Pro/ENGINEER® Interface for Unigraphics with

Associative Topology Bus^{TM} (ATB)

Pro/ENGINEER Wildfire® Series Overview

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Rev G

Pro/ENGINEER Interface for Unigraphics with ATB
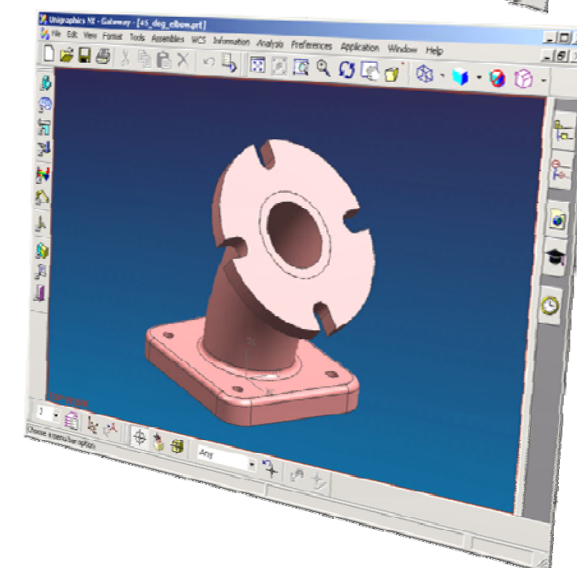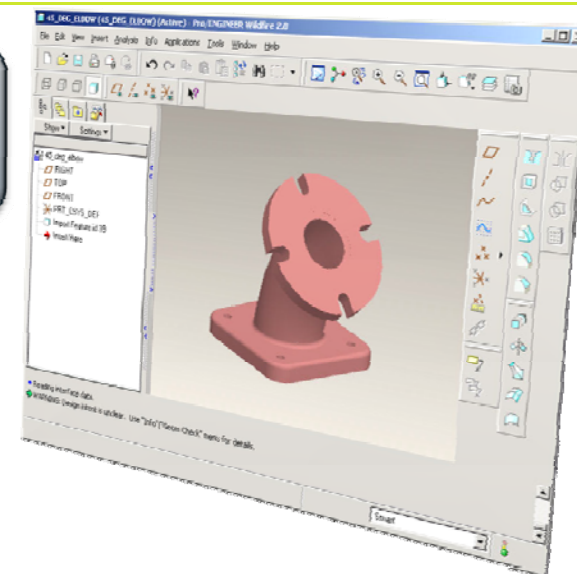
Import and Export

- Parts and Assemblies
  - individual bodies & multi-body structure
- ATB Enabled (for import)
- Entity Support
  - Brep and Facet Geometry
  - Datum points and curves
  - Layers, Visibility, and Colors

Licensing

- Requires a license and install of UG
  - Required licenses are: (assemblies), (gateway), and (solid_modeling)
- A separately-licensed module of Pro/ENGINEER

Distributed Pro/BATCH Support

- Requires Pro/ENGINEER Interface for Unigraphics with ATB Unattended Edition license (CPT-3323-L)

Pro/ENGINEER Wildfire 5.0

GRANITE® Gateway

UGOpen

Unigraphics NX4 or NX5

Associative Topology Bus

Associative

- One-directional associativity: UG to Pro/ENGINEER

- Pro/ENGINEER Translated Image Model (TIM)
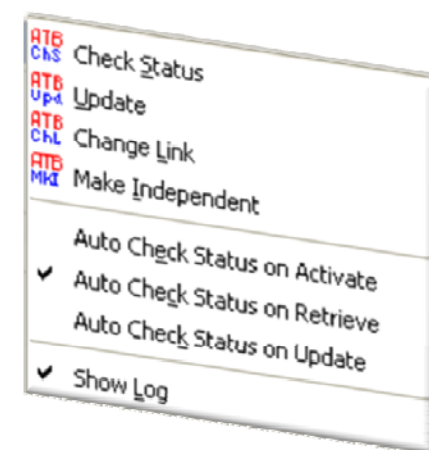
- Contains link to Source (UG) object

