



Extensive & Intensive Integration
of Collaborative Editing in Sync&Share
Platforms

January, 2019

www.onlyoffice.com

General: ONLYOFFICE Project

Company:

Ascensio System SIA

3 Divisions: Latvia (Riga), USA (Dallas), Russia (Nizhny Novgorod)

Product:

ONLYOFFICE™ unique online editors

Customers:

Over 5,000,000 customers
in 92 countries worldwide

Versions for:

Cloud, Server, Desktop, Mobile

Supported platforms:

Windows, Linux, MacOS, Android, iOS

Source Code:

GNU AGPL v3



Three pillars of ONLYOFFICE project



Advanced technology



Data security



Smart architecture

TECHNOLOGY: main Advantages of HTML5 Canvas



Browser-independent display of content

Internal tools for font metrics analysis and text rendering



High formatting quality
due to pixel-level rendering



WYSIWYG - 100% identity
while viewing, editing and printing



Maximum compatibility
with MS Office OOXML and ODF



Advanced Toolset
Desktop editor functionality available online

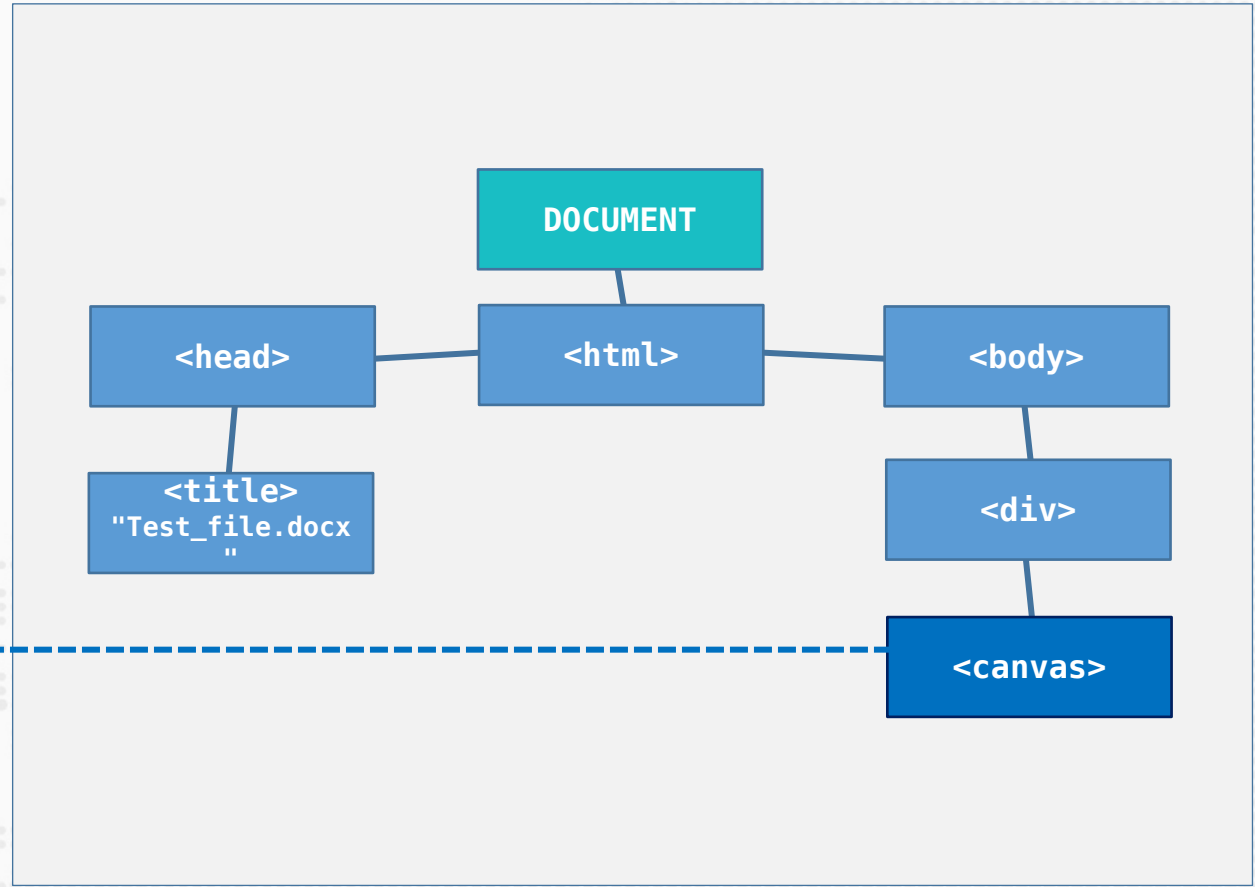


Low memory consumption
Fast processing of large multi-page documents

TECHNOLOGY: HTML5 Canvas

The screenshot shows a web browser window displaying a document titled "Test_file.docx" in the ONLYOFFICE editor. The document content includes a heading "Lowest Calorie Foods", an image of broccoli, and a table of food items with their calorie counts. A dashed blue box highlights the content area, and a blue arrow points from the diagram on the right to this area. The developer console at the bottom shows the HTML structure, with the following elements highlighted:

```
<div id="id_viewer_overlay" class="block_elem" style="user-select: none; z-index: 2; display: block; left: 0px; top: 0px; width: 839px; height: 595px; width="839" height="595">=> $0
<canvas id="id_target_cursor" class="block_elem" width="2" height="16" style="user-select: none; width: 2px; height: 16px; z-index: 4; left: 492px; top: 313px; visibility: visible;">
</div>
<div id="area_id_main" style="background: transparent; border: none; position: absolute; padding: 0px; margin: 0px; z-index: 0; pointer-events: none; left: 19px; top: 26px; width: 839px; height: 595px; overflow: hidden;">
</div>
```





- Base format: **Office Open XML (.docx, .xlsx, .pptx)**
guarantees file format compatibility
- Implemented exclusively in **JavaScript**
- **One Engine** for online, desktop and mobile editors





ONLYOFFICE ONLINE EDITORS

for Documents, Spreadsheets and Presentations

Rank	Country	Gold	Silver
1	USA	46	37
2	Great Britain	27	23
3	China	26	18
4	Russia	19	13
5	Germany	17	10
6	Japan	12	7
7	France	10	11
8	South Korea	9	9
9	Italy	8	9
10	Australia	8	7
11	Netherlands	8	7
12	Hungary	8	4
13	Brazil	7	6
14	Spain	7	6
15	Kenya	6	5
16	Jamaica	6	4
17	Croatia	5	3
18	Cuba	5	3
19	New Zealand	4	3
20	Canada	4	3
21	Uzbekistan	4	3
22	Kazakhstan	3	3
23	Colombia	3	2
24	Switzerland	3	2
25	Iran	3	2
Total:		258	202

Headline

Welcome to ONLYOFFICE Online Editors

We are proud to present the first HTML5 Canvas-based online document editor.

