Introduction to the new Orbit Cloud Product

November 2016 CONFIDENTIAL - For Orbit GT Resellers Only



What is the Orbit Cloud ?



View, Fuse, Share, Publish, Integrate and Sell all 3D Mapping data

a SaaS based Web App & Platform for All Imagery and Point Cloud data



Powerfull Viewing & Integration Capabilities

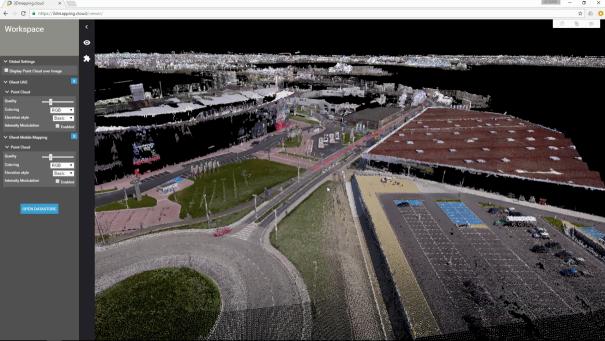
HTML5 Viewing & Free SDK



Self-Service Monthly Payments Manage Users and Data Using the Online Cloud Console









- 1. Combine, Fuse Data
 - Mobile Mapping
 - UAS Mapping
 - Indoor Mapping
 - Terrestrial Mapping
 - Oblique Mapping (with Aerial LiDAR)
 - GIS vector data and reference 2D image data
 - > Anything Image + LiDAR
- All in a single View



• 2. View, Share and Publish Data

- Imagery, Point Cloud, GIS data
- Global access
- HTML5 : Access from any Device
- Access from any Plugin*
- Share within Team, Organisation
- Share to Externals Customers, Contractors
- Share to Public
- Share via Publications

*excludes 3rd party costs

Business

• 3. Self-Service

- Customer creates Account
- Customer uploads & manages data
- Customer invites users, internal and external
- Customer shares and publishes data
- No software installation required
- Free SDK to create your own plugins
- Free Orbit GT plugins for select hosts
- Growing set of functionalities



- Yearly or Monthly payments
- Automated pre-payment
- Named Users & Storage Volume
- Most likely to grow-only
- Coupons / Pay for others
- Open to Paid Features
 - Processing, Analysis, ...



3D MAPPING CLOUD BASICS



SaaS Web Application : 3 Main Parts





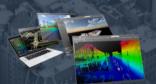


3D Mapping Cloud Website

1







Cloud-based 3D Mapping Web Application

3D MAPPING . CLOUD

View, Share and Analyse your 3D resources. Easy access vast volumes of data from Mobile Mapping, UAS Mapping, Indoor Mapping, Terrestrial scanning, or Oblique Mapping The 3D Mapping Cloud is the next step in a new and open approach to the collaborative use of different data resources.

Your email address...







STEPS TO TAKE

Easily acces and upload data Organize & manage, catalog & archive Improve your data by pointcloud cleaning instant trajectory adjustment using gcp constraintsae



SIGN UP

Sign Up in seconds. Create an account for your organisation and go invite your team mates. Instantly use sample data to get started.

REGISTER



UPLOAD

Upload your own data. Use the upload page or use our Content Manager for safe upload of large datasets. Use our Disc Delivery service for even larger datasets – there are no limits !



VIEW AND SHARE

Instant view huge 3D Data. View any dataset ad hoc. Just select them from your Data Catalog. Fuse various data types together on the fly. Share your data and views with others, your customer, your contractor, the public.

EXPLORE

TRY NOW



how

Free Trial	Starter	Team	Company	E	
Please select you wish to pay	Yearly		Monthly		

*Your currency is set to: EUR	Free Trial	Starter	Team	Company	Enterprise
	Free	€120 / month	€400 / month	€1200 / month	€4500 / month
Named Users	1	5	25	100	500
Data Access	5GB Upload plus example data	unlimited	unlimited	unlimited	unlimited
Max # Images	For 5GB in total	unlimited	unlimited	unlimited	unlimited
Max Image Size	5GB	unlimited	unlimited	unlimited	unlimited
Max # Points in Point Cloud	For 5GB in total	unlimited	unlimited	unlimited	unlimited
Max Point Cloud Size	5GB	unlimited	unlimited	unlimited	unlimited
Viewing Capabilities	unlimited	unlimited	unlimited	unlimited	unlimited
Platform Support	unlimited	unlimited	unlimited	unlimited	unlimited
Publications	n/a	n/a	5	unlimited	unlimited
3rd Party Invite	n/a	2	10	unlimited	unlimited
Access via SDK	n/a	n/a	unlimited	unlimited	unlimited
SDK Development	n/a	n/a	unlimited	unlimited	unlimited
Billing User	n/a	free	free	free	free
	Select Plan	Select Plan	Select Plan	Select Plan	Select Plan





HELP CENTER

Need help ? Here's plenty of resources for you.