Topology

- Maps geometry IDs from UG to Pro/ENGINEER

- Maintains geometry IDs as changes are made

Bus

- Checks for changes in the UG (Source) object

- Update import geometry based on changes in Source object
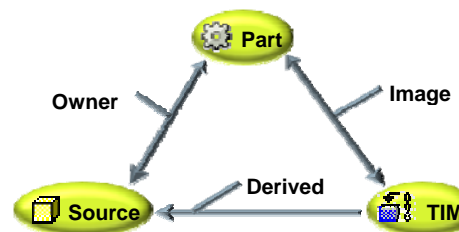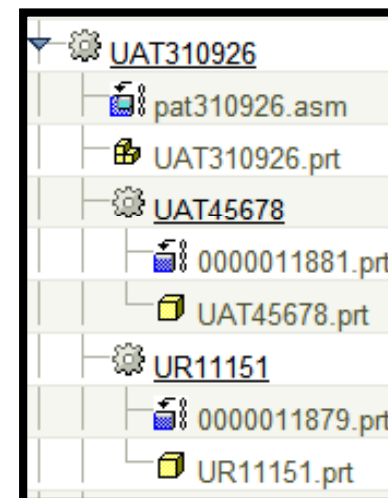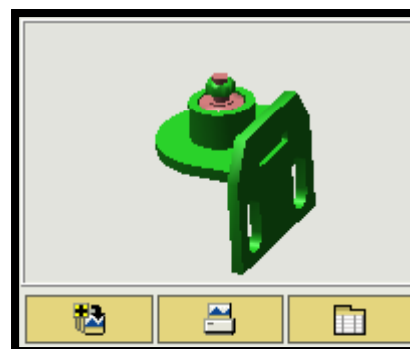
- Change Link, Make Independent

New in Pro/ENGINEER Wildfire 4.0 and PDMLink 9.1

Pro|ENGINEER
WILDFIRE® 4.0

NEW

Heterogeneous Design-In-Context (HDIC)

- Multi-CAD (Pro/ENGINEER, UG, CATIA V5) support in Windchill PDMLink

- Represent complete mixed CAD product structure in Pro/ENGINEER and Windchill.

- One WT Part – one source CAD Document – multiple image CAD Documents

- Open UG CAD Documents in Pro/ENGINEER to create ATB "image" CAD Documents.

- ATB enables: Check Status, Change Link, Make Independent, and (associative) Update on Pro/ENGINEER TIM (image) models

