
Business tools – produce, collaborate, organise knowledge

Collaborate

- ❖ Collaboration: Interwise ECP v6 – Enterprise Communications Platform is an IP-based Web conferencing software.
- ❖ Email mobile: Nextel Mobile Email Enhanced – offers instant two-way e-mail for all of its Java-enabled phones. It can synchronize with Outlook, Notes and standard e-mail accounts and delivers each message over the air as soon as the message hits the mail server.

Software infrastructures

Language & other

- ❖ SOA Stacks: SOA servers – App Servers are starting to extend to be SOA servers (Service Servers). SAP's Enterprise Service Architecture will allow development to start with a graphical representation of BP, and the use of BPEL to orchestrate previously built services to help the move away from one-of-a-kind, low-level programming. Oracle has a BPEL process manager (which was a leading BPEL tool), data hubs and content manager. BEA's Weblogic App server will have features beyond the remit of an application server e.g. clustering/failover, WS, portal integration into data repositories etc. IBM and MS also support BPEL and are building support into their stacks. The 6 most popular app servers are: IBM's Websphere (J2EE), BEA Weblogic (J2EE), Oracle Application Server (J2EE), MS .net Framework (proprietary), JBoss app server (J2EE), and SAP Netweaver.
- ❖ .Net: v2.0 inconsistencies with v1.1. – applications built on .Net Framework 1.1 have been breaking, or displaying changed behavior, on version 2.0. Applications inherently know when they have been built on versions 1.1 or 2.0 of the framework and will natively try to run on the version they were built against.

Data & metadata

- ❖ Database share: IBM/Oracle/MS – In 2004, IBM's RDBMs sales grew just 6% to \$2.7b, Oracle's grew 15% to \$2.6b, MS's grew by 18% to \$1.6b. IBM's growth came from sales on zSeries/mainframe/Unix; Oracle's from Linux/Unix; MS from Windows.

Implementation

- ❖ Integrated tools: IBM Problem Resolution Toolkit – makes closer ties between IBM's Rational tools and Tivoli software. IBM (like MS) is seeking closer coupling of its modelling and execution technologies. These strategies are likely militate against portability, interoperability and the use of best-of-breed products.

Platform – clients

Clients mobile

- ❖ Browser device: Nokia 770 – a pocket-size Web browser for wireless broadband networks. It is Nokia's 1st Linux device and its 1st non-phone. It has a 100mm touch screen and costs \$350. It is aimed at consumers seeking a cheap extra Internet screen for home use that can be used at wireless hot spots outside the home or connected to a cell phone through a Bluetooth wireless link. In future it will support VoIP.
- ❖ Mobile Phones: 180m sold last quarter – Nokia sold 55m (up 25%) and has 30% marketshare, Motorola sold 30m and has 17% marketshare, Samsung has 13% marketshare and LGE 6%, Siemens dropped from 8% marketshare to 6%, and Sony's marketshare was also 6%. About 750m mobile phones will be sold this year.

Clients desktop

- ❖ PC: Apple – may use Intel chips in its Macintoshes (rather than the current IBM chips).

Platform – utilities, storage, networking, management and security

Storage

- ❖ Storage appliance: Data Domain DD460 Restorer – appears on the network as a NAS device. When a backup writes to the DD460, it scans for patterns/matches to the data already on disk and inserts a pointer to the original block rather than saving the data again. This yields very high compression ratios on data that does not change much (100-to-1, 500-to-1) and enables full backups to be run every night. The DD460 uses a Linux kernel tuned/pruned for speed and security.
- ❖ Mobile security: NetMotion Wireless Mobility XE – provides security, control, and bandwidth optimization for mobile roaming clients. Mobile IP and VPN handle remote users, provide encryption of the data stream and provide a means of accessing the remote user via a locally assigned address. They differ when connections are broken and a reconnection is required (a VPN user loses the session and needs to re-authenticate, the Mobile IP Home Agent keeps the session open and handles the reconnection process). With Mobility XE, a user logs in to a mobility server and is authenticated against the RADIUS or NTLM/Active Directory and each user or group is assigned a Virtual IP (VIP) which stays open (even if the user is temporarily disconnected).

Systems and network management

- ❖ Data: Veritas Panther – captures granular changes to individual files in real time, delivering continuous disk-based data protection and enables recovery of files through a simple Web browser interface on user's desktops or laptops (eliminating the need for IT assistance)

Governance and quality

Development and delivery

- ❖ Compliance: Pfizer XML documents – Pfizer is consolidating 30+ document management systems (building a content repository based on Documentum) and has started standardizing on XML for authoring to streamline regulatory submissions and to ensure compliance with common business rules.
- ❖ UI: AJAX – the spread of AJAX (asynchronous JavaScript and XML) has allowed Web Browser-oriented UIs to become more sophisticated (e.g. smooth scrolling, incremental updates, more responsive input forms) but does not address real-time event notification of streaming data. Several open-source platforms provide abstractions for connecting fully interactive Web UIs to enterprise applications and WS. Nevow (Python) and Pushlets (Java) extend the event loop familiar from MVC GUIs. Browser-oriented UIs have a number of advantages (e.g. maintenance, security, scalability) and the disadvantages (sophistication of UI etc.) are being addressed. MS will combat the migration to Web Browser-oriented UIs by not supporting key standards in IE (for as long as it can), encouraging witless users to build applications that only run on IE (because of some hidden use of Windows) and making its Office/Outlook products part of the UI framework. These are some reasons that IE should not be used to develop applications targeted at generic Web browsers.

Governance and quality – Standards

Produce

- ❖ Productivity: OASIS OpenDocument v1.0 – OASIS approves the Open Document XML-based file format as a standard. It is the default format in OpenOffice.org 2.0. OpenDocument is meant to be an open format that can be used by any office suite. It has a single XML schema for text, spreadsheets, charts and graphical documents and uses HTML, SMIL, XForms etc. IBM and SUN support it, but MS will oppose it [with every ounce of its being] as MS uses proprietary XML (patents its XML formats) and wants to charge royalties for accessing its formats. If OpenOffice is adopted it would weaken MS's dominance of the Office suite market, which would in turn weaken its dominance of the desktop OS market. The adoption of OpenOffice will also open the door for innovation in the office suite (which is something MS wants to avoid).

Data & metadata

- ❖ PMML v3: Predictives Model Markup Language – is an XML markup language used to describe statistical and data mining models. The goal of PMML is to encapsulate a model in an application and system independent fashion so that two different applications (the PMML Producer and Consumer) can use it. Three new models in PMML Version 3 include rule sets, support vector machines, and text models. Ruleset models can be thought of as flattened decision tree models, but cover areas where decision trees are not handy or are too limited.

