AUG.27-29

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TEKLA BASECAMP

Localization and Collaborative Workflow Updates David Hiddemen – Application Specialist Lee Snyder – Product Manager



SUPPORT, TRAINING & LOCALIZATION





SUPPORT





Contacting our Helpdesk

- Need Help?
 - Email us (Tekla.Support.US@trimble.com)
 - When emailing support please tell us which product you are emailing in reference to (i.e. Structures, PowerFab, EPM, TSD, Tedds)
 - Call us (1-877-835-5265)
 - Extension 1 Structures Support
 - Extension 2 A&D Support (TSD and Tedds)
 - Extension 3 PowerFab/EPM Support



Closing Cases with Support

- When working cases with support, you will get a case closed receipt 24 hours after we close the case
- What does this mean?
 - We have provided you with information that should resolve your question.
 - If the resolution we have provided does not resolve your query you can respond to the technician and we will re-open the case.



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Closing Cases with Support

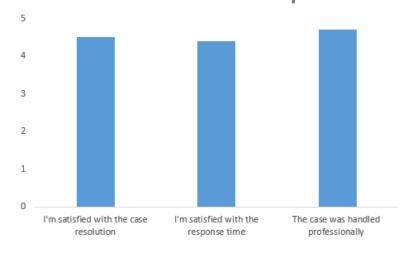
- For cases regarding feature requests or bugs, these are still closed but afterwards...
 - Helpdesk Cases are closed by our local support but Feature/Bug Items still open with our development team.
 - At any point you can email in and reference the defect or feature request number and get an update. Due to US GAAP we cannot give out all information relating to bugs but we can give you a basic update (i.e. it is being worked on or it has been fixed)
 - Also listed in Release notes

Г			
	TSAC- 2727	Steel components	The countersunk bolts that have other bolts continue to use two w
	TSAC- 2543	Steel components	In Shear <u>plate</u> simple (146) , clip secondary part. This has now bee
	TSAC- 2359	Steel components	In U.S. <u>Base plate</u> (1047) , in som has now been fixed.
e1779	TSAC- 2177	Steel components	In H/V Shear <u>plate</u> (64) , previous has now been fixed.

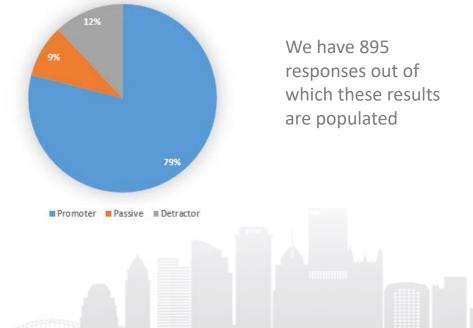


Survey Scores to date for 2019

 These statistics are based on Feedback via our Case Closed Receipt's



These results range from a score of 0-5.00 being the lowest and 5 being the highest



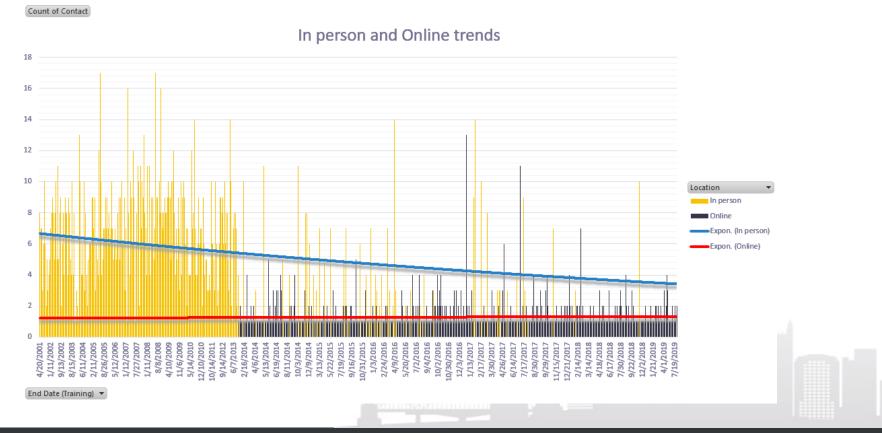


TRAINING OPPORTUNITIES



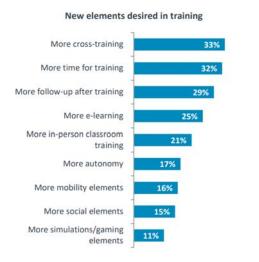


Tekla Structures training numbers

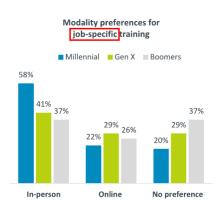




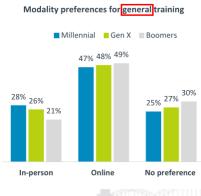
Importance of training

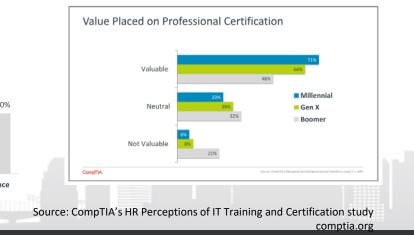


CompTIA is a leading voice in the information communications and technology (ICT) industry that focuses its support on helping businesses in this arena by providing training, certifications, and guidance on gaining critical skills needed to operate a business more effectively.







