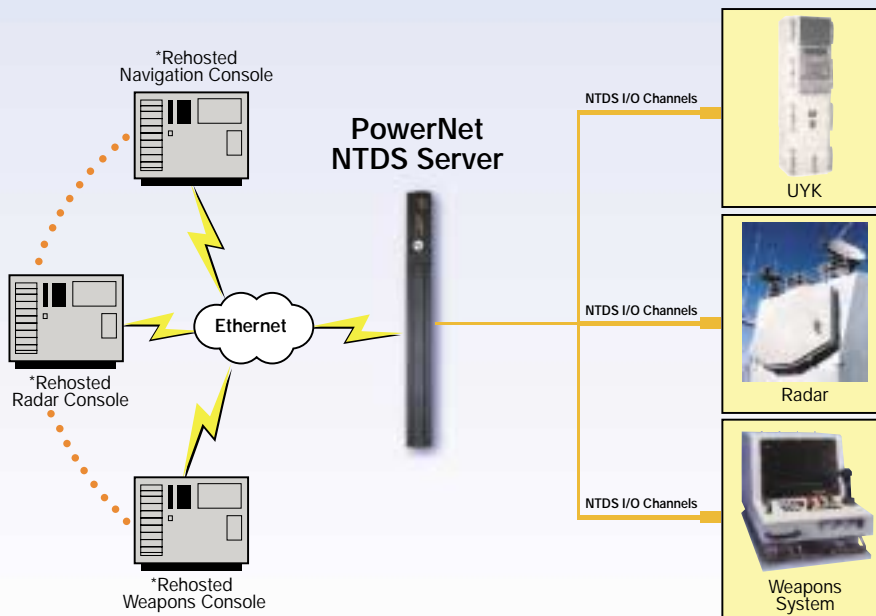*your NTDS specialist*

SABTECH INDUSTRIES

PowerNet™ NTDS Gateway

Put NTDS On The Network

Introduction

Now you can link NTDS devices to UNIX® or Windows® based systems over an Ethernet LAN, and enjoy the freedom and flexibility of sending real time NTDS data to systems that are not directly connected to NTDS I/O channels.

Sabtech's remarkable PowerNet NTDS Gateway links NTDS weapons, radar, and other systems with a variety of computers via Ethernet. It provides the real time, highly-reliable communications and control NTDS systems demand, without the bulky, costly, cable connections associated with legacy systems.

The heart of this powerful, new system from the premier provider of NTDS technology is the PowerNet™ NTDS Server. The server runs the NTDS operations with a real-time executive, so you can handle the most demanding NTDS requirements. This versatile, field-proven executive is used in tens of thousands of NTDS channels world-wide. The PowerNet NTDS server runs on a fast and reliable PowerPC platform.

An NTDS application using PowerNet runs in two parts. One part runs on the PowerNet client computer, the other on the PowerNet Server. These applications run concurrently and separately.

your NTDS specialist

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Unmatched Flexibility

PowerNet's software is as impressive as its hardware. When combined with C/C++ custom applications, PowerNet's Application Programming Interface (API) library provides a set of powerful, efficient functions that makes it easy to get your system online, fast.

Easy-to-build custom applications provide the programming flexibility NTDS users need. You can build these applications to run directly on the PowerNet server system with API calls embedded in your code. PowerNet software can be utilized to customize message processing or perform tasks that offload the main system processor.

The PowerNet API includes support for the Aegis Tactical Executive System (ATES) message protocol, greatly simplifying application development.

PowerNet NTDS Gateway supports the migration of legacy systems into the network-centric architectures for naval communications specified by Open Architecture (OA), FORCENET, Task Force Web, IT-21, and Joint Vision 2010

*Put your NTDS systems on the network with the latest technology from Sabtech,
the company that represents more than twenty years experience designing NTDS systems
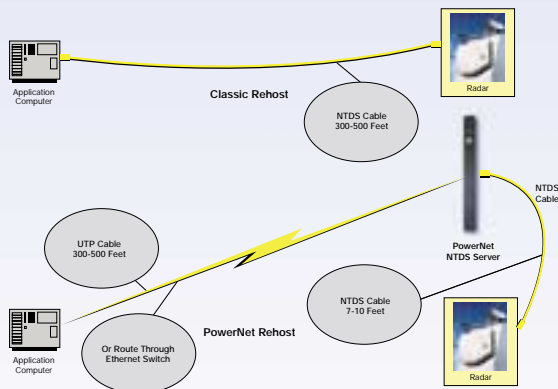and an impressive reputation for customer support.*

PowerNet™ NTDS Gateway
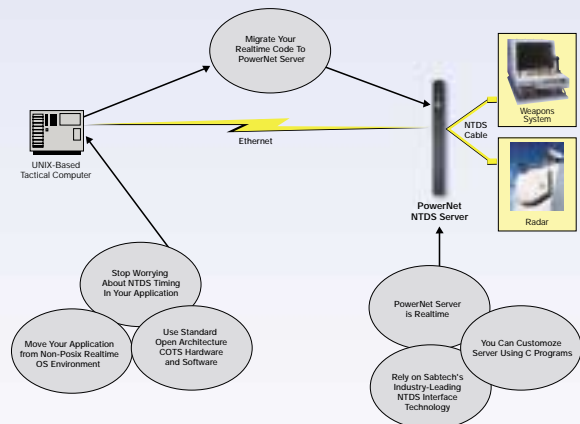
Put NTDS On The Network

