

Using Point Cloud Analytics for to update 3D city models

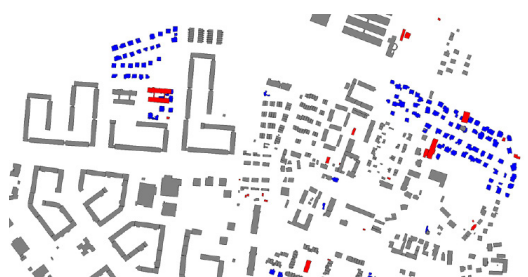
Challenge

Together with Berlin Partner and the Berlin Senate Administration, Point Cloud Technology took on the challenge of efficiently and automatically updating the 3D city model of Berlin. The biggest challenge was the enormous amount of 120 TB of raw data for an area of 900 km² with 530,000 buildings. The task was to identify all buildings that were new, obsolete, or were structurally changed in order to update the 3D model.



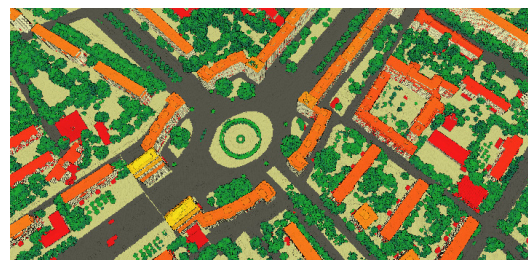
Solution

Point Cloud Technology provided its platform to classify 3D point clouds from an aerial survey into ground, buildings and vegetation. Change analysis was used to compare the new data with previous scans and the current 3D city model. Using fast and efficient processing a workflow was implemented. The detection of buildings and locations that were updated took place fully automated.



Result

Point Cloud Technology was able to support Berlin's mission to provide an up-to-date 3D city model for the entire city. Manual effort was kept to a minimum to avoid high costs and deliver the desired results.



- **Classification of 3D point clouds in ground, structure and vegetation**
- **Fully automated recognition of buildings and locations to be updated**