

PTC Weekly Email

This Weeks Topics:

A) PTC Product Focus: Industrial Design Extension

B) Technical tip: Converting Pro/E data to Mockup 2000i² and its set up

C) Upcoming Events & Training Schedules

A) PTC Product Focus: Industrial Design Extension

The Industrial Design Extension (IDX) product bundle includes Pro/3DPAINT and CDRS. IDX provides PTC customers with a lower cost alternative to purchasing CDRS and Pro/3DPAINT separately.

Pro/3DPAINT:

Gives you the power to create detailed, full color sketches and artwork directly on the 2D canvases as well as 3D models. Express your design concepts quickly with an intuitive user interface that precisely mimics the real thing, customize your own brush and color palettes, create unlimited image and mask layers, work on multiple canvases, and much more.





CDRS:

Provides the best tool on the market for creating high quality, complex surfaces while easily guiding you through the steps of importing sketches, creating curves, and making 3D models. Explore more design alternatives without worrying about reworking seams to eliminate surface gaps and ridges. Update all surfaces automatically when you make changes to a boundary curve or defining surface. Freeze or thaw any portion of a curve to maintain control over how modifications telegraph through your design.



Conceptualization – Explore Design Ideas

IDX offers specific capabilities that enhance your creative design process while allowing greater freedom of aesthetic expression than traditional design approaches. This level of creative control results in a smoother design process with fewer styling compromises and an overall improvement in product quality.

- An intuitive user interface lets you express design concepts quickly and easily.
- A full range of surface creation tools enables you to easily build free-form surfaces of ergonomics and organic shapes resulting in original, exciting and visually stimulating designs.
- By simply revising a computer model, you can explore and share multiple concepts in a fraction of the time required to recreate sketches or prototypes resulting in a multitude of accurate, innovative concepts.
- Your concepts are geometrically accurate, engineering and manufacturing can use design models without and modifications ensuring that your design intent is maintained and resulting in a more effective and efficient development process.



Integration – Update Designs and Deliverables

IDX lets you conceptualize freely in 3D, make refinements and build mathematically perfect surface models that are associative with Pro/ENGINEER mechanical design and manufacturing applications.

- Seamless integration brings industrial design information directly into the product development process.
- By linking conceptual design with engineering and manufacturing, designs are examined early on to determine the best process plan, optimize tool paths, and design tools and dies preserving design intent.
- The level of creative control provided by IDX results in fewer styling compromises, a smoother design process, and an overall improvement in product quality.
- The system's intuitive user interface and easily learned techniques will keep you focused on design!

Competitive Advantage

Pro/ENGINEER IDX helps you maximize creativity – capture, manage and communicate groundbreaking concepts. At the same time, these tools provide the ability to quickly and easily express ideas. Because the software produces highly accurate product model surfaces, the concept geometry can be used by engineering – thoroughly integrating the design-through manufacturing cycle. PTC's Industrial Design Extension supports a product development process that helps companies maintain design intent, improve productivity, lower costs, and get to market faster – The Perfect Solution!!



B) Technical tip: Converting Pro/E data to Mockup 2000i2 and how to set it up

At first glance, this conversion may be easy. Actually converting the data from Pro/ENGINEER 2000i² to Division Mockup 2000i² is very easy, it is the set up of the Mockup recipe file that can cause problems. So lets look at how we can streamline the procedure.

Step1:

Install the Division Mockup 2000i² application.



Step 2:

At this time you can start using Mockup, however you will not be able to convert any data. To be able to convert data, we have to create a few files and configure the Mockup recipe file.

Go to the load point for Mockup and the bin directory. In that directory you will find a file called *dvconvert.bat*. Copy that file and paste it in the same directory, renaming it to *rcpedit.bat*.





