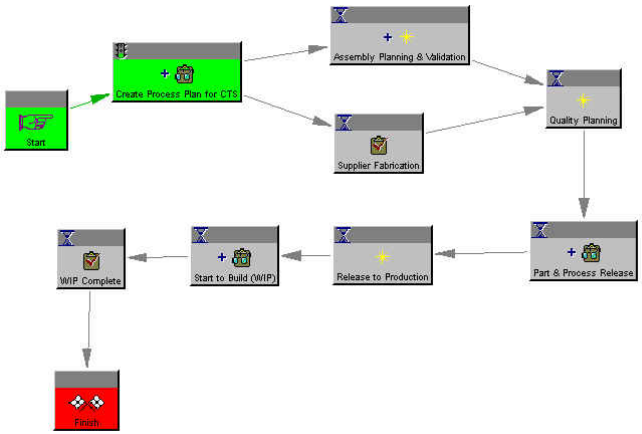
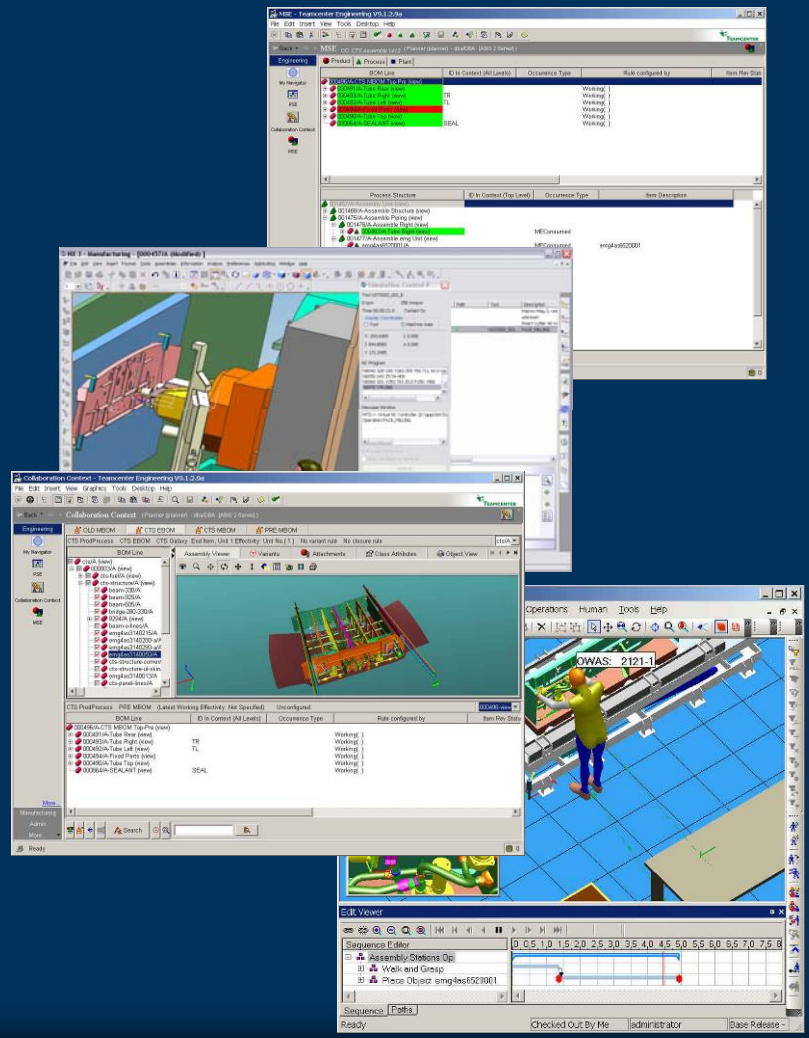


