



Advantages of GnuGK

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Where am I ?



- 19312km south-east of Garching
- “City of Sails”
- Home of Middle-earth
- “Gods own country”
- Aotearoa

Auckland, Neu Seeland



Advantages of GnuGK

- Former solution
 - “Open Firewalling” → FW was not configured for VC-System → VC-Systems not protected, Access to all services (www admin, telnet) were possible
 - **security flaw**
- Desired solution / Solution now
 - “Low-cost” solution
 - Needed to be configurable and administrable
 - GUI, text-based
 - Adapt to the existing network topology
 - no reconstruction/rearranging of DMZ



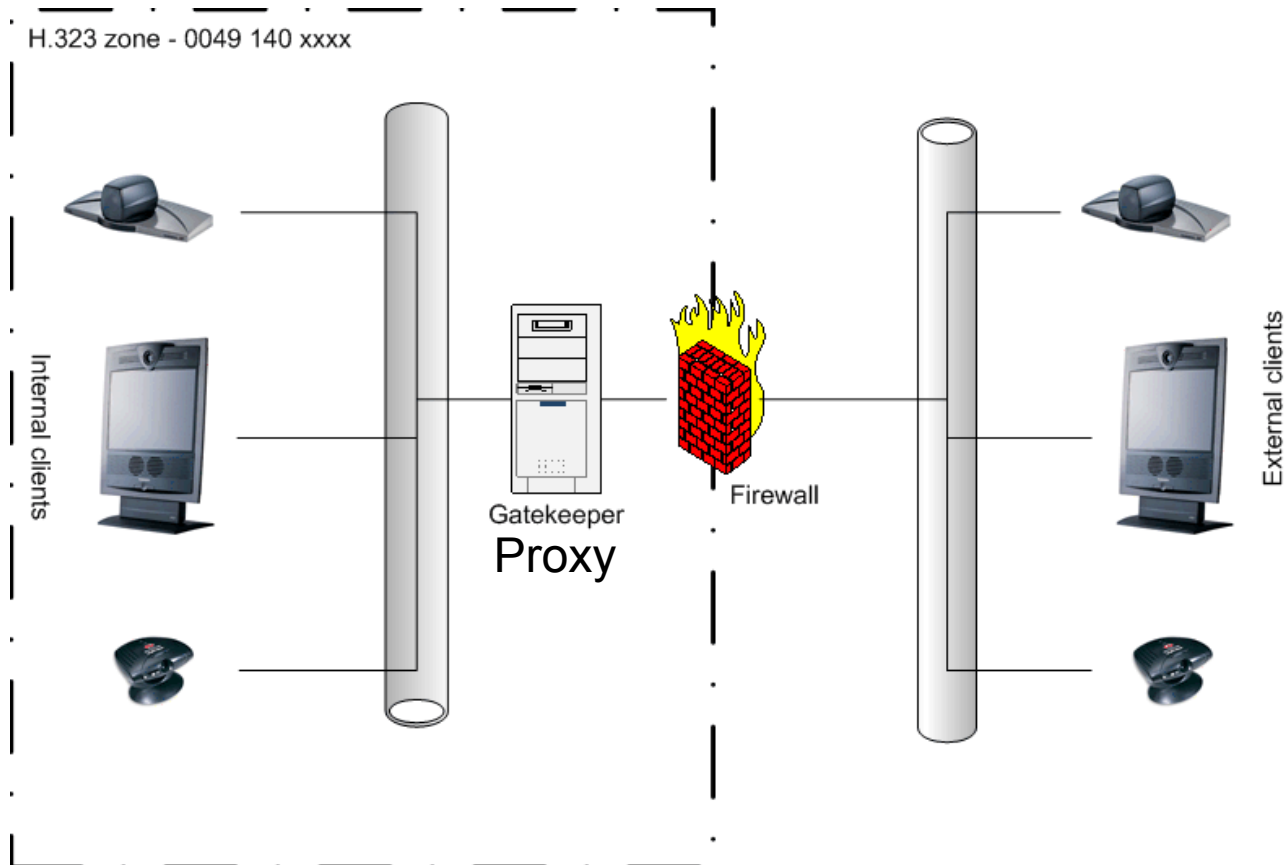
Advantages of GnuGK

- Costs
 - GnuGK based on GPL → free
 - Linux → free
 - Costs approx. €1000, just for a PC
- Linux
 - Approx. 80% of all servers in RZG are Linux/UNIX based
 - Our experiences showed that Linux is more reliable as a server (usage of resources like memory, faster, stable)
- OpenSource
 - Code is adjustable
 - Code could be used to customize settings/coding/reactions et cetera



Advantages of GnuGK

- Fits in RZGs network security rules





Advantages of GnuGK

- VideNet
 - GnuGK can be used in the VideNet structure
 - Knows GDL (Global Dialing Scheme)
 - Resolve H.323 alias via IP
 - Resolve E.164 via IP
 - Resolve IP via E.164
 - Resolve H.323 alias via E.164
 - Et cetera...
 - Neighboring
 - GnuGK can handle neighbor gatekeeper → can/is used with country gatekeeper of DFN
 - **Does not know his own zone** ☹️



Advantages of GnuGK

- Authentication
 - IP
 - Only one IP is allowed
 - Complete subnets can be enabled/disabled
 - Prefix
 - Prefixes can be used to authorize external vc-clients, e.g. guest, test machines, et cetera
 - Prefix ranges can be enabled/disabled
 - MySQL
 - Authentication data stored in MySQL DB
 - LDAP
 - LDAP data can be used as authentication as well
