



Internet Services

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Internet Services Group

- ◆ **Mission and Goals**
 - ◆ **Provide core computing services, worldwide**
- ◆ **Three specific areas**
 - ◆ **Collaborative Services**
(Mail, Calendar, Mailing lists, Directories, Video Conferencing ...)
 - ◆ **Windows Desktop Services**
(Desktops, Servers, Core applications)
 - ◆ **Web Services**
(Server infrastructure, Authoring Tools)



<http://cern.ch/mmm>

Collaborative Tools

- ◆ Provide a consistent collaborative environment to the CERN users
 - ◆ Including messaging, calendaring and videoconferencing
 - ◆ Consisting of both server and client-side services.
- ◆ Electronic Mail
 - ◆ Around 20 servers
 - ◆ 14,000 accounts
 - ◆ Towards 1 million mails / day, > 80 % spam
 - ◆ More than 3,000 mailing lists
- ◆ Videoconferencing
 - ◆ 7 VC rooms operational, 2 more in project
 - ◆ 1,300 registered videoconferences in 2002
 - ◆ 720 in first half 2003



Web Services

<http://cern.ch/web>

- ◆ Provide a consistent web hosting and authoring environment to the CERN users
- ◆ About 30 Servers:
 - ◆ ~ 6000 Sites. ~ 1.200.000 HTTP requests/day
- ◆ 24x7 Service operation
- ◆ Current offering
 - ◆ Windows/IIS and Linux/Apache hosts
 - ◆ Web storage “on the server” or on DFS / AFS
 - ◆ Support Perl, ASP, PHP scripting for web applications
 - ◆ Redirection / Relocation services
- ◆ Intranet Search Engine Service (Inktomi)

	May 2003	Nov 2003
Sites	~ 5500	~ 6000
Hits / Day	~ 1.000.000	~ 1.270.000



<http://cern.ch/win>

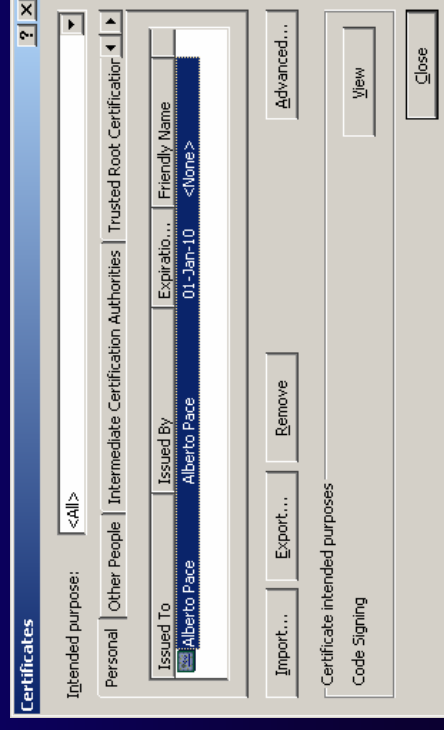
Windows Services

- ◆ Provide a consistent desktop environment to CERN users
 - ◆ Directories, file and home directories storage
 - ◆ Standardized desktop computing environment
 - ◆ A core set of application software
- ◆ Windows Server infrastructure
 - ◆ ~ 130 servers
 - ◆ ~ 16 TB of disk space, 30 TB raw disks
 - ◆ Used also for Web and Mail services
- ◆ Windows Desktop Management
 - ◆ ~ 10000 User Accounts, 23000 Contacts, 1700 Groups
 - ◆ ~ 7800 Computer accounts in the domain
 - ◆ ~ 5500 Managed desktops (2000 and XP)
- ◆ 24x7 Service operation



New Services this year

- ◆ Terminal Services
 - ◆ Scheduled for beginning of spring 2004
- ◆ Investigate the automated provision of digital certificates
 - ◆ No service foreseen, investigation only
 - ◆ Kerberos <-> PKI interoperability
 - ◆ Usable for Mail, Web authentication, software signing, Grid applications