UGS
The PLM Company

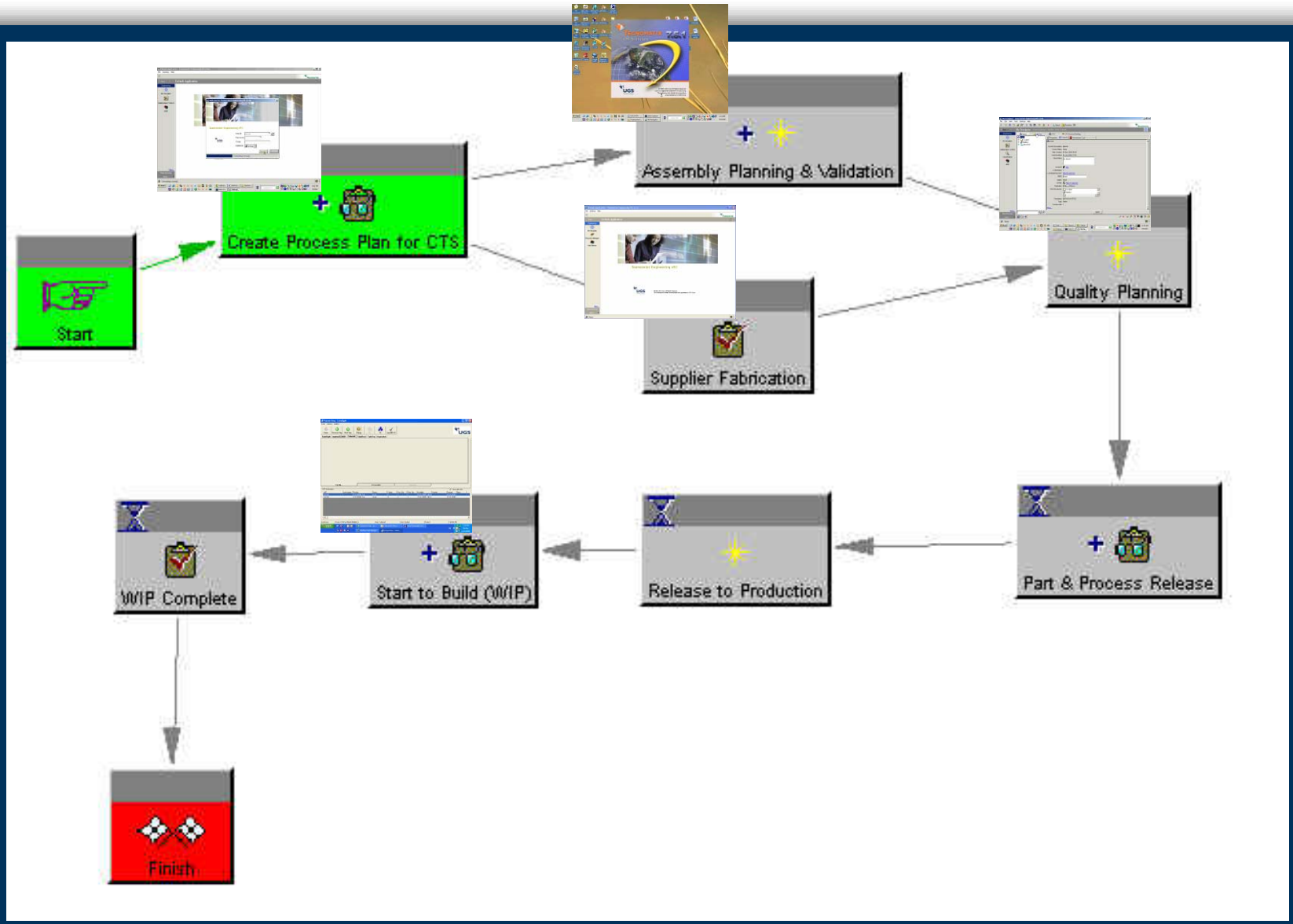
Aerospace ‘Day in The Life’ Demonstration

Scope

- Process planning, verification and execution of a ‘Carry Through Structure’ fuel sub-system, focusing on:
  - **Process planning (TC):**
    - EBOM – MBOM
    - Process definition
    - Work area definition
  - **Supplier integration for Fabrication (TC / NX CAM):**
    - Fabrication Process Planning
    - NC code generation and Documentation
    - Machine tool Simulation and verification
  - **Detailed planning and process validation (Simulate):**
    - Process detailing (define assembly path)
    - Process validation
    - Human
    - Documentation
    - Engineering change analysis
  - **Release build package:**
    - Attach data collection forms
    - Release package
  - **Build (Xfactory):**
    - Produce work order



Workflow



Demo Steps
A. Process Planning

- Objectives:
  - Create Manufacturing BOM for a sub-system from the Engineering BOM
  - Create a process plan for the new CTS sub-system based on knowledge from a similar program
  - Define the assembly area for the CTS assembly based on an existing line
  - Send process for validation
- Tools to be used:
  - Teamcenter manufacturing
- Role:
  - Planner

Process planning (TC):
- EBOM – MBOM
- Process definition
- Work area definition

Supplier integration for Fabrication (TC / NX CAM):
- Fabrication Process Planning
- NC code generation and Documentation
- Machine tool Simulation and verification

