

User profiles inside out

Helge Klein, <http://blogs.sepago.de/helge>



Who is **Helge Klein?**

IT architect at sepago • Citrix Technology Professional (CTP) • Architect of the product that later became Citrix Profile Management • Author of SetACL

What is he talking about?

What **is** a profile anyway?

- 1) A folder with 1 special file: NTUSER.DAT • ProfileList registry entry makes it known to the OS • 1 user has full access •
- 2) The only place developers can be sure their application has write access

Which profile type is right for me?

Local • Roaming • Mandatory • Third party, e.g. Citrix PM, AppSense, Flex, ...

A profile's
natural habitat is
the **local disk**. Everything
else is a crutch.

No logon delay • Fast access • Practically unlimited space • 100% compatible with all apps •
Inexpensive • Full personalization • No vendor lock-in • No infrastructure & maintenance req.

There is **no best**
network **profile**. Each
approach has pros and cons.

We will know that the perfect profile solution exists when we realize we stopped talking about the topic.

Are **mandatory** profiles more **secure**?

Full access on master copy of registry hive NTUSER.MAN for all users required •
On multi-user systems, each user can read *and* write other user's registry hives (HKU\<<SID>)

How to **assign** **profiles** to users?

No configuration → local • AD user object or group policy → roaming • Error → temporary

Can I use **multiple profiles** per user?

RDS & regular profile • Different GPOs for different machines • Environment variable, e.g. %ProfileVersion%

Should I use multiple profiles per user?

Profile sharing between platforms *may* work • Problems: “Last writer wins” and different paths in registry • Recommendation: one profile per user per platform • Platform = combination of OS and applications (i.e. silo)

Can I use the **same** profile on **32**-bit and **64**-bit?

Can you: yes • Should you: probably not • Problem: paths in HKCU\Software are different if 32-bit apps are used on x64: C:\Program Files (x86)

With assignment per GPO,
do I need to put **all**
profiles on **1 file**
server?

Yes, unless you create a virtual profile folder with DFS namespaces • Requires
1 DSF link per profile → automation

How **many** profiles per file **server**?

Without redirection: high load during mass logon hours only • With redirection: constantly high load

Folder **redirection**: how much is **good** for you?

Redirect most folders • Beware of AppData redirection (caveats here)

Is redirecting **AppData** **insane?**

Pros: Faster logons •

Cons: File server performance • App performance • App compatibility • Concurrency & multi-version issues •

Only possible solution: Streaming

Can I **replicate** profiles between sites?

One profile must not be used in more than one site •
Replication only supported by Microsoft for centralized backup

How to **limit the size** of roaming profiles?

Do **not** set quotas on the file server • Consider profile quotas set via group policy •
Helpful: folder redirection

How to **troubleshoot** profile issues?

XP/2003: easy, set UserEnvDebugLevel to 10002 • Vista and later: trial and error •
Userenv.log has been removed • Only Microsoft PSS can decipher binary traces

Why do I get a **temporary** profile after deleting a profile folder?

Corresponding registry key below "ProfileList" must also be deleted •
Correct way of deleting: use SystemPropertiesAdvanced.exe

Does profile **corruption** even exist?

Corrupt profile = NTUSER.DAT broken • Rather unusual • More common: inconsistencies caused by application “hiccups” •
Not sure how to prevent that from happening (even with 3rd-party software)

Some more advice

Beware of “.V2” when specifying profile paths • Enable these policy settings:
Do not check for user ownership of Roaming Profile Folders •
Add the Administrators security group to roaming user profiles • Delete cached copies of roaming profiles