



Collabora Productivity

LibreOffice: central configuration management on Windows

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LibreOffice in an Enterprise environment

Collabora Productivity Ltd.

- Provides consultancy and L3 support for Enterprise LibreOffice
- Helps customers' system administrators in resolving problems related to management of thousands of installations
 - Initial deployment
 - Upgrades
 - Configuration, including both:
 - uniform throughout organization,
 - per-unit or individual

LibreOffice in an Enterprise environment

LibreOffice Conference 2016 (Brno)

- Andras Timar gave a **talk** named “Central configuration management of LibreOffice in Windows server environment”
 - Discussed implementation aspects of a new configuration backend
 - Highlighted areas which need more polishing
 - e.g., lockdown issues
 - still relevant
- My presentation is more user/sysadmin-oriented

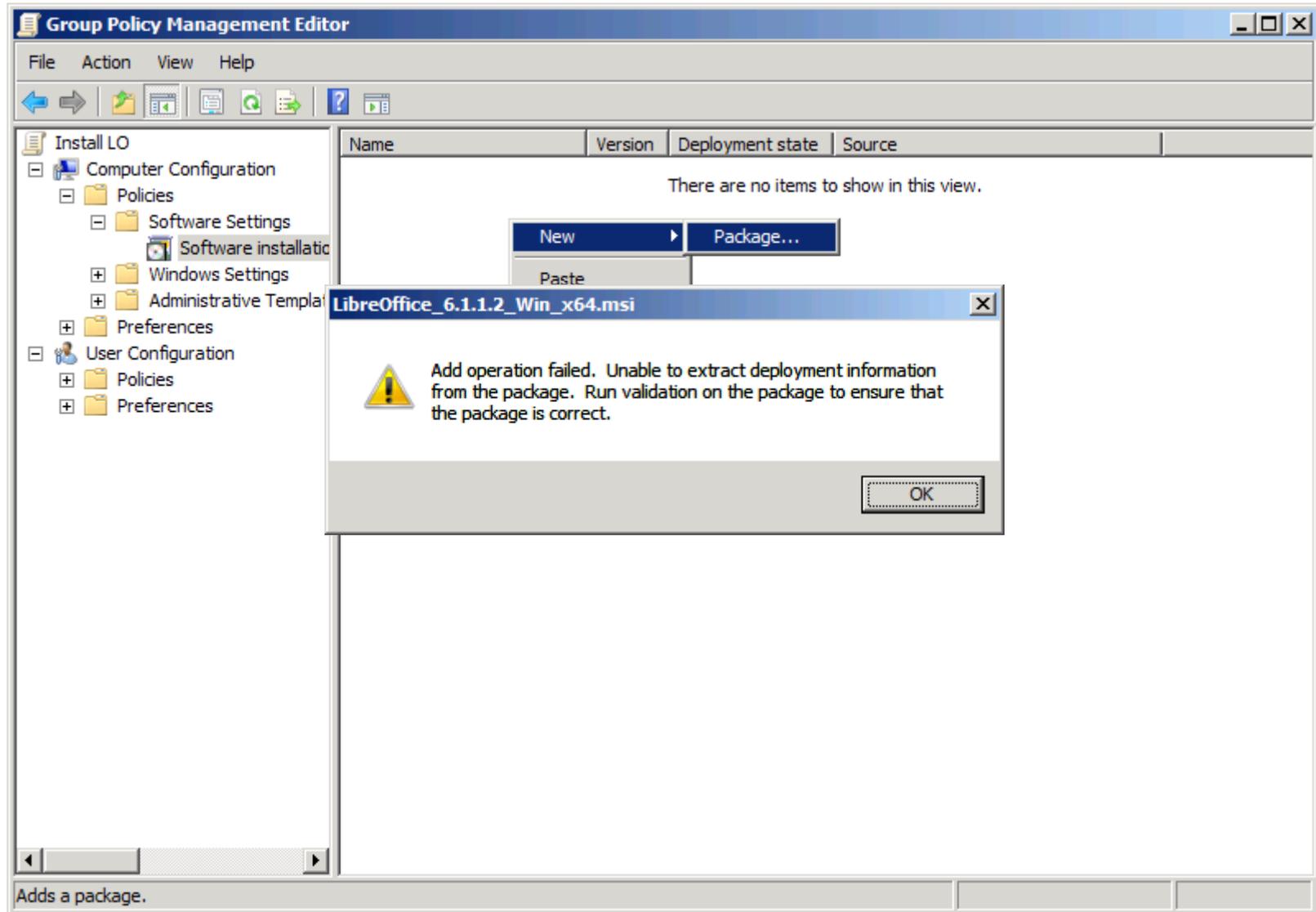
Initial deployment

LibreOffice in an Enterprise environment: initial deployment

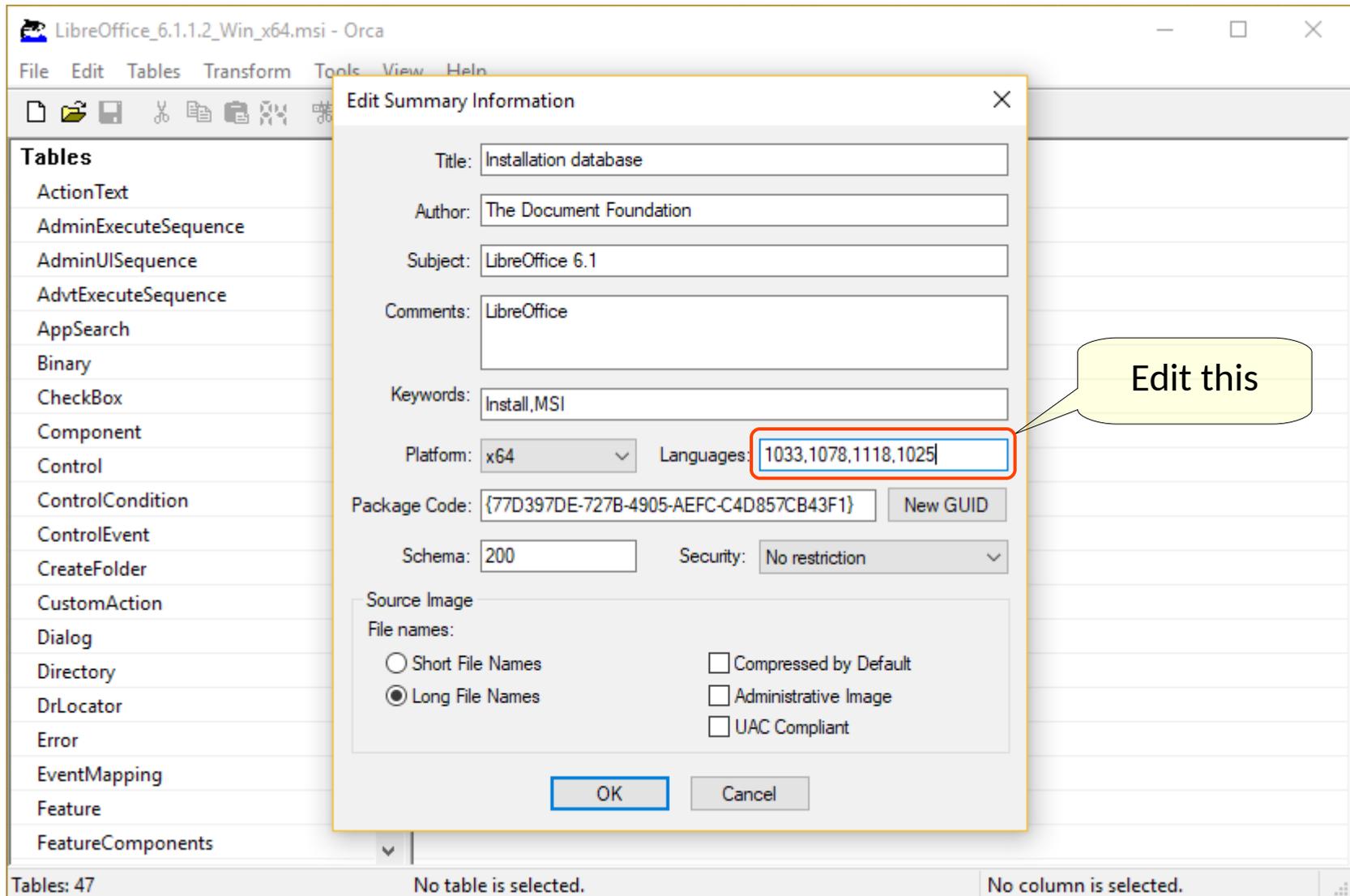
Topics specific to LibreOffice initial deployment in Windows-based Enterprise networks:

