welcome & Introduction : 9:00 AM – 9:30 AM
Orbit Product overview : 9:30 AM – 12:00 AM
Lunch break : 12:00 AM – 1:00 PM
Hands-on training : 1:00 PM – 3:00 PM
Conclusion - Q&A : 3:00 PM – 3:30 PM

I. Introduction to Orbit GT

II. Some Use Cases

III. Why Orbit 3D Mapping software?

IV. Orbit product workflow: Capture – Model – Share

V. Q&A

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Orbit GT since 1962 • Lokeren, Belgium

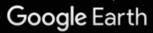
Global market since 2008

- 58 resellers
- Worldwide coverage for mobile mapping projects

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3:41 pm	3:57 pm

Data SIO, NOAA, U.S. Navy, NGA, GEBCO

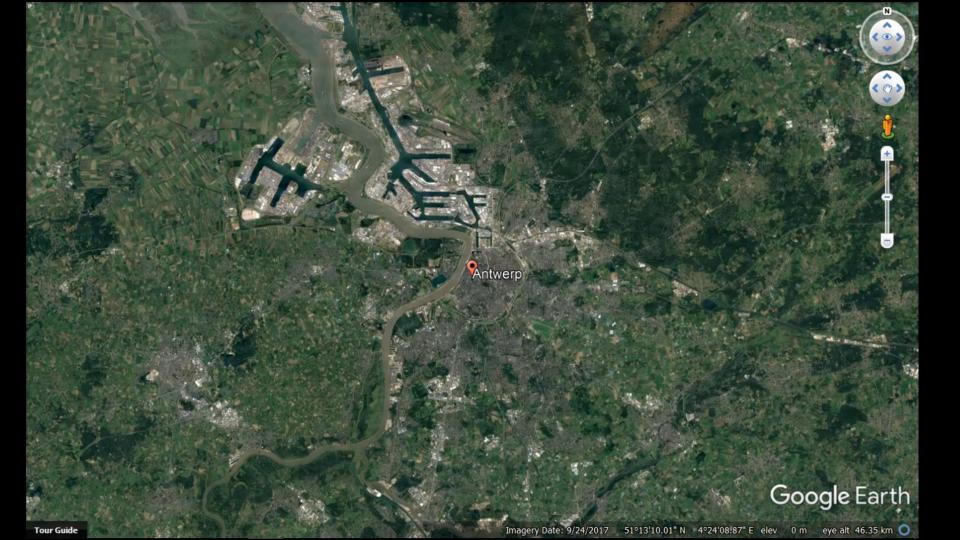
Data SIO, NOAA, U.S. Navy, NGA, GEBO Image Landsat / Copernicus Image IBCAO



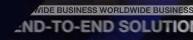
Imagery Date: 12/14/2015 29°33'50.57" N 108°32'25.67" E eye alt 20416.16 km 🔘



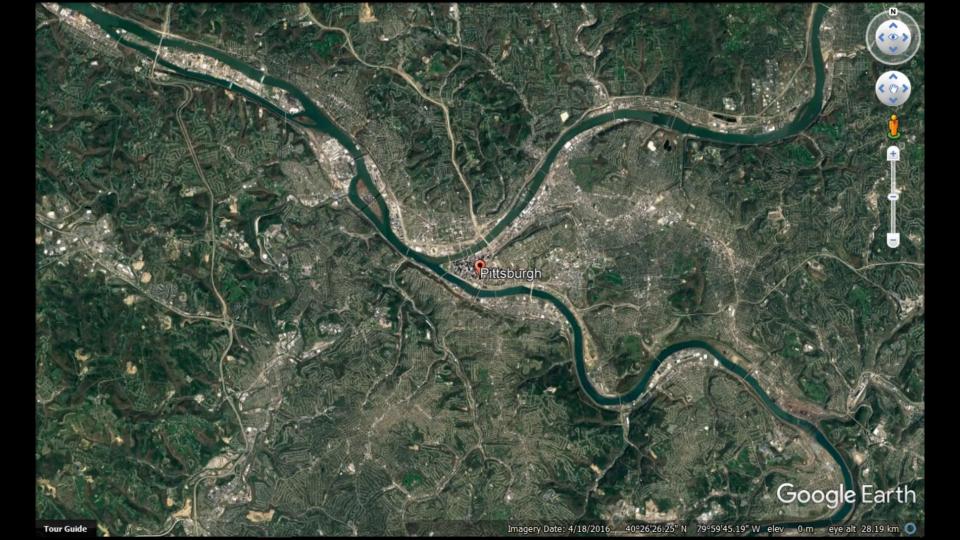








IDEAS





Why Orbit 3D Mapping software?



