

# ProCloud3D - Slicing for Industrial 3D Printing in a Protected Cloud Environment

## Enabling Industries Through a Data-Secure Streaming of Build Jobs



### Motivation and Relevance

- Substantial portion of the intellectual property creation occurs in the design phase, when a CAD file is created
- If a CAD or build job file is sent to an external production service provider, sensitive data is shared and could be passed on or used in an unauthorized way

### Approach

- Development of a cloud-based platform for preparation and secure exchange of encrypted build job files
- Demonstration of encrypted streaming and printing of build job files

### Results

- Architecture for a secure cloud-based platform that enables the encrypted and real-time transmission of production data
- Open-source streaming protocol to stream build job files in a server client architecture <https://github.com/Digital-Production-Aachen/OVFStreaming>

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### Research Area

- Data Security & Encryption
- Machine Control
- Build Job Preparation

### Partners

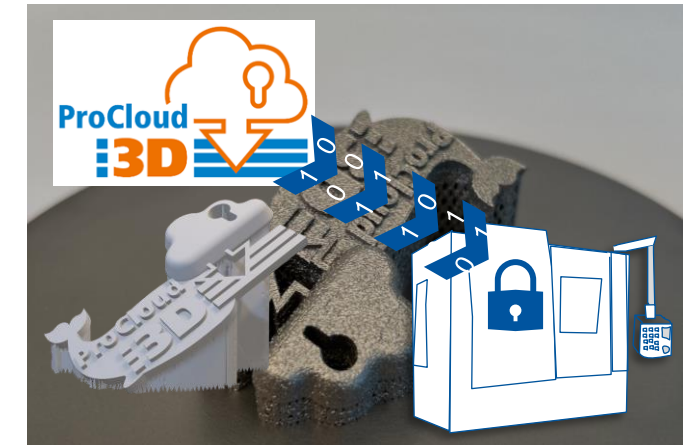


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