AD/Linux Desktop

Improving the Experience

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AD Linux Desktop: The Current State

Current State: Basic integration

- User and group definitions
  - Trusts
  - Nested groups
- Login authentication
- Domain-based password policies
- Ticket creation
- Offline logins

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Current State: User experience

- Common Userid and Password
- Password policy messages
- Authentication through Kerberized applications
  - Firefox
  - Commandline utilities
- Automatic access to shared folders
  - Through desktop
    - Gnome: Nautilus, gvfs, stored in gconf
    - KDE: Konqueror, kwin, kio
  - Through text-based logins
    - Automount
    - pam_mount

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Current State: Admin Experience

- User and group definition through AD tools
  - Common authentication possible for some apps
- Secure DNS updates
- Application settings for Desktops (and even Linux servers) independent of AD
  - Combination of text files, XML, LDAP, scripts
  - Parallel administration of Linux systems

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Current State: Examples

- Automatic shares
  - By user:
    - desktop window managers
  - By administrator:
    - Automounter:
      - stores plaintext passwords
      - Unmount is timeout based
    - pam_mount:
      - Obtain password through pam stack or:
      - Use kerberos tickets
      - Unmount on logout

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Current State: Examples

- Apache + mod_auth_kerb
  - **Net ads keytab create/add HTTP**
  - .htaccess:
    - AuthType Kerberos
    - AuthName "Krb5 Auth"
    - KrbServiceName HTTP
    - KrbVerifyKDC On
    - Krb5Keytab /etc/krb5.keytab
    - KrbAuthRealms EXAMPLE.COM
    - KrbMethodNegotiate on
    - KrbMethodK5Passwd on
    - require valid-user

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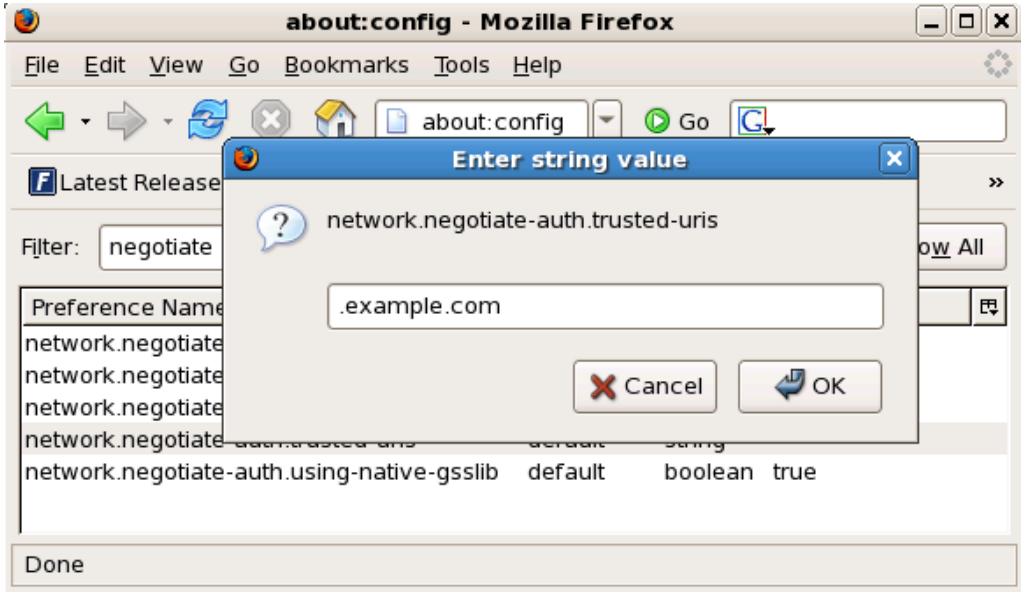
Current State: Examples

- Firefox
  - about:config or prefs.js:
    - network-negotiate-auth.delegation-uris
    - network-negotiate-auth.trusted-uris



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Centralizing Administration

Centralizing Administration

- CIM/WBEM (e.g. SBLIM, OpenWBEM, OpenPegasus)
  - Standards-based (DMTF)
  - Provides monitoring, management, configuration
  - Large entry effort
- Puppet - http://projects.puppetlabs.com
  - Open source management of dozens of software projects
  - Linux, Unix, Mac
  - Parallel administration to Windows

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Group Policy

- Flexibly apply policies to users, machines, groups
- Freedom to leave partial local control
- Once infrastructure is in place, simple to develop basic templates, extensions, and snap-ins
- Common aspects of Windows and Linux managed in one place
- Also applies to server
- And...we have a prototype (thanks to Günther Deschner, see 2007 and 2008 SambaXP archives)

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Group Policy in Samba

- Current prototype state:
  - Download policies and templates
  - Store some settings in registry config
  - Separate winbind child or net command queries and applies policies
  - Run startup, shutdown, logon, logoff scripts