 - Several IPs, Prefixes, et cetera can be restricted



Advantages of GnuGK

- Statistics/Experiences (I)
 - GnuGK is used for ALL video calls; intern ↔ intern, intern → extern, extern → intern
 - GnuGK permanently used since 8/2002
 - 7 breakdowns
 - 4 caused by configuration mistake
 - 2 caused by computer breakdown
 - 1 caused by network breakdown
 - Today GK runs 43 days; 1075 calls, including all test calls, 700 successful conf., 150 from neighbor



Advantages of GnuGK

- Statistics/Experiences (II)
 - GnuGK in regular use with:
 - 3 Tandberg 6000
 - 1 Tandberg 880, 4 Tandberg 500, 1 Tandberg 550
 - ~25 ViaVideo (Padua, JET, IR, New Zealand)
 - ~4 Netmeeting (IT, FI, IR)
 - Aethra (IT)
 - GnuGK tested with
 - Sony PCS1600
 - GnomeMeeting



Advantages of GnuGK

- **Statistics/Experiences (III)**
 - Used for Point-To-Point conferences
 - RZG Monday meeting
 - Used with transfer rate up to 3 MBit/s
 - Used by Multipoint conferences via internal or DFN MCU
 - “Praesidentenrunde”
 - Colloquia (Garching (D2) – Garching (L6) – Greifswald)
 - Transfer rate up to 3 MBit/s
 - 4 up to 16 split
 - AUG – Monday-meeting EFDA (EuropeanFusionDev.Assoc.)
 - Continuous presence, voice activated



Advantages of GnuGK

- Advantages
 - Free
 - OpenSource
 - Proxy can be disabled
 - Many authentication methods available
 - Observation via GUI
 - Runs on Windows and Linux
 - NATed systems are supported
 - E.164 rewrite
- Disadvantages
 - Observation only via telnet on port 7000
 - Does not know his own zone



Advantages of GnuGK

- GnuGK is **THE** recommended solution for the Max-Planck-Gesellschaft
- H.323 and Firewall issue could be solved
- Alternative solutions available, depending on the financial ability



Advantages of GnuGK

- Acknowledgement
 - Dr. U. Schwenn, P.H. Pflüger, MPG
 - Dr. H. Pfeiffenberg, AWI
 - J. Hornung et al., DFNVC
 - C. Fleck et al., VCC Dresden