

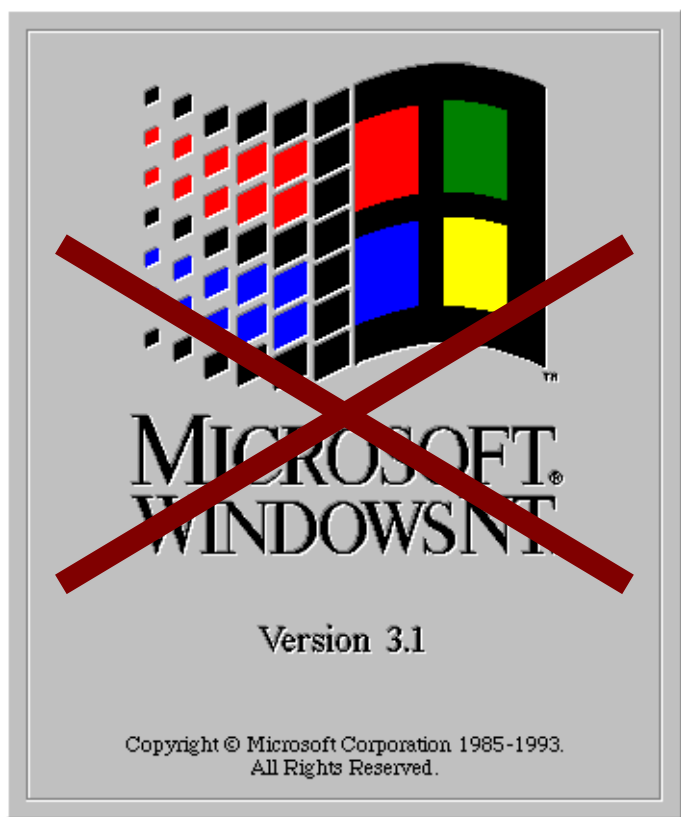


Mandriva Directory Server

Cédric Delfosse – Product Architect

RMML 2010

Context



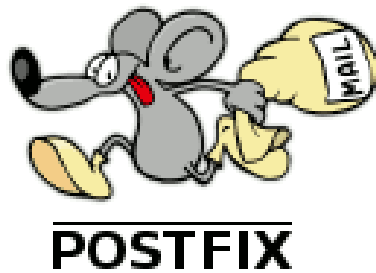
Heterogeneous network

Windows

MAC OS X

Linux desktop

Lots of already existing Open Source components



But

No integrated/centralized interface

No more true, maybe

Nice, easy to use ?

Learning curve for all those components !?

No global policies system

How to enforce parameters on heterogeneous systems ?

(Proprietary product exists now)

MDS = Identity and network service management, simple !

Web interface

+

Management API

+



Current target: small/mid sized networks

Cheaper than AD, or free :)

For Windows, no such thing like GPOs

**Lots of admins don't use them
poledit.exe sufficient**

Interface easy to use, to learn

It is not a LDAP browser !

Windows administration operations available

Domain controller

Users / Groups / Computers

Password sync

File server

Shares

ACLs

Print server

SAMBA / CUPS

Point'n Print

DNS / WINS

A / CNAME / NS / MX / PTR (reverse)

For LAN / WAN

DNS zones stored into LDAP

DHCP

DHCP options (IP phone, diskless boot, ...)

