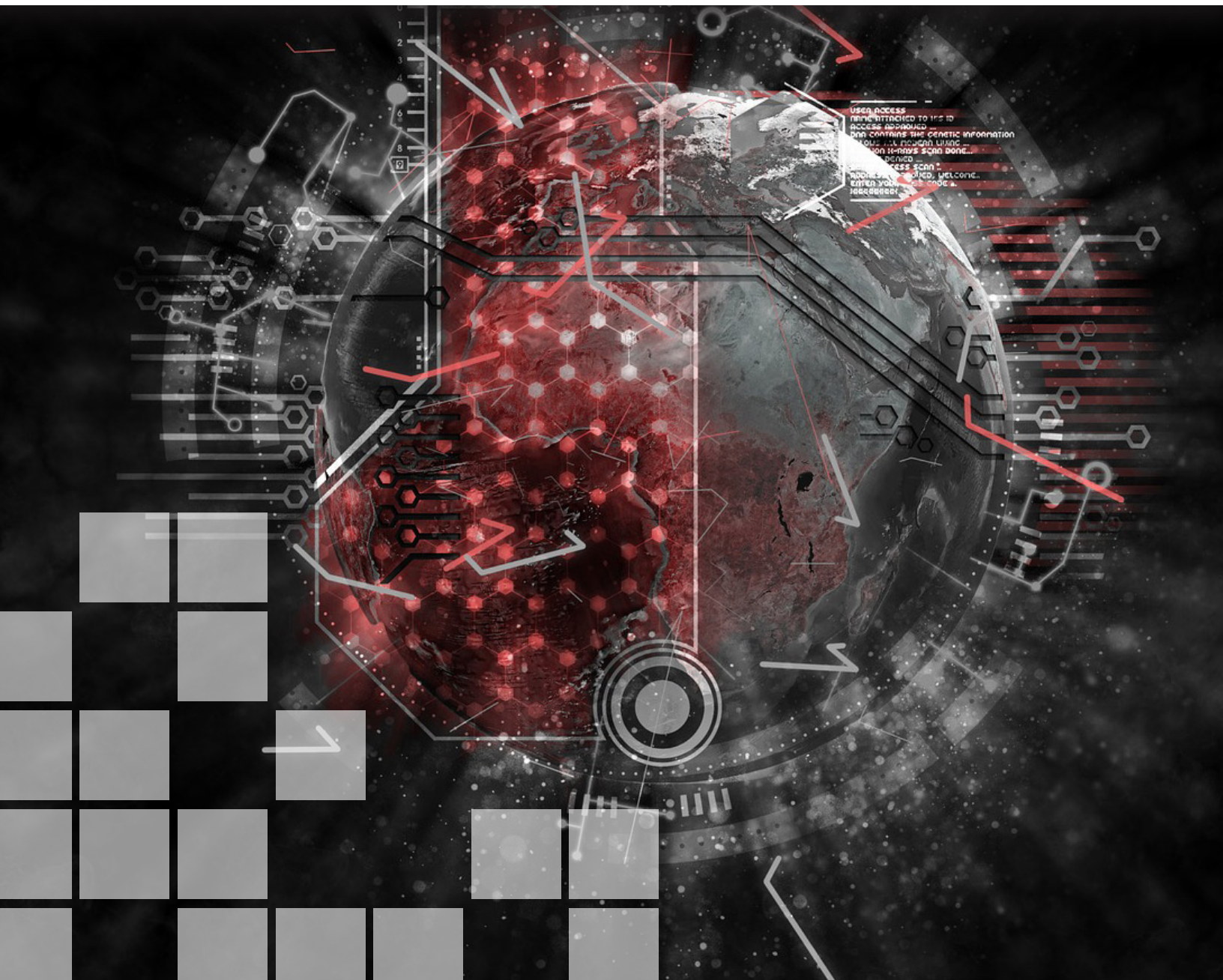


PYRAMIDSOLUTIONS

NetStaX™ EtherNet/IP Adapter DLL Kit - EIPA



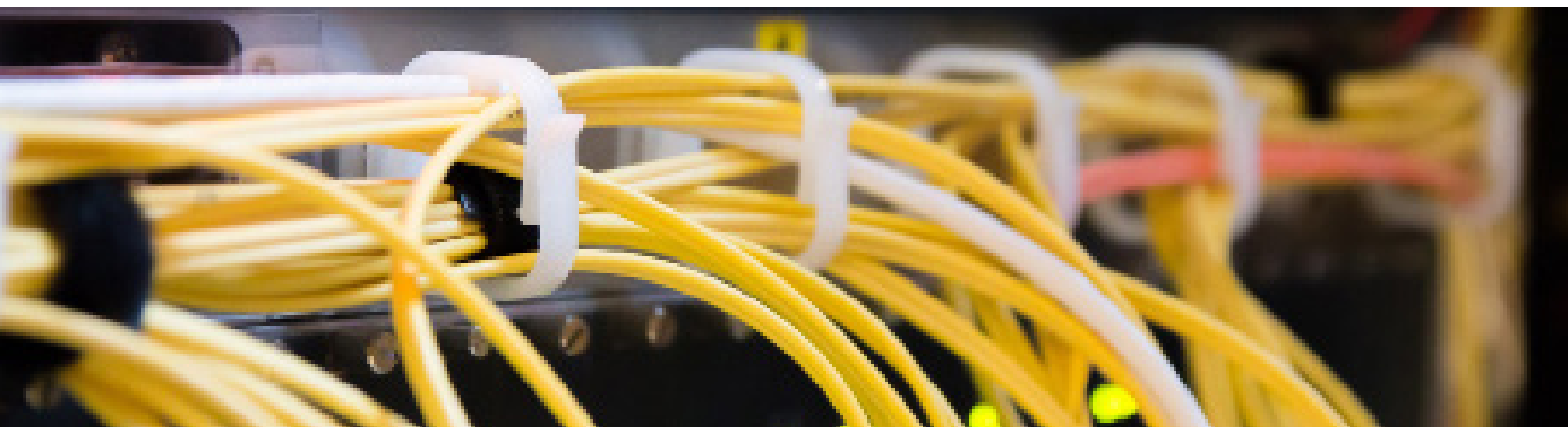
KIT OVERVIEW

OUR NETSTAX ETHERNET/IP ADAPTER DLL KIT PROVIDES THE FOLLOWING FUNCTIONALITY AND FEATURES:

- Enables EtherNet/IP Adapter Class functionality to your devices and applications
- Class 1 (I/O) implicit connection server (target)
- Class 3 (connected) explicit message server
- UCMM (unconnected) explicit message client (originator) and server
- Reads and writes Rockwell PLC tags (single or multiple) using UCMs
- Supports multiple NICs (physical or virtual)
- Provides a rich set of standard objects
- Enables the creation of user-defined objects
- Provides a logical and manageable API

EtherNet/IP[®]

NetStaX is a trademark of Pyramid Solutions, Inc.
EtherNet/IP is a trademark of the ODVA





Resource Utilization and Management:

- All resources initialized at startup
- No dynamic memory or thread allocation
- Runs on a single thread platform compatibility

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

- Compatible with Windows 7 through Windows 10
- Compatible with Windows standard WinSock TCP/IP stack
- Compatible with Visual Studio Windows/.NET with C++, C# and VB.NET examples provided
- Compatible with standard PC/Laptop Ethernet ports
- Has been used successfully across a wide range of Windows PC/ Laptop platforms and applications

Supports Objects and Functionality:

- Message router
- Connection manager
- Port
- Identity
- Ethernet link
- TCP/IP
- QOS
- Assembly
- Custom user objects
- File object
- Class 0 support
- Energy object
- CIP Security*

* The EIPA-SECURE option requires a compatible SSL library that you supply



ADDITIONAL FEATURES INCLUDE:

