KopanoLibreOffice

Release 1.0

Kopano BV

Sep 04, 2019

Contents

This document, the Kopano LibreOffice manual provides administrators with information on how to install the Kopano provided LibreOffice Online packages.

Introduction

LibreOffice Online is a HTML5 based version of the popular desktop application. As an active member of the Advisory Board of The Document Foundation Kopano strives to extend the reach of LibreOffice. With the new packages being open source and publicly available, LibreOffice Online is now at the fingertips of millions of people.

By providing publicly available packages, contrary to running the code in a docker image, Kopano makes LibreOffice Online more accessible. Your experience with LibreOffice Online will help Kopano to further contribute to the project in areas of our expertise.

The LibreOffice Online packages are available both as community or commercial versions, where the community version includes a warning that it will be offered without support. The packages are fully compatible with the LibreOffice packages for desktop and built within Kopano's Open Build Service environment. The latter enables Kopano to maintain their wide range of packages for various Linux platforms.

Installation

2.1 System requirements

For the beginning packages are only provided for the following distributions:

- Debian 8

- Debian 9

- Ubuntu 16.04

More distributions will be added over time.

Additionally we require some LibreOffice packages from the official Document Foundation download repository. At the moment of writing this needs to be 5.4.3.2-2 or greater.

The required packages are:

- libreoffice5.4 (>= 5.4.3.2-2)

- libreoffice5.4-ure (>= 5.4.3.2-2)

- libobasis5.4-calc (>= 5.4.3.2-2)

- libobasis5.4-core (>= 5.4.3.2-2)

- libobasis5.4-graphicfilter (>= 5.4.3.2-2)

- libobasis5.4-images (>= 5.4.3.2-2)

- libobasis5.4-impress (>= 5.4.3.2-2)

- libobasis5.4-ooofonts (>= 5.4.3.2-2)

- libobasis5.4-writer (>= 5.4.3.2-2)

- libobasis5.4-en-us (>= 5.4.3.2-2)

- libobasis5.4-en-us-calc (>= 5.4.3.2-2)

- libobasis5.4-en-us-res (>= 5.4.3.2-2)

- libobasis5.4-draw (>= 5.4.3.2-2)

- libobasis5.4-extension-pdf-import (>= 5.4.3.2-2)

For convinience these packages are included in the repository explained below.

2.2 Configuring the Kopano package repositories

The package repository can either be accessed by using a combination of username & password (account can be registered at the Kopano Portal) or by using the username serial and your Kopano serial (e.g. Z. . .) as the password.

Adding the supported repository for Ubuntu 16.04:

```
URL=https://serial:your-serial@download.kopano.io/supported/documentseditor/Ubuntu_
↪16.04/
echo "deb $URL /" > /etc/apt/sources.list.d/kopano-documentseditor.list
curl $URL/Release.key | apt-key add -
apt update
```

Adding the community repository for Ubuntu 16.04:

```
URL=https://download.kopano.io/community/libreofficeonline/Ubuntu_16.04/
echo "deb $URL /" > /etc/apt/sources.list.d/libreoffice-online.list
curl $URL/Release.key | apt-key add -
apt update
```

See the Kopano Groupware Core Administrator Manual for more information about our package repositories.

2.3 Installing Kopano Documents Editor (supported repository)

After the repository has been added Kopano Documents Editor can be installed by retrieving the `kopano-documentseditor` package with your package manager.

Installing packages on Ubuntu 16.04:

```
apt install kopano-documentseditor
```

2.4 Installing LibreOffice Online (community repository)

After the repository has been added LibreOffice Online can be installed by retrieving the `libreoffice-online` package with your package manager.

Installing packages on Ubuntu 16.04:

```
apt install libreoffice-online
```

2.5 Configuring LibreOffice Online and its dependencies

The configuration for LibreOffice Online and Kopano Documents Editor are the same again.

2.5.1 LibreOffice Online WebSocket server (loolwsd)

loolwsd is configured by default to use ssl by default, but since the package does not provide the configured ssl certificates the initial startup of the deamon will fail. To use **loolwsd** the admin either has to configure ssl certificates inside `/etc/libreoffice-online/loolwsd.xml` , or disable ssl altogether and implement a reverse proxy for this (recommended). To disable ssl the admin needs to set `<enable type="bool" default="true">` to false.

```
<ssl desc="SSL settings">
        <enable type="bool" default="true">false</enable>
        <termination desc="Connection via proxy where loolwsd acts as working via␣
→https, but actually uses http." type="bool" default="true">false</termination>
        <cert_file_path desc="Path to the cert file" relative="false">/etc/loolwsd/
→cert.pem</cert_file_path>
        <key_file_path desc="Path to the key file" relative="false">/etc/loolwsd/
→key.pem</key_file_path>
        <ca_file_path desc="Path to the ca file" relative="false">/etc/loolwsd/ca-
→chain.cert.pem</ca_file_path>
        <hpkp desc="Enable HTTP Public key pinning" enable="false" report_only=
→"false">
                <max_age desc="HPKP's max-age directive - time in seconds browser␣
→should remember the pins" enable="true">1000</max_age>
                <report_uri desc="HPKP's report-uri directive - pin validation␣
→failure are reported at this URL" enable="false"></report_uri>
                <pins desc="Base64 encoded SPKI fingerprints of keys to be pinned">
                <pin></pin>
                </pins>
        </hpkp>
</ssl>
```

Afterwards the deamon can be restarted by issuing `systemctl restart libreoffice-online` and will be reachable through port **9980**. Since **loolwsd** listens gloablly it is recommended to block network access e.g. via **iptables**.

