

Linux experience at DIA

using open source software

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DIA Uni Roma TRE

Current Situation



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department

DIA \subset engineering \subset university “Roma TRE”

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some clients MacOS X, Mandrake, RTLinux, Suse

most servers RedHat, Debian

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IBM

- 1 server pSeries (AIX for CATIA)
- 3 server xSeries (RedHat)
- 8 workstation IntelliStation M Pro (Gentoo)

Conventional Use



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message related

- sendmail \rightsquigarrow postfix
- majordomo \rightsquigarrow mailman
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- some CGI shell scripts, some Perl, some Python
- postgresQL (mnogosearch alternative for htdig)

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other services

- openLDAP directory
- DHCP, DNS, NTP
- (NFS, irc, squid, tftp)

CASPUR Support



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- AFS cell vn.uniroma3.it
- RedHat based solution (enterprise server 3)
- integrated ntpd for centralized time
- kaserver (\approx Kerberos4)
- NIS for user data
- most mail and personal web pages are there

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AFS history

1. pioneered at Carnegie Mellon University
2. then Transarc Corporation (now IBM Pittsburgh Labs)
3. IBM made source copy available as OpenAFS

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- ssh with Kerberos5 support

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AFS clients

- PLM laboratory as cluster of workstations on Gentoo
- PC lab (aula CAMPUS ONE) KNOPPIX based
- machine cloning via PXE boot of some minimal Linux

Cell Architecture



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krb5

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ldap



Cell Architecture

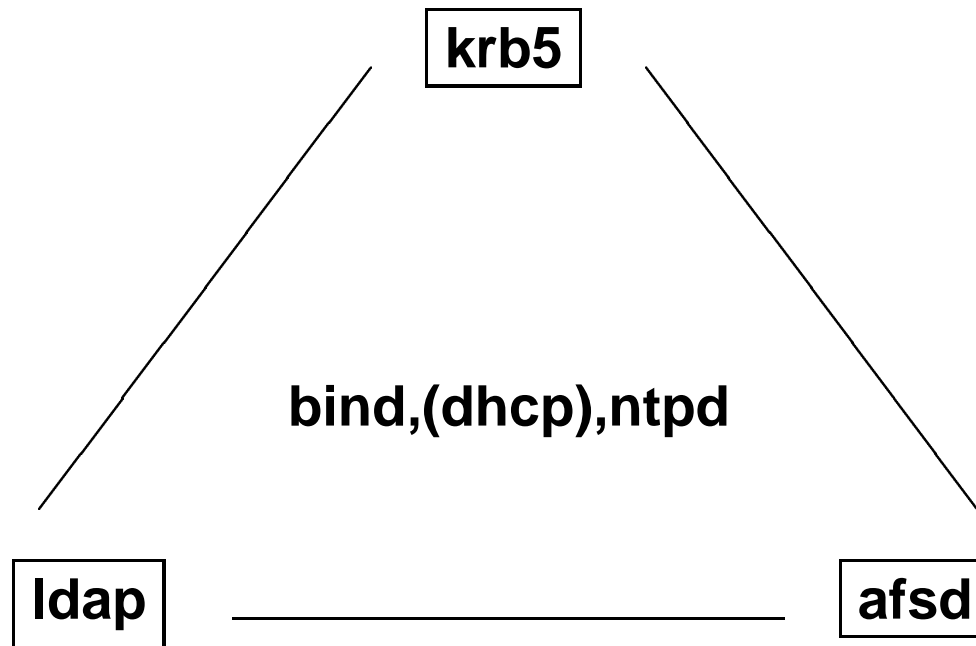
krb5

ldap

afsd



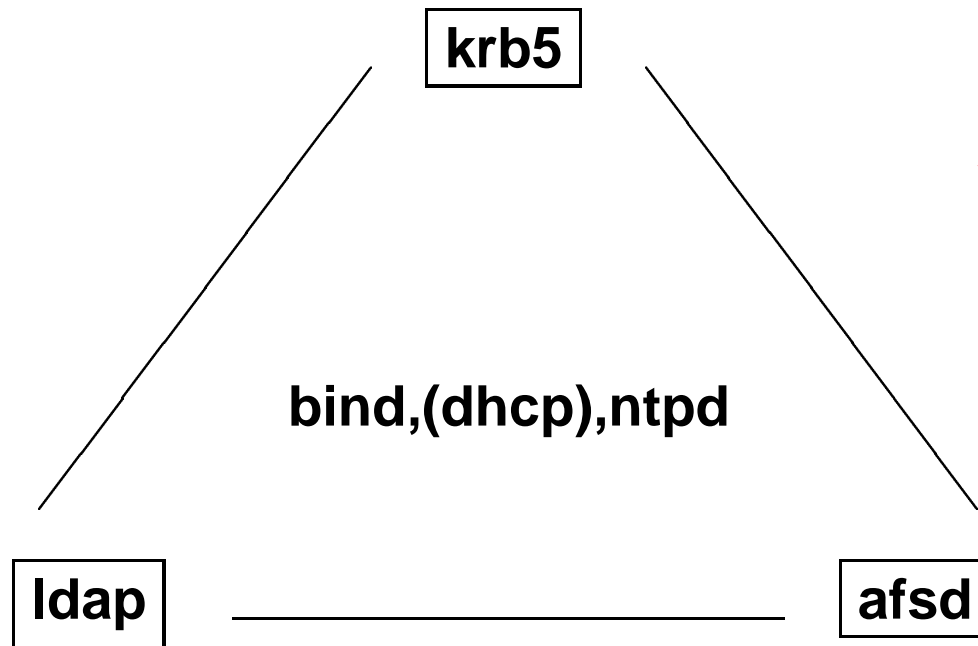
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RADIUS

