TESTED WITH SPIRENT

Spirent Enterprise Solutions

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SPIRENT - A GLOBAL COMMUNICATIONS-TEST LEADER

Smartphones and
mobile devices

High-speed IP
networks and
applications

Live network services

Mobile access, backhaul
and packet core

Data center, cloud
computing and
virtualization

Global positioning
technologies

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Symbol SPT.L

Exchange LSE
(FTSE250)

Market Cap $1.6B
(Mar. 2012)

Sales $528M

R&D investment $88M in areas that matter most to our customers

No.1 or No.2 in the markets we serve

Our business came from 1400 global customers in 2011

supported by 1400 dedicated Spirent employees

in 50 countries

Network performance experts with best-of-breed products and solutions which provide end-to-end network and web application performance

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SPIRENT ENTERPRISE SOLUTIONS

Axon

- Test network performance by simulating traffic and measuring latency, jitter, packet loss and more.
- Results are delivered in real time, for fast network troubleshooting

AxonPulse

- Wireless infrastructure management
- Performance monitoring with End User QoS Management

Blitz

- The leading cloud-based web app load test solution
- Performance, scalability and reliability testing throughout web app development, staging, production and operations

Armorhub

- Cloud Based Security Testing Solution
- Monitor and Test Web Sites for Security problems

SPIRENT BLITZ

CLOUD BASED WEB & APPLICATION TESTING & OPTIMIZATION

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BLITZ - PERFORMANCE LOAD TESTING IN CLOUD

Brings simplicity and agility to performance testing

Instantly burst up to 200,000 concurrent users against your web app in seconds, from various regions

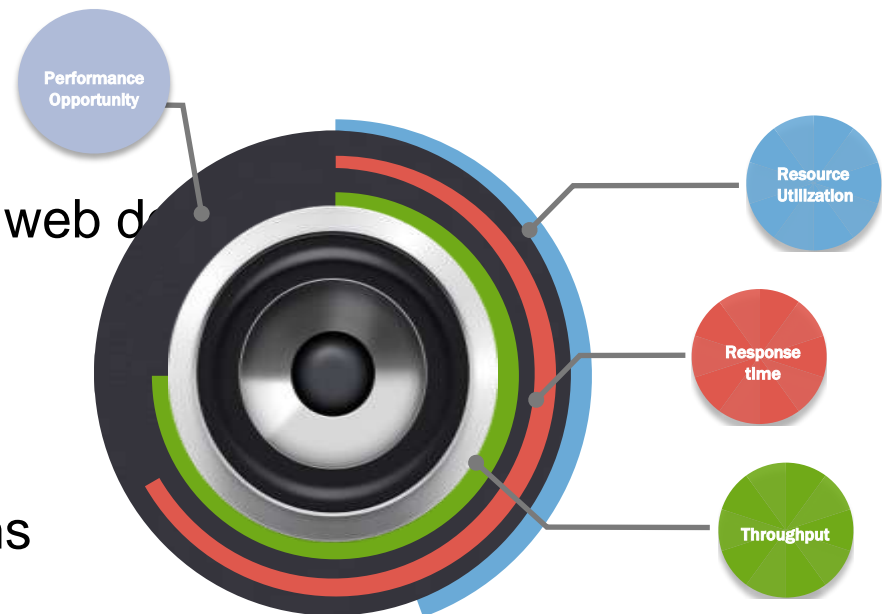Simple design changes can have significant impact on

- Performance
- Scalability

Performance tuning

- Should be tightly integrated with web d

Performance Value

- Response time affects users
- Throughput affects business
- Resource utilization affects systems

Performance Opportunity

Resource Utilization

Response time

Throughput

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KEY BLITZ FEATURES

Schedule Recurring Tests

Select various regions and up to 200,000 concurrent users

Set up Multiple steps per test

Monthly Subscriptions

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ARMORHUB

CLOUD BASED WEB SUCURITY TESTING

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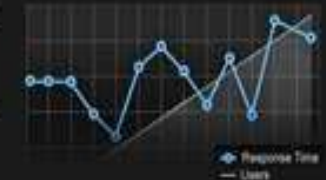
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SECURITY SCANNING AT YOUR FINGERTIPS

- Automate your Website Security in seconds

- Get notified of any new vulnerabilities.

- End-to-End Website Security

- Built for Modern Applications

- Wordpress and Magento Secured

- Intuitive & Easy to use

SECURITY ON YOUR SCHEDULE

- Schedule Recurring Scans and have them emailed to you

- Check for OWASP's Top-10 Vulnerabilities and an additional proprietary list of Exploits and Malware, including Heartbleed.