Using Apache as a reverse proxy for loolwsd

The following vHost can be used to expose LibreOffice Online on the local network.

```
<VirtualHost *:443>
  ServerName office.example.com

  # SSL configuration, you may want to take the easy route instead and use Lets␣
→Encrypt!
  SSLEngine on
  SSLCertificateFile /path/to/signed_certificate
  SSLCertificateChainFile /path/to/intermediate_certificate
  SSLCertificateKeyFile /path/to/private/key
  SSLProtocol             all -SSLv2 -SSLv3
  SSLCipherSuite ECDHE-ECDSA-CHACHA20-POLY1305:ECDHE-RSA-CHACHA20-POLY1305:ECDHE-
→ECDSA-AES128-GCM-SHA256:ECDHE-RSA-AES128-GCM-SHA256:ECDHE-ECDSA-AES256-GCM-
→SHA384:ECDHE-RSA-AES256-GCM-SHA384:DHE-RSA-AES128-GCM-SHA256:DHE-RSA-AES256-GCM-
→SHA384:ECDHE-ECDSA-AES128-SHA256:ECDHE-RSA-AES128-SHA256:ECDHE-ECDSA-AES128-
→SHA:ECDHE-RSA-AES256-SHA384:ECDHE-RSA-AES128-SHA:ECDHE-ECDSA-AES256-SHA384:ECDHE-
→ECDSA-AES256-SHA:ECDHE-RSA-AES256-SHA:DHE-RSA-AES128-SHA256:DHE-RSA-AES128-
→SHA:DHE-RSA-AES256-SHA256:DHE-RSA-AES256-SHA:ECDHE-ECDSA-DES-CBC3-SHA:ECDHE-RSA-
→DES-CBC3-SHA:EDH-RSA-DES-CBC3-SHA:AES128-GCM-SHA256:AES256-GCM-SHA384:AES128-
→SHA256:AES256-SHA256:AES128-SHA:AES256-SHA:DES-CBC3-SHA:!DSS
  SSLHonorCipherOrder     on

  # Encoded slashes need to be allowed
  AllowEncodedSlashes NoDecode

  # Container uses a unique non-signed certificate
  SSLProxyEngine On
  SSLProxyVerify None
  SSLProxyCheckPeerCN Off
  SSLProxyCheckPeerName Off

  # keep the host
```

```
  ProxyPreserveHost On

  # static html, js, images, etc. served from loolwsd
  # loleaflet is the client part of LibreOffice Online
  ProxyPass          /loleaflet https://127.0.0.1:9980/loleaflet retry=0
  ProxyPassReverse   /loleaflet https://127.0.0.1:9980/loleaflet

  # WOPI discovery URL
  ProxyPass          /hosting/discovery https://127.0.0.1:9980/hosting/discovery␣
→retry=0
  ProxyPassReverse   /hosting/discovery https://127.0.0.1:9980/hosting/discovery

  # Main websocket
  ProxyPassMatch "/lool/(.*)/ws$" wss://127.0.0.1:9980/lool/$1/ws nocanon

  # Admin Console websocket
  ProxyPass   /lool/adminws wss://127.0.0.1:9980/lool/adminws

  # Download as, Fullscreen presentation and Image upload operations
  ProxyPass          /lool https://127.0.0.1:9980/lool
  ProxyPassReverse   /lool https://127.0.0.1:9980/lool
</VirtualHost>
```

Using Nginx as a reverse proxy for loolwsd

The following vHost can be used to expose LibreOffice Online on the local network.

```
server {
    listen       443 ssl;
    server_name  office.example.com;

    ssl_certificate /path/to/ssl_certificate;
    ssl_certificate_key /path/to/ssl_certificate_key;

    # static files
    location ^~ /loleaflet {
        proxy_pass https://localhost:9980;
        proxy_set_header Host $http_host;
    }

    # WOPI discovery URL
    location ^~ /hosting/discovery {
        proxy_pass https://localhost:9980;
        proxy_set_header Host $http_host;
    }

    # main websocket
    location ~ ^/lool/(.*)/ws$ {
        proxy_pass https://localhost:9980;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "Upgrade";
        proxy_set_header Host $http_host;
        proxy_read_timeout 36000s;
    }

    # download, presentation and image upload
    location ~ ^/lool {
        proxy_pass https://localhost:9980;
        proxy_set_header Host $http_host;
    }
```

```
    # Admin Console websocket
    location ^~ /lool/adminws {
        proxy_pass https://localhost:9980;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection "Upgrade";
        proxy_set_header Host $http_host;
        proxy_read_timeout 36000s;
    }
}
```

Legal Notice

Postfix is a registered trademark of Wietse Zweitze Venema.

QMAIL is a trademark of Tencent Holdings Limited.

Red Hat, Red Hat Enterprise Linux, Fedora, RHCE and the Fedora Infinity Design logo are trademarks or registered trademarks of Red Hat, Inc. in the U.S. and other countries.

SUSE, SLES, SUSE Linux Enterprise Server, openSUSE, YaST and AppArmor are registered trademarks of SUSE LLC.

Sendmail is a trademark of Sendmail, Inc.

UNIX is a registered trademark of The Open Group.

Ubuntu and Canonical are registered trademarks of Canonical Ltd.

Univention is a trademark of Ganten Investitions GmbH.

All trademarks are property of their respective owners. Other product or company names mentioned may be trademarks or trade names of their respective owner.

Disclaimer: Although all documentation is written and compiled with care, Kopano is not responsible for direct actions or consequences derived from using this documentation, including unclear instructions or missing information not contained in these documents.