Enable **Reality Modeling** with Cloud Services

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Reality Modeling Cloud Services

ContextCapture Cloud processing service

Projectwise ContextShare

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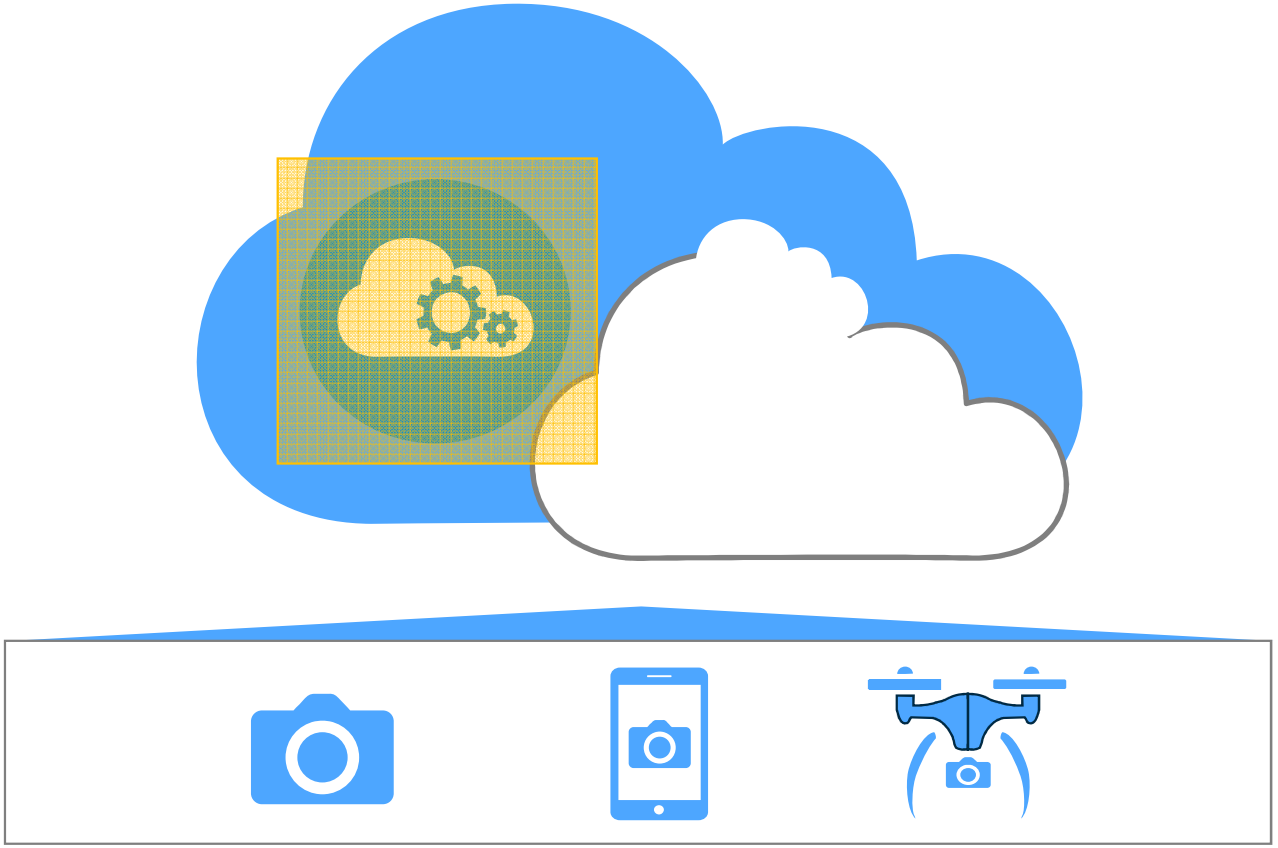
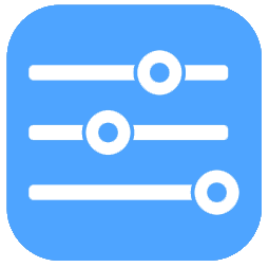


ContextCapture cloud processing service

What is ContextCapture cloud processing service

- A cloud base 3D Reality Modeling solution allowing organizations to process images and point clouds to create a number of deliverables including Reality Meshes, orthophotos, digital surface models and point clouds

Securely upload photos and point couds



Simply configure your processing task using the console application

Process the data in the cloud

Save and share data using ProjectWise ContextShare

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Why ContextCapture Cloud

- Make Reality Modeling and ContextCapture more accessible to more people
- Simpler processing workflow
- Does not require purchasing expensive hardware
- Pay per use model
- Scalable multi-engines processing