ONLYOFFICE Online Editors can be easily integrated into your web application via the REST API provided. Thus you get a chance to provide users with the most powerful editors for text docs, spreadsheets and presentations.

Why ONLYOFFICE beats all the existing online products

- ✓ In the eye of users: it combines the formatting quality of MS Office and Google Docs (real-time co-editing and commenting).
- ✓ In the eye of tech enthusiasts: it's built with the use of HTML5 Canvas.

[Click here](#) to see the video comparison with Google and Office365 documents.

ONLYOFFICE Online Editors enable you to:

- View & Edit documents directly in browser
- Share files with friends and colleagues
- Co-edit and comment them in real time
- Embed documents to websites and apps
- Work with all the popular file types without formatting

Sample Chart

Application	Sales in \$ M
Excel	~180
PowerPoint	~100
Word	~300

OK, I have no objections. Could you please collect views and comments of independent experts as well?

Integration - White-Labeling benefits.pptx

Background

Color Fill: [Blue]

Effect: Push

Bottom: [Bottom]

Duration: 3 s

Start On Click

Delay: 10 s

Apply to All Slides

out to ONLYOFFICE

position for you:

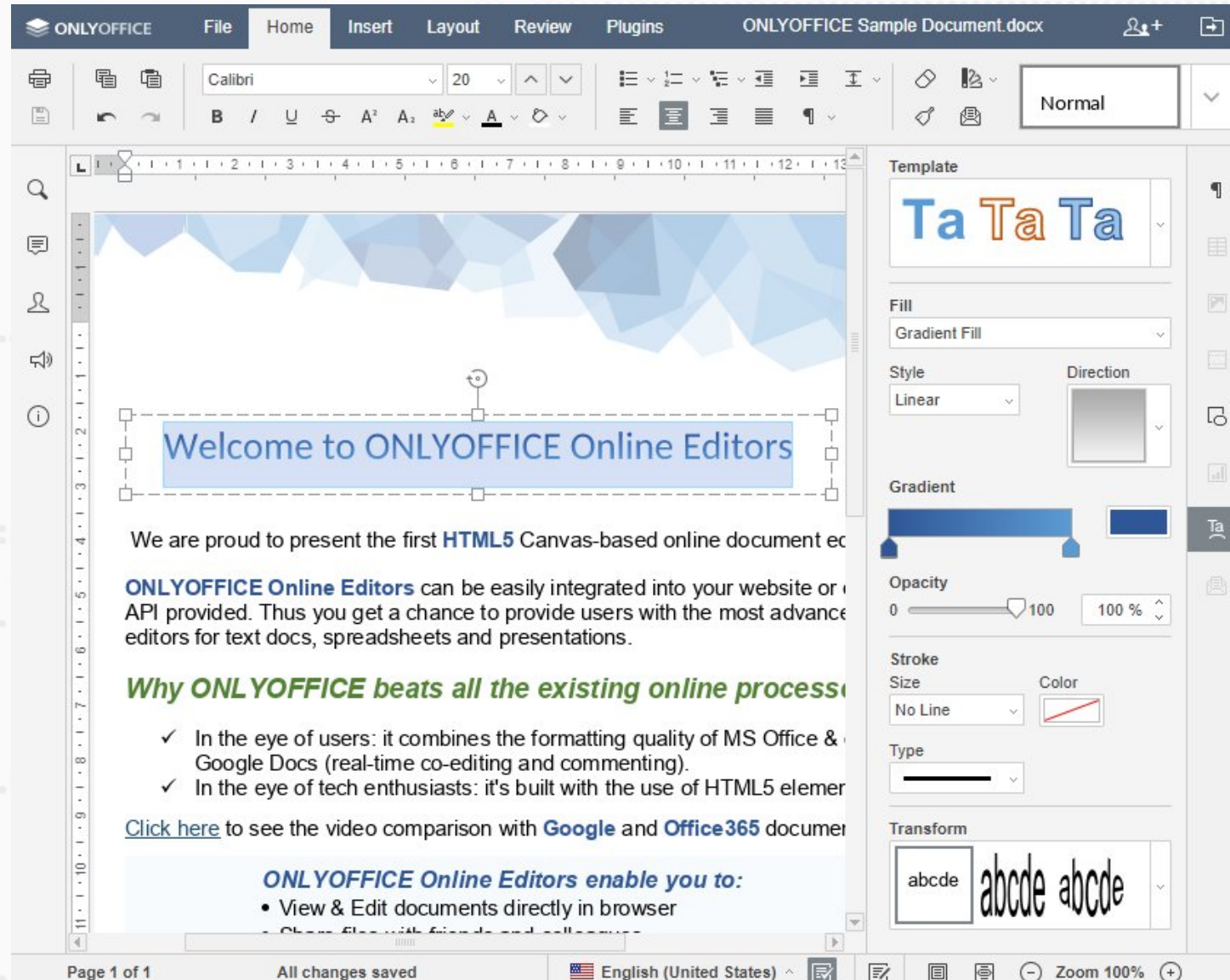
ing integration with any product on your own server without licensing port

ould you like to learn

ersion | Explor

TECHNOLOGY: editing functionality

- Full set of editing and formatting tools: all operations with fonts and styles, paragraph and text formatting
- Creating and customizing all kinds of objects: shapes, charts, text art and text boxes.
- Academic formatting and navigation: drop caps, footnotes, table of contents, bookmarks.
- Plugins for publishing, working with images and videos, translation, symbols and more.
- Content Controls feature: creating customized forms via plugin.



