



LibreOffice
The Document Foundation

Generating ODF reports on server side

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Agenda

- ODF Policy in Taiwan
- Case Study on OSOR
- Report generating modules on server



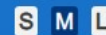
ODF Policy in Taiwan





ODF Policy in Taiwan

:: Sitemap 中文



國家發展委員會

NATIONAL DEVELOPMENT COUNCIL

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[Chronicle of Events](#)

[Press Release](#)

[Introduction](#)

Release Date: July 9th 2015

Contacts: Vide director-general MING-FEN CHUANG , deputy section chief PING-SHIH KO

Contact Tel.: 02-23165300#6802; #4987

Promote Government's Open Document Standards

Develop New Value for Document Circulation

Open data is a vital administrative direction for the government, and the most beneficial standards for presenting the document to the people have a significant influence on the people. The Executive Yuan announced the policy of "Implementation Project for Promoting ODF-CNS15251 as the Government's Standard Document Format" on June 5th of this year (2015), hoping that all industries may jointly promote the ODF (Open Document Format), as well as participate in the open document standard format of the government in order to enhance our soft power.



ODF Policy in Taiwan

The screenshot shows the 'FAQs' page on the National Palace Museum website. The page has a teal sidebar with the museum's logo and name in Chinese and English. The main content area has a light blue background with a geometric pattern. At the top, there is a breadcrumb 'Home > FAQs', the title 'FAQs', and utility icons for printing and font size adjustment. A search bar is present with a dropdown menu set to 'All' and a search input field containing 'Enter keywords'. The FAQ list includes a question about opening ODF files, an answer recommending LibreOffice with a download link, and a note about MS Office compatibility. Other questions listed are about museum location, hours, and admission prices.

Home > FAQs

FAQs

Select topic: All | Keywords: Enter keywords

Q How do I open files in ODF format (e.g., odt and ods)?

A The files may be opened using ODF open software LibreOffice.

To download LibreOffice, please click on the following URL:
<https://www.libreoffice.org/download/download/> (New window)

Note: Windows users may open files in ODF format using MS Office 2007 or above. However, errors will occur for some symbols and calculation formulas.

Q Where to Begin?

Q Where is the National Palace Museum? What's the address?

Q What are the Museum hours? What days are the Museum closed?

Q What are admission prices to the Museum? Are there any special or group discounts?



Case Study on OSOR

Taiwanese government standardises on true ODF document format | Joinup - Mozilla Firefox

檔案 (F) 編輯 (E) 檢視 (V) 歷史 (S) 書籤 (B) 工具 (T) 說明 (H)

Taiwanese government sta x NDC ODF 報表管理 - 資訊系 x Swagger UI x +

← → ↻ 🏠 🔒 https://joinup.ec.europa.eu/document/taiwanese-government-stan 🔍 搜尋

⚙️ 最常瀏覽 🌐 新手上路 🌐 ezgo 📁 ODF 📁 OpenData 📁 Collabora 📁 檔案 - The Document ... 📁 DEMO_FOSDEM

joinup

COLLECTIONS SOLUTIONS KEEP UP TO DATE 🔍 ? 👤

 Open Source Observatory (OSOR)

