



Dowco Technology Services, Ltd. becomes Graphisoft Reseller

by Arvin Eugenio

GRAPHISOFT officially announced Dowco Technology Services, Ltd. (DTSL), as an authorized value-added reseller for their suite of products as of March 1st, 2010.

DTSL, a leading provider of best-in-class construction technologies for Building Information Modeling (BIM) and Fabrication Management Solutions for the industry, saw it fit to add the GRAPHISOFT product line due to the company's long history and involvement in the development of BIM particularly in the field of architecture.

"GRAPHISOFT's ArchiCAD completes the BIM Equation", says Ewen Dobbie, President of the Dowco Group of Companies. "We have been looking at becoming a reseller of ArchiCAD for many years now and we believe the timing's just right. Our company is committed to pushing the best tools to improve efficiency and productivity and GRAPHISOFT's line for the Architectural industry is second to none. Combined with Tekla Structures and FabTrol Dowco Technology Services can now deliver solutions for all aspects of structural BIM projects, all the way from architectural design to structural design, fabrication, erection and facility management."

With focus on key markets in Canada in Alberta, British Columbia, Quebec and Ontario, Dowco Technology Services will be offering sales and support, training and consulting services as well.

"Dowco Technology Services has vast experience in working with companies and professionals in implementing BIM solutions in the engineering, steel/concrete manufacturing and detailing and contractor segments in Canada. GRAPHISOFT's portfolio of Virtual Building tools for Architects fit well with their areas of expertise," said John Magnan, Western Regional Sales Manager of GRAPHISOFT North America.

With presence in over 80 countries worldwide and firmly established in the largest AEC markets, the GRAPHISOFT Group has been in business for 25 years and is a pioneer and leader of Virtual Building solutions. Its flagship BIM application, ArchiCAD offers the architects offers an improved approach to their workflow with more control over their design, while maintaining accuracy and efficiency in documentation. The last year release, ArchiCAD 13, 'has the potential to revolutionize BIM-based collaboration by allowing team members to work together easily and quickly in real-time on modeling projects...' according to the latest *AECbytes Product review released last September. And as the latest release, ArchiCAD, 14 has big improvements on interoperability with e.g. Tekla Structures, the coordination and collaboration is easier than ever before.

Tekla and GRAPHISOFT also announced last year of their *global partnership that will enable true BIM collaboration between the AEC Disciplines. "Tekla Structures and ArchiCAD ... support the BIM process in a unique way and are thus the preferred partners that ensure the highest-quality end result in any project. The benefit of using these tools is above all the downstream constructability they offer from conceptual design to erection and site management," says Risto Rätty, Executive Vice President of Tekla Corporation.

"We knew Tekla was the 'bleeding-edge' technology 20 years ago and envisioned that the solutions they offered would change the face of the construction industry... GRAPHISOFT has been developing leading solutions for a long time and their technology ties in nicely with Tekla's in a Model-based collaborative environment which we are seeing more and more companies adapting to..." Ewen Dobbie adds.

* visit <http://www.aecbytes.com/review/2009/ArchiCAD13.html> for the complete review.

* for News on the GRAPHISOFT and Tekla Team up for best-in-class AEC workflow, visit www.tekla.com.



ConneXion

TEKLA Structures

FabTrol MRP
A better way to manage

The new version of Tekla Structures BIM software is out



Tero Laine

Tekla Structures 16.0 was released early February, and has already received plenty of good feedback from our users. There are numerous improvements in the new version and several which benefit typical Canadian Tekla users. This version follows the same path as few earlier versions: making things easier and faster for users, and enhanced support for typical BIM workflows where model information is exchanged between architects, engineers, detailers, contractors and fabricators. Tekla will soon release 16.1 with some new development as well to further improve the functionality.