Frequently Asked Questions

Here's where you get quick and easy answers to common questions.

About your Account, Users and Roles

► HOW DOES THE 3D MAPPING CLOUD WORK ?

3D Mapping.cloud is a self-service web application. It consists out of the following elements :

- 1. A Viewer for 3D data
- 2. A Console to manage you stuff

The 3D Mapping Cloud especially supports huge volume datasets, such as from (vehicle based outdoor) Mobile Mapping, Indoor Mapping, UAS Mapping, Oblique Mapping or Terrestrial Mapping. Typically, these datasets consist out of **Point Clouds** and/or **Imagery**.

You can Upload your data, View and Share within your organisation or to others.

The Viewer has every growing capabilities, among which it's availability as SDK to build plugins in any host software or website.

Want to see more ?

There's a bunch of video's posted on youtube and other social media. Follow our Blog to receive updates, tips and tricks and more.

▼ GETTING STARTED

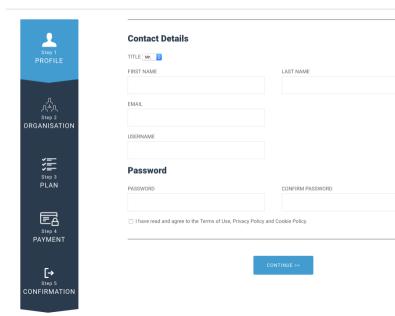
▼ ABOUT THE ACCOUNT AND ITS USERS



SIGN IN YOUR 3D MAPPING CLOUD

	Email
peter.bon	ne@orbitgt.com
	Password
	Remember Me
	LOG IN







PRODUCT PRICING HELP CENTER SIGN OUT MY CLOUD

Welcome back Peter.

What do you want to do?





2

Manage 3D Mapping Cloud Console

Users Data Plans



3D Mapping Cloud Console





CONSOLE

Manage Users & Roles Manage Data & Sharing Permissions Manage Account, Plan & Billing





DATA & SHARING

Ea

PLAN & PAYMENT

Users & Roles



- Account :
 - Every Company or Organisation has 1 single Account
 - First person to register is Owner of the Account and Invites other users

Named Users

- All Users are Named Users : non-transferrable, individual
- Identified using corporate email address
- User Roles
 - Defines what a user can do

Data & Sharing



- Catalog
 - List of available and accessible Datasets
- A Dataset can be
 - LiDAR + Imagery combination
 - LiDAR or Imagery only
 - Any type of GIS Vector or Image data

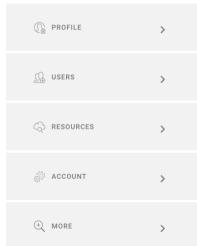
- Upload via
 - Website
 - Content Manager
 - Disc Delivery service
- Set Permissions & Metadata
 - Default Share data within Company
 - Share with 3rd party

Plan & Payment

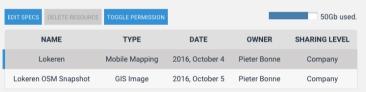


- Usage Plans
 - Plan per Organisation : X Named Users
 Y TB of Storage
- Automatic Pre-Payment
 - Credit Card Automatic Invoicing
 - Monthly or Yearly
- Use of Coupons
 - Pay for a third party





