



VDI

Centralising your applications

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#easynet

Who am I?

- ▶ **David Doherty**
- ▶ **Chief Information Officer - Easynet**
- ▶ **Industry experience: Over 30 years in the ITC industry in end user, consultancy and managed services organisations, in a variety of Programme, Change and Operational roles.**



Who are we?

17 years

€1¼ Billion

Gartner®

Any time, any place, anywhere...?

The importance of good network design



Maturity

**Understand
total design**

**Case study to
highlight good
practice**

The market place

Technology

Maturity

Comprehension

Choices

Costs

Licencing Models

Memory

Platforms

Appliances

Deployment

Vendors

Major

Niche

Benefits

Flexibility

BCM

ROI

IT support

However...

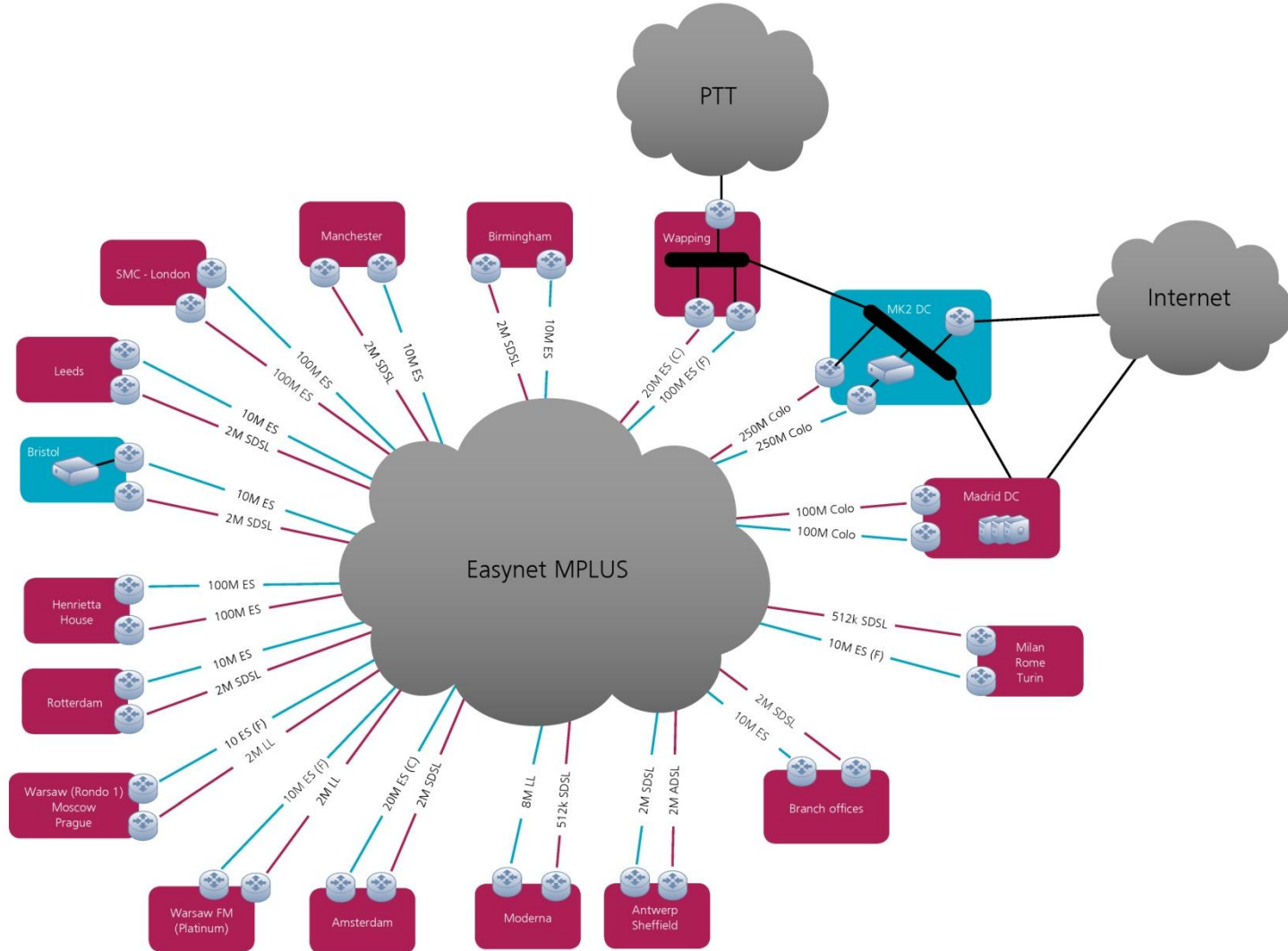


Bandwidth

Access types

**Routing &
Design**

Case study



Design considerations

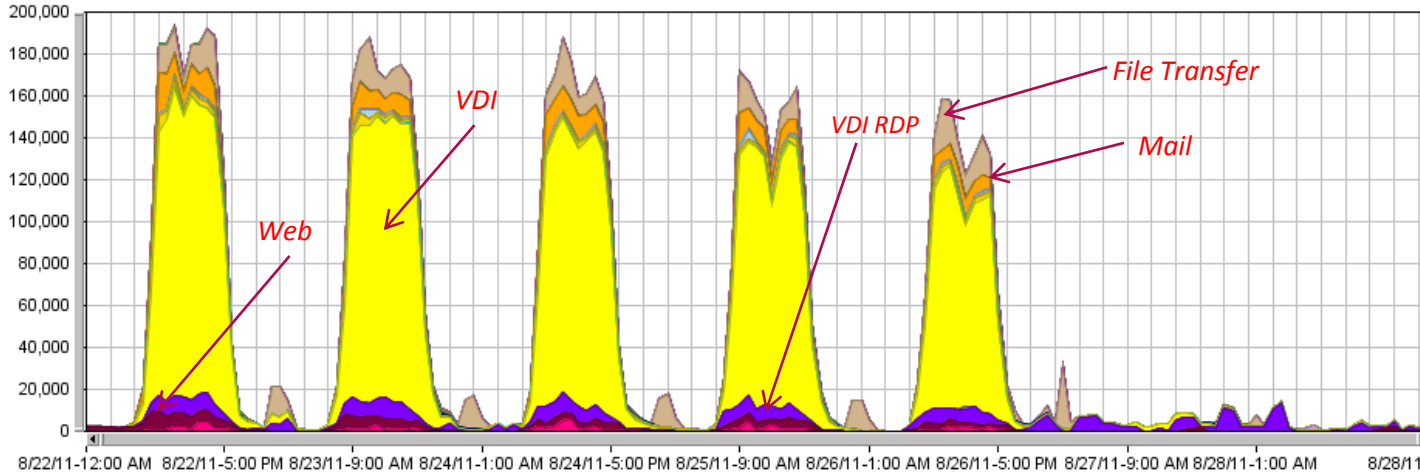
- ▶ **Single point-to-point circuits:**
 - ▶ Necessary resilience for customer's business processes?
 - ▶ Which applications require L2 services?
- ▶ **With the deployment of VDI does most traffic become business critical?**
 - ▶ If so, what dimensioning of back-up circuits is required?
- ▶ **For DR datacentre:**
 - ▶ What traffic load does the datacentre need to handle?
 - ▶ What replication resilience is needed?
- ▶ **Dimensioning and profiling of all other circuits as per VDI metrics:**
 - ▶ Value of users per site is the main input

Large site: User classes

LAN => WAN