The 2010 main improvements include, among several other things

Improvements for Tekla Structures administrators

- Tekla Structures 16.0 has Windows 7 certification
- Save as "standard" can now be prevented from named users
- Lock components only certain people can unlock them
- Ability to report modification history of an object
- Keep unlimited model backups

*"So far I love version 16!
Honestly, I wonder where you
can go from here?"*

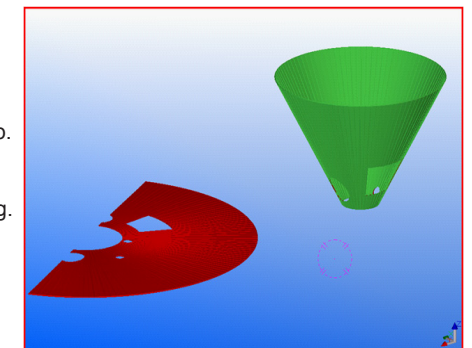
**Stephen Thomson,
Tekla user since 2004**

Modeling improvements

- Number only selected parts in the model. This translates to huge time savings on large projects, in order to update e.g. only one beam, the numbering has to only go through that numbering series. This functionality also greatly helps when sharing models between offices and organizations.
- New Snap to line functionality makes it easier to click on lines or edges of objects and reference models to model e.g. beams, walls, exact welds, cuts, etc...
- It is much easier to navigate in the model with Tekla Structures 16.0, thanks to two new improvements:
 - o Ability to change view rotation center either automatically or semi-automatically.
 - o "Zoom to selected" command means you can easily locate objects in the model by selection e.g. from clash check lists and zoom to that point.
- New system components help modeling complex geometry, and unfolding to a plane.

Drawings

- Detailed object level settings is the new improved way to manage old "Drawing Classifier" functionality. Detailed object level settings are extremely beneficial in both drawing creation as well as in drawing cleanup.
- The powerful model filtering functionality has now been added also to drawings
- Ability to easily show both Imperial and Metric dimension values on one dimension line.
- Dynamic view update while dragging drawing objects means you see all the time where you are drawing e.g. views or marks in the view, not having to guess where the objects will actually be located after the move



Interoperability

- More intelligent tools to convert IFC objects into a native Tekla objects
- In IFC export and import new IFC formats like ICFXML and zipped IFC are supported, and also reinforcement is now included into IFC export
- Include all the attributes you need into IFC export, as you want to communicate exactly the information you want.
- The automatic analysis model creation has been updated meaning both more intelligent automatic analysis model creation and also more user control

Overall, we are very excited about Tekla Structures 16.0, and hope you will be too. We are anxiously waiting for your feedback about it.

ConneXion - June 2010

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Dowco Tekla Structures Online Training updated

As version 16 is now here... so also is our updated Tekla Structures Basic Online Training course. This course has been updated to accommodate the new look, functionality and menu structure of Tekla Structures 16. The format and structure of the course has remained consistent and continues to focus on familiarizing the user with the basics as a way for them to become productive using Tekla Structures.

The course is an excellent training resource for organizations and it is included into our Tekla Structures 2010 maintenance agreement.

See also other online trainings for CISC connection design and AISC Steel Detailer Certificate at <http://training.dowco.com> .
 If you purchase CISC connection design course before the end of June, you are still entitled for the introductory pricing!

Tekla Structures Edmonton user day

by Tero Laine



We had the pleasure to meet several Tekla users especially from Edmonton area during our Alberta user event. The number of attendees exceeded our expectations and we received lots of valued feedback from them.

We started the day by giving an overview on new DowcoTech.com website and extranet, where users on maintenance can get the most recent downloads, participate discussion forum or read technical articles or latest Dowco, Tekla, Archicad or FabTrol news. There is also a lot of information about Tekla Structures in Tekla Extranet.

This was followed by a presentation of Tekla Structures – FabTrol – Tekla Structures roundtrip. First a phase in Tekla Structures model was released for fabrication using Tekla Structures FabTrol Submit tool. Then the phase was imported into FabTrol, where steel was estimated, nested and pushed through the production. After that, we showed how the status of each assembly was imported back to Tekla Structures. In Tekla Structures it is easy to visualize the project status.

We also highlighted the work Tekla has put to the North American environments. Each new version comes with new US environment, with lots of goodies you will not find elsewhere. Make sure you read the US localization nodes in every version, as we are confident there is always something useful also for you. There is also some localization directed towards Canadian Tekla users. We have already made CISC compatible profile catalogs for both Metric and Imperial environments. We would like to continue this work with you, and are open to receive any ideas which we could implement for Canadian users to help your work.

Then we discussed about Tekla Structures Extensions. We showed only small part of these highly useful tools, which do not always come with the installation but are often developed and uploaded to Extranet after an official release. There is now also a complete “Tekla Structures 16.0 US Extensions” installation package with helpful videos available in Tekla Extranet. We hope that current and future extensions will become a standard part of your Tekla toolset, so please let us know how you use them and what extensions you might need.

