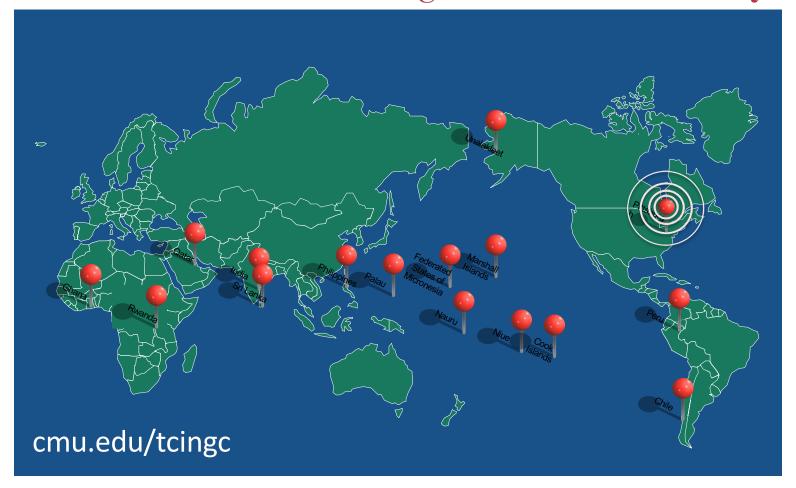
TECHNOLOGY CONSULTING IN THE GLOBAL COMMUNITY

Final Consulting Report
Palau Code Commission
Hannah Somers
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Carnegie Mellon University



Palau Code Commission Executive Summary

Student Consultant, Hannah Somers Development Partners, Palau Code Commission & Marina Udui

I. About the Organization

The Palau Code Commission is a governmental committee made up of members of Palau's Legal Community.

The mission of the Code Commission is to codify and/or vote on any technical changes after a piece of legislation has been passed and to publish all new legislation.

The Code Commission has managerial control over the Publication and Law Access Unit Office (PALAU Office), which is staffed by one full-time employee, Marina Udui and one part-time employee, Lindsay Pedro. The PALAU Office is responsible for carrying out the mission of codifying and/or publishing the laws of Palau.

The PALAU Office publishes legislation through the Law Search CD, which is sold to attorneys for \$500/year. The Law Search CD allows attorneys to search for legislation through a program called dtSearch. The Law Search CD is used by approximately 40-50 attorneys per year.

II. Solving Palau's Law Storage & Search Problem

The goal of this consulting partnership was to improve the way that legislation is stored and searched in the Republic of Palau. The catalyst for this engagement was the fact that the Law Search Program has not been updated since 2002 and the computer used to add content to the Law Search CD (when new legislation is passed) is also from 2002. The lack of updates to the Law Search Program resulted in an inaccurate system that was challenging to use and update with new content. Additionally, the Code Commission was fearful that the computer from 2002 would crash at any given moment. The Code Commission was eager to either update their current system or invest in a new system for storing and searching Palau's laws.

The Student Consultant interviewed attorneys on island to understand how the Law Search CD is used and how a new system would be used. After analyzing the interviews with the Code Commission, six possible solutions were considered and discussed. The Code Commission ultimately settled on using Google Drive as a solution to store and search Palau's laws. A Google account was created for the PALAU Office, the laws of Palau were uploaded to Google Drive, and the PALAU Office staff were trained to use Google Drive. Google Drive was shared with the Code Commission and a handful of other on-island attorneys.

The implementation of Google Drive reduced the amount of time between when a law is passed and when it is made available to attorneys by approximately 60 days. It also improved the efficiency of the PALAU Office. Finally, it provided a safe depository for laws that will be accessible even if the old computer crashes. However, at the end of the consulting

engagement, the Code Commission did not commit to using Google Drive. If there is no motivation to keep Google Drive regularly maintained it will cease to be useful as a solution.

It was recommended that the Code Commission use Google Drive and/or upgrade dtSearch as an interim solution and take the steps to secure a long-term solution like Fastcase or pacLII. In the short term, the Student Consultant recommended using Computers Plus, an on-island company, to assist with the dtSearch upgrade.

III. Converting the Data

In order to put the laws of Palau in Google Drive, it was imperative that the data itself be converted from WordPerfect to Microsoft Word, as WordPerfect is outdated, no longer commonly used, and has poor compatibility with Google Drive. The Student Consultant used a combination of Microsoft Word programs, macros, and manual conversion processes to convert the documents.

