



MINNESOTA SolidWorks USER GROUP

Minutes for the May 21, 2008 meeting

1:00 - Announcements Introductions:

Dan Podzimek – Group President, and David Labuda – Group VP.
 Introduced Wisconsin SW User group President Brian Lindahl.
 Introduced President of NTI Keith Fossen.

1:15 - Cole McLeod From Alignex , DriveWorks demo

The Easy To Use Design Automation Choice for SolidWorks. Drive WorksXpress now in every seat of SolidWorks 2008. Use Drive WorksXpress to take fear out of working with rules.

Typical Business Issues:

- Bottlenecks and Repetitive Tasks in the Design Office
- Fire Fighting to get the job done in Manufacturing
- Cannot Respond to Customer Inquiries
- Sales people selling stuff we cannot make!!!

DriveWorksEngineer:

At the heart of every implementation

- Capture parameters and knowledge
- Create the user interface/forms
- Build and assign rules
- Specify new & variant products/projects

1:45 - Break

2:00 - Peter Wetzel From Alignex , TactonWorks demo

Tacton: Mass Customization Sales Engine

Customer > Distributor > Sales > Ordering > Bills of Material/Drawings

TactonWorks –Benefits

- SolidWorks Users can quickly generate custom drawings and 3D models for quotations
- Automate routine engineering tasks in design-to-order & ETO processes
- Migrate more easily from 2D to 3D, by reusing knowledge instead of old drawings
- Web site users can create custom configured products and download dynamically generated CAD files
- Thousands of variants with unique CAD files can be generated automatically in batch mode

TactonWorks –Unique Advantages

- Interactively empowers the user to make selections in any sequence, and directly see which options are valid
- Generates a solution even with an incomplete specification (partial results)•Runs inside SolidWorks, updating the assembly after each selection, making it easy to review the 3D consequence of each selection
- Always proposes optimal solution
- Based on state-of-the-art research since 1987
- Proven in challenging implementations since 1998
- Designed for integration with any business application
- Dependencies are encoded concisely in a configuration model with constraints, reducing the number of rules

TactonWorks –Intro to Constraints

- Example–motherboard.socket= processor.socket
- General–Avoids product-to-product relationships–Separates components and business logic



MINNESOTA SolidWorks USER GROUP

- Maintenance—No need to change the rules when product data is updated—Rules reflect business logic and are easily read and updated—Faster model creation —less rule creation (lower administrative overhead and cost of ownership)—No need to followed a required sequence of rules—Point and click rules authoring
- Use—All constraints are applied simultaneously every time a user makes a new choice

CustomerCase: Berg Propulsion A leading world-wide vendor of controllable pitch propeller systems for merchant and industrial ships.

Challenge

- The propeller shaft is customized for each ship, and a complete propeller system consists of a configuration of many other components including the propeller itself
- Manually generating all the drawings for approval and manufacturing takes a weekSolution
- TactonWorks will be used to automatically generate a complete set of drawings for the custom configured propeller system, for use in quotations as well as for approval and manufacturingBusiness Benefits
- Shorter delivery time
- Reduced work-load on engineering
- Better quotations with drawings, leading to further increase of sales
- Fast and exact drawings for manufacturing

Customer Case: FläktWoodsWorld leading manufacturer of ventilation equipment for buildings, industrial applications, and infrastructure; merger of ABB Fläktand Woods Air Movement; Annual revenues \$615M

Challenge

- Sales and order process for industrial products was complex and time consuming, due to high degree of variation in customer requirements
- Inaccurate estimates of cost and delivery time
- Needed a configuratorflexible to integrate into diverse systemsSolution
- Tacton Configuratorweb-application for assemble-to-order and configure-to-order fans, integrated with existing fan selector, online ordering, and back-end ERP
- TactonWorks for design-to-order fansBusiness Benefits
- Reduced quotation process time by 30%
- Faster response to inquiries
- No engineering required for configure-to-order fans
- Better control of margins by accurate cost estimates in quotation phase
- Increased use of existing parts inventory
- Improved estimates of factory lead time
- Easier to replace parts suppliers
- Design-to-ordertime reducedfrom days to hours
- Easier migration from 2D to 3D for custom fans

Tacton Applications

- For Engineering:—TactonWorks Engineer
- Support tool for engineers to configure components and drawings in SolidWorks—Runs as an add-in in SolidWorks—TactonWorks Studio
- A graphical point-and-click application for defining configuration rules and mapping to SolidWorks component parameters—TactonWorks Batch
- An application to batch generate all valid configurations within a specified range, and save their requested CAD files. Used to generate many permutations of a design.
- For Sales:—Tacton Configurator Nomad
- Sales configurator off-line usage, to support field sales—Tacton Configurator Site
- Web based opportunity management with sales configurator—TactonWorks Server
- A web service that receives a Tacton Configuratorresult XML from a TCsiteor TCnomad, and returns requested CAD files to the user



MINNESOTA SolidWorks USER GROUP

TactonWorks Summary

- All the capabilities you need for automating engineer-to-order in SolidWorks
- Outstanding features of interactivity, validation, and ease of maintenance
- Seamless integration with enterprise sales configuration solutions

