

OpenCIM

Common Information Model Interface

Electric utilities use computer software for design, operation and maintenance of their systems. The data is stored in computer files and databases that do not have common formats between companies, or even within the same company. One of the major challenges for any development project is the effort necessary to develop proper interfaces for different applications.

Common Information Model

CIM can represent all of the major objects of an electric utility as object classes and attributes, it also represents their relationships. CIM uses these object classes and attributes to facilitate the integration of independently developed applications between vendor-specific EMS systems, or between a EMS system and other systems that are concerned with different aspects of power system operations, such as generation or distribution management.

OpenCIM™ provides a platform for bi-directional transfer of data between OSI **monarch™** products and CIM-compliant databases and XML/RDF data formats. It requires literally no effort to integrate OSI **monarch** products with the existing applications that support CIM standards. RDF (Resource Description Framework) and XML (Extensible Markup Language) are the obvious solutions for data exchange between different applications.

XML is used to exchange data and is a subset of the international text-processing SGML (Standard Generalized Markup Language). The data converted to XML can be shared between many different applications. This reduces the time consuming challenges for the application developer to write a new interface for each new application. Since XML data is stored in text format, it is much easier and less costly to upgrade the systems. No effort is necessary to convert the data for new products. Therefore, integration can be done faster and without error. XML data can be re-used when upgrading the systems.

RDF enables the encoding of the shared structured metadata. It provides the necessary syntax, semantic and structure that is needed to process exchangeable data between different applications. RDF is an application of XML that provides clear methods of expressing semantics, by imposing the necessary structural constraints.

