



Unix Based SCADA Software Sitewatch™ NX

SITEWATCH™ NX OVERVIEW

Sitewatch™ NX is a high performance, high availability, Supervisory Control And Data Acquisition (SCADA) Master Station software package which runs on various architecture platforms (SUN Sparc, DEC Alpha, X-Terminals etc). Sitewatch™ NX Master Stations can be configured for stand alone operation with single or multiple displays, or working as a node on a network or in a fault tolerant configuration with other Master Stations.

OPERATOR INTERFACE

The Sitewatch™ NX Human Machine Interface (HMI) is designed for simple, intuitive and consistent operation over a wide range of field equipment, allowing the operator to quickly assess process conditions and rapidly respond to changes. The HMI uses a mouse as the operator pointing and control device and high resolution active colour graphics displays via the acclaimed ILOG views to indicate dynamically the status of the remote site equipment. The display area has a number of dedicated non-overlapping panels which are used for system alarms and events, operator log-on, screen navigation and for mimic displays. Sitewatch™ NX uses an advanced 'drag and drop' facility which provides a direct navigation route from an alarm displayed in the Alarm and Event panel to the relevant mimic diagram. Mimic displays are configured in a logical hierarchical format with the operator log on, notepad and on line help always accessible.

SOFTWARE ARCHITECTURE

Sitewatch™ NX takes advantage of the proven advances in hardware and software technology to harness the performance and reliability of distributed computing architecture. Sitewatch™ NX's distributed software base uses a high performance, network transparent 'software bus' which is built using the inter-processor and client server features of the operating system. The active object oriented database encompasses all data and rules relating to a point, significantly increasing data throughput and reducing system response times. The object management service incorporates historical data storage and retrieval as an integral part of the service. Data can be displayed dynamically on active mimic diagrams, graphically as trends or in tabular form as process reports. Sitewatch™ NX can co-reside and exchange data with other compatible software packages on a common network, allowing data analysis and report generation using the customers standard database or spreadsheet software.

CONFIGURATION

Sitewatch™ NX provides the user with a powerful set of configuration tools which are designed to minimise configuration times and to ensure that the final configuration is validated and fully documented. Extensive features are incorporated for on or off line configuration of animated mimic displays, statistical analysis, mathematical functions, data import and export and communications with other system components.

SYSTEM COMMUNICATIONS

Sitewatch™ NX Master Stations communicate with Remote Terminal Units (RTU's), Programmable Logic Controllers (PLC's) or other intelligent equipment over dedicated lines, Radio, Microwave or Fibre Optic Links or Switched Telephone Networks using a multi-layered communications protocol with error checking at each level.

SPECIFICATIONS

MAIN SYSTEM FEATURES

- Multi-Protocol/Multi-Port Data Acquisition Service (DAS)
- Interface to RTUs, PLCs and other intelligent devices
- Operator Interface via Keypad, Mouse and Touch Screen
- Report By Exception (RBE) system logic - rapid system refresh
- Networking of multiple hosts to allow load sharing/redundancy
- Multiple printer support - Alarm/Event printer and System Printer
- Open Database Connectivity (ODBC) Compliant
- System Configuration is a fast and simple methodology within the Sitewatch NX system

SYSTEM SOFTWARE FEATURES

- Object Oriented Database
- User configurable areas of responsibility
- Alarm/Event Summary Panel
- Swift navigation from Alarm/Event text to relevant graphics display
- Alarm Pop-ups
- Trends - up to 12 pens per page
- Trends - ability to compare current with historical trend
- Trends - pan and zoom feature
- scaling of analogue inputs into engineering units
- Active hierarchical symbols