Collaborative Scenario

The screenshot shows the Microsoft Outlook interface. The main window displays an email titled "RE: Request for C5" from Ivan Deloose. A red arrow points to the "Right-Click" text in the email body, which is highlighted in red. The context menu is open, showing various actions such as "Send E-mail", "Send an Instant Message", "Start an Audio Conversation", "Start a Video Conference", "Make a Phone Call to his office 73032", "Make a Phone Call to his GSM 164166", "Share an application ...", "Schedule a meeting", "Block", "Copy Contact to", "Move Contact to", "View Profile", and "Properties". The interface also shows the "Inbox" folder, "Favorite Folders", and "All Mail Folders".

RE: Request for C5
Ivan Deloose
Right-Click

- After the simultaneous fail will replace the machine on minutes and the following I Divisions\IT\Support\Servi Divisions\EP\Groups\ATE

Received	Subject	Size
Tue 13-Jan-04 1...	Fax Received 13-Jan 11h27.jpg	8 KB
Tue 13-Jan-04 1...	VoiceMail 13-Jan 10h32.mp3	3 ...
Tue 13-Jan-04 1...	VoiceMail 13-Jan 11h43.mp3	3 ...
Tue 13-Jan-04 ...	Cernprof10 hiccup?	5 ...
Mon 12-Jan-04 1...	Dates for next meetings	1 ...
Thu 08-Jan-04 1...	RE: Request for C5 Reports	9 KB



Group Organization

Activities ≠ Sections

DS Section
(Desktop Services)

IN Section
(Infrastructure)