Manage Resources





3

Use 3D Mapping Cloud Viewer



3D Mapping Cloud Viewer





APPLICATION / VIEWER

3D Viewing Point Cloud & Imagery Functionalities Web & SDK





MEASURE & REGISTER



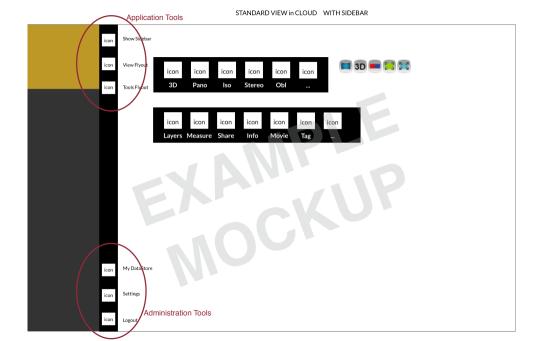
TOOLS, SDK

About The Viewer

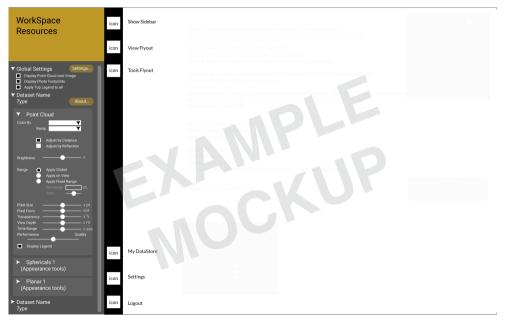


- Tech Aspects
 - HTML 5, Responsive Design Smartphone, Tablet ready Default 3D
 - Views Point Cloud, Imagery
 - Views GIS Vector & Raster data
 - Viewer is Free Available as SDK
 For building a Plugin
 For Web app development
 - Free Plugins from Orbit GT
 - ArcOnline widget
 - ArcGIS, AutoCAD, MicroStation, QGIS

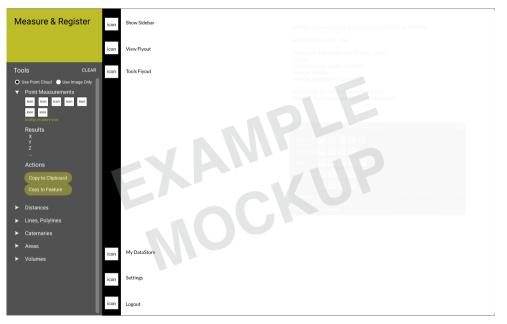
- Use aspects
 - Requires Named User to sign in
 - Choose Datasets from Catalog
 - Access to and Fusion of all data (MM, OBL, UAS, Terrestrial, ...)
 - Intuitive viewing
 - Viewing Performance Options
 - Measurement Tools
 - Growing list of Tools



STANDARD VIEW - DATASET LIST



STANDARD VIEW - MEASURE

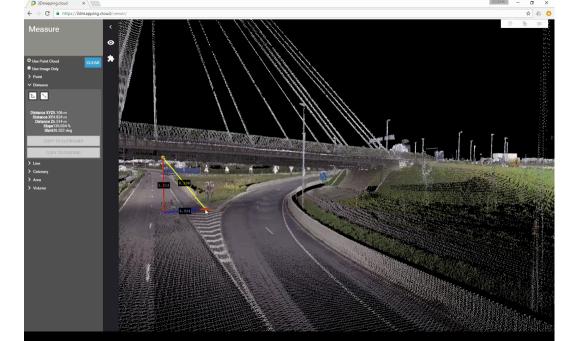


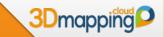












UNDERSTANDING





Getting Started

Registration Procedure



Registration Overview



Registration

- First User to register will register also Company / Organisation
- First User will be Owner, have Admin role and will invite other users
- > There is no personal Account, only a Corporate Account which holds X Named Users

Named Users

- Each user individually known ("Named")
- Each user belongs to 1 Account (Company / Organisation wide)
- No concurrent users
- ▶ Invited by First User (Owner) or by users having the proper role assigned to them

1. First User : Sign Up



• Sign Up

- ▶ 1. Register as person
- > 2. Register your Company / Organisation
- ▶ 3. Choose your Plan & Storage
- ▶ 4. Setup Payment
- 5. Check and Confirm
- Done. You are now the Account Owner.
- According to your Plan & Storage, start uploading data.

