

## MONTHLY TECHNOLOGY BRIEF

### *Cisco changes its positioning; And the role of the Network in respect of Services*

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## **Cisco changes its positioning; and the role of the network in respect of Services**

Everyone knows Cisco, just about every enterprise has Cisco as its network provider, but John Chambers their long serving CEO set about repositioning Cisco in the down turn after 9/11 to be more than just a provider of routers and switches. The transition from 'connections, to transactions, to interactions' has seen Cisco rise to become a major force in the Software for Storage Systems, the largest provider of Security Products, a top player in desktop telephony and the launch of its 'Service Oriented Network Architecture', or SONA, following its Applications Oriented Networking, or AON, starting point for interactions between an application and the use of the network to be arranged.

Cisco has a vision around the network as a platform in its own right, providing not just the connections, but a rich variety of capabilities that it believes can only be hosted on the ubiquitously present network. Its approach to Service Oriented Infrastructure, or SOI, through its SONA vision is a good example of this. If the Architecture and the Services are purely provided and used internally to the Enterprise then it's easy to provide controls to determine routing of processes. But one of the biggest growth areas that offer the greatest business value lies in external interactions around buying and selling processes with other enterprises. The Network lies between all Enterprises and is therefore the one common factor to the all parties, starting with supporting the necessary Services for transactions, and moving to enable complex interactions around 'real-time' collaborations and optimisations.

These will not necessarily mean only the management of a connection, but the introduction of higher level capabilities that would be best residing on the network. The common host that lies everywhere that can be used for this is the ubiquitous Cisco router or switch. Cisco has been moving in the direction for the last few years and already has introduced some key new capabilities round a slew of new products.

A simple example is in the exploding market for RFID, where the specification only allows an RFID reader to report to a single address, worse if this address is on a remote network the reader will invariably report multiple reads of the same tag clogging the network with low value inefficient traffic. Cisco provide an add in card for the local router that the reader sends data to, the card then removes multiple reads reducing the data to a single clear read, and forwards across the network to as many addresses as required using its onboard management facility. It's now possible to advise both the supplier and purchaser of arrival, or even to have public readers at docks, or airports, that can notify when the goods pass through in transshipment. It's also more practical than adding remote servers to handle this task, both in terms of cost and management, but this still happens as many Enterprise Architects don't know Cisco provides this capability.

Over recent years Data Storage has moved to become network based for operating efficiency, and Cisco has a wide range of software to manage access and use by network based applications. However, much of this is again internally based, and yet there is a growing need to share data with other Enterprises externally. The Cisco concept of the 'Self Defending Network', an integral part of their SONA approach ensures that all aspects of the network from devices to transport services are secure. Cisco provides the capabilities to carry out the necessary security checks on the request for the data, to locate the data on a network based storage device, and manage the access to only the data that the request should be allowed to have. The approach has many advantages including the ability to locate data storage outside the firewall removing the need for access to the Enterprises own servers, or applications.

The capabilities extend to include specialised products for use with SAP and Oracle as part of its 'ADD', (Application Delivery and Acceleration) product range that enhance performance and can remote the need for additional servers in Branch Offices. As an example SAP Business Intelligence software can run on an AON Blade inserted into the existing router allowing significant upgrading of capabilities offered locally without requiring additional hardware. Currently AON is able to use the pervasive presence of the Network to handle both decentralised, remote access, and centralised deployments, increased density, in new cost effective and performance boosting ways, all with improved security and data access. It's a similar picture with telephony services and Cisco IP Telephony, or IPT, Voice over IP, or VoIP, which offers a mixture of cost savings by removing existing costs for a separate telephone service and adding a variety of digitally based additional features. Tied with the AON and ADD capabilities it forms a total package that is particularly attractive in branch offices where both cost and new features are demanded, as well as lower support.

