



Solid Edge Embedded Client

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SEEC -- A New Focus



- ▶ Our Vision – The Solid Edge Embedded Client will set a new standard for integration, transparency, and breadth. No other solution will match this level of close and cooperative integration.

- ▶ Enabled by:
 - ▶ Joint venture style teaming of Solid Edge and Teamcenter personnel
 - ▶ Significant new and ongoing investment in this joint development
 - ▶ Commitment of key personnel to define and implement the vision



A Differentiated Solution



- ▶ UGS is uniquely positioned to maintain sustained differentiation as a result of the joint teaming
- ▶ Only UGS will be able to offer:
 - ▶ Completely transparent UI
 - ▶ No bolt-on commands
 - ▶ Unmatched CAD breadth
 - ▶ Complete CAD coverage
 - ▶ Synchronized Release
 - ▶ Compatibility with latest Solid Edge releases

D e t a i l s !



Open Dialog



- ▶ Provide a Solid Edge Open dialog with the ability to peer into Teamcenter.
 - Default to “Home” folder
 - Filter enabled for Solid Edge documents
 - Display datasets directly (not Item, Item Revision)
 - Revision Rule
 - Variant Rule (TcEngineering)
 - Teamcenter Search

- ▶ Benefits: Teamcenter managed information displayed in a manner consistent with Solid Edge.



Assembly Pathfinder Display



- ▶ Provide design status information in Pathfinder.
 - Filename formula
 - Checked Out by You
 - Checked Out by JDOE
 - New Version Available
 - New Revision Available
 - Teamcenter Status

- ▶ Benefits: Reduces work by providing designer with key data management information.



Implicit Operations



- ▶ Based on observed user interaction, capture particular user-PDM interactions and automatically perform these tasks as part of this new transparent paradigm. Examples include:
 - Checkout on Open (check that the item is available)
 - On Close (not dirty), undo Check Out.

- ▶ Benefits: User can concentrate on designing and the PDM system maintains up-to-date and consistent data.



Solid Edge Library



- ▶ Teamcenter aware Library tab
 - ▶ Assembly, Teamcenter Part Library
 - ▶ Part or Sheet Metal, Feature Library
 - ▶ Draft, Library
- ▶ Teamcenter tabs only support drag and drop out of the control.
- ▶ Benefits: Primary user workflows.

D e m o n s t r a t i o n



Document Creation



- ▶ Document creation **New** should be performed within the context of Teamcenter.

The screenshot displays the UG NX software interface. A 'New' dialog box is open, showing a list of document types: Normal.asm, Normal.dft, Normal.par, Normal.psm, Normal.pwd, Symbol.dft, and Weldment.asm. In the background, a 3D model of a part is visible. In the foreground, a 'New Document' dialog box is open, showing a table with the following data:

Document Name	Item ID	Revision	Item Name	Item Type	Folder	Dataset ...
000077.par	000077	A	My Part	Item	Demo	Description

Buttons for 'OK' and 'Cancel' are visible at the bottom of the dialog box.



Save/Save As/Close



- ▶ **Save** persists data to disk and is consistent with the *save* process for unmanaged data.
- ▶ **Save As** branches, displays Common Property dialog with the intent to assign a new Item ID, Revision, etc.
- ▶ **Close** document, display Common dialog and persist data to Teamcenter.

- ▶ **Benefits:** This behavior allows designers to save documents to the cache location (capturing their work in the event of an abort) without creating unnecessary TcE versions (maximize user experience while satisfying IT). Terminology and corresponding behavior is aligned with Solid Edge.



Common Property Dialog



- ▶ Define a common Edge Manager dialog to capture property information for all documents being persisted to TcE and provide the ability to define the document's filename for all file creation commands.
- ▶ Benefits: This dialog provides a single code path for users to view and possibly modify Solid Edge properties exchanged and synchronized with TcE. When a user sees this dialog, documents will be persisted to TcE.



Assembly, Create In-Place



- ▶ Creating a single file to disk.

The screenshot shows the UGS software interface with two dialog boxes open. The 'Create New Part In-Place' dialog is in the foreground, and the 'New Document' dialog is in the background.

Create New Part In-Place Dialog:

- Template: Normal.par
- New file name: Assign2
- New file location: C:_Cache\seaedge-1\TeamcenterConnect
- Options: Coincident with assembly origin, By graphic input, Offset from assembly origin

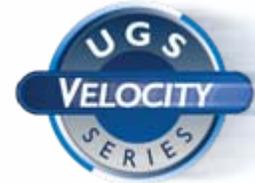
New Document Dialog:

- Files of type: All Files (*.*)
- Active connection: DefaultConnectic
- Options: No levels, BOM view

Document Name	Item ID	Revision	Item Name	Item Type	Folder	Dataset ...
000077.par	000077	A	My Part	Item	Demo	Description



Virtual Components, Publish



- ▶ Create multiple files on disk.

The screenshot displays two overlapping dialog boxes in a CAD application. The top dialog, 'Publish Virtual Components', contains a table with the following data:

Name	Document Location	Template
Belt	C:\...\DefaultConnection	normal.par
Chain	C:\...\DefaultConnection	normal.par

The bottom dialog, 'New Document', shows a file list with the following columns and data:

Document Name	Item ID	Revision	Item Name	Item Type	Folder	Dataset Description
000083.par	000083	A	000083	Item	Demo	Virtual Components
000084.par	000084	A	000084	Item	Demo	Virtual Components

The 'New Document' dialog also includes a toolbar with icons for file operations and a 'Files of type' dropdown set to 'All Files (*.*)'. The 'Active connection' is set to 'DefaultConnectio'. A third window in the foreground shows a tree view of the assembly structure:

- 000080.asm
 - Reference Planes
 - 000077.par:1
 - 000081.par:1
 - 000083.par:1
 - 000084.par:1

D e m o n s t r a t i o n



Document Creation, Summary



- ▶ Document creation in the context of Teamcenter.
Examples include:
 - New, Create Drawing, Create Assembly, Evolve 3D
 - Create in place
 - Family of Parts (FOP), Divide Part
 - Mirror Assembly
 - Virtual Component Publish

- ▶ Benefits: Supports a managed document creation workflow where the documents are named based on Item ID.



Cache Management



- ▶ Description: Align cache management functionality and terminology.
- ▶ Benefits: Provide a consistent set of commands to manage cache.



Teamcenter Declaration



- ▶ **Description:** Need a mechanism to declare Teamcenter managed mode. When enabled, SE Manager would interact with the events, displaying the new managed dialogs. The Solid Edge user is not expected to interact with (2) PDM solutions.
- ▶ **Benefits:** This declaration would provide the user with the appropriate dialogs.



SEEC Compatibility



- ▶ Solid Edge V18
- ▶ TcE V9.1.3.x or TcX v1.0



UGS

*Transforming the
process of innovation*



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VELOCITY

