

**You don't know it yet,** but adding business critical IT devices (servers, routers, hubs, printers, etc.) over the past six months increased the demand on your power load well beyond what the original design plans estimated. To make matters worse, the power usage varies due to weekly schedules and high processing times.

**Wednesday 2:00 pm:**

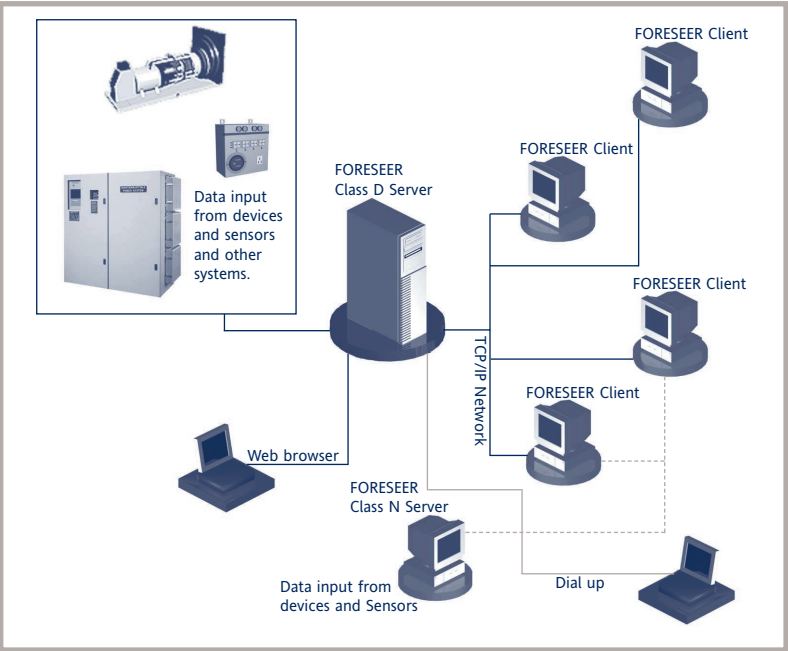
Yet another new cluster of servers has been added creating additional power demand exceeding your Uninterruptible Power System (UPS) output rating, but only during peak processing times.

**Friday 10:00 am:**

Your weekly printing peak begins just as the new air conditioner for the new servers comes on line. The increased demand placed on your UPS has just exceeded the rated capacity causing the system to automatically switch to "bypass". This situation has placed you in a position where there are no good choices: a) leave your UPS on bypass thereby exposing your entire critical load b) shut down your time sensitive printing jobs or c) turn off your air conditioning unit which will cause the temperature to rapidly rise in the new server area.

**Friday 10:15 am:**

Your vice president is calling to find out what you intend to do about the situation.



FORESEER Architecture

**Your ability to avoid this type of situation by preempting crisis depends solely on the monitoring system you have installed to help you pro-actively manage your critical site.** More than ever, the availability of your information and communications technology depends upon the functional integrity of your critical facilities infrastructure – power systems, environmental equipment, safety and security systems.

DataTrax System's FORESEER® is the ultimate solution to pro-actively monitor and manage critical facilities infrastructure. Regardless of manufacturer, from uninterruptible power systems, air handlers and battery monitoring to simple temperature/humidity sensors, FORESEER monitors them all. FORESEER'S unique interface capability and unparalleled performance analysis tools deliver the information you need to identify dangerous trends, execute corrective action and prevent failures. Information comes across clearly and intuitively via the most advanced graphical user interface (GUI) available.

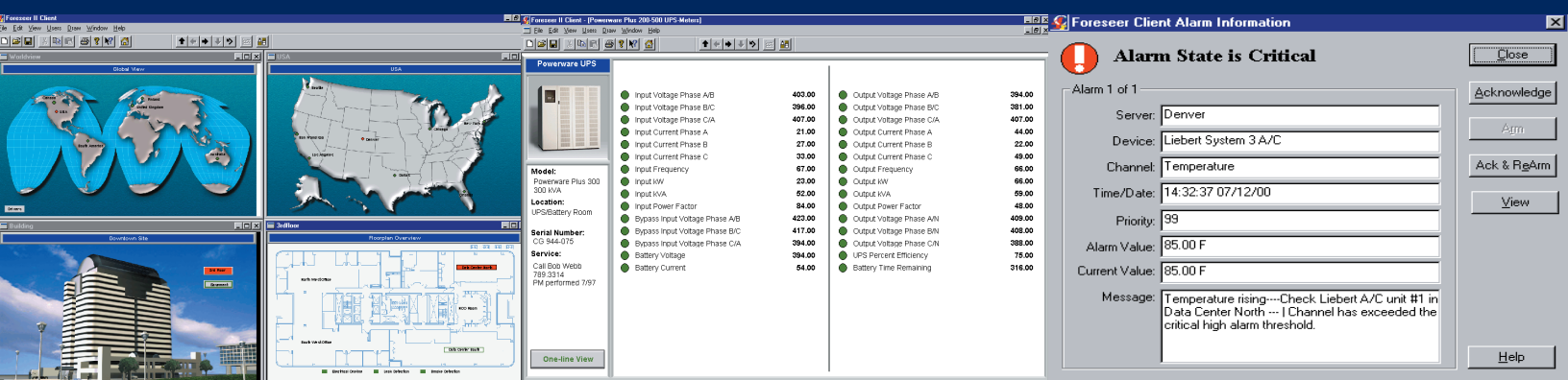
**Distributed and Scalable Architecture.**

