Palau Foreign Investment Board
System Shortlist & DMS Recommendation

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I. System Features

The following *A-level* features will serve as tentatively required criteria for the selection process. A short review of candidate Document Management Systems is provided below, and special attention is paid to the more DMS-specific *B-level* features.

System names are clickable links to the homepage of each product. See for a complete enumeration of the product's features.

A-Level Features

1. Tree / Cabinet-like file navigation
2. Automated Workflows / Document Routing
    a. Application Submissions → Checks → Circulation → Board Review
    b. Time sensitive stages
3. Descriptive Searches / OCR (Zonal / selective scanning is optional)
4. Document Tags
5. Comments
6. Revision Histories
7. Remote System Support (Ideally 24/7)

B-Level Features

1. System Submission Portal
    a. *OR* API Support (To realize Goal 2, specifically)
2. System Viewing Portal
    a. *OR* another means of external circulation
3. Built-in Document Editing
4. Team Calendar
5. Remote / Mobile File Access
6. About 40GB of cloud storage (*Rough* estimate: ≈ 3,000 unzipped 400pg PDF documents)
7. Automated Reporting (One excel sheet of most recent filing info)

II. System Shortlist

Rubex eFileCabinet – Business Tier $3300/annum | 5TB storage

Rubex is an expensive, but viable option. It stands out because of its interface simplicity, and integrated sharing features. FIB staff will be able to easily make file requests via email, having Rubex automatically store the uploads in the file system. Subsets of the uploaded documents will then be available for sharing with individuals via email (an additional step will be required for the user to sign in as a guest to the Rubex portal). Preset file templates in Rubex would also minimize any metadata entry, while adanced governance and retention policies offer avenues for disposal and withholding of select documents.

Mobile access is possible, but file uploads of documents *other than* photos are not possible. Like most cloud-based alternatives, the system cannot handle in-browser file editing, but has a checkout feature where only a single user can make changes to the file.

In general, Rubex provides nearly perfect functionality at an enterprise-level rate.

Pros:

- Zonal OCR: investigators will be able to search for keywords among 400pg FIAC's
- Password-protected external submissions are possible
    - No need for a custom submission portal, and uploads are throttled & secure

Cons:

- Cost; we would be paying for a huge amount of Cloud Storage.

DocuWare Cloud $350 to $1500/mo (Quote Pending) | 20GB

In comparison to Rubex, Docuware is a more extensive solution. The service has many more call centers, better online documentation, and a larger user base. Functional advantages include staging uploaded documents prior to filing, the ability to edit documents in-app, and a slew of file markup tools. These tools provide the ability to staple / clip files into one document in one place (while keeping the same files distinct in other locations), and easily linking related documents. Other features include importing tools that allow email storage via Outlook, auto-filled metadata tags for user uploads, a client-facing form builder, and an extensive list of 3rd-party integrations.

DocuWare is the superior choice over Rubex, but only if a cheaper quote is obtained.

Pros:

- Advanced file-markup and editing functionality
- Great Workflow features, extensive logic provided

Cons:

- Cost.
- File uploads still require a custom portal (Form builder only populates PDF's)

Ascencio OnlyOffice — $244/annum | 50GB storage

OnlyOffice is the most affordable alternative out there, and comes with a range of features that really exceed the price point. There is a Customer Relationship Management module for storing contacts of interest, as well as a form generator that imports leads & contacts directly into the system. Direct messaging, blogs, and unlimited mailboxes for your organization's teams are a big plus. If the project management and invoice tacking features seem a little overwhelming, then *Box* may be a better alternative.