There are multiple ways to leverage the power and flexibility of PowerNet NTDS Gateway:

❏ Connect networked workstations to legacy NTDS equipment (main diagram)
❏ Replace bulky, costly, NTDS cable runs
❏ Run tactical programs on non-realtime systems
❏ Support lab-based NTDS system simulators /emulators
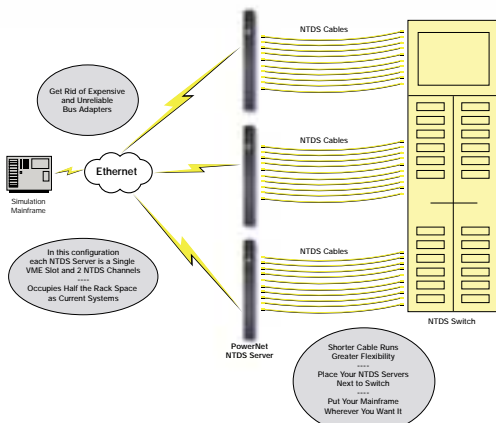❏ Use its tap capability to collect and transfer NTDS data
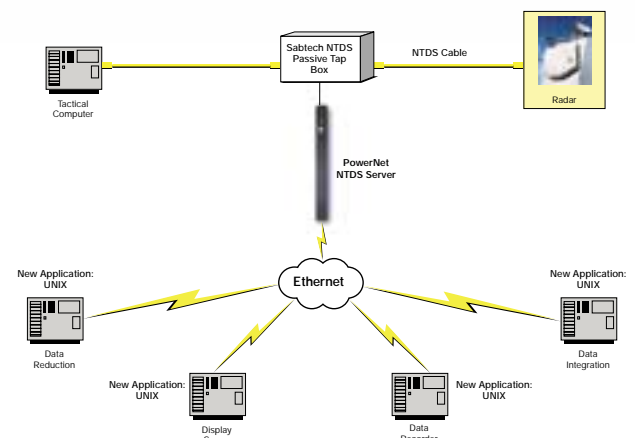
Replace Bulky, Costly NTDS Cable Runs

Application Computer

Classic Rehost

NTDS Cable 300-500 Feet

Radar

NTDS Cable

UTP Cable 300-500 Feet

PowerNet NTDS Server

NTDS Cable 7-10 Feet

PowerNet Rehost

Application Computer

Or Route Through Ethernet Switch

Radar

Run Tactical Programs on Non-Realtime Systems

Migrate Your Realtime Code To PowerNet Server

UNIX-Based Tactical Computer

Ethernet

NTDS Cable

Weapons System

Radar

PowerNet NTDS Server

Stop Worrying About NTDS Timing In Your Application

Move Your Application from Non-Posix Realtime OS Environment

Use Standard Open Architecture COTS Hardware and Software

PowerNet Server is Realtime

You Can Customoze Server Using C Programs

Rely on Sabtech's Industry-Leading NTDS Interface Technology

Great for Lab-Based NTDS System Simulators/Emulators

NTDS Cables

Get Rid of Expensive and Unreliable Bus Adapters

Ethernet

Simulation Mainframe

NTDS Cables

In this configuration each NTDS Server is a Single VME Slot and 2 NTDS Channels
----
Occupies Half the Rack Space as Current Systems

NTDS Cables

NTDS Switch

PowerNet NTDS Server

Shorter Cable Runs Greater Flexibility

Place Your NTDS Servers Next to Switch

Put Your Mainframe Wherever You Want It

Tap Critical NTDS Data Directly to Network

Tactical Computer

Sabtech NTDS Passive Tap Box

NTDS Cable

Radar

PowerNet NTDS Server

New Application: UNIX

Ethernet

New Application: UNIX

Data Reduction

New Application: UNIX

New Application: UNIX

Data Integration

Display Server

Data Recorder

your NTDS specialist
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PowerNet™ NTDS Gateway

Put NTDS On The Network

Features
❏ Provides an NTDS to Ethernet bridge. Transfer combat system data via ethernet between any ship or land based system
❏ Can be configured for any combination of NTDS Parallel (A/B/C/H) or NTDS Serial (D/E) for up to 2 channels per server
❏ Collect & transmit data using the built in NTDS passive tap capability on the PowerNet server
❏ Real time trace capability
❏ Server can be upgraded in the field
❏ Remote configuration & communication with the server
❏ Multi-platform client API library

Specifications
The PowerNet NTDS Gateway includes:
❏ Client Software with choice of:
  - UNIX
  - LynxOS
  - *Windows 2000/XP
❏ PowerNet NTDS Server (PowerPC based)
Available in a VME or Rackmount Form Factor
  - 2 Ethernet ports
  - 2 NTDS channels – Choice of Parallel or Serial
*Check with factory for availability

Ordering Information
The PowerNet NTDS Gateway can be configured for any combination of NTDS Parallel (A/B/C/H) or NTDS Serial (D/E) for up to 2 channels.

Product Name	Part Number (Choose your configuration)			
PowerNet NTDS Gateway	PX-P N N= 6 U VME Form Factor	X X= # of NTDS Serial D Channels	X X= # of NTDS Serial E Channels	X -00 X= # of NTDS Parallel ABCH Channels

For additional configurations please contact a Sabtech sales representative at 714.692.3800 or sales@sabtech.com