

Question 2.9: What is your experience in integrating/interfacing models/tools for the cyber system with traditional power system analysis software environment?

Some of the issues with integration of power system data with various centralized applications (such as fault record analysis tools and asset management tools), are:

- Collection the relevant data for each application from a variety devices (of various models from a range of manufacturers), which may use standard interfaces for data access, but may only provide proprietary means of access to this data
- To ensure that each user or application has access to all data required for their job function while protecting the system from inadvertent (or malicious) alteration by unauthorized users, even where the device vendor's tools do not provide this isolation and protection
- To provide automated data retrieval in order to reduce requirements for repetitive user interactions
- To minimize the need for users to learn to use multiple device vendor tools (that match the variety of device types)
- To minimize the need for users to be provided with and manage security credentials (device addresses, user names, passwords, etc.) for device access

An integrated centralized device management system that manages data access can:

- Enforce attribute-based access control (ABAC) for each kind of data and function required by each user
- Manage device access (addressing, protocol, username, passwords, etc.) to relieve the burden of managing this access from users
- Automate periodic data collection and delivery of data to user applications
- Provide a single interface for accessing a range of different kinds of devices, reducing training requirements

Experience:

We have over five years of experience deploying systems of this kind and integrating them with a range of centralized analysis and other applications.

