Bentley®
Advancing Infrastructure

Complete iTwin® Capture Cloud Services Checklist

Advance your infrastructure workflows by turning reality data into real-world insights for your digital twins

As reality capture experts, we know that you operate under demanding workloads and tight deadlines to ensure that stakeholders receive timely information for informed decisions throughout the project lifecycle.

Choosing the right reality capture solution is not always straightforward.

Because we think that you must benefit from the latest technology to easily capture, manage, analyze, and share your reality data, we created this checklist to help you determine the best solution for you and your team.

Capture, Create, and Enhance Reality Data	iTwin Capture	Vendor 1
Import reality data of any type and from various formats		
Input		
Import reality data of any type (image, point cloud, video)	◆	
Have unlimited imagery dataset size per project	◆	
Have unlimited scanned point clouds per project	◆	
Output		
Create reality meshes, orthophotos, and point clouds	◆	
Export mesh in the following formats: 3SM, Cesium 3D tiles, I3S, OSGB, 3MX, OBJ, DAE, and DGN	◆	
Work with a true orthophoto/ 2.5D digital surface model (TIFF/GEOTIFF/KML)	◆	
Export colorized point clouds (LAS/OPC/POD)	◆	
Generate accurate reality data		
Georegistration, quality, and measurements		
Leverage ground control point import, recording, and automatic detection	◆	
Handle any flight metadata from EXIF tags to external columned files	◆	
Generate quality reports and review quality metrics in 3D	◆	
Import camera metadata (calibration, position and orientation) to enable more accurate processing	◆	
Provide automatic tie-points registration (QR codes, April tags)	◆	
Implement georegistration	◆	
Produce reality data on time		
Reality mesh processing		
Leverage unique parallel computing to reach unmatched processing speed	◆	
Leverage level-of-detail technology to smoothly stream reality models in web clients or in Bentley design applications	◆	

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Manage, Catalog, and Share	iTwin Capture	Vendor 1
Improve collaboration with stakeholders		
Share reality data to connected environments		
Share images, point clouds, and meshes straight from the user interface	◆	
Invite all project stakeholders to collaborate in single environment	◆	
Manage access rights and levels of permission to secure the project environment	◆	
Share image collections as mapping runs to enable web-based photo navigation	◆	
Share deliverables to a connected environment to enable data ingestion workflows	◆	

Validate, Extract Insights, and Deliver	iTwin Capture	Vendor 1
Extract insights from reality data		
Extract features from reality data		
Transform reality data of any kind or size into GIS/CAD-ready document	◆	
Accelerate asset inventory operations with automatic detection feature (light-poles, traffic signs, trees, etc.)	◆	
Clean noise and ghosts from point-cloud data	◆	
Leverage advanced analysis		
Proceed with point cloud management and classification	◆	
Generate and export cross-sections	◆	
Improve workflows leveraging artificial intelligence		
Save time on asset inventory operations		
Execute image and point cloud-based automatic detection in 2D and 3D environments	◆	
Enjoy a rich, on-the-shelf detector library	◆	
Export as regular-boxes or center-points in common mapping formats (DGN, SHP, Cesium)	◆	
Make inpections safer		
Advanced automatic defect detection (cracks, spalling, corrosion) performed in 2D and 3D	◆	
Automatic dimension analysis of detected defects (length, width, area) for severity assessment	◆	
Deliver insights on ground occupation		
Proceed with automatic ground extraction out of the largest reality meshes to enable design operations	◆	
Extract building footprints on city-scale scenes in a few hours	◆	
Improve reality mesh quality		
Improve color-equalization of output reality mesh	◆	
Detect and fix water bodies	◆	
Train your own AI-detector		
Share reality data and related annotations to train custom AI-detectors tailored for specific needs	◆	

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Validate reality data and deliver		
Validate work through QA before delivery		
Review reality data in a web environment for visual checks	◆	
Assess quality of alignment with open mapping layers	◆	
Verify dimensions with coordinates, length, or area measurement capabilities prior to delivery	◆	
Deliver reality data to serve as a key component of your digital twins using iTwin Platform or any third-party software	◆	

Benefit from a Vendor Partnership and Get the Solution That Meets Your Needs	**iTwin Capture**	**Vendor 1**
Training/Support: Access on-site and remote training documentation, videos, and help guides	◆	
Product Development: Ensure that changing business and industry needs are met with an active development and ongoing strategy	◆	
Choose the license you need, whether desktop solution, cloud solution, subscription, or permanent license	◆	