



Presented at the FIG Working Week 2023,  
28 May - 1 June 2023 in Orlando, Florida, USA

# FIG WORKING WEEK 2023

28 May - 1 June 2023 Orlando Florida USA

Protecting  
Our World,  
Conquering  
New Frontiers

## TopoShare<sup>®</sup>

### Integrating Geospatial Operations into Next Generation Design Processes (12235)

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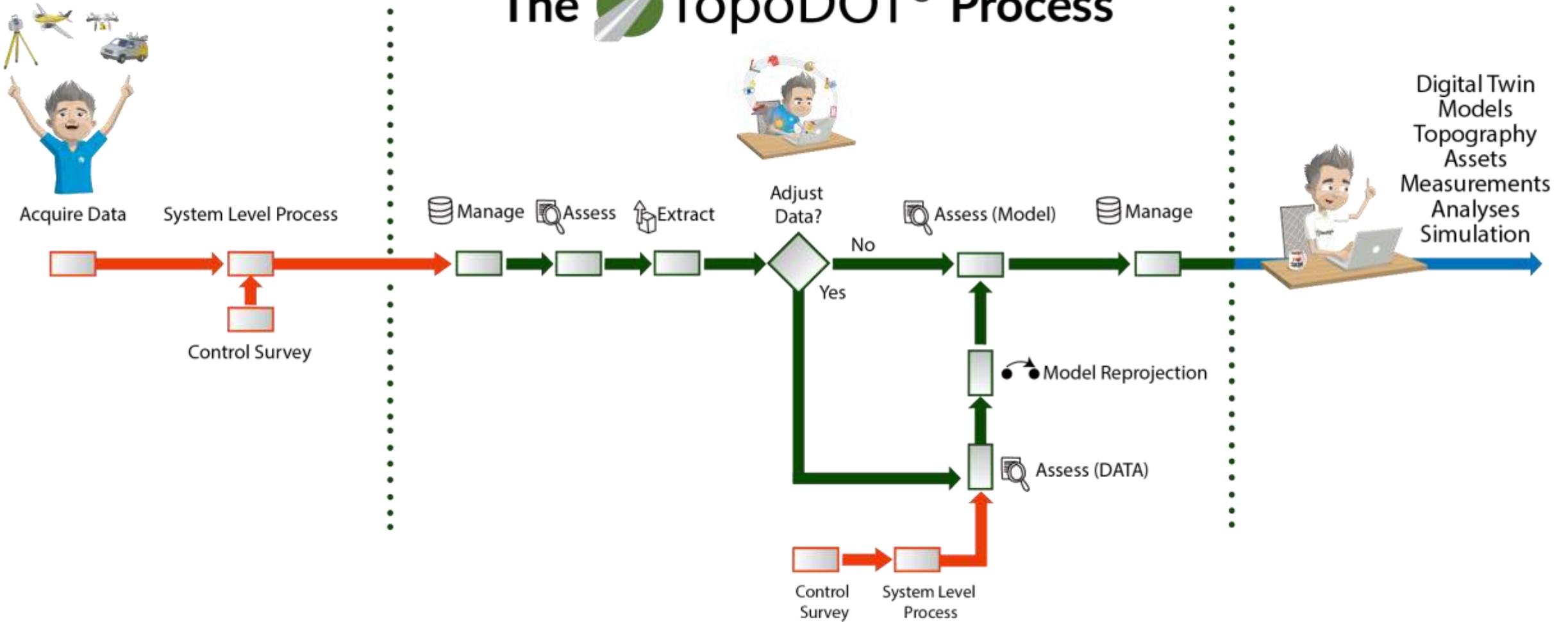
**TopoDOT®**  
Point Cloud Processing Software

**The Worldwide TopoDOT Community**  
**700+ Companies/Agencies 6000+ Users**



**Headquarters in Winter Garden, Florida**

# The TopoDOT® Process



The world's most productive process for extracting transportation Digital Twin deliverables from point cloud project data!