Detailed planning and process validation (Simulate):
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Release build package:
- Attach data collection forms
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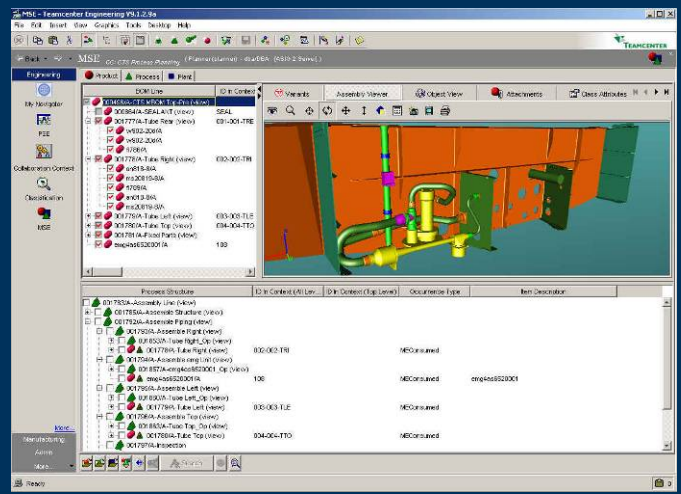
Build (Xfactory):
- Produce work order



Demo Steps
B. Supplier integration for Fabrication

- Objectives:
  - Define & verify detailed Fabrication process:
    - Assign Machining Operation
    - Assign Resources
  - NC Program generation
  - Machine tool Simulation and verification
  - Documentation of Fabrication Process for Shop floor People
  - Generate cost reports
- Main tools to be used:
  - TC Manufacturing
  - NX CAM
- Role:
  - Planner

Process planning (TC):
- EBOM – MBOM
- Process definition
- Work area definition

Supplier integration for Fabrication (TC / NX CAM):
- Fabrication Process Planning
- NC code generation and Documentation
- Machine tool Simulation and verification

Detailed planning and process validation (Simulate):
- Process detailing (define assembly path)
- Process validation
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- Documentation
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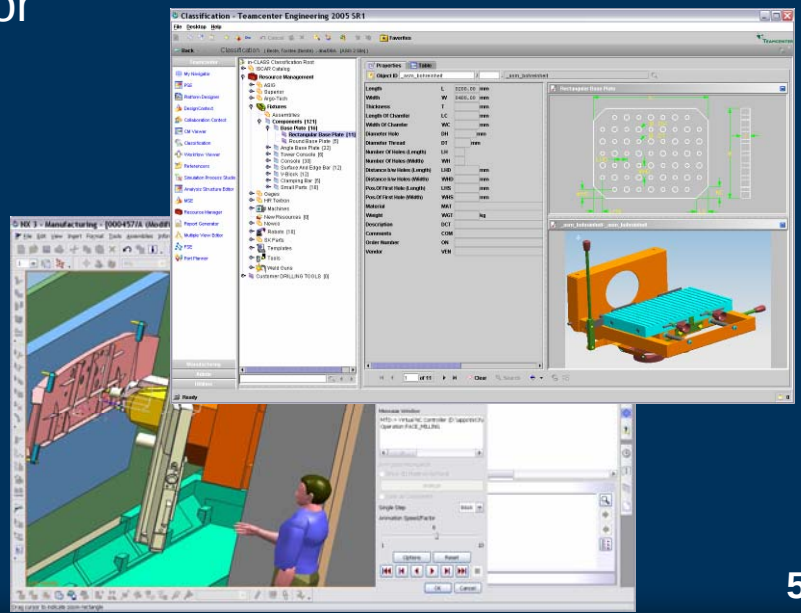
Release build package:
- Attach data collection forms
- Release package

Build (Xfactory):
- Produce work order



Demo Steps
C. Detailed Planning and Process Validation

- Objectives:
  - Define & verify detailed assembly process:
    - Path
    - Sequence
    - Collision
  - Document the process
  - Verify human visibility and ergonomics
  - Analyze the impact of an engineering change
- Main tools to be used:
  - Process Simulate
- Role:
  - Simulation Expert

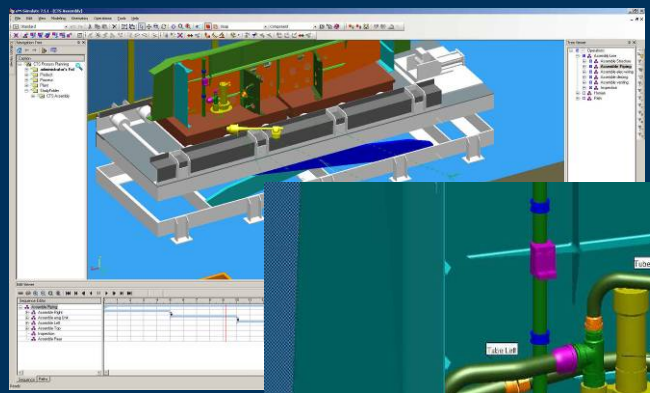
Process planning (TC):
- EBOM – MBOM
- Process definition
- Work area definition