TECHNOLOGY: collaboration functionality

- **Flexible access rights:** viewing, editing, reviewing, commenting only, field filling;
- **Strict and Fast co-editing modes;**
- **Version and revision control;**
- **Review mode;**
- **Track Changes;**
- **Comments;**
- **Built-in chat.**

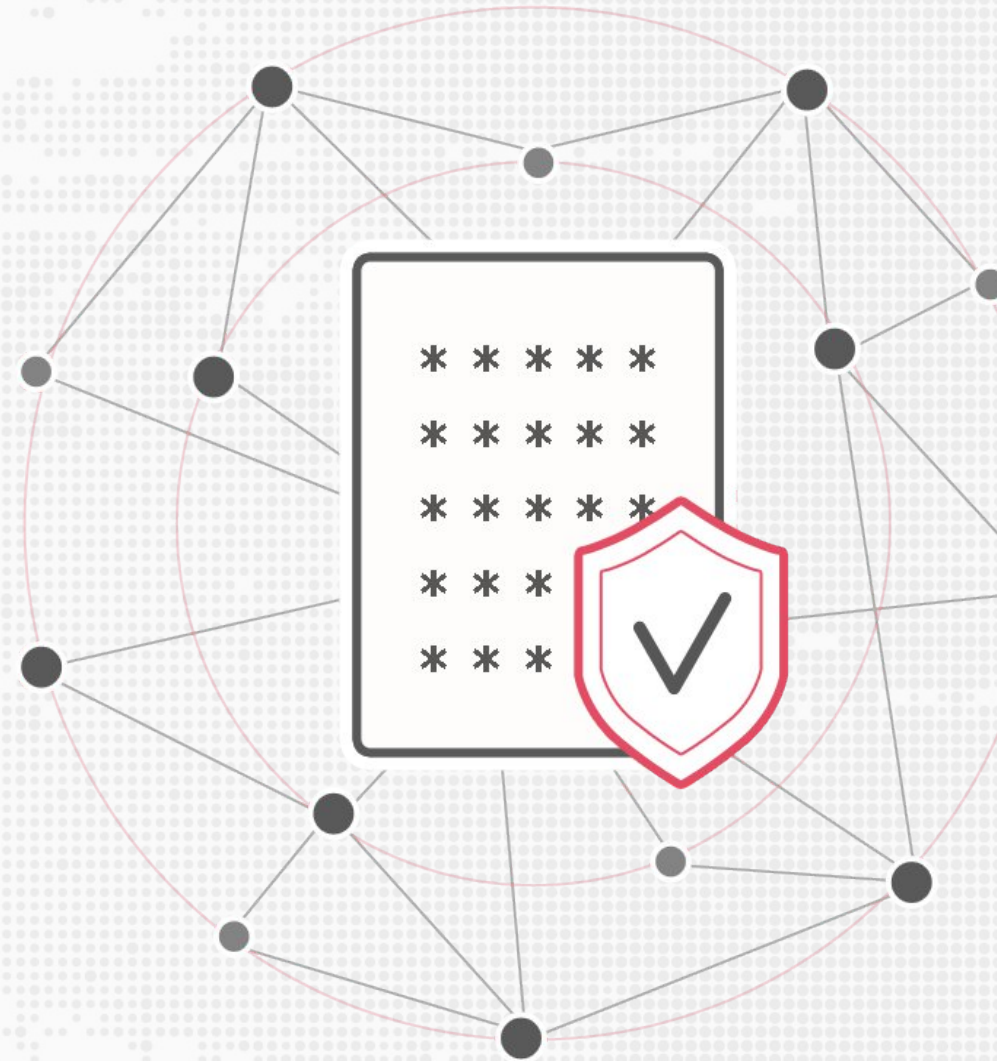
The screenshot displays the ONLYOFFICE Online Editors interface. The top menu bar includes 'ONLYOFFICE', 'File', 'Home', 'Insert', 'Layout', 'Review', and 'Plugins'. The 'Review' tab is active, showing a 'Track Changes' button and a dropdown menu with options: 'Accept Current Change', 'Accept All Changes', 'Previous', 'Next', 'Accept', and 'Reject'. The document content features a 'Welcome to ONLYOFFICE Online Editors' heading, followed by a paragraph about HTML5 Canvas-based editors. A section titled 'Why ONLYOFFICE beats all the existing online processors?' lists two benefits: user preference for MS Office-like quality and real-time collaboration, and technical preference for HTML5 and Canvas. A 'Click here' link points to a video comparison. A comment box is open over the text 'ONLYOFFICE Online Editors enable you to:', showing a comment from 'Hamish Mitchell' dated 8/25/2017 12:36 pm, with the text 'Inserted: , review'. The bottom status bar shows 'Page 1 of 1', 'English (United States)', and 'Zoom 100%'.

DATA SECURITY

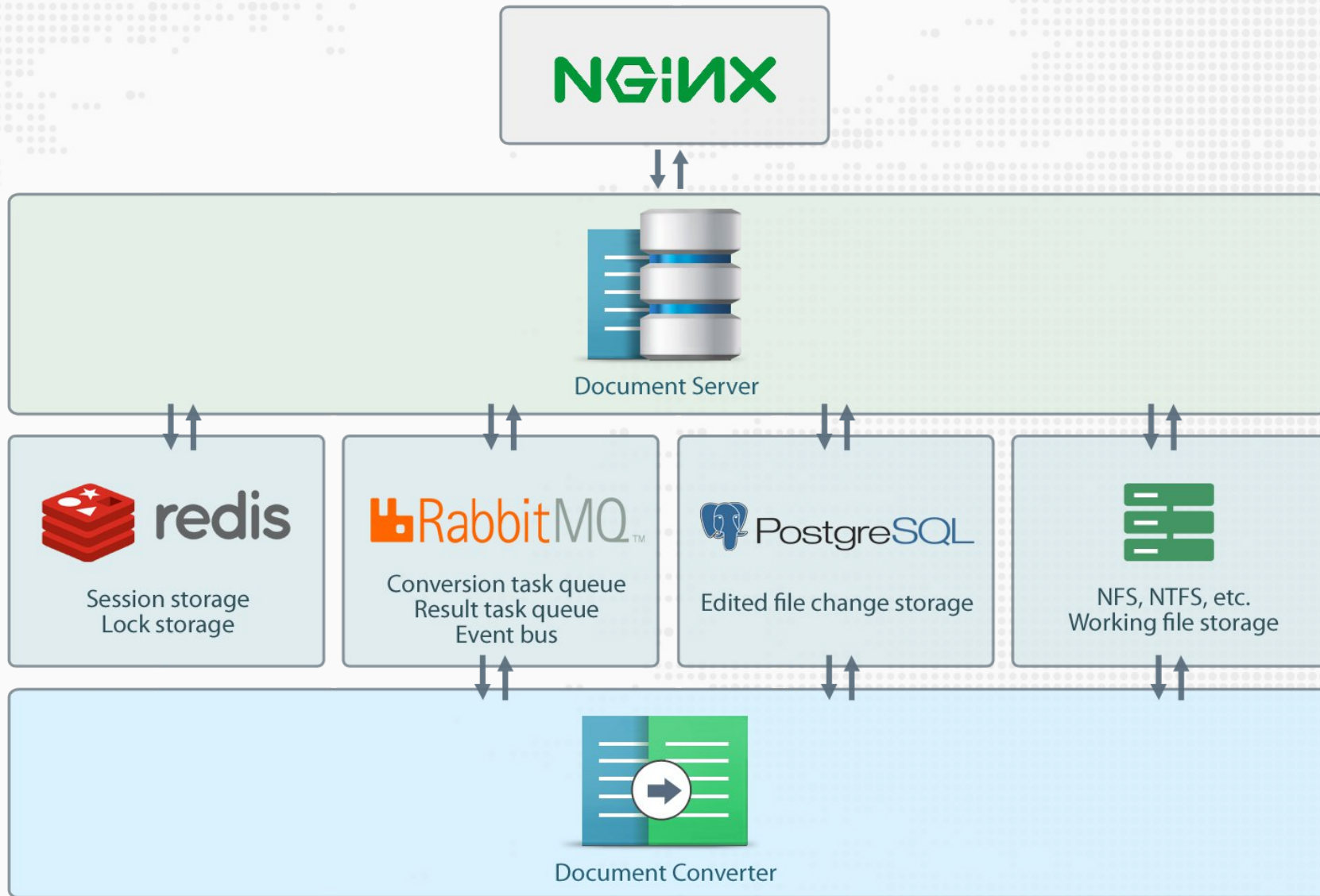
- JWT for sharing authorization
- Configurable cache lifetime