- Large-scale: needs automation
 - Since LibreOffice uses Windows Installer (MSI) technology, shouldn't be a problem for GPO-based deployment ("Software installation" policies)
 - Yet there is [tdf#45750](#): Windows Server only supports up to 254 characters in Languages summary string when adding an MSI to a GPO. Possibly to save a lot of space. But our multi-lingual installer has much longer language list.
 - Manual MSI editing, or custom installers for our customers

LibreOffice in an Enterprise environment: initial deployment



LibreOffice in an Enterprise environment: initial deployment



LibreOffice in an Enterprise environment: initial deployment

Topics specific to LibreOffice initial deployment in Windows-based Enterprise networks:

- Large-scale: needs automation
 - Some settings need to be defined at install time; this is usually done using MST transform files
 - install location
 - file associations for MS Office file types
 - installed UI languages and dictionaries

https://wiki.documentfoundation.org/Deployment_and_Migration

LibreOffice in an Enterprise environment: initial deployment

Topics specific to LibreOffice initial deployment in Windows-based Enterprise networks:

- Large-scale: needs automation
 - Installing dependencies
 - LibreOffice is almost self-contained on supported Windows versions (7 SP1 and higher)
 - ... except for UCRT dependency on Windows 7 through 8.1 since 5.4: [tdf#108580](#)
 - LibreOffice 6.0 requires separate installation of UCRT
 - LibreOffice 6.1 installs UCRT in silent mode (administrative deployments), too

LibreOffice in an Enterprise environment: initial deployment

Topics specific to LibreOffice initial deployment in Windows-based Enterprise networks:

- Large-scale: needs automation
 - Installing extensions
 - No built-in mechanism allowing administrators to just say “this extension must be installed along with LibreOffice”
 - But it’s possible to create MSTs with custom actions that e.g. call *unopkg* on a directory or specific .oxt file

LibreOffice in an Enterprise environment: initial deployment

Topics specific to LibreOffice initial deployment in Windows-based Enterprise networks: bottom line

- LibreOffice, being distributed as Windows Installer package, needs minimal preparation to be ready for Enterprise deployment, including per-unit, using Windows standard GPO deployment mechanism;
- It needs some advanced modification to allow deployment of extensions
- Collabora Productivity is glad to help our customers with this

Upgrades

LibreOffice in an Enterprise environment: upgrades

Topics specific to LibreOffice upgrades in Windows-based Enterprise networks:

- Usual upgrade scenario: assign new packages to upgrade/replace previous versions (or simply remove previous, and assign new)
 - works fine
- Some Enterprises prefer to use MSP incremental patches in the product's lifetime, not the whole installer (e.g., to decrease time required to upgrade)
 - Collabora Productivity offers this option to its customers

Configuration

LibreOffice in an Enterprise environment: configuration

Topics specific to LibreOffice configuration in Windows-based Enterprise networks:

