

Theseus

The Tactical Management System

In the modern theatre of operations, an effective, secure communications network is essential for swift and decisive deployment of assets. With a growing range of off the shelf network capable communications equipment, the management system is the keystone for achieving integrated capability.

Theseus is the most advanced tactical management system in the world today. Feature rich yet simple to use, Theseus provides

an integrated suite of powerful, state of the art management tools. A single application links Strike, Fleet and Land, helping to deliver Network Enabled Capability to realise the true potential of any military force.

Theseus supports network management from the initial creation of ORBAT through generation of system initialisation data to real time monitoring of the fielded deployment.

Benefits of Theseus

Flexible toolset

- Modular design allows customers to select the exact functionality required
- Solution adopted makes Theseus easy to upgrade through COTS/MOTS
- Product is continually upgraded in house to ensure it remains the leading tactical management system available

Simple and intuitive to use

- Designed specifically for military users, recognising low training burden as a requirement

Training solutions

- Range of training packages available, including emulation of managed equipment, allowing classroom training of online monitoring and control functions

Integrated solution

- Theseus is a fully integrated, seamless application with full tactical capabilities, ensuring a consistent look and feel
- Costs to customers greatly reduced compared to a multiple application solution since software integration has already been carried out

Support packages

- Cost effective support options offered

Proven track record

- Currently in service with the British Army. Other nations have ordered product



Theseus Toolset

Deployment Planning

- ORBAT definition tools using APP6A symbology
- Radio propagation and coverage modelling
- HF Propagation Prediction
- Rapid Path Profile Analysis
- Radio Coverage maps
- Line of Sight maps
- Highpoint maps

Cryptographic Key Assignment

- Automated wizard guides user through cryptographic key assignment, based upon a key holdings database

Equipment Specification

User can define library of platform equipment fits then fine tune settings including:

- Radio sensitivity
- Harmonics
- Intermodulation products
- Quietened channels
- Antenna gain
- Feeder loss
- Antenna coupler loss
- Computer port availability
- Supported applications

Frequency Assignment

- Automated process (through wizard). Modes supported include:
- STANAG 4203 (HF Fixed Frequency)
- STANAG 4204 (VHF Fixed Frequency)
- STANAG 4292 (VHF Clear Hail Mode)
- STANAG 4538 (HF 3G ALE)
- Mil-Std-188-144A Appendix A (HF 2G ALE)
- Fast Frequency Hopping
- Optimisation algorithms maximise frequency reuse whilst minimising cosite and farsite interference

Network Planning

- Wizard automatically assigns IP addresses, subnet addresses and SNMP community names to all IP capable equipment
- Planning of internets, including IP networks and their interconnectivity. Supports meshing of IP subnets regardless of underlying bearer networks
- Planning of network services, including planning of DNS (users, servers and DNS domain hierarchy) and DHCP servers

Fill Data Generation and Distribution

- Automated generation of equipment initialisation data
- Fill regeneration after post fielding replanning
- Distribution of fill data and initialisation of equipment using Theseus Initialisation Manager software. Software allows Windows CE® PDA or a Notebook with Windows XP® to be used as a Fill Gun

Compatibility

- Compatible with secure digital HF, VHF and UHF radios from several major manufacturers
- Theseus can easily be integrated with new radio types

Wide Area Network and Internetwork Topology Monitoring

- Radio physical location (via GPS infeed)
- Network topology (via SNMP - RFC 1157)
- Traffic Monitoring (via Remote Monitoring Probes - RFC 1513)

Situational awareness

- Real time display of communication asset deployment

Local Area Network Management

- Identification of cabling configuration
- Monitoring and control for radios, computers, routers, switches and printers
- Automatic alerts when equipment fails or is disconnected

GIS Functionality

- Compatible with range of vector and raster map data formats including VMap, DTED, ESRI Shapefiles, BMP, TIFF, GeoTIFF, IMG, JPEG, GIF
- Multiple map layers allowed. Aerial photography overlay supported

Self-diagnostic application

- Checkers automatically inform users of human errors in planning processes

Reporting

- Automatic generation of pre-formatted reports in HTML or XML

Minimum System Specification:

Management Terminal

PIII 800 processor (or equivalent)

512 Mb RAM

5 Gb Hard Drive

1024 x 768 pixels resolution

Operating System - Windows XP® or Windows

2000 Professional®

Fill Device

Windows XP® or Windows CE®

FOR MORE INFORMATION CONTACT:

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