Cisco Network Architecture Blueprint (C-NAB) for the NHS

NHS Customer Roadshows - Nov-Dec 2008
“Cisco’s strategy is a story based on change—the market transitions that affect our business. Through multiple transitions in the last decade and over the next 3–5 years, the network will evolve from the plumbing of the Internet, providing connectivity, to the platform that enables people to experience life.”

The Network as the Platform…

John Chambers,
Chairman and CEO, Cisco
FY08 Fiscal Year Revenue

Total $39.5B | 13% Y/Y

- Record revenue of $39.5B... up 13% Y/Y
- Cash flows from operations of $12B... up 20% Y/Y
- Product order growth approximately 12% Y/Y
- Service order growth approximately 25% Y/Y
- Market Cap £135 Billion
- R & D $5.2 Billion
- Cash in the bank $28 Billion
culture
employees

...are our competitive advantage

1/3 sales
1/3 engineering
1/6 service
1/6 other

65K employees
140 countries
300+ offices
Cisco Network Architecture Blueprint For The NHS (C-NAB)

Terry Espiner – Regional Manager, UK Healthcare
Technology and the NHS – Today and Tomorrow
Agenda

Cisco in Healthcare

The Future of Healthcare?
Cisco in Healthcare
Cisco’s engagement with the NHS to date.....

- 1999 - Cisco Healthcare Team launched
- 2000 - Meeting between PM, Tony Blair, and Cisco CEO, John Chambers
  - Commitment from Cisco to supply guidance to NHS on standardisation across the NHS
  - Engagement of Cisco’s IBSG Consultancy Practice
- 2001 - Official Secondment from Cisco into the NHS
  - Commitment from NHSIA for ECN Studies
  - ECN Reports Published (Acute, PCT, N3, N3MM)
  - Series of Launch Roadshows around the UK
- 2003 - NHS NPfIT Launched
  - ‘The four pillars of the temple’
- 2004 - NHS and Cisco sign Enterprise Wide Agreement
  - Secondment to NHS CfH
- 2004 - Cisco launch ‘Medical Grade Network’ (MGN)
- 2008 - Cisco launch Cisco Network Architecture Blueprint (C-NAB)
Healthcare – FY09 Coverage Model
FY08 – UK Healthcare - Fiscal Year Revenue

Total $87m | 17% Y/Y

- Advanced Technologies – 36% ($31m)
  - 802.11 - $11.25m (89% y/y)
  - UC - $10m (102% y/y)
  - Security - $7.3m (52% y/y)
  - ANS - $2m (47% y/y)
  - Storage - $0.5m (Neg 83% y/y)
Cisco Healthcare Partners – FY09 (EWA partners)

- 2e2
- Affiniti
- ANS Group PLC
- Azzurri Communications Ltd
- Block Solutions Ltd
- British Telecom
- Cable & Wireless
- Carillion IT Services Ltd
- Cisilion
- Computacenter PLC
- Damovo UK Ltd
- Dimension Data
- Equanet
- Hewlett Packard
- Insight Europe
- Intrinsic Technology Ltd
- Knowledge IT
- Logicalis Ltd
- Nextira One Ltd
- Nowcomm Ltd
- NTL Inc
- Pinacl Solutions
- Redstone Converged Solutions Ltd
- Repton
- SCC
- Stoneleigh Consultancy Ltd
- Voyager Networks
Cisco’s Role in the National Program

- **NPfIT** - £12bn (over 10 years) initiative to move towards an electronic care record for patients and to connect 30,000 GPs to 300 hospitals, providing secure and audited access to these records by authorised health professionals

- **LSP** - Local Service Providers are responsible for delivering NPfIT

- **NASP** - National Application Service Providers are responsible for delivering the NCRS Spine Service (BT) and the Choose & Book Service (Atos Origin)

- **NISP** - National Infrastructure Service Provider (N3SP) responsible for providing the network that connects All NHS sites to National Apps
Cisco’s Engagement with NHS Trusts…..(1)