- Central configuration required, when an administrator can define settings for (groups of) installations, and they will be applied automatically
- It should be possible to lock some settings (user should not be able to change them)
- Some settings must be taken from user environment (system), like user names (for collaboration, like commenting and changes tracking), or credentials for data access

LibreOffice in an Enterprise environment: configuration

Traditional method of configuration: .xcd files

- Allows to define any setting available in *usermodifications.xcu*
- Placed to a directory with read-only access for normal users:
%ProgramFiles%\LibreOffice\share\registry
- See Post deployment configuration on our [Deployment and Migration](#) wiki page

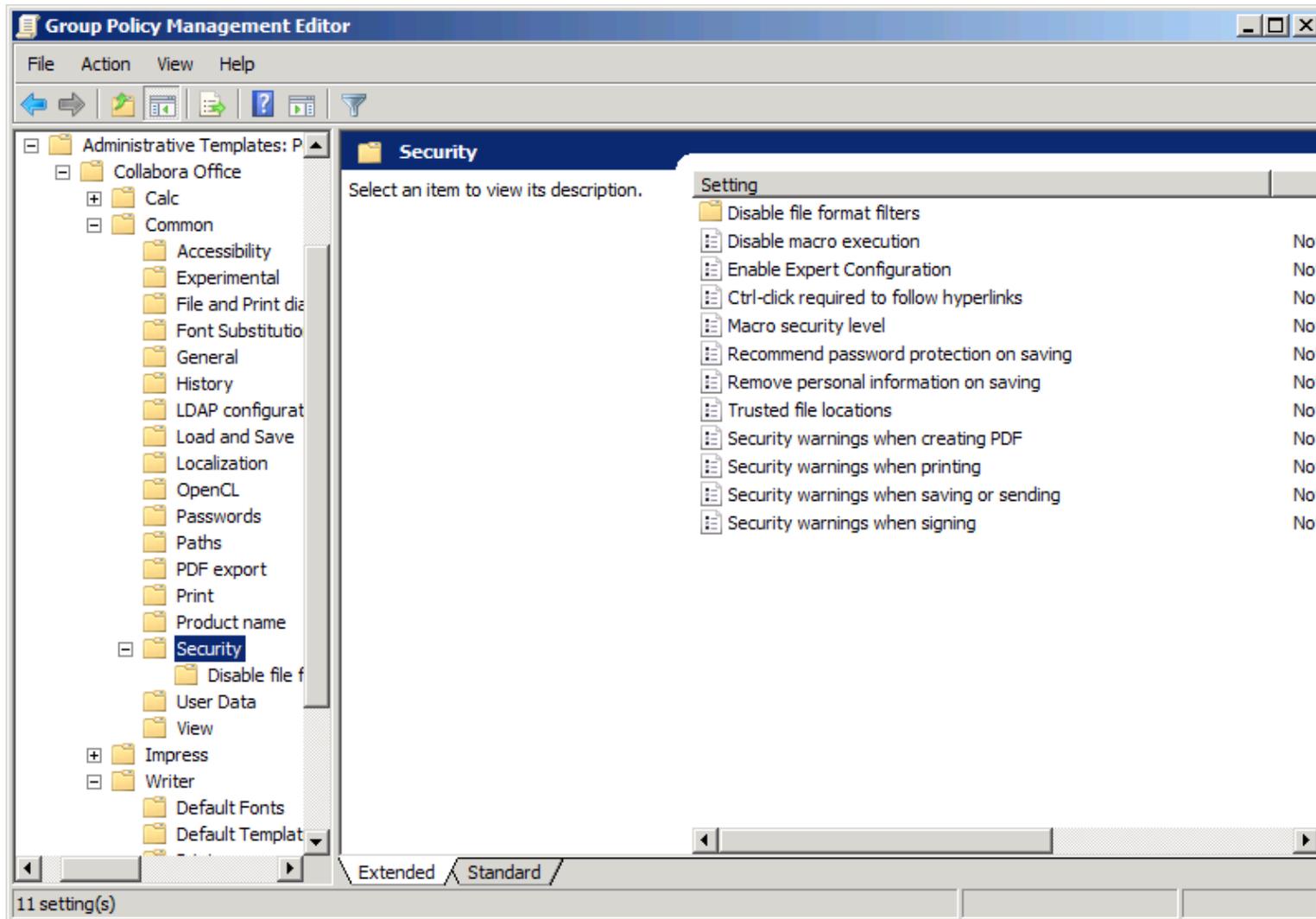
```
<?xml version="1.0"?>
<oor:data xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:oor="http://openoffice.org/2001/registry">
  <dependency file="main" />
  <oor:component-data xmlns:install="http://openoffice
```