The conversion of the data resulted in the laws of Palau being compatible with Google Drive and more easily accessed by those who do not have Word Perfect installed. Additionally, as technology continues to develop, it will be easier for the laws of Palau to be preserved and edited now that the documents are in .doc format. However, due to the outdated nature of WordPerfect, many of the converted documents were not correctly formatted. If the documents are not cleaned and reformatted, they will not be sufficient for attorneys to use. It was recommended that the PALAU Office go through the documents one by one to reformat and ensure accuracy.

III. Additional Recommendations

The Student Consultant recommends that the Code Commission consider the following three additional recommendations:

- 1. Designate a Code Commission member to be responsible for technology, specifically someone who will check in with the PALAU Office and guarantee that any technologies the Code Commission and PALAU Office use are up to date.
- 2. Develop a system for storing old versions of the PNCA in Google Drive now that it is possible, as this is something that many attorneys would find useful.
- 3. Streamline the process of managing the PALAU Office per Executive Order 413.

Palau Code Commission Final Consulting Report

Student Consultant, Hannah Somers Development Partners, Palau Code Commission & Marina Udui

I. About the Organization

Organization

The Code Commission is a governmental committee made up of members of Palau's Legal Community.

The mission of the Code Commission is to codify and/or vote on any technical changes after a piece of legislation has been passed and to publish all new legislation.

The Code Commission, chaired by Danail Mizinov, Chief Public Defender, has managerial control over the Publication and Law Access Unit Office (PALAU Office) as of 2018. The Code Commission, as a committee, only meets to vote about topics related to management of the PALAU Office and to approve any technical changes to legislation. The PALAU Office is responsible for carrying out the mission of codifying and/or publishing Palau's laws. When congress passes a new law, amendment, executive order, etc., the PALAU Office is responsible for appropriately codifying it and publishing it to be accessed by Palau's legal community. The legislation is published on "portable media" (a CD or flash drive) that runs the Law Search Program.

The Law Search Program (also referred to as the Law Search CD) is primarily used by attorneys and members of the government, including Congress, the Judiciary, and the Executive Branch. The PALAU Office estimates that 40 people per year purchase access to the Law Search Program. The majority of these subscription purchases are paid for by office budgets, rather than the individuals using the program. The payment to access the law search program (\$400 for local attorneys, \$500 for off-island attorneys) goes into the PALAU Office bank account, used to fund office maintenance and technology.

The PALAU Office has one full time employee and one part time employee and is located in the old Olbiil Era Kelulau (OEK) Building, which is located on Main Street across from the Palau Community College. The PALAU Office salaries are funded through the Code Commission, which receives \$64,000 annually as a line item in the federal budget. The PALAU Office also has a separate bank account, mentioned above, that is funded through subscription fees for the Law Search Program and is managed by the Ministry of Finance. In a year, the PALAU Office typically makes \$20,000. The money in this account currently sits somewhere around \$100,000.

Neither the PALAU Office nor the Code Commission have a website or any social media presence. Public notices are posted on bulletin boards outside of the old OEK building to alert citizens of upcoming Code Commission meetings. It is significant to note that current, up-to-date laws of the Republic of Palau are not easily accessible without purchasing access to the

Law Search Program through the PALAU Office. It is unclear how an average person would find the PALAU Office unless they were referred here by an attorney or member of the government.

Facilities

The Code Commission does not have an office. When they hold meetings, they meet in one of the hearing rooms at the Court Building. The PALAU Office is located in downtown Koror on Main Street, in a building owned by the State of Koror, called the old OEK building. The PALAU Office has free use of this space through an agreement with Koror State. The PALAU Office has been in this space for four years, but the permanence of the agreement with Koror State is uncertain.

The PALAU Office is a small, well airconditioned space that is isolated from the rest of the building. It has room for desks for the two employees and their computers, as well as the old computer from 2002 that is used for adding new content to the Law Search CD. There is a printer, a separate scanner, and a router and modem for their wireless internet. Almost everything in the office is connected to a battery-powered backup extension cord, to ensure connectivity if the power goes out, which happens infrequently. The walls of the office space are filled with boxes and binders of paper copies of all the legislation for the Republic of Palau.