- 32,000 NHS locations connected to N3SP via Cisco CPE
- > 75% of Acute Trusts with Cisco at the core of their LAN
- > 80 Trusts with Cisco IPT deployments, (102% $ growth in FY08)
- > 802.11 Revenues doubling each of last 3 years, > $20m in 3 yrs
- Increasing number of Trusts with IP based Contact Centres
- Increasing number of Trusts looking at Collaboration tools
- Increasing number of Trusts looking at E-mail encryption solution from Ironport – now a Cisco company
- A number of MH Trusts and PCT deploying WAN Optimisation solutions to overcome application challenges in the field
- Health Locator Solution to bridge UC and 802.11 to help Trusts meet Productive Ward and Doctors at Night initiatives
- Cisco Funded Study at a South West Trust – Health Locator impact
- EU Funded study by the ACCA at an East Midlands Trust due to report back to European Parliament in Dec 2009 – Network Impact
Cisco’s Engagement with NHS Trusts…..(2)

- Regional ‘Tech Update’ Seminars
- NHS Confed – Annual Conf – Manchester, May 2008
- NHS Live – Wembley, July 2008
- World of Health IT – Copenhagen, Nov 2008
- Nobel Public Sector Summit – Stockholm, Oslo, Dec 2008
- HIMSS – Chicago, Apr 2009
- HC2009 ?
- Web Based Update Sessions (Webex or Meeting Place) ?
The Future of Healthcare?
The Healthcare revolution…..

- We are riding a technology avalanche in our daily lives
- Patients and families are becoming wiser & more demanding customers
- We cannot sustain delivery of healthcare as demand rises, population ages, medicine specialises & personalises, carbon & waste costs rise……
- Knowledge and information in health are connecting like never before…..and unconnected health hurts
- Treat & Cure are evolving to Prevent & Maintain
- Location-based resources are becoming virtual
The future......then

GPO ~1970 vision of videoconferencing
Cisco TelePresence
In the next few years…..

- Nano Projector
- Multi-touch
- Home TelePresence
- Smart Appliances
- Wearables
Web 2.0 capabilities are growing....

Examples:
- Mash-ups
- Generous Web
- Swarming
Major Trends – Ready?

What you need is to……

Collaborate - safely, securely
Find resources – presence-aware applications
Communicate - any device, any network, any time
Securely - any device, all information, any format, any place
Deliver - any device, any format, any place

Only sensible approach is to use your network as the platform
Health Living initiatives

- Healthy living advice
  Quizzes, Videos
- Health information
  On-demand expertise, Digital Signage in waiting areas
- Choice information for care options
  Primary, Acute – performance & access information
- Chronic disease management – kiosks, home care, work care
Virtual Resources - Locator

- Problem: according to statistics from the Productive Ward programme, 20% - 30% of a nurse's time is spent searching for people or equipment. This is both unproductive and introduces delay into key parts of a care cycle.

- Uses: In Acute Hospitals, increase productivity and improve patient care by reducing to minutes the time spent to..
  
  Locate key equipment such as wheelchairs, keys to the drugs cabinet, IV Pumps, cots
  
  Find what skills you have available in the hospital and where they are

- Solution: Prioritising ease of use, Cisco use speech recognition in any Cisco phone, allowing any hospital employee to locate any person or piece of equipment by simply “asking” the phone where it is. It requires minimal training and is non-disruptive.

Virtual translators...
Virtualising knowledge

Mobile Map of Medicine
Virtual teaming – an Expert Network
Virtual Resources Cisco HealthPresence

- **Problem**: Need scalable expert clinical resources, local availability; improve access, reduce travel

- **Uses**: Remote & rural locations, A&E, Inner-city, Community Hospitals, Prisons, Corporate HQ, Public spaces (railway stations, airports), Retail…

- **Solution**: Combines Cisco Telepresence, Medical devices, with a “many to many” Presence network providing consultations on-demand, and escalating referrals

- **Pilots**: 5 pilots worldwide. First global pilot was in NHS Scotland at Aberdeen – Phase 1 (Jan – June 2008) successful for safety and efficacy tests (100+ patients); Phase 2 now expanding numbers of patients.

http://www.cisco.com/web/about/ac79/health/hp/index.html
Source: Cisco Internet Business Solutions Group (IBSG), August 2008
Connected Health 2008-2015

- Today’s Applications / Data & Technology agenda (records, standards, semantics, connectivity…) plus...
- Collaborate - safely, securely
- Find resources - presence aware applications
- Communicate - any device, any network, any time
- Secure - any device, all information, any format, any place
- Deliver - any device, any format, any place

Delivered through the **Network as the platform for communication and collaboration**