

## “ Network virtualization ”

The obvious benefit of virtualization is better usage of the available resources. When we take an example of a network switch, multiple virtual LANS can be created in a single switch using VLAN. When we consider virtualization in Network Management, there are products like console servers, which using a single connection to the central site can manage, monitor and configure multiple devices including Routers, Switches and Firewalls, Solaris, Windows, Linux and Unix servers, PBXs or any device with a serial console port. This helps IT professionals and network operations center personnel with all of the advanced security functionality needed to easily perform secure remote data centre management from anywhere in the world. These devices are designed specifically to be deployed as a system management solution, which replace multiple dumb screens with a single PC and a Console Server and manage multiple simultaneous console windows with one LAN workstation.

Dax offers Console Servers which provide data centre managers what they require most - secure remote management of Routers, Switches and

Firewalls, Solaris, Windows, Linux and Unix servers, PBXs or any device with a serial console port. The benefit of using network management virtualization devices like console servers is that it allows you to communicate directly via the serial port to networked devices (such as routers, servers and so on) in order to perform system administration tasks. It helps the system administrators to diagnose and fix from anywhere on the LAN/WAN or via a modem thus saving on administrator's time and costs to keep system disruption to a minimum.

### Security

Security is an important aspect in the virtualization network design. Dax's remote management offers higher level of security features to provide secure access to critical network devices. The security options include built-in user names and passwords and support for encryption protocols such as SSH and SSL/TLS. It supports SLIP and PPP for remote user dial in. It has strong authentication schemes such as RADIUS, TACACS, LDAP, SecureID, Kerberos and NIS for server environments. It has packet filtering to ensure the Console



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Server can be kept secure from unauthorized access.

### Protocols

For network virtualization on optimizing the LAN switch, VLAN protocols are used. For network virtualization for remote management, security protocols such as SSH, SSL, SLIP, PPP, RADIUS, TACACS secure ID are used. To provide loss of information, the device offers Port Buffers of varying sizes to ensure data from attached devices is not lost. Without Port Buffers any data sent from a device, while an administrator is not attached, is lost. With Port Buffers this data is captured and can be viewed later to aid in problem diagnosis.