The first of the new Unified Communications products has just appeared as desktop collaboration package. Using a centralised 'presence server' and the widely used SIP standard this suite bundles together a wide range of services plus the ability to track what device(s) the users currently available through with what capabilities and features that may be used for any interaction. The point being that most users today have both multiple devices; Desktop, Notebook, PDA, SmartPhone etc, and are present on different devices at different times and locations, Cisco aims to make this transparent by using the network to coordinate and provision the optimum options.

Taken together all of these products, together with the new alliances Cisco has forged with other major technology vendors, provide what Cisco calls an 'Intelligent Information Network', or IIIN, with the network playing a key role as a provider of platform services. Today these products are mostly used within current requirements for cost reduction reasons, but as the use of Business 'Services' delivered through SOA methods rises, SOI capabilities to support network based communications, collaborations and content use become increasingly vital. [www.cisco.com](http://www.cisco.com)

### Leading Company Results

- **Intel** 1<sup>st</sup> qtr revenue down 5% to \$8.9bn with income down 38% to \$1.3bn; **Yahoo** 1<sup>st</sup> qtr revenue up 34% to \$1.57bn with income down 28% to \$160mn; **Unisys** 1<sup>st</sup> qtr revenue up 2% to \$1.39bn and lower net loss of \$27.9mn (\$45.4mn); **eBay** 1<sup>st</sup> qtr revenue up 35% to \$1.4bn with income down at \$248.3mn (\$255.9mn); **SAP** 1<sup>st</sup> qtr revenues up 18% to euro 2.4bn with income up 11% to euro 282mn; **Google** 1<sup>st</sup> qtr revenues up 79% to \$2.25bn with income up 38% to \$592mn; **EMC** 1<sup>st</sup> qtr revenue up 14% to \$2.55bn with income up 1% to \$272.5mn; **IBM** 1<sup>st</sup> qtr down 10% to \$20.7bn (like for like without PC revenues up 4%) income up 21% to \$1.7bn; **Microsoft** Q1-06 revenues up 13% to \$10.9bn with net income up 14% to \$2.97bn; **AMD** 1<sup>st</sup> qtr revenues up 70.5% to \$1.33bn with net income up to \$185mn against loss of \$17.4mn; **Atos Origin** Q1-06 revenues up 2.7% to euro 1.3bn; **Capgemini** 1<sup>st</sup> qtr revenue up 10% to euro 1.87bn; **Wipro** 4<sup>th</sup> qtr up 35% to rupees 31.13bn (approx \$660mn) with profits up 43% to rupees 6.18bn (approx \$130mn); **Tata** 4<sup>th</sup> qtr revenue up 44% to rupees 37.1bn (approx \$785mn) with profit up 76.4% to rupees 8.3bn (approx \$175mn); **Infosys** 4<sup>th</sup> qtr revenue up 32.1% to rupees 26.24bn (approx \$550mn) with profit up 31.2% to rupees 6.7bn (approx \$140mn); **Nokia** 1<sup>st</sup> qtr up 29% to euro 9.5bn and net income up 21% to euro 1.05bn; **EDS** 1<sup>st</sup> qtr revenue up 10% to \$5.1bn net income up from \$4 to \$24mn. **Cisco** 3<sup>rd</sup> qtr revenue up 18% to \$7.3bn with net income up 17% to \$1.4bn; **Fujitsu Siemens** full year revenue up 11% to euro 6.6bn and pre tax profits up 27% to euro 121mn.