While most of the day was spent on issues related to the daily work of all current Tekla Structures users, we also showcased some of the less know yet very powerful features in Tekla Structures in a separate session:

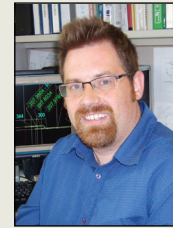
- Using reference objects to see design done by other companies and as an input for your own work
- Checking Tekla model against the reference models, and reference models against each other to prevent any issues with conflicting design or constructability issues
- Analysis model creation directly from Tekla model, and reading analysis model results back to the model
- Using analysis results in connection design

The day was ended with a presentation about what improvements have recently been added to Tekla Structures and how to use these in daily work. During the session we covered not only 16.0 but also some of the 15.0 and 16.1 improvements in order to give more complete picture of what has happened recently.

Thanks to all the attendees and our guest presenter Tom Carpenter from FabTrol, we hope everyone found the session useful and will come back to the next one!

Edmonton BIM Conference

by Mike Samilski, P.Eng.



Dowco Technology Services' held a Building Information Modeling (BIM) Conference last March 24th at the Westin in Downtown Edmonton in Alberta for design professionals. Similar to our previous BIM conference in Vancouver held last December 1st, the goal was to inform, educate and convey the value of implementing BIM-based projects to the audience by presenting innovative BIM project delivery processes which are currently being used in Canada. This was shown by way of four presentations that demonstrated how “best-in-class” solutions were used from Architectural Design to Construction.

Monte Chapin, Business Process Leader for GRAPHISOFT North America, kicked off the meeting with his presentation on “Architecture – Engineering Integrated Workflow”. Monte presented GRAPHISOFT's ArchiCAD and its innovative approach to BIM and project delivery. This was illustrated by showing the exchange of construction project data between “best-of-breed” solutions ArchiCAD and Tekla Structures.

Brad Shipton from Force Engineering presented how his firm benefits from using Tekla Structures in BIM Projects. Primarily focusing on the use of tools from a Professional Engineer's perspective, Brad covered topics such as 2D Drawings vs. 3D modeling and Value-added BIM Services. Illustrating how his firm uses BIM solutions for steel, concrete and rebar, etc, he also stressed the value of using Tekla Structures as a base for their design models, which he can use to transfer information such as loads and combinations back and forth seamlessly with Analysis & Design software.



This was followed by a case study on how Tekla Structures was used in the Vancouver Convention Centre project. It was one of the first projects to use BIM model for communication throughout the entire project timeline from conceptual design to construction. We explained how BIM concepts were utilized from the consulting end and as also instituted from the Steel Detailer and Fabricator side. The presentation involved reviewing the collaboration with BIM that was accomplished inside the engineering firm and with outside consultants, describing how shop drawings were checked using the model, and how the project was tracked through to fabrication using the model and concluded with a description of the use of the 4D model created for construction planning.

A befitting closing presentation was done by Jeremy Spelsberg of Empire Iron Works. He explained the use of BIM in the construction process of the Art Gallery of Alberta. Due to extreme complicity, this project required a higher level of quality control, and Empire Iron Works created checkpoints in the Tekla model and lined up those points up using Trimble field equipment in the shop and out in the field. This greatly assists in making sure the Tekla BIM model used for the project is in line with the actual locations on site. Mountain View Systems demonstration linking Tekla models to Trimble survey equipment followed closely after Jeremy's presentation.

This was the second BIM conference we have held. The turnout was again good due to the increasing awareness of the construction industry on BIM, and this was evident in the active participation of the audience during the question and answer portions we had in between presentations. BIM is definitely here and we believe this new form of project delivery is slowly catching on. We look forward seeing you at our next BIM conference.



Dowco's Mike Samilski talking to the audience during Edmonton BIM Conference.

Dowco at NASCC 2010

Dowco Group attended NASCC this year, held at the Gaylord Resort in Orlando, FL. We had one booth for FabTrol, the other for Dowco Consultants and Dowco Technology Services.

