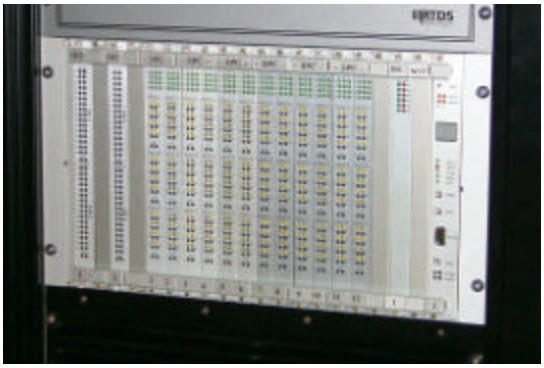
RTDS NEWS

December 1999



The Next Generation RTDS® Simulator Version 2 – The All 3PC rack

New WIF

PSCAD/RTDS Update

New Portable RTDS Simulator

New Developments at RTDS Technologies !

RTDS Technologies is excited to start the new millennium with a variety of new offerings to better meet your simulation and study needs. New developments include:

- ***The Next Generation RTDS® Simulator Version 2 – The All 3PC rack***
- ***New Workstation InterFace Card***
- ***New cubicle option –The Portable***
- ***PSCAD / RTDS Software update***
- ***New 3PC models***
- ***New Website***

Version 2 – The All 3PC Rack!

RTDS Technologies now offers simulator systems based exclusively on 3PC processor boards. Until now, all RTDS units have been configured as either all TPC or as a combination of TPC and 3PC boards. Significant efforts to port software models together with a re-design of the Workstation InterFace Card have made it possible to allow the all 3PC rack.

Using the same number of processors (i.e. 36 DSP's on 12-3PC cards), the new 3PC rack has significantly more power than a traditional TPC rack. The simulation of larger systems, using less hardware, is enabled by taking full advantage of the power provided by the Real Time Network Solution and the component stacking facility available for the 3PC.

The 3PC component library now encompasses all models previously available for the TPC as well as several new models which could not be realized using the TPC technology.

Through the continued development and enhancement of the 3PC component library, the applications for the RTDS Simulator will continue to expand.

RTDS Technologies

KEPS Stage II

KEPS Stage II is set for timely completion in January 2000. The Stage II configuration represents the largest RTDS Simulator interconnection to date made using the new WIF and an added number of 3PC's per rack.

New Workstation Interface Card

As part of the Next Generation Simulator, we are pleased to introduce the new **W**orkstation **I**nter**F**ace (*WIF*) card. The WIF increases the communication efficiency of the RTDS Simulator by reducing the dedicated time spent for signal communication. The key benefit of the WIF is that it enables the use of up to 12-3PCs in one RTDS rack!

The WIF is a direct replacement for the WIC and is compatible with the current RTDS hardware structure. This new card employs the Motorola MPC860 microprocessor and fiber optic communication to enhance the performance of the Simulator.

The Portable

RTDS Technologies now provides clients with the opportunity to choose a small portable configuration for their RTDS Simulator. This cubicle has seven slots, which are typically configured with five 3PC cards, one workstation interface card, and one Digital Input/Output card (DIO). The Portable RTDS weights about 18 kg with dimensions 58 cm x 21 cm x 51 cm.

Optionally, either one of the 3PCs or the DIO can be removed and replaced with an IRC so that this cubicle can be connected to other RTDS Simulators (either portables or traditional cubicles).

New Website

Please visit RTDS Technologies' newly designed website at www.rtds.com for detailed information about our products and services, as well as, announcements of new developments for the RTDS.

Software Release!

We would like to announce the release of PSCAD for RTDS Version 2.1.21. This software has a number of enhancements and new features including:

- Parallel downloads
- Digital meters in RunTime
- Digital plot component
- Comtrade preprocessor and plot save
- Rack security lock
- Drag & drop, group file, and auto order operations in FileManager
- Sequencer clear
- Draft processor usage
- Sequencer initiated plot updates
- New models for the 3PC listed below

The update will be send out first thing in Y2K.

New 3PC Models

Development continues on the 3PC component model library and the following models have been included in the software release mentioned above.

- controls components
- source model and arrestor model
- machine and multi-mass models
- enhanced SVC, Statcom and UPFC models
- additional cross rack components
- the new 6 pulse HVDC converter (with internal valve faults and improved firing)

In the near future, several additional models will be available – a transmission line with embedded breakers and enhanced CT models.

Please visit us at the following exhibitions …

IEEE/PES Winter Meeting

Booth S3 at the exhibition being held in conjunction with the IEEE/PES Winter Meeting in Singapore January 23 - 27, 2000.

Middle East Electricity 2000

Exhibition February 6 – 9, 2000 in Dubai, United Arab Emirates.