Connect

a customizable, ontology-based, network analysis toolkit

charles river analytics

CAPABILITIES

Connect[™] is a user-friendly software tool designed for end users or software engineers to build, understand, and analyze heterogeneous networks. Its flexible ontology lets users and developers define the types of nodes and links that comprise the network, which makes Connect a solution for any domain that requires network analysis. Connect makes it easy to change the visualization of the network and to visually represent nodes and links based on the data that describes them. Both nodes and links may be defined with a rich set of hierarchical information. A variety of plug-in components



provide network analysis algorithms, GIS visualization, connections to external data sources, and experimental analysis, querying, and visualization tools. Connect can be used on its own or integrated into other software applications.

ARCHITECTURE

- Extensible ontology lets users and developers define the types of nodes and links that comprise a network
- Nodes and links can each be described by a full dossier of hierarchical information
- Visualizations can be easily tailored and can be made to reflect the data underlying each node or link
- Plug-in architecture based on our Metronome[™] application framework makes it easy to add and remove analysis components
- Network data is saved in and loaded from industry-standard file formats

Scientists and engineers at Charles River Analytics were frustrated by the poor usability and extensibility of existing network analysis tools. They developed Connect to be as flexible and user-friendly as possible. Aside from the fact that a network consists of nodes connected by links, no other assumptions were built into the application. Connect is most commonly used as a piece of a more advanced system, and Connect has been used on over 30 projects within Charles River—in situations varying from understanding terror networks, exploring the information environment of an area of operation, planning effective logistics, and managing aircraft assets.



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