Squeezing more on a Rack!

We have been working hard using the power of the 3PC (Three Processor Card) to squeeze more components on to a rack. Through this effort, we intend to help our customers make the most of their investment.

Component models for use with the 3PC

As we mentioned in our December newsletter, the following models are available for the 3PC: GTO based STATCOM Converter; Unified Power Flow Controller (UPFC); Travelling wave line model with full mutual coupling between a maximum of 12 conductors; and the Enlarged SVC model with improved firing.

More New Models!

Since December, we have added several more models to the 3PC Component Library including:

- single and twin circuit PI sections
- single and three phase power transformers with on-load tap changers, 1-3PC processor required for 2 three phase transformers
- transducers, 3 single phase current transformers or 3 single phase voltage transformers can be represented on 1–3PC processor
- thyristor controlled series compensation, TCSC model with improved firing and internal faults, 1–3PC processor is required per phase

With the programming efficiencies that can be gained by programming in "C" for the 3PC, we will continue to port models to the 3PC.

Stacking Components on the 3PC

In order to take full advantage of the 3PC's processing power, it is now possible to stack, or execute, more than one component on one 3PC processor.



For example, one 3PC processor can be used to compute a three phase transformer, a travelling wave transmission line, and a PI section simultaneously during a simulation.

Real Time Network Solution

Through strong efforts and some novel thinking on the part of our development team, the Real Time Network Solution is presently being Beta tested in a commercial installation. This new model provides effective on-line or real time inversion of a circuit's admittance matrix. As a result, branches with continually varying conductances may be utilized in the simulation solution.

Although our R&D work is not yet 100% complete, we foresee taking advantage of this model to implement new and more complex models as well as to improve our existing capabilities. One of the improvements the Real Time Network Solution will provide is the ability to model a 21 node subsystem with a maximum of 28 switches. In this instance 2–3PC cards are used to compute the nodal solution, where presently 11–TPC cards are required to perform the same function.

There are some conditions on the structure of the subsystem solved by the Real Time Network solution, and in those cases where the conditions are not met, it will continue to be necessary to utilize the existing network solution.

Users will require a minimum of 2–3PC cards and the RTDS Controls System Compiler software in order to take advantage of the new network solution.

This development marks a tremendous advancement which will facilitate the incorporation of new and more complex power system components. Another first in Real Time Digital Simulation!

Software Release

PSCAD V2.1.18 for RTDS software update has been provided to all Extended Warranty and Maintenance clients. These users are nowtaking full advantage of the capabilities of this new software. We look forward to receiving any comments which may help us with our future developments.

Conferences

IEEE/PES Summer Meeting

Please visit our hospitality suite in the Sheraton San Diego Hotel & Marina during the IEEE/PES Summer Meeting July 12–16, 1998 in San Diego, California, USA.

CIGRÉ – International Conference on Large High Voltage Electric Systems

Visit us in the exhibition hall in Paris, France Aug. 31 – Sept. 3, 1998.

New OptoDAC

The new OptoDAC is now available. This new hardware is intended to provide higher precision (16 bit) optically isolated digital to analogue output. This hardware will provide additional flexibility in interfacing with the RTDS Simulator.

The OptoDAC can be used with or without an optical isolation panel. It provides all of the capabilities of the existing DAC16 with the added optical isolation feature. This new OptoDAC is 100% compatible with the existing DAC16.

A New Look for RTDS Technologies

New Corporate Logo

We are proud to unveil our new look! Inspired by the continual development of our company, services and products, RTDS Technologies has taken on a new corporate logo.



New Postal Code

Please note that the postal code in our mailing address has changed:

RTDS Technologies Inc. 200 – 1619 Pembina Hwy. Winnipeg, Manitoba Canada, R3T 3Y6

Thank you!

We would like to thank our clients for their assistance in returning the supply certificates and other information that we have requested. We appreciate their cooperation.

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