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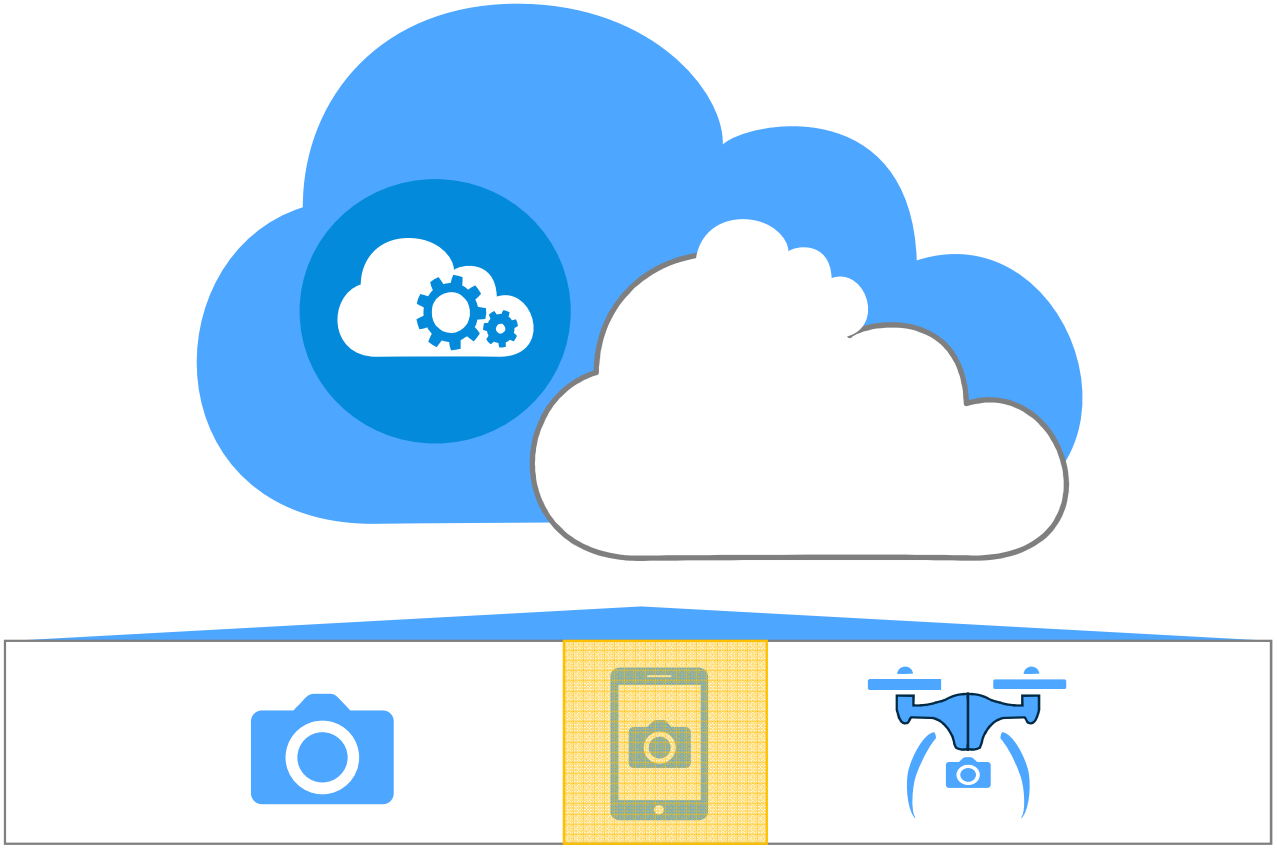
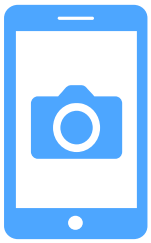


ContextCapture mobile application

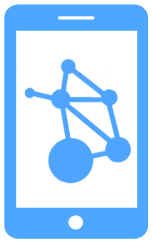
What is ContextCapture mobile application

- A new iOS and Android mobile application



Take photos on smartphone or tablet

Process in the cloud with CCCS



Display resulting 3D mesh on your device

Save and share data in Projectwise ContextShare

Email model link to your collaborators

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Reality modeling acquisition device