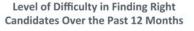


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Hiring qualified employees

Most HR Professionals Report Experiencing Challenges in Filling Job Openings

About 9 in 10 (93% NET) found it challenging to fill openings with the right candidates over the past 12 months





CompTIA

Source: CompTIA's HR Perceptions of IT Training and Certification study Base: 400 U.S. HR professionals

Large Organizations Are Especially Impacted by Hiring Challenges

Challenges Organizations Face in Filling Openings with the Right Candidates	Overall	Small 5-99 employees	Medium 100-499 employees	Large 500+ employees
Finding candidates with the right level of experience	44%	35%	45%	57%
Finding candidates with the right "hard" skills	37%	31%	30%	52%
Pool of quality candidates in the local region	37%	32%	37%	43%
Filling openings in a timely manner	37%	24%	40%	53%
Finding candidates in the right salary range	36%	28%	29%	53%
Finding candidates with the right "soft" skills	36%	31%	27%	49%
Competing with large employers that can make more enticing offers	33%	29%	32%	41%
Costs associated with recruiting (e.g. job board fees, headhunters)	32%	28%	35%	35%

See CompTIA's IT Industry Outlook 2015 for staffing and skills data specific to U.S. IT companies where 43% NET report being understaffed <u>http://www.comptia.org/resources/it-industry-outlook-2015</u>

CompTIA

Source: CompTIA's HR Perceptions of IT Training and Certification study Base: 400 U.S. HR professionals

Sources: CompTIA's HR Perceptions of IT Training and Certification study CompTIA Employer Perceptions of IT Apprenticeships comptia.org



Hiring qualified employees

Most Organizations Trying Different Recruiting Tactics

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Diminish in Importance No Change Grow Somewhat in Importance Grow Significantly in Importance Grow **Degree Organizations Changed or Tried Different Recruiting Tactics** Training / professional development for 70% 25% 44% 26% existing staff 51% Training new hires 23% 48% 25% 73% Certifications for new hires 48% 32% 43% 7% 16% Credentials for existing staff 42% 47% 30% 8% 30% 17% Significantly changed 53% Related work experience for new hires 36% 33% 10% 19% Moderately changed Little or no change College degrees for new hires 47% 24% 37% 13% 139 Over past 1-2 years CompTIA [+3% Not applicable] Source: CompTIA Employer Perceptions of IT Apprenticeships | n=553 U.S. hiring managers & executives CompTIA [Not Sure results not shown] Source: CompTIA Employer Perceptions of IT Apprenticeships | n=553 U.S. hiring managers & executives Sources: CompTIA's HR Perceptions of IT Training and Certification study **CompTIA Employer Perceptions of IT Apprenticeships** comptia.org

Over next 2 years

Expected Change in Importance of Factors Among New

Hires and Existing Employees

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NET

Available Training Courses

LOCATION KEY

TRM = Trimble Premises YO = Your Office OL = Online TUA = Tekla User Assistance

Tekla Structures

_	Steel Basic	TRM / YO / OL			
_	Engineering Basic	TRM / YO / OL			
_	CIP (Cast In Place) Basic	TRM / YO / TUA			
_	Precast Basic	TRM / YO / TUA			
_	Entrenamiento básico Acero	TRM / YO / OL			
_	Estimodeling (NEW)	TUA			
_	Advanced Topics	OL			
_	Project Viewer	OL			
Analysis & Design					
_	Tekla Structural Designer	OL			
_	Tedds	OL			

TRM / YO / OL

TRM / YO / OL

PowerFab

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- Estimating
- Production Control

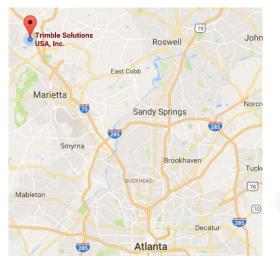




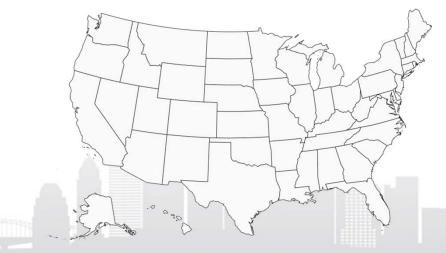
Where Can I Train?

- Online
 - Guided training (paid)
 - Self-guided training (TUA-video tutorials)
- Kennesaw, Ga.
 - Instructor-led training
 - 3 to 10 people*
- Onsite (your office)
 - Instructor-led training
 - Up to 10 people*
- Offsite (neutral site in your region)
 - Instructor-led training
 - 6 or 8 people minimum, up to 12*

* Maximum for one trainer.



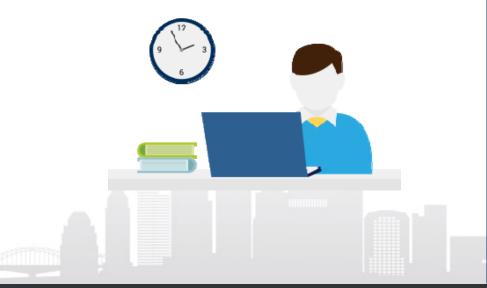






Benefits to Online Training

- Eliminate Travel Expenses
- Reduced Course Fee (Some TUA tutorials are free)
- . Convenient
- . Self-paced
- . Reduced Downtime





Benefits to Instructor Lead Training

- Real-time interaction and discussions with Instructor
- . 99% completion rate
- . Higher % of material comprehension
- . Controlled environment
- · Peer collaboration



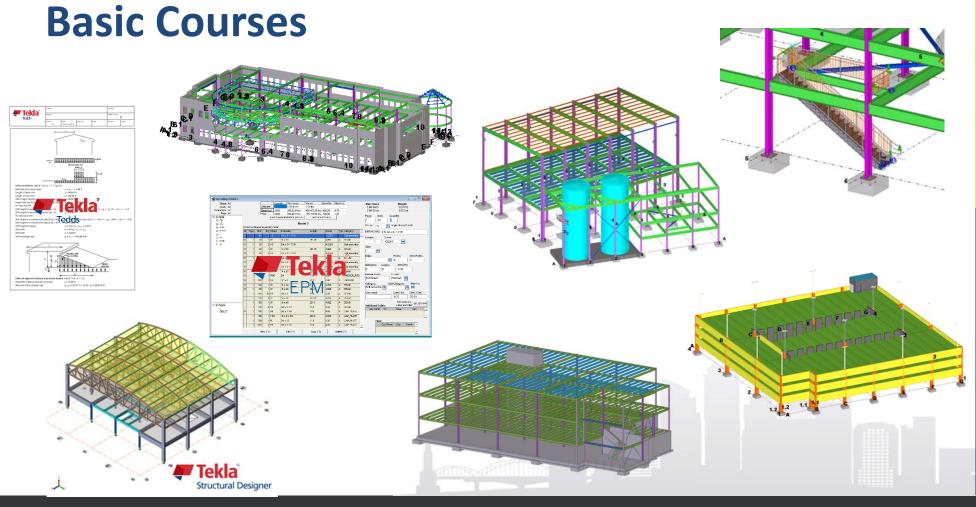
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Advanced Topics

- Connections
- Administration
- Interoperability . Layouts .
- Drawings .