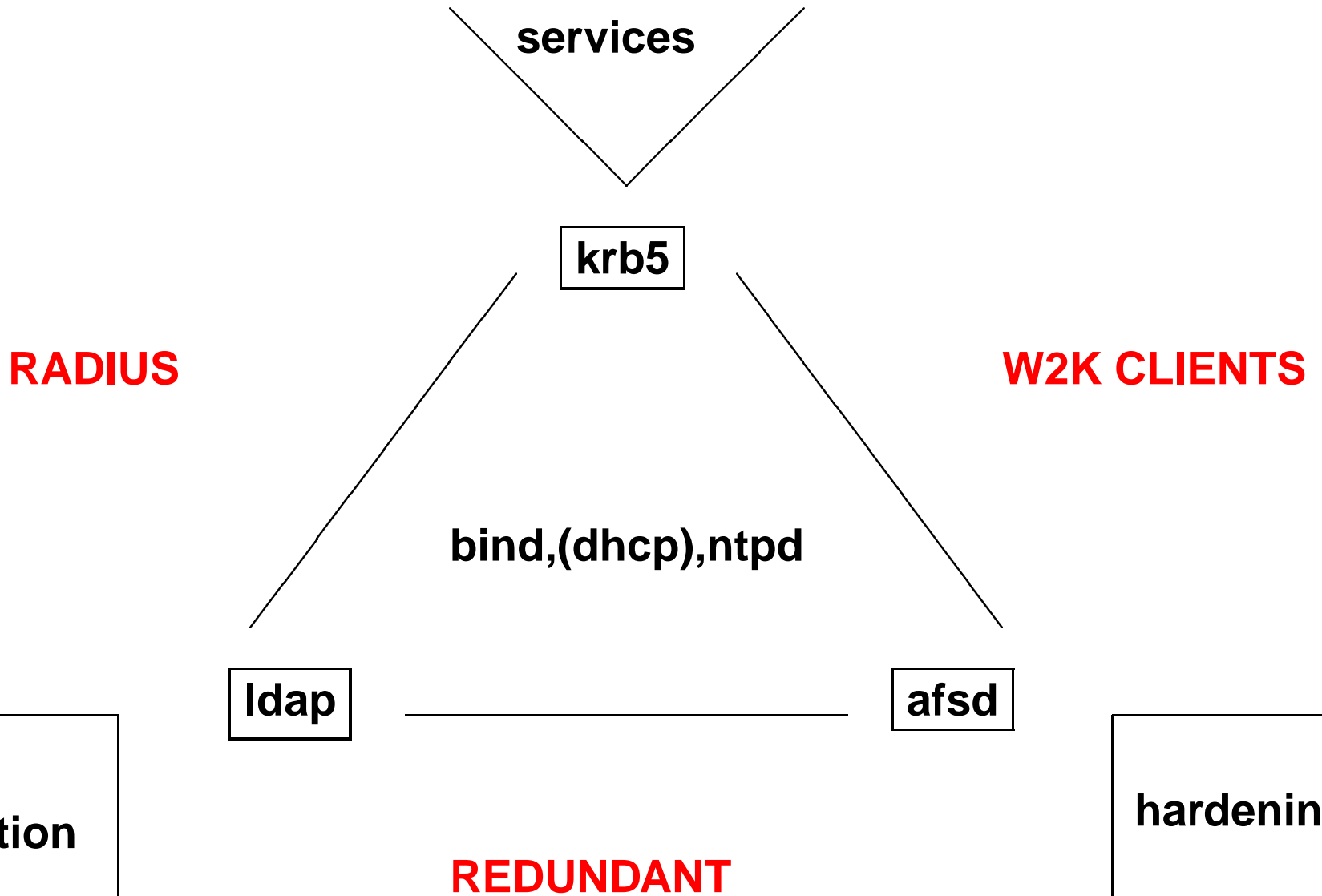
W2K CLIENTS



REDUNDANT



Cell Architecture



Next Steps



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Kerberos5 authentication for more services

Mail scanning and filtering

Zope testing for workflow

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- request for feedback on Linux
- student stages at DIA:
 - general** RADIUS with Kerberos and LDAP
 - Linux** service files in AFS, Kerberized services
 - Windows** SSO, Kerberized clients, LDAP clients
- some AIX hints?