- Tested with ODVA CT18*
- Supports TCP/IP object revision 2
- Supports Ethernet link object revision 4
- Supports “Big 12” diagnostics
- Full support for dynamic assemblies
- Customize the number of connections, requests, etc. from build time parameters
- EIPA Adapter DLLs (32 & 64bit) with C++ function call API, C# API for .NET applications and a legacy (no longer updated) COM API for using the EIPA stack with Windows and VB6 applications
- An Adapter Class example application executable with source code that demonstrates use of the EIPA’s Adapter Class API and functionality
- EIPA Getting Started and software reference manuals
- Application notes and code examples that demonstrate specific stack features (in C++, C# and VB.NET)
- Example STC file to edit for use with your product when pre-conformance testing
- Example EDS file

* To test the latest EIPA stack, we create a pseudo-device and run the latest ODVA conformance software against the pseudo-device.

PERFORM FUNCTIONS, SUCH AS:

- Start the stack
- Establish an event callback
- Allocate a NIC
- Populate your product identity object
- Instantiate assembly instances (if operating as an Adapter)
- Check connection status
- Originate an unconnected explicit message
- Respond to an external connection
- Produce data on a connection
- Process an object request
- Stop the stack

Note: The above is an example subset of the EIPA APIs.

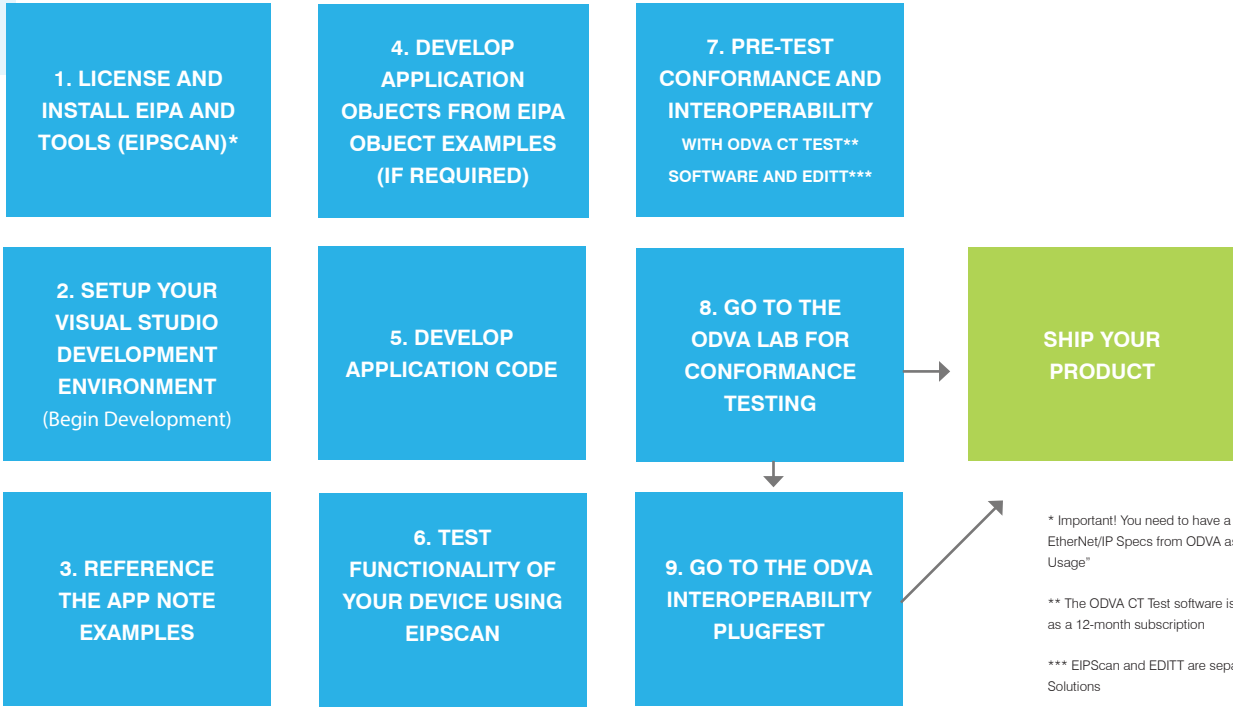
DEFINING YOUR DEVICE

When you define your device, you determine what application objects are needed to interface to the outside world for data exchange and configuration.