# The Challenge of Modern Design Processes

How do we synchronize Digital Twin production frequency with extremely dynamic processes?

How do we optimize Digital Twin fidelity when requirements vary dramatically across operations?

How do we assure quality control of Digital Twin production?

How do we optimize schedule and cost?

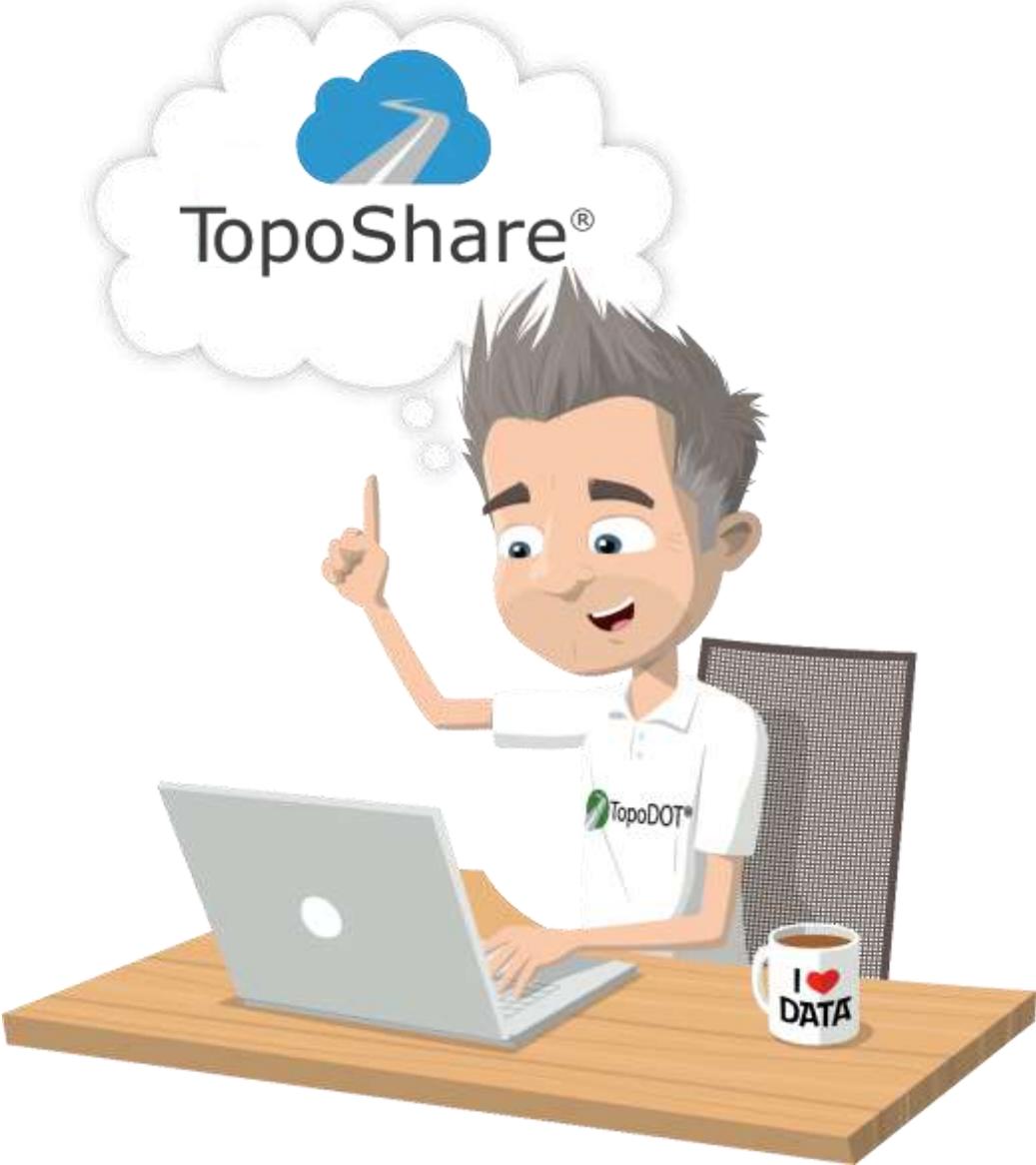


I-4 Connector Project

Tampa, FL

December 2011 - July 2013

The first step is to build a firm foundation of data governance!