• Trial

- 1. Register as person
- > 2. Register your Company / Organisation
- 3. Choose Trial Plan
- 4. Check and Confirm
- 14 days free
- Upload limit of 5GB (example data available)

2. Other Users : Invite



- Owner to invite other users
 - Identify by email-address
 - Send invite from Cloud Console
 - User accepts link in email
 - User registers as person added as user to Company Account
- Owner defines User Roles
- from Administrator to view-only user

- Free "Billing User"
 - Separate from Named Users
 - Access to Financials only





Example set of Roles and allowed actions

v TASKS	ROLES >	BILLING	OWNER	ADMIN	TEAM LEADER	RESOURCE MGR	SPACES MGR	USER	
BILLING	Access Billing	x	×						
									0 0
RESOURCES	Open a Resource		×	×	×	x	×	x	Can Open upon individual permission
	Upload a Resource		×	×	x	x			
	Edit/Delete OWN Resource		×	×	x	×			
	Edit/Delete OTHER Resource		×	×	x	×			
	Set permissions OWN Resource		×	×	×	x			
	Set permissions OTHER Resource		×	×	×	x			
	Share Resource externally		×	×	x				
(WORK)SPACES	Open a Workspace		×	×	×	×	×	×	Can Open upon individual permission
	Create a Workspace		x	×	×	×	×	x	
	Edit/Delete OWN workspace		x	×	x	×	×	x	
	Edit/Delete OTHER workspace		x	×	x		x		
	Set permissions OWN Workspace		×	×	×	×	x	x	
	Set permissions OTHER Workspace		×	×	×		×		
USERS	Contact a User		×	×	x	x			
	Invite a new User		x	×					
	Manage User Groups		x	×	x				
	Invite external user		×	×					

4. Manage Data



- Upload
 - via Upload button on webpage (single file only)
 - via Content Manager (standard MM datasets)
 - via Disc Delivery service (very large datasets)
- Set Permissions
 - Data Owner defines
 - > Which user(s) can see, use, share, ... which data

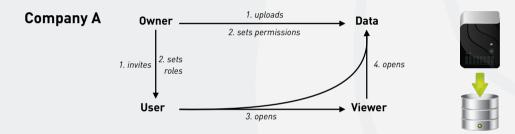


Sharing, SDK, Cloud vs Publisher



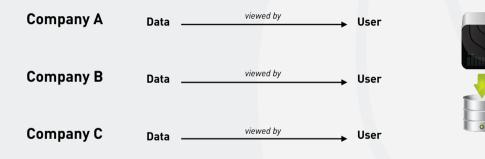


Owner, Users and Data sequence





Traditional : Each Company manages own data





Traditional : Typical Publisher setup is outbound

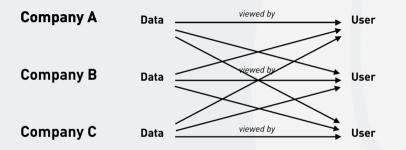








New : Share data with external users, simply set permissions







3D Mapping Cloud vs On Premises Publisher

Named Users Cloud

Company A

Users

Combine Any Data Global Sharing Access from Anywhere Access from any Device Free Access from SDK/Plugin* Coupons, Pay-as-you-go



Concurrent Users Mobile Mapping only On Premises LAN Sharing Access within Company Access from PC Paid Access from SDK/Plugin Sale

Company B Users Publisher

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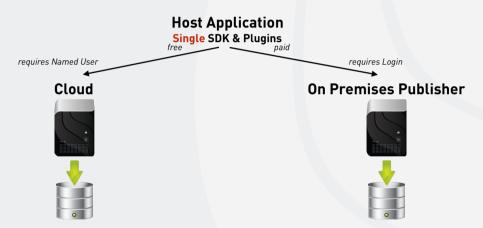


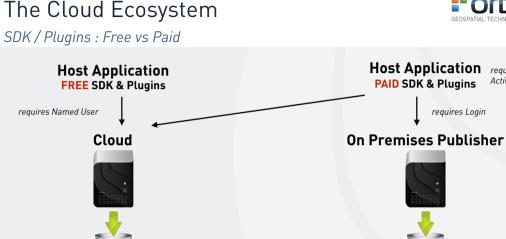


*excludes 3rd party costs



SDK / Plugins : Re-usability







requires Activation Key

Using the SDK for the Cloud only

- FREE HTML5 SDK
 - > To build integrations in any host, any website
 - Orbit GT to provide plugins for ArcGIS, ArcOnline, AutoCAD, MicroStation, QGIS
- User must have 3DMapping.Cloud Account
 - User must sign in using his/her named account
- API's
 - Available for JS, dotNet
 - ▶ 90% equal to current API



Cloud SDK vs Publisher SDK

- SDK and API's are identical : only 1 version
- At startup, user must :
 - Sign In to 3DMapping.Cloud Free use of SDK
 - Connect to a Publisher* and login

Requires Activation Key : Paid functionality according to current SDK & Plugin prices.