A FORESEER system can be designed for monitoring an individual site with thousands of data inputs or a distributed enterprise with hundreds of remote sites all monitored from a central operations center. The Client software provides the graphical interface creating a "virtual enterprise" view into all sites equipped with a FORESEER Server. The Servers software provides for the data acquisition and storage at the site. The FORESEER Server software comes in three classifications:

- ▶ Class D Server Software- designed for the larger data or communication centers.
- ▶ Class N Server Software- designed for smaller IT or network sites.
- ▶ T Module-a hardware/software module designed for very small communications sites.

These various classes of FORESEER Server software can be deployed throughout all critical sites of various sizes and locations and connected to the FORESEER Client software at local, regional and global operations for a complete enterprise management solution.

- **Enterprise/Site View.** The FORESEER Client provides the graphical access to the FORESEER Server which acquires the data from equipment and sensors at each facility. The Client can be configured for an individual site or a Global view with access to hundreds of sites. Site floor plans can also be imported allowing for easy identification of equipment location.
- **Equipment View.** Users can drill down at the FORESEER Client to access individual equipment views presenting the real time data and status as received from the device through intelligent interfaces called Device Drivers. All monitored data can be viewed and color-coding provides quick references to the state of each data point.
- **Alarm Information View.** Alarm events are easy to understand and respond to through the use of detailed screens that display all event data and provide user messages to ensure that proper procedures are followed for each alarm event.



- **Enterprise/Site View**
- **Equipment View**
- **Alarm Information View**

**Site Integration**

Data inputs to the Servers are typically accomplished through software interfaces called Device Drivers. DataTrax offers an extensive library representing most major manufacturers of power and environmental equipment as well as many subsystems such as fire, security, fuel, and building controls. From uninterrupted power systems to air conditioners, generators, chillers, and leak detection systems – DataTrax’s multi-vendor device driver library delivers the necessary software to ensure a high level of intelligent connectivity and data retrieval.

**Enterprise Integration**

FORESEER Class D or N Servers, and the T Module can provide the right level of connectivity for all your sites from the largest data centers to hundreds of remote telecommunications sites. All sites can view their data locally and from a central network operations center (NOC). With network, dial up, and web access, you will always be in touch with your mission-critical operations anywhere, anytime.

**Virtual Site Views**

FORESEER makes it easy to set-up graphical views to accurately depict your site. Authorized users, enterprise-wide, can personalize FORESEER "views" based on individual preference. Both graphics and views are conveniently modified on-line without having to interrupt monitoring functions – there is no penalty for keeping your FORESEER system up-to-date. FORESEER'S view editor includes an extensive drawing capability and lets you import CAD files, logos, photographs and other scanned images.

**Standard Equipment**

Pre-configured software views for all Device Drivers, display real time data . Both alarm status and meters values are available. Metered channels can be graphed instantaneously via the click of a mouse for up to three years on-line. Other information such as model number, location, serial number, and service information of the device is also displayed.

