"The uniqueness of our change detection algorithm means that users can mix and match models from different modelling tools and pipelines and still be able to spot exactly what has changed over time between any two revisions. This becomes invaluable, not only during the design coordination stages, but also throughout construction when contractors introduce as-built models. It is also important for litigation when the proof of who did what and when may result in legal liability and financial claim."

Dr Jozef Dobos, CEO of 3D Repo

3D Diff® - First Real-time BIM Change Detection Web Solution

The cloud based solution provides a fast and reliable way to detect all changes in underlying 3D models, in real time, via an encrypted web browser.
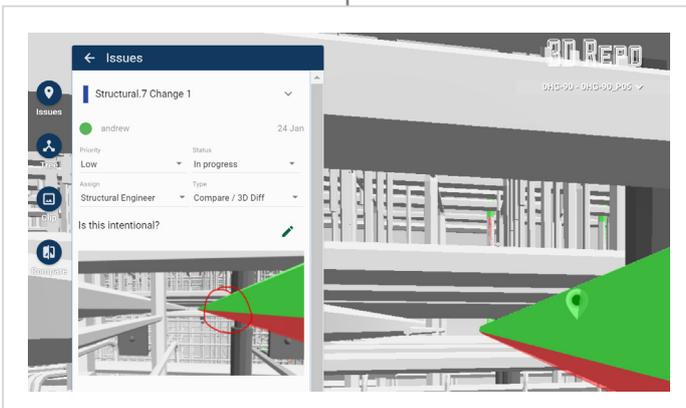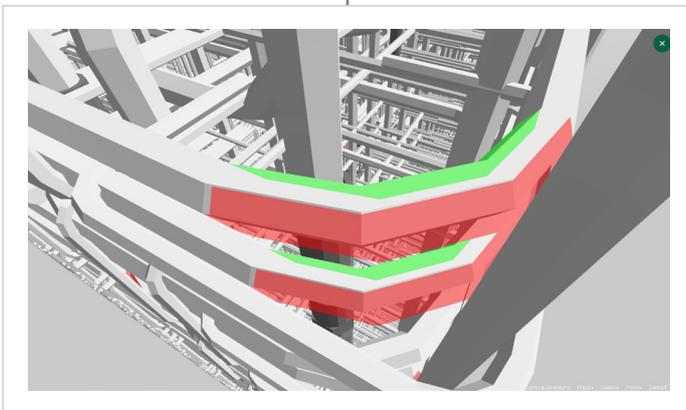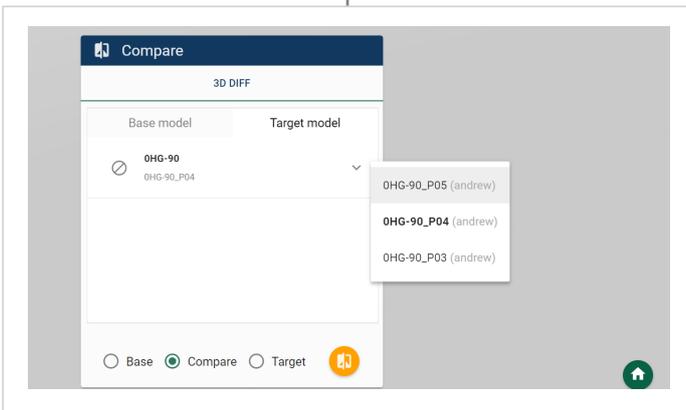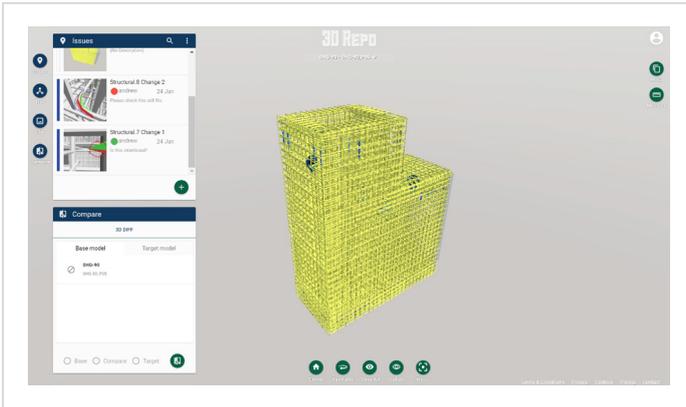
3D Diff is a first for the industry as it operates on any 3D models, regardless of their file type, software used to produce them or file size. 3D Repo solution also allows users to share visualisations with project partners and stakeholders irrespective of location or time-zone.

By comparing the actual geometry of a model rather than underlying, software specific object IDs or labels, 3D Diff can detect changes between models from different sources. For instance, a user may pass 3D models from PDMS to Navisworks as well as to Tekla due to project specific requirements. Without 3D Diff, there is no way of verifying what data has been lost in translation from one package to the next.

In addition to offering a fast, effective, software independent solution for change and clash detection, 3D Diff requires no installation of desktop software. Data is fully encrypted and project privileges, such as view only or edit, can be assigned to individual project partners.

The 3D Diff digital solution builds on 3drepo.io cloud based BIM platform that allows users to access the latest 3D models and informed decisions. Often described as an online knowledge base, the 3D Repo platform is different from other collaboration tools as it uses a component-based database — meaning that information is live, useful and accessible throughout the entire project lifecycle.

How to use 3D Diff®?

- Open model from 3D Repo Teamspaces.

- Open Compare tool.

- Click compare button to highlight changes in the current revision with the previous or...

- Choose the revision to compare from target model menu.

- Compare model will load.

- 3D Repo now calculates geometric changes in real time.

- Green shows new items and red shows deleted.

- A modified item will show both old and new positions.

- Navigate to a change.

- You can flick now between base and target to easily see the effect of the change.

- To create a new issue, open the issues tab.

- Click the "+" to create a new issue.

- Give it a Title.

- Set the Priority, Status and Assign to the appropriate group.

- You can also add the Type to the issue, in this case, we have added Compare/ 3D Diff.

- This is fully customisable in the model settings menu.

- Write a description.

- Take a screen shot and add some mark-up.

- You can also drop a pin to help easily find issues.

- This process can then be repeated for all changes to help others easily identify and comment on them.

[More at 3D Repo's YouTube channel](#)

www.3drepo.io