D:\ptc\mockup2000i2\bin _ 🗆 🗵 <u>File Edit View Help</u> ٩ 4 4 ٠ bgf2dxf.bat bgf2flt.bat cpu_id.bat dgl2vdi.bat dvconvert.bal bgfutil.bat 4 ٠ igds2vdi.bat dxf2vdi.bat flt2vdi.bat i486_nt_ptc... i486_win95_... echocast.bat ٩ œ iges2vdi.bat iv2vdi.bat mockup_rem... mockup200... mockupepd.... mockuplink.. ٩ ٩ ٠ ٠ ٠ ٠ mutil.bat pro2vdi19.bat pro2vdi20.bat pro2vdi2000i... ptcflush.bat ptcsetup.bat ٠ ٠ ٠ Copy and paste stl2vdi.bat rcpedit.bat wf2vdi.bat vrml2vdi.bat ptcstatus.bat dvconvert.bat into the .\bin directory. 127KB 29 object(s) Rename the file to rcpedit.bat.

Step 3:

Select the *rcpedit.bat* file and edit it in notepad. The second last line of text will have to be edited. Below shows the last paragraph before editing:

```
if NOT "%LM_LICENSE_FILE%" == ""
set LM_LICENSE_FILE=%PRODIR%\text\licensing\ae_license.dat;%LM_LICENSE_FILE%
if "%LM_LICENSE_FILE=%PRODIR%\text\licensing\ae_license.dat
set MOCKUPCONVERTER_FEATURE_NAME=MOCKUPCONVERTER_AE
set DIVISIONROOT=%PRO_DIRECTORY%
set PATH="%PRO_DIRECTORY%\%MC%\obj;%PATH%"
%start_cmd% "%PRO_DIRECTORY%\%MC%\obj\<u>dvconvert" -gui</u> %1 %2 %3 %4 %5 %6 %7 %8 %9
:ptc_end
```

Change "dvconvert" to "rcpedit" and remove the "-gui", as shown below:

%start_cmd% "%PRO_DIRECTORY%\%MC%\obj\rcpedit" %1 %2 %3 %4 %5 %6 %7 %8 %9



Step 4:

Know that we have created the *rcpedit.bat*, we can configure the recipe file. Open a "Command Prompt", and go to the .\bin directory for mockup, then type:

rcpedit -admin d:\ptc\mockup2000i2\recipe\default.rcp

This will open the rcpedit GUI, which will allow you to configure the recipe file.

General Tab - under the **Assembly Properties** column, switch the Use Libraries off.