• Only the Login screen is different !!





SDK capabilities compared

- 1 SDK
- Can Connect to the Cloud
 - Free
 - Perform Named User access for :

Personal Data

- Team / Corporate Data
- 3rd Party Data (Free or Purchased data access)
- Shop on the Marketplace
- Fuse various data sources

- Can Connect to a dedicated On-Premises Publisher
 - Paid
 - Needs Activation Key to make login option available
 - Perform Publisher Login for :
 - Private Use
 - Protected Data
 - **On-Premises**



Server Dynamics Security Backup, Archiving, Recovery Global Access



Server Dynamics

- Fully automated scaling of server capacity
 - More Users => More Servers
- Optimised Data Access & Data Storage
- Session management
 - optimised data caching per session per user





Security

- Data Security
 - Only https Certified
 - Access only via Central Identification Service

OAuth 2 protocol

User Identification is checked on each request

- > Data not directly accessible from outside the cloud
- Payment Security
 - Via secured gateways
 - Orbit GT does not receive or process payments

Delegated to Payment Service Provider(s) depending on country

Backup, Archiving, Recovery

- Backup
 - All Data is automatically backed up within the Data Center
 - Cool LRS : Locally Redundant Storage using Cool access tier
- Archiving
 - Upon request only
- Recovery
- ▶ Upon errors in Data Center 1, data is automatically recovered from Data Center 2



Global Access · Data Center locations



Americas

Region Location Fast US Viminia East US 2 Virginia Central US North Central US Illinois South Central US Texas West Central US West Central US West US California West US 2 West US 2 US Goy Virginia Virginia LIS Con Jours Ouebec City Canada Central Toronto Brazil South Sao Paulo State

Newly announced

IS DoD East	To be announced
IS DoD Central	To be announced
IS Gov Arizona	Arizona
IS Gov Texas	Texas

Location
Ireland
Netherland
Frankfurt
Magdeburg
Cardiff
London

Newly announced

France Central To be announced France South To be announced

Asia Pacific

Region	Location
Southeast Asia	Singapore
East Asia	Hong Kong
Australia East	New South Wales
Australia Southeast	Victoria
Central India	Pune
West India	Mumbai
South India	Chennai
Japan East	Tokyo, Saitama
Japan West	Osaka
China East	Shanghai
China North	Beijing

Newly announced Korea South

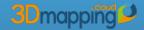
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THE BUSINESS MODEL





3D Mapping Cloud Pricing Model



Pricing Model

• 1. Plan

- Fixed amount per month/year
- Plan Price according to # Named Users
- Includes software, updates and hardware, use of SDK
- Reseller earns 20% of Customer Spending

• 2. Storage

- Fixed price of 50 EUR / 60 USD per month per TB
- User choice per 1 TB
- Reseller earns 10% of Customer Spending



	Please select how you wish to pay	Yearly	Monthly	
"Your currency is set to: EUR	Free Trial	Starter	Team	Company
	Free	€114 / month	C380 / month	€1140 / month
Named Users	1	5	25	100
Data Access	5GB Upload plus example data	unlimited	unlimited	unlimited
Max # Images	For 5Gb in total	unlimited	unlimited	unlimited
Max Image Size	50b	unlimited	unlimited	unlimited
Max # Points in Point Cloud	For 5Gb in total	unlimited	unlimited	unlimited
Max Point Cloud Size	505	unlimited	unlimited	unlimited
Viewing Capabilities	unlimited	unlimited	unlimited	unlimited
Platform Support	unlimited	unlimited	unlimited	unlimited
Publications	n/a	n/a	5	unlimited
3rd Party Invite	n/a	2	10	unlimited
Access via SDK	n/a	n/a	unlimited	unlimited
SDK Development	n/a	n/a	unlimited	unlimited
Billing User	n/a	free	free	free
	Select Plan	Select Plan	Select Plan	Select Plan

Reseller Fees Compared



• Publisher

- ▶ Fee on End User Price : 30% 40%
- Hardware : Excluded from End User Price
- Recurring Revenue : No guaranteed Maintenance
- > Your Effort : Demo-unit, Installation, Tech support, ...