Programs

The primary program of the PALAU Office is to codify and/or publish legislation after it has passed, in addition to making any necessary technical changes. They perform this work on behalf of the Code Commission. It is crucial to the country of Palau that they have all laws published and accessible in order to write new laws, amend current laws, and generally govern effectively. In addition, the PALAU Office is responsible for selling the subscriptions to the Law Search CD and collecting the money. Subscriptions are valid for one year.

Staff

The members of the Code Commission include Chief Public Defender Danail Mizinov, Bar Association Representative Ebil Matsutaro, Counsel for the House of Delegates Sarah Barr, Justice Michelsen, Chief Justice Ngiraklsong, Attorney General Ernestine Rengiil, Moji Waibuta, Lance Seibenhener, and Counsel for the Senate Brengyei Katosang. Danail Mizinov serves as Chair of the Code Commission and Ebil Matsutaro serves as Vice Chair. Sarah Barr serves as Secretary.

The PALAU Office has one full time employee, Marina Udui, and one part time employee, Lindsay Pedro. Marina has worked for the PALAU Office since 2002 and is responsible for everything in the office, including codifying new legislation, adding new content to the Law Search CD, selling and installing the Law Search CD to attorneys, updating office technology, bringing technical changes to the Code Commission, and ordering office supplies. Lindsay has worked at the PALAU Office for less than a year. She is a part-time student at Palau Community College and has some experience in computer science. Lindsay is primarily responsible for editing, scanning, and printing various legislative documents.

Technology Infrastructure

The PALAU Office has three computers, a printer, two scanners, and two telephones. It does not have a server.

Marina's Computer:

Hardware	Dell Inspiron 560 with Pentium(R) Dual-Core CPU Processor 2.80 GHz and 6.00 GB of RAM and a 64 bit operating system.				
Network	1 NIC(s) Installed, Connection Name: LAN, DHCP Enabled: yes				
Internet Connection	Wireless Internet (144 Mbps)				
Operating Systems	Microsoft Windows 7 Professional, version 6.1.7600 Original Installation date 3/9/2016				
Peripherals	External hard drive, copier, monitors, CDs for the update, flash drives for the update				
Software Programs	Wordperfect, Microsoft Office Word 2007, ABBYY Fine Reader Professional Edition 9.0				

Lindsay's Computer:

Hardware	Dell Inspiron 560 with Pentium(R) Dual-Core CPU Processor 2.80 GHz and 6.00 GB of RAM and a 64 bit operating system.				
Network	1 NIC(s) Installed, Connection Name: LAN, DHCP Enabled: yes				
Internet Connection	Wireless Internet (144 Mbps)				
Operating Systems	Microsoft Windows 7 Home Premium, version 6.1.7601 Original Installation date 12/13/2010				
Peripherals	External hard drive, copier, monitors, CDs for the update, flash drives for the update				
Software Programs	Wordperfect, Microsoft Office Word 2007, Adobe Acrobat 8 Professional, dtSearch CD Wizard (the Law Search program), Microsoft Office Excel 2007, Windows 7				

Old Computer (Motoko):

Hardware	Intel(R) Pentium(R) 4CPU 2.00GHz 1.99GHz, 256 MB of RAM, Micron PC Clientpro
Network	Intel(R) PRO/100 VE Network Connection
Internet Connection	No internet connection
Operating Systems	Microsoft Windows XP Professional, Version 2002, Service Pack 2
Peripherals	External hard drive, monitors, CDs for the update, flash drives for the update, floppy disc compatible
Software Programs	Microsoft Office 2000, WordPerfect Office 2000, WordPerfect Office 11, Adobe Acrobat 4.0

Technology Management

Marina is responsible for the PALAU Office's technology management. Upgrades, updates, and recommendations for new technology come from Computers Plus, a local company. Help from Computers Plus is requested on an as-needed basis.

The Law Search Program was created by a Japanese volunteer in 2002 and has not been updated since. Critical data is backed up on an external hard drive as needed.

Technology Planning

Currently, there is no technology plan in place for the PALAU Office, which seems to be on par with other offices that they work with. If a technology upgrade or update is suggested by Computers Plus, Marina must request and justify funding from the Attorney General.

Communication

Communication is done primarily by phone, email, paper, and external drives. Within the office, documents are shared through paper and external hard drives. Between the PALAU Office and other offices, documents are shared via email or paper copy. Questions for attorneys are often handled by phone or in person, and if an attorney wants to purchase a subscription to the Law Search CD they come to the PALAU Office in person. The most efficient way to reach someone at the PALAU Office is to call or show up in person.