- General . Template Editor .
 - Reports .
 - Templates

- **Custom Components**
 - . Creation
 - Edit Existing
 - . Customization





Training information

- **Training Agendas**
 - www.tekla.com/us/services/training
- Questions about our courses
 - tekla.training.admins.us@trimble.com
- Online Tekla User Assistance
- . Interested in purchasing
 - Speak to your Account Manager



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LOCALIZATION FOR USA ENVIRONMENTS





2018 - Localization Improvements

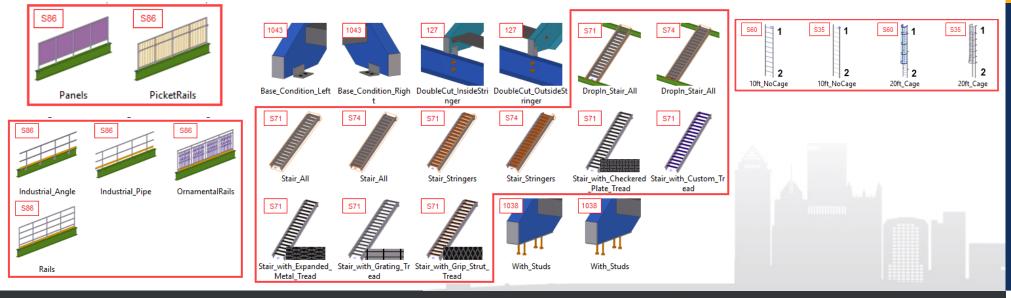
- AISC Changes per 15th Edition
- Profile database has now been updated to include changes from the 15th Edition of the AISC Steel Construction Manual





2018 - Localization Improvements

- . New Published Attributes for Misc Stairs, ladders, and Rails
- Published attributes for S86, S35, S60, S71, and S74 for easy access to load settings in one click.





2019 - Changes in folder structure

 Previously we had two separate environments and those have now been combined into one singular environment called "USA"



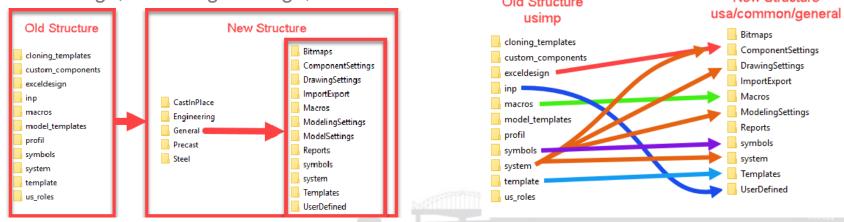
 The USIMP and USMET folders were merged into unit specific folders (Imperial and Metric) and all common files shared between those environments were merged into a folder called "Common".

	Imperial	3/11/2019 8:14 AM
	Metric	3/11/2019 8:15 AM
	🔄 env_US.ini	3/11/2019 8:14 AM
	📓 Role_Imperial Rolesini	3/11/2019 8:14 AM
	📓 Role_Imperial_Cast_In_Place.ini	3/11/2019 8:13 AM
blank_project	📓 Role_Imperial_Engineering.ini	3/11/2019 8:14 AM
common	📓 Role_Imperial_Precast_Detailing.ini	3/11/2019 8:15 AM
usimp	📓 Role_Imperial_Rebar_Detailing.ini	3/11/2019 8:15 AM
usmet	Role_Imperial_Steel_Detailing.ini	3/11/2019 8:16 AM
USHICL	Role_Metric Rolesini	3/11/2019 8:14 AM
	📓 Role_Metric_Bridge_Designer.ini	3/11/2019 8:13 AM
	📓 Role_Metric_Cast_In_Place.ini	3/11/2019 8:13 AM
	Role_Metric_Engineering.ini	3/11/2019 8:14 AM
	Role_Metric_Precast_Detailing.ini	3/11/2019 8:15 AM
	📓 Role_Metric_Rebar_Detailing.ini	3/11/2019 8:16 AM
	Role_Metric_Steel_Detailing.ini	3/11/2019 8:16 AM
	RoleSelect_Role.ini	3/11/2019 8:14 AM



2019 - Renaming of sub folders

- The old folder structure was broken down into more specific folders in 2019. For example, the 'system' folder contained
 - component settings
 - drawing settings
 - etc...
- Now we have folders in the new structure specific to Drawing Settings, Component Settings, Modeling Settings, etc...



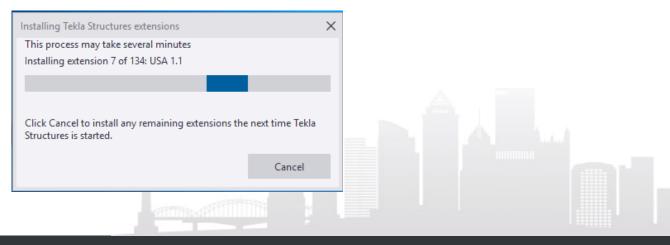
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2019 - TSEP Installations for environments

We introduced the TSEP installations for environments. Now environment installations are done via a TSEP file during the launch of Tekla or during installation of the exe.





2019 - Extensions

Extensions will now be included out of the box when you install the USA Environment

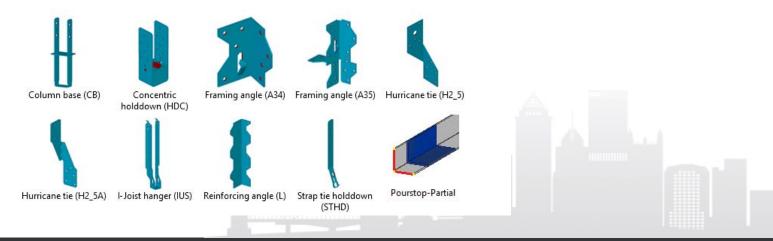
- Beam Marks
- Compare Objects
- Drawing BreakLine
- Formwork Tools Slabs and Walls
- Grid From Parts
- Handrail Dimensioning
- Multi Converter
- Plan Level Mark
- Publish 3D PDF