LibreOffice in an Enterprise environment: configuration

Standard method to centrally manage software configuration in Windows (AD) networks is using group policy objects (GPO) with necessary Administrative Templates

- This has been possible [since LibreOffice 4.2](#), thanks to Collabora: the program respects GPO settings as its configuration source
- Collabora also has created and supports ADMX template: <https://github.com/CollaboraOnline/ADMX>
- New settings are added there over time, according to our users' requirements

LibreOffice in an Enterprise environment: configuration

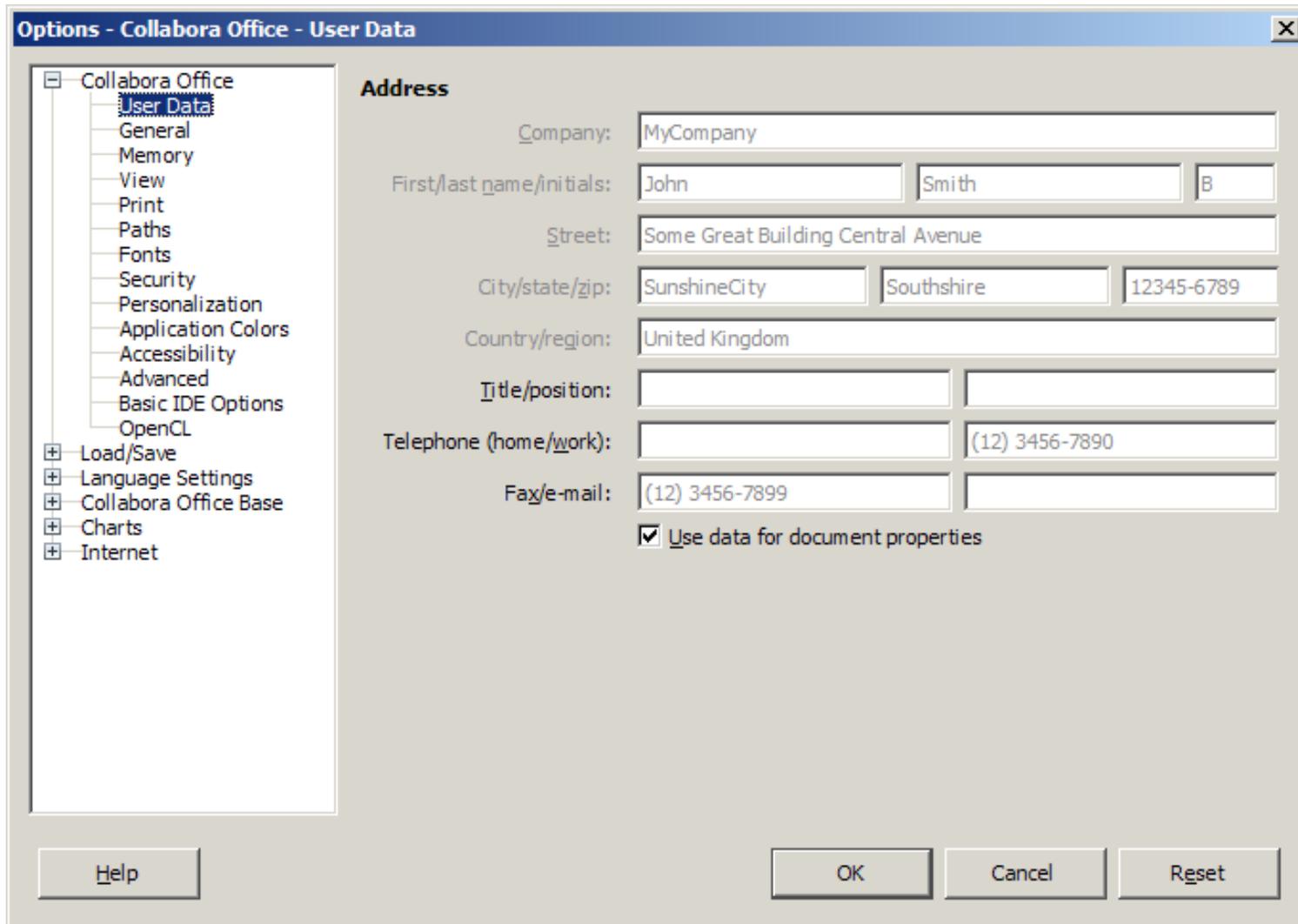


LibreOffice in an Enterprise environment: configuration

Configuring LibreOffice using system data

- User information (company, name, address, ...)
 - Essential for collaborating, including comments and change tracking
 - Normally associated with user account used to logon, and configured centrally on domain level
 - Cannot rely on user's manual filling: user forgetting to fill the data, or making a mistake, or resetting user profile is bad
 - Usually even shouldn't be modifiable by user

LibreOffice in an Enterprise environment: configuration



Options - Collabora Office - User Data

Collabora Office

- User Data
- General
- Memory
- View
- Print
- Paths
- Fonts
- Security
- Personalization
- Application Colors
- Accessibility
- Advanced
- Basic IDE Options
- OpenCL

Address

Company: MyCompany

First/last name/initials: John Smith B

Street: Some Great Building Central Avenue

City/state/zip: SunshineCity Southshire 12345-6789

Country/region: United Kingdom

Title/position:

Telephone (home/work): (12) 3456-7890

Fax/e-mail: (12) 3456-7899

Use data for document properties

Buttons: Help, OK, Cancel, Reset

LibreOffice in an Enterprise environment: configuration

Configuring LibreOffice using system data

- LibreOffice has long been able to get user data from AD using LDAP (LdapUserProfileBe)