Web

Mail,
Video
Conf

Win

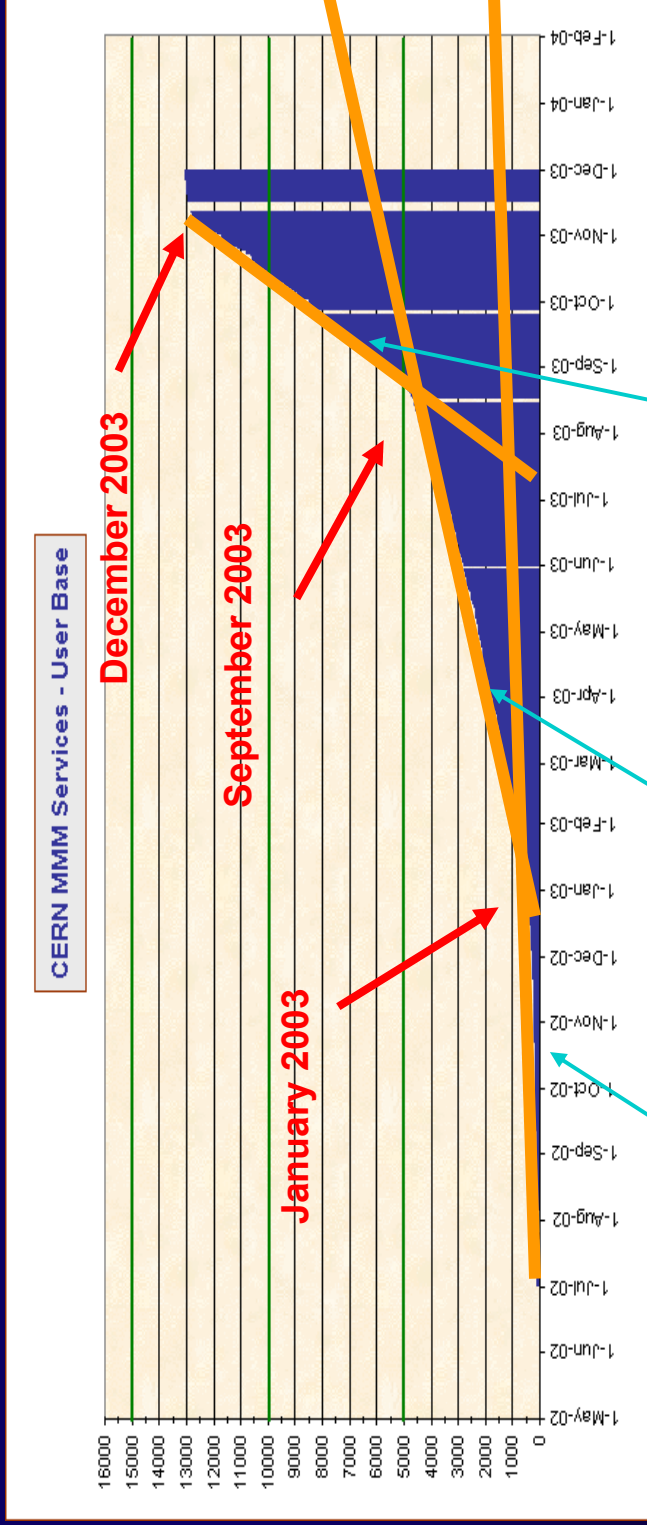
common directories

common server infrastructure

common services