These days Mobile Mapping projects are common all over the world, covering countries, states, regions, cities.

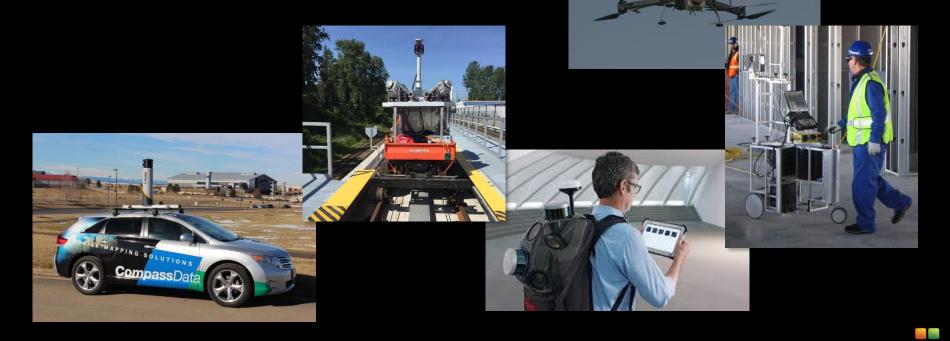
Big projects are going on in Europe (e.g. Belgium, Sweden, Spain, Germany, Austria, Lithuania, Portugal, Italy, Turkey), United States, South & Latin America (Costa Rica, Honduras, Bolivia, Ecuador, Mexico), Asia (Singapore, Hong Kong, Thailand, Korea, China, India), MENA (Saoudi Arabia, Morocco, United Emirates), ...



Hundreds of different mobile mapping systems are used by thousands of data collection companies.

Importance of a strong industry support.

Standardized Mobile Mapping software products for a complete 3D mapping workflow.





The **support** of different hardware setups is one, bringing all 3D mapping data together in **one and the same** project is the key thing. Flying, driving, walking, indoor, outdoor, underground, ...



Mobile Mapping





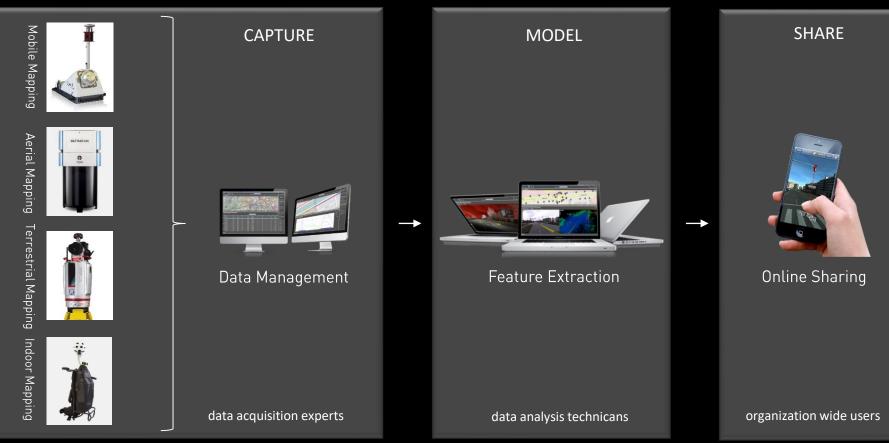
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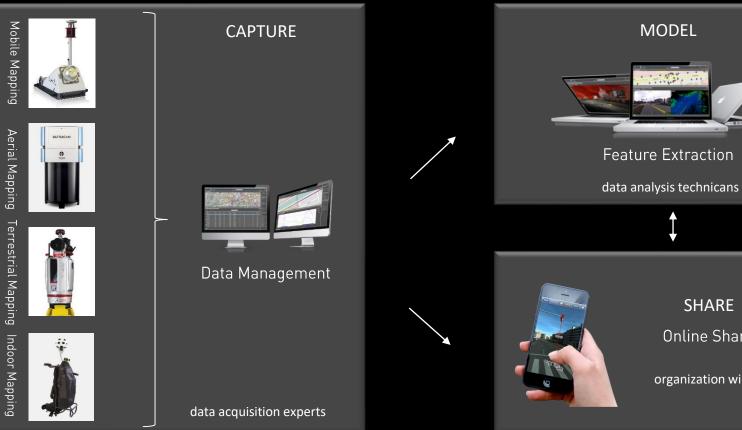
Terrestiral Mapping