Each geospatial system acquisition is unique—time, accuracy, resolution, reference control, consultant, etc. etc.





Project 3459

Project 3458

Project 3457

Project 1234

Project 1233

Project 1232



Create YOUR data warehouse!

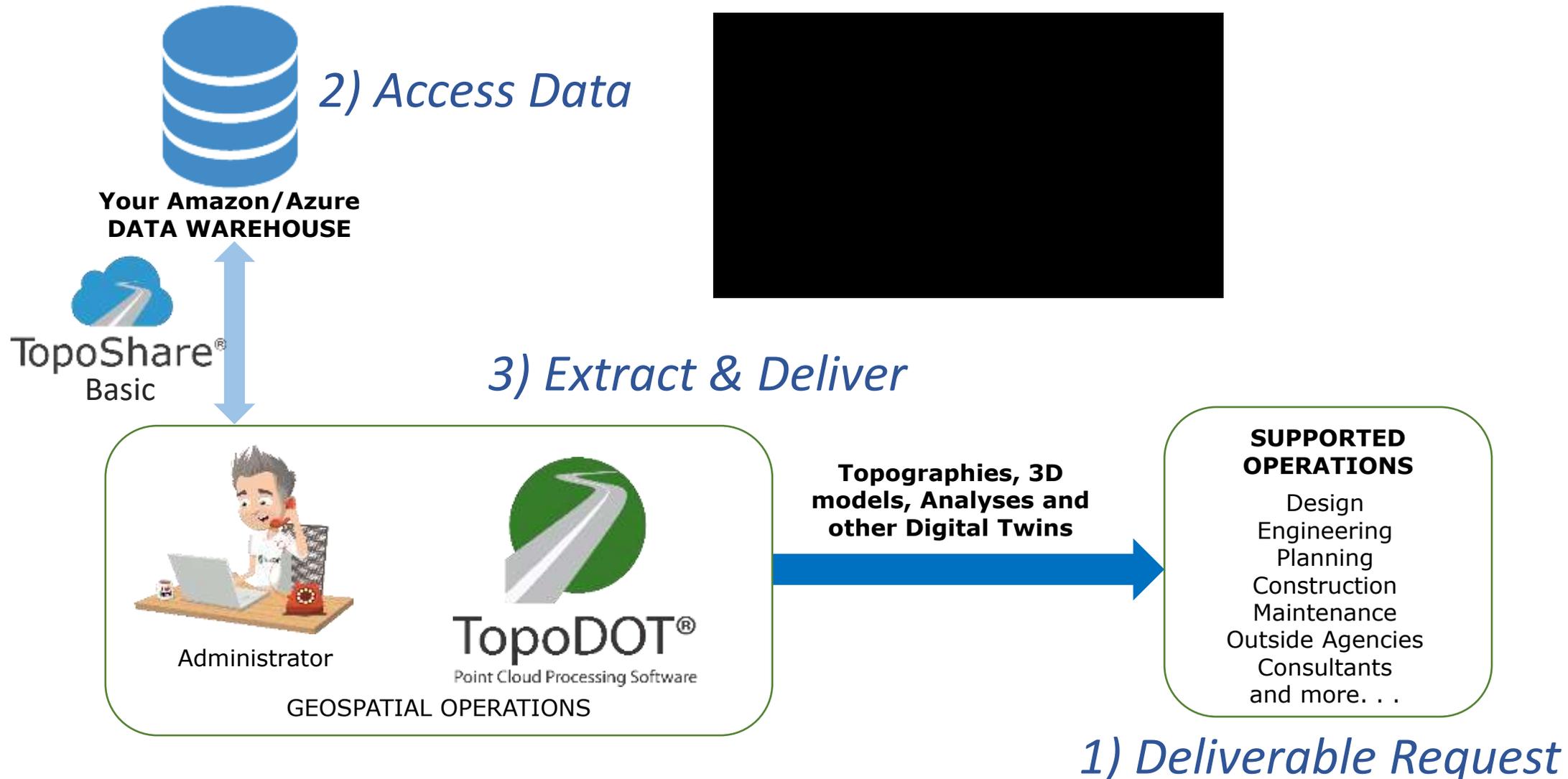


# TopoShare<sup>®</sup> Basic

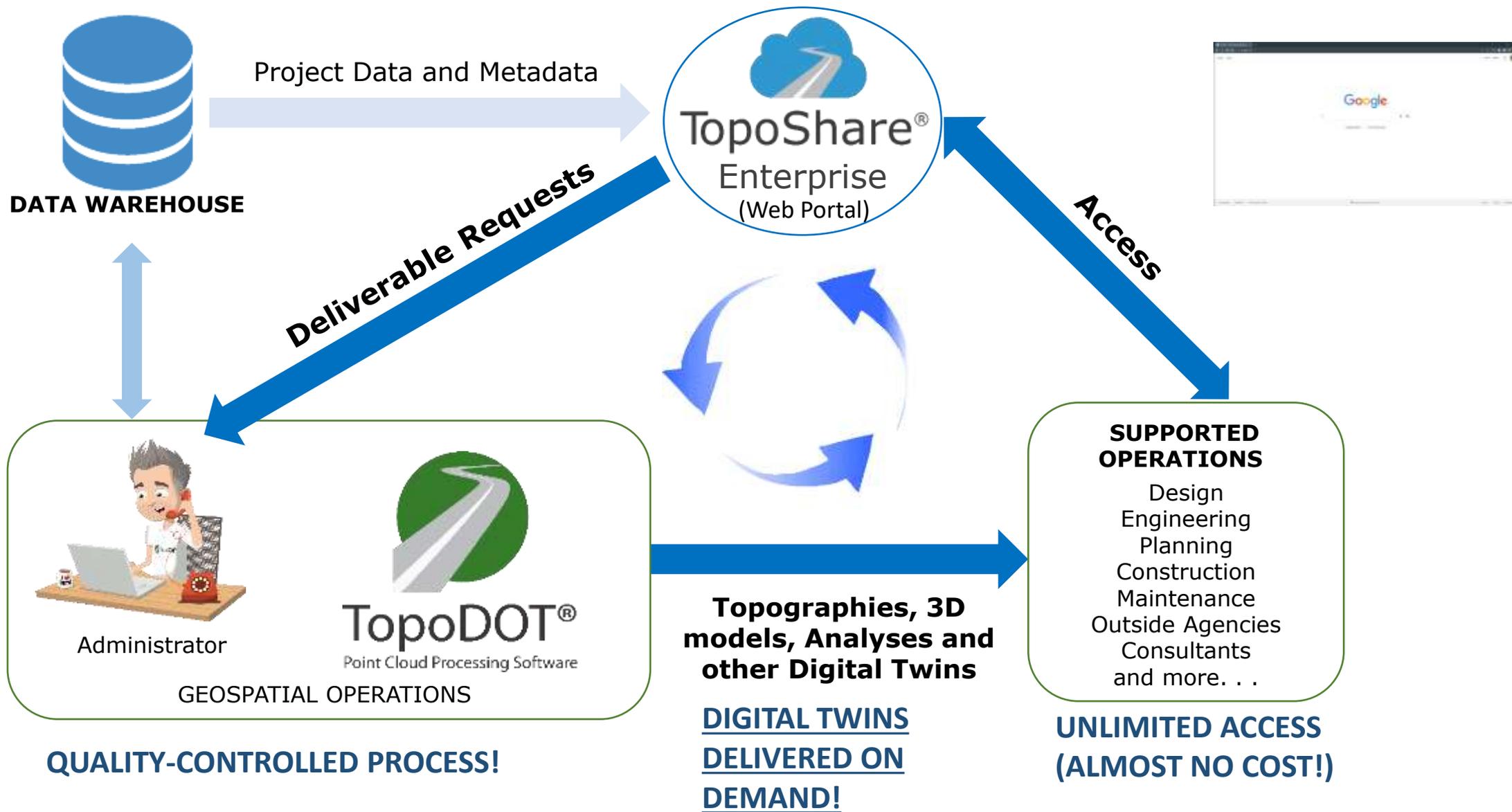


Let's have look!

