



Cintoo Cloud Feature List

Collaboration, Sharing & Distribution

Admin

- Dashboard, Users list, Activities and Calendar
- Add co-Admins & Project Managers
- Define custom roles and permissions
- Manage groups of users
- Support of corporate Single Sign-On (SSO) (additional implementation fee required)
- Generate Usage Reports (date, users, companies, import/export of scans, crops or unified meshes)

Create Projects

- Choice of Automatic Cloud Hosting with CDN or selection of provider (AWS or Microsoft Azure) and region
- Choice of hybrid cloud with your own AWS or Azure instances (additional implementation fee required)
- Choice of private data center (additional implementation fee required)

Manage Scan Projects

- Map, Thumbnails, List
- Search
- Versioning

Collaborate

- Invite Users & Team members to each project
- Manage access & sharing rights

Upload Terrestrial (Static) Scans

- Upload structured scan projects in RCP, e57, FLS or LSPROJ format
- Support of intensity
- Automatic point cloud-to-3D mesh transformation for each scan prior to the upload

Upload Indoor Mobile Lidar Scans

- Upload scans captured with NavVis, GeoSLAM, Gexcel, Emesent, Leica BLK2GO or Viامتري devices
- Upload unstructured scans in E57 together with camera path and source 360° images
- Restructuring or unstructured data with creation of 'static' 3D scans that preserve the source point cloud density and accuracy
- Automatic point cloud-to-3D mesh transformation for each scan prior to the upload

Upload 360° images (beta)

- Upload spherical images with their geolocation and orientation
- Orientation set as compass heading or quaternions

View

- Supports Google Chrome, Microsoft Edge (V79 or higher) and Mozilla Firefox
- Data, 2D Overview Map, 3D View
- Data: Thumbnails or list, with high-res panoramic picture display, scan or 360° images information and specific URL
- 3D View: Display scan data in Scan Mode or 3D Navigation Mode, in 3D RGB, 3D Intensity, 3D X-Ray, 3D Surface, 3D Height or 2D Panoramic Images (Scan Mode only) only – Display 360° images to navigate between scans and spherical images – Orthographic or perspective camera from any of the 6 axes – Scan sprites filtering (occlusion and/or range) in Scan Mode
- TurboMesh™ engine in 3D Navigation mode, to stream mesh data at the resolution of the source scans
- Navigation Map (mini-map) in 3D View showing scan and 360° images icons over RGB, DWG or Site Map background
- 2D Overview Map: Display scan data and 360° images in orthographic mode from any of the 6 axes, in 3D RGB, 3D X-Ray, 3D Surface or 3D Height



- Display BIM models in 3D RGB, 3D X-Ray, or 3D Height in Overview Map and 3D View

Site Map

- Site Map upload (jpeg, PNG)
- Alignment tool in Overview Map
- 3D Alignment tool in 3D View
- Use of Site Map in Navigation Map

Work Zones

- Create as many Work Zones and sub-Work Zones as necessary
- Assign scans or BIM/CAD models to each Work Zone or sub-Work Zone
- Manage team member access to Work Zones or sub-Work Zones
- Display each Work Zone individually or collectively

Cropping Tools

- 3D crop box combined with XYZ sliders in 3D View
- XYZ sliders in Overview Map
- Rotate crop to align with screen in Overview Map
- Save & edit unlimited crops

Annotations

- Annotate as notes, private notes or issues
- Add labels, text, photo, video, URL, PDF to the annotations
- Assign private notes and issues to team members
- Search for annotations based on labels

Measurements

- Set unit system as metric, US or international Imperial with precision of measurement
- Add linear measurements in 3D View (Scan Mode or 3D Navigation Mode)
- Constrained measurements (X, Y, Z axis or disto)
- Pick 3D point and paste XYZ coordinates.

