

EUROPEAN AFS & KERBEROS
CONFERENCE 2010

From dark age to UTF-8

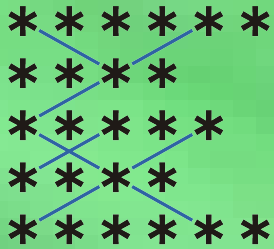
C:\Documents and Settings\Nabýdka Start\Po spuštýnÝ



C:\Documents and Settings\Nabídka Start\Po spuštění

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Tomů Stibor

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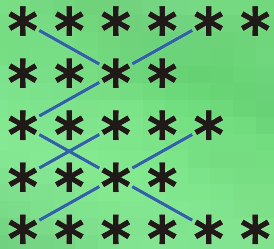
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Local computer environment



- About 1200 managed Windows XP machines
- About 30 hardware configurations
- Various OpenAFS clients
- User profiles stored on AFS
- Central software management, repository on AFS
- Standalone users with Windows 7 and UTF-8 clients

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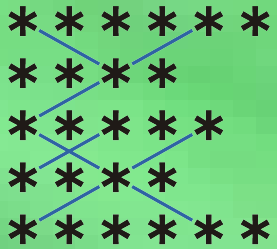
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The idea of the upgrade



- Current version of OpenAFS is 1.5.7700
- Future workstations upgrade to Windows 7
- Unification of software enviroment

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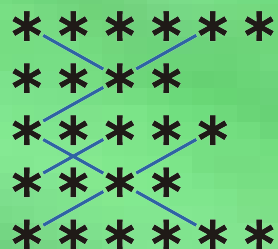
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The main Windows problems



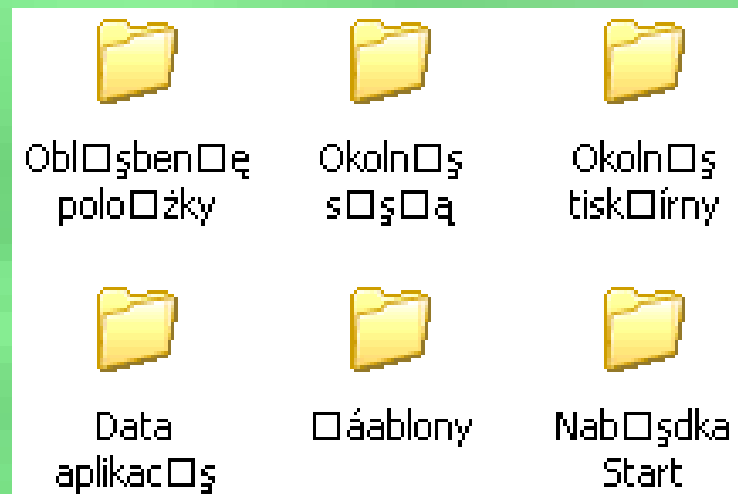
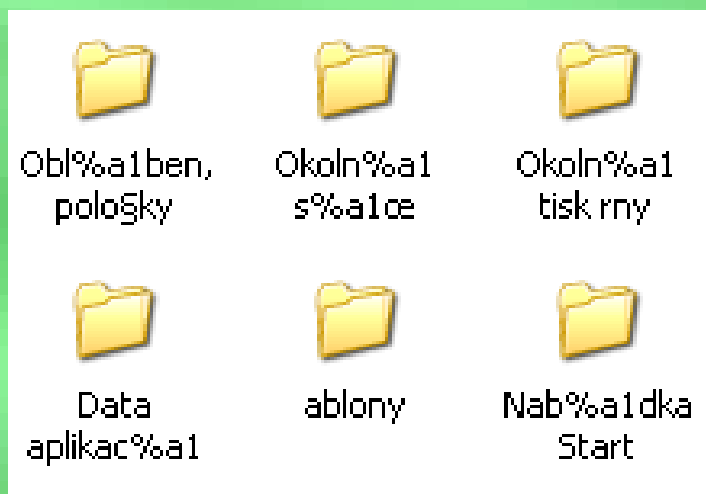
- User profile folders with accented characters
- Due to UTF-8 issues we were stuck at 1.5.39
- Unattended instalation before user logs in
- Instalation files are stored on AFS :-)

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The main Windows problems



User profile is damaged with UTF-8 client

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A problem has been detected and windows has been shut down to prevent damage to your computer.

If this is the first time you've seen this Stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to be sure you have adequate disk space. If a driver is identified in the Stop message, disable the driver or check with the manufacturer for driver updates. Try changing video adapters.

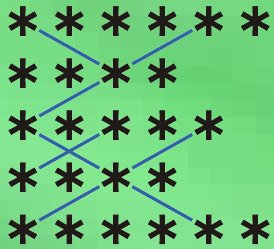
Check with your hardware vendor for any BIOS updates. Disable BIOS memory options such as caching or shadowing. If you need to use Safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup options, and then select Safe Mode.