Last update
about 8 hours ago

👤 428 Members
📄 1 Solution

☰

Taiwanese government standardises on
true ODF document format

👤 [Adrian Offerman](#) | 28/10/2018

Overview

Members

About

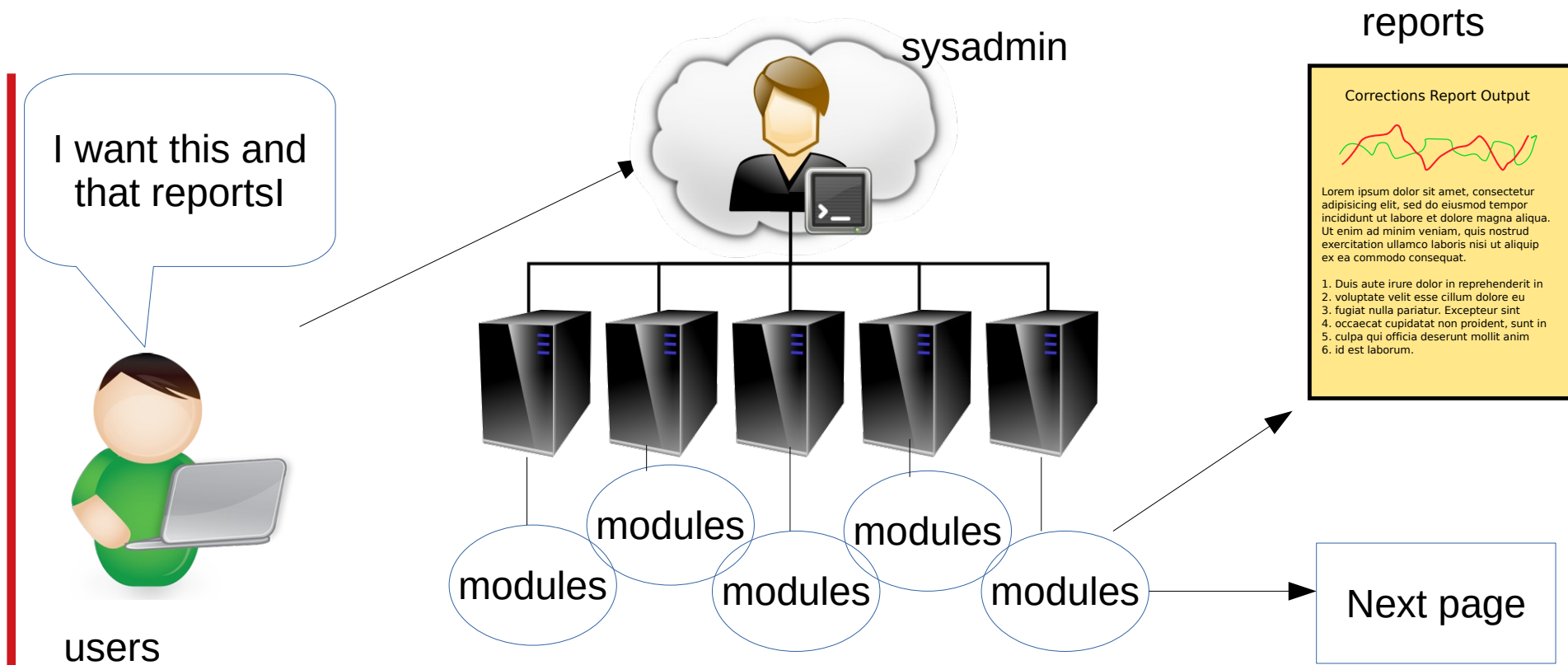
Case study, Joinup/OSOR, written by Adrian Offerman



That's clients' part.

However, we have another
problem to solve...

Reports generated by server





Mostly Used Reports Generating Modules

SAP Crystal Reports - Mozilla Firefox

檔案 (F) 編輯 (E) 檢視 (V) 歷史 (S) 書籤 (B) 工具 (T) 說明 (H)

National Palace Museum x crystal report at DuckDuck x SAP Crystal Reports x +

https://www.crystalreports.com/reports/ crystal report

SAP Crystal Reports Crystal Server Resources

Crystal Reports: the de-facto standard in pixel-perfect data reporting since 1991.

Buy digitally - full version Buy digitally - upgrade

With SAP Crystal Reports, you can create powerful, richly formatted, and dynamic reports from [virtually any data source](#), delivered in [over a dozen formats](#), in up to [28 languages](#). SAP Crystal Reports turns almost any data source into interactive, actionable information that can be accessed offline or online, from applications, portals and mobile devices.



Supported Exporting File Format

1 頁, 共 1 頁

自動縮放

Export Format Types:

The export formats supported by Crystal Reports can be broadly categorized in two groups: page-based formats and record-based formats.

- Crystal Reports (RPT)
- Crystal Reports Read-only (RPTR)
- HTML 3.2 and HTML 4.0
- Microsoft Excel (07-2003)
- Microsoft Excel (97.2003) Data-only
- Microsoft Excel Workbook Data-only
- Microsoft Word (97-2003)
- Microsoft Word (97-2003) - Editable
- ODBC
- PDF
- Record Style – Columns with spaces and Record Style – Columns without spaces
- Rich Text Format (RTF)
- Separated Values (CSV)
- Tab Separated Text (TTX)
- Text
- XML
- XML Legacy



Supported Exporting File Format

- No ODF
- So what can users do when they need to hand over ODF reports?



