

Windows and Linux Integration With AFS and Kerberos/LDAP

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Why Bother?

- Price
- Users
- Software for each platform
- Single Username/Password/Data Set

Windows Can!

Windows Server 2003 (and presumably Vista server) Uses:

- Kerberos V (KRB5) for Auth
- Lightweight Directory Access Protocol (LDAP) for User and Group management
- Server Message Block (SMB/SAMBA) for Files and Printers

All of these are interoperable (and it can use AFS too ☺)!

Linux Can!

- Uses LDAP for Users and Groups
- Uses KRB5 for Auth
- Uses AFS and/or Samba for files
- Uses CUPS/Samba for printers
- Can provide terminal server at a low cost

Kerberos

- Allows users to use services after being authenticated by OKing them
- Authenticates users

LDAP

- Manages Users and Groups
- Provides fine grained ACL for AD
KRB5

AFS

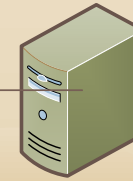
- Is a network file system used by 1000's
- Supports
 - Windows
 - Linux
 - MacOSX
 - BSD

AFS

- Allows secure remote usage over the internet (/afs)
- Scales well
- Is convenient for users

The Plan

- Use windows for Auth/User/Group management
- Use Linux for cluster/terminal server/ AFS / Core network services (DNS/DHCP/Mail/Web)



Linux Servers

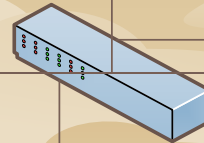
Provide:

- * File Storage (AFS)
- * Email
- * Web
- * Mirror
- * ETC

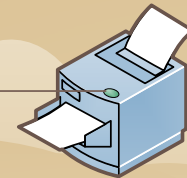
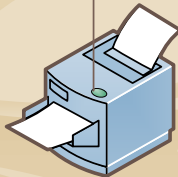
Windows Active Directory Servers

Provide:

- * Authentication (KRB5/LDAP)
- * Printing
- * Etc

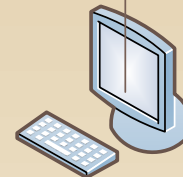
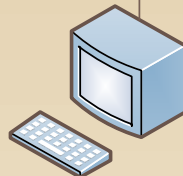


Physical and Wireless Networks



Linux Printer (CUPS/LPR)