Technical information:

*** STOP: 0x0000008E (0xC0000005,0x93704E9B,0x9328BAC8,0x00000000)

*** SASKUTIL.sys - Address 93704E9B base at 936FB000, DateStamp 48163ef6

collecting data for crash dump ...
initializing disk for crash dump ...
Beginning dump of physical memory.
Dumping physical memory to disk: 30



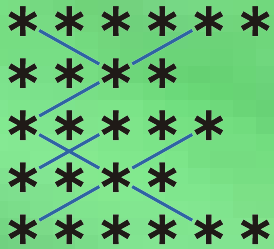
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Deployment on workstations

- About 1200 Windows XP workstations
- Deployment via startup script
- Combo upgrade – SP3, OpenAFS, Kfw, NetIDmgr
- The need of old instalation files
- Free space issues
- Angry users issues
- The buletproof update script :-)




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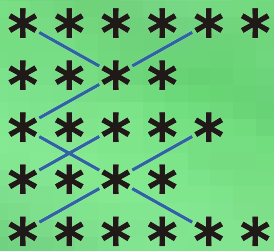


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Recoding AFS filesystem

- `convmv -f cp852 -t utf8 . --notest`
- About 37 000 users with stored profile
- Slow because of 3.2×10^7 files 
- Find found that only 1.7×10^6 files required recoding
- Output from find need to be parsed in reverse order
- Conversion was run in five instances

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Results

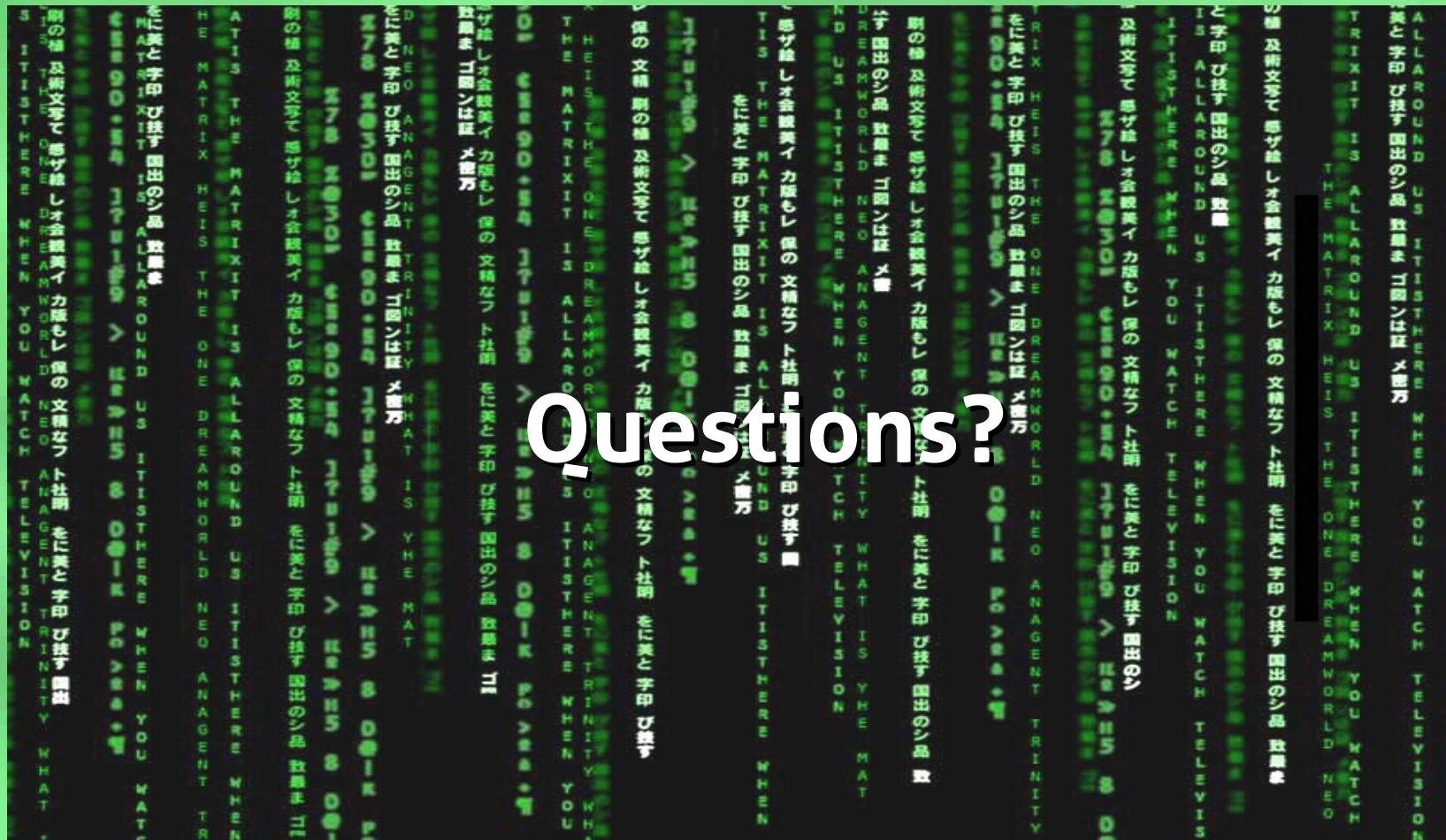
- Recoding took about 20 hours
- Until now we have 1000 upgraded workstations and still counting
- „Příliš žluťoučký kůň úpěl d'ábelské ódy“ is now possible in profile path :-)
- No more profiles destroyed because of exotic file name
- Sleepless night for our colleague



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Thanks for your attention

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