Information Management

The most critical information (the laws of Palau) are stored on Marina's computer and backed up on an external hard drive. In addition, paper copies are stored in binders and boxes in the PALAU Office. Any other important information (employee details, payroll information, etc.) are stored in folders and/or on Marina's computer.

Business Systems

The PALAU Office bank account is managed by the Ministry of Finance and overseen by the Attorney General. Any requests for money must be approved by the Attorney General.

II. Implementing Google Drive to Store and Search Legislation

Motivation

Palau's Law Search CD System had not been updated since 2002. The outdated system posed problems for Palau's legal community. Specifically, search results were inaccurate, the Law Search CD was not compatible with mac computers, and content was not able to be browsed. Additionally, adding new content to the Law Search CD whenever new legislation was passed was a time consuming, multi-step process. Often, new legislation would not be accessible to Palau's legal community for months.

The Law Search CD System that Palau had been using prevented the legal community from having immediate access to accurate, current law. Lawyers had to go through great lengths to adapt their research methods to work with the Law Search CD. One office specifically, purchased a computer just to access the Law Search CD, since their other computers (macs) were not compatible. Additionally, because the search results were inaccurate, there were instances of confusion about what is "good law".

Finally, the computer used to update the Law Search CD is old, outdated, and dangerously close to crashing. If the computer were to crash before a new system were in place, access to Palau's laws would be unreasonably difficult. The Code Commission and the PALAU Office are responsible for ensuring that the laws of Palau are published and accessible and any system being used must allow them to meet this mandate.

Six options were presented to the Code Commission (*see Appendix A*) and Google Drive was selected as the first solution to test. Google Drive was selected because it is free up to 15G, accessible online and offline, compatible with macs, and a handful of members on the Code Commission have experience using Google Drive.

Process

To begin, the Student Consultant interviewed attorneys on island to understand how they use the Law Search CD and what a good Law Search Program should look like. This data was used to create an Analysis of Interviews as well as a list of Requirements and Nice-to-Haves (see Appendix B and Appendix C). After reviewing the Analysis of Interviews and list of Requirements and Nice-to-Haves with the Code Commission to confirm that they were accurate, the student consultant researched preexisting solutions. A chart comparing possible solutions was created (Appendix A) and presented to the Code Commission.

After thorough analysis and discussion, the Code Commission settled on moving forward with Google Drive and the creation of a website. An additional request was made to keep open the option of updating dtSearch, in the event that Google Drive and the website were not satisfactory.

A Google Account was created for the PALAU Office by the student consultant and Marina Udui (<u>PalauPublicationOffice@gmail.com</u>). The laws of Palau were put into a folder on Google Drive called "All Law". The "All Law" folder was shared with the members of the Code Commission for testing purposes. Code Commission members were also given instructions for downloading and setting up Google Backup & Sync (*see Appendix D*), to make the content available on their computer while offline.

Google Drive was configured to be as easy to use as possible while securely storing Palau's laws. The account was set up in Marina's name and test users were given "View Only" permissions, which was done by the student consultant and Marina. Users are prevented from granting other people access as well.

The content uploaded to Google Drive mirrors the way that Palau's laws have historically been organized, using the following folders:

Compact

Constitution

Court Cases – Palau

Court Cases – Trust Territory

Court Rules

Executive Administrative Directives

Executive Orders

Executive Presidential Proclamations

International Agreements

Management Action Plan (MAP)

OEK Resolutions

Palau National Annotated Code (PNCA)

Presidential Directives

Public Corporation Regulations

Public Laws (RPPL)

Regulations

State Constitutions

TT Public Laws

Uncodified Public Laws (RPPL)

Uncodified State Laws

The PALAU Office staff were trained to access and maintain Google Drive through the <u>PalauPublicationOffice@gmail.com</u> account. Specifically, they are more than capable of granting access to new users, eliminating users who should no longer have access, removing old documents, uploading new documents, and ensuring that the appropriate sharing permissions are set (*see Appendix E for training documents made to assist with these processes*). Additionally, they are familiar with downloading and setting up Google Backup & Sync.

Outcomes

After the initial testing period, Code Commission members that were familiar with Google Drive generally provided positive feedback, whereas Code Commission members that were less familiar with Google Drive had more hesitancies about using Google Drive as a solution.