Supported Exporting File Format

- Convert from doc/docx to odt?
- But when opening it in LibreOffice...



Supported Exporting File Format

ap0302_rpt(典型的用crystal_report生成html後, 再另生成doc輸出).doc - LibreOffice Writer

檔案(F) 編輯(E) 檢視(V) 插入(I) 格式(O) 樣式(Y) 表格(A) 表單(R) 工具(T) 視窗(W) 說明(H)

內文 Noto Serif CJK TC 12

36 72 108 144 180 216 252 288 324 360 396 432 468 504

僱主接續聘僱外國人通報證明書 (含期滿轉換)

第 10621B001465 號

茲證明僱主：譚正夫

統一編號：G101271831

外國人接續日期：106 年 07 月 05 日 (期滿轉換外國人，請填寫外國人聘僱期間屆滿之翌日)

原僱主編號：G101102162

原僱主名稱：林肇禎

國籍：印尼 護照號碼：AS706766 姓名：SOFIAH 等 1 名

期滿轉換外國人與僱主雙方合意接續聘僱簽署日： 年 月 日

(名冊如附)，業於 106 年 07 月 07 日

依外國人受聘僱從事就業服務法第 46 條第 1 項第 8 款至第 11 款規定工作之轉換僱主或工作程序準則 (以下簡稱本準則) 規定，檢附僱主接續聘僱外國人通報單、外

(無作者) 2019/01/26 21:19

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頁 1 / 3 762 個字, 884 個字元 HTML 中文 (正體字) 100%



Supported Exporting File Format

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原僱主編號：G101102162
原僱主名稱：林肇禎
國籍：印尼 護照號碼：AS706766 姓名：SOFIAH等1名
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(名冊如附)，業於 106年 07月 07日

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注意事項：
一、僱主接續聘僱外國人，所附外國人入國工作費用及工資切結書，免經驗證。
二、接續聘僱外國人之僱主應檢具本準則規定之文件，依下列所定之期限向勞動部（勞動力發展署）申請接續聘僱許可資料異動：
1. 依本準則第7條規定申請者，應於取得接續聘僱證明書之翌日起15日內。
2. 依本準則第17條第1項第1款至第4款規定申請者，於第19條第2項所定之事由發生日起60日內。但原僱主於取得招募許可後至外國人未入國前有第17條第1項第1款規定之情事者，符合第

It's actually a HTML file.



Besides the difficulties of "converting" to ODF, there are also other annoying problems...



Problems when generating reports

- No standard format
 - Different departments and system may use different versions/tools
 - Difficult to integrate with other systems



Problems when generating reports

- Maintenance
 - Every single server needs to install one report generating system
 - Difficult to manage multiple servers



Rewriting system to generate ODF reports?

- Find out the relative XML structure
- Insert variables which will be replaced by dynamic data
- What if contents or layout changes?



NDC ODF API Service





Brief Setup Steps

1. Create a server
2. Create a report template
3. Upload template and get RESTful API
4. Send HTTP POST from system with data
5. Download the generated ODF



Create a Server

- GitHub:
https://github.com/NDCODF/ndcodfapi_service
- NDC demo server:
<http://122.116.99.182:8880/odfapi/>



Create a Report Template

- Template design wizard
 - An extension for NDC ODF Application Tools and LibreOffice
 - <https://www.ndc.gov.tw/cp.aspx?n=32A75A78342B669D&s=0E6E547DECCF0FBB>



Upload the template

- Add some description for the template
 - This template is **for system maintainers** (report generators) to use, so the description of the fields and the document should be clear to them.
- Get the API URL which will be used to send report data