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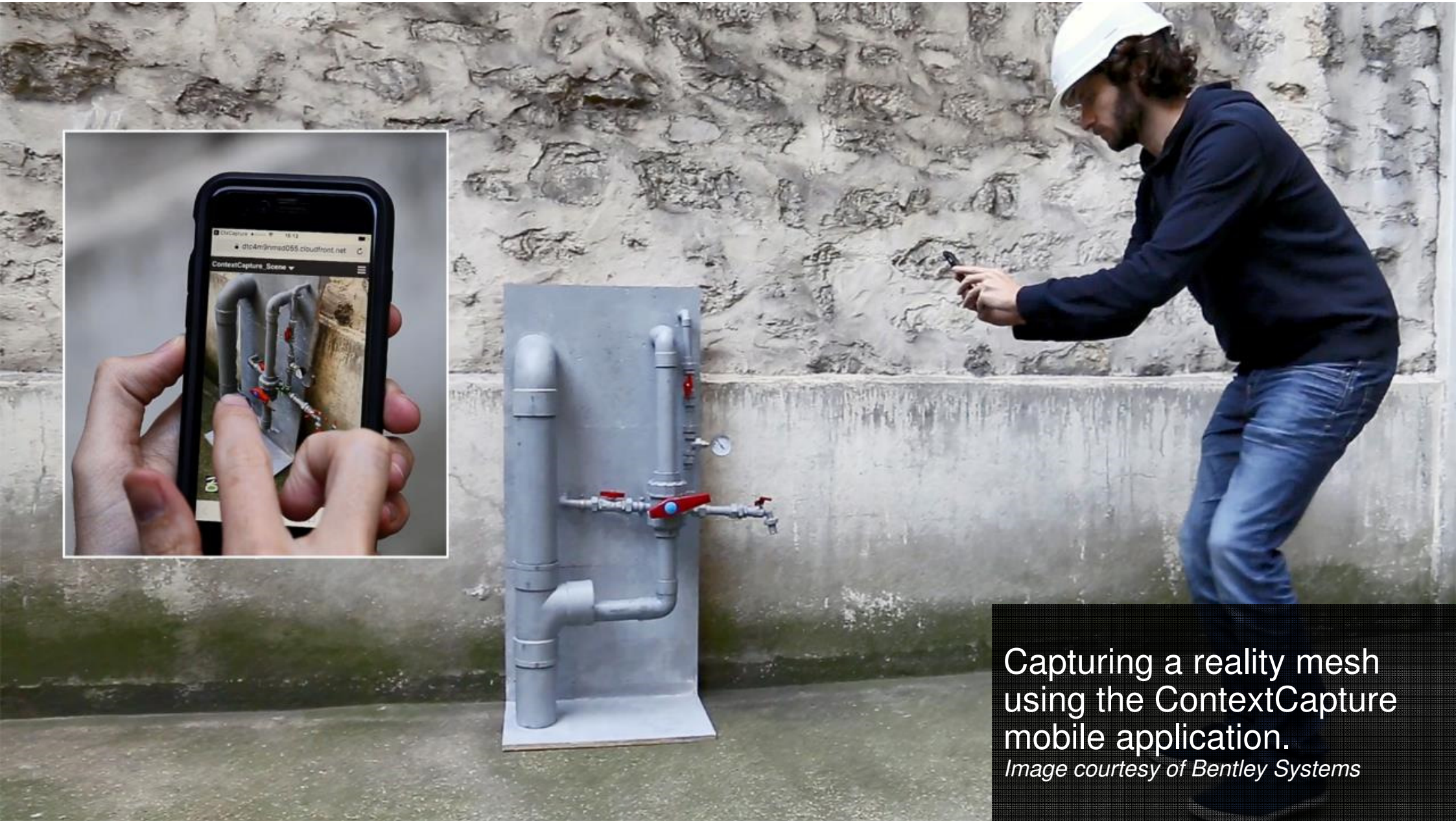

Capturing a reality mesh using the ContextCapture mobile application.

Image courtesy of Bentley Systems

Why ContextCapture Mobile

- Allow anyone to quickly capture reality model
- Allow to share directly the models with collaborators
- Allow to better document as-is situations

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More that 110 models created so far !

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Secure
https://connect-realitydataservices.bentley.com/webviewer/?id=48855394-c08d-4958-bfe6-37b0b51039d5&projectId=351cb629-7880-486e-a944-ba026d3cdf04

DEMO

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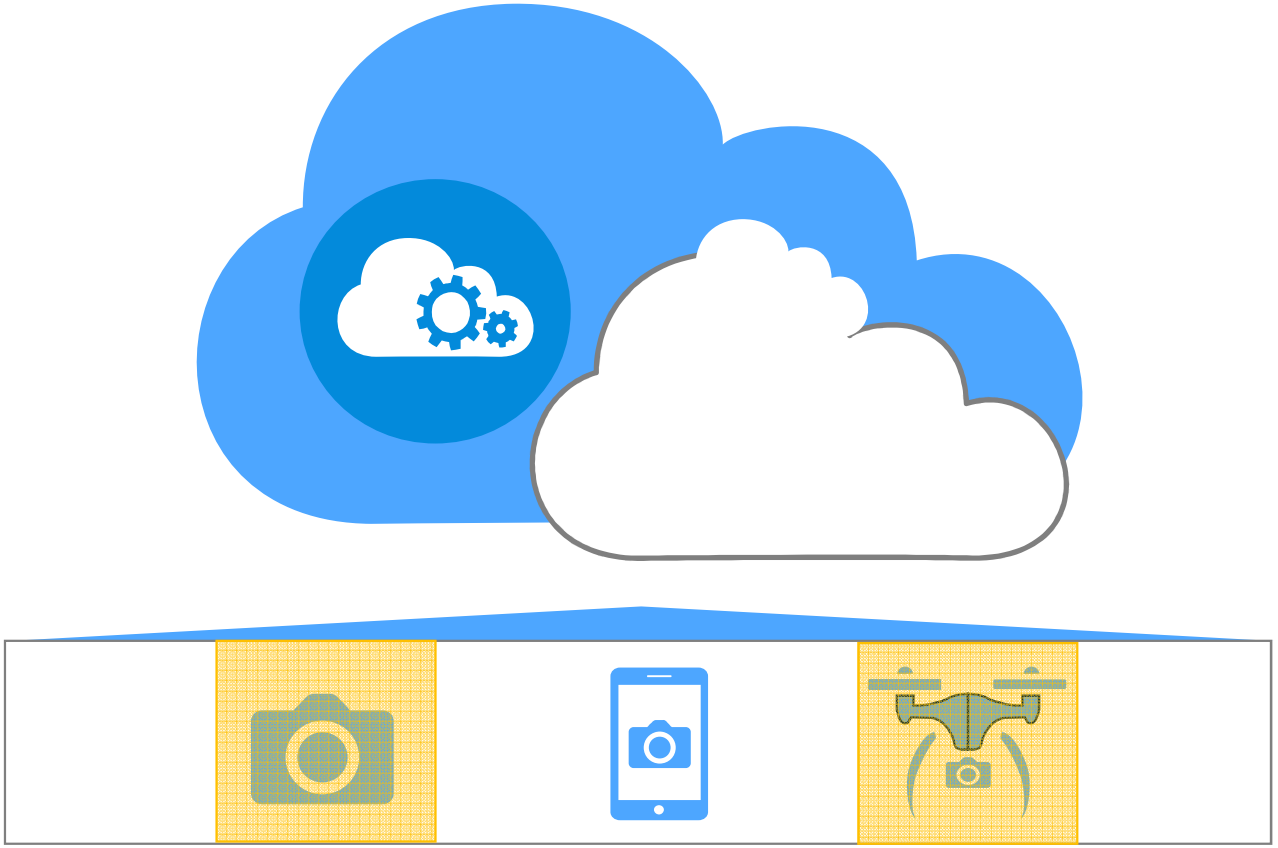