# The Basic TopoShare Data Process implements data governance within the TopoDOT® user community. . .



# TopoShare Enterprise expands data access across all operations!

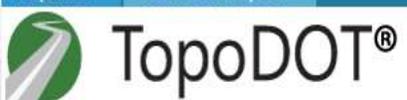




## TopoShare/TopoDOT process does not “compete” with Immersive Data Viewing Applications!

	TopoShare/TopoDOT Process	Point Cloud Viewing Apps
Comprehensive Data Governance	YES	NO
Support Digital Twin Production	YES	NO
Maintain Provenance of Project Data	YES	NO
Assure Quality Control of Model, Analyses and other Digital Twin Production	YES	NO
Provide Fast Efficient Access to Original Project Data	YES	NO
Place Data Governance and Digital Twin Production under Geospatial Operations Administration	YES	NO
Implemented and Executed at Low Cost	YES	NO
Provide more “Immersive” Point Cloud/Image Viewing Experience	NO	YES

Properties Work Order Request

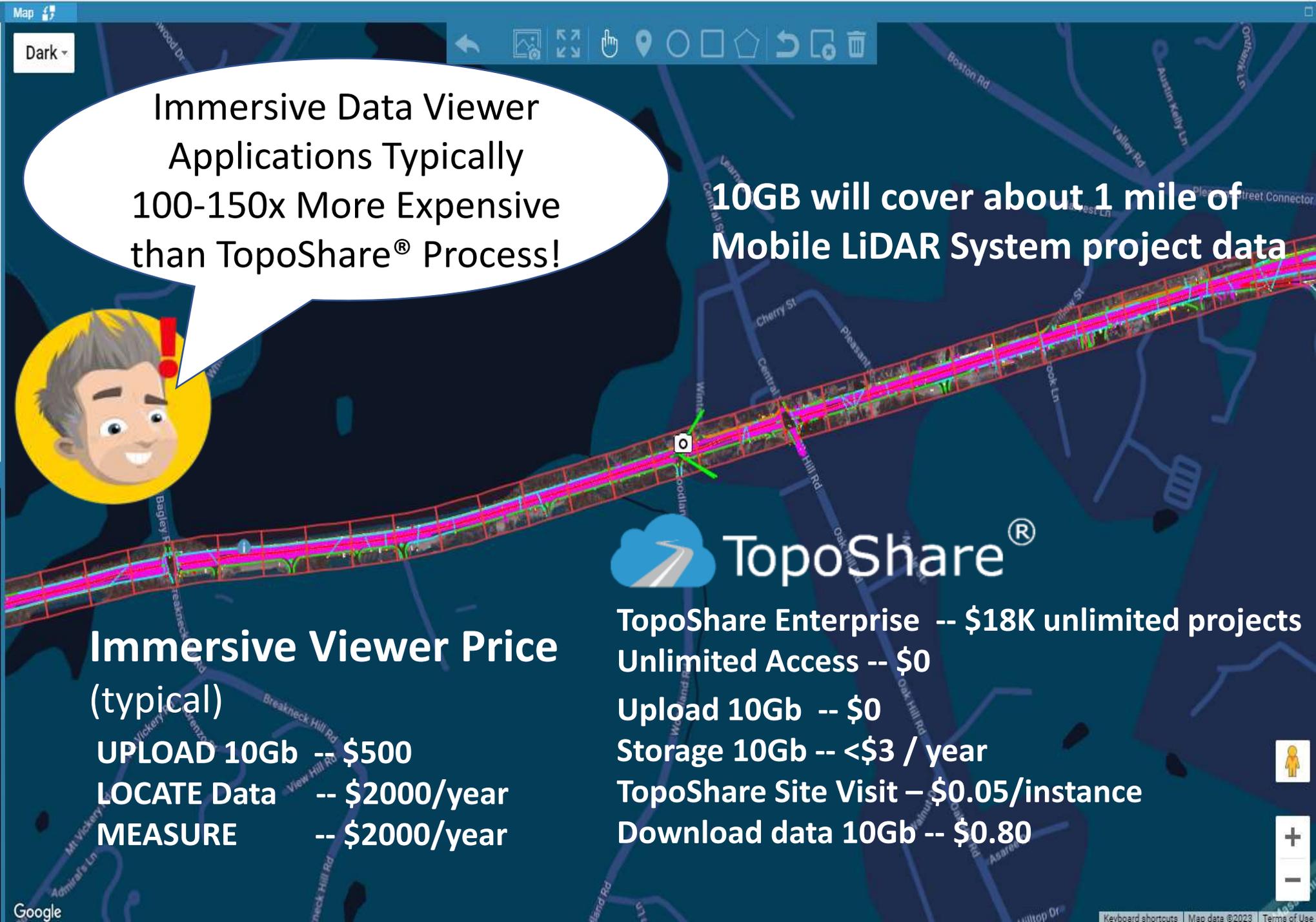


Route 9

- Tiles
- Linework
- Overlays
  - Point Cloud Deviation
  - Point Cloud Density
  - Intensity
- Project Information
- Assessment Report



Dark ▾



**Immersive Data Viewer Applications Typically 100-150x More Expensive than TopoShare® Process!**

**10GB will cover about 1 mile of Mobile LiDAR System project data**



**Immersive Viewer Price (typical)**

<b>UPLOAD 10Gb</b>	-- \$500
<b>LOCATE Data</b>	-- \$2000/year
<b>MEASURE</b>	-- \$2000/year

