



SOLIBRI

MODEL CHECKING FOR QUALITY



S O L I B R I M O D E L C H E C K E R v 7



Friday, October 14, 2011

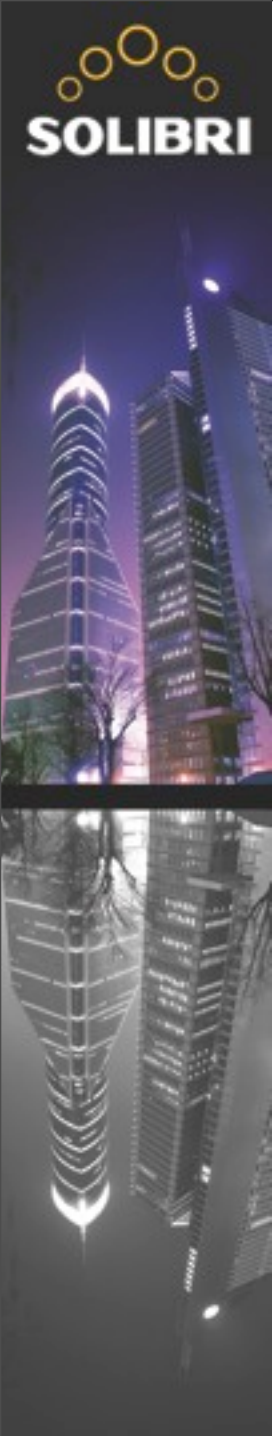


Solibri Model Checker™

Model Checking for Quality

Demonstration

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Agenda

- What Is Quality – Why Quality
- How does Solibri Model Checker Work?
- Solibri Model Checker Benefits



What is Quality? – Why Quality?



Building Owner Experience

Better and Cheaper Buildings with OpenBIM

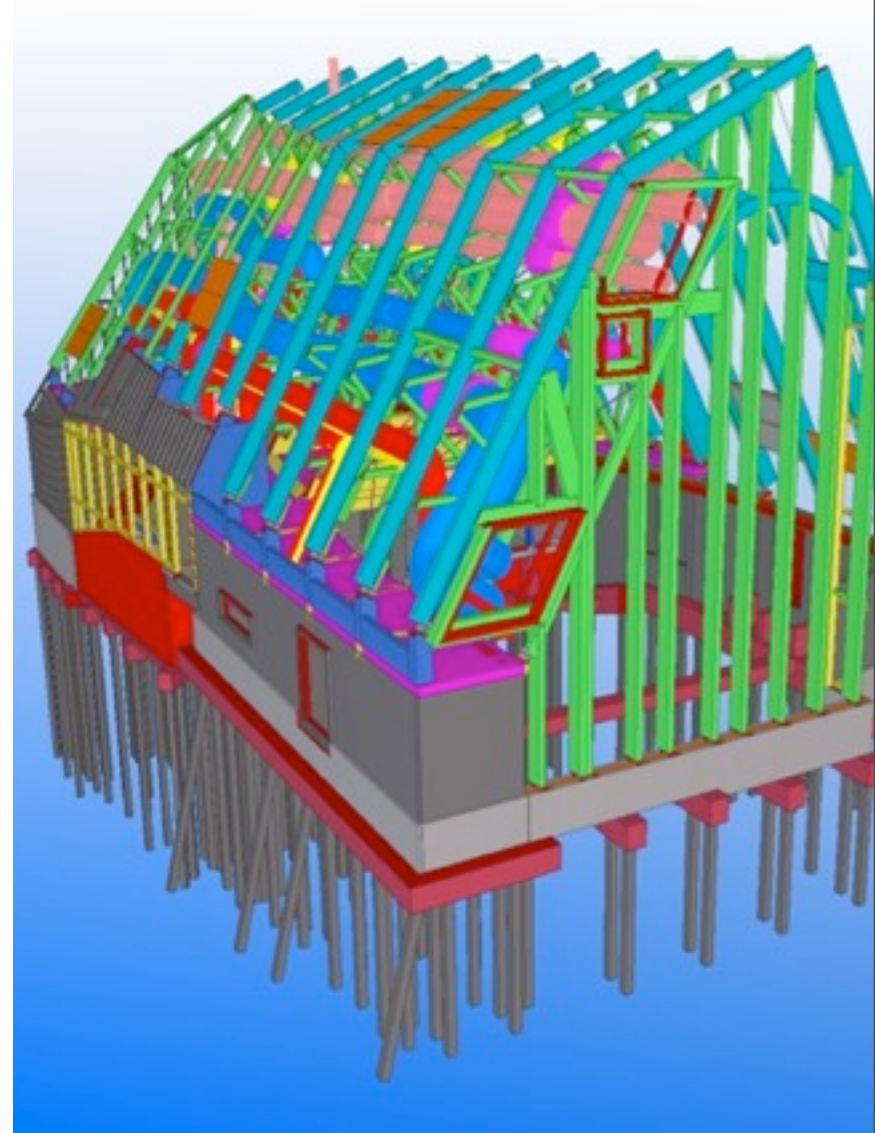
- “OpenBIM enables high quality and (close to) flawless design outcome and with these efficient tools cost savings during both design and construction phases.”
- “It seems ...that designers who have integrated BIM in their workflow are able to do better quality in less time.”



