

# Network Server

Smart Grid command & control center for  
the Tantalus Utility Network



The Network Server interfaces with backoffice applications. Data is delivered in standard formats so that integration with other applications is hassle free, including Milsoft DisSPatch and NISC iVUE Outage Management Systems. This allows a utility to leverage data and use it to make prompt, insightful operations and business decisions.

It is also a central repository for data collected from TUNet-enabled meters and infrastructure apparatus. Data is backed up to a secondary hard drive and can be exported to remote drives and servers for the highest levels of security. The system can be synchronized with standard routines to ensure a high level of data redundancy.

The web server presents TOU consumption measurements, outage alerts and other operational data securely via a common web browser. Easy access to up-to-the-minute usage information enables a utility to closely monitor consumption and performance. Web server technology is incorporated into the Network Server to simplify the data presentment process, facilitate information sharing within the utility, and avoid software licensing costs as users increase.

Commands can be sent to field devices to allow customer service and operations staff to monitor power quality, voltage and outage/restoration status as well as perform off-cycle reads. It can also be used as the basis for customer signaling, online billing and web-based conservation and cost containment programs.



The Network Server is a high-performance, multi-application computer system that processes, routes and stores incoming data, and issues outgoing commands within TUNet – the Tantalus Utility Network. It is built for full Smart Grid functionality, including Advanced Metering (AMI/AMR), Distribution Automation (DA) and Demand Response (DR). It provides the rapid and reliable two-way communications needed for dynamic billing programs and other advanced applications such as load management. It also enables technicians to remotely configure and maintain meters, add softkeys or other device-specific capabilities, change firmware in some devices, and program infrastructure apparatus. The Network Server is a packaged product suite that includes an application server, a database server, a web/presentation server and the operating systems for this hardware. Versions are available to meet the requirements of small or large utilities as well as the operational needs of single or multi-commodity enterprises.

## TANTALUS ADVANTAGES

- Controls, routes & stores all inbound and outbound data on TUNet network
- Designed for advanced Smart Grid functionality including AMI, DR and DA
- Scalable to support 10,000 residential meters up to 1 million or more
- Routes data to multiple departments (engineering, operations, customer service) and/or utilities (electric, water, gas)
- Open systems – flat file ASCII, ODBC, XML – for integration with billing, engineering and customer service applications
- Easy report generation through popular applications such as Jasper, Crystal Reports and Excel
- Event-driven network; immediately notifies staff of outages and voltage swells, sags, and blinks via on-screen event monitor
- Outage alerts issued via email, cell phone and/or pager to on-call utility staff
- Web browser interface provides staff with easy access to data and opportunity for utility to present bills & usage reports online
- Over-the-air reprogramming enables utility to change metering parameters quickly and remotely
- Fast report generation with built-in support for graphs, charts & diagrams; exportable to PDF and CSV files
- Central repository for all data collected from endpoints
- Configurable backup options to ensure high data redundancy

### Systems Integration

- Capable of interfacing with a variety of third-party applications including MDM, CIS, Billing, OMS, LMS, GIS, MV-90
- OMS integration via MultiSpeak 3
  - Milsoft DisSPatch
  - NISC iVUE

### Connectivity

- Connects to TUNet Network Controllers through TCP/IP (microwave, fiber-optic cable, 10/100 Ethernet and ADSL)
- Connectivity options include dial-up (for low-density areas), fiber or WiFi

### Computer & Peripherals

- HP servers
- Linux operating system
- Oracle database

### Environmental

- Suitable for standard office or server environments

### Approvals / Standards

- FCC for CFR Title 47 Part 15b