- Layout Point Applicator
- Rebar Export
- Rebar RDX Export
- Reference Model Scale Tool
- US Custom Variables
- Z Pan Dimensioning (New)

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2019 - Localization Changes for all roles

 A few components were removed but are still available in the system location (environments\usa\imperial\customcomponents "wood Connectors.uel and Pourstop-Partial.uel")





TEKLA WAREHOUSE





Tekla Warehouse

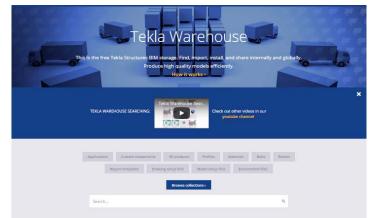
- Tekla Warehouse is an online library of Tekla Structures modeling tools, intelligent parts and templates
- More efficient workflows and higher quality
 - Easy to find
 - Easy to import and install
 - Easy to share internally and globally



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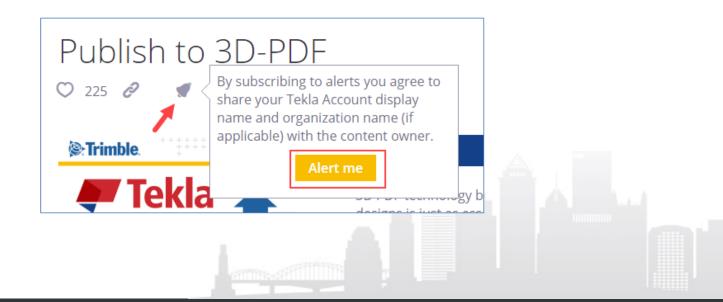




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Tekla Warehouse

 Subscribe to extensions to get email updates when they are modified/updated





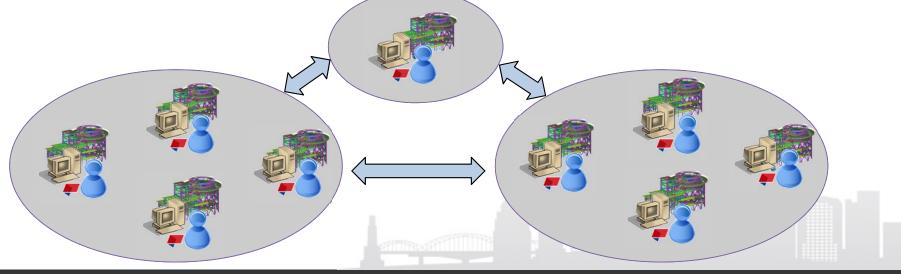
MODEL SHARING



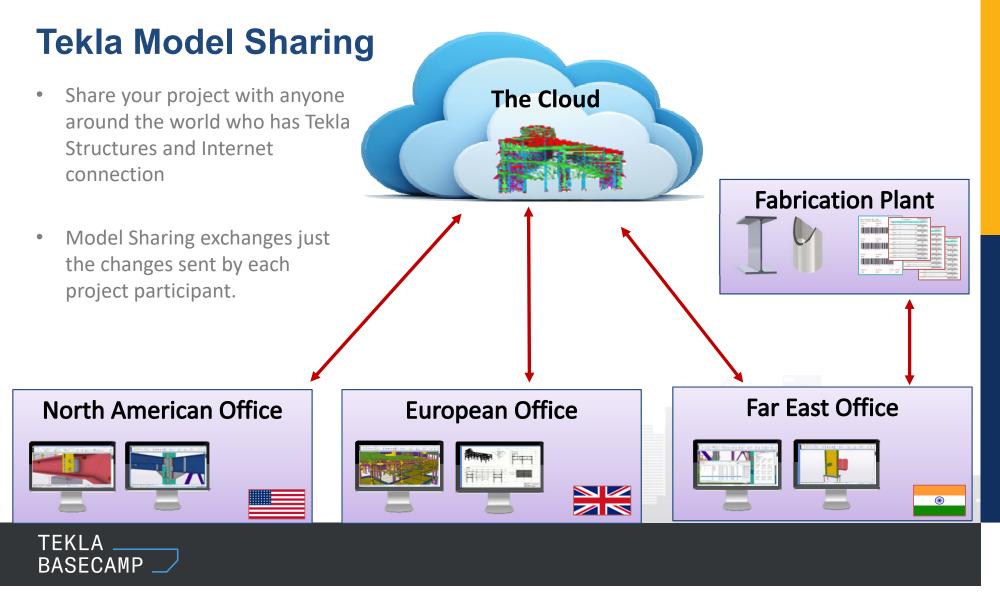


Recap - What is Tekla Model Sharing?

- Allows collaboration at any distance
 - Satellite offices or subcontractors
 - Offsite employees
 - Everyone has local copy of model







Model Sharing



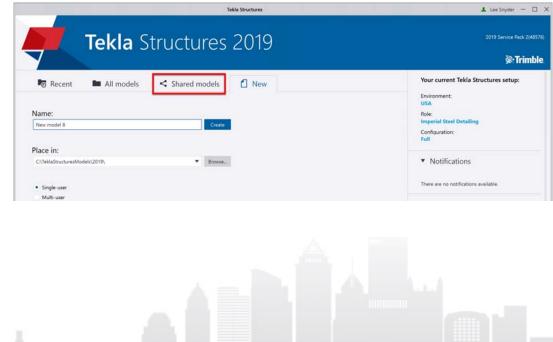




Shared models tab in start screen

The start screen of Tekla Structures 2019 has been updated.

- All tabs of the start screen now have their own dedicated views.
- There is a new Shared models tab that includes the Tekla Model Sharing models.



