Datacraft

DATA CENTRE NETWORKING SOLUTIONS

IS YOUR DATA CENTRE NETWORK ARCHITECTED TO SUPPORT VIRTUALISED SERVER AND STORAGE ENVIRONMENTS?

Computing is evolving from discreet systems to cloud- and shared utility services. At the heart of this change is the data centre. Organisations embarking on data centre projects are trying to achieve lower total cost of ownership (TCO) – consolidating infrastructure and increasing utilisation to reduce costs; improved business agility – responsive IT that can rapidly provision infrastructure and applications; higher levels of resilience – organisations require 24 x 7 x 365 availability of their IT operations; and improved service levels – by providing secure, accelerated access to applications and information.

The foundation is the data centre network that can help organisations achieve these IT goals.

Data centre networking refers to the networking devices, solutions and architectures deployed into an organisation's data centre. This broad set of networking technology includes Ethernet switching, storage networking, application delivery, core IP services (DNS, DHCP, IP address management, etc.) and network-level security functionality. Each of these technologies is experiencing significant innovation that is allowing the network to have a higher capacity, be more intelligent and application aware, provide improved support for virtualisation projects, reduce costs by consolidating networking and cabling infrastructures, and provide a stable and robust platform for today's 24 x 7 x 365 business environment.

Virtualisation is a disruptive technology; it needs a strong, robust network architecture to support its demands if users are to enjoy easy, speedy access to the applications running across the network, irrespective of where they are, or what device they are connecting with.

ARCHITECTING THE DATA CENTRE NETWORK

Virtualisation has become a key disruptive technology that is forcing organisations to look at their underlying network and ensure that it supports their virtualisation projects. Server virtualisation has gained massive momentum as a solution that can address the challenges related to the cost and operation of the server environment in the data centre.

But virtualisation is an ongoing journey towards a 'virtual nirvana' of cloud computing, where all computing functions are delivered as a service. However cloud computing will be out of reach entirely unless you get your data centre network in a position to support virtualisation.

With data centres being consolidated to reduce high facility and operations costs and server and storage infrastructures being consolidated to improve utilisation, networks are under further pressure. Your data centre network must provide sufficient capacity, availability and security.

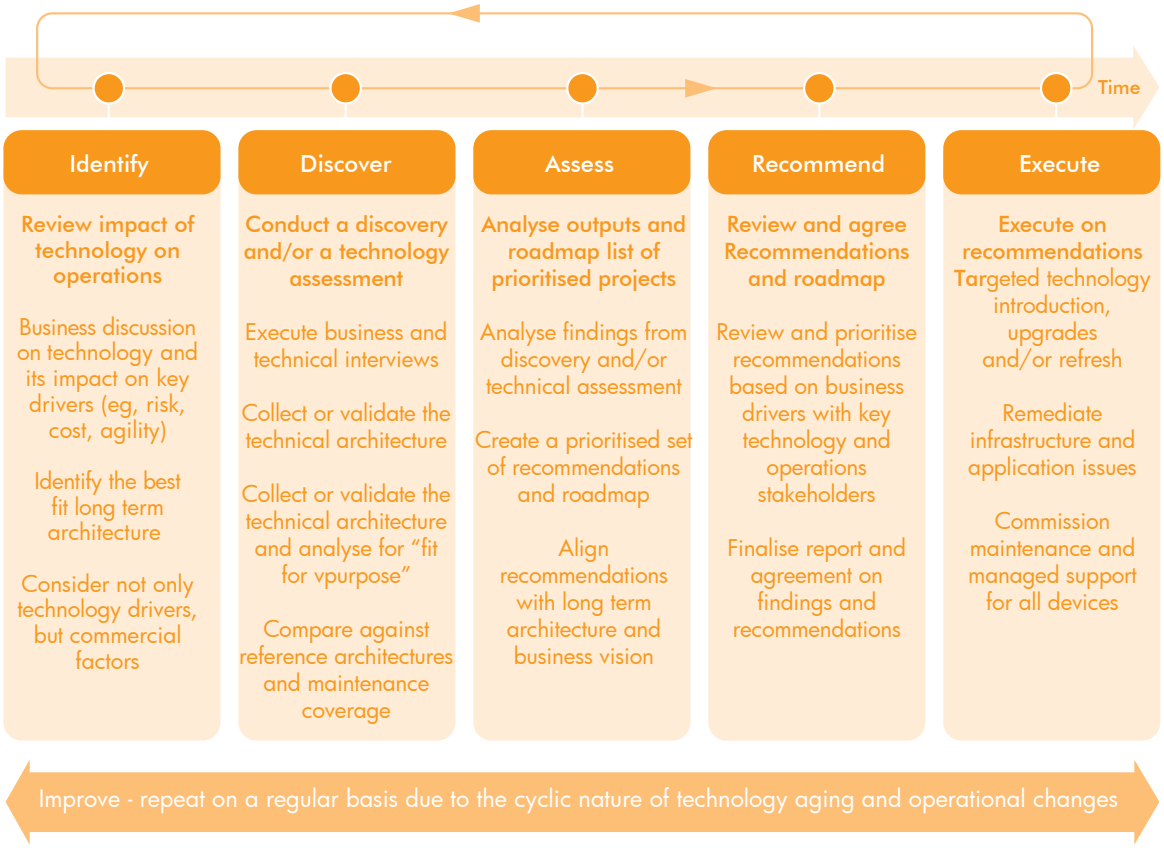
The network needs to deliver functionality across the evolving data centre