ENCRYPTION:

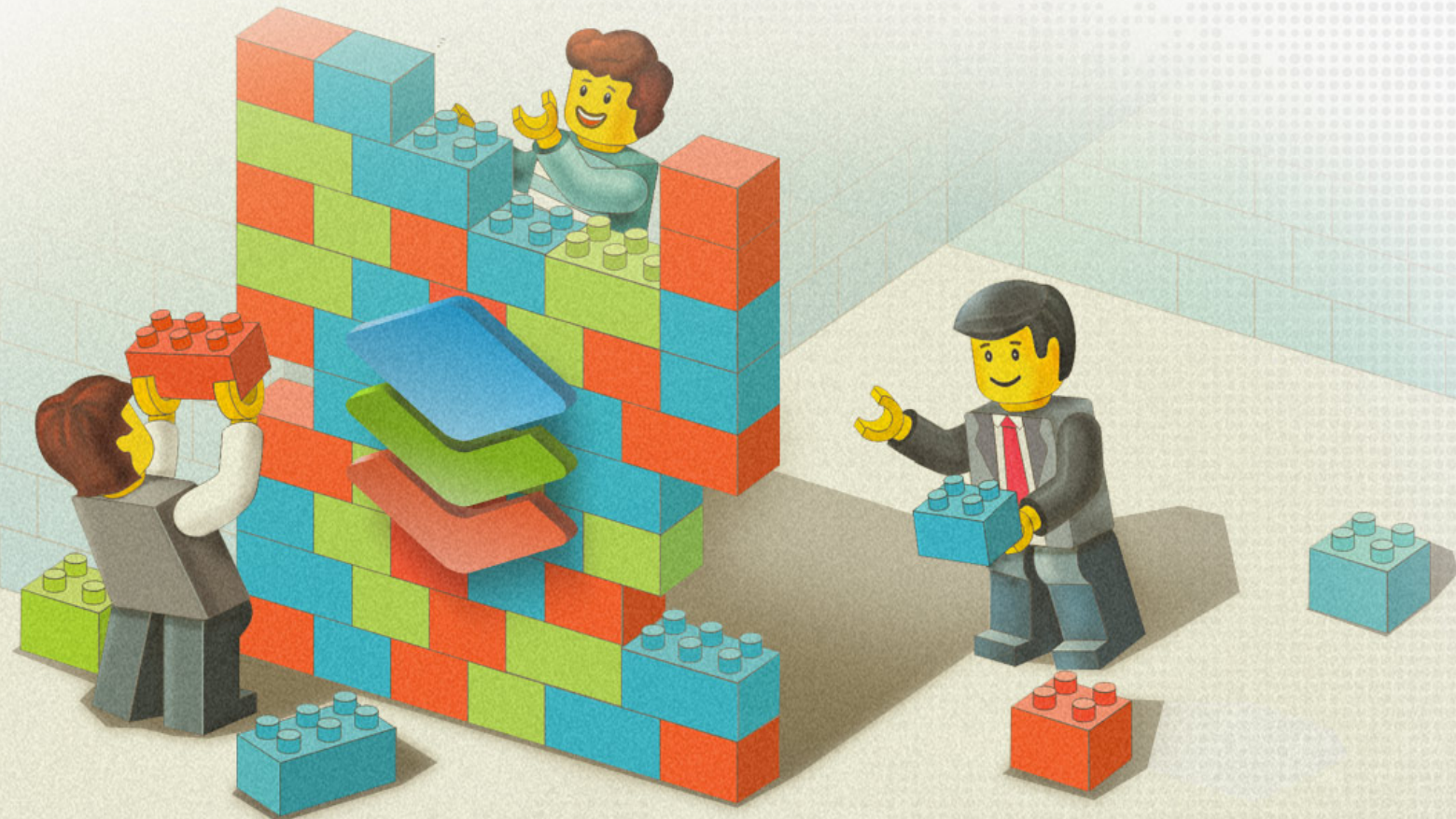
- End-to-end encryption of data with AES-256
- Blockchain technology for transferring the credentials
- Encrypted co-editing