Indoor Mapping







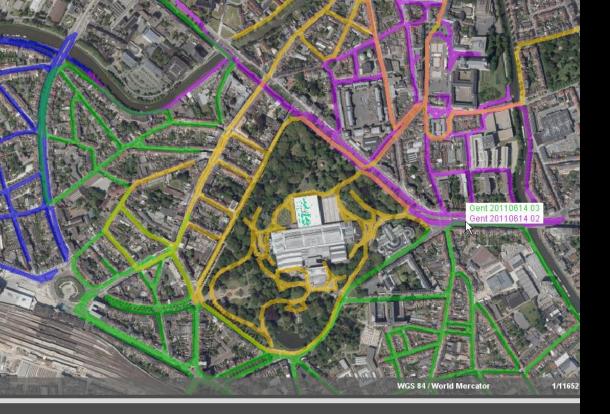


SHARE Online Sharing

organization wide users



HARDWARE SETUP WITH LiDAR & IMAGERY



PLANNING JOB CONTROL OPTIMIZATION CLEANING DATA DELIVERY

82 m 130 m

158 m

Q Gent		•		
Collection date	Status	Sphericals	Planars	Point Cloue
2011/06/14	In process	4459		0
2011/06/14	Imported	3306		
2011/06/14	Imported	6368		
2011/06/14		6230		0

ORBIT 3DM CONTENT MANAGER

Import - Explore - Verify - Adjust - Deliver

Manage 3D Mapping data after Capture



orbit

Manage **3D Mapping Data** after Capture CAPTURE CONTENT MANAGER > PUBLISH FEATURE EXTRACTION

Import - all systems, sensors, size - Mobile, UAS, Indoor, Oblique, Terrestrial 3D data import

Explore

catalog overview, query, archive, view details map view in 2D, 3D, slice viewing use reference GIS data

Verif

positional accuracy analysis trajectory accuracy graph quality control via ground control points

Adjust

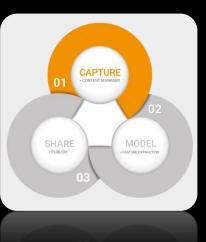
trajectory adjustment using GCP's remove duplicates, auto point cloud ghost cleaning georeference 3D data

Consolidate & Deliver

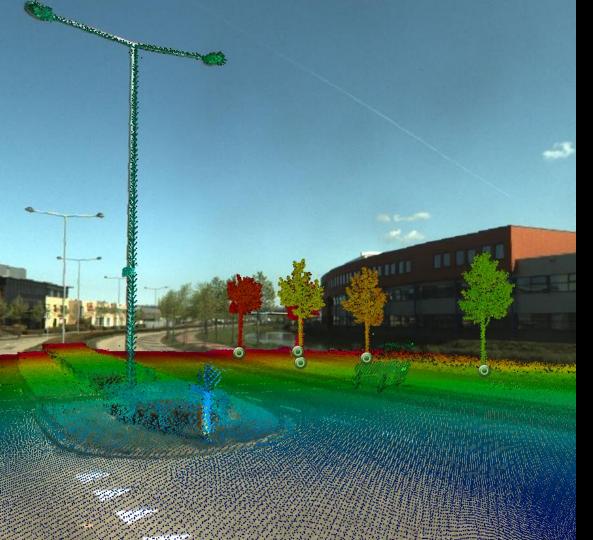
prepare and optimize for feature extraction and publishing upload to 3D Mapping Cloud