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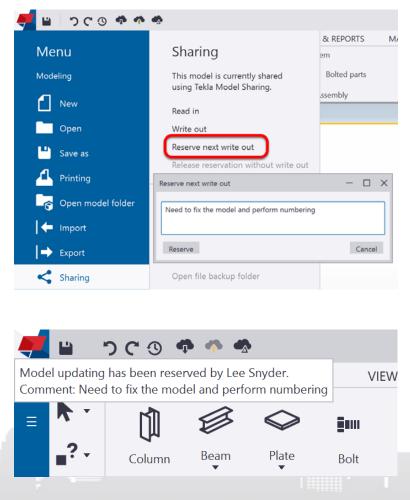
Reserve Next Write Out

- Reserve next write out in order to push your update to the model before letting the others make changes (and forcing you to Read In)
- E.g. Centralized numbering where one person
 - Reads in
 - Reserves next write out
 - Performs numbering
 - Writes out

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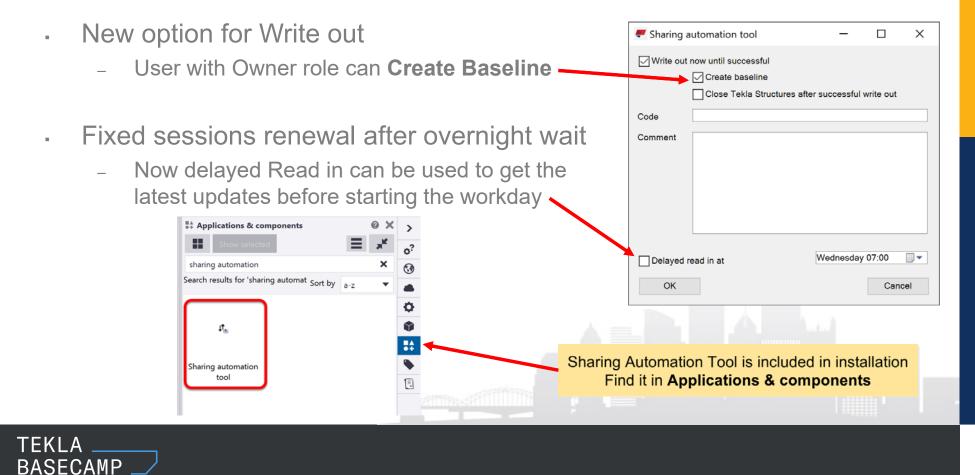
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• Also great for baselining and investigating etc.



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Sharing Automation Tool



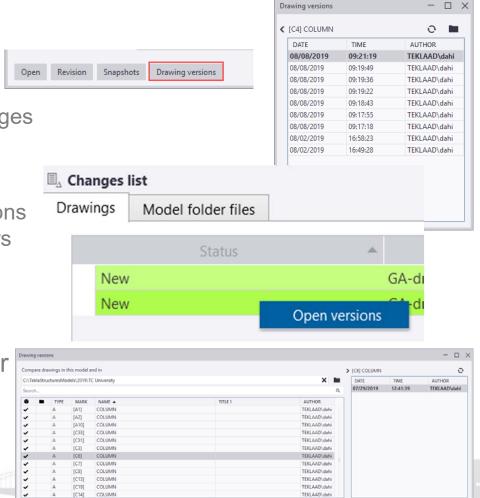
Drawing Version History

- · View and open previous versions
 - View snapshots, overlay to see changes
 - View deleted drawing snapshots too
- Restore previous versions

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- Open and save to restore 'lost' versions when there are user conflicts or errors
- *Cannot restore deleted drawings
- With version control, unintentional changes to drawings by another user can be identified and version with correct content can be returned.

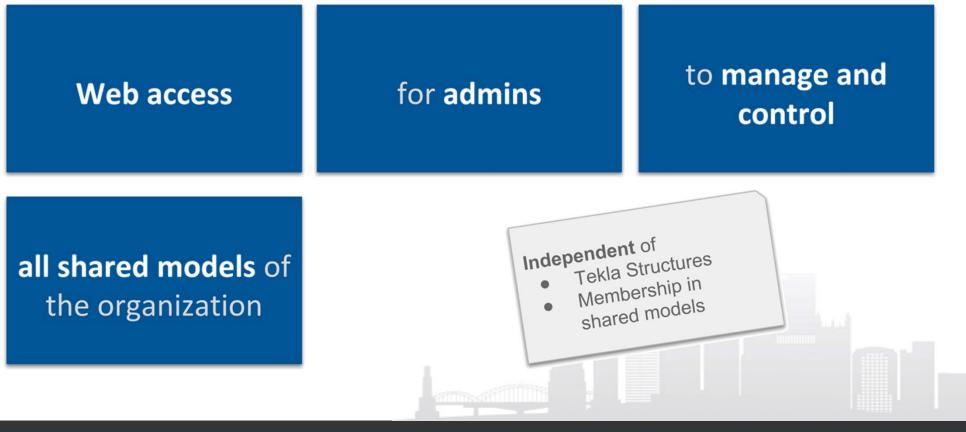


MANAGEMENT CONSOLE





What is the Management Console?





List all shared models

- · List all models
- · View basic model information
 - Name, creation date, TS version
 - Model Id, Environment
 - User count, Versions count
 - List Versions (packets) in model
 - See version type (Base, Incr)
 - Who created it and when
 - Comment about the change
 - List Users in model
 - See each user's current version

MODEL		CREATED (UTC) V	COMPANY	TS VERSIO	NC		
Junior Designer test 2016	ing course	2017-03-01 06:40:19	Audit2	2016		Users 1	Versions 4
Delhi Schooling PR s Bld4	ection A2	2017-03-01 05:56:58	Audit2	AUDIT2			
Mall of KL parking W	12	2017-03-01 05:51:22	Audit2	Delhi School Description Company	Audit2		n A2 Bld4
Town Office Melbou	rne	2017-03-01	Audit2	Created (UTC) Created by			:om
				LockType LockOwner LockComment Environment	Default		
Delhi Schoo	oling P	'R section A	2 Bld4	LockOwner LockComment	Default 837 2016i 5		
Filter	oling P		2 BId4 company	LockOwner LockComment Environment DB Version TS Version Users Count	Default 837 2016i 5	LOAD	ED (UTC)
	EMAIL A			LockOwner LockComment DB Version TS Version Users Count Versions Count	Default 837 2016 5 8	LOAD	ED (UTC)
Filter	EMAIL A emma.sr m		COMPANY	LockOwner LockComment BB Version TS Version Users Count Versions Count ROLE	Default 837 2016 5 8	LOAD	ED (UTC)



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Add users to shared models

Add users to a shared model

- Admin can assist on building the design team
- New employees can be added to projects easily
- Can be done without opening Tekla Structures