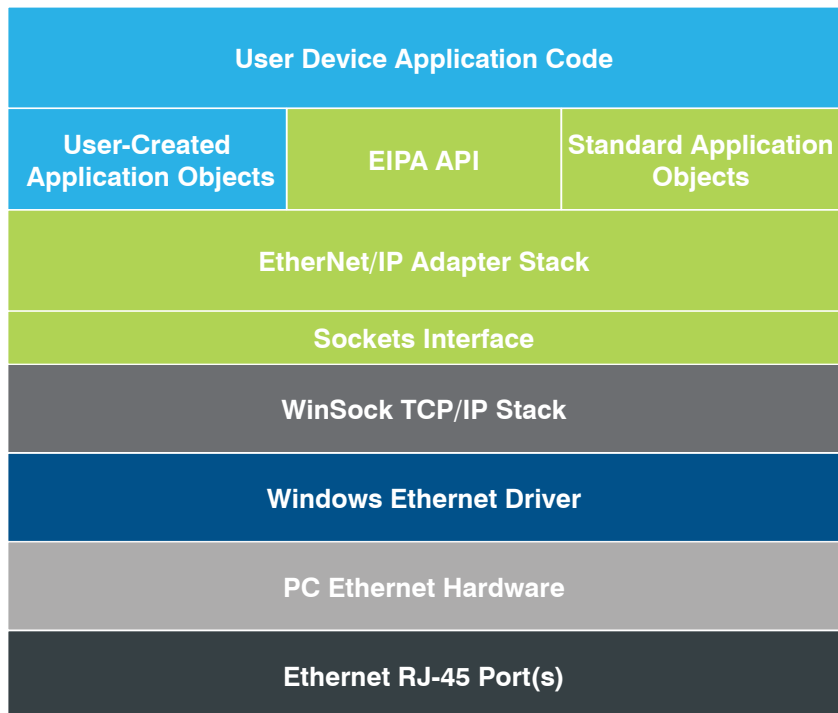
The EIPA ships with a set of standard objects, but by using the included object templates, you can create your own application objects as well. You can include these when compiling your target code and then instantiate at runtime.

You also determine what connections your device needs to respond to and any assembly instances your device needs to expose and instantiate at runtime. These features are controlled by your application code based on the configuration of your device.





ETHERNET/IP ADAPTER DEVICE HIGH-LEVEL ARCHITECTURE



NetStaX EtherNet/IP Scanner Development Kit

User-created application objects are developed using the object templates provided with the kit.

