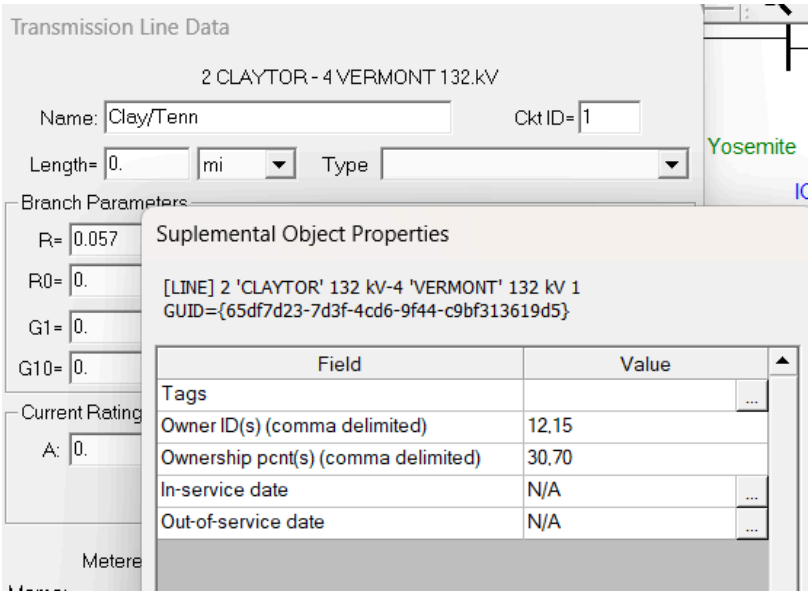
What's New In OneLiner V15.10

This maintenance release includes program improvements and bug fixes.

Please write to support@aspeninc.com in English (suporte@aspeninc.com in Spanish and Portuguese) or call us (650-347-3997) if you have questions.

Improvements between Versions 15.9 and 15.10

1. **New Ownership attributes in all network model element and relays**:
   Up to five owners and their percentage ownership can be specified for any network element and relay. In the following example the line has two owners with IDs of 12 and 16 and ownership percent of 30 and 70 respectively.



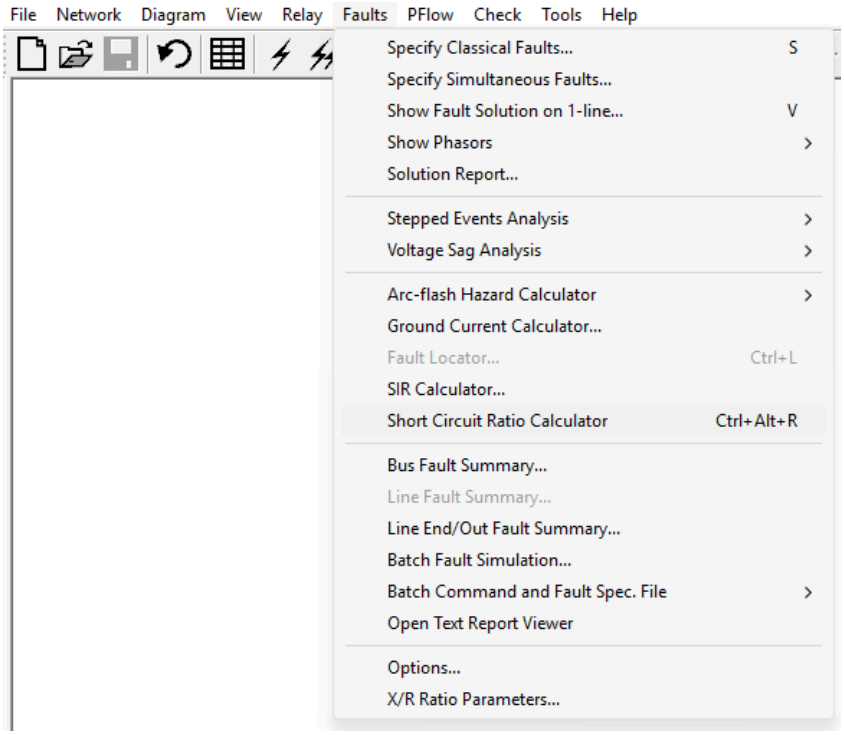
2. **New "Copy data to clipboard" and "Paste data from clipboard" commands in the Data Browser**: The Copy data to clipboard command lets users copy table data from the Data Browser to the clipboard and paste it into Excel for further editing. The Paste data from clipboard command allows users to import the modified data back into the Data Browser.

3. **New Tidyup bus symbol command**: This command (Ctrl+Alt+L) automatically rearranges all one-line diagram elements connected to the selected bus—such as lines, transformers, generators, loads, and shunts—so they are evenly spaced along the bus bar.

4. **New DS relay models**:

a. **New relay model (Siemens SIP5RMD):** A relay model is now available for Siemens SIPROTEC 5 distance protection relay with the reactance method.
b. **New relay model (Hitachi REX670HSG__ and REX670HSP__):** New relay models are now available for the Hitachi REL670/RED670 relay with high-speed ground and phase distance protection.
c. **New relay model (Sifang CSC101EB):** A relay model is now available for the Sifang CSC-101EB line distance protection relay.