Google Drive drastically reduced the amount of time between when legislation is signed into law and when it is made available to attorneys. With the Law Search CD, it could take anywhere from one week to 3 months for new legislation to be made available to the attorneys. With Google Drive, new legislation can be made available within a few days. Additionally, Google Drive improved the efficiency of the PALAU Office. Previously, Marina would need to convert a new law from .pdf to .doc to .wpd and codify / reformat as necessary. Every few months, Marina would compile all the new laws into a folder and update the Law Search CD on the old computer. After adding the new laws, Marina and Lindsay would distribute the updated CDs to customers. This entire process took a few days. Google Drive reduced the work that Marina needs to do to simply converting the document from .pdf to .doc, codifying, and uploading to the appropriate folder in Google Drive. When appropriate, the file can be uploaded in .pdf format directly.

Most importantly, Google Drive put all the data on a system that is secure. There is no concern that it will not be accessible if the old computer crashes. And if Marina's computer crashed, the content would still be accessible. Additionally, mac users can now access the laws of Palau on their computers using Google Drive and Google Backup & Sync, and all content is accessible without internet when the users install Google Backup & Sync.

An additional outcome that was unanticipated is the ability to use this account for emailing communications when the PALAU Office's current email account is down.

While the initially expected outcomes indicated that this new system would encourage all attorneys to rely on a single system and result in less instances of attorneys referencing the incorrect version of a law, it was not possible to accurately assess that at this point. This will be easier to assess if there becomes a time when all attorneys in Palau are able to use the Google Drive system.

Risks to Sustainability

The major risk to sustaining Google Drive at the end of the 10-week engagement is the lack of commitment to the solution. At the final meeting between the student consultant and the Code Commission, the Code Commission expressed concern that members of the Palau Bar Association would not be willing or able to learn Google Drive. It was then decided that Google Drive should remain as a backup solution, and dtSearch (or the current Law Search CD System) should be upgraded.

While maintaining Google Drive is a safe way to ensure that laws will be accessible if the old computer does crash, it requires slightly more work on behalf of the PALAU Office, as Marina needs to update two separate systems. Additionally, there will be little incentive to maintain Google Drive if no one is using it. Fortunately, it will be easy enough to bring up to date if necessary, but the safest way to ensure a well-functioning system will be to commit to regularly maintaining it.

Sustaining Google Drive will also require that attorneys who have familiarity with Google Drive be willing and available to share their knowledge with others. One of the benefits to Google Drive is that it does not require expert knowledge and can be easily learned by spending a few hours exploring it. Having Code Commission members familiar with Google Drive serve as on-island resources will greatly aid in the process of transitioning to Google Drive, should the decision be made to do so.

Long-Term Recommendations

It is highly recommended that the Code Commission view Google Drive and/or dtSearch as an interim solution only and make a plan to invest in an advanced, preexisting solution.

Based on conversations with the Code Commission and other attorneys across the island, it is clear that an advanced solution is needed. Specifically, a solution that can be accessible online and offline, that is compatible with macs and windows computers, that can hyperlink within and to other documents, that can indicate when law is no longer "good law," and that can generally mirror research tools such as Westlaw or LexisNexis.

In conversations with Code Commission members, what stands in the way of Palau investing in an advanced system is the mandate that the PALAU Office attempt to be self-funded. According to Marina, the PALAU Office brings in approximately \$20,000 per year. That money goes to a bank account controlled by the Ministry of Finance. That account currently sits at upwards of \$100,000 and is used to maintain the PALAU Office. Marina estimates that costs of maintaining the PALAU Office are somewhere around \$5,000 per year, with slightly higher costs in years that she needs to print the Palau National Annotated Code.

It is recommended that the Code Commission verify the amount of money necessary to maintain the PALAU Office and consider alternative money sources. For example, charging Palau Bar Association members a slightly higher bar fee per person and using that additional money to fund the PALAU Office. Or, requesting the additional money as a line item in the federal budget.

After securing an alternate source for the funds necessary to keep the PALAU Office running, it is recommended that the Code Commission work with the Legislature to remove the mandate that the PALAU Office attempt to be self-funded. Doing so will open up possibilities to invest in more advanced solutions, such as PacLII, Fastcase, or others. (Both PacLII and Fastcase were initially suggested by the Student Consultant as a potential solution. While both PacLII and Fastcase are advanced and meet almost all of the requirements of the Code Commission, they were voted down because using either of these solutions would not allow the Code Commission / PALAU Office to charge for access to the laws. (*Please see Appendix F and Appendix G for records of communication between the Student Consultant and PacLII and the Student Consultant and Fastcase.*)) A more advanced law search system will allow the Code Commission and PALAU Office to fulfil their mission of publishing the laws of Palau in a way that is reasonable and easily accessible.