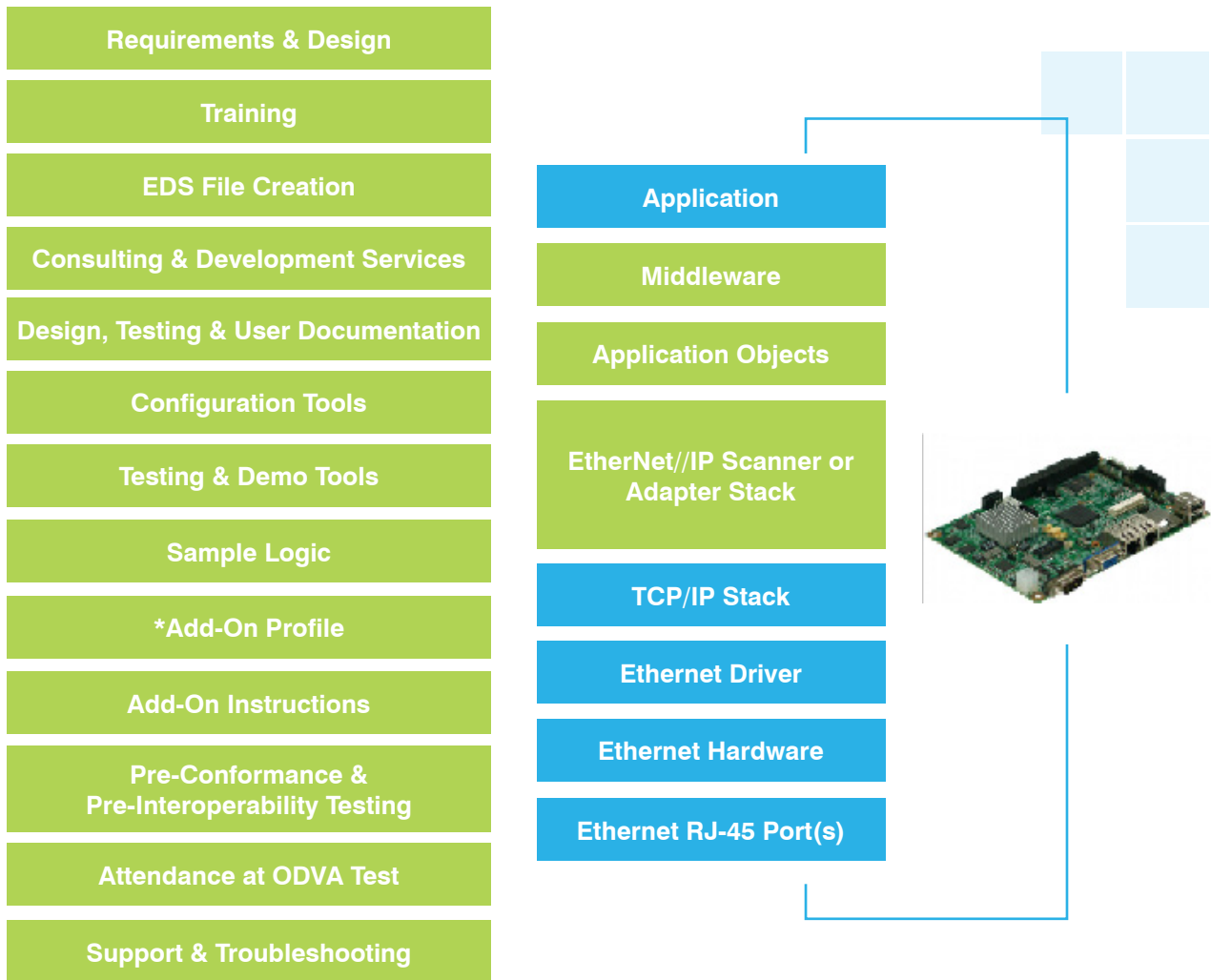
Assembly instances are dynamically allocated by the device application code at runtime from the assembly object's pre-allocated resources.

PYRAMID SOLUTIONS PROVIDES THE FOLLOWING SERVICES

- EtherNet/IP and EIPA training
- Assist in requirements and design of your EtherNet/IP product
- Expert consulting – design, development, testing and troubleshooting
- Development services – from getting you started to full turnkey development
- Configuration, simulation and test tools development
- Pre-conformance and pre-interopability testing
- Attendance of the ODVA lab test or remote support
- Extended support options

Whether you are looking for a partner to develop your EtherNet/IP product or want to do it yourself, we have services options that will benefit your project and accelerate your product to market.

Contact us today to see how we can help.



Pyramid Solutions Product & Services Options

* Rockwell Automation provides AOP services and Pyramid Solutions prepares the device properly beforehand.

IF YOU HAVE QUESTIONS PLEASE VISIT:

PyramidSolutions.com

IF YOU ARE LOOKING FOR SUPPORT FOR YOUR EXISTING NETSTAX PRODUCTS CONTACT:

productsupport@pyramidsolutions.com

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