ContextCapture console application

What is ContextCapture console application

- A new ContextCapture desktop application for beginners
- It allows to:
  - Create new cloud processing project
  - Upload photos and point cloud
  - Define ContextCapture settings (e.g.: ground control points)
  - Process those using ContextCapture cloud processing service
  - Store the resulting Reality Mesh inside ProjectWise ContextShare
  - Email the resulting model link to your collaborators

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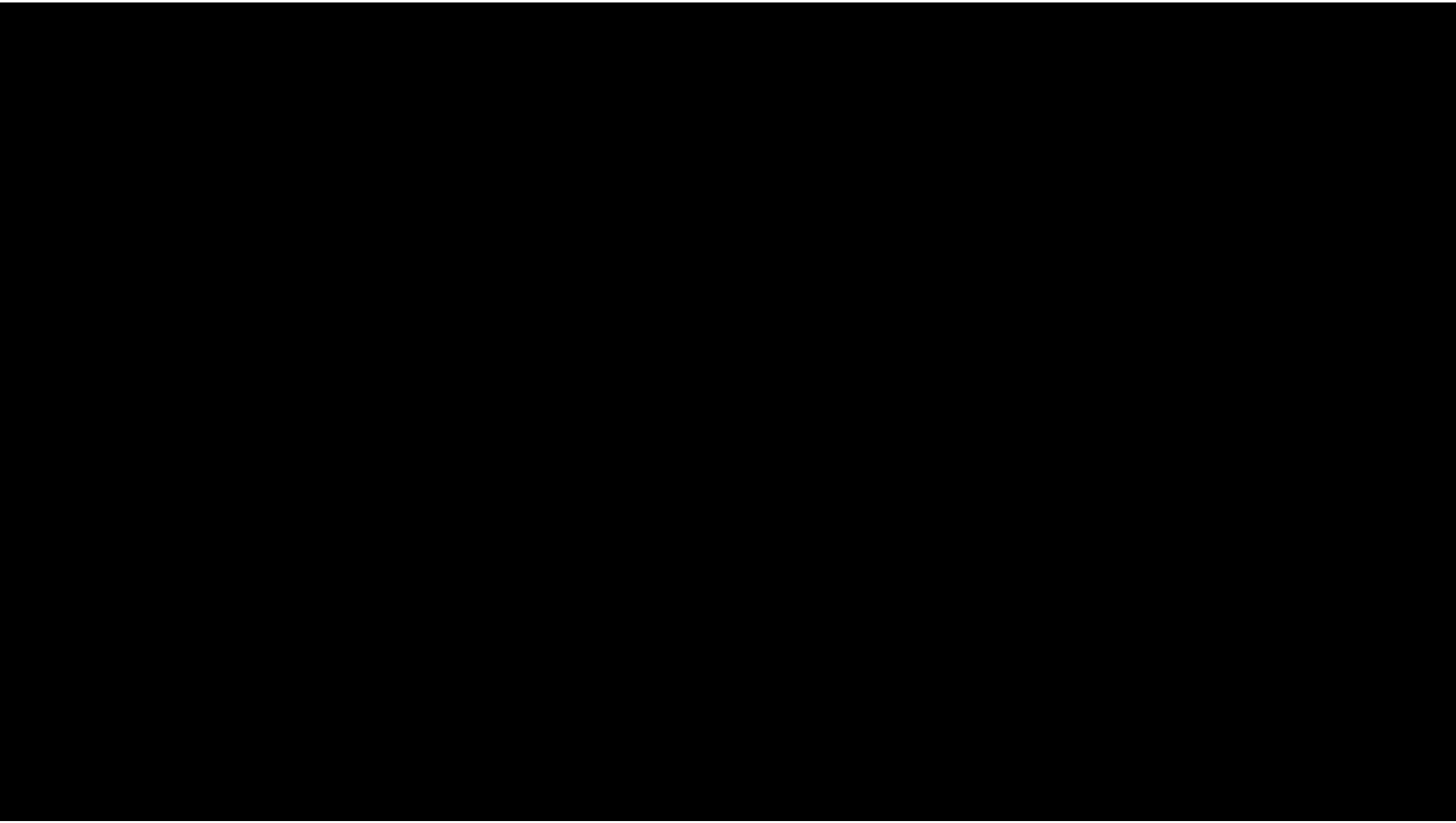

