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samba eXperience 2007

Digital Map Making:
A Linux Desktop Migration
(beyond GNOME & KDE)

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Agenda

Background Information

Design Choices

The New Desktop

Samba Trouble & Solution

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The Customer Case

- **Landesvermessung und Geobasisinformation Brandenburg**
  - State office for geo-information and survey
  - Collecting, storing and developing data relating to location on the surface of the earth.
  - Responsible for the production and publication of the official maps and for keeping the official land register of the Federal State of Brandenburg.
  - Located in Potsdam
  - Heavily IT dependant

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Digital Map Making

- Department size ~ 30 map makers

- Computer based (specialized CAD application)

- SICAD

- 2 IRIX application servers, 2 Linux database servers

- Users running Windows & Exceed as desktops

- Slow (load times up to 5 min !)

- Batch processing on central servers

- SPOFs

- Who knows how to admin IRIX ?

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System Layout

- **Migrate SICAD to Linux**

- **User desktop runs Linux**

- **Use existing user accounts from existing AD**

- **No need for application server**

- **Linux database servers**

- **Central file storage (NFS) for work area**

- **Central file storage (NFS) for home directories**

    - **No personal data on user desktop**

    - **Users can work on any computer**

- **Test & Development on VMware ESX**

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Requirements of a Linux Desktop

- Integration into existing AD environment

- No extra management hassle for IT staff

- As simple as possible – don't confuse the user

- Easy to customize menu system

- „Fool proof", no user help desk for Linux desktop

- Commercial support and security updates (Novell Linux)

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SLED 10 & fvwm

- **SuSE Linux Enterprise Desktop 10**

- **AutoYaST scripted installation (in 25 minutes ready)**

- **All required software included (OpenOffice ...)**

- **fvwm:**

    - **fixed system-wide configuration**

    - **simple menu system**

    - **fast**

    - **does not look like Windows**

    - **„Consultants Preference"**

- **Windows apps through Citrix, fvwm menu integration**

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Why not GNOME & KDE ?

- **KDE & GNOME very well integrated in SLED 10**

- **Looks like Windows – confusing for Windows users**

- **Users can change too many things, break GUI**

- **Users can try too many things – no Linux hotline**

- **Slow & Sluggish**

- **Difficult to enforce central (NFS based) configuration and menu system**

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The Project

- **Total of 25 consulting days**

- **Development & Pilot in 17 days**

- **Rollout in May / June**

- **End-user training:**
  ½ day workshop & 2 hours personal migration / coaching

- **Trouble to find hardware**
  (Novell YES certified and really working well)

