



Digital Twin Prototypes and Instances

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Digital Twin Prototypes

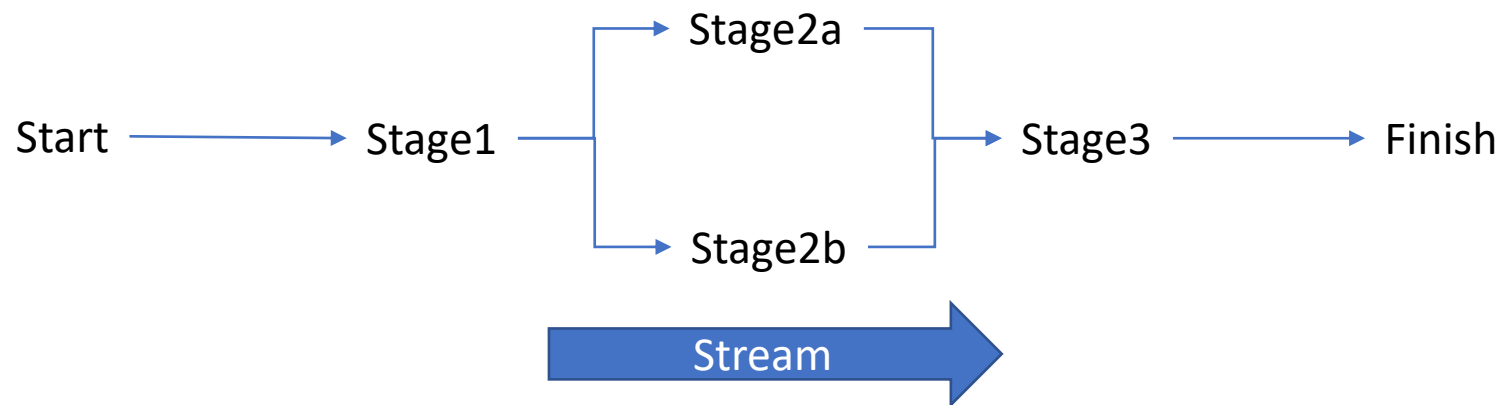
- A digital twin prototype is used to validate digital twin instances.
- A digital twin prototype is made in a CAD or CAM system.
- A digital twin prototype has UUID's for its products, processes, tolerances and features.

Stage	Prototype	Instance
Stage 1	Abc.stp	Boxy at start
Stage 2	Def.stp	Boxy at second setup
Stage 3	Ghi.stp	Boxy at third setup



Digital Twin Streaming

- Stage results are checked using monitoring and inspection systems.
- Stage results are communicated using the UUID's of the prototypes.
- Naming of the instances does not matter to the checking systems.
- Enterprises can choose an appropriate serialization method.



Digital Twin Supervisor

- A digital twin supervisor optimizes production by observing differences between digital twin instances and digital twin prototypes
 - Manages progress between the stages
 - Optimizes production parameters
 - Ensures production correctness