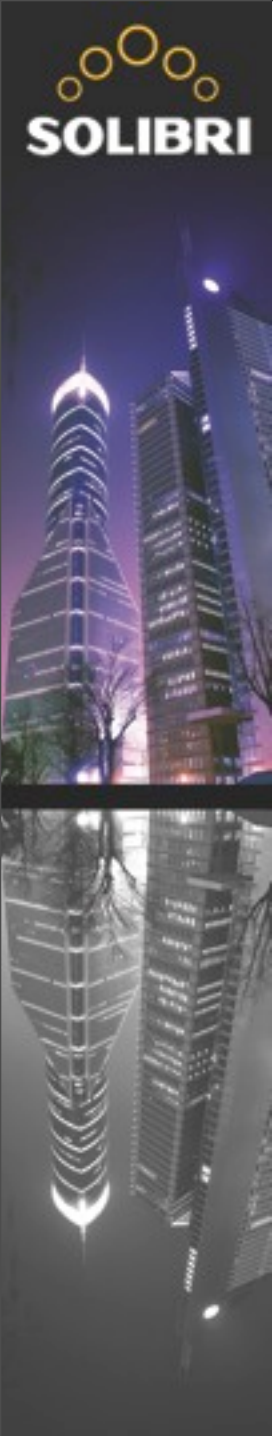
Courtesy Public Works Department, City of Helsinki.
Visualization Tietoa Finland Ltd.

Engineering View

- “Without BIM, the church would have been impossible to design, not to mention build.”
- “Consulting firms, who master BIM today, ensure their market share in the future.”
- “Currently the ISO based quality assurance system is being amended by creating guidelines for BIM quality assurance.”



Courtesy Ramboll Finland Ltd.



Architects View

Productivity, Profitability, Quality, Customer Satisfaction

- “The advantage computer based quality assurance gives us is more efficient quality control, more productive modeling and design...”
- “Quality is equally important in every project because all of our customers are repeat customers.”
- “We check all models leaving the office with Solibri Model Checker.”

Courtesy Larkas & Laine Architects



Construction Company View

- “We are convinced that our expanded expertise and use of BIM will give us both competitive advantages and higher profitability in our projects. Building Information Modeling (BIM) is an important tool for more efficient construction.”

SKANSKA

BIM: five 0 in construction process

0 errors in design



0 errors in quantity- and cost estimations and scheduling



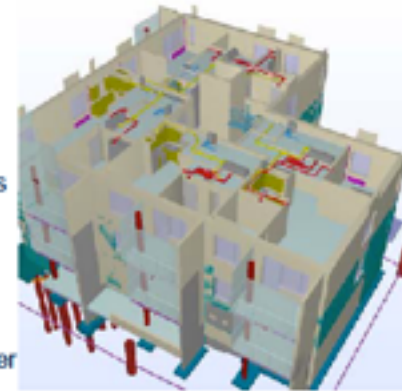
0 errors in procurement and logistics



0 errors in production

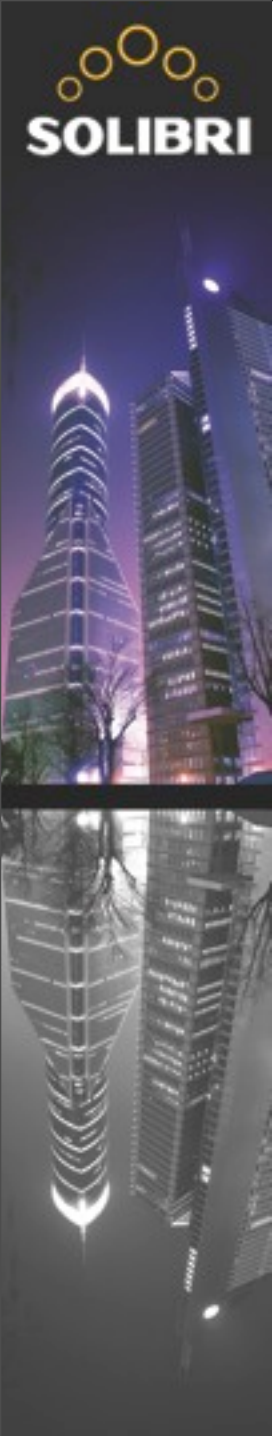


0 errors in hand-over



0 errors in the design of SXC pilot Mäntylinna

Results in better productivity!



