

PowerScript

We are working on *PowerScript*[™], a scripting language interpreter that will enable *OneLiner*[™] and *Power Flow*[™] users to drive the programs with instructions written in Basic. *PowerScript* will let users examine and modify all the system and network parameters and drive *OneLiner* and *Power Flow* as solution engines.

PowerScript has many applications. In the simplest form, a script can be just a few lines of instructions designed to automate a frequently used task. For instance, you can write a script in *OneLiner* to find the highest fault current at a bus with the adjacent branches outaged one at a time. Simple scripts of this type are commonly referred to as "macros."

With a slightly more complicated script, you can use PowerScript to create customized reports of network parameters and solution variables. As an example, you can create your own report in *Power Flow* to list all the PV buses whose MVAR output is pegged at the maximum or minimum value.

A script can be a full-fledged computer program with its own decision-making capabilities and computational logic. A

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ASPEN 34 North San Mateo Dr., San Mateo, CA 94401 Phone: (650)347-3997 schan@aspeninc.com Www.aspeninc.com **OneLiner** user, for example, can write a script to change the impedance of an MOV (a nonlinear device that is commonly put

in parallel with series capacitors) and solve the short-circuit case iteratively until the voltage across the MOV converges to a constant value. A *Power Flow* user can write a script to gradually increase the MW flow across the tie lines until the voltage at certain key buses fall below a threshold.

PowerScript has a wide range of input/output capabilities. A script can open disk file for reading in or writing out any kind of text of binary data. It can also interact with the user through dialog boxes and keyboard handling routines. PowerScript comes with a built-in dialog editor that makes designing dialog boxes a snap. The editor has all stnadard dialog-box controls such as Edit, List, Comobo, Check, and Radio Button.

PowerScript has support for OLE Automation, a widely used standard for connecting computer software made by different vendors. This means a script can access and manipulate programs such as MS Word and Excel, which are written as OLE containers. The possibility of what you can do with *PowerScript* is limitless.

In creating *PowerScript* we are mindful of the common perception that scripting language - especially those associated with power engineering software - are sluggish and difficult to use. We have found from our experience that these are not inherent shortcomings of scripting language, and that they can be overcome. Our choice of Basic, instead of a one-of-a-kind computer language, will go a long way toward making *PowerScript* easy to learn and to use.



Most ASPEN users are already proficient in Basic or they can learn it in a short time. *PowerScript* will also have a compact, yet comprehensive, set of functions that you can use to access and change system parameters and to drive the solution engines. Our tests so far have shown no sign of sluggish performance.

PowerScript is being implemented as an integral part of *OneLiner* and *Power Flow*. Within these two programs, you will be able to store your favorite scripts and execute them with a few clicks of the mouse. A development environment, which includes an editor and a symbolic debugger, is available to help you develop new scripts. The figure on this page shows the editor window. We plan to ship a number of example scripts to help users get started using this powerful feature. We also plan to hold special classes on *PowerScript* usage.

Users of *OneLiner* and *Power Flow* who are subscribing to the maintenance program will receive *PowerScript* in their version 2000 upgrade, which is scheduled for release in the fourth quarter.

Live Demos through the Web

This new technology makes it possible for us to give you a live demonstration of our software through the web. To use this service, you need to first make an appointment with us. At the appointed hour, all you need to do is to call us up on the phone and then point your web browser to the "Demos" page of our web site and click on "CLICK HERE TO BEGIN". The screen image of the program will appear on your web browser. As the demonstration progresses, you will see the mouse move and the screen updated in real time. The person demonstrating the program will tell you what he is doing. You can ask questions at any time. This is definitely the next best thing to an on-site demonstration!

Employee Profile

Dominic Maratukulam joined ASPEN in January as our Manager of Customer Services. He received his BTech degree from the Indian Institute of Technology



from University of British Columbia. both in electrical engineering. He has worked as an engineer at BC Hydro and Systems Control Inc., and as a project manager

at EPRI before joining ASPEN. Some of the notable EPRI projects he managed include FACTS technology development, voltage stability analysis program, and short-term load forecasting. Dominic is a Senior Member of IEEE. You can reach him at dominic@aspeninc.com.

eMail Subscription Service

We have been sending users eMail messages to notify them of program bugs, updates and upcoming events since the beginning of this year. If you are a user of ASPEN software, you should have received at least one eMail message from us within the last three months. If not, the reason is that we do not have your eMail address on record. You can get your name on our eMail subscription list by dropping us a message (dominic@aspeninc.com) with your name, telephone number and company affiliation.

Upcoming Events

- **OneLiner Users Group Meeting**
- Atlanta, on May 2.
- **Power Flow Training Class**
- San Francisco, on May 18-19. **OneLiner Training Class**
- San Francisco, on September 11-13.
- Amsterdam, The Netherlands, on October 4-6.

The schedule and signup sheet are available on the Events page of our web site.

New Users

ASPEN Breaker Rating Module™

- Conectiv Power Delivery, Chrisiana, DE
- Indianapolis Power & Light, IN
- N. Indiana Public Service, Hammond, IN
- Potomac Electric Power, Washington, DC
- TXU Electric, Dallas, TX
- Tampa Electric, FL
- Virginia Electric & Power, Richmond, VA
- **ASPEN DistriView**[™]
- CFE Unidad de Ingeneria Especializada, Mexico
- City of Wyandotte, MI
- DELSUR, El Salvador

- Klickitat PUD, Goldendale, WA
- Nan Ya Plastics Corp., Taiwan
- Tampa Electric, FL

ASPEN Relay Database

- City of Wyandotte, MI
- Companhia Paulista De Forca e Luz, Brazil
- Florida Power Corp., Maitland, FL
- Great River Energy, Elk River, MN
- Jacksonville Electric Authority, FL
- Lakeland Electric & Water, FL
- Motiva Enterprise Llc., Port Arthur, TX
- Ottawa Hydro, Canada
- Washington Metro Area Transit Authority, Alexandria, VA

ASPEN OneLiner

- · City of Burbank, CA
- Companhia Paulista De Forca e Luz, Brazil
- Iberdroia Ingenieria Consultoria, Spain
- Instituto Nacional de Electrificacion, Guatemala
- Jacksonville Electric Authority, FL
- Nan Ya Plastics Corp., Taiwan
- Orion Power Holdings, Liverpool, NY
- Rio Grande Energia, S.A., Brazil.
- SGS Witter, Albuquerque, NM
- **ASPEN Power Flow Program**
- ABB Electric Systems Technology Institute, Raleigh, NC
- Alaska Electric Light & Power, Juneau, AK
- · City of Riverside, CA
- Keyspan Energy, Melville, NY
- NEI Electric Power Engineering, Inc., Wheat Ridge, CO
- West Kootenay Power, Canada

ASPEN Line Constants Program[™]

- Central Maine Power, Augusta, ME
- Colorado Springs Utilities, CO
- Companhia Paulista De Forca e Luz. Brazil
- GPU Energy, Reading, PA.





and MEng degree