The definitive highlight of the NASCC show this year for FabTrol Systems was all of the new functionality in their steel fabrication management software FabTrol MRP. In the year prior to the show, the following new functionality was introduced:

- Round-trip electronic communication with shaped-plate nesting software
- Real-time production progress tracking with augmented ADC technology
- A detailer material definitions' export for trouble-free drawing imports
- Requests for Information (RFI) management tools
- CNC export to shop equipment
- Expedited material inquiries with a one-click service center export

Sue Landis, a regional account manager with FabTrol Systems who attended the show, said, “The show was a tremendous success. It was good to see so many customers in attendance and to have the opportunity to show off all of the incredible new tools we have developed to help them.”

FabTrol sponsored an Exhibitor Workshop titled Model to Production Batch to NC Machines and Back Again: Look Ma, No Hands! The workshop focused on how integration between modeling software, steel fabrication management software, CNC machines, and plate nesting software can automate and improve fabrication processes—and ultimately improve project timelines. Randy Bolt, a regional account manager with FabTrol, delivered the main presentation. Many of our industry partners attended the workshop including representatives from Tekla, MTC Software (ProNest), Controlled Automation, Peddinghaus, and others. A recent case study about production management with FabTrol's customer Trinity Steel was distributed and was highly received.

Dowco Technology Services and Dowco Consultants met both existing and new customers at the other Dowco Group booth. We did get a number of visitors from different fields of the construction industry: steel fabricators, detailers, engineers and general contractors.

Dowco booth was conveniently located next to Tekla booth, so we had best seats to hear the latest news from Tekla. Very interesting development is the integration of Tekla Structures with a number of connection design software, as linking with connection design software has been one of the most frequently asked features by our customers. We hope to see the new connection design & management tools available in Tekla Structures in the near future.

One of the new connection design software is AD ConX. Even though AD ConX is still in its early stages (beta version), they seem to have an interface that will really cater to Connection Design engineers. Strong link with Tekla Structures will make it a very attractive package for our customers. Also Descon implied that they would have a link with Tekla Structures completely ready by the end of the year.

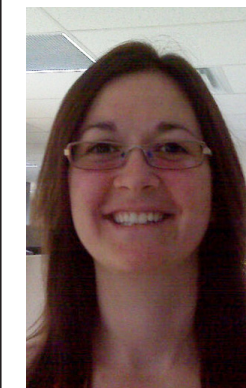
Another example of new collaboration tools are the new links between in house joist design software and Tekla Structures. Joist manufacturers like New Millennium Joists, Canam and Nucor's Vulcraft have used Tekla .NET API to create a more realistic representation of their joist rather than only showing one solid piece of material for each joist. This development will help joist fabricators as well as structural consultants work more efficiently with mechanical, electrical and plumbing designers, who want to weave their systems through the joists. All the traditional benefits of BIM models, such as easy scheduling, fabrication and project management, come on top of that.

Tekla's is also expanding collaboration in the analysis and design field. One of the new links is to design software FASTRACK, which is widely used especially in the UK but is now gaining momentum also in North America. Demonstration of the software was quite impressive; especially the usability and modeling capabilities of FASTRACK, the usual drawbacks in structural analysis and design software, looked terrific. FASTRACK is in many ways similar to RAM Steel, but has a lot more capabilities in terms of 3D modeling and interoperability. CSC has put a lot of effort in developing links various other software, including Tekla Structures and FabTrol among several others. All this will make it easier for structural engineers to effectively contribute in BIM projects.

Thanks to all who dropped by our booths, see you again next year in Pittsburgh, PA!



Changes in Laval Office



We have recently added Melissa Labelle to our Dowco Quebec office staff. Melissa will be helping our users with technical issues especially in Eastern time zones, but also assisting us to serve users from Western Canada. Melissa has a long history in steel detailing, first in SDS/2 and then in Tekla Structures. She has done practically everything from drawing scrubbing to project management, and her knowledge on how the industry works will make her a major asset for our team. As she also has a long history in another North American steel detailing software, she will be highly useful for many of our current customers who have converted into Tekla Structures after first trying other products.

We are very happy to welcome Melissa to our Team!

Unfortunately, Abdelmalik El-Ouahabi had to leave our Quebec office for personal reasons, but we hope we'll get him back later. As a token of our appreciation for all his efforts and dedication, we presented him with the ultimate mark of a true Quebecois!