Alternatively, if it is not possible to remove the mandate that the PALAU Office try to be self-funded, the Code Commission should consider hiring a full or part-time IT person to update and maintain their law search system(s). Even if dtSearch is updated this year, it will require maintenance and future updates in order to avoid the situation that Palau was in this year. This IT person could be a student at PCC studying computer science, someone from Computers Plus, or an off-island person who regularly comes in to check up on the system.

When researching what U.S. states and other small islands do to store their legislation, it became clear that it is rare for a city, state, or country to charge for access to the laws. Typically, laws are made accessible to everyone for free and fees are charged to attorneys who wish to have an advanced way to search the laws. While it is currently impossible for Palau to make all of their legislation available to the public given the mandate that the

PALAU Office attempt to be self-funded, it strongly recommended that the Code Commission remedy the fact that Palau's laws are not accessible to an average citizen.

Short-Term Recommendations

In the interim period, the Student Consultant recommends upgrading dtSearch as discussed at the final meeting between the Code Commission and the Student Consultant.

The Student Consultant chose not to begin the update process during her last week on island, citing that it would be irresponsible to start the process without ample time to finish. Upgrading dtSearch includes installing a Microsoft IIS Server, installing the newest version of dtSearch on Marina or Lindsay's computer, uploading and indexing the laws, troubleshooting, training Marina and Lindsay on the newest version of dtSearch, and reworking the encryption code written by Motoko to ensure that the license granted when someone purchases access to the Law Search CD will still expire in one year. Based on the age of the code written by Motoko, it is likely that a new licensing system will need to be created. Additionally, the Code Commission still needs to discuss how to deal with providing access to the web-based version of dtSearch, as customers will have indefinite access via the web-based version unless actions are taken to also limit that access to one year.

The Student Consultant contacted dtSearch to ask about the possibility of the Code Commission flying a dtSearch staff member to Palau to carry out the update. dtSearch declined, citing that it would be "overkill." (*Please see Appendix H.*) The Student Consultant then contacted Computers Plus, a local IT company (488-6001), to see if they are capable of upgrading the dtSearch system. Dennis, an employee of Computers Plus, indicated that they would be capable of installing an IIS server, installing the newest versions of dtSearch, adding the content, and training Marina and Lindsay. However, he does not have enough experience to say with certainty that he could add the licensing component to ensure that access to the content expires in a year. Dennis can be reached by email at djumawid@computersplus.bz.

Given the lack of IT expertise on the island, it is recommended that the Code Commission hire Computers Plus to upgrade dtSearch. Given that they are a local agency, it will likely be the lowest cost to the Code Commission. Additionally, they will be available for troubleshooting and future upgrade support. The Student Consultant suggests that the Code Commission explore alternative possibilities to contract out the licensing component. It is likely that this could be done remotely.

Should the Code Commission choose to continue working with dtSearch for more than another year, the Student Consultant would again recommend hiring someone to maintain dtSearch. At minimum, it is recommended that the Code Commission ask computers plus to check up on dtSearch once a year. Additionally, the Code Commission should provide feedback on how dtSearch is working at Code Commission meetings twice a year.

If it will take more than six months to find the appropriate expertise for upgrading the dtSearch system, it is recommended that the Code Commission meet with the Palau Bar Association to reconsider the use of Google Drive.

Notes about the Website

As mentioned above, the Code Commission initially decided to create a website in addition to Google Drive. The website would store select content which would be accessible to anyone

who wished to view it. One of the main attractions of storing the laws of Palau on a website was that it would be searchable using Google Advanced Search, something that most attorneys use now to search the Palau Supreme Court website.

The Student Consultant took initial steps to set up a website and considered Google Sites, WordPress, Weebly, Wix, and Squarespace. It was ultimately decided that using WordPress made the most sense because Computers Plus, the local tech support company, has experience with WordPress. If support were needed down the road, Computers Plus would be able to help.

The WordPress Premium plan, at \$8/month, was decided upon and the Student Consultant intended to train Lindsay to build the website. The PALAU Office has no means of making electronic payments, so it was suggested that the Student Consultant use her own credit card to pay the initial fees and a request for petty cash was sent to the Attorney General's Office to reimburse the cost of a one-year subscription for the WordPress Premium plan. Due to a misunderstanding with the Ministry of Finance, there was a great delay in securing the petty cash.