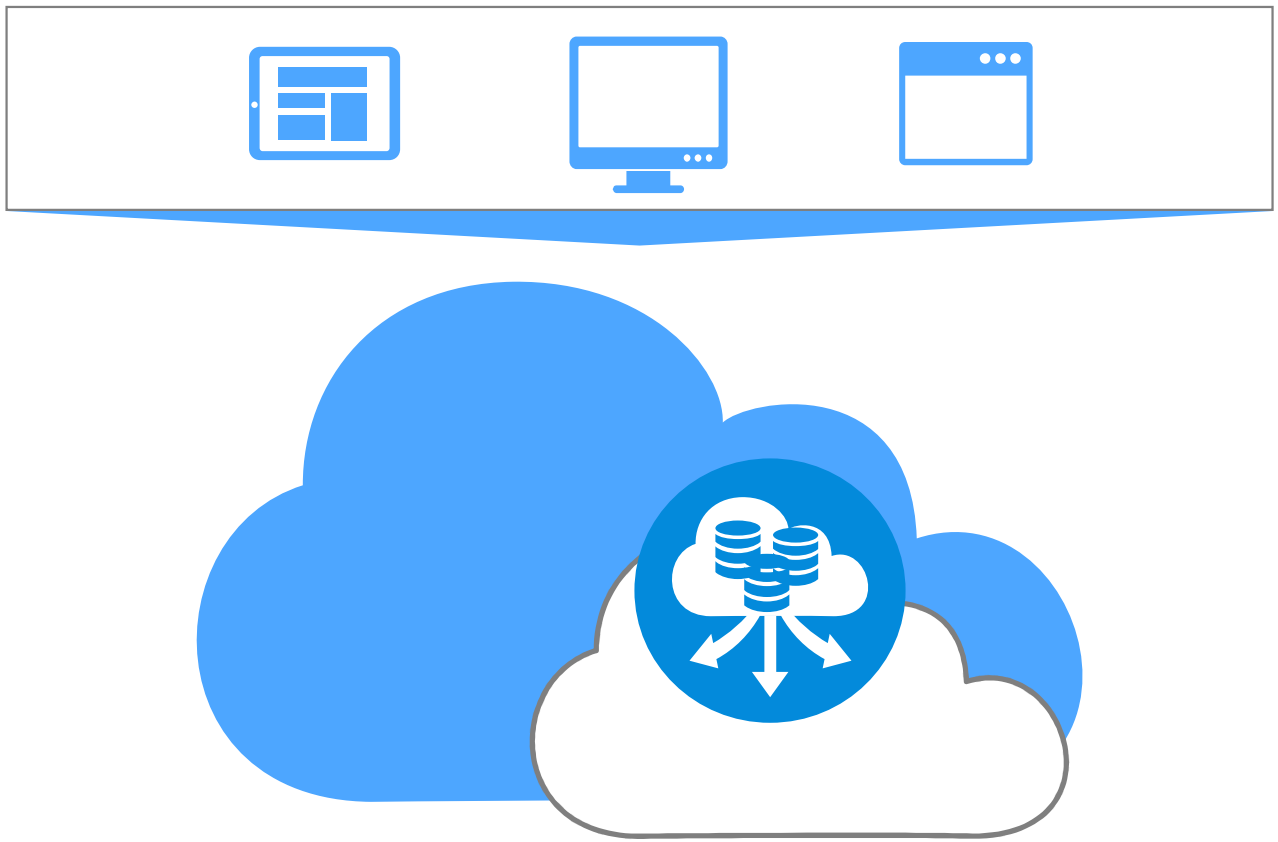

ProjectWise ContextShare

What is ProjectWise ContextShare

- A cloud base solution allowing organizations to manage extremely large quantities of Reality Modeling data including Reality Mesh, Point Cloud and Images
- It allows to:
  - Securely manage your reality data (upload, rename, delete…)
  - Control access to the Reality Modeling data
  - Make data accessible to internal and external users through the CONNECT project
  - Easily search, download or stream this same data from a number of different clients.

