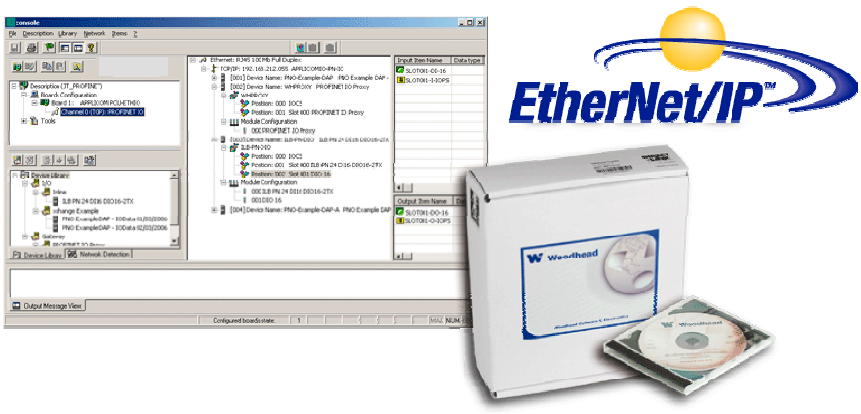
Deliver EtherNet/IP™ solutions on your PC-based systems faster and more easily with BradCommunications™ software tools.

EtherNet/IP™ Software Tools

A suite of solutions to embed EtherNet/IP into your applications



Features:

- **Explicit Messaging DLL Driver kit**
  - ✓ **User friendly API! No EtherNet/IP knowledge required**
  - ✓ **Send & Receive explicit messages**
  - ✓ **Client mode (Server mode on request)**
  - ✓ **DLL library for Windows 32-bit (XP / Vista)**
- **OEM Engineering Console for EtherNet/IP Scanner**
  - ✓ **Allows configuration and diagnostics of EtherNet/IP devices**
  - ✓ **Automatic device detection**
  - ✓ **ODVA-approved EDS Parser**
  - ✓ **Configuration manager**
  - ✓ **Supports Rockwell devices such as FlexIO, PointIO**
  - ✓ **Rack Optimization**
  - ✓ **On-Line mode for diagnostics**
- **Diagnostic Tool**
  - ✓ **FREE limited version**
  - ✓ **Supports 0xF5 TCP/IP and 0xF6 Ethernet Link objects**
  - ✓ **Ideal to prepare for EtherNet/IP Plug fest**
  - ✓ **Selected by ODVA as the official tool for testing EtherNet/IP network objects**

Active member of the ODVA interoperability plug fest and working groups.

Overview

Molex, Inc through its automation products is a recognized leader in industrial communication and connectivity solutions.

Molex provides a complete range of EtherNet/IP services, expertise and products, including training, protocol stacks, software tools, network interface cards, I/O modules, and infrastructure products.

Molex is the ideal partner to listen your requirements and turn your projects into successful, cost-effective solutions.

Explicit Messaging DLL Driver kit (EIP_Driver)

BradCommunications™ EIP_Driver provides EtherNet/IP Explicit Messaging (EM) functionality for applications developed for PC / Windows™ platforms. The product consists of a user-mode DLL driver, sample client application source code that demonstrates use of the EIP_Driver DLL API and its capabilities, and the user reference manual.

The EIP_Driver is the fastest and easiest solution to implement Explicit Messaging communication in PC-based client applications such as:

- Configuration / Commissioning consoles
- Diagnostic / Monitoring tools
- HMI / Scada applications
- Custom software

The EIP_Driver provides an Application Programming Interface (API) that simply send/receive buffer of data on the network with remote EtherNet/IP EM server devices. The EIP_Driver is managing the complete CIP communication (connection / reconnection, etc) so the application software writer needs no special expertise in the EtherNet/IP protocol. The EIP_Driver DLL library can be statically or dynamically linked with the target application.

The EIP_Driver is distributed under a royalty-free site license.

