



How to reach World Domination?

- 4 IT units in the headquarter
 - more than 11000 PCs worldwide
 - 226 missions (embassies, general consulates)
 - IT service centers in New York, Singapur
 - little IT stuff abroad
- IT strategy unit (CIO like):
 - managing IT budgets
 - responsible for IT security
 - ‚strategic decisions‘
 - got job through former DPL: Martin Michlmayr





history

- until 2003:
 - Redhat servers in the missions
 - german branded ‚SINA‘ IPSEC based connectivity worldwide
 - MS Windows XP and Office at the clients
 - MS Windows NT at servers and clients in the headquarter including MS Outlook and Exchange
- 2004 (introducing Debian):
 - Debian for Internet terminal servers
 - Debian for more and more ‚Intranet‘ web applications



history and present

- 2005 (refreshing the headquarter):
 - Debian on almost all servers
 - Debian on all clients in a multiboot configuration
- 2006 (speeding up):
 - Debian on all new servers and (multiboot) clients in the missions
 - Debian on all notebooks with SINA based VPN
- 2007 (starting the final phase):
 - migrating some missions to Debian only: Oslo and Kairo
 - VirtualBox for legacy software



advantages of Debian

- large package pool and large developer community
- not business driven: independence
- real open source distribution; you are allowed to recompile the kernel
- users can easily contribute: BTS, collaborative development, translations, new maintainer
- end user focus; compared to Gentoo or free BSDs
- high stability thanks to the Bug Tracking Systems and the strict release process



development / installation infrastructure

- goal: package everything in deb format for easy distribution and installation
- own mirror, components archive, upload queues, build server, and policies
- bugtracker bugzilla, SVN, git, mailman based mailing lists, mediawiki, and OTRS ticket system
- it is still too hard to setup and maintain our own infrastructure
 - no LDAP integration
 - missing a lot of helper tools e.g. for archive maintainance



installer

- d-i is good but did/does not fit our needs
- automatic setup of load-balancing heartbeat clusters
- automatic setup of DRBD and LVM on top of DRBD
- simple creation of installation media: CDROM, DVDROM, network based (PXE), ...
- support of virtual machines (Xen, VirtualBox)
- image based installations (preinstalled OS by hardware vendor, support for other, non-Debian OS)
- separation of installation from setup



policy-like problems

- running the same daemon twice (or more):
 - needed for better heartbeat support
 - avoid hardcoded paths to files or directories like /etc
 - support automatic installation of multiple instances of every daemon via preseeding or something similar
- dynamic UIDs/GIDs on shared storage:
 - some kind of preseeding of UID/GID mappings needed
- no definition of a central configuration database
- no extensible configuration mechanism



configuration file handling

- more flexible configuration files than dpkg's conffiles
- preset `--force-confold/--force-confnew` for individual files (ucf uses `$UCF_FORCE_CONFFNEW`, `$UCF_FORCE_CONFFOLD` and `debconf`)
- diversion tool like `dpkg-divert`
- conffile handling of dpkg not fully documented (6.8.5)
- moving conffiles from one package to another one with or without changing the filenames
- run-parts for configuration files + migration/diversion mechanism (e.g. `run-parts --list /etc/conffile.d/`)

configuration file handling



- numbered backups
- central database of configuration data
 - debconf's LDAP backend is experimental and very limited
 - plain files are the only option currently
- standard and extensible template mechanism for configuration files
- user frontend for central database (webapp)



Thanks for
your
interest!

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