Doxel, Inc
Case Study

VERCATOR®
Smart point cloud procesing

Converting Data at Scale

Doxel is a US start-up that specialises in providing a service for tracking construction progress in terms of cost, schedule, and quality at scale, with 3D scan data through the use of artificial intelligence and computer vision. Doxel captures huge quantities of complex, multi-modal data from each of their construction sites every week of which 3D scan data is a significant proportion of the total.

Point cloud data can come in a range of different formats with different specifications and which were developed for different usages. As part of Doxel's processing workflow they needed to convert the point cloud data captured into common formats that were required for their workflow. Due to the highly automated workflows that they use, this needed to be done without user intervention.

The Vercator® API provides the perfect solution for this. Not only does it unlock Vercator's leading point cloud processing for third party integration, it allows it to be programmed to be used as required and the pay as you go tariff means there was predictability on cost based on their workload.

By integrating with the Vercator API, it meant that Doxel could concentrate their development resources on their core competencies in construction progress analytics while relying on Vercator services to provide a point cloud processing sub-system in their process.

Try the Vercator cloud for yourself here, or if you have a workflow challenge which would benefit from an acceleration project, why not have a chat with us?

www.vercator.com

```
1   POST /api/v0/scan-conversion
2
3   {
4     "paths": [
5       "https://bucket.s3.eu-west-2.amazonaws.com/scan1.ptx",
6       "https://bucket.s3.eu-west-2.amazonaws.com/scan2.ptx",
7       "https://bucket.s3.eu-west-2.amazonaws.com/scan3.ptx"
8     ],
9     "type": "HTTP",
10    "mergeResults": false,
11    "format": "RCS"
12  }
```

VERCATOR®

xyz, ply, pts, e57, las, laz, rcs

DOXEL

Electrical
EMT conduit
Percent complete 23.9%
Quantity 9,000 / 37,650 LF
● Medium Risk   ● Critical

Fire Protection
Clevis hanger
Percent complete 22.42%
Quantity 760 / 3389 Ea
● Low Risk   ● Not Critical