

Press Release

Phoenix Contact and VENIOS develop IoT platform solution

10/19) With the systematic elimination of conventional power generation sources, distribution systems will face new challenges in the future:

Volatility is on the rise as a result of renewable energies, and consumer requirements for security of supply are increasing. This, in turn, makes it more difficult to manage assets from a cost-optimized perspective in today's environment. Phoenix Contact and Venios are therefore starting to offer the market an IoT platform solution that ensures transparency and controllability at the medium and low-voltage levels in order to facilitate economically optimized management of distribution systems.

Headquartered in Frankfurt, Germany, Venios GmbH has been developing software solutions for location-based and time-resolved analysis of electrical energy systems since 2012. To this end, the Venios Energy platform is designed to support large-scale simultaneous processing of different data sources and models (big data). Combined with existing information or information derived on the topology and equipment configuration of the local grid, load flows can be modeled, calculated, graphically processed and made available via an integrated geo-information system (GIS). A large number of forecast scenarios also provide a glimpse into the future.

Solutions from Phoenix Contact offer not only mathematical models, but also live data on secondary distribution network stations, renewable energy plants and medium-voltage unit substations. In so doing, they lay the foundation for ensuring optimized forecast control and automated power system management in the distribution system. In the future, the PLCnext platform from Phoenix Contact will serve as the basis for facilitating interoperable data exchange between different subsystems at the lower distribution system level. "Functions in line with IEC 61131-3 requirements as well as C/C++, C# or Matlab Simulink routines can therefore be combined flexibly, as required, thanks to this concept," affirms Stephan Volgmann, Head of Vertical Market Management Energy at Phoenix Contact.