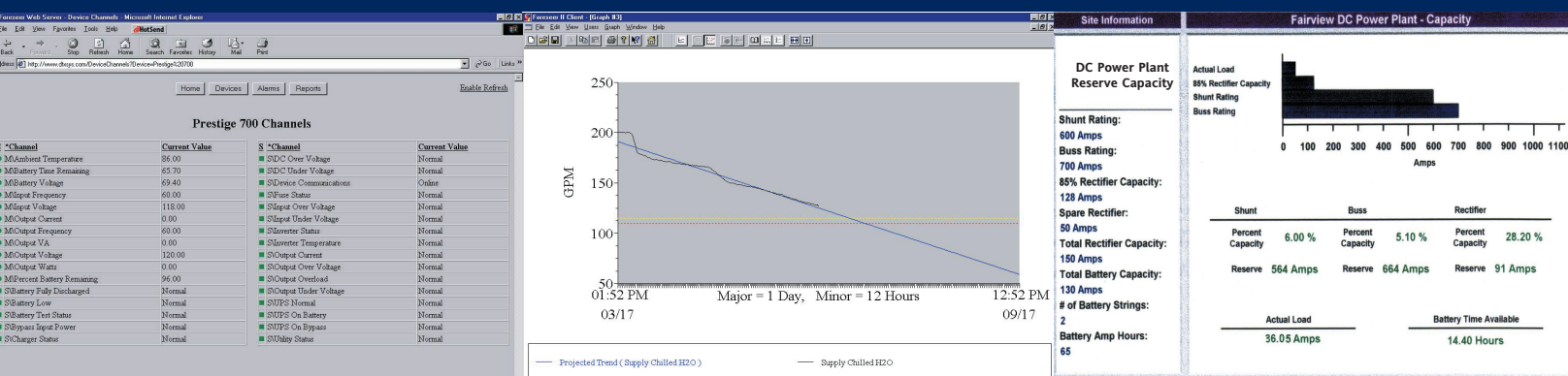
**Alarm Notification**

FORESEER arms you with the most advanced alarm management capabilities available. A stoplight color scheme tells you at a glance if you have a problem and the level of severity. Green indicates a normal condition, yellow indicates a cautionary condition, and red indicates a critical alarm. Monitored points can be assigned four alarm thresholds with specific instruction for each condition and a predetermined escalation procedure. Smart alpha-numeric paging, e-mail, and ASCII output with pre-determined call escalation lists, sorting, filtering, and broadcasting are some of the functionality found within FORESEER'S Message Manager. Alarm messages with operator instructions can even be automatically sent to a network management system for management of events for both IT and facilities on a single platform.

► **Web Browser View.** FORESEER Servers can be accessed by way of the Internet . The built in web browser is designed for real time updates for data, reports and alarm management information.

► **Data Graph View with ProGraph™.** Graphing data at the FORESEER Client is quick and easy. The time axis is selectable through menus and up to twenty data traces can be plotted on a single graph. The unique Pro-graph feature plots historical data into the future making it easier to see just when a problem may occur.

► **Custom Data View.** Once the data is stored at the FORESEER Servers, the Client can be configured with specialized data views to offer both historical and real time information on important site data such as power and cooling capacity, power density (watts/sq.ft.), cooling load levels, power allocation by branch circuit and much more.



► **Web Browser View**

► **Data Graph View with ProGraph™**

► Custom Data View

## Web Browser Access

The FORESEER Servers can be viewed on the internet through a web browser by entering the Server's IP address. This will permit remote viewing of all data "real-time" as well as allowing reports and alarm management capabilities. The web browser supports access through Personal Digital Assistants (PDAs) and wireless communications.

## Data – Analysis

FORESEER delivers accurate and complete information, empowering you to manage your power and environmental systems pro-actively instead re-actively. Up to three years online data and an array of performance analysis tools ensure that you have the information you need to make informed decisions on repairs, upgrades, expansions, pre-emptive correction actions etc. FORESEER'S on-line statistical and proactive data analysis tools allow you to perform cause/effect analysis, impact analysis, capacity planning, preventive maintenance assessments, and trending so that you have a window into the past, present, and future of your equipments' performance.

## Reports

FORESEER also offers automated reports that are easy to access. These reports include system diagnostics, system configuration and log files. Also included are extensive alarm reports for daily, weekly and monthly alarms. These reports are time stamped and can be sorted by device, alarm point, date and time making it very easy to focus on the exact events you want in your report. These alarm reports also include time of user acknowledgement and time of return to normal.

## Service and Support

FORESEER is the latest generation of a technology that has been tried and proven in Fortune 500 critical sites around the world including data centers, telecommunications, internet service providers, colocation sites, and process control sites. All systems are installed, serviced and supported by the DataTrax Professional Services Group. A range of installation options are available to meet your specific needs including complete turn-key installations, configuration, documentation, training, and project management.

**Your biggest risk tomorrow may be in not calling us today.** Contact your DataTrax representative or DataTrax headquarters directly for more information specific to your application.

*DataTrax Systems, pioneered monitoring technology systems to ensure uptime of critical applications. 4CR and FORESEER are trademarks of DataTrax Systems.*



Imagine seeing the solution before the problem



**ENERGY SYSTEMS**

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