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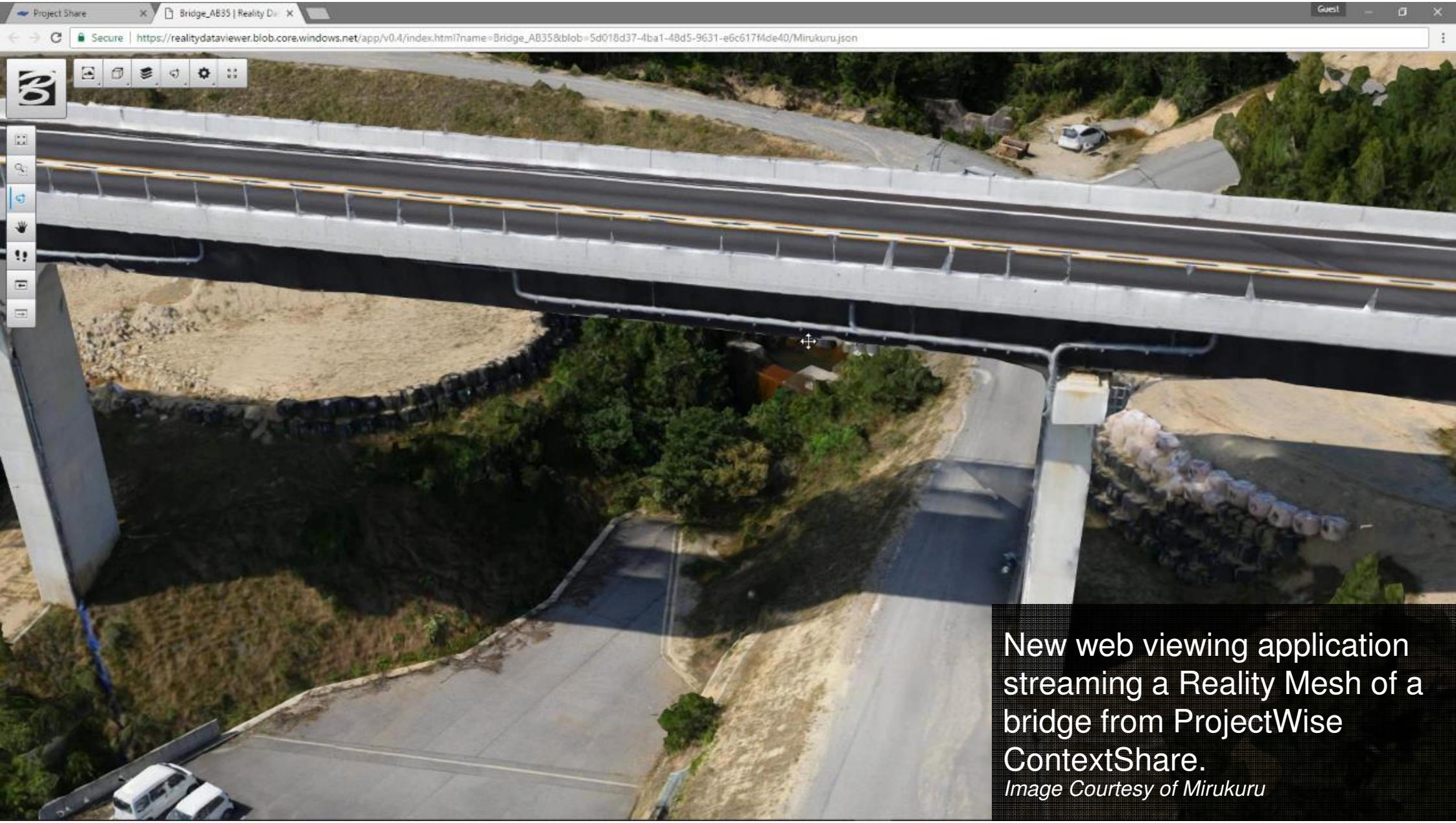
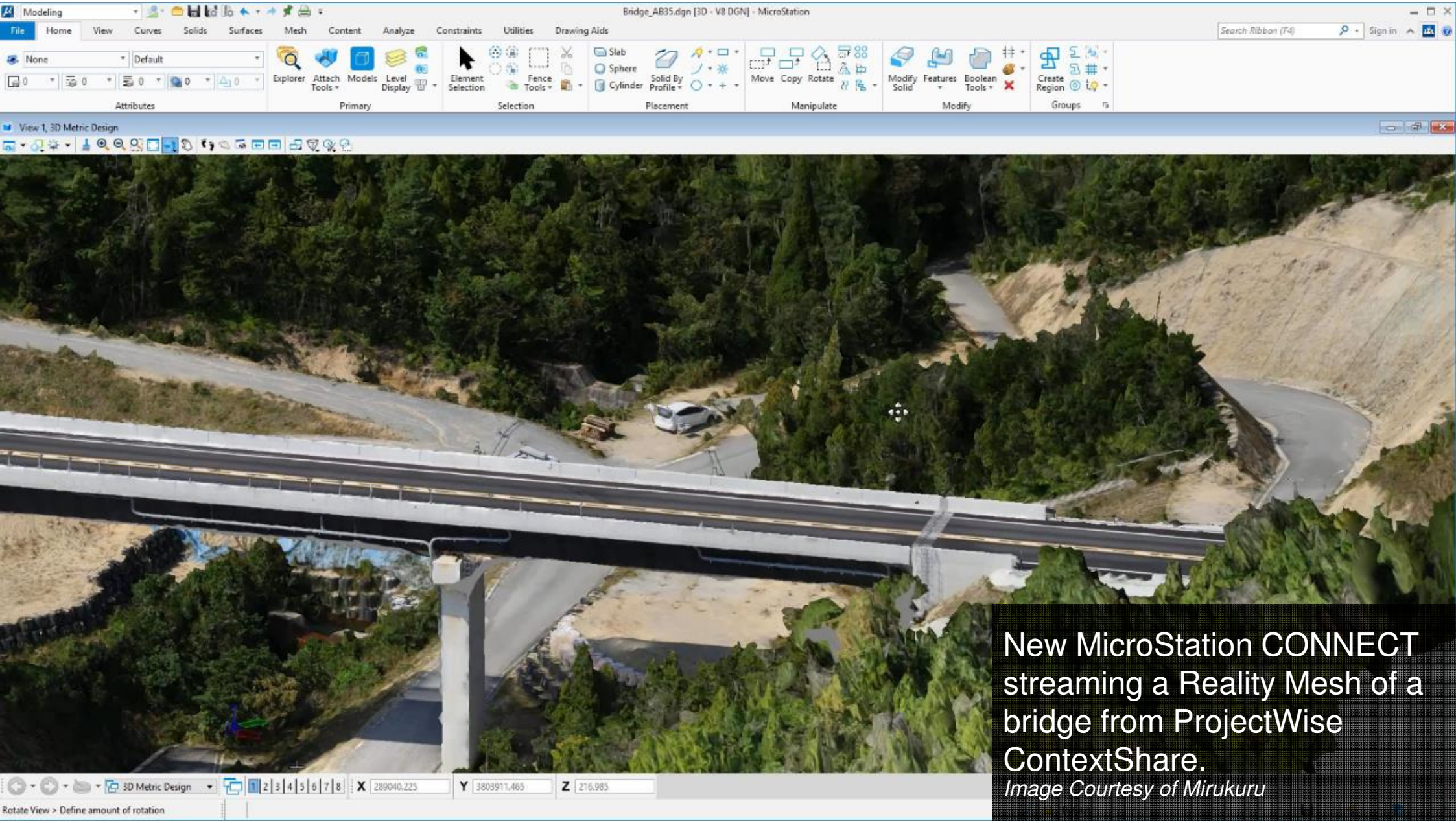