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BradCommunications™

EtherNet/IP™ Software Tools

EIP_Driver Features	
Object Library	DLL Windows 32 bits (validated under the Windows XP and Windows Vista 32-bit environments)
Explicit Messages	Client mode only ▪ Supports connected and unconnected messages ▪ Supports synchronous and asynchronous modes
List Identify	This service provides a way to detect all EtherNet/IP™ stations connected to the network
Multi-Threading	The API is designed to be used in multi-threaded applications
Multi-Process	Several applications can use the EIP_Driver simultaneously

OEM Engineering Console Tool (EIP_CT)

BradCommunications™ EIP_CT is an OEM engineering Console Tool (CT) that is used to configure and diagnose an EtherNet/IP™ network. It runs on Windows PC platforms.

It enables an industrial products' manufacturer to easily provide a full range of configuration and diagnostics functions for an Ethernet/IP Scanner, in a branded and field-tested application.

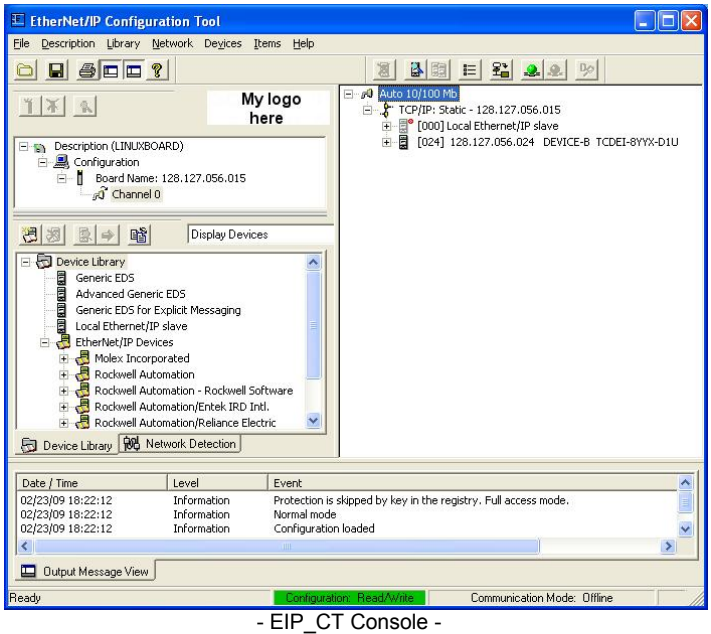
EIP_CT is connected to a remote Scanner and within a few mouse clicks, a user can configure a complete EtherNet/IP™ network including Scanner parameters and device connections. The user configuration is downloaded to the Scanner using the FTP protocol.

EIP_CT includes an EDS parser equipment library that is used during the device detection step to build automatically the network topology.

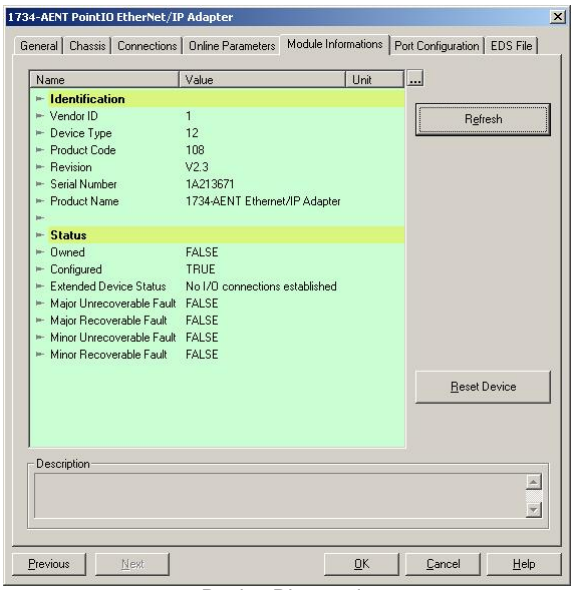
When EIP_CT is running in ON_LINE mode, the console provides useful diagnostic information (device parameters, module information, port configuration and I/O process data).

EIP_CT can be customized very quickly through an XML template which defines the information such as: tool name, system platform name, product logo.