- **Overhaul of internal processes – each day a new detail**

- **Major effort with documentation (DokuWiki)**

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Login

Citrix PNA login

fvwm menu
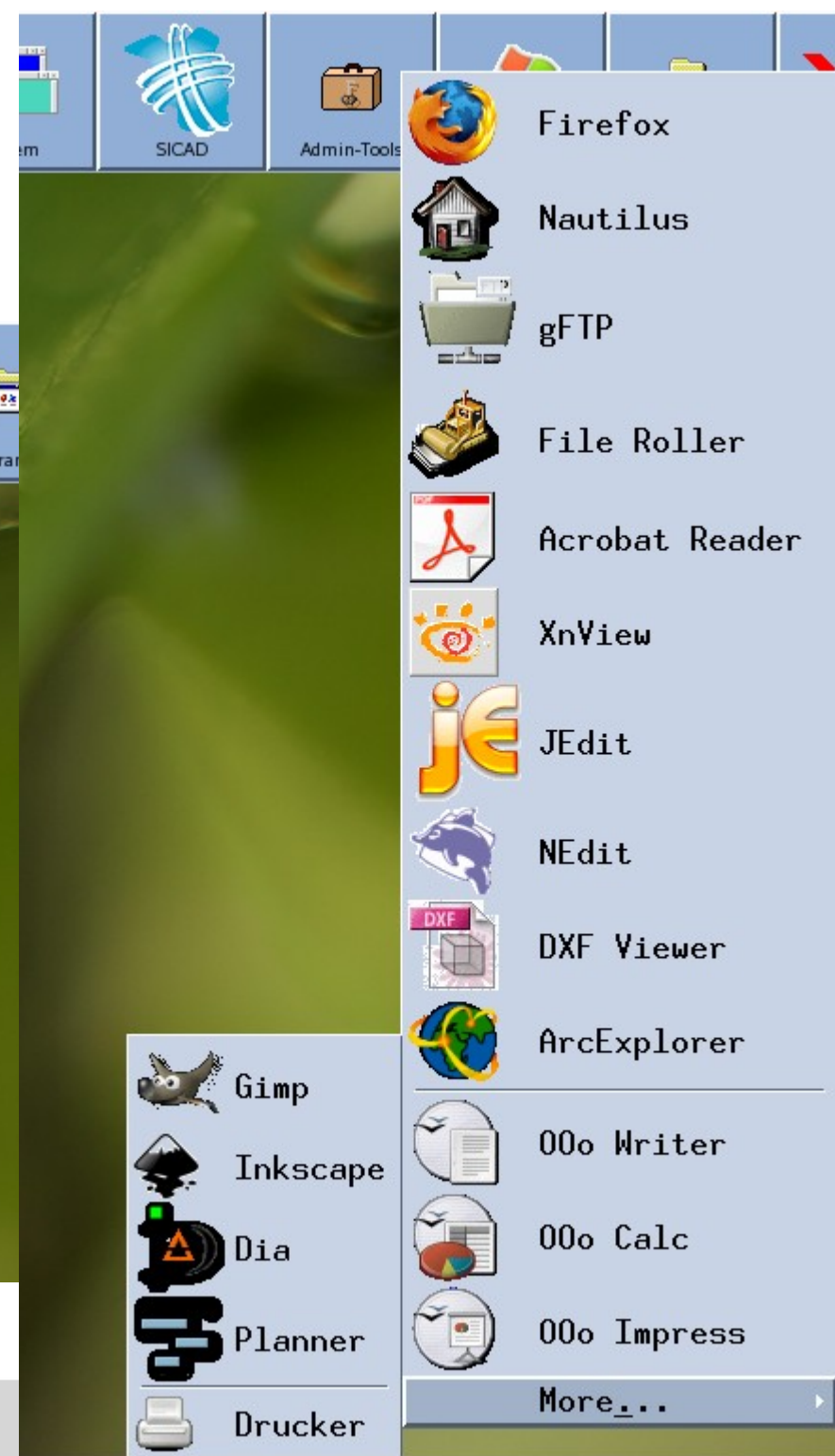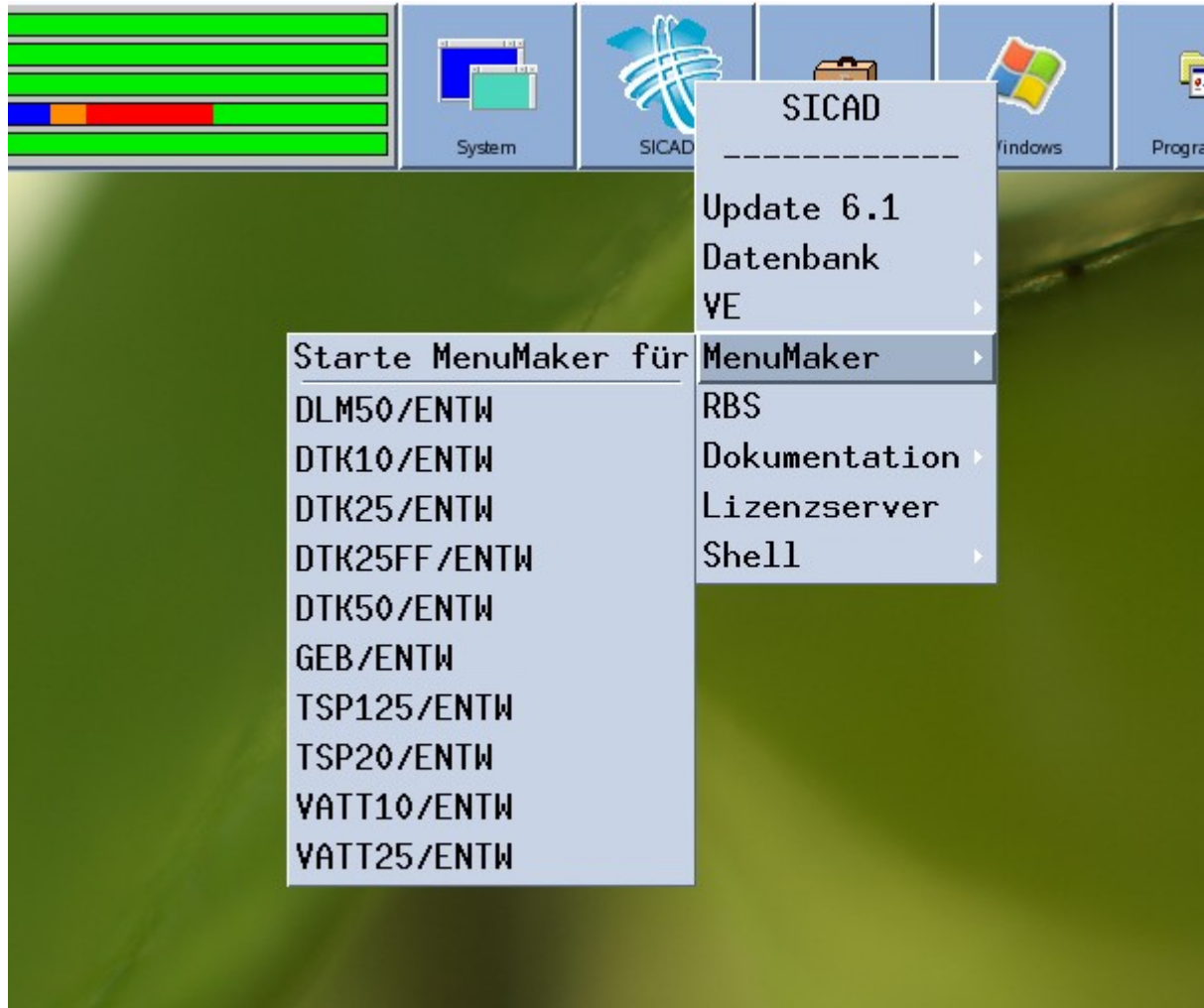
logout
