



### Highlights

>> Tightly Integrated Software and Hardware Solutions for WAN Connectivity and WAN Applications

>> Multi-Protocol Processing

>> WAN Protocols:

- Radar Receiver
  - CD-2
  - ASTERIX
  - NEC Radar Extractor
  - Raduga-2
- TADIL-B
- HDLC
  - ABM/LAPB
  - LAPD
  - NRM
  - SDLC
- X.25
- Frame Relay
- ASYNC

>> WAN Controllers and Adapters

- T1/E1/J1 Controllers
- Synchronous WAN Communications Adapters
- WAN/LAN Communications Servers
- Managed WAN Gateways

>> Platform Support

- PCI/PCI Express®
- CompactPCI®/PICMG®2.16

>> Supports the following

- Operating Systems:
- Linux®
  - Windows®
  - Solaris™

Performance Technologies' suite of NexusWare® WAN protocols provides all the critical pieces required for timely application development. The suite provides a wide range of WAN protocols, and is supported on Performance Technologies' line of high-performance controllers and servers. This powerful combination of software and hardware allows OEMs and System Integrators to create flexible and efficient radar gateways, converged serial gateways, and front-end I/O systems.

NexusWare WAN software products are offered both as installable software packages for NexusWare Core (a comprehensive, highly integrated, Linux® OS and development, integration and management environment) and as turn-key packages for those developers interested in the protocol package by itself. Whether the installable or the turn-key solution is chosen, developers will be provided with a well-documented and powerful API to assist the development process.

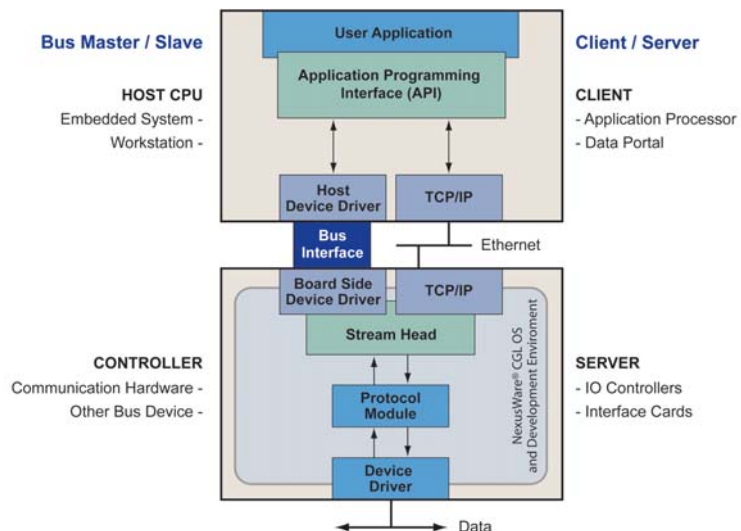
### Consistent API

All NexusWare WAN protocols include a simple, easy-to-use API, which runs on all of the WAN-specific controllers and adapters. The API provides a standard interface to the WAN protocol stacks. This makes application programs easily portable among Performance Technologies' T1/E1/J1 and serial controllers. The following routines are included:

<b>MPSopen</b>	Open connection
<b>MPSclose</b>	Close connection
<b>MPSputmsg</b>	Send a message on a connection
<b>MPSgetmsg</b>	Get a message from a connection
<b>MPSwrite</b>	Send data on a connection

<b>MPSread</b>	Get data from a connection
<b>MPSioctl</b>	Send a control message on a connection
<b>MPSpoll</b>	Monitor connections
<b>MPSerror</b>	Display system error message

The following is an architectural overview of the API:





# NexusWare® WAN

## Protocol Software

### Ordering Information

- >> **PTNXSWARE-11359**  
NexusWare® Core  
Development Environment  
and Associated Tools
- >> NexusWare® WAN Installable  
Packages:
  - **PT-NHDLCKT-12050**  
HDLC Installable Software  
Package
  - **PT-NFRAMKT-12037**  
Frame Relay Installable  
Software Package
  - **PT-NX25KIT-12052**  
X.25 Installable Software  
Package
- >> NexusWare® WAN Turn-key  
Packages:
  - **PT-HDLCKIT-11490**  
HDLC Turn-key Software  
Package
  - **PT-FRAMKIT-11661**  
Frame Relay Turn-key  
Software Package
  - **PT-X25KIT-11612**  
X.25 Turn-key Software  
Package
  - **PT-ASYNKIT-11702**  
Asynchronous Turn-key  
Software Package
  - **PT-RADKIT-11705**  
Radar Receiver and  
Synchronous Bit Stream  
Turn-key Software Package
  - **PT-TADKIT-11893**  
TADIL-B Turn-key  
Software Package

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### A Comprehensive Protocol Suite

#### Radar Receiver

The Radar Receiver protocol is used for communication with military and civil aviation radar systems. The product recognizes a number of popular radar data formats, including CD-2 (or FPS 117), Marconi 10-Bit, ASTERIX (or Alenia, Selenia, Ericsson, RDIF, RAMP), Thomson-CSF (or TPR1000 and Aircat500) and Thomson-TVT2, Toshiba, TPS-43 (Common Format), Modified Eurocontrol, General 18-Bit, NEC Radar Extractor, TPS-75, and Raduga-2. Synchronous Bit Stream Interface (SBSI), included with the radar receiver package, transmits and receives a continuous bit stream with no synchronization signal required.

#### HDLC

The HDLC is used for transmission and reception of HDLC/SDLC data frames with frame-level control, zero bit insertion/deletion, CRC generation and checking, and abort detection. It includes LAPD, ABM/LAPB (asynchronous balanced mode), and NRM (normal response mode).

#### X.25

The X.25 protocol software is a STREAMS-based implementation of the X.25 protocol suite, which conforms to ITU-T ('80, '84, and '88) and ISO specifications. It meets approval requirements for the European Telecom Standard NET2 for connecting a DTE to an X.25 (84) PSDN and for the joint US standard FIPS 100/Federal Standard 1041 for the DTE/DCE interface. Comprehensive configuration mechanisms allow the software to be tailored for operation on numerous public data networks (PDN).

#### Frame Relay

The Frame Relay is a portable, STREAMS-based product. It is designed to conform to ITU-T and ANSI specifications and to FRF implementation agreements for the Frame Relay Bearer Service. Frame Relay supports both permanent virtual circuits (PVCs) and switched virtual circuits (SVCs), and its Layer2 (DL-CORE) conforms to Q.922 and T1.618. The product supports the DLPI standard interface and has a local management interface.

#### Asynchronous Data Transfer

The Asynchronous Data Transfer (ADX) protocol allows a client (host) application to send and receive character- or block-oriented asynchronous data. Client applications use a simple API to access the ADX software resident on the controller or LAN-based server.

#### TADIL-B

The TADIL-B protocol is derived from MIL-STD-188-212, "Subsystem Design and Engineering Standards for Tactical Digital Information Link (TADIL) B," and has been modified to accommodate the Westinghouse Electric Corporation (WEC) radar protocol. The Data Link Provider Interface (DLPI) defines a STREAMS-based message interface between a data link service provider (TADIL-B) and an application program. This package can also be configured to accommodate UDL (Unclassified Data Link), Link1, ATDL (Army Tactical Data Link) and Link-11B.

#### Support and Maintenance

Performance Technologies understands every aspect of systems development, including hardware, software, integration, and deployment, and offers various aspects of technical, OEM, and end-user support to ensure successful deployments and product launches.