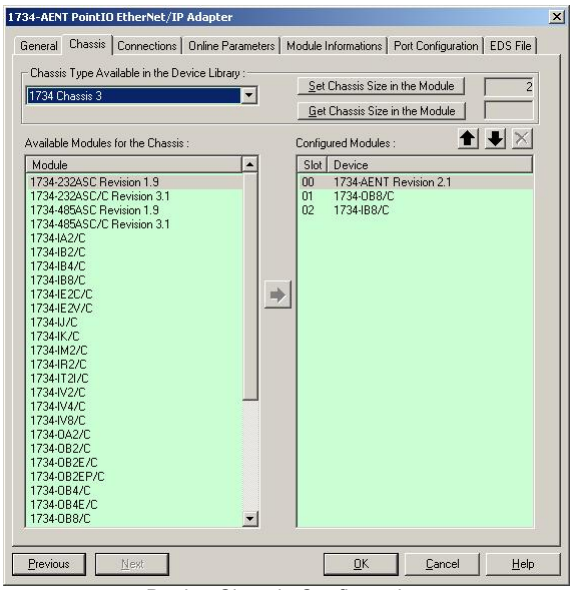
EIP_CT is selected by ODVA to validate ESD file integrity and communication for EtherNet/IP interoperability testing.



- EIP_CT Console -



- Device Diagnostic -



- Device Chassis Configuration -

EDS Manager (EIP_EDS-Manager)

BradCommunications™ EIP_EDS-Manager is a Windows software component that enables a product developer to implement an EtherNet/IP Scanner configuration console in proprietary engineering software.

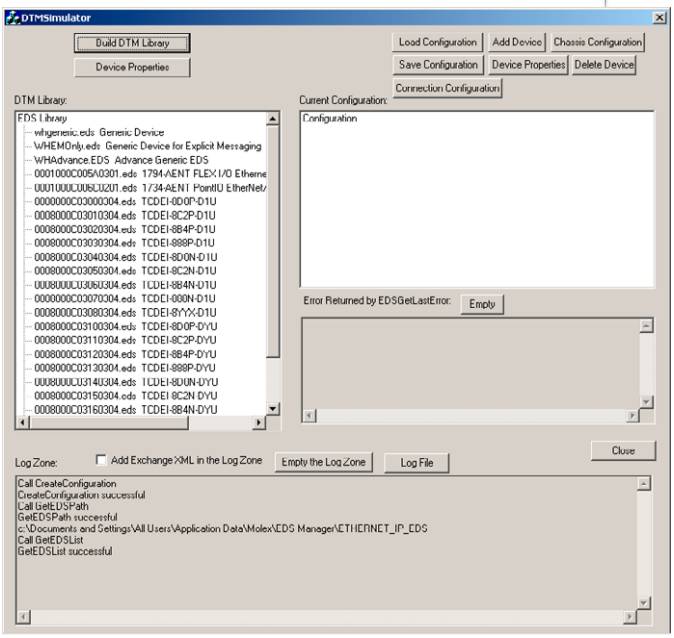
EIP_EDS-Manager includes an API library to handle:

- EDS file library
  - EDS import Wizard
  - EDS Remover
- EDS parser
- Display device properties
- Add/Remove a device into user configuration
- Add/Remove modules in a device chassis
  - Support Rockwell FlexIO / PointIO
  - Support Rack optimization for Rockwell devices
- Configuration of Scanner connections
  - Add/Remove connection
  - Support of Exclusive Owner (EO), Listen Only (LO, and Input Only (IO)
- Automatic tag creation of I/O data
- Load/Save a user configuration (XML format)

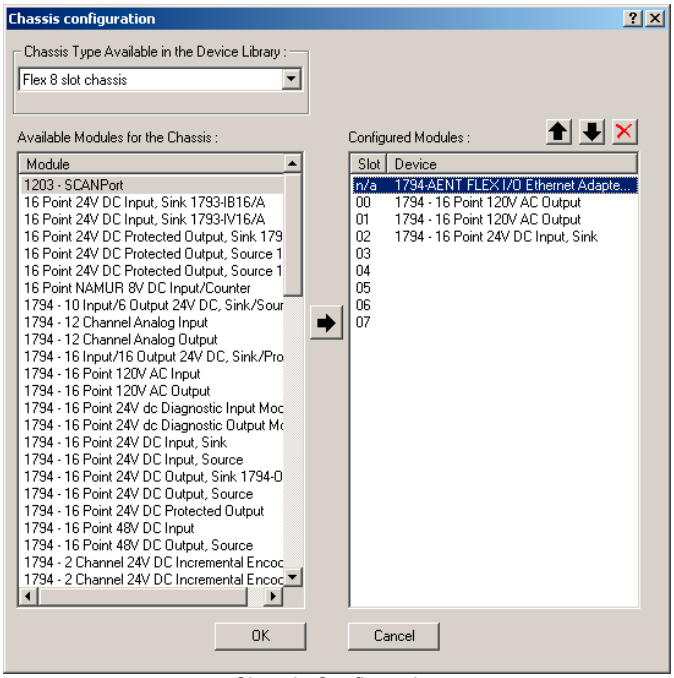
EIP_ EDS-Manager is delivered with a Windows sample that illustrates the different calls of API library.