Supplier integration for Fabrication (TC / NX CAM):
- Fabrication Process Planning
- NC code generation and Documentation
- Machine tool Simulation and verification

Detailed planning and process validation (Simulate):
- Process detailing (define assembly path)
- Process validation
- Human
- Documentation
- Engineering change analysis

Release build package:
- Attach data collection forms
- Release package

Build (Xfactory):
- Produce work order



Demo Steps
D. Release build package

- Objectives:
  - Define data collection forms on the process
  - Release build package
- Main tools to be used:
  - Teamcenter Manufacturing
- Role:
  - Mfg manager

Process planning (TC):
- EBOM – MBOM
- Process definition
- Work area definition

Supplier integration for Fabrication (TC / NX CAM):
- Fabrication Process Planning
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Detailed planning and process validation (Simulate):
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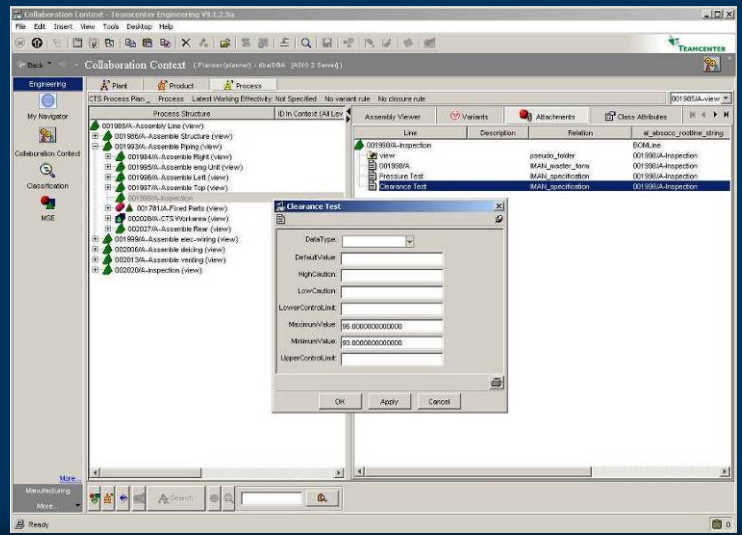
Release build package:
- Attach data collection forms
- Release package

Build (Xfactory):
- Produce work order



Demo Steps
E. Build

- Objectives:
  - Controlled execution
  - Data collection by the shop-floor operator
  - Non-conformance
- Main tools to be used:
  - Tecnomatix Execution
- Role:
  - Shop floor Mechanic

Process planning (TC):
- EBOM – MBOM
- Process definition
- Work area definition

Supplier integration for Fabrication (TC / NX CAM):
- Fabrication Process Planning
- NC code generation and Documentation
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Detailed planning and process validation (Simulate):
- Process detailing (define assembly path)
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Release build package:
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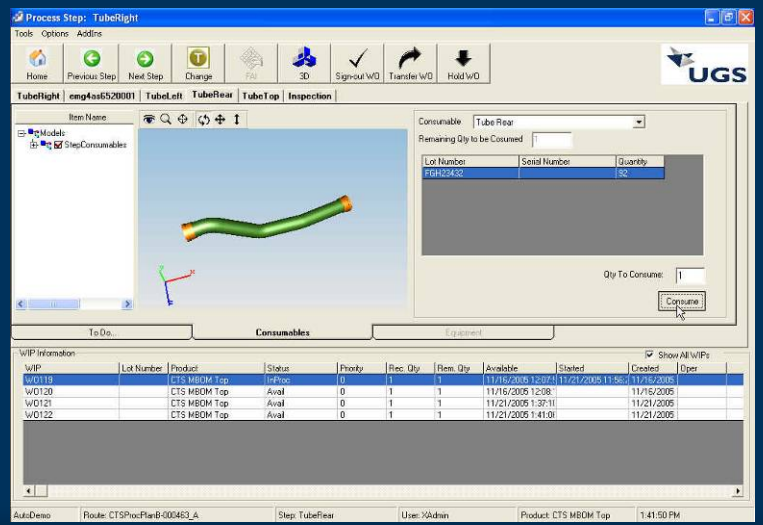
Build (Xfactory):
- Produce work order



Thank You