DHCP / DNS sync

DHCP lease status

DHCP configuration stored into LDAP

Mail service

POSTFIX / DOVECOT

SMTP / IMAP / POP

Web proxy

Authentication

Blacklist

User account

Home directory quota

Mail delivery quota

Massive import/export from CSV file

User password policy

Server side

Complexity

Expiration

Avoid brute-force attack

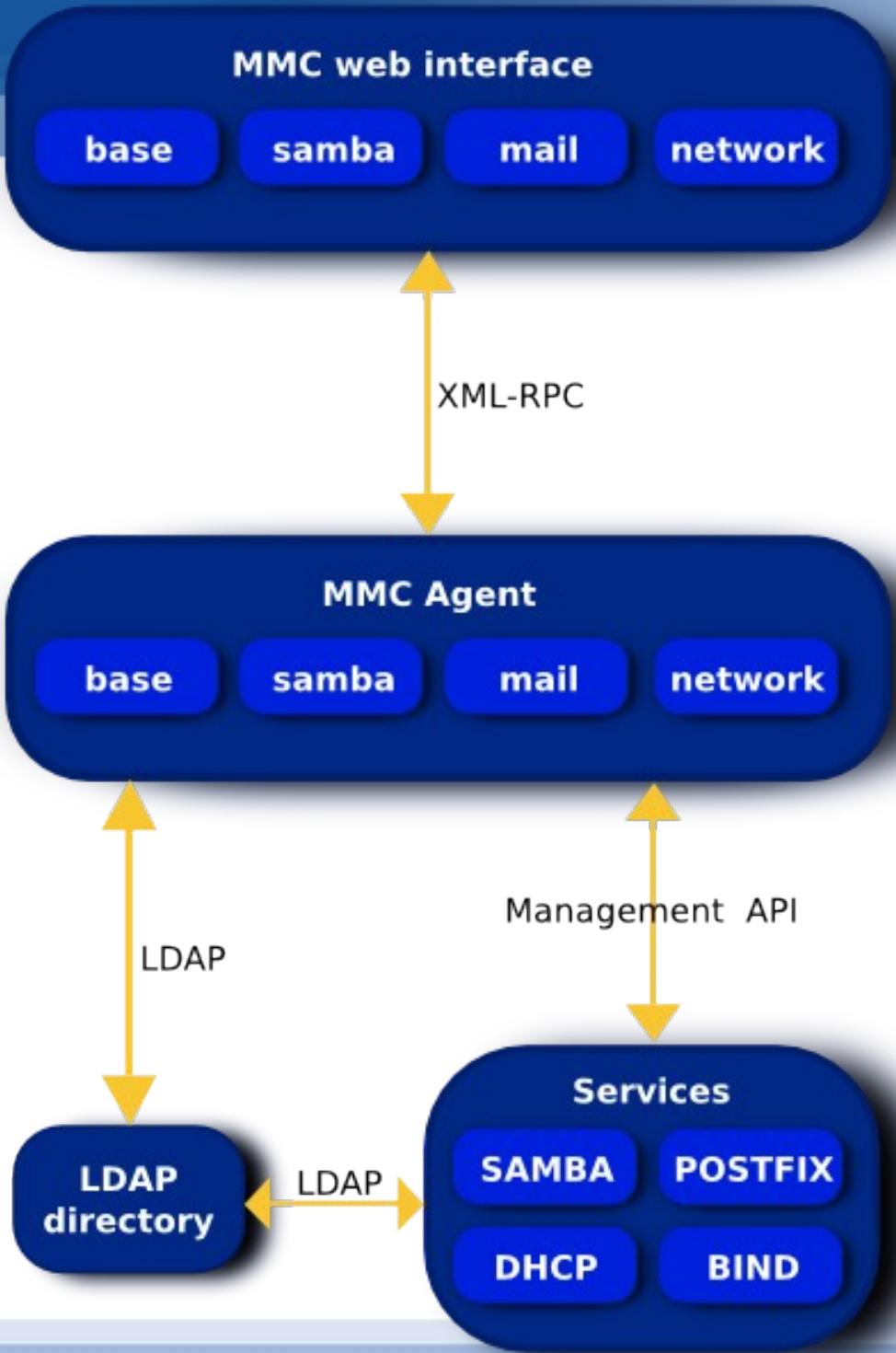
Scope: user or directory

Audit

Trace all MDS user interactions

Who ? What ? When ?

DEMO !



Python script

```
#!/usr/bin/python

from mmc.plugins.base import ldapUserGroupControl
users = [('login1', 'passwd1', 'firstname1', 'lastname1'),
         ('login2', 'passwd2', 'firstname2', 'lastname2'),
         ('login3', 'passwd3', 'firstname3', 'lastname3'),
         # ...
        ]
l = ldapUserGroupControl()
for login, password, firstname, lastname in users:
    # Store user into LDAP
    l.addUser(login, password, firstname, lastname)
    # Change user "mail" attribute value
    l.changeUserAttributes(login, 'mail', login + '@example.com')
```

WEB interface



XML-RPC agent



OpenLDAP

+ Custom pwdCheckModule

XML-RPC call

```
#!/usr/bin/python

import xmlrpclib

server = xmlrpclib.ServerProxy("https://mmc:s3cr3t@localhost:7080")
print server.base.authenticate('user1', 'userpass')
```