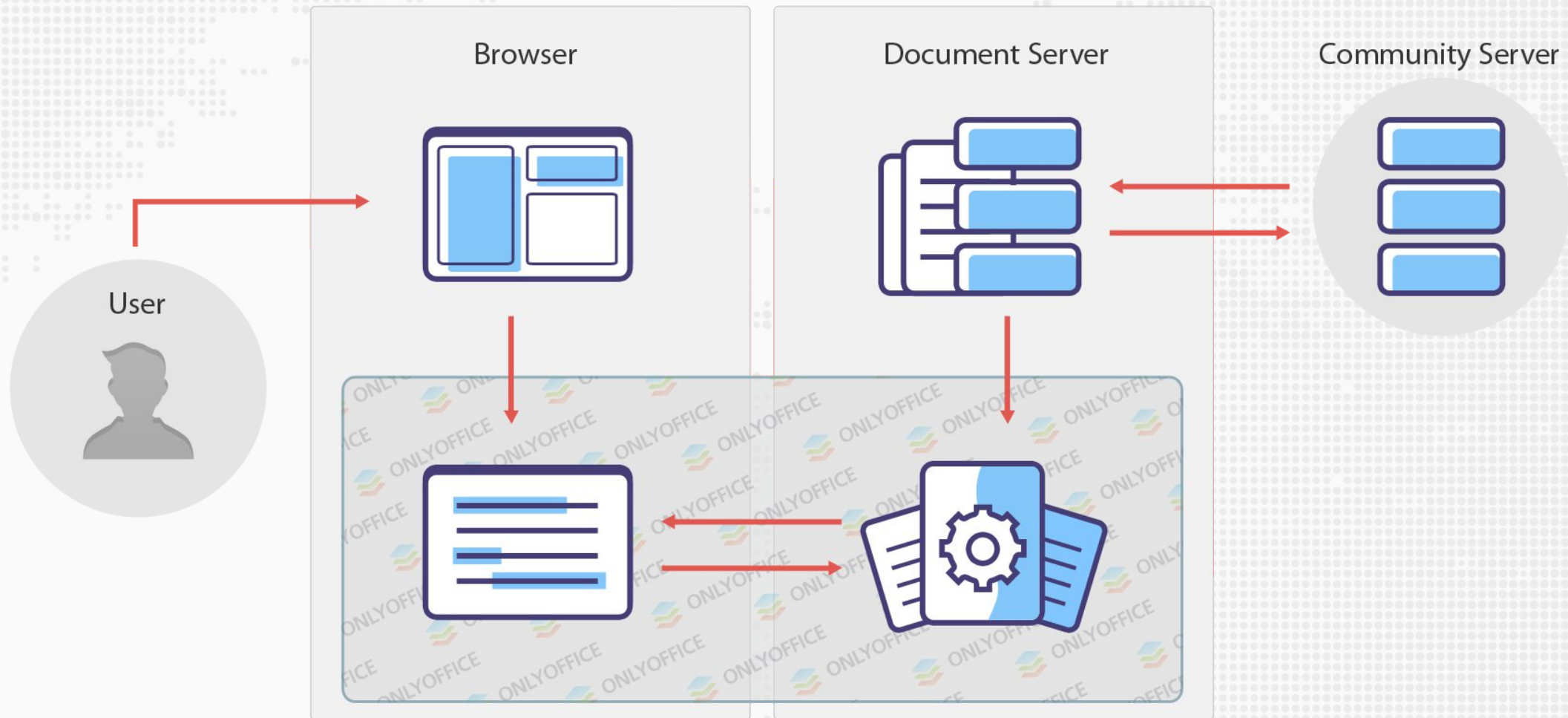
Architecture: document editing service structure



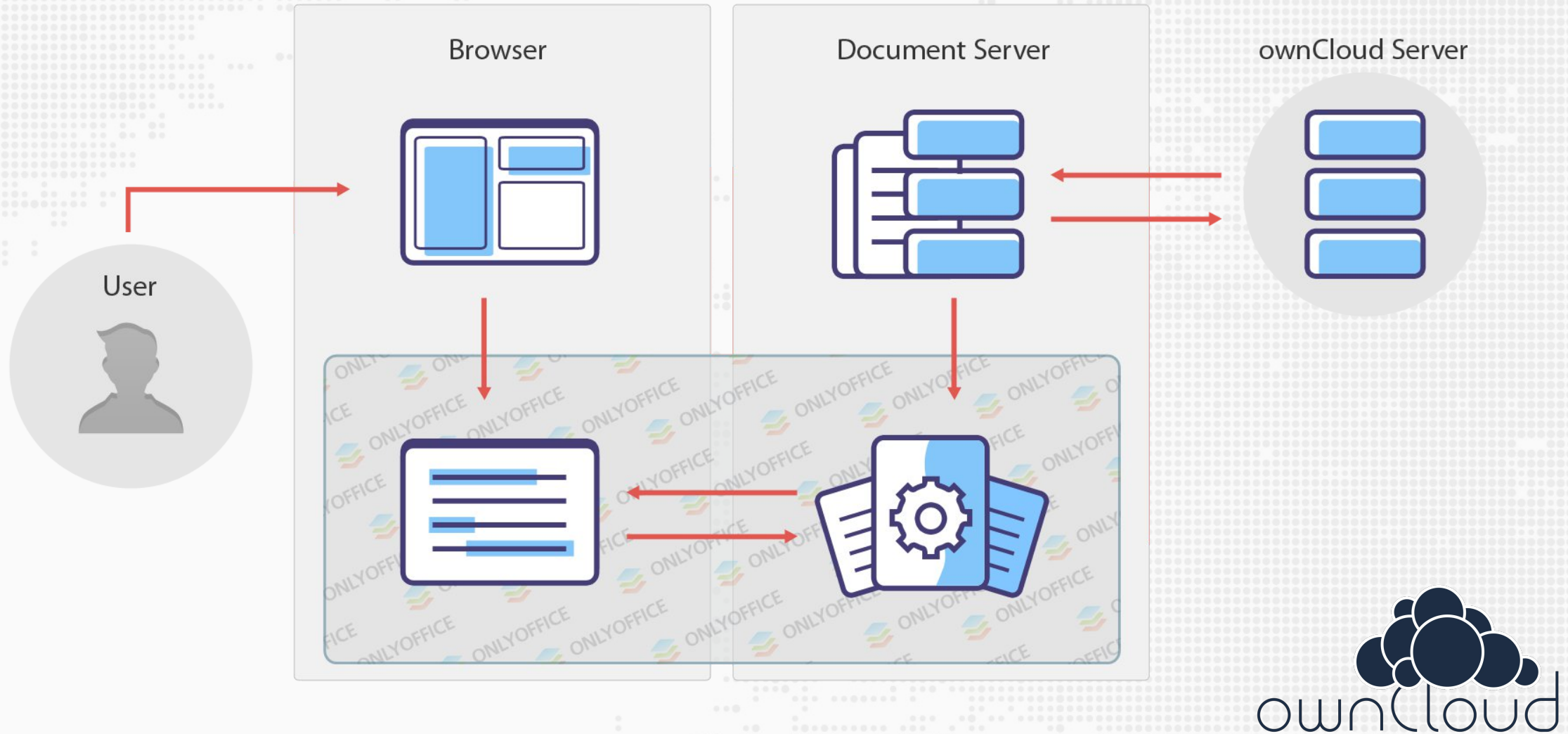
Extensive and intensive integration strategies



