

# NexusWare® Core PRODUCT SHEET

## Carrier Grade Linux® Distribution and Development Tools

### FEATURES

Carrier Grade Linux® Distribution

Complete Suite of Development Tools

GUI-Based System Management Tool – NexusWare® Portal for IPnexus®

IPV6 Certification Ready

Foundation for All NexusWare® Software Products

Powerful APIs for All Onboard Hardware Resources

Application Development with Windows® or Linux® Operating Systems

Pre-Packaged Sample Applications and Protocols

Wide Range of Hardware Support:

- SBC/Compute
- I/O
- Storage
- Voice Processor

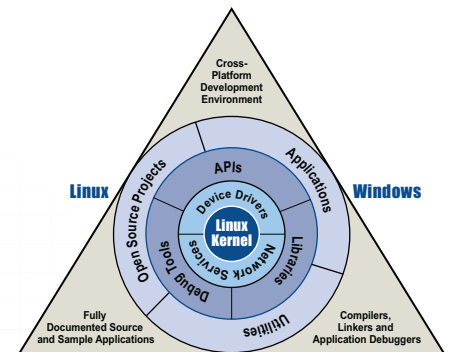


NexusWare® Core is a Carrier Grade Linux® (CGL) registered distribution that provides a full operating system on PT's hardware platforms, as well as a suite of tools for application development that is tightly coupled to PT's broad range of COTS embedded hardware solutions. This powerful combination allows system engineers, architects, and designers in the telecommunications, as well as aerospace and defense markets, to create applications and bring to market solutions such as media gateways, managed WAN gateways, lawful intercept platforms, radar servers, wireless base station controllers, HA communications systems, monitoring solutions, TDM switches, and signaling gateways and SIP servers. Installable software packages, such as NexusWare C7 (MTP2), NexusWare WAN (HDLC, X.25, Frame Relay, and others), and NexusWare SIP, provide enhancements and add flexibility to NexusWare Core.

### Development Environment

The philosophy behind NexusWare Core is to provide a common development platform and toolset that spans a broad range of hardware while raising the level at which system integration is performed. The Ethernet capabilities of PT's IPnexus® products, coupled with the strong Linux Distribution provided by NexusWare Core, offer a simple and rapid path to IP-based systems while giving developers a simplified way to design in legacy-based systems as well.

NexusWare Core features an integrated suite of carrier grade device drivers for full access to onboard resources (H.110, Ethernet, PCI, T1/E1/J1, CAS), as well as a powerful NexusWare Core API. In addition to a range of I/O and storage products supported by NexusWare Core, PT also offers PowerPC® and x86-based single-board computers that are fully supported under NexusWare Core, which provides system integrators with a single Linux distribution and tool set across the entire system.



Cross Platform Support

The powerful NexusWare Core API provides a common interface for application development and allows system integration using either Legacy bus or IP-based architectures. Additionally, NexusWare Core allows application development to occur across several different operating systems, including Linux and Windows®, which translates to greater flexibility for engineers.



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NexusWare® Core's distribution includes a pre-ported Linux® kernel, a complete suite of GNU/EGCS cross-development tools (CDT), compilers (C, C++), debuggers, profilers, libraries, and embedded tools that build software images for the embedded targets. A kernel debugger supports development of custom drivers on the target system. Utilities are included to make a bootable image in flash memory.

NexusWare Kernel Builder, included with NexusWare Core, provides a configuration tool that allows users to easily add or remove kernel elements to optimize the kernel per their requirements.

NexusWare Image Builder, included with NexusWare Core, provides full customization of the target image. This allows developers to specify the services, configuration files, and application files to be included in the onboard file system.

NexusWare® Studio™ (Eclipse-based IDE), included with NexusWare Core, provides a powerful integrated development environment for developing and debugging applications.

Also included as part of NexusWare Core is NexusWare Portal, a web-based development and management tool that provides remote management and monitoring of the company's IPnexus® MicroTCA™ systems. NexusWare Portal provides communication systems designers with enhanced system control, development capabilities, as well as serviceability of these solutions via a web-based, graphical user interface (GUI). For more information, please reference the NexusWare Portal data sheet.