Rapid business growth compels administrators to build IT infrastructure so rapidly that they have little time to consider the architectural implications … the cumulative effect is an IT architecture that is so complex and rigid that inefficiency abounds.

Burton Group: The Dynamic Data Center, June 2008, Drue Reeves

A STRUCTURED APPROACH TO DATA CENTRE NETWORKING

We recommend an approach to data centre networking that starts with understanding of the business objectives and the operational context:



There are many benefits to a structured approach to architecting the data centre network

- Improved network performance
- Reduced capital and operational costs
- Builds a network that supports virtualisation
- Reduced infrastructure complexity
- Much improved network management
- More flexible switching architecture
- Network adapts with demands of modern business
- Higher levels of application availability and security
- Better end user experience when connecting to applications
- Improved Green IT posture

The Data Centre Network Needs Assessment workshop is the starting point and is delivered in three phases:

Discovery

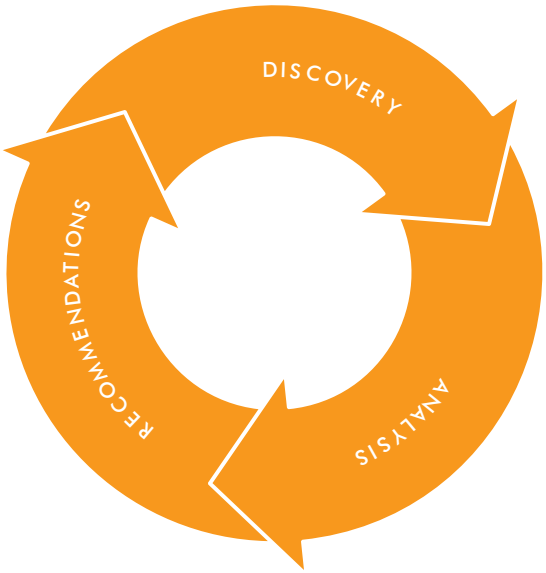
- Business and technical interviews
- Architecture workshop
- Data centre network asset recovery

Analysis

- Review data centre network architecture with gap analysis
- Map infrastructure with business goals
- Find areas for cost reduction and performance improvement

Recommendations

- Priotitised recommendations to close gaps
- Provides roadmap to evolve the data centre network
- Specific technology recommendations



DATA CENTRE NETWORKING SUCCESS STORY

A leading financial services provider recently built a 10Gbps Ethernet network for server access in order to avoid performance bottlenecks and to support their virtualisation strategy going forward. They changed their data centre network architecture to allow for 'top of rack' switching, giving them increased flexibility with a modular data centre design as racks can be moved or added very quickly, and connected into the network with minimal disruption and effort. The next phases will include giving the network full visibility of the virtual machines traffic by adding virtual machine switching capability, running their storage traffic across their 10Gbps Ethernet and allowing for a unified fabric in the data centre.

Datacraft's Expertise

To build a network in the data centre that supports client's changing business requires networking expertise, understanding of underlying protocols, knowledge of virtualisation, computing and storage, and experience in delivering complex IT solutions across geographies.

Datacraft has provided network solutions for clients' data centres for many years and as a result we have the experience to evolve the data centre and its networking infrastructure. This is further strengthened by our global relationships with Cisco, VMWare, EMC and other organisations which create data centre technologies.

Our combined networking, data centre and storage, security and Microsoft capabilities enable us to plan, design, build and operate data centre networks that meet business needs.

Datacraft - Pressure proof solutions for your Data Centre Network

For more information contact your local Datacraft office or go to www.datacraft-asia.com/pressuretest

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ABOUT DATACRAFT

- Datacraft is a wholly-owned subsidiary of Dimension Data, a US$4 billion global IT services and solutions provider
- Earned US$606 million in annual revenue for FY2009
- Has over 2,000 client relationships around the Asia Pacific region
- Has a client base that spans five major industry sectors:
  - Financial Services
  - Media & Communications
  - Manufacturing
  - Travel, Transportation & Real Estate
  - Public Sector
- With a portfolio of solutions and services in:
  - Consultancy • Converged Communications • Contact Centres
  - Data Centre and Storage • Managed Services • Microsoft Solutions
  - Network Integration • Performance Optimisation • Security • Training
- Operates in more than 50 offices across 13 Asia Pacific markets

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