Cross - language

GPL v2

Development resources

TRAC => <http://mds.mandriva.org>

Mailing lists

SVN, pre-commit hooks

QA: Buildbot + Selenium

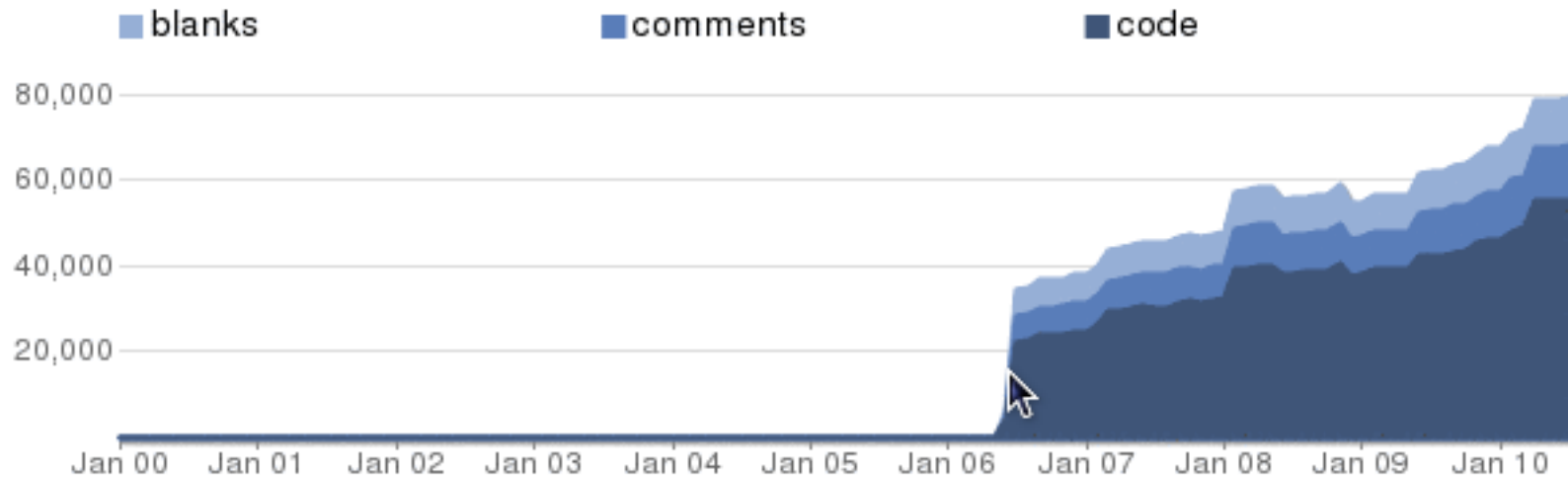
Public repo is the main repo !

Current version: 2.4.0

Ohloh stats

Project started in 2004 (was called LDS)

Lines of Code ⓘ



Pulse 2 – Computer System Management

Inventory

Deployment

Imaging

Heterogeneous systems

Pulse 2 =

MMC

+ XML-RPC SERVICES

+ client side agents

AdminProxy

Remote access control to equipments (SSH proxy, HTTP proxy, etc)

A **System@tic project**

**Consortium WALLIX / Mandriva / ALTERWAY /
AQUARELLE / OPPIDA**

Main idea : manage and control larger network

LDAP directory: from flat to tree

New widget web side

Apply parameters to computer and user profiles

GPO-like system

Policy agent for Windows, MAC, Linux

Delegation of administration

MDS 2.4.1

Bug fix

Code stabilization

Minor features (Zarafa, ...)

First round of MMC Widget improvement

MDS 2.4.2

Finalize Kerberos 5 integration

Using Heimdal + LDAP

Password synchronization

userPassword

sambaNTPassword

krb5Key

With OpenLDAP + smbkrb5pwd overlay !

(Kerberos authentication to the MMC login)

CUPS administration

Getting rid of CUPS web interface

Preliminary work done

May be a 2.4.x release

Presence notification

Who's online ?

Where ?

May be a 2.5.x release

GPO-like system

Goal: apply parameters

To computers and users

On heterogeneous systems !

