

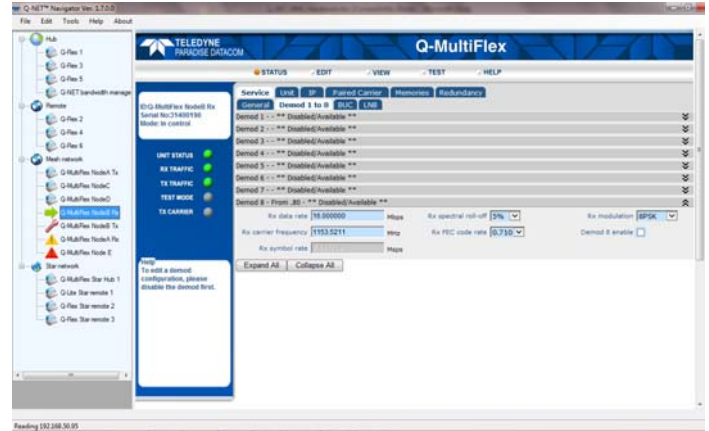
OVERVIEW

Q-NET™ is a scalable satellite communications system that supports point-to-point and point-to-multipoint networks.

Q-NET™ has two complementary NMS components:

- **Q-NET™ Bandwidth Manager** provides multi-satellite/transponder carrier planning and high-level system control, monitoring, recording and quality-of-service reporting. It runs on a server and supports any number of remote clients. It also supports a transactional database that stores all system configurations and events. It supports full backup redundancy, which can be in any location.
- **Q-NET™ Navigator** allows all modems (and other network devices) in the system to be controlled through a single application. It provides control over all modem and multi-demodulator functions, using an easy-to-navigate site map.

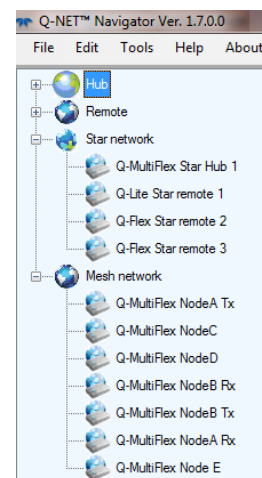
The two NMS applications can be used together or in isolation from each other. The Bandwidth Manager is typically used by power users and in larger systems that require extensive high-level planning and coordination. Navigator is suited to day-to-day 'hands-on' operational control activities.