NAME	EMAIL A	COMPANY	ROLE	VERS	LOADED (UTC)
Emma Snowflake	emma.snowflakeinc@gmail.co m	Snowflake Inc.	Project viewer *	a I	
Noah Snowflake	noah.snowflakeinc@gmail.co m	Snowflake Inc.	Editor		
	olivia.snowflakeinc@gmail.co m		Owner •		
User Demo	tmstesting+300@outlook.com	Audit2	Owner •	9	2017-03-01 05:48:36
Back	Add users				
			- Internetion		



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Modify roles of users in model

- Modify roles of users in model
 - Admin can now remove access for a **leaving** employee
 - Admin can also promote another owner in a case the only owner is unreachable

Editor	•
Owner	v
None	
Viewer	
Project viewer	
Editor	
Owner	

ROLE



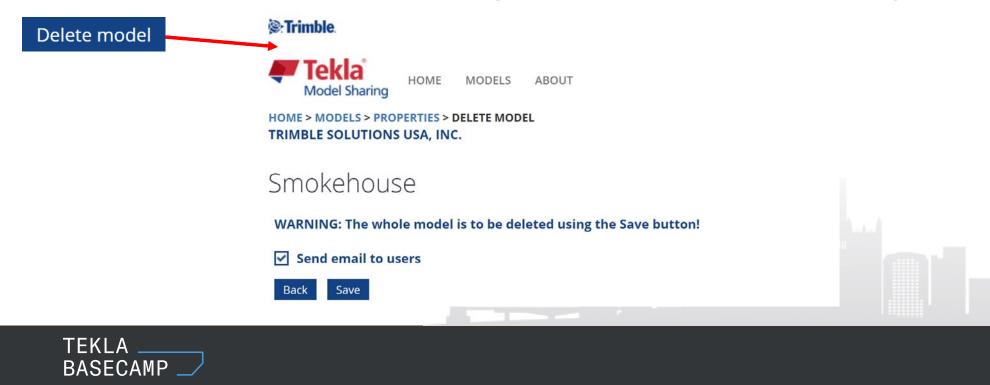
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Delete model from sharing service

Admin can now delete shared models

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- Can be used for cleaning up completed or obsolete projects



Model Lock and Version Delete

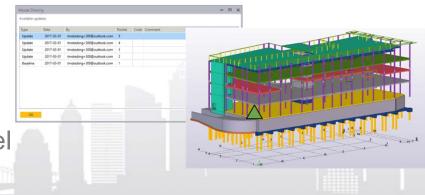
Model Lock

- Prevent users from Writing out
- Lock the model when trying to identify broken version (packet).
 Unlock after deleting the packet

Version Delete

- Find the last valid version
- Delete version after that (and in practice all newer version along)
- Users a forced to rejoin the model to the valid version







GETTING STARTED FOR NEW USERS



Free trial can be initiated by customer admin

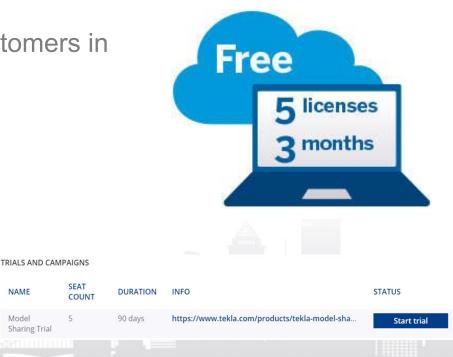
Free trial can be initiated by customer admin, without contacting Tekla sales.

NAME

Model

The trial is currently available for customers in

- USA, Canada
- United Kingdom, Ireland
- France, The Netherlands
- Australia, New Zealand
- India
- Korea, The Philippines, and
- Middle East region





eLearning lesson and training video clips

Quick learning (no cost)

- Interactive **eLearning** course (30 min)
- Video tutorials to learn the
 - basic usage, and
 - how to take Tekla Model Sharing into use
 - available in <u>TUA</u> and Free trial campaign site, also in <u>YouTube</u>



Open the **interactive elearning course** for Tekla Model Sharing. This course includes all the Model Sharing videos below, additional learning material, and knowledge checks. Completing the course takes about 30 minutes.



Video tutorials - Tekla Model Sharing

del Sharing getting sta

Tekla Model Sharing enables teams to collaborate on the same Tekla Structures project regardless of their location or time zone. Tekla Model Shari adapts to anv internet connection speed, and you can even work offline. No additional hardware or software is required apart from Tekla Structure





to createLearn about the user roles in Te Model Sharing. There are four r Owner, Editor, Viewer, and Proje Viewer.





earn how to use the Management onsole. With Management Console, Iministrators can list and delete odels, add users and modify the roles users lock and