The product consists of a user-mode DLL component, sample client application source code that demonstrates use of the EIP_ EDS-Manager DLL API and its capabilities, and the user reference manual.

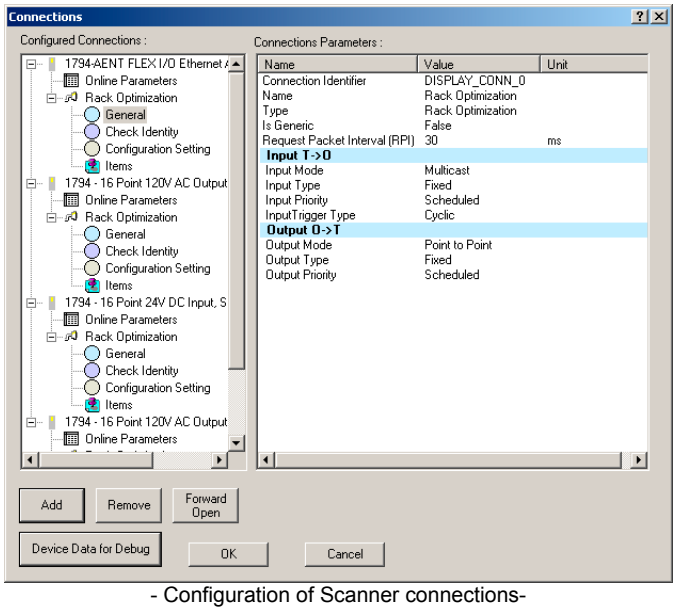
EIP_ EDS-Manager uses the same core engine of EIP_CT engineering console selected by ODVA to validate ESD file integrity and communication for EtherNet/IP interoperability testing (PlugFest).



- EDS Manager -



- Chassis Configuration -



- Configuration of Scanner connections-

Network Interface

EtherNet/IP™ Software Tools

Diagnostic Tools (EIP_DiagTools)

BradCommunications™ EIP_Tools provides a set of EtherNet/IP utilities that enable a user or product developer to test CIP objects. EIP_Tools consists of an executable application for PC / Windows™ platforms.

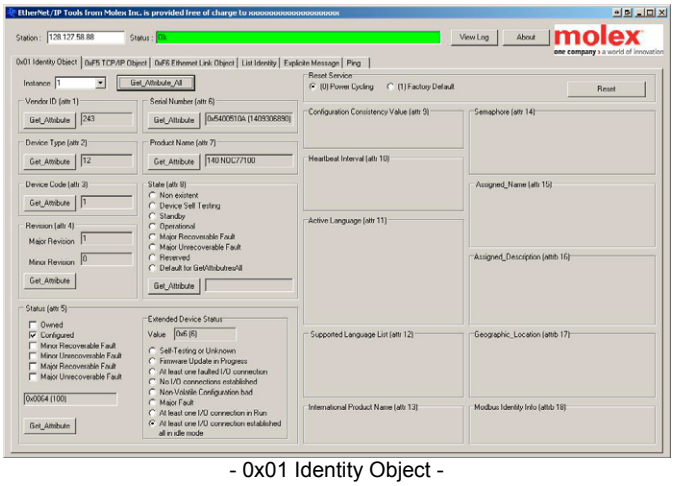
A **FREE limited version** is available on request to access objects such as:

