

Benefits

- CIP secure connections
- High performance
- Out-of-the-box examples
- Simplified porting
- Minimized resource use
- Rich set of features
- Scalable

EADK Contains

- EtherNet/IP Adapter Class Protocol Stack source code
- CIP Security functionality
- EADK Adapter DLLs (32 & 64bit) with C++ function call API, C# API for .NET Applications and legacy (no longer updated) COM API for EADK stack with Windows and VB6 applications
- EADK Getting Started, Software Reference Manuals and Porting guide
- Sample EDS file, prepared to allow the EADK to be used as a Class1 connection target by remote tools, such as RSNetWorx for EtherNet/IP
- Adapter Class example code
- Sample STC file for pre-conformance testing



PYRAMID
SOLUTIONS

NetStaX™ EADK

ETHERNET/IP ADAPTER DEVELOPERS KIT

ENABLING SECURE ETHERNET/IP CONNECTIVITY

Pyramid Solutions' NetStaX™ EtherNet/IP Adapter Development Kit (EADK) enables you to quickly introduce secure EtherNet/IP Adapter Class functionality for your products.

Our stack provides complete I/O server, message server, and message client functionality along with an Application Programming Interface (API) for using Common Industrial Protocol (CIP) via TCP/IP. The stack API interfaces with your product's application software and to your product's socket level TCP/IP interface.

Rest assured that your connections will be secured with the EADK's CIP Security features. The EADK adds secure connection capabilities that will allow your product to communicate with other devices that support conformant CIP Security EtherNet/IP functionality. Secure connectivity prevents bad actors from attempting to spoof connections to your products and spoofing devices on your network.

NetStaX EADK is distributed under a royalty free software license agreement.

Features

EtherNet/IP Compatibility

- ODVA CT20 Conformant
- Enables EtherNet/IP Adapter Class functionality
- CIP Security enable
- UCMM (unconnected) message client and server
- Class 3 (connected) message server
- Class 1 (I/O) connection server

- The EADK source code is designed using an object-oriented approach. It's building blocks, such as TCP/IP sessions, CIP connections, explicit requests, and all implemented CIP objects, including assemblies, are grouped into separate modules with corresponding functionality. This allows for easy understanding and debugging of the source code.

Resource Utilization and Management

- All resources initialized at stack startup
- No dynamic memory or thread allocation
- Runs on a single thread
- Scalable for optimizing resources

Platform, OS, and TCP/IP Stack Compatibility and Portability

- "Platform file" approach separates routines into a single set of platform files to simplify porting
- Sample platform files included
- Stack core source is 'C' code for portability

Supported/Included Objects

- Message router
- Connection manager
- CIP Security specification
- Port
- Identity
- Ethernet link
- TCP/IP
- QOS
- DLR & LLDP
- CIP sync
- Assembly
- Custom objects
- File object
- Class 0 support
- Energy object
- CIP Safety option

EtherNet/IP™