New web viewing application streaming a Reality Mesh of a bridge from ProjectWise ContextShare.

Image Courtesy of Mirukuru



New MicroStation CONNECT streaming a Reality Mesh of a bridge from ProjectWise ContextShare.

Image Courtesy of Mirukuru

Why ProjectWise Contextshare

- Infrastructure engineering consultants and owners have to manage and share an increasing large amount of Reality Modeling data
- Many organizations don’t currently have the required IT infrastructure to manage this type of data
- The hardware to manage that much data is expensive and quickly becomes obsolete

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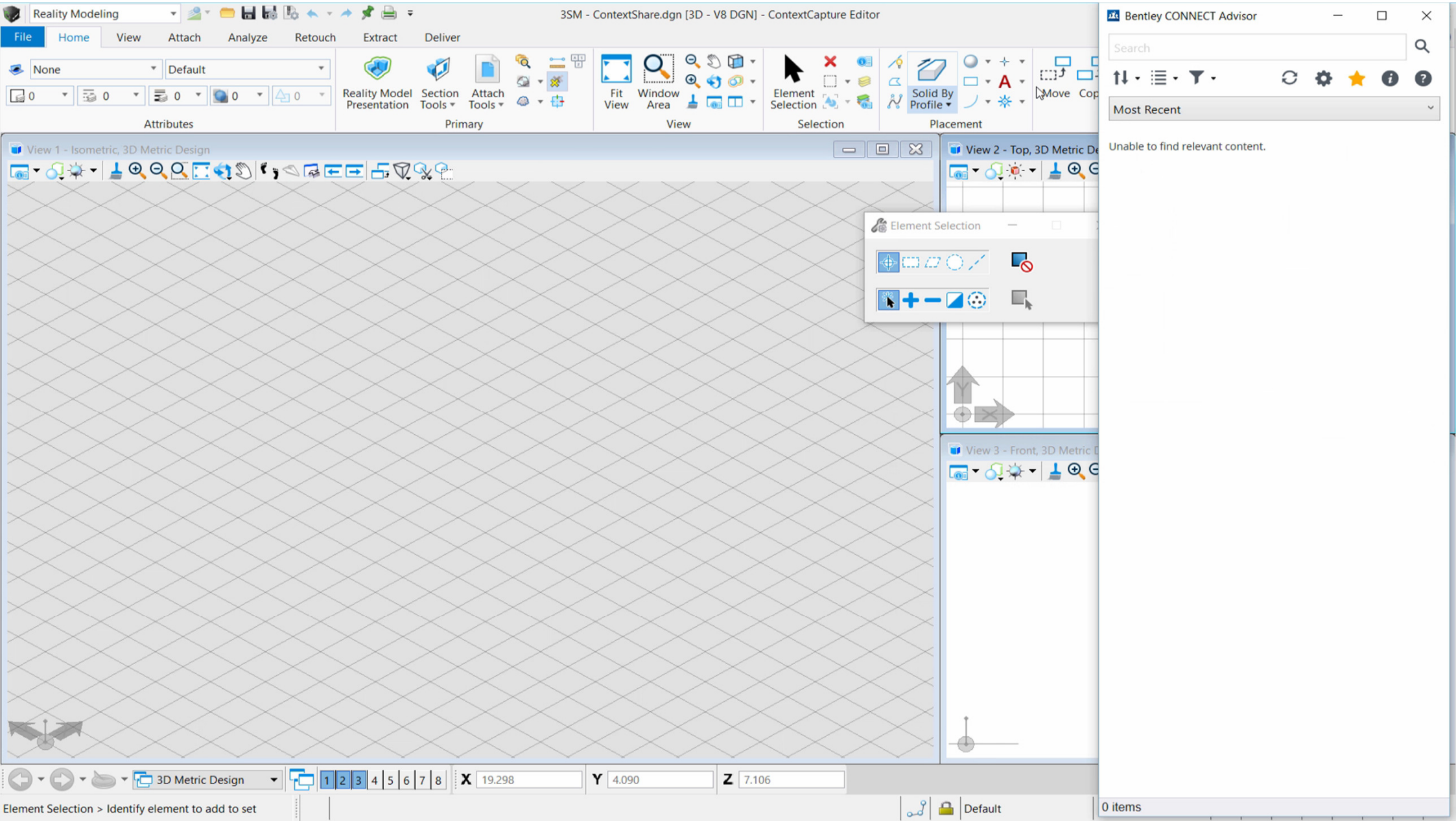
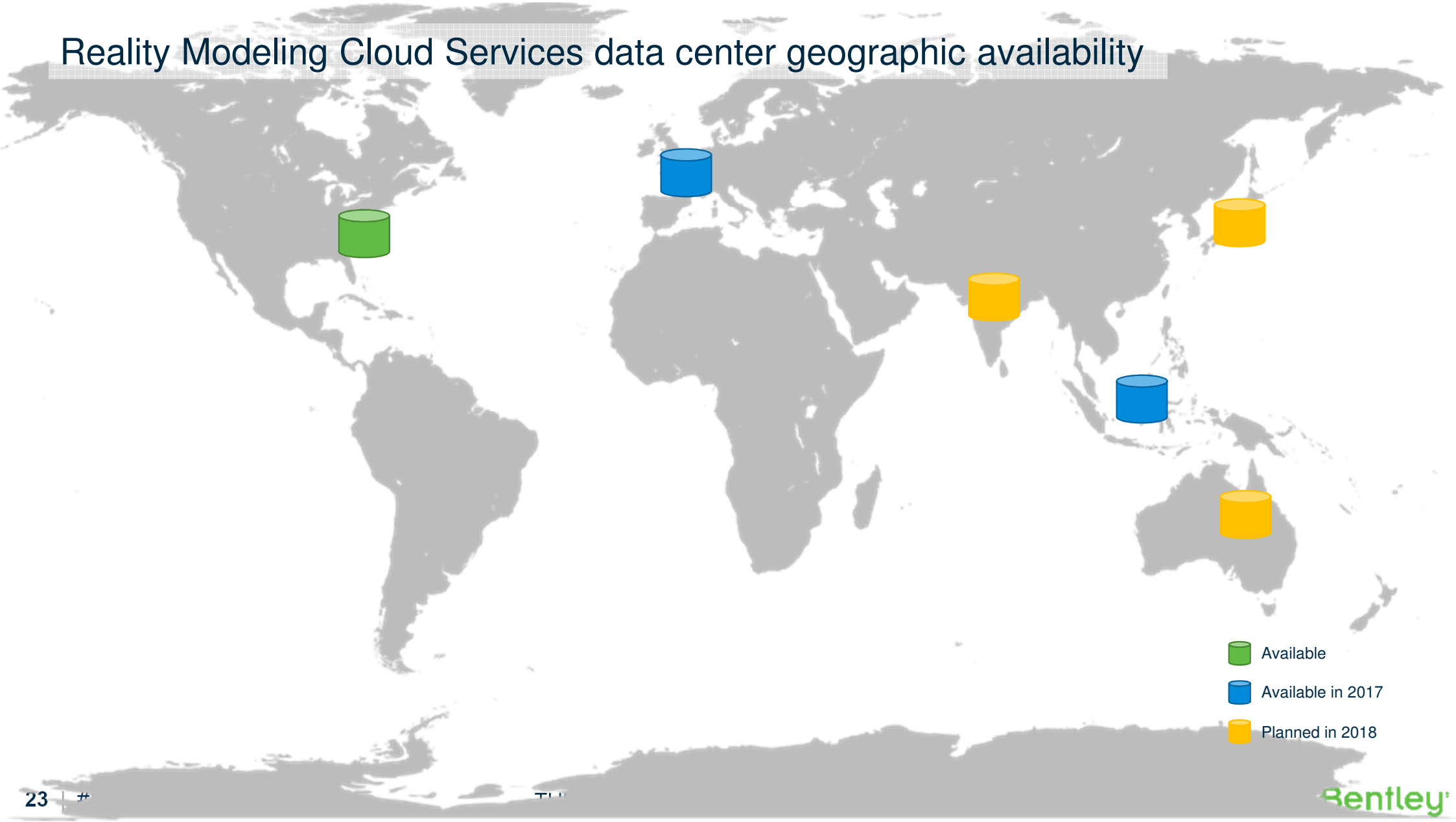

Reality Modeling
3SM - ContextShare.dgn [3D - V8 DGN] - ContextCapture Editor
File
Home
View
Attach
Analyze
Retouch
Extract
Deliver
None
Default
Attributes
Reality Model Presentation
Section Tools
Attach Tools
Primary
Fit View
Window Area
View
Element Selection
Selection
Solid By Profile
Placement
Move
View 1 - Isometric, 3D Metric Design
View 2 - Top, 3D Metric De
View 3 - Front, 3D Metric D
Element Selection
Bentley CONNECT Advisor
Search
Most Recent
Unable to find relevant content.
0 items
3D Metric Design
1 2 3 4 5 6 7 8
X 19.298
Y 4.090
Z 7.106
Element Selection > Identify element to add to set
Default

Reality Modeling Cloud Services data center geographic availability



Reality Modeling Cloud Services Business Model

- Organization pre-purchase a bucket of units
  - Image processing units (roughly 1 GigaPixel)
  - Point cloud processing units (roughly 1 million points)
  - Storage units (1GB)
- Minimum amount
  - 48 image processing units
  - 150 point cloud processing units
  - 150 storage units
- Maximum amount -> unlimited

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