Consistent user profile across desktop environment

Windows

MAC

KDE / GNOME

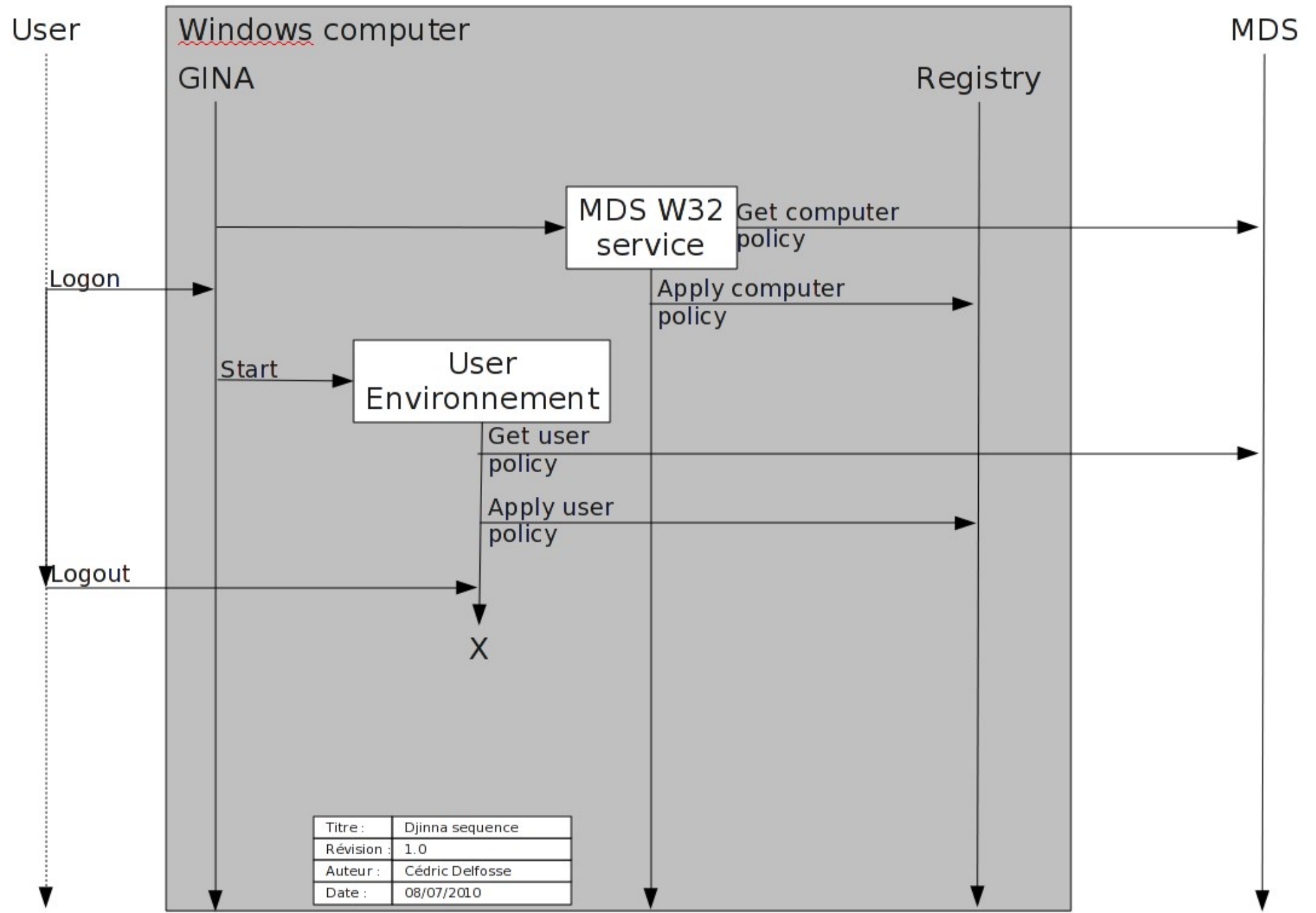
For example

Desktop customization (background ...)

Device locking (USB keys, ...)

Needs for new client side policy agent

DJINN



Titre :	Djinna sequence
Révision :	1.0
Auteur :	Cédric Delfosse
Date :	08/07/2010

MDS web site

<http://mds.mandriva.org>