

Novell's net gains

Bob Walder brings you the news from Novell's BrainShare developers' conference held in Salt Lake City, Utah.

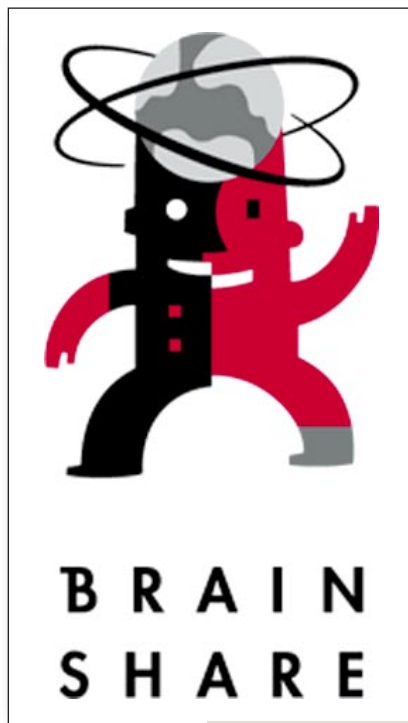
It doesn't seem too long ago that Novell seemed to be fighting for survival. Abortive attempts to enter the desktop OS and application market; fragmentation of the core product line through the dalliance with UnixWare; a ridiculous attempt to project itself as an internet company by renaming its flagship operating system, and all the while losing the marketing battle against Microsoft.

Whether or not you attribute the recent turnaround in fortune entirely to the arrival of Dr. Eric Schmidt, chairman and CEO, the company is certainly looking a lot healthier these days and at this year's BrainShare it became apparent that the company has emerged from its troubled times and is busy reinventing itself as a true internet company.

Nor does it need to resort to simple smoke-and-mirrors name-changing to accomplish this feat given the success of NetWare 5 and NDS. Eric Schmidt points out that 'it took two-and-a-half years for sales of NetWare 4 to outstrip those of NetWare 3'. Sales of NetWare 5, however, are already outstripping those of NetWare 4, just six months after its launch. 'This is the year,' stated Schmidt, 'that Novell regains its market leadership as we deploy systems for more than just file and print.'

NetWare 5 will undergo another facelift later this year in the form of an update codenamed 'Six Pack'; a curious name for a product from a Utah-based company — I've been told that the 'powers that be' didn't realise the term related to alcoholic beverages! After Six Pack comes Modesto, Novell's next-generation 64-bit server operating system, designed to run on Intel's Merced processor family. This is slated to ship along with the Merced processor around the middle of next year.

In the meantime, Six Pack brings a significant increase in performance and scalability thanks to the new Multi Processing Kernel (MPK) which supports up to 32 processors and scales extremely



▲ THE BRAINSHARE LOGO PRETTY MUCH MIRRORED THE STATE OF OUR MINDS

well when adding processors (depending on the application). All the core networking services — the file system, Java, and so on — have also been multi-processor enabled to further enhance performance.

On the management front, Console One, the new Java-based management console introduced with NetWare 5, has also gained additional features and functionality. It, too, benefits from increased performance thanks to the multithreading of Java.

Developers will be pleased to hear that the NetWare Core Protocols will be opened up finally and that the HTTP protocol is now included as part of the OS, allowing access to the file system via HTTP without having to run a web server.

■ NDS reborn

Another major feature of Six Pack is NDS V8. Now a native LDAP V3 directory, the new NDS has been redesigned to significantly improve scalability and performance. At BrainShare it was

demonstrated with over a billion objects in the directory, and with lightning-fast response to LDAP searches. This would allow NDS to be used as the main directory for the internet, and will provide Novell with a strong story to present to corporates and ISPs.

This story can only be further enhanced by the ubiquity of NDS, which was demonstrated running under NetWare, NT (natively), Unix and OS/390. An indication was also made that it will be ported to Linux with the recent investment in Red Hat. According to Glen Ricart, Chief Technology Officer: 'We want to see NDS run on everything that is networked because that becomes the new operating system base — the new platform to which applications are written.'