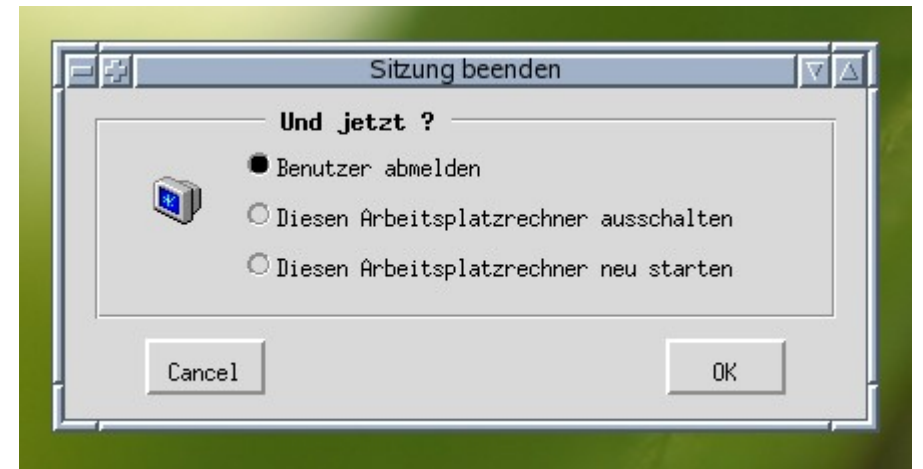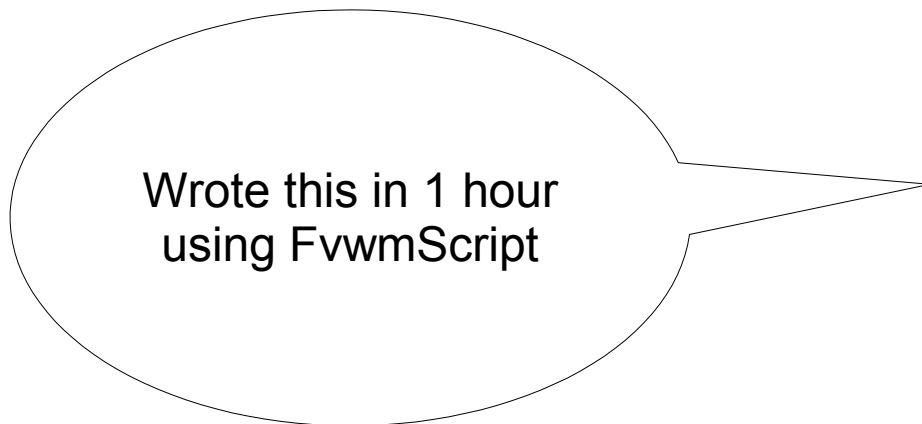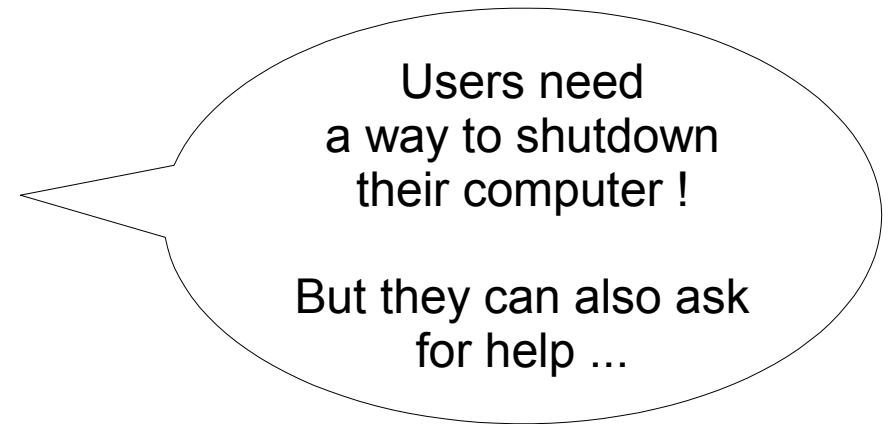
LOAD 0.0
CPU0 0%
CPU1 0%
MEM   598M
NET   18K