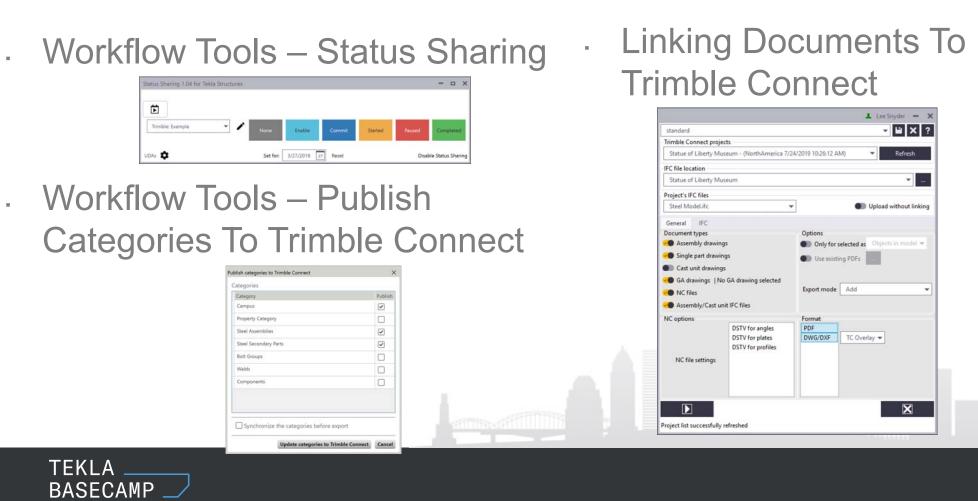


TRIMBLE CONNECT





Tekla Structures Extensions



Linking documents to Trimble Connect

- Link documents to model objects
 - PDF drawings

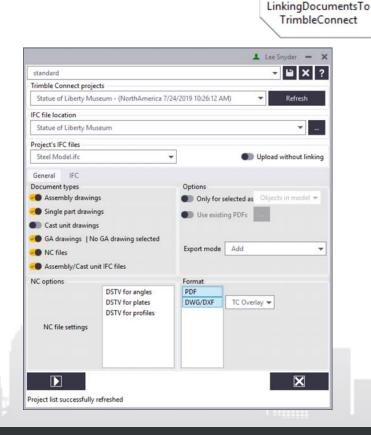
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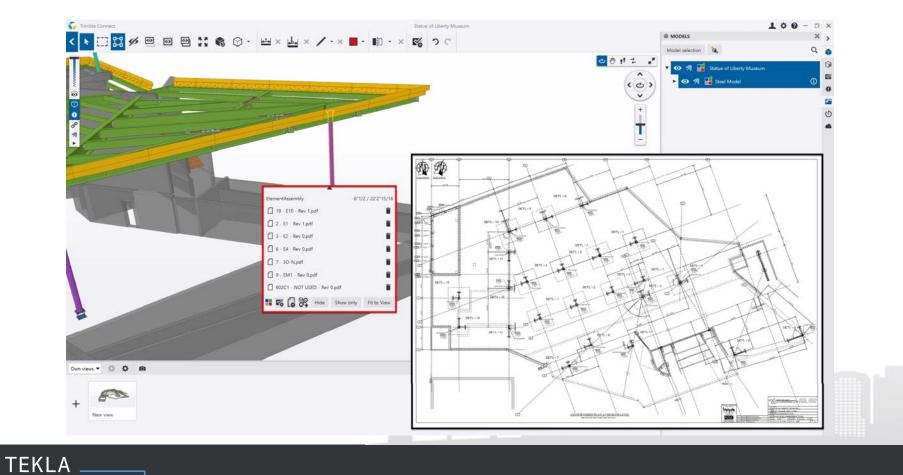
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- Part, Assembly & Cast Unit
- . GA Drawings
- DSTV (CNC) Files
- IFC files for assembly/cast units
- DWG Drawing Annotation Overlay
- Trimble Connect project needs to be created first