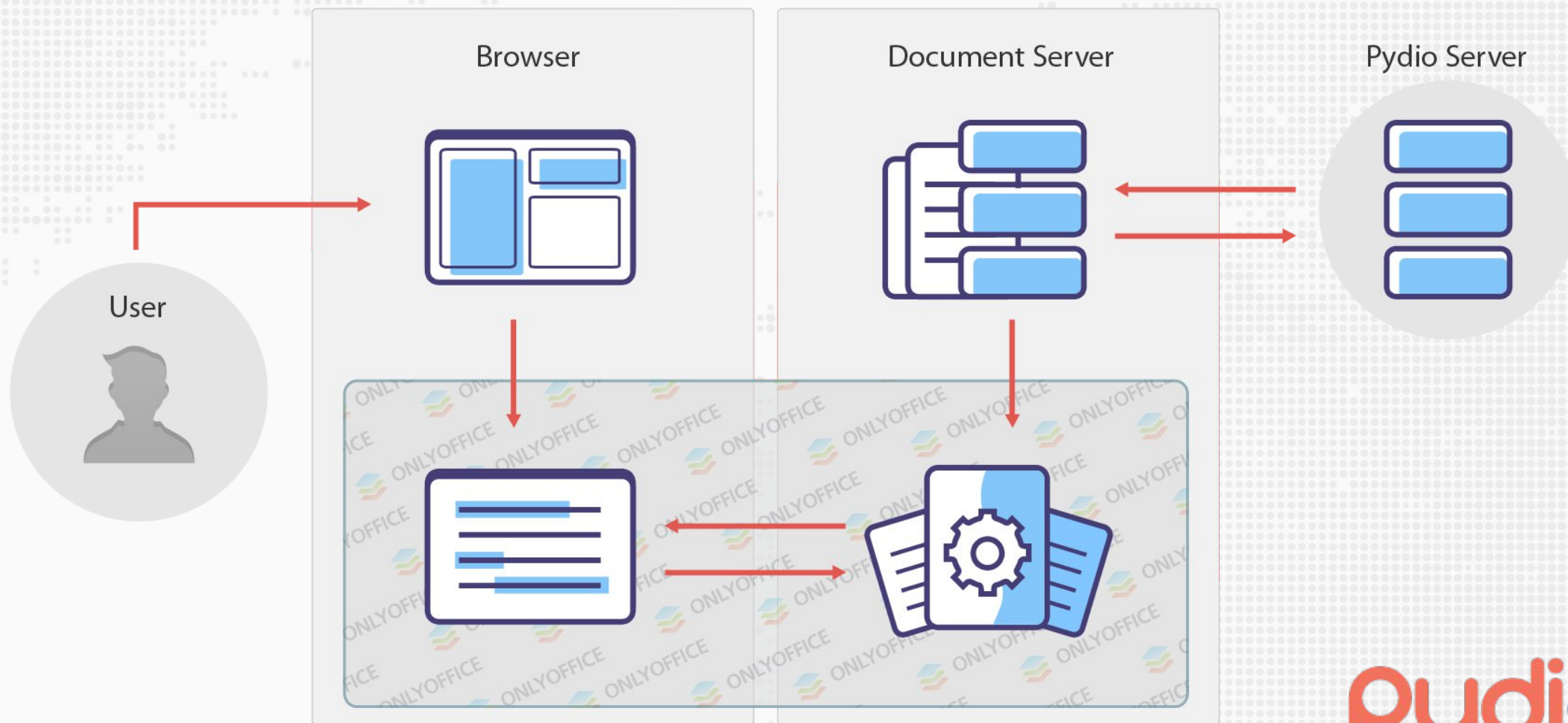
ONLYOFFICE editors and ONLYOFFICE cloud



Integrating ONLYOFFICE in third-party platforms

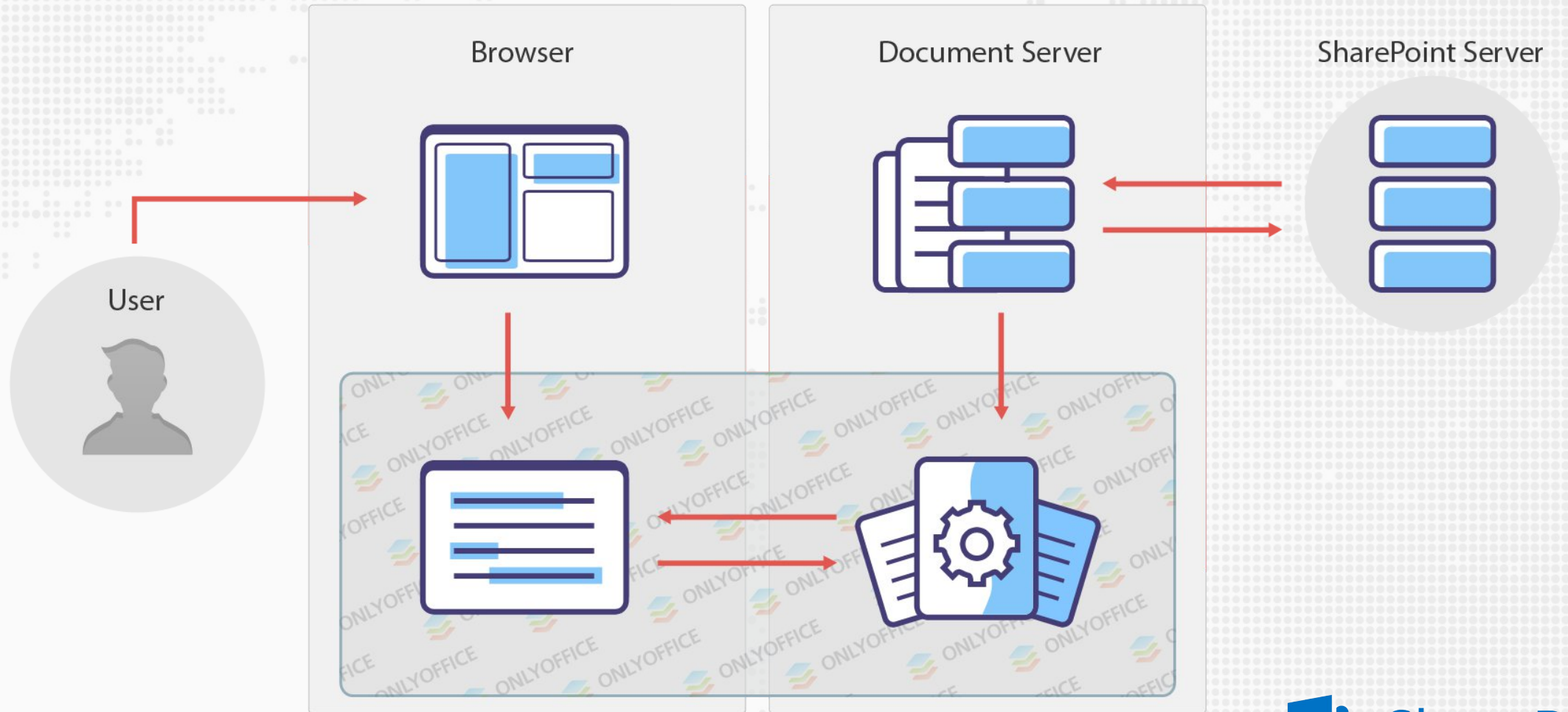


Integrating ONLYOFFICE in third-party platforms



PUT YOUR DATA IN ORBIT

Integrating ONLYOFFICE in third-party platforms



INTEGRATION: how it works

ONLYOFFICE
Document Server



Integration app (connector)

Back end:

- Conversion of data to formats of the counterpart;
- Requesting information about users and rights;
- Requesting operations with files;
- Signing (e.g. JWT requests).

Front end:

- Configuration unit (settings directory) for managing data transport;