During this delay, the Student Consultant and the Code Commission had a meeting to discuss what plan would be in place in the future to cover the cost of the website, as WordPress only accepts payment by credit card, debit card, or PayPal account. After conducting further research, it was discovered that M&D Web Creations, based in Guam, may be a reasonable solution for building and hosting the website. M&D Web Creations accepts payment via electronic check or bank transfer.

After further discussions with M&D Web Creations about what a website for Palau's laws would look like, a quote was secured. M&D Web Creations offered to build, host, and regularly update a website for Palau for the initial set up fee of \$2,000 and a yearly fee of \$900 for two years. This information was shared with the Code Commission. At the final meeting between the Code Commission and the Student Consultant, the Code Commission decided to focus only on Google Drive and dtSearch and to table the website issue indefinitely. The request for petty cash was cancelled and the Student Consultant did not use her own money to begin the process of building a website.

Should the Code Commission ever wish to pursue the option of building a website through M&D Web Creations, their contact information as well as the communications between M&D Web Creations and the Student Consultant can be found in *Appendix I*.

III. Converting Data from WordPerfect to Microsoft Word

Motivation

When the consulting engagement began, all of the laws of Palau were in WordPerfect format (.wpd). Because the Law Search CD had not been updated since 2002, new legislation was converted from .pdf or .doc to .wpd in order to be added to the Law Search CD.

Not only do most people no longer use WordPerfect, but when uploading documents in .wpd format to Google Drive, Google Drive would store them as .wpd, rather than converting to google doc or .doc or .doc or .doc or .doc and a converting to google doc or .doc or

compatible, and in order to upload to Google Drive, it was necessary to convert them to Microsoft Word.

Process

The Student Consultant began the process of converting the documents from .wpd to .doc, using the "Batch Conversion Wizard" on the old computer. This allowed folders of data to be converted from .wpd to .doc (not capable of converting to .docx) in a matter of minutes. Despite running into a handful of corrupted documents that needed to be converted one-byone, the process of converting all of Palau's laws to .doc took approximately 8 hours.

After converting, the Student Consultant checked the documents for accuracy. Unfortunately, many of the original documents included characters in a WordPerfect font that converted inaccurately to Microsoft Word. For example, a sentence in quotation marks might look "like this" in WordPerfect, but Alike this@ in Microsoft Word. In order to combat this problem, the Student Consultant used a macro (*see Appendix J*) to quickly convert as many incorrect symbols as possible. However, it was not possible to use a macro or the Find & Replace function in Microsoft Word to convert begin quotes, which showed up as a capital A, without replacing every A in the document.

Therefore, the Student Consultant returned to the initial .wpd versions of the data and ran a macro to change all quotation marks from "to Ø. Then, all documents were run through the Batch Conversion Wizard again to be converted to .doc. Finally, the first macro (Appendix K) was run again to replace all the incorrect characters.

After the second round of conversions, it was discovered that there are still some incorrect characters, as well as incorrect fonts, spacing, and alignment. The Student Consultant worked with Marina and Lindsay to explain the issues and how to fix these errors in the future. A document with instructions on character replacements was made and shared as well (*see Appendix K*).

Outcomes

All 4,892 documents that make up the laws of Palau are now in .doc format. Moving forward, this ensures that Palau's data will be compatible with other Law Search systems and with all newer computers.

Risks to Sustainability

To maintain accurate and streamlined content, Marina needs to transition from editing documents in WordPerfect to Microsoft Word. Because Marina has used WordPerfect for so long, there will be a learning curve for her to learn Microsoft Word. It is important to ensure that she is supported by Lindsay and Code Commission staff as she continues to learn Microsoft Word.

Additionally, in the immediate future, as Marina continues with the old Law Search CD (until dtSearch is upgraded or Google Drive is settled on as an interim solution), she will continue working in WordPerfect. She will be required to convert the new documents from Microsoft Word to WordPerfect to edit and codify, and then keep one copy in WordPerfect to upload to the Law Search CD and keep another copy in Microsoft Word for Google Drive. Maintaining

these two systems in two different document formats will be tricky and Marina will need support to ensure that it is done properly.

Recommendations

It is strongly recommended that the PALAU Office and Code Commission continue to maintain Palau's laws in Microsoft Word. As WordPerfect continues to become used with less frequency, it is imperative that Palau's laws remain in a format that is readable and compatible.