Ceneral Specific Preparation LOD Setup LOD Details Admin Converter File ID Source File Search Paths Add Regove Add Regove Move Ug Move Ug Move Ug Move Ug Move Ug Move Dgwn File ID Move Ug Move Ug Geometry Properties Fgrce Single Sided Output Texture Wraps 255 ♀ Collidable Cogstrained Optimization Switch the OFF Optimization Fast pmesh strips Switch the OFF Save Save As Exit Help	74 repe	it - D:/ptc/	mockup2000	i2/recipe/def	ault.rcp				_ [
Source File Search Paths Agd Remove Move Ug Move Ug Move Dgwn Oceometry Properties Fgrce Single Sided Output Collidable Collidable Constrained Optimization Switch the OFF Optimization Switch the OFF Maximum Triangle Strip Length S8 Save Save As Save Save As	General	Specific	Preparation	LOD Setup	LOD Details	Admin	Converter	File ID		
Source rile Search Pairs Agd Remove Move Ug Move Ug Move Dgwn Geometry Properties Libraries Fgree Single Sided Output Libraries Fgree Double Sided Output Collidable Texture Wraps 255 € Optimization Switch the OFF Optimization Switch the OFF Optimization Save As Ext Help	Carrier	- File Ceevels	Dette e							
Agd Remove Move Ug Move Ug Move Dgwn Move Dgwn Ceometry Properties Libraries Fgrce Single Sided Output Use Libraries Fgrce Double Sided Output Collidable Coptimization Cogstrained Optimization Switch the OFF Optimization Switch the OFF Maximum Triangle Strip Length S8 Save Save As Ext	Sourc	e File Search	Paths							
Remove Move Ug Move Down Geometry Properties Fgrce Single Sided Output Fgrce Double Sided Output Texture Wraps 255 Save Save As Exit Help									A <u>d</u> d	
Move Ug Move Dgwn Geometry Properties Fgrce Single Sided Output Fgrce Double Sided Output Fgrce Double Sided Output Texture Wraps 255 Optimization Optimization Optimization Optimization Maximum Triangle Strip Length 58 Save Save Save Save								F	Re <u>m</u> ove	
Geometry Properties Assembly Properties Fgrce Single Sided Output Use Libraries Fgrce Double Sided Output Collidable Fgrce Double Sided Output Collidable Texture Wraps 255 Optimization Cogstrained Optimization Switch the OFF Maximum Triangle Strip Length 58 Save Save As								N	love U <u>p</u>	
Geometry Properties Assembly Properties Force Single Sided Output Use Libraries Force Double Sided Output Collidable Texture Wraps 255 € Optimization Constrained Optimization Fast pmesh strips Optimization Switch the OFFF Maximum Triangle Strip Length 58 € Save Save As Exit								Ma		┤│
Geometry Properties Assembly Properties									ve D <u>o</u> wn	
Geometry Properties Assembly Properties Force Single Sided Output Use Libraries Force Double Sided Output Collidable Texture Wraps 255 Optimization Constrained Optimization Fast pmesh strips Maximum Triangle Strip Length 58 Save Save As										
Geometry Properties Assembly Properties □ Force Single Sided Output □ Use Libraries □ Use Libraries □ Collidable □ Constrained Optimization Fast pmesh strips Optimization Fast pmesh strips Maximum Triangle Strip Length 58 Save Save As										
Geometry Properties Assembly Properties Force Single Sided Output Use Libraries Force Double Sided Output Collidable Texture Wraps 255 Optimization Constrained Optimization Switch the OFF Maximum Triangle Strip Length 58 Save Save As										
Geometry Properties Assembly Properties Force Single Sided Output Use Libraries Force Double Sided Output Collidable Texture Wraps 255 Optimization Constrained Optimization Fast pmesh strips Maximum Triangle Strip Length 58 Save Save As						_				
Force Single Sided Output Force Double Sided Output Texture Wraps 255 ♀ Optimization Optimization Optimization Optimization Maximum Triangle Strip Length 58 ♀ Maximum Vertices Per Polygon Save Save As	Geom	try Properties	s			Assembly	y Properties—	\rightarrow		
Force Double Sided Output Texture Wraps 255 ♀ Optimization Optimization Method Fast pmesh strips Maximum Triangle Strip Length 58 ♀ Maximum Vertices Per Polygon 3 ♀ Save Save As Exit Help	F 1	orce Single S	ided Output			<u>Γ</u> <u>U</u> se	: Libraries			
Texture Wraps 255 Constrained Optimization Optimization Method Fast pmesh strips Switch the OFF Maximum Triangle Strip Length S8 OFF Maximum Vertices Per Polygon Save As Exit Help	– 1	orce Double :	Sided Output			Coll	įdable			
Optimization Switch the OFF Optimization Method Fast presh strips Maximum Triangle Strip Length 58 Maximum Vertices Per Polygon 3 Save Save As	Textu	re Wraps	255 🚔			Cor	strained			
Optimization Switch the OFF Optimization Method Fast pmesh strips Maximum Triangle Strip Length 58 Maximum Vertices Per Polygon 3 Save Save As										
Optimization method prospines ratios Maximum Triangle Strip Length 58 Maximum Vertices Per Polygon 3 Save Save As		ation ization Methor	4	Fast nmesh s	trins 📕	1			Switch	n the
Maximum Vertices Per Polygon 3 Save Save As Exit Help	Movie	um Trianala S	a Nain Longth		<u> </u>]			OFF	
Save Save As Exit Help	Maxin	um Martiana	Day Delugar					L		
Save As Exit Help	Waxir	ium venices	Per Polygon							
		<u>S</u> ave		Save <u>A</u> s		E <u>×</u> it		Н	lelp	



Specific Tab - under the *File Type*, change it to "**PTC Pro/ENGINEER**". Then add an extra zero the *Chord Height*, under the *Tessellation* column to be 0.0001.