- Required Components

  – Pro/ENGINEER Wildfire 4.0 M060 or later

  – Pro/ENGINEER Interface for Unigraphics with ATB

  – Unigraphics NX4 or NX5

  – Windchill Workgroup Manager for Unigraphics
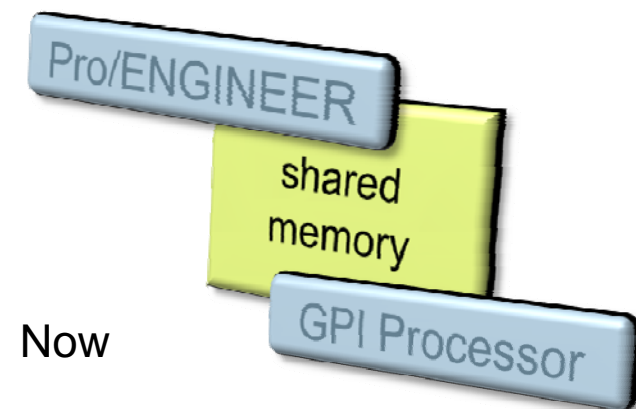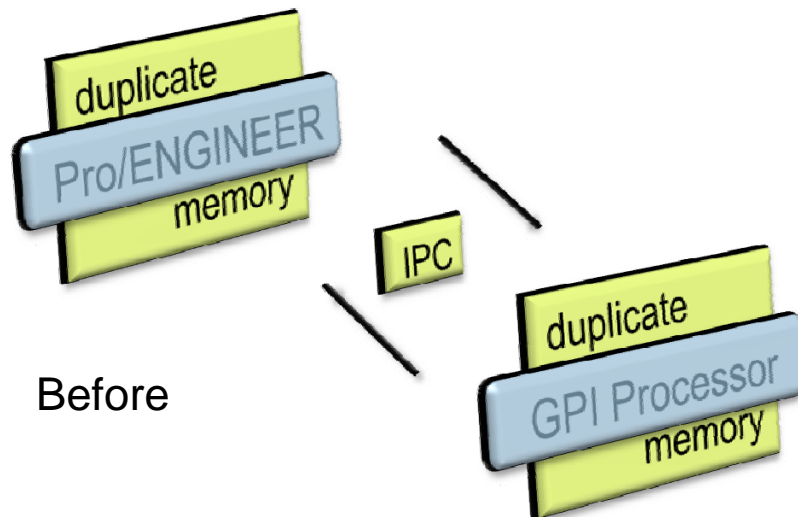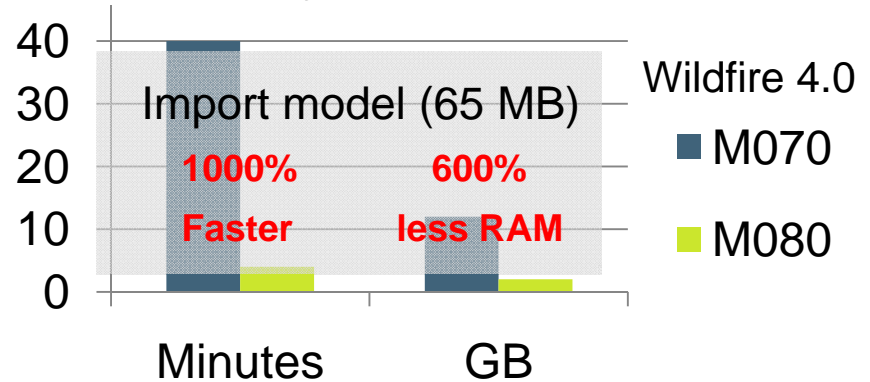
  – PDMLink 9.1 F000 or later

UAT310926
  pat310926.asm
  UAT310926.prt
UAT45678
  0000011881.prt
  UAT45678.prt
UR11151
  0000011879.prt
  UR11151.prt

Part
Owner   Image
Source   Derived   TIM

New in Pro/ENGINEER Wildfire 5.0

NEW

Pro|ENGINEER
WILDFIRE® 5.0

Shared Memory

- Limited to GPI-based processors
  - CATIA V5, CGR, JT, ProductView, UG, Autodesk Inventor, and CADDS5
- Introduced in Pro/ENGINEER Wildfire 4.0 (M080)
- Benefits
  - Reduced processing time
  - Reduced memory (RAM) usage

Shared Memory Performance & Resource

Import model (65 MB)