- 0x01 Identify Object
- 0xF5 TCP/IP Object
- 0xF6 EtherNet/IP Link Object

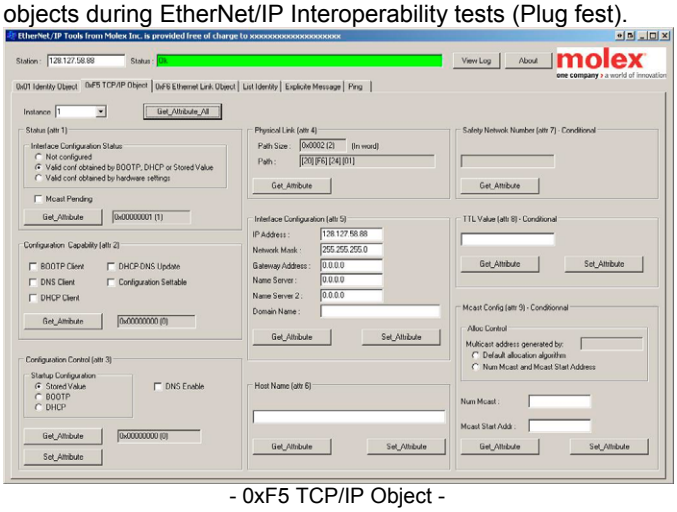
The full version supports:

- List Identify; automatic detection of EIP devices connected to network
- Explicit Message; allows to send and receive Explicit Messages in unconnected and connected modes
- Ping service

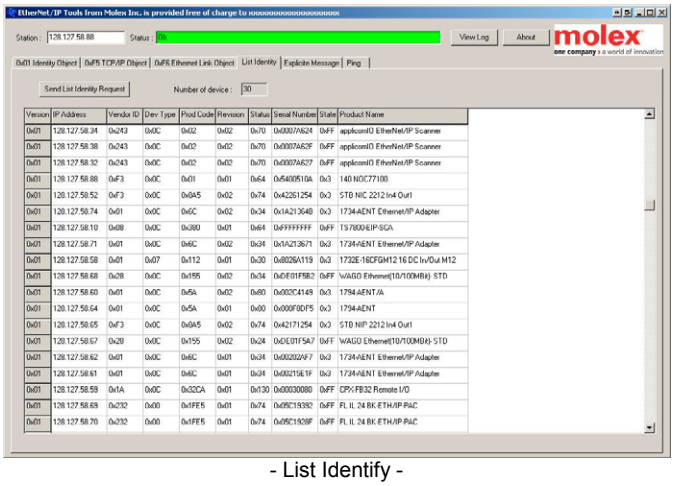
EIP_Tool is selected by ODVA to validate 0xF5 and 0xF6 objects during EtherNet/IP Interoperability tests (Plug fest).



- 0x01 Identity Object -



- 0xF5 TCP/IP Object -



- List Identify -

Ordering Information

Part Number	SAP Number	Description
SDK-EIP-EML	**1121065008**	BradCommunications EtherNet/IP Explicit Messaging DLL Driver kit, Client mode (EIP_Driver)
SDK-EIP-SCA-CNF-U	**1121065011**	BradCommunications EtherNet/IP OEM Configuration Console, USB Dongle, 1 license (EIP_CT)
SDK-EIP-DIAG	Consult Us	BradCommunications EtherNet/IP Diagnostic Tools (EIP_DiagTools)
SDK-EIP-EDSM	Consult Us	BradCommunications EtherNet/IP EDS Manager DLL Driver kit (EIP_ EDS-Manager)

Other related EtherNet/IP products

Part Number	SAP Number	Description
SDK-EIP-ADP	**1121060000**	BradCommunications EtherNet/IP Adapter Protocol Software Development Kit (stack)
SDK-EIP-ADP -SAF	**1121170001**	BradCommunications EtherNet/IP CIP Safety Adapter Protocol Software Development Kit (stack)
SDK-EIP-SCA	**1121065003**	BradCommunications EtherNet/IP Scanner/Adapter Protocol Software Development Kit (stack)
SDK-EIP-EDS	**8600000141**	BradCommunications Engineering Development Support for EtherNet/IP Software Development Kits
SDK-EIP-TRN	**8600000143**	BradCommunications EtherNet/IP Software Development Kit Training & Implementation (2 + 1 days)
DRL-EIP-PCU	**1120005030**	BradCommunications EtherNet/IP Scanner/Adapter PCI Universal 5V/3.3V interface card

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