	Change the File Type to PTC Pro/ENGINEER
	🎀 rcpedit - D:/ptc/mockup2000i2/recipe/default.rcp
Add an additional zero to the Chord Height , to be 0.0001	Procedit - D:/ptc/mockup2000i/2/tecipe/default.rcp General Specific Converter File Type Processing Cutput File Docation Cutput File Docation Cutput File Docation
	Save Save As Exit Help

Converter Tab - under the **Converter**, change it to "**PTC Pro/ENGINEER**". Then input the **ProE Command** without the extension, under the **Converter Specific** column (you have to have a licensed version of Pro/E).

Эр ртс	November 6 th , 2000	
Change the Converter to PTC Pro/ENGINEER	cpedit - D:/ptc/mockup2000i2/recipe/default.rcp Image: Converter File ID erail Specific Preparation LOD Setup LOD Details Admin Converter File ID converter PTC Pro/ENGINEER Supports v18, v19, v20 and v2000i ieneral MocRUp dvconvert Worker Supports v18, v19, v20 and v2000i Output File Location Current Directory Source Location Output File Name Mask Source Path Directory Single Directory I File Base Name IFile Part Name Use CGOS Names No VDI Output No Write Msg No Geom #_1 Converter Specific ProE Command proe2000/2	
	Save As Exit Help	

Once you have finished configuring the recipe file, hit the save tap and exit the rcpedit GUI.

Step 5:

We have finished configuring the recipe file, but we still need modify a few files. Go to the load point directory for mockup and then to the below directory:

.\mockup2000i2\etc\proe\V2000i2\i486_nt



Contained in this directory is the key file that Pro/ENGINEER uses to add the publishing functionality to the Pro/E session. This file is called, *protk.dat*. You will have to edit the file and modify it to look at the load point for Mockup, like this:

```
name prodvise
exec_file d:\ptc\mockup2000i2\i486_nt\lib\prodvise2000i2_s.dll
text_dir d:\ptc\mockup2000i2\etc\proe
startup dll
end
```

Once you have saved this file, cut and paste the file into the *text* directory in the load point for Pro/E. This will give you the opportunity to be able to convert Pro/E data to Mockup.

Step 6:

Add system variables to your systems.



stem Properties	?	×
Startup/Shutdown General	Hardware Profiles User Profiles Performance Environment	
System Variables: Variable ComSpec DIVISIONROOT DV_RUN_AUDIO FV_PORT INCLUDE User Variables for Adm	Value C:\WINNT\system32\cmd.exe d:\ptc\mockup2000i2 on 7777 C:\Program Files\Mts\Include	Add these given
– Variable TEMP TMP	Value C:\TEMP C:\TEMP	
⊻ariable: Vaļue:	S <u>e</u> t <u>D</u> elete	
	OK Cancel Apply	1



Step 7:

Start Pro/E and load any given model into session. If you have created a part or assembly from scratch, you will have to save it before you can convert the data. Under the *Menu Manager* you will see a button called *Publish*. Click on the *Publish* button and it will expand to show the new buttons. The *Recipe File* button is referring to the recipe file we just configured (don't edit this, better yet,





C) Upcoming Events & Training Schedules

HP/PTC Executive Seminar Series

When: November 16-17, 2000 Where: Hyatt Regency, Long Beach, CA

Focus:

This E-business / E-service focused program is developed by Cambridge Executive Enterprises (CEE) to expose the business strategies that succeed in today's marketplace - as well as the IT infrastructure needed to implement and support these initiatives. This lecture series, presented by Professor John J. Donovan of MIT, will provide you with the vision and framework you need to develop a targeted business/IT strategy to address your organization's specific challenges in the area of Collaborative Product Commerce.