### Movements by Industry Leaders

- **Cisco has added three new hardware modules to upgrade its popular long serving 7200 MAN/WAN series routers** by providing; a faster network processor engine; a VPN services adaptor and a Port adaptor card to increase port density and types. [www.cisco.com](http://www.cisco.com)
- **Oracle has extended support dates for JDE and PeopleSoft** to beyond the original commitment of 2013 even though Fusion is still on schedule to replace existing products by 2008. [www.oracle.com](http://www.oracle.com)
- **Sun shocked the industry with news that founder and CEO Scott McNealy is stepping down** in favour of COO Jonathan Schwartz. The news came after financial analysts looking at the latest quarters results had lambasted McNealy for failing to cut costs and workforce hard enough when the recession hit. Sun **will move further into storage technology expanding its StorageTek range** adding new features to broaden access and offer better security including identity management. The **final specification for Java Enterprise Edition 5 has been released** to key software developers offering efficiency improvements claimed to be up to 30% less java code, a 60% reduction in Java Classes and an 80% reduction in XML files. **Java ME Mobile platform gets an early access of tools and blueprints** based on JSR 248 and 209 covering many advanced technology features of next generation smart phones. [www.sun.com](http://www.sun.com)
- **HP will acquire Trustgenix a provider of federated identity management software** to add to OpenView. **Four new corporate notebook ranges have been introduced** covering many new features including a **3G option in the new NC 6400 which will be co marketed with Vodafone** offering a global roaming package at speeds up to 1.4Mbps, all units have Intel Core Duo chips and a DVD drive plus one touch features for common tasks. [www.hp.com](http://www.hp.com)
- **Intel is preparing a major cost cutting reorganisation** 'to adjust to the business realities of today' CEO Paul Ortellini advised analysts as the impact of reducing growth in the PC market hit estimates for the year. Continuing the platform strategy **Intel has introduced vPro a new brand name for updated corporate desktops** including significant improvements at the chip level in management, security and virus capabilities. **Core 2 Duo will be the official name** for the code named Conroe and Merom low power desktop and Notebook dual core chips. **A Voice over IP add-on board** will be offered with PC motherboards supporting Skype, Counterpath and others. [www.intel.com](http://www.intel.com)
- **IBM is offering 'test drives' of its next generation DB2 DataBase code named Viper** and tuned for SOA use via downloads from its Web site. **SAP ERP application data is now accessible from IBM Workplace and Notes** with a new integration product that is free to Notes users, but chargeable for Workplace users. **A new low end Z series 'mainframe' for SOA users** is aimed at supporting running composite applications and removing the need for 'hundreds' of distributed servers needing SOI management. IBM is **revamping its Z Class 'mainframes' lowering price and raising the specification** pushing the capabilities for a new generation of uses often based on Linux OS. **Software Development tracking specialist BuildForge has been acquired** for its compliance tracking capabilities during development. [www.ibm.com](http://www.ibm.com)
- **Microsoft has released beta code for public download of MSN Messenger**, dubbed Windows Live Messenger, the code allows integration with Verizon's Web calling service. **Minimum hardware specifications for Vista have been released** with PC vendors able to brand PCs as with 'Vista Capable' or 'Vista Premium Ready', the specifications are lower than was predicted reducing numbers of PCs that will need to be upgraded to run Vista. **RSA SecureID token native support in Vista** has been dropped following over a year of testing. A strategy for **web based advertising as funding mechanism has been detailed around AdCenter** which displays adverts when certain key words are selected. **Mendocino is renamed Duet with the official launch of the Microsoft front end to SAP backend** integration product. [www.microsoft.com](http://www.microsoft.com)
- **SAP joint development with Microsoft is officially launched as Duet** rather than its development code name of Mendocino and provides integration between SAP back end procedures and Microsoft user roles. **ESA, Enterprise**

**Services Architecture has been renamed Enterprise SOA, or ESOA**, to avoid confusion that it was different to SOA as portrayed by other vendors. [www.sap.com](http://www.sap.com)

#### *What's Happening with Standards*

- **OpenDocument Format, ODF, has been approved as a standard by the International Standards Organisation, ISO**, thus encouraging even faster adoption of the popular format. [www.odfalliance.org](http://www.odfalliance.org)
- **W3C has added the first draft of DIAL, its Device Independent Authoring Lanaguage** designed to make mobbile content easier to write and use across the wide range of mobile devceives that the W3C sees as making up the future model. [www.w3.org/TR/dial/](http://www.w3.org/TR/dial/)
- **Ratification of 802.11n WiFi** has been delayed as many hardware suppliers have refused to support the draft, its not expected that a new draft can be prepared until next year. [www.ieee802.org/11/](http://www.ieee802.org/11/)