2:40 – Break

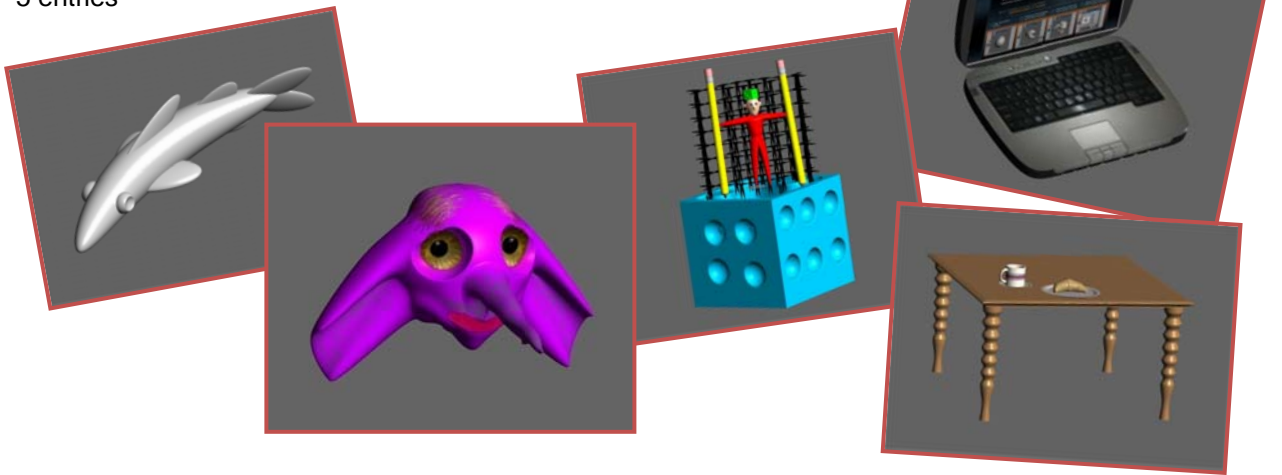
3:00 – Dan Podzimek, Contests

Current contest wrap-up, Dayton Die Cushions Model Contest

Create the coolest thing you could with CB Model Pro

Winner was chosen by member voting from the group website.

5 entries



41 votes were cast

20 votes for the winner

And the winner of the 8 GB iPod touch donated by Dayton Die Cushions is Robin Pashusta from Burke Enterprises for the model of the laptop computer.

Thanks for entering Alex Lowe, Gerald Pierson, Dave Kozlak, and Gary Schultze.

Thank you Dayton Die Cushions for sponsoring the contest.

Next contest is the PrimeStaff Virtual Derby

Introduce Jennifer Anderson from PrimeStaff

If you are familiar with the Cub Scout pinewood derby, you know a little bit about this race.

Download the kit with the official rules, an axle part and a wheel part from the group website.

Model your car body following the specifications in the official rules.

Create an assembly with your body, wheels and axles and email it in.

The race will be run virtually using COSMOS to determine the aerodynamic factor then run in a motion simulation for the race time.

Winner of the race will receive a \$300 gift card to Best Buy donated by PrimeStaff.

Best picture of their car will win Best in Show prize

We are hoping to get more prizes from SolidWorks, specifically from the COSMOS group, so we can award prizes for placing in the race and the Best in Show competition.

Winners will be announced at the SWUGN Summit in Minneapolis on August 19.



MINNESOTA SolidWorks USER GROUP

SWUGN Summit

SolidWorks User Group Network
Become part of our COMMUNITY.

About SWUGN | Membership Benefits | Find a Group | Calendar | SWUGN Special Events | User Group Support

- Orlando, FL - 3/18
- Nashville, TN - 04/08
- Oklahoma City, OK - 5/20
- Baltimore, MD - 6/17
- Vancouver, BC - 7/22
- Minneapolis, MN - 8/19
- St. Louis, MO - 9/23
- Salt Lake City, UT - 10/21
- Chennai, India - 11/18
- Los Angeles, CA - 12/16

Search

SWUGN Technical Summit

SWUGN Technical Summits are one-day training and networking events scheduled monthly in cities around the US and Canada. These events are hosted by the SolidWorks User Group Network and feature technical sessions geared toward all levels of users.

Sample Agenda

[click here](#) for session descriptions

General SolidWorks functionality*

- Sheet metal tools
- Drawings
- Weldments
- Assembly modeling

SolidWorks Add-in product sessions*

- PhotoWorks
- SolidWorks Animator
- eDrawings
- PDMWorks

Also

- Continental breakfast and lunch
- Regional Sessions - COSMOS, Surfacing, etc.
- Tips and Tricks

A chance to network with your peers
And more....

Attendees get breakfast, lunch, choice of 5 out of 10 seminars on a verity of topics, and lunch time entertainment by Richard Doyle all for \$40. Check out www.swugn.org for more info.

Also at the SWUGN Summit will be a 1 minute TIP contest. Go [here](#) to see what 1 min TIPs are, then put something together to demonstrate your own 1 min TIP and you could win a major prize.

3:40 - Open Mouse

Chris McCormack demonstrated how you can look busy without actually doing anything at all by using the SolidWorks RX recording function. Discussion about the useful components within SolidWorks RX.

Also some useful links

- <http://www.fcsuper.com/swblog/>
- <http://solidmentor.com/modules/news/>
- <http://tech.groups.yahoo.com/group/solidworks/>

3:50 – Raffle and meeting close.