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AXON PULSE

Let Virtual Users Take The Guesswork Out of Network Performance

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A✶ON PULSE

Monitor Wi-Fi and Fixed line QoE directly

- Remote probes 'imitate' user behaviour
- and report into cloud solution

From any browser you can:

- Troubleshoot and repair issues early
- Gain visibility to QoE
- Get real-time analytics

ACTIVE MONITORING & TESTING

A✶ON CLOUD CONTROL

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MEASURE WHAT MATTERS

Measure the key performance indicators and popular apps that affect your user experience.

Video Quality

- Start Time
- Buffering Time
- Interrupts

Environment

- Signal Strength
- Time –to-Connect
- SSID

Data

- Down/Upload Speed
- HTTP Throughput
- Web Browsing
- Latency
- DNS Resolution

Public Apps

- Salesforce
- Point of Sale
- Intranet
- + more

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WHERE IS THE SOLUTION USED?

Enterprise

Retail & Consumer

Hospitality

Education and Government

Finance & Banking

Healthcare

AxonPulse™ scales to any size business or organization.

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CASE STUDY – TELEFONICA O2 (UK)

Who? Major UK MNO rolling out Wi-Fi for global and UK blue-chip clients

Challenge: Prove Quality of Service to clients + Remotely manage QoE for thousands of hotspots

Solution: Purchased Streetwise™ (Axon Pulse) and have installed at;

WHAT IS AXON?

Easy to use network platform that enables testing of network performance by simulating traffic

- Measure latency
- Jitter
- Packet loss and more
- For 1GB and 10GB networks

Results are delivered in real time, for fast network troubleshooting

DEMO ARCHITECTURE

Demo architecture picture of the openreality 4-vendor demo setup
at mercedes event

AXON USE CASE

SLA Management
- Manage Carrier SLA Performance
- Troubleshoot Circuit & Ensure uptime

Network Modelling
- Generate real traffic to measure performance
- Ensure Voice Quality and Network Quality - Prior to UC Deployment or new application deployment

Diagnose & Repair
- Validate and Increase Performance
- Pinpoint Issues before they arise

Circuit and Branch Office Management
- Branch Office Deploy, Troubleshoot and Manage
- Data Center Circuit management, Disaster and Backup Validation

✓ Reduce Costs And Risk	✓ Speed Time To Deploy	✓ Reduce Downtime	✓ Size Circuit Need
✓ Bandwidth Spend	✓ Validate Deployments	✓ Identify Issues Early	✓ Ensure Circuit SLA
✓ Reduce Downtime	✓ Ensure Qoe	✓ Reduce Support Costs	✓ Ensure Qoe

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SIMPLE YET POWERFUL

Use to validate the performance of applications, devices, and IT services on the network, including:

- Network Infrastructure Performance
- Web Application Performance
- Voice/Video Readiness
- Network QoS Testing
- Failover Performance