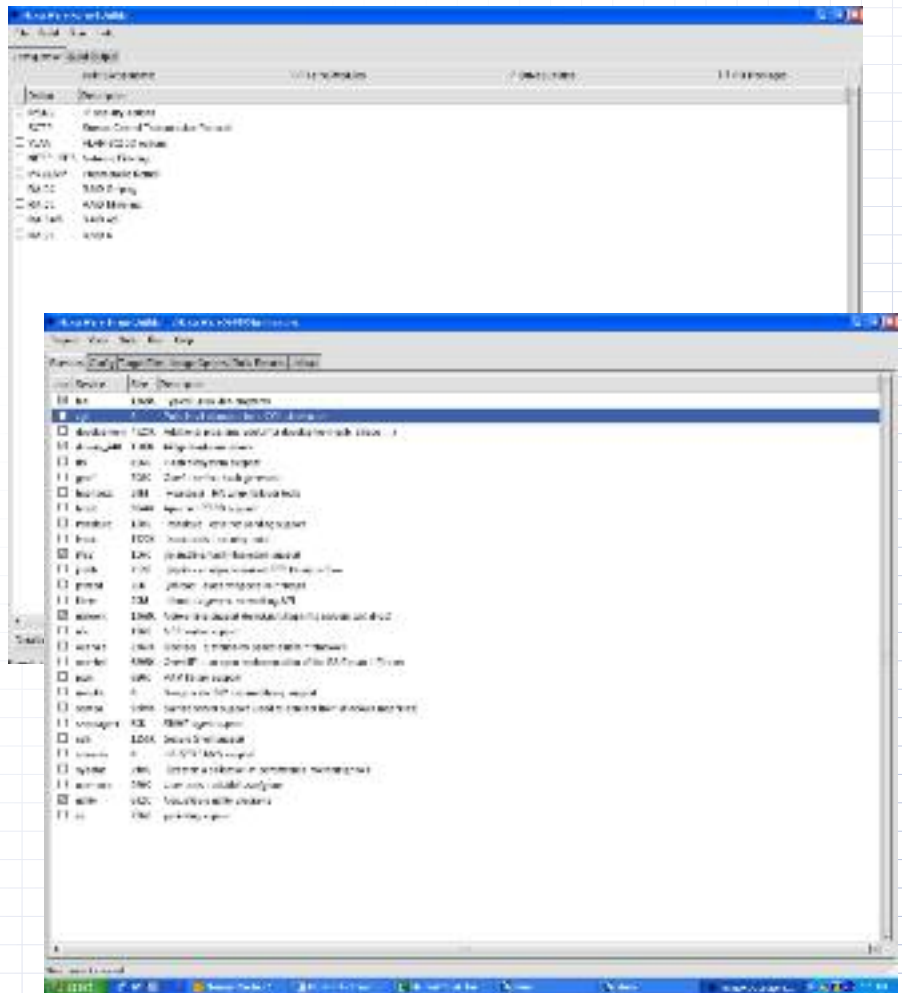
With any Linux® Distribution, general purpose software is open source and represents a lower cost solution for customers or, at minimum, a solid protocol baseline for the development of customer-specific systems. Characteristic of the Linux open source

model is the ability to easily integrate in-house or third-party software that is needed for the development of telecom, and IP telephony systems, as well as aerospace and defense platforms.

