

VisSim: A Tutorial

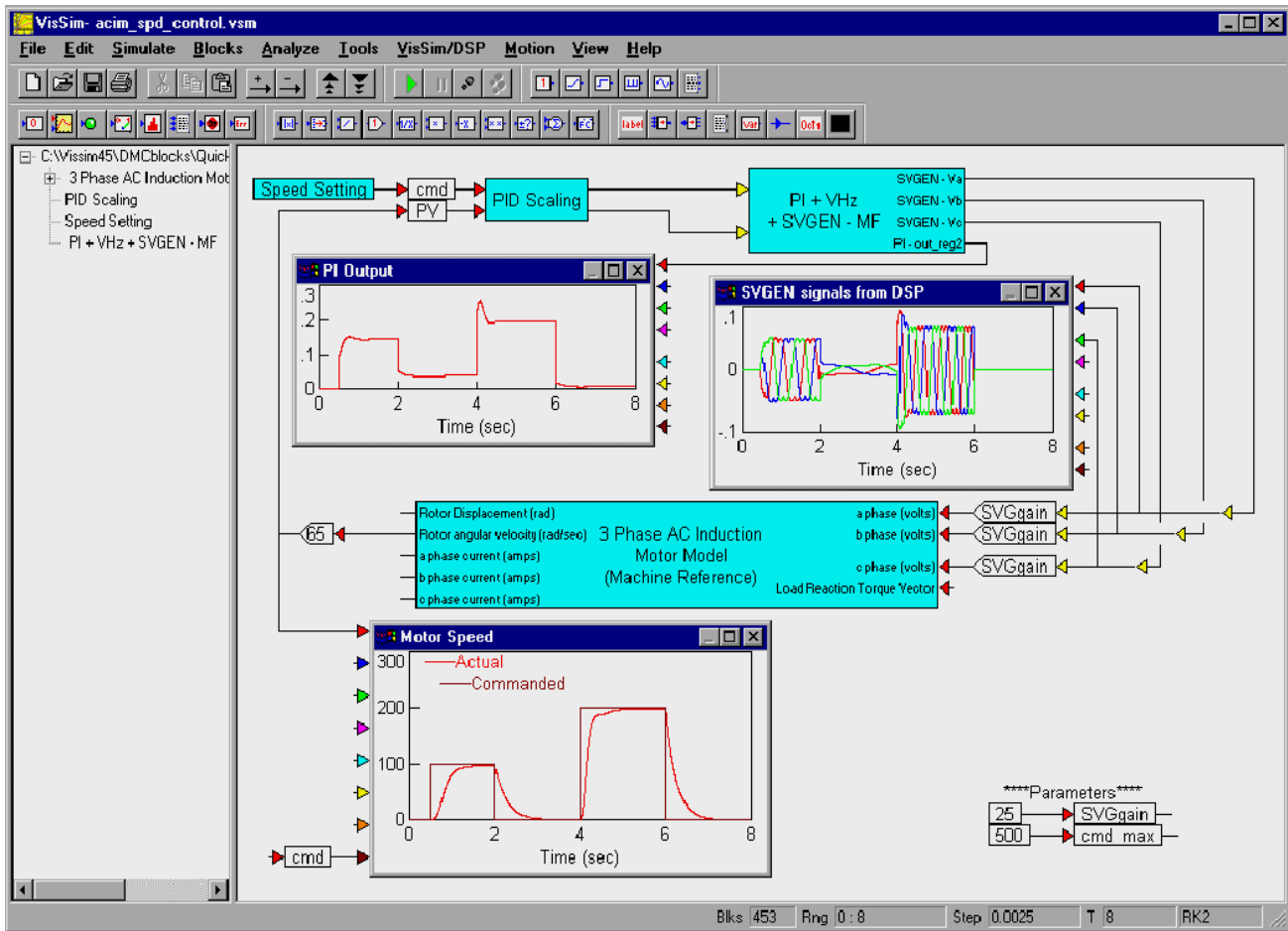
Adam Knight, Samir Khan

Adept Scientific plc
 Amor Way, Letchworth, Herts. SG6 1ZA, United Kingdom.
<http://www.adeptscience.co.uk>; adam.knight@adeptscience.co.uk

