



## 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 Structured 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 Unstructured Scans (beta)

- Upload unstructured scans in E57 together with camera path and source 360° images

### Upload 360° images (beta)

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

### Upload CAD Models

- Upload BIM models in IFC format

### 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
- 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

#### Organize Scan & BIM/CAD Projects

- 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

#### Cropping Tools

- Crop in X, Y, or Z axis from Overview Map or 3D view
- 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)
- 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 or HTC Vive Pro
- 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

## Visual Analysis

### BIM 360 Interoperability

- Push RVT, NWD, NWC, 3D DWG, JT or IFC files from Autodesk BIM 360 to Cintoo Cloud
- 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

### 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)