Another stated aim is to leverage the power of NDS wherever possible, and Schmidt has tasked his people to produce 'ten new ZENs' by the end of the year. This highlights the runaway success of ZENworks (a new version of which was announced at BrainShare, slated to ship in the first half of this year), which uses NDS to provide simplified desktop management for the administrator. It does not, however, indicate a return to the folly of trying to become an application developer. Instead, the company is hoping to seed the market for



► DR. ERIC SCHMIDT, CHAIRMAN AND CEO OF NOVELL



NDS applications with a few of its own, in order to ensure that NDS is the preferred directory platform for developers going forward.

■ Personal services

At the other end of the scale to NDS is the concept of the 'personal directory', and this provides even more opportunities for software developers and service providers alike.

'So many sites on the internet want to collect my personal information and then give me a name and password,' said Ricart. 'Why should we be forced to store several different identities around the net? There are just too many to manage, especially when you think that all those passwords really ought to be unique.'

To address this, Novell has announced 'digitalme', which allows users to take control of their personal information and store it in customisable containers within the directory. Creating digitalme 'cards' containing personal details allows the user to control what information is made public to third parties.

A different card can be created for business colleagues, friends or Internet Service Providers. Once a card is created, the user no longer has to provide that data when registering for internet services. Even if you distribute 200 cards to colleagues, changing a piece of information such as your address only needs to be done once in the directory, and all those cards are updated automatically. Novell envisages that service providers will create 'communities' based around digitalme, using the card paradigm to ensure trust between user and provider.

Novell is also hoping to increase the performance of the internet with the announcement of its Internet Cacheing System. Finding it increasingly difficult to sell products like BorderManager into ISPs because of the reliance on NetWare as a platform, the company has produced a stripped-down NetWare kernel on which resides a high-performance caching object file store and the caching software from Border Manager. This will be licensed to third-party hardware vendors — Dell and Compaq are the first takers — to produce a caching 'appliance'.

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■ Smart move

Perhaps this is just the start of the appliance business for Novell. Who is to say we will not shortly see standalone Novell mail servers and directory servers? This sort of licensing agreement could turn out to be the smartest thing Novell has done for years.

As well as Dell and Compaq, announcements were made by Cabletron, Check Point, Compaq and Lucent, all of whom have made commitments to Novell's directory platform. IBM, meanwhile, has announced an agreement to bundle its Java-based web application server, WebSphere, with NetWare.

The WebSphere Advanced Edition, running on NetWare, will enable Novell customers to use Enterprise JavaBeans to connect web applications to existing and host-based transaction systems.

'Novell and IBM strongly agree that the internet is fast becoming the *de facto* network for business information flow and e-commerce,' said Chris Stone, the senior VP of IBM's strategy and corporate development section.

This view was further supported by the announcement that Oracle and Novell have announced an expanded bundling agreement which includes a five-user version of Oracle WebDB with NetWare. This new bundle will enable small and medium-sized companies to easily develop self-service web applications and data-driven web sites with very little training.



▲ THE SALT PALACE, UTAH, WHERE IT ALL HAPPENED

■ Single file

While on the subject of databases, SQL Integrator caught my eye as yet another great piece of technology that should find favour among developers, administrators and end-users alike.

Acting as a sort of 'meta data repository', SQL Integrator presents all the relational database information in an organisation as a single database, eliminating all differences in access language and data types. Tables from a wide range of supported databases on a number of different platforms can be pulled together and presented in a single 'logical database' which can be referenced from any ODBC-compliant application. This simplifies data access in multi-database organisations, creating a tremendous competitive advantage as corporate data becomes easier to get at, and is thus used more effectively.

And so it was a bullish Novell that stood in front of its developers this year and admitted to its previous mistakes, yet managed to convince everyone present of a bright and prosperous future. Microsoft's continued delays in shipping Windows 2000 and Active Directory can only help Novell retrench and regroup in readiness for the forthcoming battle.

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