COLLECT / PRODUCE > CONTENT MANAGER

DELIVERY



Combined projects Clean image and LiDAR No Overlaps Ready for next steps



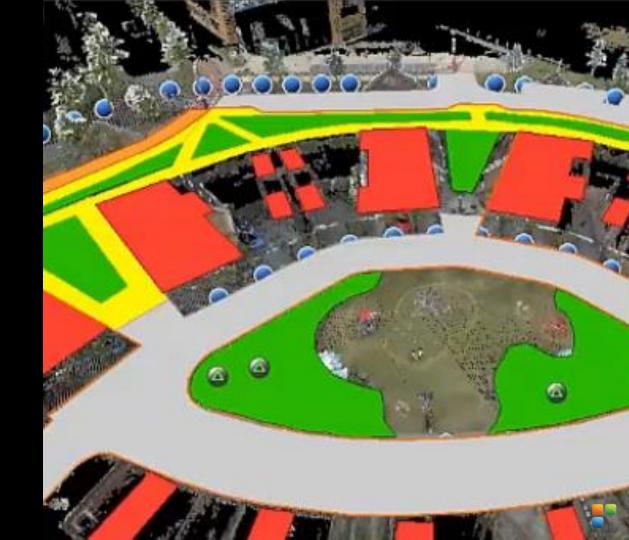
MEASURE EXTRACT MODEL ANALYSE REPORT TEAM WORK

Orbit 3DM Feature Extraction

FEATURE EXTRACTION

Basic & Advanced

Workflows & (semi-) automated processes



ORBIT 3DM FEATURE EXTRACTION

Import - Explore - Measure & Extract - Produce & Analyse - Deliver

Advanced Feature Extraction for the Professional

essional Share

NEW IN V18

MODEL

Advanced Feature Extraction for Mobile, UAS, Indoor, Oblique and Terrestrial Mapping



Import all 3D Mapping data: imagery & point cloud add file, database and web based geo resources

Explore map view in 2D, 3D, slice viewing overlay reference GIS data

Measure & Extract

NEW IN V18 !!!

nes, catenary curves, areas, volumes, circle

ridge, edge and corner detection and measurement slice, point cloud, and imagery only measurement

Produce & Analyse

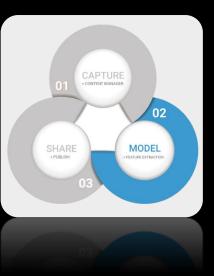
asset inventory workflow, parallel auto-extraction profiles, contours, volumes, cross section analysis clash detection, floor plan builder **automated pole detection, template-based classification automated traffic sign detection**

Deliver

deliver extracted features for publishing export data (flythrough movie, vector files, snapshots, ...)

EXTRACT / PROCESS > FEATURE EXTRACTION

DELIVERY



GIS & CAD Data Profiles & volumes Analysis reports Documents PUBLISH ONLINE SHARE VIA WEB INTEGRATE VIA API PLUG-IN ARCGIS PLUG-IN AUTOCAD PLUG-IN QGIS

Orbit 3DM Publisher Orbit 3DM Cloud



ORBIT 3DM PUBLISHER - ON-PREMISES

Configure - Publish - Webclient - Plugins - SDK

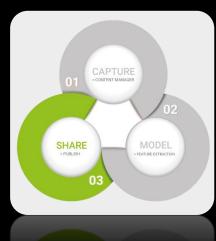
Share Online without Limits





SHARE / DELIVER > PUBLISHER

DELIVERY

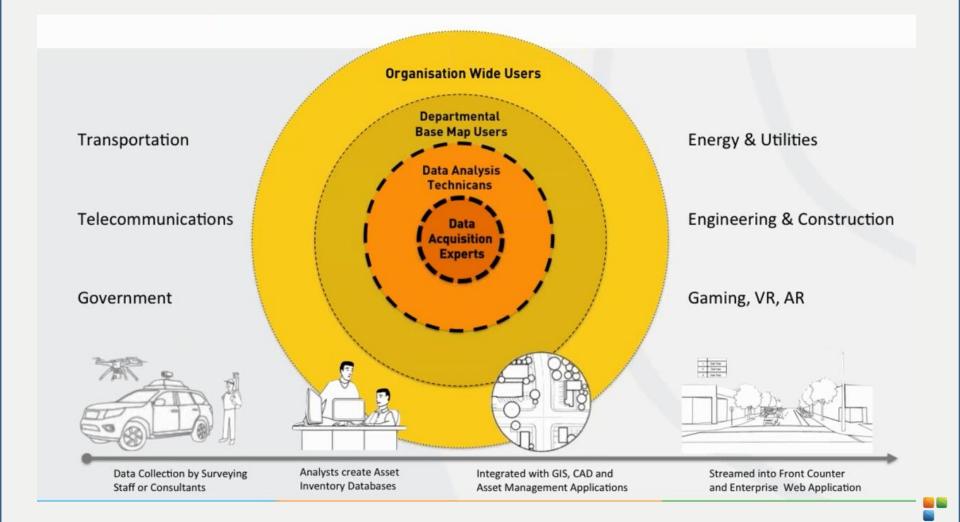


Make 3DM content useful to thousands Repetitive business

The analysis of the entire mapping workflow.







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