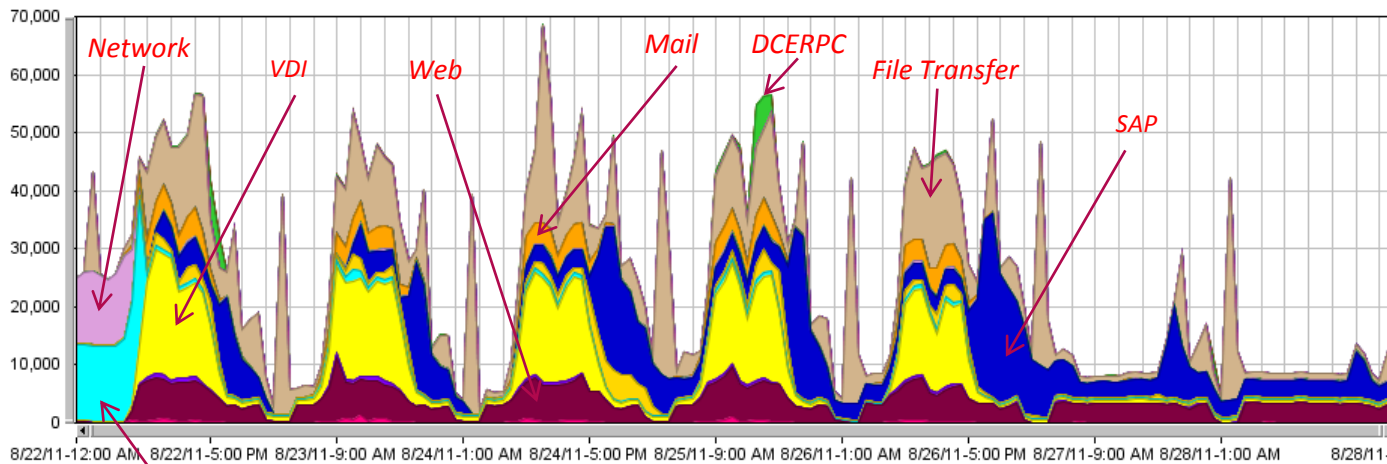
Throughput (kbps)

Drill Down



WAN => LAN

Throughput (kbps)



UDP-Other

Site summary

- ▶ **Outbound traffic dominated by VDI**
 - ▶ VDI is mostly UDP traffic
 - ▶ Overall 57% of traffic is VDI
- ▶ **Peak value based on 1 minute average was 221Mb/s at end of August**
- ▶ **250Mb/s limit to be reviewed**
 - ▶ More headroom
 - ▶ Consideration for busier periods than August
 - ▶ See end of presentation
- ▶ **Large amount of SAP**

VDI – Network Checklist

▶ Planning

- ▶ Develop metrics for VDI for good user experience
 - ▶ Consider application stress testing since theoretical metrics are often inaccurate
- ▶ Choice of “toasters” versus software agents?

▶ Overall: VDI traffic is particularly “bursty”

- ▶ What network set-up recommendations does your software vendor provide?
 - ▶ IP quality: packet loss, latency, jitter? - Can you measure this?
- ▶ Most bandwidth to remote sites will be VDI and voice
 - ▶ Backup lines typically need upgrading to as much bandwidth as primary lines

▶ Once VDI is deployed, use Application & Network Performance Monitoring

What can we do for you?

- ▶ **Host the VDI application and let you concentrate on running the service**
- ▶ **Analyse your current network and help you review the design, sizing and technology mix:**
 - ▶ Set up the right measures - application stress testing etc.
 - ▶ Put in place new measures and analysis (not just Network health) – APM etc.
 - ▶ Manage the Network and give you visibility of these key metrics in real time

Questions...