1000%   **600%**

Faster   **less RAM**

Minutes   GB

Wildfire 4.0
■ M070
■ M080

duplicate
Pro/ENGINEER
memory

IPC

duplicate
GPI Processor
memory

Before

Pro/ENGINEER
shared memory
GPI Processor

Now

Forward looking information subject to change without notice © 2009 PTC

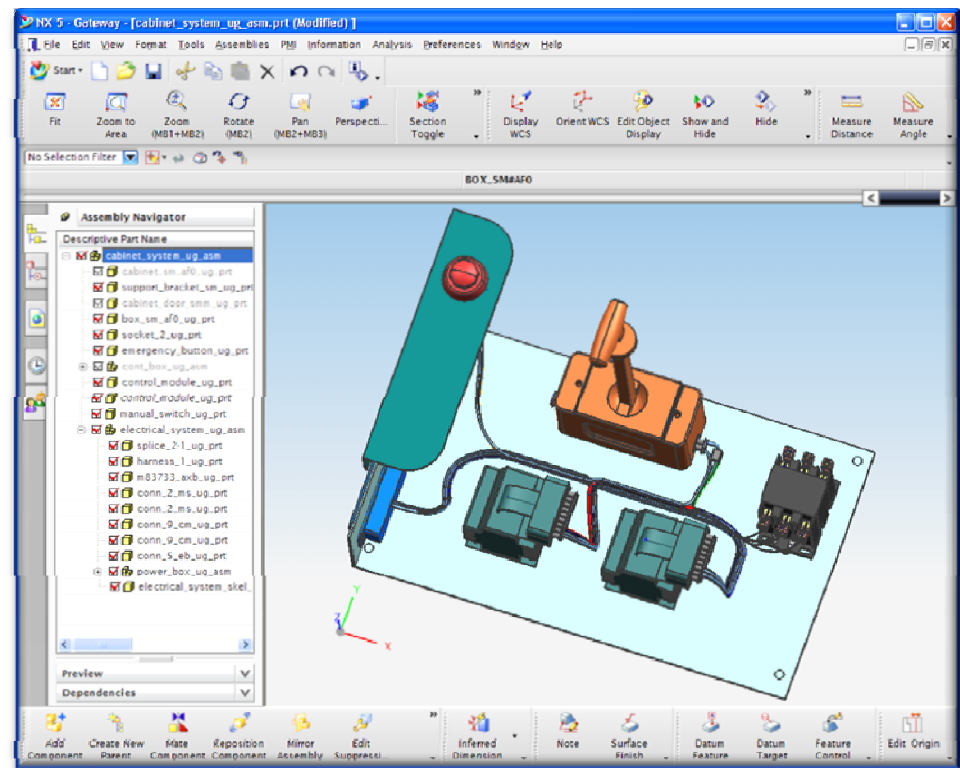# New in Pro/ENGINEER Wildfire 5.0

NEW

Pro|ENGINEER
WILDFIRE® 5.0

Geometry Export and Import

- Cables as geometry

  - Intf3d_out_cables   yes | no (default)