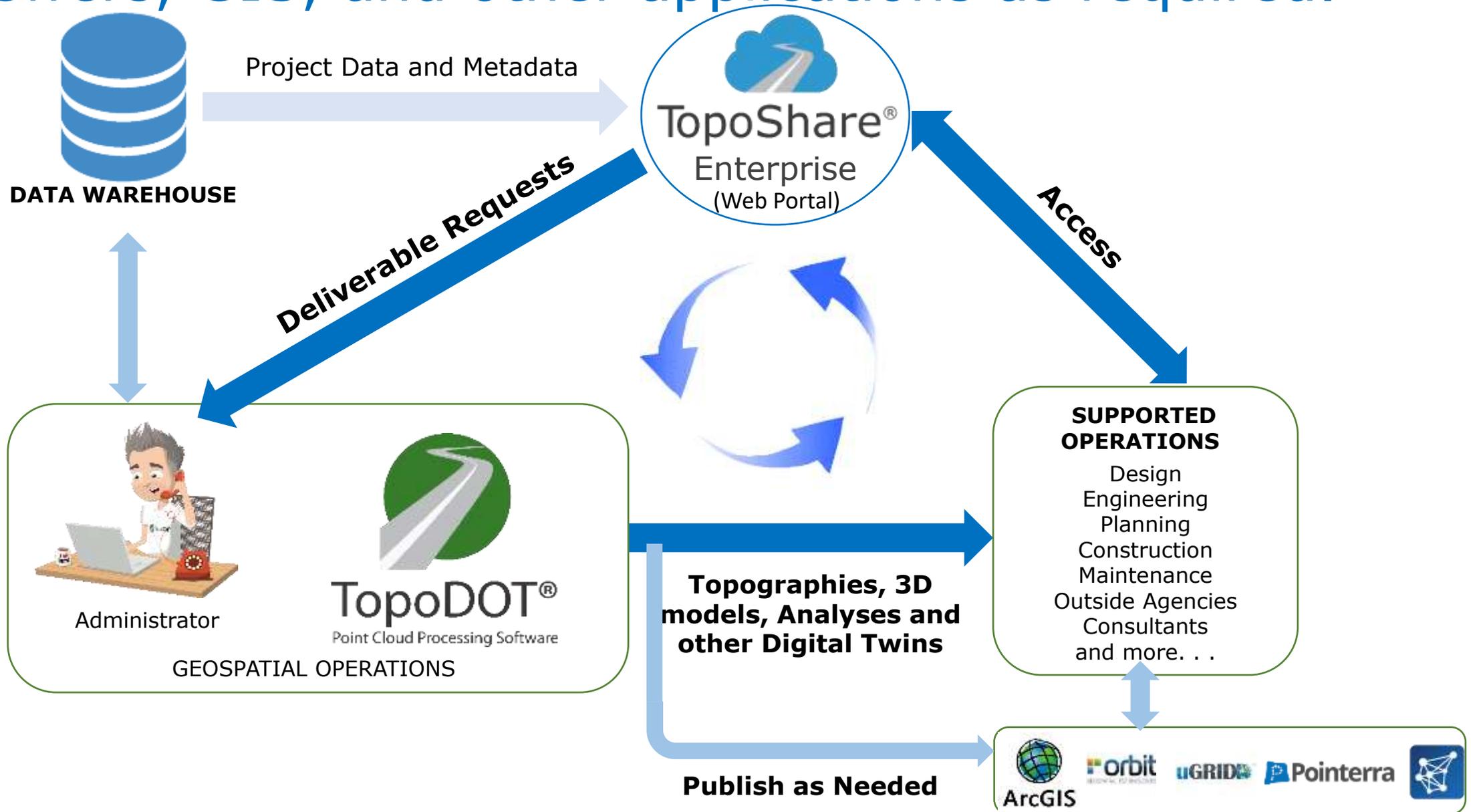
**TopoShare®**

<b>TopoShare Enterprise</b>	-- \$18K unlimited projects
<b>Unlimited Access</b>	-- \$0
<b>Upload 10Gb</b>	-- \$0
<b>Storage 10Gb</b>	-- <\$3 / year
<b>TopoShare Site Visit</b>	-- \$0.05/instance
<b>Download data 10Gb</b>	-- \$0.80

Google

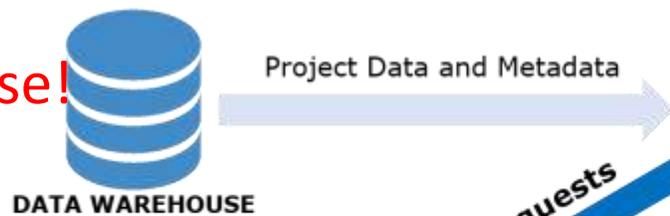
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# TopoShare/TopoDOT process supports immersive data viewers, GIS, and other applications as required.



# Geospatial Operations Integrated Across Operations!

Your Low Cost  
Data Warehouse!

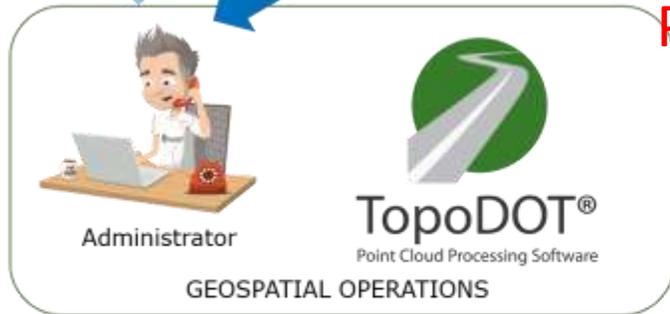


Implemented Over Existing  
Process Used Worldwide!

Deliverable Requests

Access

On-Demand  
Digital Twin  
Production!



Unlimited Access!

Topographies, 3D  
models, Analyses and  
other Digital Twins

Data Governance!  
Quality!  
Administration!

Publish as Needed



Supports Viewers, GIS and More



## Questions?



**Come by to see us at Stand 403**