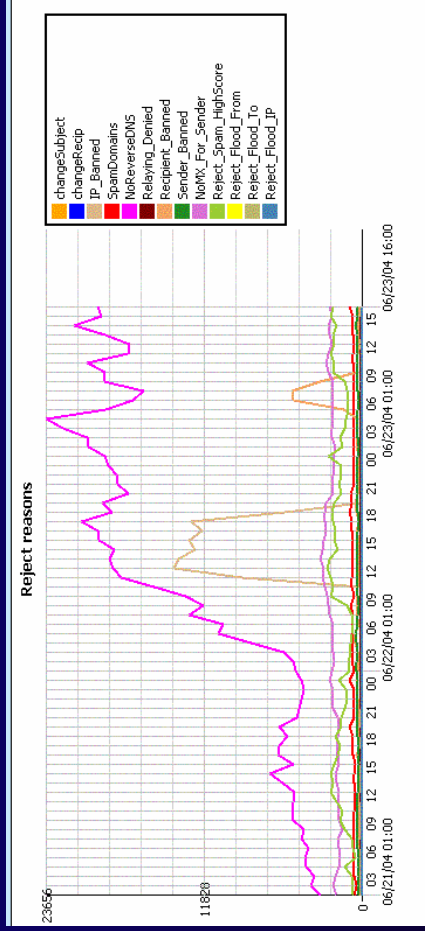
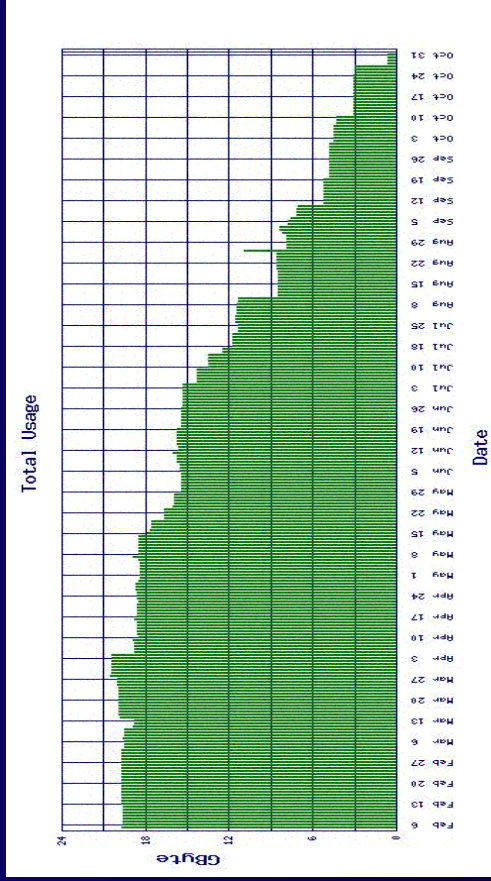
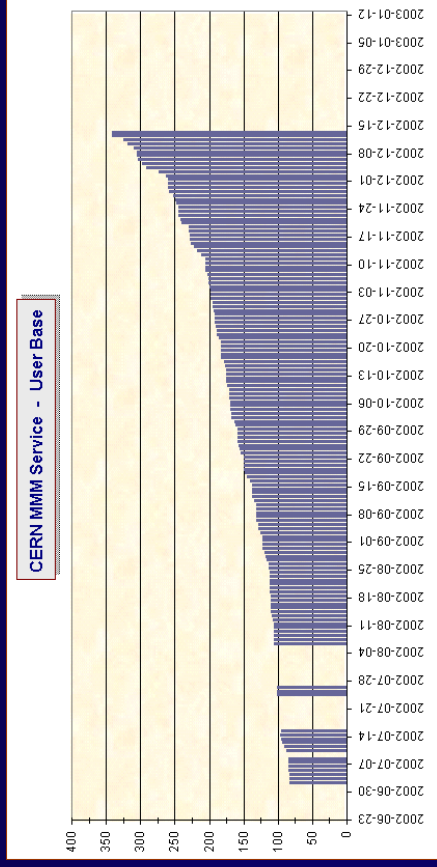
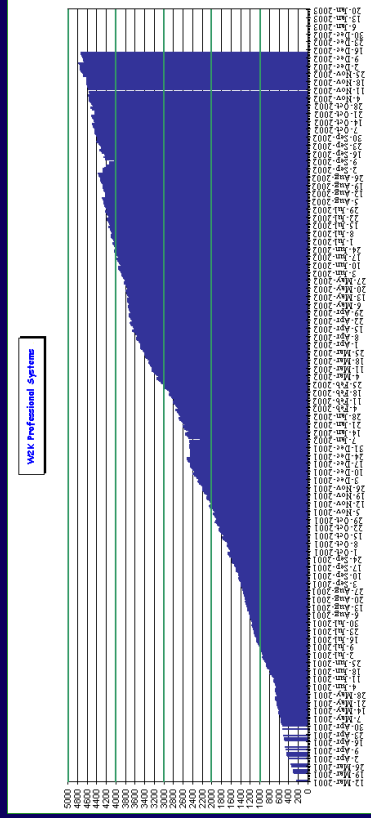


