

# SYNC-E Trunk Management Software

#### **Key Features**

- Provides SYNC-E Timing management functions
- Implements Synchronous Operation mode per G.8264
- Transmit and receives Packet Level SSM messages
- Provides timing input to NComm SSM package
- Implements EMSC channel
- Implements QL reception requirements and QL transmission requirements
- Monitors failures on SYNC-E interface that could cause timing failures
- Allows for interoperation between SYNC-E and SDH/PDH networks
- Fully Standard Compliant
- OS independent
- Pre-ported to Linux

### **Key Benefits**

- Turnkey solution
- Easy to use APIs
- Sample application included
- ANSI C Source Code
- Driver Included

With NComm's proven source code and protocol stack, you have the quality and standard compliance interfaces that you need for less cost than you can do it yourself.

#### **Product Overview**

NComm's SYNC-E TMS allows integration of SYNC-E interfaces into distribution of timing throughout the network.

The SYNC-E TMS handles the algorithms and packet-types needed to measure determine the quality of network timing delivered over a SYNC-E network interface. The interface and its quality level will be used with NComm's SSM product to determine the best quality interface to use. NComm's SYNC-E TMS conforms to ITU-T G.8264 requirements for Synchronization Status Message processing.

The SYNC-E TMS product is designed to operate in a distributed environment. Each interface will recover clocking and clock quality information and send that information to NComm's SSM product. NComm's SSM product will determine the best clock to select for global system operation.

The SYNC-E TMS product will receive SSM message so that receive clock quality can be determined. In addition, the SYNC-E interface will be monitored to detect failures that could cause the receive clock to be discarded as a possible clocking source.

After the SSM product determines the properly clock source to be used by the system, the transmit SSM message will be provided on the SYNC-E interface. The SYNC-E TMS product will manage the transmission of the packets on the interface.

The SYNC-E TMS product can also be used on asynchronous Ethernet interfaces that are operating NComm's IEEE-1588 PTP product. On these interfaces, the clock will be derived via the IEEE-1588 protocols, but the quality level will be managed per ITU G.8264.

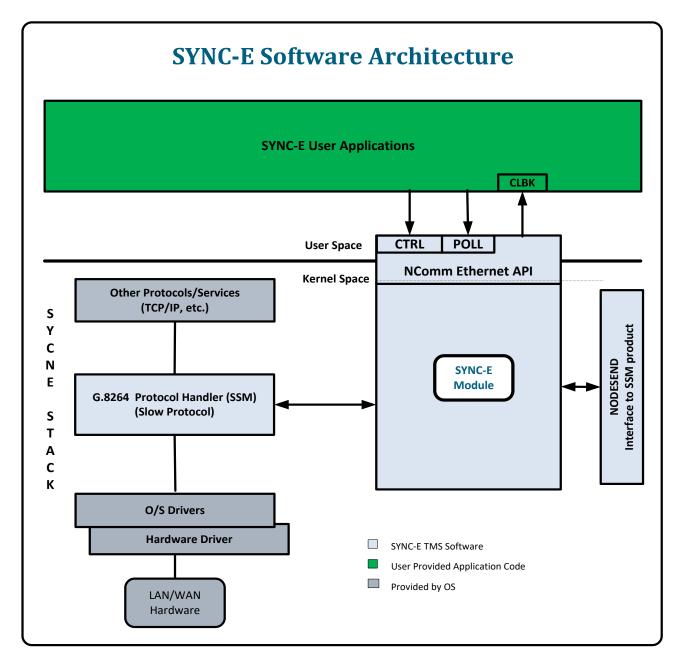
NComm's SYNCE-E TMS is supplied as ANSI C source code. User manuals, implementation training and technical support are also included with each license. A sample demo application provides functionality very quickly.

## Applications

- Routers
- Switches
- Base Stations
- Access Point
- Aggregation devices
- Test Equipment
- Embedded Systems

# **Ethernet OAM TMS Architecture**

As in the entire TMS family of OAM software, the SYNC-E TMS is architected to be hardware and operating system independent. Well-defined APIs are employed for faster first time integration and ease of reuse.



**Driver and SYNC-E Software Architecture** 

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