

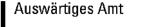
## How to reach World Domination?

- 4 IT units in the headquarter
  - more than 11000 PCs worldwide



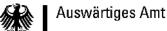
- IT service centers in New York, Singapur
- little IT stuff abroad
- IT strategy unit (CIO like):
  - managing IT budgets
  - responsible for IT security
  - ,strategic decisions'
  - got job throught former DPL: Martin Michlmayr





# history

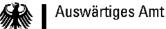
- until 2003:
  - Redhat servers in the missions
  - german branded ,SINA' IPSEC based connectivity worldwide
  - MS Windows XP and Office at the clients
  - MS Windows NT at servers and clients in the headquarter including MS Outlook and Exchange
- 2004 (introducing Debian):
  - Debian for Internet terminalservers
  - 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

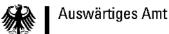
- large package pool and large developer community
- not business driven: independence
- real open source distribution; you are allowed to recompile the kernel
- users can easily contribute: BTS, collaborative development, translations, new maintainer
- end user focus; compared to Gentoo or free BSDs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





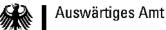
# development / installation infrastructure

- 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

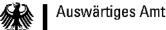
- d-i is good but did/does not fit our needs
- automatic setup of load-balancing heartbeat clusters
- automatic setup of DRBD and LVM on top of DRBD
- simple creation of installation media: CDROM, DVDROM, network based (PXE), ...
- support of virtual machines (Xen, VirtualBox)
- image based installations (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 then 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/)

Debconf 7, Edinburgh, 22<sup>th</sup> June 2007



# 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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