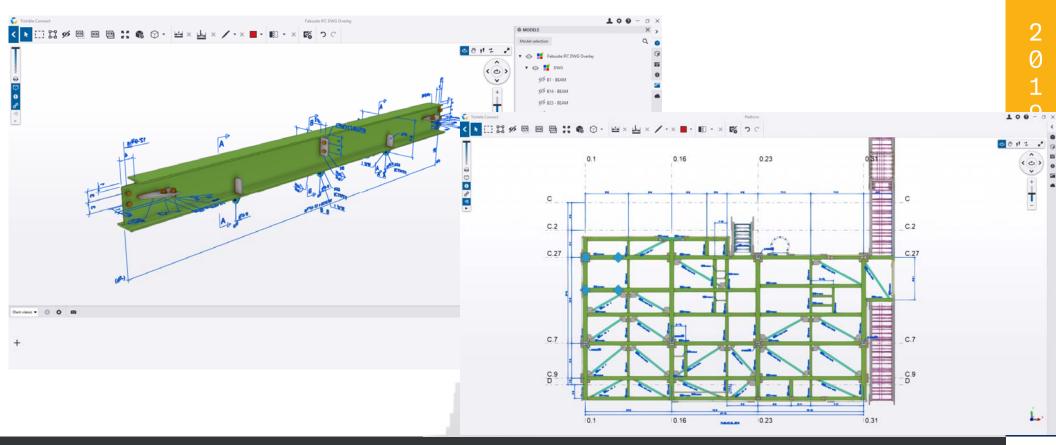


Linking documents to Trimble Connect

BASECAMP

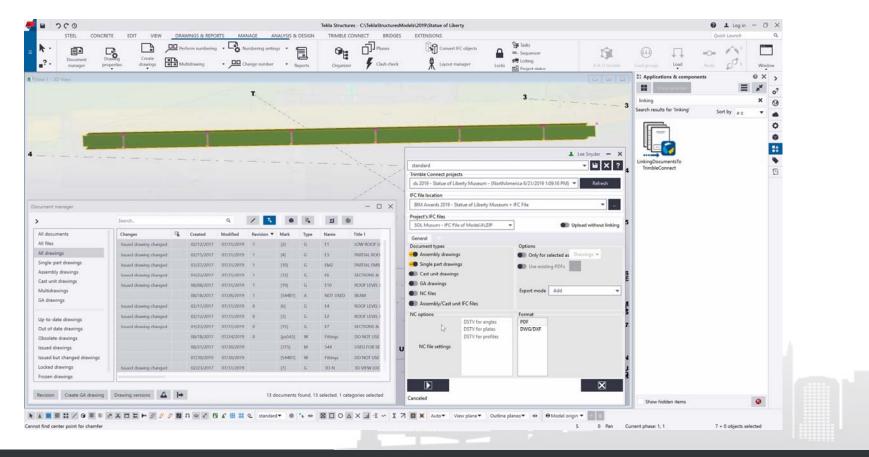


DWG - Drawing Annotation Overlay





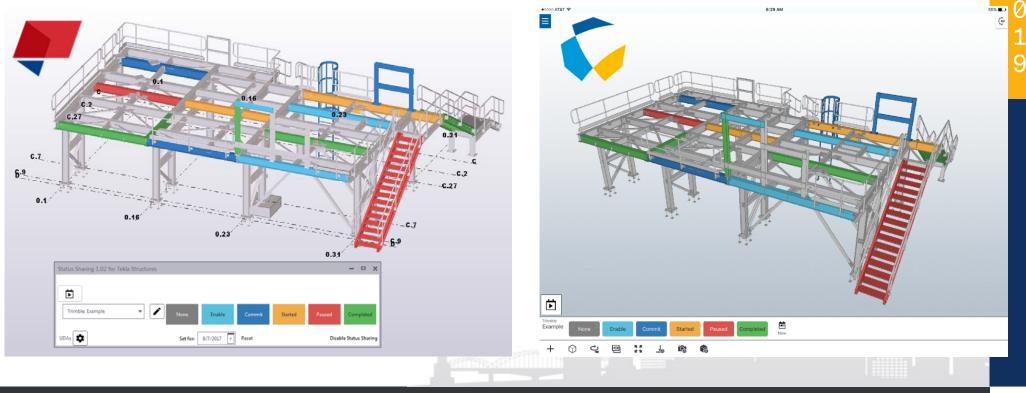
Linking Documents To Trimble Connect



Workflow Tools - Status Sharing

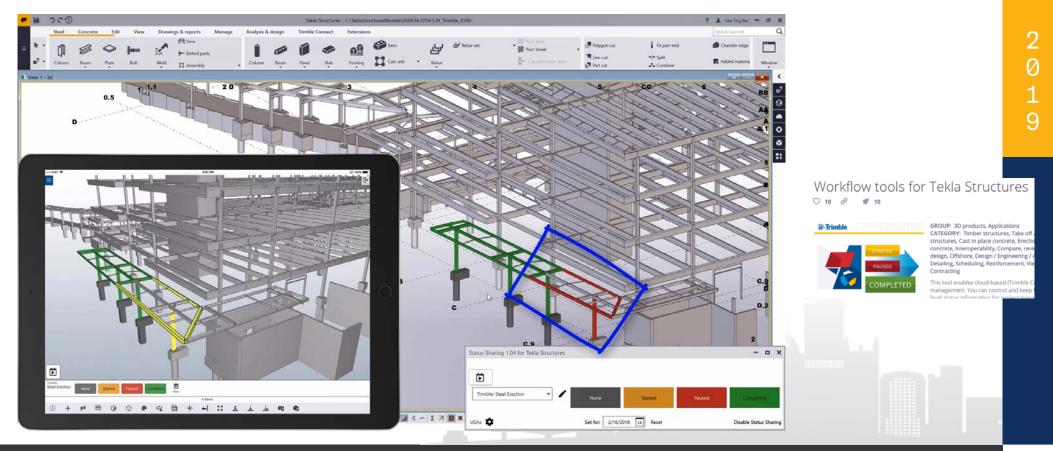


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Workflow Tools - Status Sharing



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Workflow Tools - Publish Categories

Categories

1369)				•i(AT&T 🌩	143 PM	
egorized (629)	Publish categories to Trimble Connect	×			Testect subcompany	
40)	Categories				Cancel	
ilding A (446)	Category	Publish			Site (740)	
Section 1 (350)	Campus	✓			Building A (446)	
 Floor 2 (110) Floor 1 (122) 	Property Category				Section 1 (350) Finish Floor (118)	
Finish Floor (118)					Floor 1 (122)	
Section 2 (96)	Steel Assemblies				The second second	
Floor 2 (26)	Steel Secondary Parts	v			Floor 2 (110)	
Floor 1 (37)	Bolt Groups		145 PM	100	Section 2 (96) Finish Floor (33)	#
Finish Floor (33) Section 3 (-)	Welds	10 10			Floor 1 (37)	T
Floor 2 (-)	weids		Search autorationry		Floor 2 (26)	1
 Floor 1 (-) 	Components		Cancel		Section 3 (0)	
Finish Floor (-)			ANCHOR_ROD (2	256)	Finish Floor (0)	
lding B (294)	7		Backer Bar (2)		Floor 1 (0)	
ategory (-)			BEAM (659)		Floor 2 (0)	
mblies (1227/1227)	Synchronize the categories before expo	ort	BRACE (6)		Building B (294)	
DR_ROD (256)			COLUMN (100		building o (204)	
(659)	Update categories to Trim	ole Connect Cancel	HANGER (2)			
(6) Bar (2)			JOIST (102)	A THE THE		
IN (106)			PLATE (1)	~ ~ *		
R (2)			RAIL (4)			
(102)			STAIR (4)			
t or selection in the mod 👻 📕			VERTICAL HSS BRAC	CE (85)		
zer categories zer categories						
nble Connect			4 8 % 4 %			
TEKLA						

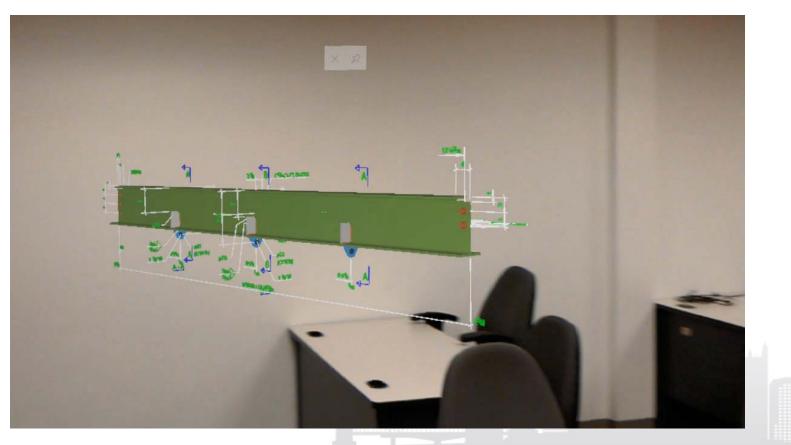
Trimble Connect For Hololens







Trimble Connect For Hololens





SUMMARY





2 0 1

9

Cloud Based Construction Workflows

Status Sharing

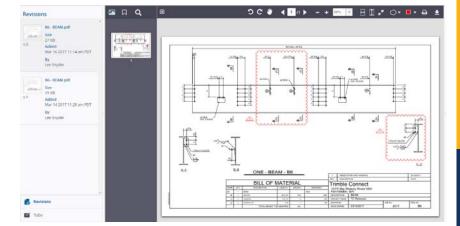
- Create Actions
- View Status
- History Playback

1/26/2017 10 01.01.2017			•	10.03.20
Trimble: Fabrication Status 👻 🖌	None	Started	Paused	Completed

Linking documents to Trimble Connect

- Per Assembly or a Part
- Link IFC of Assembly
- Link CNC & DWG Overlay
- Link part, assembly and GAs PDF's





Releases and Document Markup Tools

- Send versions of files or folders
- Markup documents
- Assign as TODO's







