## Technicien·ne en systèmes industriels diplômé·e ES – Travail de diplôme

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## Development of an OPC-UA communication demonstrator on a CNC machine of the company Groupe Recomatic SA



Evaluate machine needs

AUTHOR :

EXPERT :

- Create a connection between a CNC and an industrial PC via Profinet
- Configure an OPC UA server •
- Connect different clients to OPC UA
- Compare the solution with Fanuc OPC Server
- Plan and monitor the project •

## Result

Communication between the different parts of the machine has been established. Various connection options and access levels have been tested. A data architecture has been defined to meet the machine's needs. Communication integration has been implemented in the CNC, along with a client visualization.

## **Application**

The goal of this communication between machine parts is to centralize data for managing the machine via an industrial PC. The communication, secured by OPC UA, allows for data collection at the IT level for machine supervision as well as for controlling the machine, which will increase production capacity



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The CNC controls the production machine and is the master in the communication with the industrial PC.



The visualization allows the user to interact with