

Roche

Maps 4 Smart Building

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Maps 4 Smart Building

Enabler, Use Cases & Stakeholders





Maps 4 Smart Building What does it provide?



Digitalised and georeferenced consistent maps of buildings

Building structure data



Architectural and CAFM information in a simple and standardized form



Automated Cloud-based service for future proof



Automated process (Maps don't need to be updated manually when changed)



Maps 4 Smart Building Highlevel Illustration of floor maps flow





Maps 4 Smart Building

Further enablers and use cases based on FME solution

Digital Twin in design for showcase Innolab Bldg 8





CAFM

Same GeoJSON data from CAFM are already implemented in the Digital Twin Data Integration Platform

FME Software is used as a data integration platform for the Digital Twin Full automated Cloud based solution (concept phase)



Automated QS-Check

QS-Check of CAD/BIM models according to Elvis and SAP specifications <u>QS-CAD/BIM</u>



API pRED PKM + *BIM360*

FME Software is used as an interface in pRED Project for data transfering from PKM to BIM360 Construction Cloud



IoT and PoI

FME Software could be use for linking sensor data (IoT) and Points of Interest (Pol) for Digital Twin (Not yet launched)



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Technical challenges

Task: Merge DWG and Excel data (Planon), producing GeoJSON files on MS Azure

- Roche on-premise FME Server not ready
 - Solution: FME Cloud was perfect to get the MVP up and running quickly, all the input files are available on the Roche ProjectWise portal. We could then migrate on-premises later.
- Do we get DWG or DGN files as input?
 - Solution: No problem for FME, just add the appropriate reader!
- Room numbers: a question of CAD vs GIS
 - Or: "Just use the PointOnAreaOverlayer, how hard could it be?"
 - Solution: Manual corrections and lots and lots of transformers.
- Discrepancies between data sources
 - Solution: Workspace creates user-friendly text logs outlining any problematic areas needing manual revision.







Doing now what patients need next