Cloud

- ▶ Fee on End User Price : 20%
- Hardware : Included in End User Price
- Recurring Revenue : Yes
- Your Effort : Customer performs Self-Service !

How will that work ?

Reseller Fees Compared



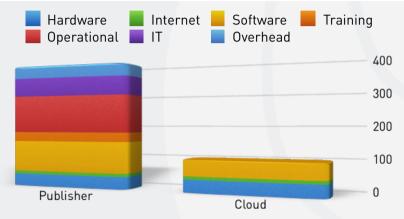
Fee % of End User Price explained



Customer TCO Compared

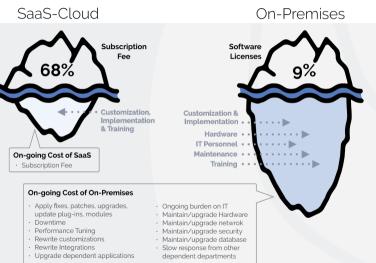


Yearly Total Cost of Ownership



Customer TCO Compared





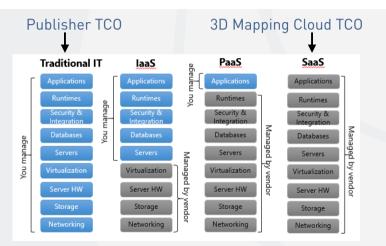
Customer TCO Compared



 Changing from On-Premises to Cloud

is much more

than a different price model



Why SaaS is beneficial to organisations



- No additional hardware costs : the processing power required to run the applications is supplied by the cloud provider.
- No initial setup costs : applications are ready to use once the user subscribes.
- Pay for what you use : if a piece of software is only needed for a limited period then it is only paid for over that period and subscriptions can usually be halted at any time.
- Usage is scalable : if a user decides they need more storage or additional services, for example, then they can access these on demand without needing to install new software or hardware.
- Updates are automated : whenever there is an update it is available online to existing customers, often free of charge. No new software will be required as it often is with other types of applications and the updates will usually be deployed automatically by the cloud provider.
- Cross device compatibility: SaaS applications can be accessed via any internet enabled device, which makes it ideal for those who use a
 number of different devices, such as internet enabled phones and tablets, and those who don't always use the same computer.
- Accessible from any location : rather than being restricted to installations on individual computers, an application can be accessed from anywhere with an internet enabled device.
- Applications can be embedded / integrated / customised; with some software, customisation is available meaning it can be altered to suit the needs and workflow integration of a particular customer.
- Summary
 - > There are no setup costs with SaaS, as there often are with other applications
 - ▶ SaaS is scalable with upgrades available on demand
 - > Access to Software as a Service is compatible across all internet enabled devices
 - > As long as there is an internet connection, applications are accessible from any location



Using Coupons



Coupons



- Pay for a third party
 - As startup / introduction
 - As permanent payment
 - Buy upfront
- Company A buys a Coupon and provides Coupon to Company B
 - ▶ Coupon contains e.g. a Plan for 5 users, 1 month. Value = €120
- Company B redeems Coupon to activate the Plan
 - Company B can use the 3D Mapping Cloud with 5 users for 1 month
 - Company B needs to enter Payment Info to continue after 1 month

LINK CUSTOMER TO RESELLER



- As Reseller :
 - Create your Account
 - Buy a Coupon
 - Provide Coupon to Customer to get him/her started
- The Customer :
 - Creates his/her Account
 - Redeems Coupon
 - Customer is now Linked to YOU
- As Reseller :
 - You will earn your fee on Customer's Spendings



The Marketplace



Shop for Data



Bring Data Producer and Data Consumer together

- Make your data publicly available on the Marketplace
 - > Defined Specs and Metadata (coverage, date, content, quality, ...)
 - Provide Sample view (if data is online)
 - How to Contact
- Organisations that are interested contact you
 - Conditions and payments are amongst both parties
 - > Data Producer gives access permission to Data Consumer according to their deal
- FREE: Orbit GT does not interfere in the transaction, only facilitates the sale
 - Both parties are Cloud users, hence pay for their use / storage

Marketplace Example for a Data Producer



- Produces data for tender X
- Delivers higher standard than requested by tender X, aimed for second sale
- Makes data listed on Marketplace
 - May promote and contact possible users
 - Marketplace is Free
 - Can sell twice or more
 - Can sell at lower price per unit