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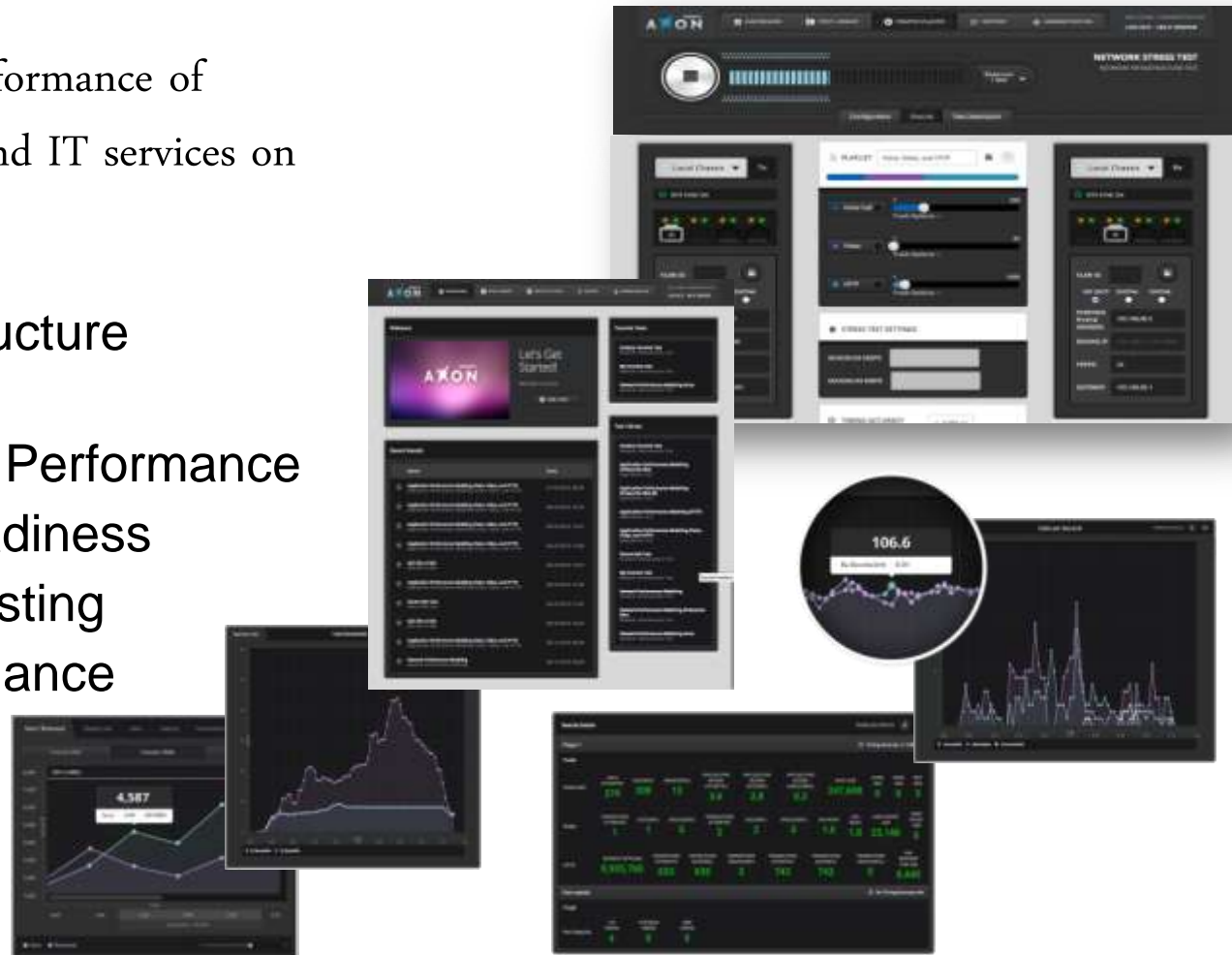
USE CASE – MONITOR CIRCUITS BETWEEN REMOTE DATA CENTERS

Customer Needs

- Ensure that Disaster Recovery Data Center can provide adequate performance in the event of a failed connections
- Ensure that the inter-connecting L2/3 circuit between data centers for network recovery and data replication can perform adequately and Ensure that Carriers are providing Circuits per agreements

Spirent Solution

- Customer has 1 Production & 1 Disaster Recovery Data Center through MPLS based WAN, serving the remote offices.
- Using 2 Axon Devices at each Data Center, to emulate L2-7 traffic for performance testing site to site to test the capacity of this circuit as well as the mix of applications and network services.
- Give IT Simple control of the test scenarios and the number of users and sessions for any

DC to DC Interconnect Circuit Testing
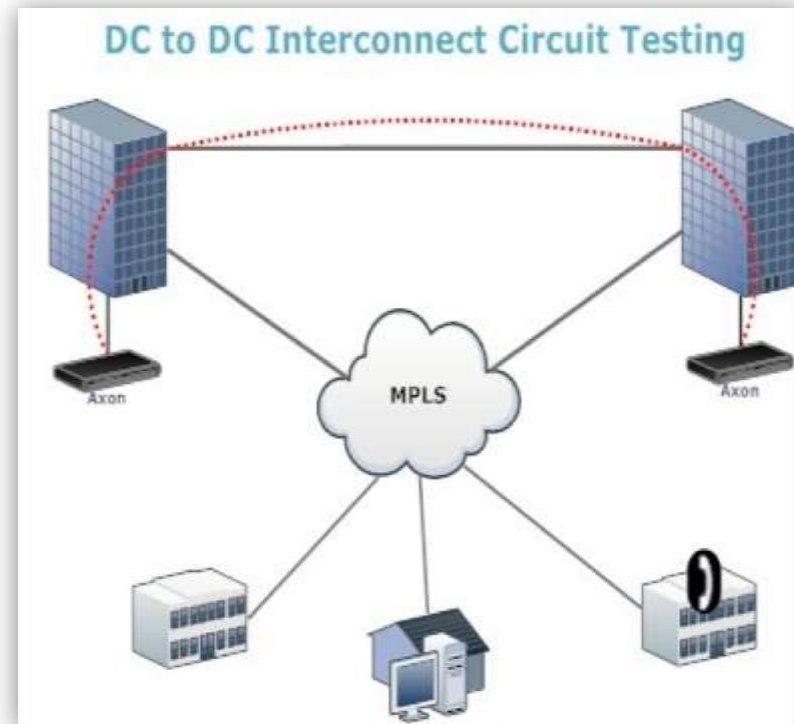
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AXON CUSTOMERS

Thank you !

Alfons de Jong

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