DATRAN VI SCADA Server specifications and requirements

We are often asked to assist with the specification/requirements for replacement DATRAN VI SCADA servers. We hope the following notes are useful and enable the replacement or upgrade of the server to be discussed with you IT provider.

This discussion is important as it will ensure that the DATRAN server is aligned with any other IT policies and requirements your organisation may have. Upgrading a server needs to be viewed as a project, as there are significant technology and user impacts.

Hardware Selection

The SCADA server should be regarded as a mission critical 24/7 enterprise wide server.

We recommend full server class hardware & recommend considering dual/parallel redundancy PSUs etc in the specification. Ideally the SCADA server would be installed in a secure air conditioned rack.

Operating System

Windows 7, XP, Server 2003 or Server 2008 (not Windows 8 or Server 2012)
Note DATRAN VI is a 32 bit application.

Memory - RAM

More is better and recommended, but all new machines are available with massive amounts.
A combined DATRAN server/database server will need at least 4GB.

Hard Drive HDD

Most IT staff now prefer RAID type arrays. When it comes to licensing the DATRAN software, remember this is associated with the hard drive serial number (8 digit hex). In a RAID array we need the "logical drive" details for where DATRAN is installed, typically C drive.

Serial Ports and Connectivity

Historically we have suggested specifying to the OEM a number of "native" RS232 serial ports in the machine build.

This has become more difficult to achieve and indeed creates a server that is a hardware "orphan". DATRAN needs a number of RS232 serial ports for connection to communication channels (radio/cellular modem etc) so is likely to be different to others servers in your organisation.

We generally use a USB to multi RS232 port device called a UPort from Moxa.

Pragmatically the Moxa serial device is a single critical device. An onsite spare should be considered. A few users have moved from USB to RS232 as USB is not appropriate for virtual type environments. If you are considering a virtual environment for the server, Ethernet is the supported option and a Moxa Ethernet to multiple RS232 port device is required.

Databases

The default DATRAN database is SQL Express 2008 R2 with up to 10GB of storage. This is available on the DATRAN VI installation CD.

Best practise from a disaster recovery perspective, includes managing the regular back up and archiving of the database and even mount it on a separate, dedicated database server.

QTech Pre Loading Software etc

QTech are able to install and test the server to help with the migration.
For this to be achieved efficiently, before the server is sent to us, it needs:

- Have the Operating System installed including .NET2
- Have any IT/network polices etc enabled and have been connected to your network
- Provide us with administrator log in details
- Confirm the details of the transition to ensure the logged data is