 - and now it may be configured using ADMX ([commit 8776a895d41f174bf5d86332093ed5795c73bdd6](#))
 - but needs server connection setup, including dedicated user account
 - and also correct mapping of LDAP attributes
 - ... which on the other hand adds flexibility (which is rarely needed)
 - see documentation on this in our [ADMX project](#)

LibreOffice in an Enterprise environment: configuration

The screenshot shows the 'LDAP User Directory' configuration dialog box. It has a title bar with the text 'LDAP User Directory' and standard window controls. Below the title bar, there are two buttons: 'Previous Setting' and 'Next Setting'. The main area contains three radio buttons for configuration status: 'Not Configured', 'Enabled' (which is selected), and 'Disabled'. To the right of these is a 'Comment:' text box. Below the radio buttons is a 'Supported on:' text box containing the text 'LibreOffice-from-Collabora 4.2 or higher'. Underneath, there are two sections: 'Options:' and 'Help:'. The 'Options:' section is divided into two parts: 'LDAP Server configuration' and 'LDAP Search configuration'. The 'LDAP Server configuration' part has a 'Server:' text box with 'spfacility-ad.local' and a 'Port:' text box with '389'. The 'LDAP Search configuration' part has a 'Username to bind:' text box with 'SPFacility\loreader', a 'Password to bind:' text box with 'Lo1234Reader', and a 'Base DN for search:' text box. The 'Help:' section contains two paragraphs of text: 'Defines how to connect to LDAP server and retrieve user information used in User Data section' and 'Note that the password to bind to LDAP server is stored unencrypted in client system's registry; you should use a restricted search account (only able to perform LDAP searches). User unique attribute must correspond to the logged on user's Windows user name without domain.' At the bottom right, there are three buttons: 'OK', 'Cancel', and 'Apply'.

