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)
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

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New in Pro/ENGINEER Wildfire 4.0 and PDMLink 9.1

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
New in 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)

Wildfire 4.0

- 1000% Faster
- 600% less RAM

Minutes

GB

M070

M080

Before

Now

© 2009 PTC
New in 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

<table>
<thead>
<tr>
<th>Platforms</th>
<th>Pro/ENGINEER Wildfire 4.0&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Pro/ENGINEER Wildfire 5.0&lt;sup&gt;(2)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OS</strong></td>
<td><strong>Processor</strong></td>
<td><strong>32 bit</strong></td>
</tr>
<tr>
<td>Windows XP</td>
<td>Pentium/Xeon</td>
<td>✓</td>
</tr>
<tr>
<td>Windows Vista</td>
<td>Pentium/Xeon</td>
<td>✓</td>
</tr>
<tr>
<td>HP-UX</td>
<td>PA8000</td>
<td>–</td>
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<tr>
<td>SUN Solaris</td>
<td>Ultra SPARC II</td>
<td>–</td>
</tr>
<tr>
<td>SUN Solaris</td>
<td>AMD &amp; Intel</td>
<td>–</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Pro/ENGINEER Wildfire 4.0 Platform Support Matrix

<sup>(2)</sup> Pro/ENGINEER Wildfire 5.0 Platform Support Matrix

<sup>(3)</sup> Support for Windows 64 bit systems introduced in Unigraphics NX5.

<sup>(4)</sup> 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

<table>
<thead>
<tr>
<th>Unigraphics Versions Support</th>
<th>Pro/ENGINEER Wildfire 3.0</th>
<th>Pro/ENGINEER Wildfire 4.0</th>
<th>Pro/ENGINEER Wildfire 5.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unigraphics Import Versions(^{(1)})</td>
<td>V18 and NX</td>
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</tr>
</tbody>
</table>

\(^{(1)}\) 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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