The program will address these and other key business concerns:

- Leveraging Internet Standards in a Global Economy
- Industry Consolidation
- Increasing Profitability

Education Services Course Schedule By Location (November 2000) <u>www.ptc.com/services/edserv/schedule.htm</u>

<u> Mississauga, Ont – Canada</u>

2000 11/13	Introduction to Pro/ENGINEER
2000 11/20	Pro/INTRALINK Administrator Training
2000 11/27	Fundamentals of Design

Vancouver, BC - Canada

2000 11/27 Fundamentals of Design

<u>Phoenix, AZ</u>

2000 11/06	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/13	Introduction to Pro/ENGINEER
2000 11/27	Fundamentals of Drawing

<u>El Segundo, CA</u>

2000 11/13 Introduction to Pro/ENGINEER



Newport Beach, CA

2000 11/06 Fundamentals of Design Introduction to Pro/ENGINEER 2000 11/13 2000 11/13 Fundamentals of Sheetmetal **Designing With Surfaces** 2000 11/15 Pro/INTRALINK User Training 2000 11/20 **Designing With Surfaces** 2000 11/27 Fundamentals of Milling 2000 11/27 Pro/PROCESS for Assemblies 2000 11/30

<u>San Jose, CA</u>

2000 11/06	Introduction to Pro/ENGINEER
2000 11/06	Designing With Surfaces
2000 11/09	Pro/ENGINEER Advanced Rounds
2000 11/13	Pro/INTRALINK Administrator Training
2000 11/13	Fundamentals of Pro/MECHANICA Motion Training
2000 11/13	Introduction to Pro/ENGINEER
2000 11/16	Large Assembly Management Training
2000 11/20	Fundamentals of Sheetmetal
2000 11/20	Pro/ENGINEER Advanced Top Down Design
2000 11/27	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/27	Introduction to Pro/ENGINEER
2000 11/30	Pro/INTRALINK User Training

Englewood, CO

2000 11/06	Fundamentals of Design
2000 11/13	Pro/INTRALINK Administrator Training
2000 11/27	Introduction to Pro/ENGINEER

South Windsor, CT

2000 11/13 Fundamentals of Design

Longwood, FL

2000 11/06Introduction to Pro/ENGINEER2000 11/13Fundamentals of Design2000 11/27Fundamentals of Drawing

<u>Alpharetta, GA</u>

2000 11/06	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/13	Introduction to Pro/ENGINEER
2000 11/27	Pro/INTRALINK User Training
2000 11/27	Fundamentals of Milling



<u>Lisle, IL</u>

2000 11/02	Fundamentals of Sheetmetal
2000 11/06	Fundamentals of Drawing
2000 11/13	Introduction to Pro/ENGINEER
2000 11/13	Designing With Surfaces
2000 11/16	Fundamentals of Sheetmetal
2000 11/27	Pro/INTRALINK Administrator Training
2000 11/27	Fundamentals of Design

<u>Moline, IL</u>

2000 11/06 Introduction to Pro/ENGINEER

<u>Waltham, MA</u>

2000 11/13	Introduction to Pro/ENGINEER
2000 11/20	Fundamentals of Sheetmetal
2000 11/27	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/27	Introduction to Pro/ENGINEER
2000 11/27	Fundamentals of Design
2000 11/27	Fundamentals of Drawing
2000 11/30	Pro/ENGINEER Advanced Rounds

<u>Beltsville, MD</u>

2000 11/06	Introduction to Pro/ENGINEER
2000 11/27	Introduction to Pro/ENGINEER

<u>Grand Rapids, MI</u>

2000 11/06	Introduction to Pro/ENGINEER
2000 11/13	Fundamentals of Design
2000 11/27	Fundamentals of Drawing

<u>Troy, MI</u>

2000 11/06	Pro/INTRALINK Administrator Training
2000 11/06	Introduction to Pro/NC
2000 11/20	Drawing for Designers
2000 11/27	Introduction to Pro/ENGINEER
2000 11/27	Pro/ENGINEER Recovery Tools Workshop
2000 11/28	Pro/ENGINEER Parent/Child Relationships Workshop
2000 11/29	Pro/ENGINEER Assembly Workshop
2000 11/30	Pro/ENGINEER Advanced Top Down Design



Minneapolis, MN

2000 11/27	Introduction to Pro/ENGINEER
2000 11/27	Fundamentals of Drawing

Cary, NC

2000 11/06	Fundamentals of Drawing
2000 11/13	Introduction to Pro/ENGINEER
2000 11/13	Fundamentals of Sheetmetal
2000 11/15	Designing With Surfaces
2000 11/27	Introduction to Pro/ENGINEER