- A page for the editors in the interface;
- Action buttons.



Cloud
solution server



Extensive path: Official connectors by ONLYOFFICE



Extensive path: Open API for creating integration apps



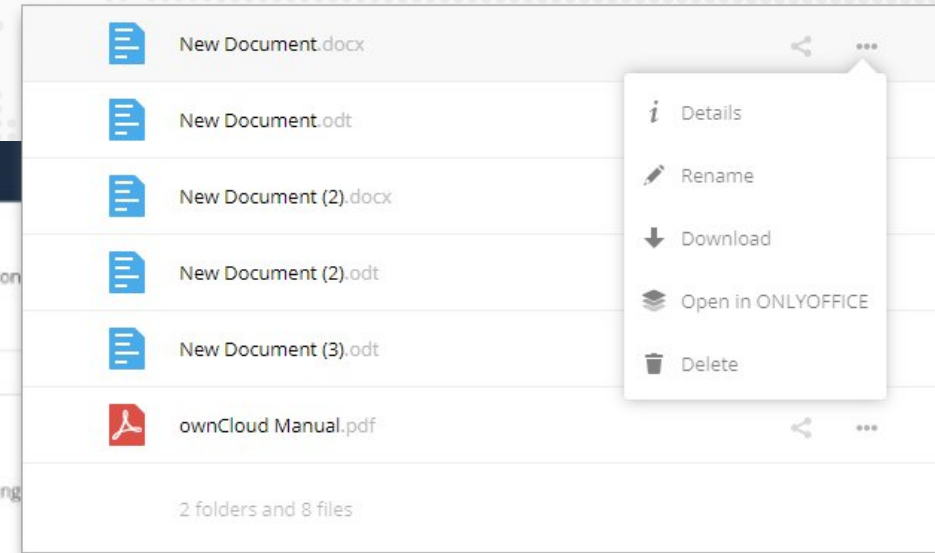
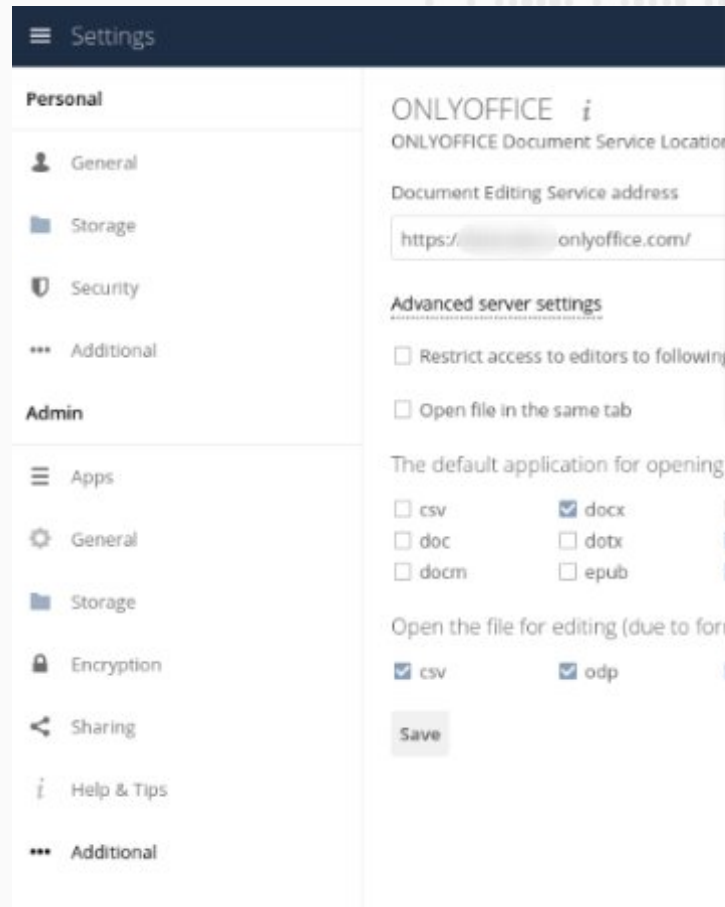


Integration: intensive path

- Extending the UI and adding advanced configuration options
- Mobile and desktop editors for integrated platforms
- New distribution formats
- Technological partnerships

Configuration and interface enhancement

- Application access control;
- Default file opening settings;
- Instant conversion settings;
- Public sharing;
- Notifications.