A final comment



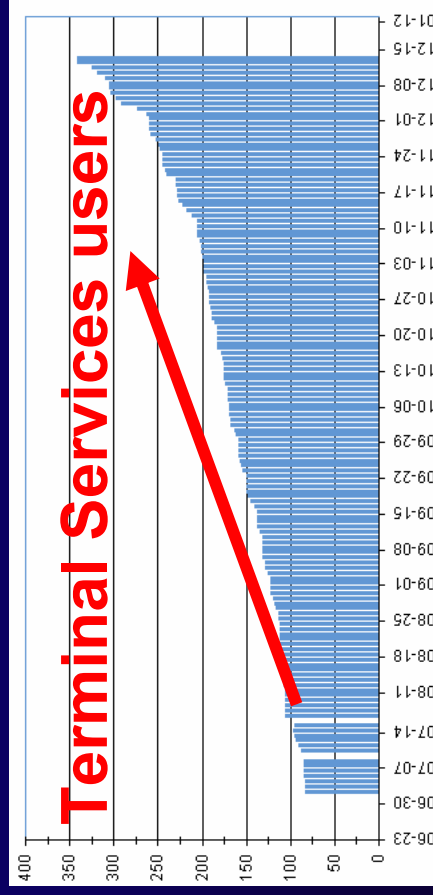
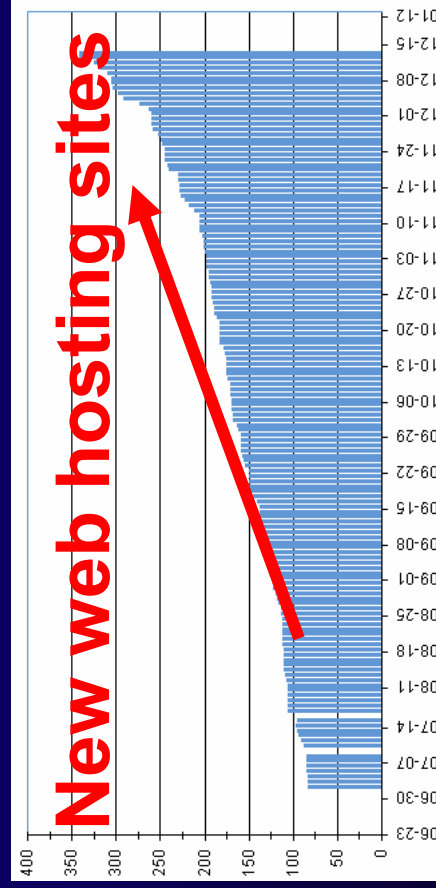
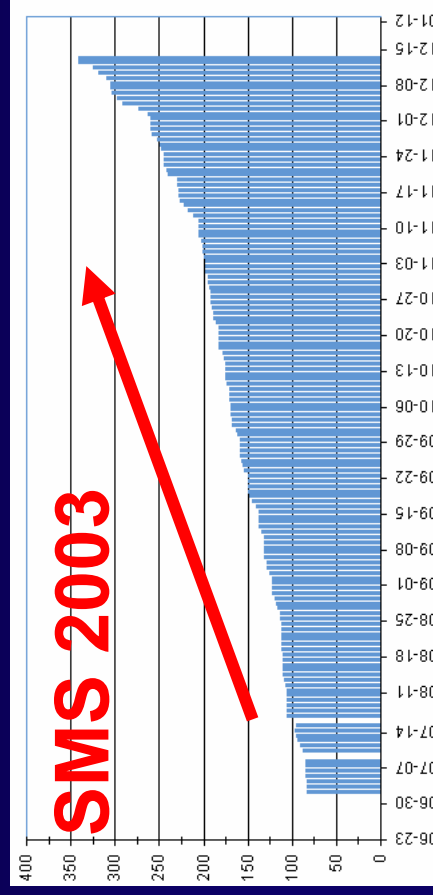
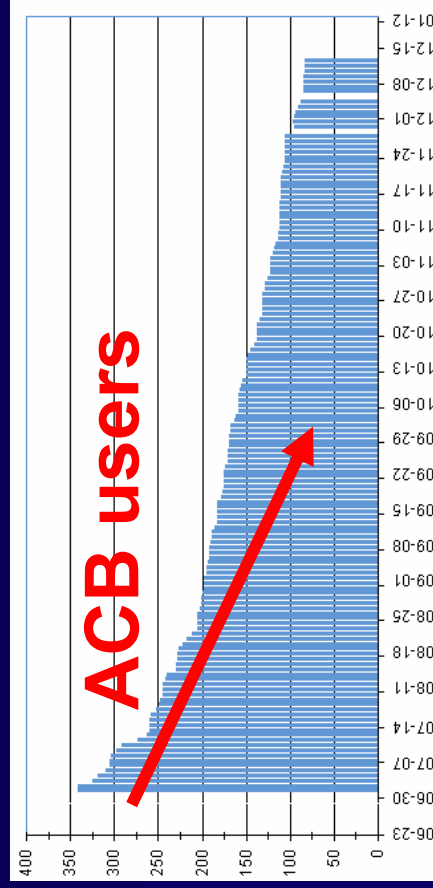


The past was not static





The future won't be static either





Summary

- ◆ Major stakeholders
 - ◆ UDS group, Helpdesk
 - ◆ CS group, Network
 - ◆ FIO group, Computer Centre, backups
- ◆ Important mission, high visibility of services
- ◆ When Web/Mail/Desktop down or security compromised, nobody can work
 - ◆ Lot of stress means lot of responsibilities, top priority
- ◆ Important and formal procedures for change management
- ◆ Teamwork essential
- ◆ Centralized management means high efficiency but also error amplification



Selected topic demos ...

- ◆ **Windows Account Management** <http://cern.ch/win>
- ◆ **Web Site management automation** <http://cern.ch/web>
- ◆ **Mailing list management** <http://cern.ch/simba2>
- ◆ **Anti Spam efforts** <http://cern.ch/mmm>