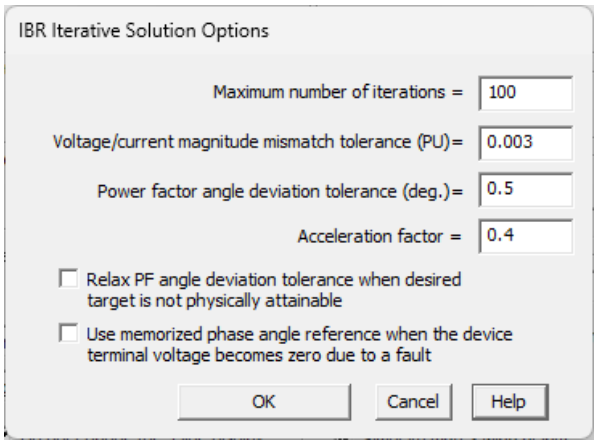
5. **IBR Short Circuit Ratio Calculator**
The IBR SCR Calculator offers a quick, straightforward way to estimate the SCR for an IBR plant. It helps users determine whether a low SCR may be contributing to non-convergence and to evaluate potential convergence risks before running detailed fault studies. In practice, convergence issues commonly arise when the SCR drops below 5.



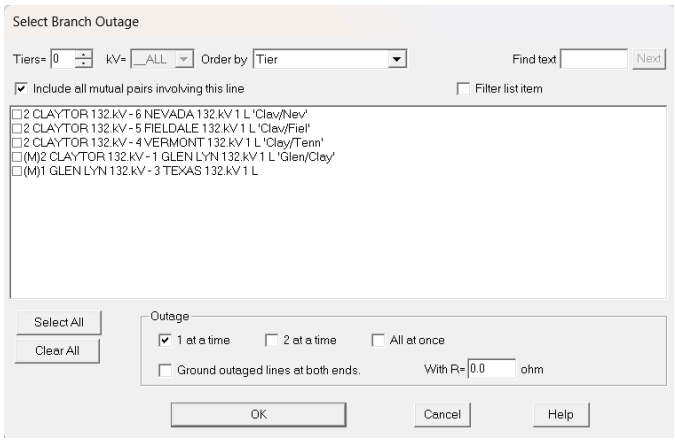
6. **Model Builder Tool**: This new standalone tool enables users to create and execute model build plans that generate an OLR model by applying a sequence of build steps to a seed case. Build steps can include change files and Python scripts.

The tool supports an iterative workflow, allowing users to make adjustments and rerun the build until the desired output model is achieved. It improves consistency, repeatability, and auditability when developing OneLiner network models in a team environment.

7. **IBR Iterative Solution Acceleration Factor Setting**
   The OneLiner iterative fault solver now allows users to adjust the solution acceleration factor. This provides an additional control to help achieve convergence in challenging fault simulations when the default solver settings are insufficient.



8. **Enhancement in outage selection dialog box**: The dialog now includes a text filter to quickly find and select entries. It also adds a checkbox to include mutually coupled lines in the selection list—an important consideration for ground fault analysis.

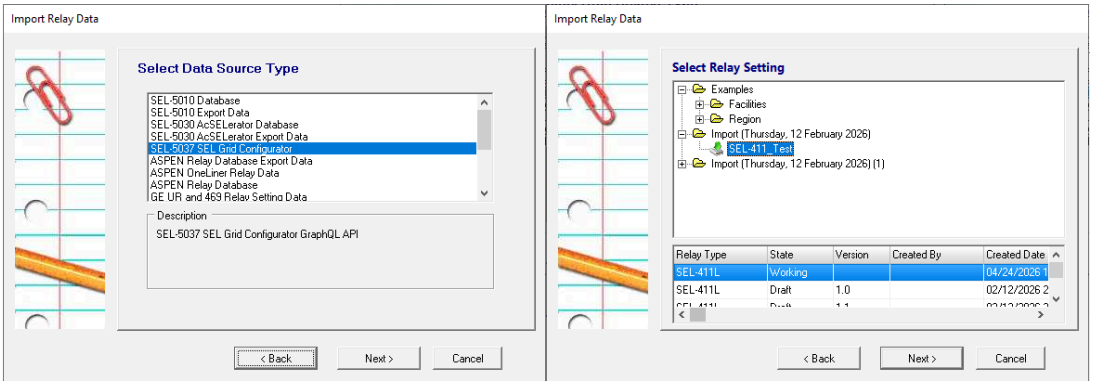


9. **New curve library file ERLPhase.RLY**: This library contains relay curves from ERLPhase, the new name for NXTPhase.

10. **Enhanced the PSS/E to ASPEN data conversion logic** to use RAW file vector group data when possible to improve the model translation output.