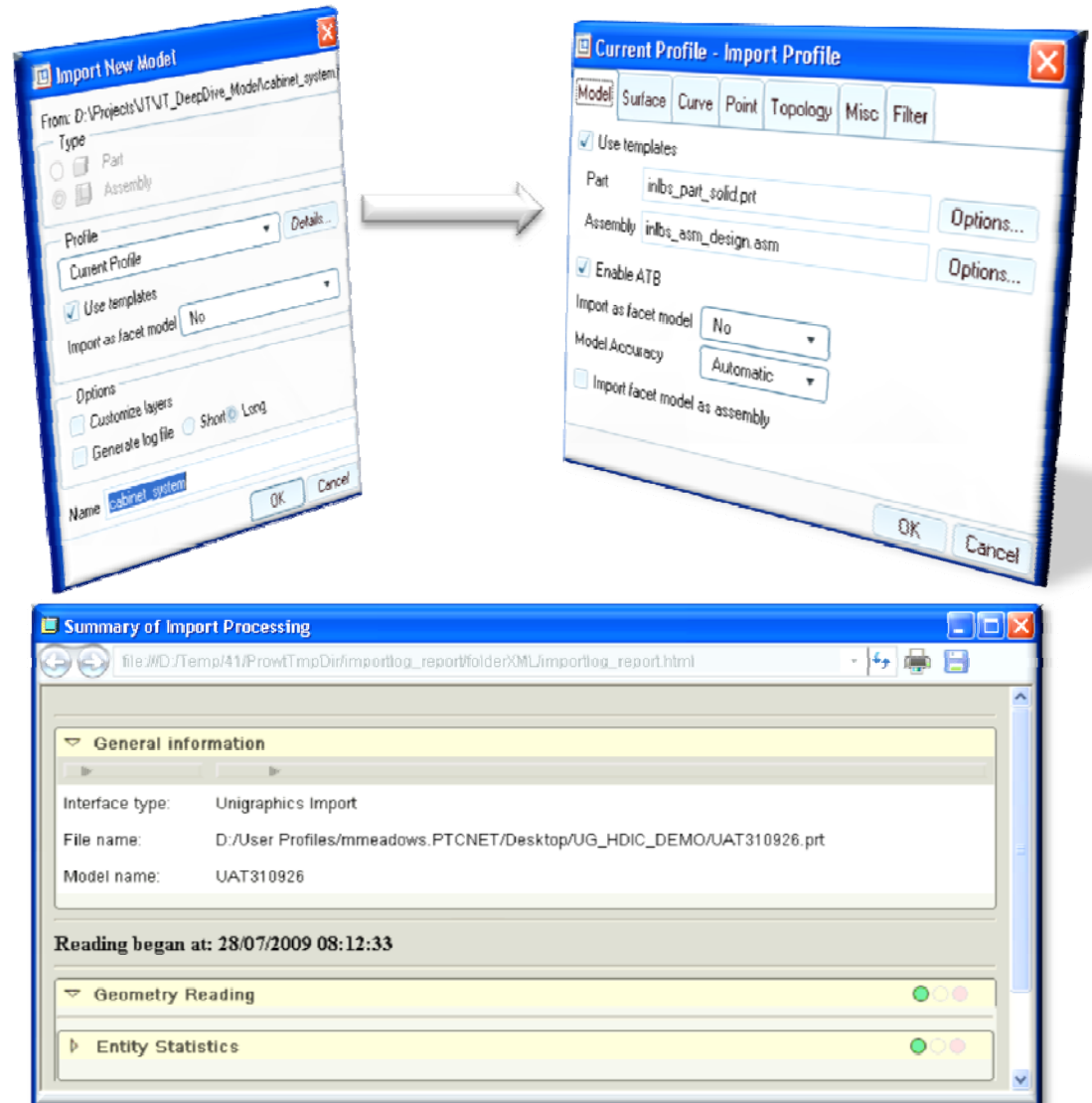 - Exact representation

New in Pro/ENGINEER Wildfire 5.0

New Import Wizards

- Greater transparency of data exchange options
- Improved workflow
- Finer control of settings

Updated import log files

- XML format (*.xml)
- Log Options
  - Generate on Import
    - Short - receipt
    - Long - full log
    - None
  - Dynamically generate
    - Info > Data Exchange > Import Log
- Status Indicator

Platform Support

Pro/ENGINEER Interface for UG with ATB					
Platforms		Pro/ENGINEER Wildfire 4.0[1]		Pro/ENGINEER Wildfire 5.0[2]	
OS	Processor	32 bit	64 bit	32 bit	64 bit
Windows XP	Pentium/Xeon	✓	✓[3]	✓	✓
Windows Vista	Pentium/Xeon	✓	✓[3]	✓	✓
HP-UX	PA8000	–	✓	–	–
SUN Solaris	Ultra SPARC II	–	✓	–	–
SUN Solaris	AMD & Intel	–	✗	–	✗

(1) **Pro/ENGINEER Wildfire 4.0 Platform Support Matrix**

(2) **Pro/ENGINEER Wildfire 5.0 Platform Support Matrix**

(3) **Support for Windows 64 bit systems introduced in Unigraphics NX5.**

(4) **Legend**

✓ Platform supported by Pro/ENGINEER and processor

✗ Platform supported by Pro/ENGINEER, but not by processor

– Platform not supported by Pro/ENGINEER

Version Support

Unigraphics Versions Support			
	Pro/ENGINEER Wildfire 3.0	**Pro/ENGINEER Wildfire 4.0**	**Pro/ENGINEER Wildfire 5.0**
Unigraphics Import Versions[1]	**V18 and NX**	**NX3 and NX4, NX5 (M020)**	**NX4 and NX5, NX6 (M030)**
Unigraphics Export Versions[2]	**V18 and NX**	**NX3 and NX4, NX5 (M020)**	**NX4 and NX5, NX6 (M030)**

(1)   Imports Unigraphics versions up compatible with the version of Unigraphics connected to Pro/ENGINEER.

(2)   Export format is defined by version of Unigraphics Pro/ENGINEER is connected to.

(3)   TPI 145483 details Unigraphics support in previous releases.

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