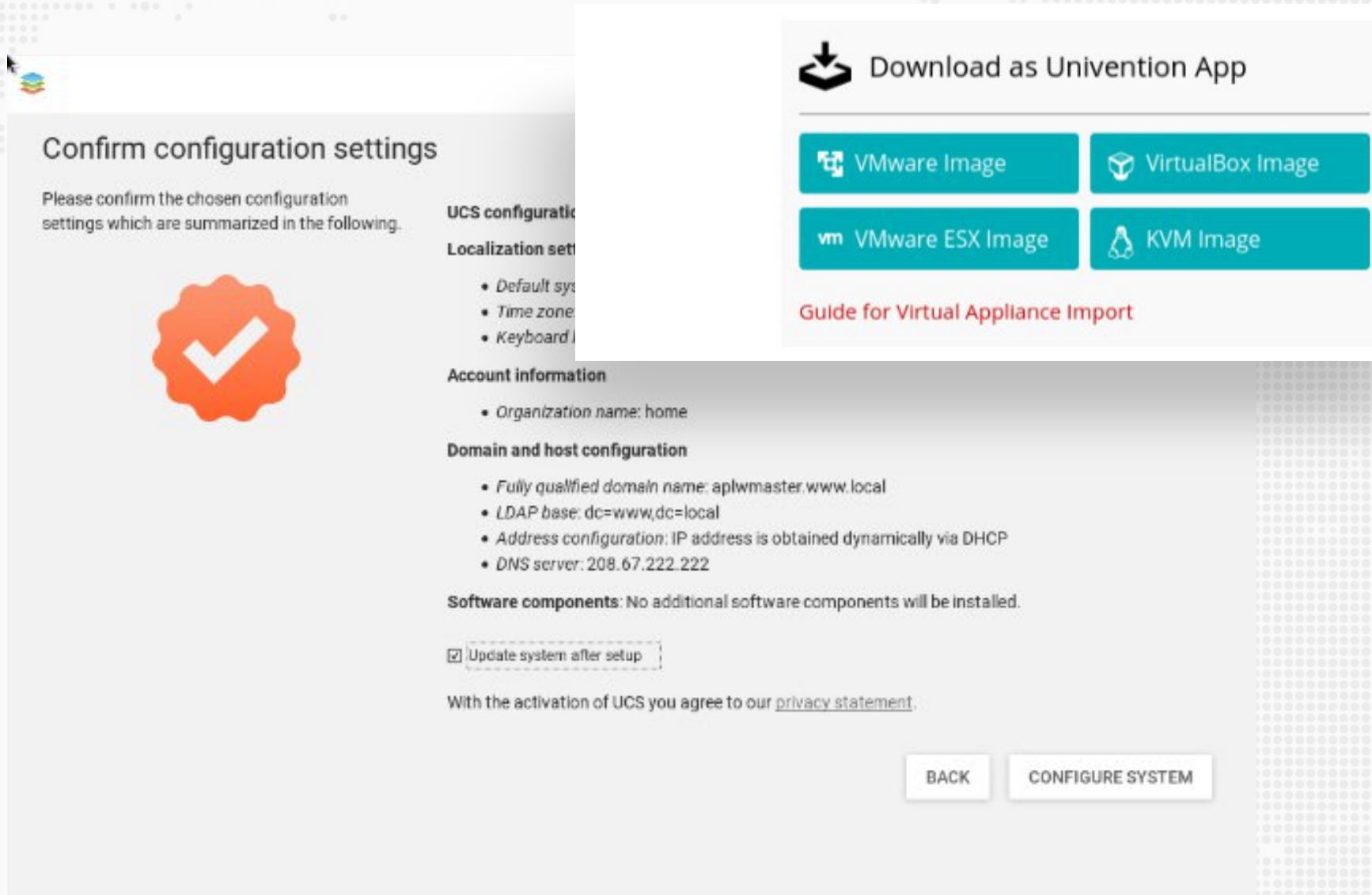


Desktop Editors for integrated cloud platforms

- Using local features not available online: fonts, plugins, spellchecker, etc.;
- Accessing the print service directly;
- Working with clipboard content with direct access to buffer;
- Connecting to multiple clouds at once from a single suite.

The screenshot displays the ONLYOFFICE Desktop Editors interface. At the top, a sidebar offers options to 'Create new' (DOCUMENT, SPREADSHEET, PRESENTATION) and 'Recent files'. The main workspace shows a document titled 'ONLYOFFICE Desktop Editors.docx' with a ribbon menu (File, Home, Insert, Layout, References, Collaboration, Plugins). The document content includes a 3D pie chart with four segments labeled 'Quater 1' through 'Quater 4', a 3D bar chart with five bars labeled '0-1' through '4-5', and a flowchart titled 'Work with autoshapes'. The flowchart consists of four boxes: 'The beginning' (top-left), 'Intermediate stage' (top-right), 'Meeting conditions' (bottom-right), and 'Final stage' (bottom-left). Arrows indicate a clockwise flow: 'The beginning' to 'Intermediate stage', 'Intermediate stage' to 'Meeting conditions', 'Meeting conditions' to 'Final stage', and 'Final stage' back to 'The beginning'. A central vertical arrow points from 'Meeting conditions' to 'Intermediate stage', with '(NO)' above it and '(YES)' below it. The right sidebar contains settings for 'Line Spacing' (Multiple: 1.15) and 'Paragraph Spacing' (Before: 0.85 cm, After: 0 cm). The bottom right corner shows 'Page | 3'.


New distribution format: Univention virtual appliances



The image shows a screenshot of the Univention configuration interface. On the left, a confirmation screen titled "Confirm configuration settings" is displayed. It features a large orange checkmark icon and a list of configuration details. On the right, a separate panel titled "Download as Univention App" offers four options for downloading the virtual appliance: VMware Image, VirtualBox Image, VMware ESX Image, and KVM Image. Below these options is a link for a "Guide for Virtual Appliance Import".

Confirm configuration settings

Please confirm the chosen configuration settings which are summarized in the following.



- UCS configuration**
- Localization settings**
 - Default system language: en
 - Time zone: Europe/Berlin
 - Keyboard layout: de
- Account information**
 - Organization name: home
- Domain and host configuration**
 - Fully qualified domain name: aplwmaster.www.local
 - LDAP base: dc=www,dc=local
 - Address configuration: IP address is obtained dynamically via DHCP
 - DNS server: 208.67.222.222
- Software components:** No additional software components will be installed.

Update system after setup

With the activation of UCS you agree to our [privacy statement](#).

BACK **CONFIGURE SYSTEM**

Download as Univention App

- VMware Image
- VirtualBox Image
- VMware ESX Image
- KVM Image

[Guide for Virtual Appliance Import](#)

Next steps

- Integration with more platforms, including industry-specific services

- **Mobile app integration**
- **Federated sharing**
- In-editor notifications
- Force save
- "Download as" option
- File lock
- Mail merge
- Version history in the editor

**Encrypted collaborative
editing** of documents in
real time



QUESTIONS?