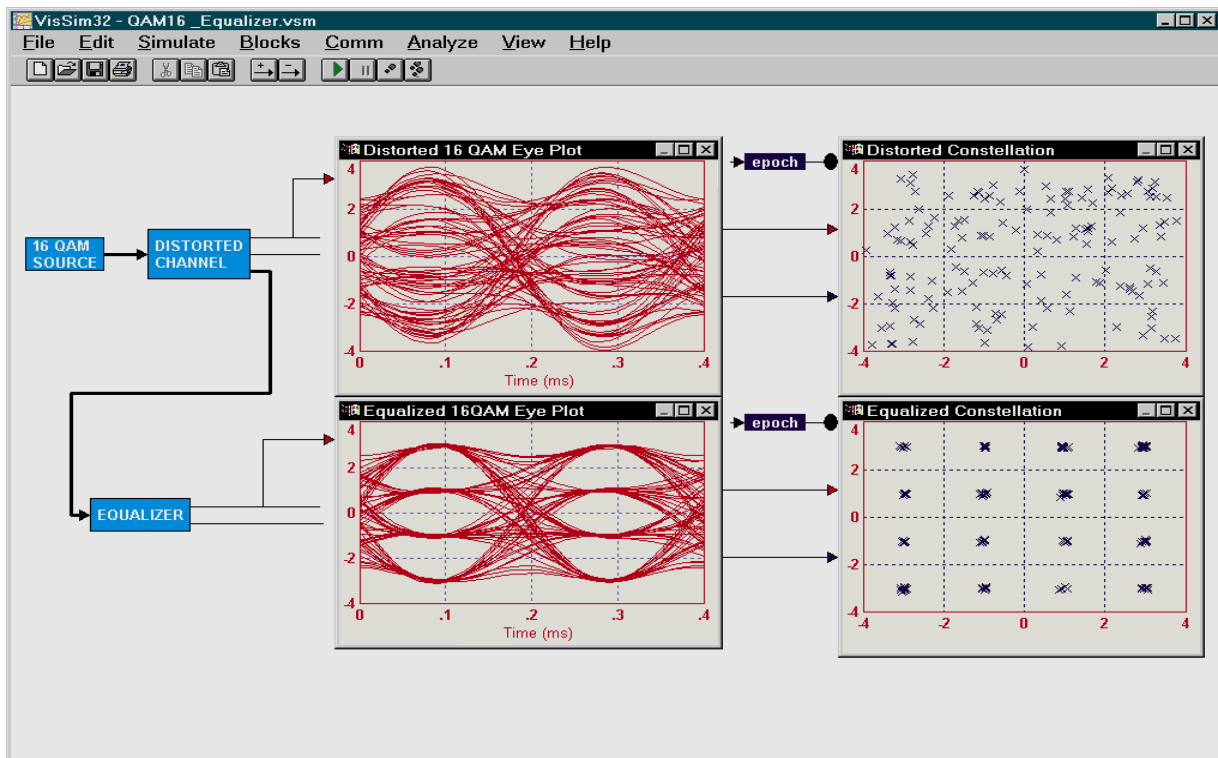
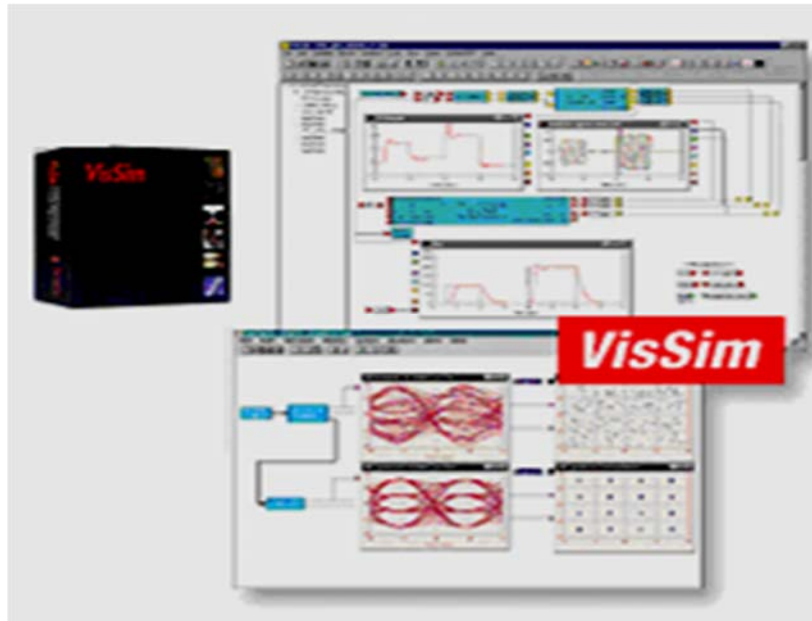
Abstract - VisSim is one of the fastest, most intuitive simulation software packages around and an indispensable tool for anyone who needs to model dynamic processes and systems. This presentation will give you an insight into how VisSim can shorten the design stage of any project, reduce costs, provide dependable outcomes for virtual prototypes and provide more results for less effort. VisSim is an award winning software program for the modeling and simulation of complex dynamical systems. VisSim combines an intuitive drag & drop block diagram interface with a powerful simulation engine. The visual block diagram interface offers a simple method for constructing, modifying and maintaining complex system models. The simulation engine provides fast and accurate solutions for linear, nonlinear, continuous time, discrete time, time varying and hybrid system designs. With VisSim, users can quickly develop software or "virtual" prototypes of systems or processes to demonstrate their behavior prior to building physical prototypes.