- A few examples with Solibri Model Checker



Some perspectives on Quality

- **Conclusion**
 - BIM quality is about many things.
 - Clash detection \neq BIM quality
- **And even clash detection depends on high quality models.**
 - **Another** Solibri example.
- **The answer: Model Checking for Quality.**



How does Solibri Model Checker Work?



Key Points on SMCv7

- Roles
- Organizations centralized QA/QC repository: Solibri resources
- Rule based
- Automated model checking
- Automatic severity categories
- Coordination and communication
- ITO



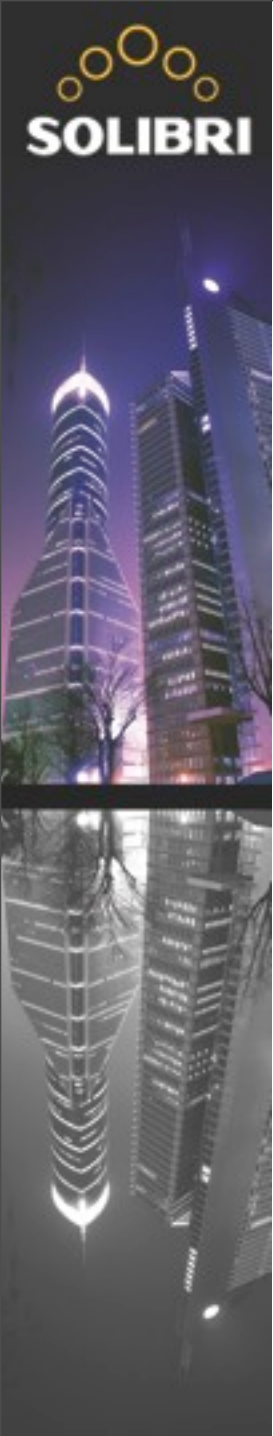
The Value of Solibri Model





The Value of SMCv7

- The Most Effective and Productive QA and BIM Analysis Process
- Implement and Enforce Best Practices
- Low Total Cost of Ownership (TCO)



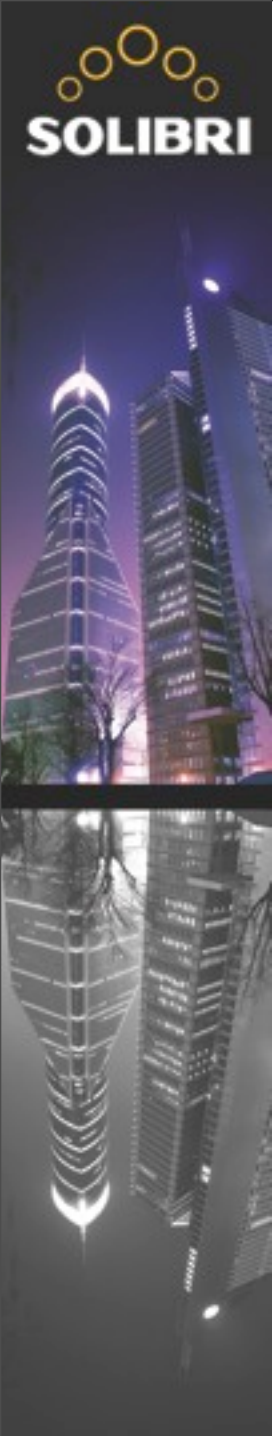
The Most Effective and Productive QA and BIM Analysis Process

- High Performance
 - Very fast automated model checking speed
 - Shorter QA time
- Support for tasks and job functions: roles
 - SMC v7 is a special tool
 - Solibri Model Checker supports experts in specialized tasks
- Highly developed Rulesets
 - Less but more meaningful results
 - More efficient QA/QC
 - More useful checking results
 - Solving design issues is more effective
- Unsurpassed Versatility
- Usability
 - High quality user interface including what is needed, only
 - More efficient use



Best Practises

- Centralized management and distribution of companies practises as Solibri resources
- Implement best practises with Solibri Model Checker
- Enforce best practises with Solibri Model Checker



Total Cost of Ownership (TCO)

- **Centralized Management of Solibri Resources**
 - Cost effective SW system administration
- **Silent Installation**
 - Efficient SW distribution
- **Excellent UI and Usability**
 - Easy to learn - steep learning curve
 - Fast time-to-benefits
- **Efficient Use**
 - Roles: for use at the organization level
 - Simpler, more efficient and effective QA/QC process
 - Fast implementation



Collision Detection – Whatever the Tool

Past State-of-the-Art





Thank You!