Marketplace Example for a Data Consumer



- Consumer has access to data for Town X
- Now needs to work on Town Y
- Consumer can do 2 things :
 - (1) File a tender or purchase order to collect data
 - probably pay full cost has to wait until data is deliverable
 - > (2) Search the Marketplace if there's any data available meeting his criteria
 - make a deal probably pay less have data available right away
 - Likely to go for (2)



3D Mapping Cloud Users

Example Use Cases



Case 1 : Government Use



- Government :
 - I use Mobile Mapping data via a Tender
 - I want my own team to go scan a site (Terrestrial / UAS)
 - I want to blend that data together

- MM contractor is Cloud user
 - Uploads tender MM data to his account
 - Shares MM data with Government
 - Typical Usage Plan : Small number of Named Users Large volume of Storage
- Government is Cloud user
 - Gets access to contractor data
 - Can upload own data and view jointly
 - Typical Usage Plan Large number of Named Users Small volume of Storage

Case 2 : Asset Management



- Government / Utility :
 - I need Mobile Mapping data
 - I need Asset Inventory
 - I need workflow integration
- Contractor :
 - Collects MM
 - Extracts Features
 - Performs Analysis

- MM contractor is Cloud user
 - Uploads MM data to his account
 - Uploads Features and results
 - Shares with Government direct sharing share via Publication
- Government is Cloud user
 - Has access to MM and Feature data
 - Can integrate (SDK) in own workflow

Case 3 : I am Contractor



- Contractor :
 - Produces Data for primary customer
 - ▶ Needs to Share / Publish
 - Wants to sell beyond primary customer

- Contractor is Cloud user
 - Typical Usage Plan : Small number of Named Users Large volume of Storage
 - Upload & Share with primary Customer
 - List data in Marketplace Sell data to new customers
- Primary Customer is Cloud user
 - Typical Usage Plan

Large number of Named Users

Small volume of Storage

Case 4 : I do UAS or Indoor Projects



- Company
 - Collects UAS / Indoor / ... data
 - Needs to make it available

- Company is Cloud user
 - Typical Usage Plan : Small number of Named Users Large volume of Storage
 - Upload Data
 - Define dedicated Publications ready-made webpages
 - List data in Marketplace
 Promote and Sell data to customers
- Customers will become Cloud users



Road Ahead



3D Mapping Cloud : Road Ahead





Roadmap





Launch Apr 2017



• Users

- ▶ Register, Invite, Manage
- Manage Corporate Account & Billing
- Data
 - Upload for MM, UAS
- Viewer
 - Point Cloud, Spherical & Planar Imagery
 - Basic Measurements

• Official Launches

- Soft Launch @ ILMF, Denver, Feb 2016
- Full Launch @ SPAR, Houston, Apr 2016

Upgrades Q2 2017



- Users
 - Additional Roles
 - External Users
- Data
 - Upload Oblique, Indoor, Terrestrial
 - Additional Permissions
 - ▶ Workspaces

• Viewer

Additional Tools

Upgrades Q3-Q4 2017

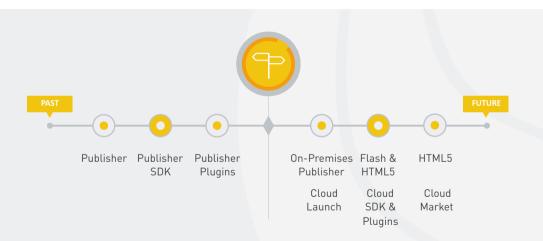


• Users

- Teams within Companies
- Data
 - ▶ 3D meshes
 - Publications
 - ▶ Feature Extraction
- Viewer
 - Additional Tools

Evolution Online Products





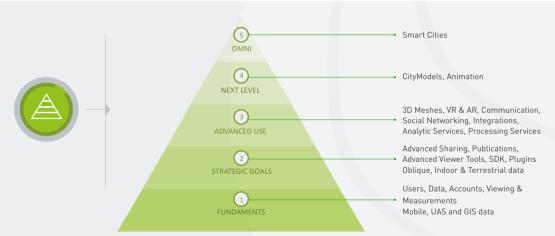
Evolution Online Capabilities





Long Term Vision 2017-2020







Take-Aways





5 Take-Aways

Self-Service & Self-Manage
 Named Users - Single Corporate Account
 Superb HTML5 Streaming & Viewing

 Free Integration Capabilities
 Coupons & Recurring Revenue