Keywords - simulation tools, simulation software, visual simulation tools, complex dynamical systems

PRESENTATION OUTLINE



1. VisSim – Introduction to the Solution
2. VisSim – Overview
3. VisSim – Product range
4. VisSim – Technical Demonstration
5. VisSim – Conclusions



VisSim 5 Application Pack 7:



**Process
Control
Simulation
Made Easy**



the technical computing people

“ For the Process Control Engineer, a powerful and easy-to-use simulation tool is as essential as a good spreadsheet and word processor. VisSim meets the needs, is excellent value, and has proved its worth. And what's more, it's fun! ”

Ed Dilley,
Chartered Chemical Engineer

VISSIM 5 APPLICATION PACK FROM ADEPT SCIENTIFIC



Automatic Optimisation

APPLICATION PACK 7



VisSim for the Refinery and Plant Process Control Engineer 1

Contents

The benefits of modelling a process control system in software are obvious: faster system development, lower prototyping costs, more opportunities to try out different scenarios and parameters. But some process control engineers avoid such software because they think it's too complicated, too difficult to learn and use. That may be true of some simulation software, but not VisSim. VisSim's intuitive visual interface, which lets you build your model by simply dragging pre-defined function blocks into place on screen, makes mathematical modelling of dynamic systems easy for non-mathematicians. This Case Study shows how one plant control engineer, who admits to having few natural mathematical or programming skills, used VisSim to resolve his process problems.



VISSIM 5 APPLICATION PACK FROM ADEPT SCIENTIFIC

Authors' Biography

Adam Knight graduated with a BA (Hons) degree in Business Studies from the University of West England, Bristol, in 2000. He began his work within control and instrumentation, with CAL Controls Ltd in 2000. Moving on in 2003 to Adept Scientific PLC, he is now Account Manager for a number of key personal based computer solutions for engineers and technical professionals, including VisSim and Maple.



Samir Khan graduated with a degree in Chemical Engineering from the University of Nottingham and then progressed to complete an industrially sponsored PhD at Heriot-Watt University. He is an experienced trainer, not only in the use of Mathcad software, but also in using CAD and other scientific and engineering software. He has developed Mathematical models of multiphase fluid systems, as well as solving engineering problems with a wide range of software tools.