Charlotte, NC

2000 11/06	Fundamentals of Design
2000 11/27	Pro/INTRALINK Administrator Training

<u>Nashua, NH</u>

2000 11/06	Pro/INTRALINK User Training
2000 11/06	Fundamentals of Drawing
2000 11/13	Introduction to Pro/ENGINEER
2000 11/27	Introduction to Pro/ENGINEER
2000 11/27	Designing With Surfaces
2000 11/30	Large Assembly Management Training

Parsippany, NJ

2000 11/06	Fundamentals of Design
2000 11/06	Fundamentals of Milling
2000 11/13	Large Assembly Management Training
2000 11/13	Fundamentals of Drawing
2000 11/20	Pro/INTRALINK User Training
2000 11/20	Importing/Exporting 3D Data
2000 11/27	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/27	Fundamentals of Design

Independence, OH

2000 11/20 Designing With Surfaces

Milford, OH

2000 11/06Pro/INTRALINK Administrator Training2000 11/13Introduction to Pro/ENGINEER2000 11/27Designing With Surfaces2000 11/30Pro/ENGINEER Advanced Rounds



<u>Pique, OH</u>

2000 11/06	Introduction to Pro/ENGINEED
2000 11/00	Introduction to FIO/ENGINEER
2000 11/13	Pro/ENGINEER Parent/Child Relationships Workshop
2000 11/14	Pro/ENGINEER Recovery Tools Workshop
2000 11/15	Pro/ENGINEER Assembly Workshop
2000 11/16	Large Assembly Management Training
2000 11/27	Fundamentals of Pro/MECHANICA Motion Training
2000 11/30	Pro/MECHANICA Advanced Workshop

Monroeville, PA

2000 11/15	Pro/PIPING Training
2000 11/27	Introduction to Pro/ENGINEER

West Conchohocken, PA

2000 11/06	Pro/ENGINEER Advanced Top Down Design
2000 11/13	Fundamentals of Pro/MECHANICA Structure/Thermal Training
2000 11/20	Pro/INTRALINK User Training
2000 11/27	Fundamentals of Drawing

<u>Dallas, TX</u>

2000 11/09	Pro/INTRALINK User Training
2000 11/09	Pro/INTRALINK User Training
2000 11/10	Core Pro/ENGINEER Release 2000i2 Update Training
2000 11/13	Introduction to Pro/ENGINEER
2000 11/20	Pro/ENGINEER Expert Machinist
2000 11/27	Fundamentals of Sheetmetal
2000 11/29	Designing With Surfaces

Houston, TX

2000 11/06	Introduction to Pro/ENGINEER
2000 11/13	Fundamentals of Drawing
2000 11/27	Fundamentals of Design
2000 11/27	Pro/ENGINEER Advanced Rounds
2000 11/30	Pro/INTRALINK User Training

Taylor (Austin), TX

- 2000 11/03Core Pro/ENGINEER Release 2000i2 Update Training2000 11/13Introduction to Pro/ENGINEER2000 11/20Drawing for Designers2000 11/20Draving for Designers
- 2000 11/28Pro/ENGINEER Assembly Workshop2000 11/29Pro/MECHANICA Advanced Workshop



Salt Lake City, UT

2000 11/06	Introduction to Pro/ENGINEER
2000 11/06	Fundamentals of Turning
2000 11/13	Pro/ENGINEER Advanced Top Down Design
2000 11/15	Fundamentals of Sheetmetal
2000 11/29	Pro/ENGINEER Cable Harness Design Training

<u>Bellevue, WA</u>

2000 11/13	Fundamentals of Drawing
2000 11/20	Pro/INTRALINK User Training
2000 11/27	Introduction to Pro/ENGINEER

<u>Waukesha, WI</u>

2000 11/06	Introduction to Pro/ENGINEER
2000 11/06	Designing With Surfaces
2000 11/09	Fundamentals of Sheetmetal
2000 11/27	Introduction to Pro/ENGINEER
2000 11/27	Fundamentals of Design