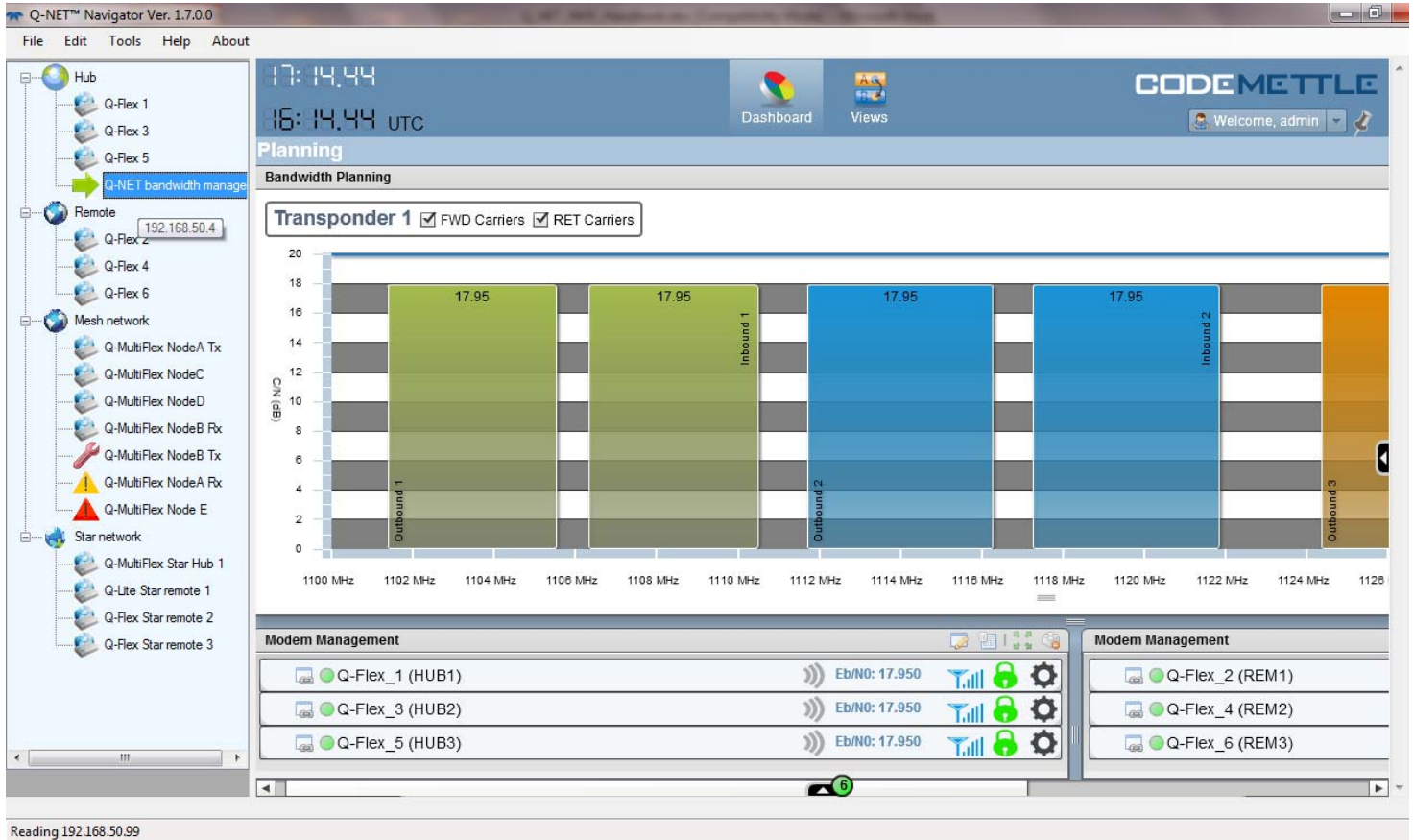
Q-NET™ Navigator's web-based user interface.

NETWORK VIEW

Q-NET™ Navigator allows the user to enter details of all network devices and arrange these into an easy-to-use navigation tree. Clicking on a network device brings up a control interface for that device, which can be used to control every aspect of device operation.



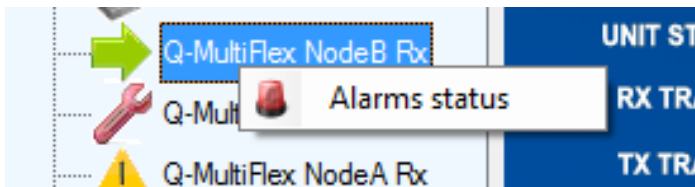
Navigator's intuitive user interface allows access to any network device in one mouse click.



Reading 192.168.50.99

STATUS MONITORING

All devices are polled continuously for their status, which is reflected in the icons used in the navigation tree, giving the operator an instantaneous visible indication of any alarms in the system. The operator can drill down to find the specific details of alarms.



Alarm Name	Status	Level
Rx fault: Demodulators unlocked	Off	Fault
Rx fault: FEC Decoder synchronisation lost	Off	Fault
Wanted Rx input power out of range	Off	Warning
Composite to wanted power level ratio	Off	Warning

Navigator supports system-wide status monitoring and easy access to multiple levels of detailed alarm reports for individual network devices.

Running Q-NET™ Bandwidth Manager within Navigator, creating a fully integrated 'all-in-one' NMS that supports all activities from carrier management, system monitoring and QoS reporting to routine remote device software upgrades.

FEATURE HIGHLIGHTS

- ▶ Full control of all network devices from a single multi-operator application, using an intuitive network navigation tree
- ▶ Continuous status polling and alarm reporting for all network devices
- ▶ Secure login and secure network M&C communications
- ▶ Network access can be tailored to reflect different operator roles
- ▶ Simple integration and control of third-party network devices
- ▶ Supports all Paradise modems (point-to-point and point-to-multipoint)
- ▶ No fee, no annual maintenance!