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Technical Support Policy 6 July 2007

Free support basics

DAQ Systems offers free technical support to help users get their systems up-and-running. This support is not an alternative to having in-house skills in networking and operating systems or reading the manuals. DAQ Systems reserves the right to terminate or alter the terms of free support at any time and without notice.

Some areas not covered by free support

- Problems from security flaws
- Bad file syntax
- Corrupted files
- Failure to maintain backup copies
- Resolution of problems that cannot be demonstrated
- Addition of new features
- Application of a “tar ball”
- Driver development
- Software module development
- Transferal of free support
- Earthworm (supported by CERL, USGS and ISTI)

What you need to know

Modern DA (Data Acquisition) systems require detailed knowledge of networking and advanced operating system know-how. It is important to have this relevant understanding before attempting to install NetDAS units in the field. The table below lists some important items to help you assess your training needs before proceeding. A good rule-of-thumb is to answer these two questions:

1. Have you set up, worked with and configured a LAN?
2. Are you conversant in Linux/Unix (NetDAS/Linux only)?

If the answer to either question is “no” then training is advised before proceeding.

Configuring a LAN	Setting IP address so data can flow between computers
“vi” editor	Use vi to edit config files (Linux)
Error logging	Use logging facility to troubleshoot problems
Serial networking	Set up serial port interface as a backup
Telnet	Use Putty telnet client to log on to the remote computer
FTP	Transfer files for back up and updates
Tar ball update	Use Linux ‘tar’ utility to update application files
Command line programs	Run a program from the command line with proper arguments
OS commands	Familiarity with many useful commands like ls, ps, ifcfg...
Mounting file systems	Mount and unmount file systems (Linux)
Client/server	Setting up clients and servers
Security	Firewalls, access lists, passwords, users, root
Triggering	Configuring of trigger files
Services and daemons	Running programs without being logged in
Interfaces	Setting Ethernet, serial and USB interfaces

Staffing issues

What background should managers look for in this selecting the right person to run a real time DA network? Experience has shown that a hardware background is less unsuitable than computer and networking experience. It is easier to train an IT person in battery chargers, basic test equipment, soldering etc. than to train an electronics technician in networking and advanced operating system features.

Training opportunities

When training is required, it is more efficient and the end-user will have a better experience with a firm grasp in the above table’s areas (as opposed to piecemeal learning). For those needing training we offer an economical and convenient two-day training session providing the tools and knowledge needed to effectively work with NetDAS. **Failure to select a suitably trained person does not constitute an obligation on DAQ Systems’ part to solve problems arising due to this lack of experience.**

Free support guidelines

To make efficient use of our time we require all free support inquiries follow these guidelines:

- Report only one issue at a time
- Email a filled-in RMA form for returned units
- Be prepared to document the problem with files and other information
- Respond explicitly to every query from us within 48 hours
- If you want to contact us by phone send a detailed email first
- Be prepared to run tests we deem important
- Clear up all overdue invoices before seeking support
- Call during normal business hours, M – F, 0900 – 1700, US holidays excepted.

- We respond to emails and phone messages within one day
- Free support does not include training or solving problems on basic networking and OS issues.

Third party hardware support limitations. Third party hardware refers to hardware purchased by the end user from another company. Unless you purchase a turn-key system it is likely that your application will need third party hardware (batteries, routers, wireless Ethernet, power supplies and chargers, seismometers, accelerometers...). We guarantee any item we supply but support for third-party hardware is limited. We will offer some assistance in resolving problems if the specification of the third-party hardware is compatible with our system. This assistance is in the form of general technical advice.

Third party software support limitations. Third party software refers to software purchased by the end user from another company. Unless you purchase a turn-key system it is likely that you will need third party software (MATLAB, Excel...) in order to use your system. We guarantee that any files generated by our systems conform to the published standard and are readable by any software system able to read that format. After the file is read by the third-party software package the only support we provide is on a fee basis.

Fee based support

Fee-based support assists personnel who lack the requisite skills discussed above. Fee-based support is also available for developers. The rate is \$700/day or \$400 per half-day. Some of the fee-based support areas are:

- Network configuration
- The Linux OS
- Advanced Windows XP
- Third-party software and hardware development
- Software development for platforms not supported
- Adding new features
- Re-installation of software
- Driver development
- Recovering from failed user-applied software
- MATLAB programming
- Java and ANSI C code development
- Operating system scripts
- Earthworm configuration

Fee-based support is provided after a PO or other payment means is in place.

Bug reports

The majority of reported “bugs” are user configuration errors, lack of experience in networking and Linux or XP or interface problems with software or hardware we did not supply. At DAQ Systems’ discretion, a payment means (PO) may be required before we spend time on a bug report. If the error is in our hardware, software or documentation no charge will be made.

FAQs

Our organization does not have budget for training or someone with the suitable expertise.

A fee-based support contract provides for technical help on a per-incident basis including configuring units, network and Linux issues and field work. Organizations needing real-time IP-based DA need to have suitably trained staff and it is false economy to send unqualified personal in the field to save the minor training costs.

We need to write some of our own software but are having problems setting up our development environment.

We can provide assistance on a fee-basis. Free support covers the our software not development issues.

We just received a NetDAS unit but GRFViewer won't work on our laptop.

This is probably a basic networking issue and indicates the technician needs training before proceeding.

Why is NetDAS so complicated?

NetDAS is not complicated if the basics of networking and Linux/Unix are grasped. The future of real-time data networks (like NetDAS) requires IP networking skills and adherence to open standards like Linux, the client/server model, Ethernet, Java (multi-platform). Organizations will face some tough personnel decisions in transitioning their staffs to fit this new era.

GRF2EW (Earthworm) module does not seem to be working properly. For free help use the official Earthworm support organizations or set up a support contract.

Why do the manuals not contain all relevant information required to run NetDAS?

This would require a book on networking and Linux/XP. Older DA systems run DOS-like OS's that are simpler but far less capable and easily documented.

Will the training be effective so that I won't still need help to run NetDAS?

Anyone with reasonable aptitude in computer technology will come out properly trained and be able to work independently.

Would having a systems administrator in our organization make formal training unnecessary?

The person running the DA network, which includes field operations, will need to have knowledge about networking/Linux/XP unless your Systems Administrator is freely available. Often organizational lines and job descriptions get in the way of using an in-house IT person.