Pros:

- Collaboration-focused tools, online document edits
- Document Builder written in Java: means of writing code to generate summary documents
    - ie. An Excel sheet of all FIAC holders and their associated tags / metadata
- Integrated team calendar

Cons:

- Poor API documentation: It will be more difficult to build a custom submission portal
- No support for Full Text Search or OCR
- No offline file storage / Desktop sync

Box Standard — $348/annum | 100GB storage

The interface is minimalistic and a close second to Rubex, while packing in most of the same high level features available in enterprise alternatives. The service offers offline storage of documents, a means of linking documents between directories, and has one of the best API documentations out there. Box is also one of the longest tenured alternatives on this shortlist, and offers great help forums, 3rd party integrations with Google tools, and some of the quickest responding customer service reps that I've spoken with. Comment sections for documents serve as paradigms of institutional memory, while notifications and content feeds will provide employees with relevant internal updates. Although Box Standard offers a more limited set of features than enterprise alternatives, it provides avenues for expansion (should the FIB need additional storage space or features like OCR) and remains a perfect fit with its stock feature set.

Pros:

- Great search feature: tags / metadata
- External document sharing (just as robust as Rubex)
- The best mobile app among all the contenders on this list

Cons:

- OCR only available for Business version
- Standard workflows aren't as robust as alternatives

III. Final Recommendation

Box Standard

In my system comparison, the most common pattern I noticed with SaaS products was the large tradeoff in price for a negligible tradeoff in functionality. Box, at minimum, offers a useful document platform for investigators and other staff to maintain records in a centralized and easily accessible location. This, alone, helps tackle the organizational goals of the FIB better than the additional enterprise-level functionality of Rubex and DocuWare. And ultimately, the low cost of Box helps mitigate any threat of budget cuts and aids in promoting the system's long-term usage.

In regards to features and the user interface, my feeling is that this platform is best suited to complement the knowledge level of the staff and the hardware restrictions of the office.

What is most important is that Box offers a level of scalability that complements the FIB's long term goals. Opting for upgrades when additional functionality is needed (ie. OCR, Automated Workflows, Document Interaction Reports, Governance/Retention features) will require minimal internal transition. Additional cloud storage space will not come at a premium, and is unlimited at the next subscription tier. The platform's information assurance mechanisms also provide the peace of mind needed for the FIB to transition to a truly paperless office. Finally, the Box API provides a range of features so comprehensive that it can enable fully custom Webapps to run on top of the Box UI. With additional development, the FIB will be able to easily share information with other regulatory agencies, better aggregate metadata, and manage the files stored in Box from external locations.

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IV. Internet Speed Considerations

The Foreign Investment Board's technology infrastructure may face serious limitations when it comes to internet speed. Because internet traffic would increase with the use of this system, the FIB would have a smaller portion of their current bandwidth to split between other wired and wireless office devices. The FIB's bandwidth of 1Mbps is a low-scale speed in comparison to offices like the FIC/FIU, Our Ocean 2020, and the satellite Office of the President. These organizations pay for services that are over 10 times as fast, but maintain an amount of personnel / devices that is proportionally lower than that of the FIB.

It is recommended that the FIB move forward with an upgrade to *2Mbps* to maintain their current speed, while considering an upgrade to *4Mbps* to ensure a noticeable improvement in sharing and uploading internal documents. The former of the two can also provide a cost savings of $40/month if an internet service provider switch is made. While an upgrade to 4Mbps would only run an extra $40/month if the same switch is made.

V. Operational Benefits

Moving forward, the FIB can expect to see the following operational benefits as they acclimate to using a Document Management System:

Function	Operational Benefit
Digital circulation of FIAC applications during the comment period.	• The weekly preparation and hand-delivery of applications to seven different government entities is no longer required
Digital Quarterly Report dissemination.	• Annual savings of 7 reams of printer / letterhead paper • Postage savings from discontinuing the mailing of resources to 218 individual businesses
Digital intake of FIAC applications and Quarterly Reports.	• A 50% reduction in paper-based FIAC submissions, and a potential savings of several thousands of paper pages per applicant (who are currently required to submit 15 application copies) • Physical storage of 872 Quarterly Reports per annum is no longer required
Digital case file storage.	• Investigators will no longer need to maintain multiple hard-copies of original FIAC filings (spanning hundreds of pages) pertaining to internal investigations • External resources previously filed on paper can now be kept in digital format • Internal resources such as activity logs and statistics can now be accessible to everyone in the organization
Online retention.	• Maintaining digital filings is a means of information assurance in the scenario that any physical copies get corrupted or lost