Play Sequence

- Play capture sequence via the timeline

Reports

- Generate Measurement & Annotation reports in PDF with hyperlinks to each entity
- Create screenshots

Distribute Scans via the Cloud

- Select a project, a Work Zone or a crop for download
- Download and export scan data as point cloud in structured e57 or structured RCP for whole projects, sets of scans or Work Zones
- Download and export scan data as point cloud in Unified RCP / RCS / e57 for crops

Download Unified 3D Meshes

- Download the Unified 3D Meshes in OBJ, FBX and STL format (requires a creation step as a Web Service)

Shared 3D viewer

- Share Cintoo Cloud viewer via URL or email
- Display high-resolution Scan data + BIM/CAD models in Google Chrome or Mozilla Firefox
- 3D View: Display scan data in Scan Mode or 3D Navigation Mode, in 3D RGB, 3D Intensity, 3D X-Ray, 3D Surface, 3D Height or 2D Panoramic Images (Scan Mode only)
- Add QR code
- Add company logo
- Set time limits and passwords
- Share metadata (measurements, annotations)
- Embed Shared Views in iframe from any domain

VR streaming

- Stream high-resolution Scan data + BIM/CAD models in stereoscopic mode using Mozilla Firefox
- Connect to Oculus Rift, Oculus Rift S, HTC Vive Pro, Meta Quest 1 or Quest 2 (tethered)



- Navigate from Scan-to-Scan positions
- Display in Scan Mode in 3D RGB, 3D X-Ray or 3D Surface mode
- Make point to point measurements or distance measurements

Tablet Viewer

- Support of Windows, IOS or Android tablets
- Project and Work Zone Selection
- Scan mode or 3D Navigation
- Display modes: 3D RGB, 3D Surface, 2D Panoramic Image
- Tools: Measure, Annotate

BIM & CAD Module

Autodesk Construction Cloud and BIM 360 Interoperability

- Push RVT, NWD, NWC, 3D DWG, JT or IFC files from Autodesk BIM 360 to Cintoo Cloud
- Upload BIM models together with hierarchy, disciplines, and metadata
- Look for model updates BIM 360
- Select transformation to be applied to the Revit model (Shared Coordinates or Origin to Origin)
- Push back issues from Cintoo Cloud to BIM 360 for project coordination

Upload BIM or CAD models from disk (Q3/Q4 2022)

- Formats: IFC, Step, JT, Revit, DWG, Catia, Iges, MicroStation, Solidworks, Pro E, Inventor, Rhino, OBJ, FBX

Align Scan & BIM

- Align Scan to BIM/CAD or BIM/CAD to Scan
- Export the alignment to Revit and Navisworks

Compare Scan data & BIM/CAD Model (Scan vs. BIM/CAD)

- Overlay the BIM/CAD model to the scan
- Compare using the Visual Difference and Visual Check tools
- Generate heat map based on tolerance

Compare Scan versions (Scan vs. Scan)

- Display scan versions using the timeline
- Align Scan to Scan
- Compare using the Visual Difference and Visual Check tools
- Generate heat map based on tolerance input

Issue Tracking

- Export issues in BCF Format (BCF = BIM Collaboration Format)
- Interoperability with BIM Track (push or sync notes and issues between Cintoo Cloud and BIM Track)
- Interoperability with Autodesk BIM 360 (push issues from Cintoo Cloud to BIM 360)
- Interoperability with Procore (push issues from Cintoo Cloud to Procore)



Web Services

Unified 3D Mesh Creation (BETA)

- Create Unified 3D Meshes with photo-texture from crops
- From up to 100 scans
- Select density starting at 0.2 cm / 0.1 inch
- Select format (OBJ, FBX, STL)

Asset Management (Beta)

Asset List Import

- Import lists of assets in any spreadsheet format that contains the equipment Id, location, metadata, and hyperlink
- Add up to 10 custom fields to each asset metadata
- Edit asset lists (append existing lists)
- Delete asset lists

Display Assets in the 3D View

- Display assets with their best scan view(s) in the 3D View
- Edit the scan view or the 3D view
- Click on the asset in the list or in the 3D bounding box to access asset information
- Display the asset metadata
- Connect to your Digital Twin or documentation platform via hyperlinks

Search for Assets

- Search for assets in the list with multiple elements

Share Asset Views

- Share Asset Views as hyperlink or QR code

Export Asset Lists

- Export Asset Lists in CSV or Excel file together with the Asset View for each asset