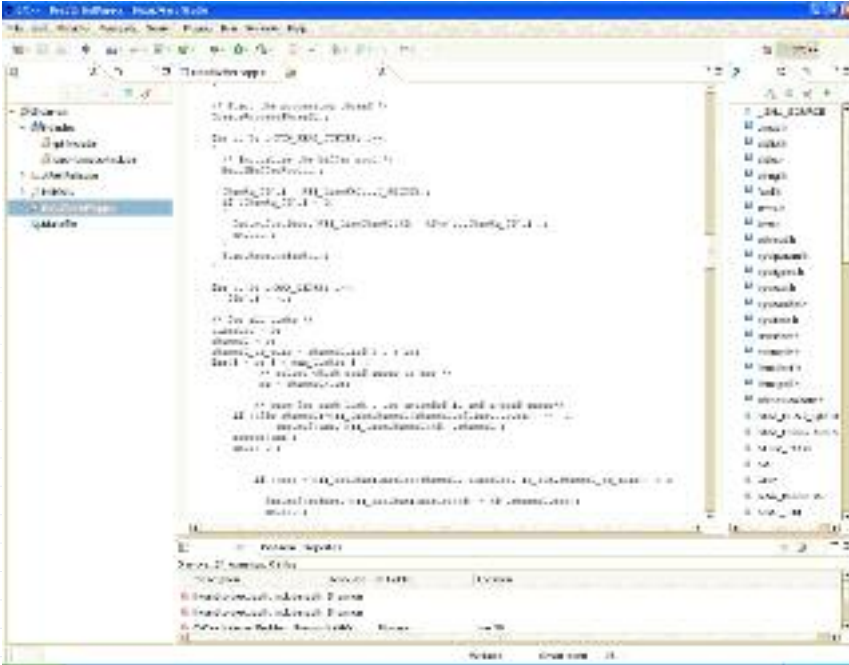
NexusWare Core's rich Linux distribution and development tools, complete with IP protocols and software tools, significantly speeds system integration and ultimately accelerates time-to-market.

VMware Player software is included, which enables NexusWare Core to be installed on Windows operating systems. VMware, the market leader in vitalization infrastructure software, provides PT with the most robust and widely deployed vitalization software available. Millions of users and more than 20,000 enterprise customers, including 100 of the Fortune 100 companies, use VMware software to virtualize their data centers.

NexusWare Kernel Builder



NexusWare Image Builder



NexusWare Studio™

## NexusWare® Core Installable Software Packages

**NexusWare C7:** Comprehensive SS7 MTP-2 installable software package for NexusWare Core. NexusWare C7 provides a foundation for building SS7 applications, including next-generation wireless and IP telephony systems, to equipment manufacturers and application developers who use PT's embedded products.

**NexusWare WAN:** Extensive offering of protocol packages that includes, but is not limited to, HDLC, X.25, Frame Relay, and Radar Receiver. Combined with PT's embedded products, these enhance the creation of flexible and efficient radar gateways, converged serial gateways, and front-end I/O systems.

The WAN software products are offered either as installable software packages for NexusWare Core or as turnkey packages for those developers interested in the protocol package by itself. Whichever solution is chosen, a well-documented and powerful API will be provided to assist in the development process.

**NexusWare SIP:** A Session Initiation Protocol (SIP) stack and API software package that enables users of the company's IPnexus® platforms to rapidly develop and deploy value-added capabilities for their communication solutions. NexusWare SIP is delivered as an installable software package and is compliant with the RFC3261 specification to ensure interoperability and effortless integration.

## NexusWare Core Support and Maintenance

PT 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 a successful deployment or product launch.

## Hardware Compatibility

### SBC/Compute

- CPC5505
- CPC5564
- CPC5565
- AMC121
- AMC122
- AMC123
- AMC131

### TDM

- CPC324
- CPC308
- PCI384
- PCE385
- AMC304
- AMC305
- AMC308
- AMC318

### SERIAL

- CPC358
- PCE335
- AMC335

### STORAGE

- CPC5900
- AMC590

### INTELLIGENT PTMC CARRIER

- CPC300

### VOICE PROCESSORS

- PMC531
- PMC532
- MB6624
- MB6108
- AMC328

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## Carrier Grade Linux® Distribution and Development Tools

### ORDERING INFORMATION

#### **PT-NXSWARE-11359**

NexusWare® Core Development  
Environment and Associated Tools

#### **Installable Packages**

#### **PT-NWC7KIT-11943**

MTP2 Installable Software Package

#### **PT-NHDLCKT-12050**

HDLC Installable Software Package

#### **PT-NFRAMKT-12037**

Frame Relay Installable Software  
Package

#### **PT-NX25KT-12052**

X.25 Installable Software Package

#### **PT-NWSIP-12237**

SIP Installable Software Package

#### **PT-NWCMANP-11820**

Annual NexusWare® Core  
Maintenance Package

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