#### *Open Source Update*

- **Microsoft has a plug in developed by the OpenDocument Foundation** to provide compatibility that installs in the menu as a 'natural feature', initially this will not be available for general release but will be released to the EU, Massachusetts and Californian public sector users. [www.microsoft.com](http://www.microsoft.com)
- **SAP and Adobe have announced their support for the OpenAjax Initiative** joining Intel, Tibco and Software AG in looking to develop the use of Asynchronous Javascript and XML. [www.javalobby.org/java/forums/t43740.html](http://www.javalobby.org/java/forums/t43740.html)
- **Sun became the firist major vendor to support Ubuntu a Linux distribution based on Debian** and currently only available as a desktop OS though a server version is iminant. Ubuntu seeks to differenite from RedHat SuSE etc by not making support a mandatory part of the distribution. [www.sun.com](http://www.sun.com)
- **RedHat has acquired Open Source Middleware provider JBOSS** adding its popular application server to its comprehensive Linux distributions. [www.jboss.org](http://www.jboss.org) [www.redhat.com](http://www.redhat.com)

#### *More Noteworthy News*

- **Gartner states it believes that there are four key trends driving technology further into business;** 1) Commoditisation and Consumerisation; 2) Virtualisation and Tera-Architectures; 3) Software models and development styles; 4) Communities and Collaboration with the explanation that the average knowledge worker now participates in as many as 10 virtual unofficial communities every day. [www.gartner.com](http://www.gartner.com)
- **Forrester Research SOA report shows SOA uptake faster than expected with 70%** of those who have piloted SOA are convinced of its benefit, 46% are now using for strategic business transformation, with USA federal agencies stating its already 'transforming' their entire approach to IT. [www.forrester.com](http://www.forrester.com)
- **Wallop is a Microsoft spun off start up aiming to 'turn social networking on its head'** by aiming to connect people round their interests and activities rather than through friend of a friend relationships. [www.mywallop.com](http://www.mywallop.com)
- **Yahoo beta software for turning a PC into a TV digital recorder** is available as a free download and includes a range of other media software to compete with Microsoft Media Centre. It seems that it will be offered as a subscription package to use Yahoo services. [www.yahoo.com](http://www.yahoo.com)
- **Nokia has launched the E61 a quad band business phone with e mail compatibility** to Blackberry, Goodlink, Visto and other forms of push e mail servers and a full qwerty keyboard. [www.google.com](http://www.google.com)
- **RIM Blackberry has added a new SME version of its mail server** and is providing it as a free download to any customer who has bought a Blackberry phone. Also the **BlackBerry Enterprise Server for Mobile Data Services, or MDS, adds a complete framework to build mobility applications** and / or re purpose existing applications for mobility use. [www.blackberry.com](http://www.blackberry.com)
- **EMC has launched its third generation Clariion CX Fibre Channel Disk Storage Systems** offering higher capacity up to 239 TB on 480 drives, the current products will remain on sale until the new range receives its NEBs, (Network Equipment Building System) and iSCSI certification. [www.emc.com](http://www.emc.com)
- **Novell Open Workgroup Suite is an open source challenge to Microsoft** running as Linux only or a mixed Linux / Windows versions and claimed to offer a 70% cost reduction on a like for like basis. [www.novell.com](http://www.novell.com)
- **Google are adding two new tools**, the first blocks searches on the network from Google Desktop and the second allows search results to be saved into an online notebook to be shared with colleagues and friends. [www.google.com](http://www.google.com)
- **Apple has completed its switch to Intel chips with the rollout of a new range of MacBooks** which feature higher performance at lower prices due to the adoption of Intel chips claim Apple. [www.apple.com](http://www.apple.com)
- **Dell has introduced its first servers using non Intel chips based on the AMD Opteron** for some high end models but stressed its commit to Intel stating this move was in response to customer demands. [www.dell.com](http://www.dell.com)
- **EMC introduced Documentum Archive Services for Imagining Software** to reduce the storage demands and add sophisticated search and retrieval tools. [www.emc.com](http://www.emc.com)