Admin-Tools

✿ Fvwm2 ▸
🔒 Bildschirm sperren
🔊 Unlock Audio Device
🖥 Fernsteuerung erlauben
⏻ Beenden

Users need
a way to shutdown
their computer !

But they can also ask
for help ...

Wrote this in 1 hour
using FvwmScript

Sitzung beenden

Und jetzt ?

● Benutzer abmelden

○ Diesen Arbeitsplatzrechner ausschalten

○ Diesen Arbeitsplatzrechner neu starten
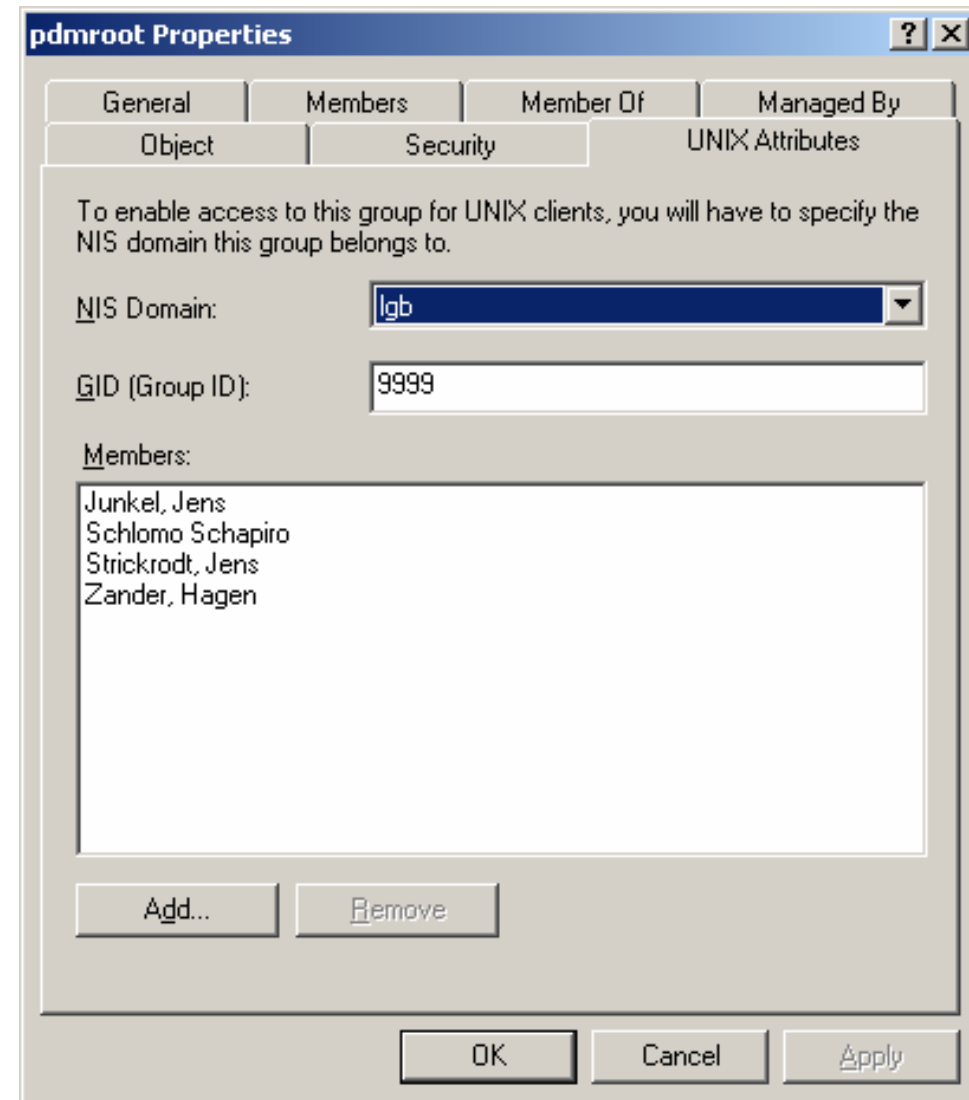
Cancel   OK

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Windows 2003 R2 Domain

- **Includes ½ SFU**

- **Ancient technology (NIS)**

- **Management of UNIX groups independant of Windows groups**

- **Linux connectivity:**
  - **nss_ldap**
  - **nss_pam**
  - **Works without problem**
  - **Inconvenient**

Samba 3.0.24

- **First SuSE build broken (!), second (-54) OK**

- **Winbind in AD / RFC2307 mode:**

    - **passdb backend = tdbsam**

    - **idmap backend = ad**

    - **idmap uid = 100-20000000**

    - **idmap gid = 100-20000000**

    - **winbind nss info = rfc2307**

- **Works very well & convenient**

- **No more double group management**

- **Clients use LDAP (pam / nss), no domain join required**

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More Features

- Winbind on clients (domain joins ?)

- Kerberized SSH between clients and to servers

- Service management

- Login scripts

- Hopefully, seamless Citrix login

- Let people use more Linux applications

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Thank You ! Questions & Answers
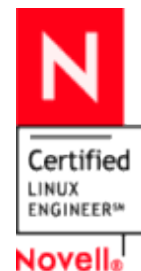
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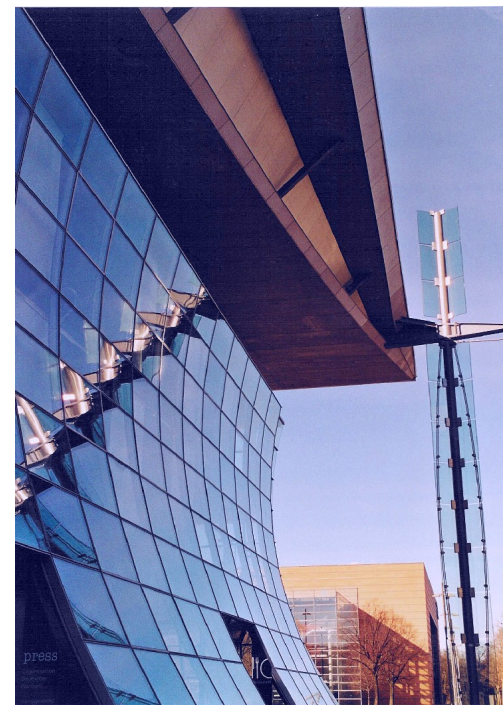
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