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Next Implementation Steps

To-dos: Group Policy

- Complete prototype
  - Clean up and complete registry interface
  - Determine interaction between system settings and policies
  - Recognize more common settings
  - Define CSE interface
  - Common source!
- Provide sample Administrative Templates
  - Store settings in samba registry
  - Accompanying scripts
  - Common system utilities, e.g. sudo, firewall

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To-dos: Group Policy

- Implement desktop CSE
  - gconf (or ksyscoca, etc.)
  - Short term: simple registry-style interface
  - Longer term: snap-in
- Samba registry-backed API
  - Enable Linux applications to query policy settings

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To-dos: Group Policy

- Firefox
  - Administrative template
    - Default settings
    - Lockdown
    - Per-user settings
  - Script manipulation of .js files
- Openoffice
  - Administrative template
  - Manipulation of xml files
  - Snapin ?

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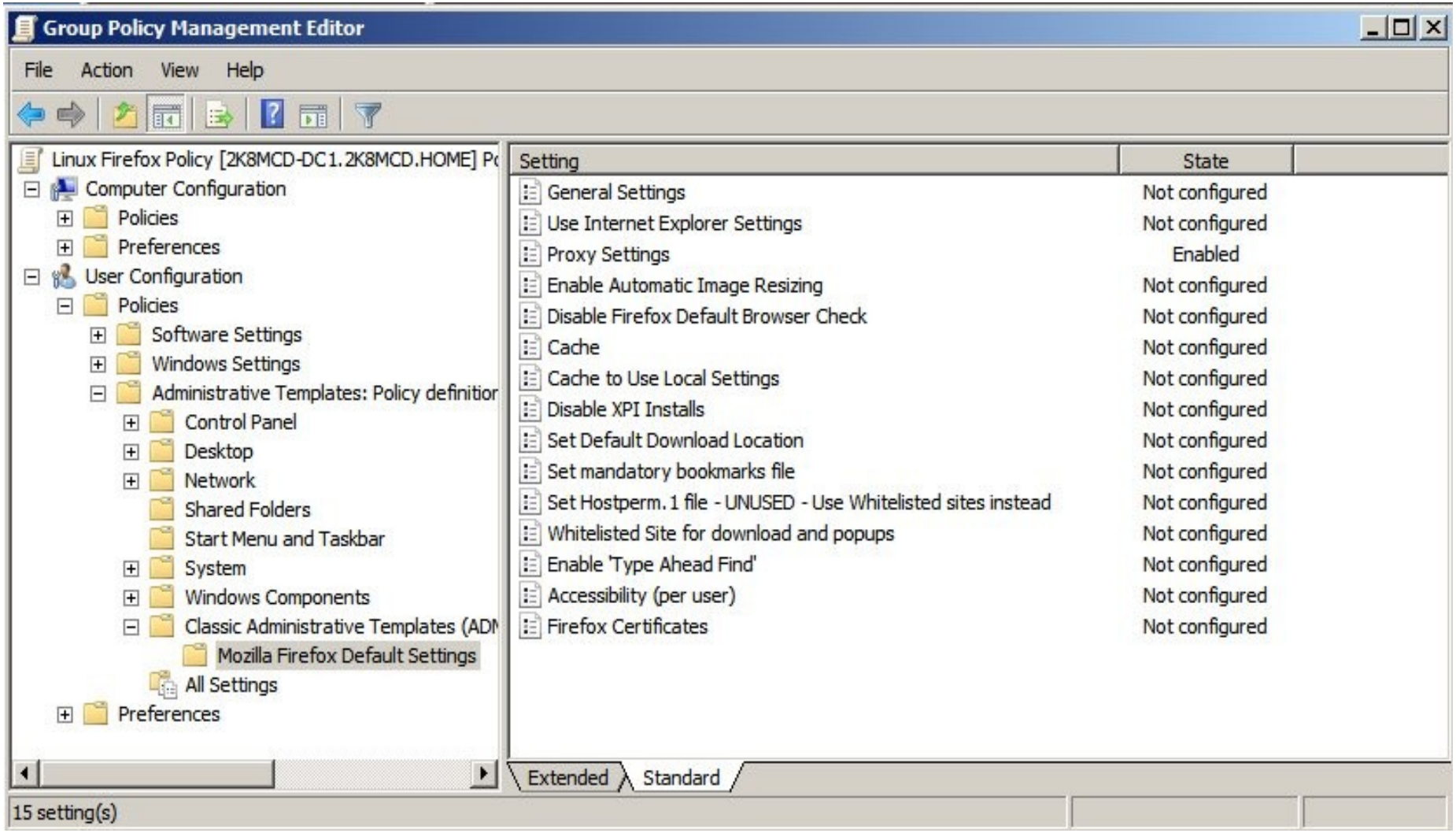
Sample Firefox template



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To-dos: Group Policy

- Create client extensions for many preferences (Windows 2008)
  - Mapped drives
  - Power options
  - Environment variables
  - Lots more...

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Questions?

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He’ll be standing up here in just a moment...

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