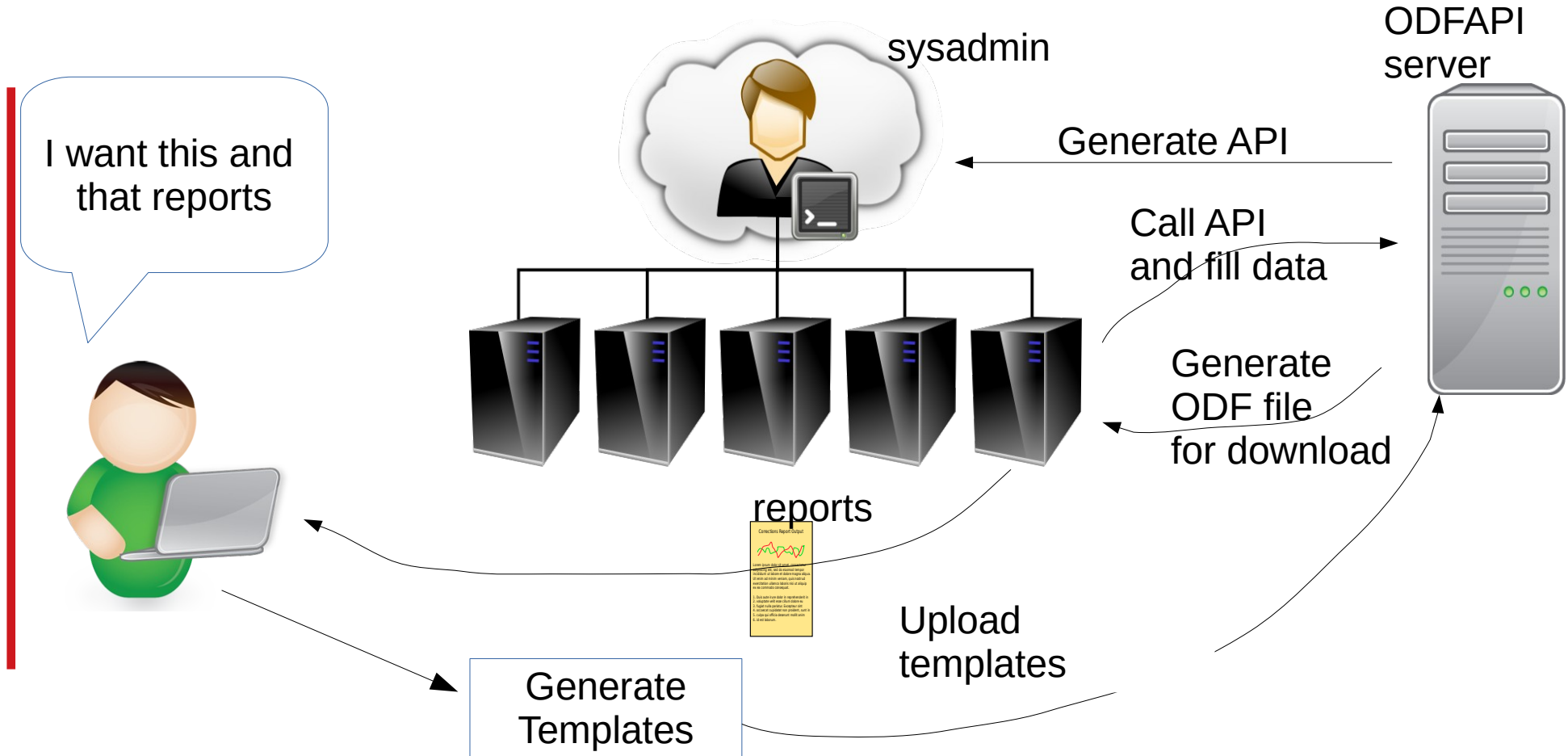


Send HTTP POST

- Use swagger.io to simulate the server side behavior
- The result URL would be able to send directly and save the output as report.odt
- And it's done.



Reports generating flow





Advantages

- The server side does not need to rewrite the whole report generating module, just calling the API server to get a report.
- It does not matter which programming language the server uses, since it just require HTTP POST to get report.



Advantages

- The server does not need to maintain / upgrade report generating tools (and can save a lot efforts)
- The report generators do not need to study / dig into XML code and find where to replace, and do not need to worry about the content layout either.



Advantages

- Everything would be defined in the report templates, generated by the users who really needs the report.



Thank you for listening!

Q&A

If there is any question,
Please speak English **slowly**...
Or just ask Franklin Weng (flee)



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