Windows Printer



Linux Client

Windows Client

LTSP Client

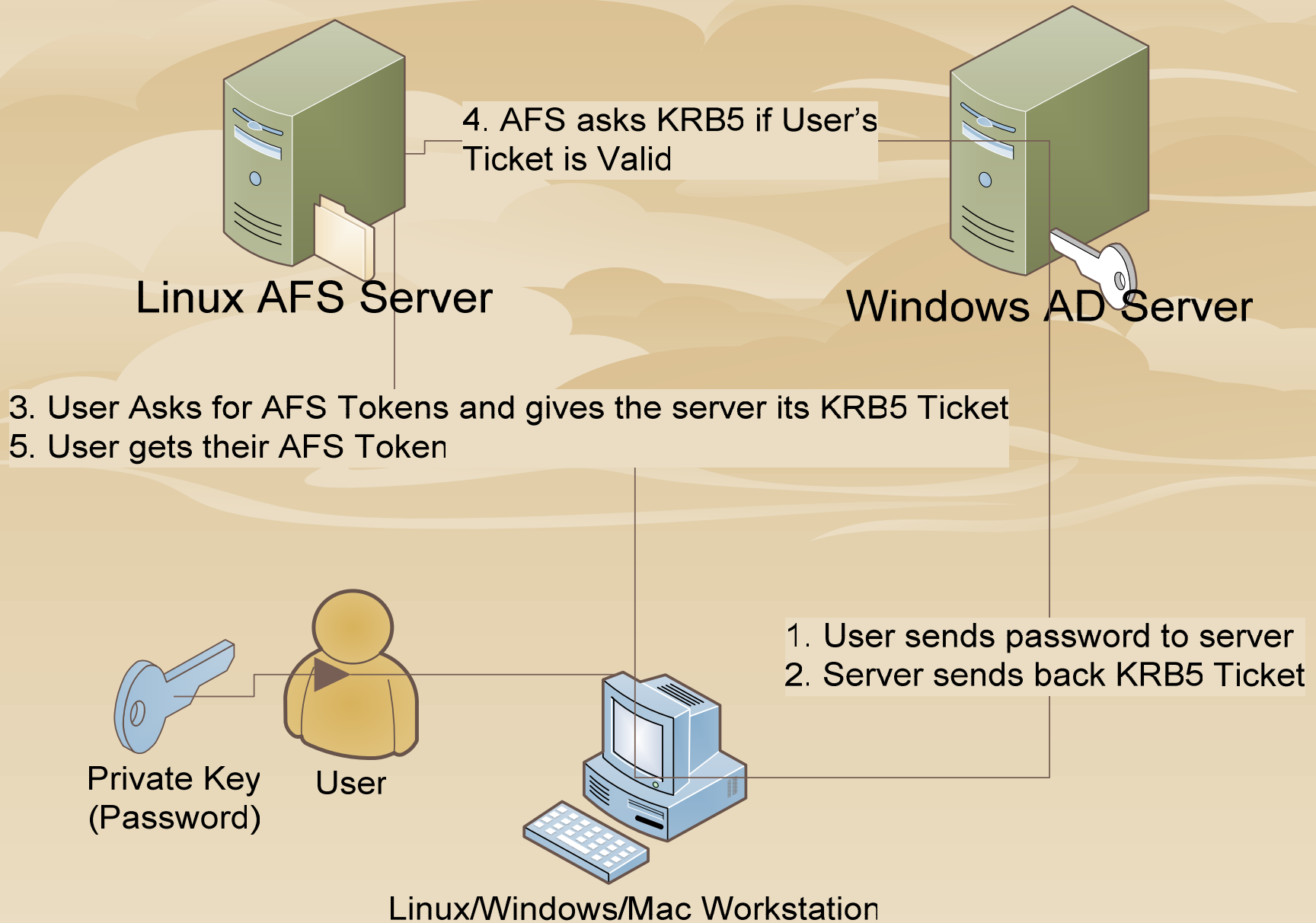
Tablet PC

Mac OSX Client

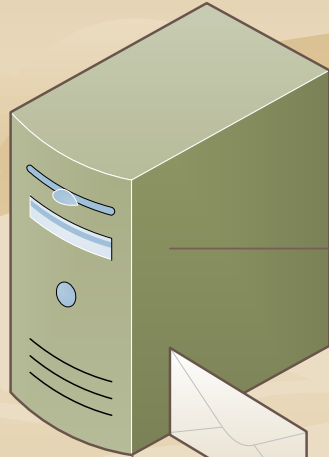
Linux/Windows/Mac Laptop

Remember:

- * AFS Uses Tokens
- * Kerberos/KRB5 Uses Tickets

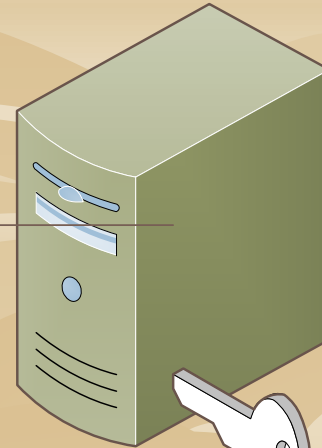


LDAP is the Lightweight Directory Access Protocol

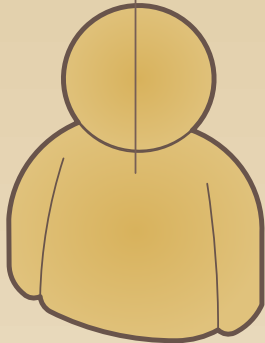


Linux Zimbra Server

LDAP Calls



Windows AD Server



Users (WEB+IMAP+POP3)

Questions? Demos? Comments?

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