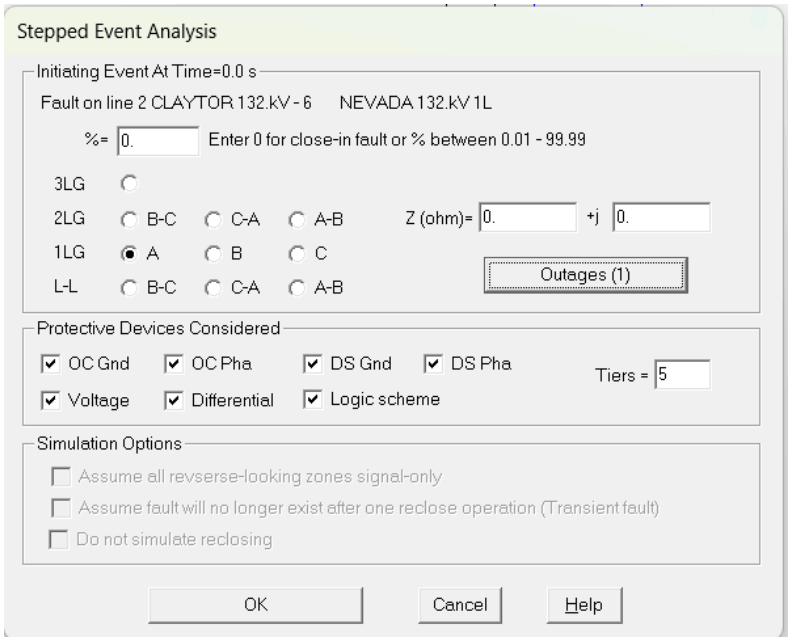
11. **Import relay settings from SEL-5037 Grid Configurator:** Users can now import relay settings directly from the SEL-5037 Grid Configurator database using the Relay Import

Wizard. This new data source type will automatically appear when OneLiner runs on a computer that already has the SEL Grid Configurator software installed.



12. **Breaker Rating Module updates**: Text labels in the dialog box for IEC circuit breakers have been adjusted to align more closely with IEC standard terminology.

13. **Implemented the Outages button in the Stepped Event Analysis command dialog box**: The button allows users to select the desired line and transformer outage contingencies to include when running the analysis.

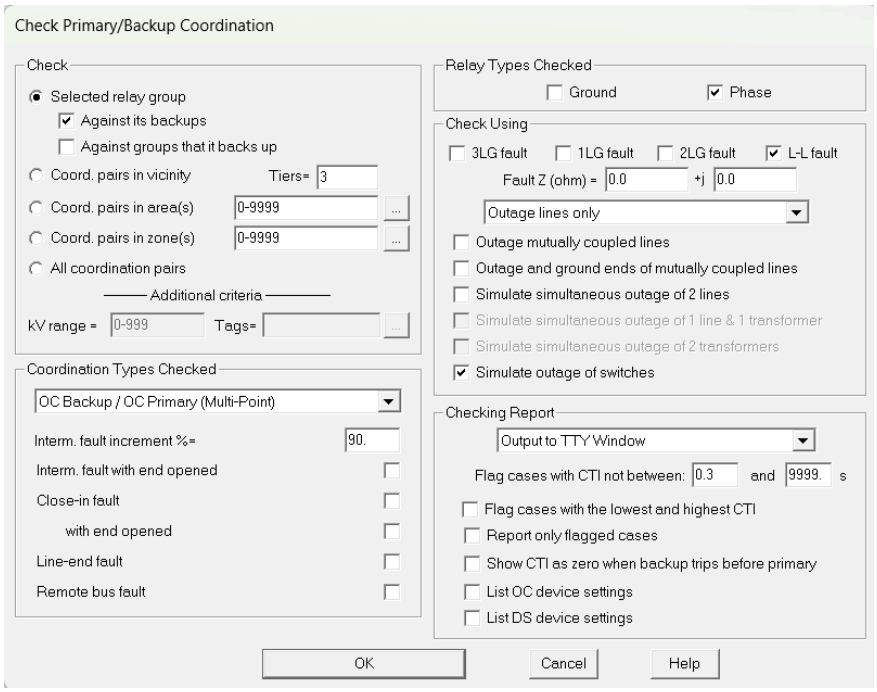


14. **New section in the ADX file:** The Read change file logic in this version can process the <BUSMAP> section, where users specify a list of bus mapping pairs using OLNetID. Including this XML section will enhance model-building quality when the change file data received from different utilities contain bus name mismatches.

15. **New feature in API Run1LPFCommand(FAULTLOCATOR)**: The API now supports a new input parameter BREAKEROPEN2, which lets users specify the desired remote breaker-open to be simulated during the fault location calculation.

16. **Added support** for importing NxtPhase relay setting files

17. **Implemented the Simulate outage of switches** checkbox in the Check | Primary/Backup Coordination command. This will allow users to include bus ties in the contingency list for the coordination study.



Cumulative bug fixes since OneLiner V15.9

OneLiner V115.10 contains all bug fixes applied to the program since the first release of V15.9. The list can be found in this history.txt file.

Installation Notes:

- *The data files generated by OneLiner V15.10 are compatible and can be opened in the earlier releases of OneLiner V15.3 through V15.9.*
- *The backend database structure for OneLiner with the EDX module must be updated before the Model Builder tool in this release can access it. Refer to the EDX Module v16.2 User Manual for detailed instructions.*