LDAP User Directory

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: LibreOffice-from-Collabora 4.2 or higher

Options: Help:

LDAP Server configuration

Server: spfacility-ad.local

Port: 389

LDAP Search configuration

Username to bind: SPFacility\loreader

Password to bind: Lo1234Reader

Base DN for search:

Defines how to connect to LDAP server and retrieve user information used in User Data section

Note that the password to bind to LDAP server is stored unencrypted in client system's registry; you should use a restricted search account (only able to perform LDAP searches).

User unique attribute must correspond to the logged on user's Windows user name without domain.

OK Cancel Apply

LibreOffice in an Enterprise environment: configuration

Configuring LibreOffice using system data

- User information (company, name, address, ...)
 - Starting with LibreOffice 6.0, we have implemented a new configuration backend to get user information from Windows, which works using current user's credentials:
WinUserInfoBe
([commit f154f63cb662f02415d5cb0051011bdb5d0d523c](#))
 - No need to configure anything except simple setting “take this property from Windows”

LibreOffice in an Enterprise environment: configuration

The screenshot shows the 'User name' configuration dialog box. At the top, there are 'Previous Setting' and 'Next Setting' buttons. Below them are three radio buttons: 'Not Configured', 'Enabled' (which is selected), and 'Disabled'. To the right of these is a 'Comment:' text area. Below the radio buttons is a 'Supported on:' field with the text 'LibreOffice-from-Collabora 4.2 or higher'. Underneath, there are two sections: 'Options:' and 'Help:'. The 'Options:' section contains three text input fields for 'Given Name:', 'Last Name:', and 'Initials:', each followed by a 'Flags:' dropdown menu set to 'From Windows'. The 'Help:' section contains a text area with the following text: 'User name' followed by 'When it is set to take from LDAP, then its value is LDAP attribute holding user name; LDAP configuration backend settings determine how to connect to LDAP server.' At the bottom right, there are 'OK', 'Cancel', and 'Apply' buttons.

LibreOffice in an Enterprise environment: configuration

Configuring LibreOffice using system data

- Using Windows user's credentials to access remote documents
 - ADMX allows to configure LibreOffice to “use system credentials”
- Proxy server configuration
 - also useful to allow crash reports from corporate networks
 - until recently, only supported static configuration, thus failing in environments utilizing proxy configuration scripts

LibreOffice in an Enterprise environment: configuration

Configuring LibreOffice using system data

- For 6.1, we have greatly improved our backends taking proxy configuration from system – both for Linux and for Windows ([tdf#114227](#)).
 - The Windows backend now utilizes system support of [Web Proxy Auto-Discovery \(WPAD\) protocol](#) and [Proxy Auto-Configuration \(PAC\) file](#) ([commit 2e142c0ee54744d35517f0b9c49a24302fb32d47](#))
 - The Linux backend now also properly takes proxy configuration from OS ([commit 0e375686e2f2c6c626f50c06c5323c0982d7f602](#))

LibreOffice in an Enterprise environment: conclusion

Over the last years, Collabora Productivity had introduced many useful improvements to the process of centralized deployment and configuration of LibreOffice.

Yet, there are more things to do. We constantly work to fulfil our users' demands.

And of course, we welcome every contribution!



Collabora Productivity

Thank you!

... goes from Mike Kaganski

+Mike Kaganski

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