It is also recommended that the PALAU Office and Code Commission commit time to reviewing each converted document one-by-one to ensure accuracy with fonts, spacing, alignment, and character replacement. The best way to do this is to compare the newly converted version to the paper copy or WordPerfect version.

This is a large task that could take Lindsay and Marina up to a year to complete in addition to carrying out their regular work. The Student Consultant recommends that the Code Commission consider helping the PALAU Office hire a part-time employee to help with this process.

III. Additional Recommendations

Designate a Code Commission Member to be Responsible for Technology

The Student Consultant recommends that the Code Commission create a position (like that of Vice Chair or Secretary) to be the point person for technology moving forward. This position would be responsible for duties such as:

- Talking to the Code Commission, the Palau Bar Association, and other attorneys about the state of the current law search system twice a year and reporting back to the Code Commission
- Working with the PALAU Office to ensure that technology updates are occurring when necessary, specifically for the Law Search System
- Training new lawyers and Bar Association members as necessary if a staff member from the PALAU Office is unable to
- Bringing forth suggestions for updates to the Law Search System
- Ensuring that progress continues to be made on updating the Law Search System
- Keeping historical records of work that has been done to update the Law Search System to be passed on to the next person in this position

Many members of the Code Commission are attorneys in Palau on two-year contracts. While some may extend their contracts, the turnover of the Code Commission is relatively high. This creates an environment where information gets lost and it can be challenging to maintain momentum to update the Law Search System.

To avoid running into another scenario where the Law Search System has not been updated for 16 years, it is strongly advised that the Code Commission designate someone to be responsible to work with the PALAU Office on future technology updates.

Develop a System for Storing Old Versions of the PNCA in Google Drive

Note: this recommendation is only to be considered if Google Drive is used moving forward.

During the interviews conducted with attorneys in Palau, it was mentioned many times that attorneys would like to have access to old versions of the Palau National Code Annotated (PNCA). Whenever an amendment is made to a title in the PNCA, only the newest version of that title is made accessible to attorneys. To understand how Palau's laws have historically changed, it is important to be able to view old versions of the PNCA.

It is recommended that the Code Commission and the PALAU Office meet to discuss how this can be done in a feasible way. One suggestion is to create a second folder outside of the "All Law" folder in Google Drive that can contain the old versions of the PNCA organized by title and date. A second suggestion is to mirror the way in which Guam indicates that the code has been changed, which can be found here:

http://www.guamcourts.org/CompilerofLaws/SessionLaws/images/Table_Sections_Affected_28th Session Laws.pdf

It is important that both the PALAU Office and the Code Commission agree on a solution together, as it will be implemented by Marina and Lindsay and used by attorneys.

Streamline the Process of Managing the PALAU Office

Throughout the consulting engagement, it was frequently brought to the attention of the Student Consultant that the Code Commission was recently given managerial control over the PALAU Office by Executive Order 413. However, in nearly all transactions that the Student Consultant observed, the PALAU Office was continuing to operate under the Attorney General's Office, as it had been prior to the passage of Executive Order 413.

After further discussion with Marina, it was stated that Lauren Henry, former Chair of the Code Commission, had asked the Attorney General's Office to continue managing the PALAU Office until the Code Commission established their rules and regulations.

The Student Consultant recommends that the Code Commission meet with the PALAU Office and the Attorney General's Office to clarify who has managerial control over the PALAU Office. It is also recommended that any clarifications that result from this meeting e well documented.

About the Consultant

Hannah Somers will be completing her master's degree in Public Management at Carnegie Mellon University in December of 2018. She intends to pursue work in the field of international development and nonprofit management upon graduation.

List of Appendices

- Appendix A A side-by-side comparison of possible technical solutions
- Appendix B Analysis of Interviews
- Appendix C List of Requirements and Nice-to-Haves
- Appendix D Google Drive/Backup & Sync Instructions
- Appendix E Google Drive Instructions for the PALAU Office
- Appendix F Communications between the Student Consultant and PacLII
- Appendix G Communications between the Student Consultant and Fastcase
 - Appendix G-1 Fastcase responses to requirement document as mentioned in Appendix G
- Appendix H Communications between the Student Consultant and dtSearch
- Appendix I Communications between the Student Consultant and M&D Web Creations
- Appendix J Macro used with Microsoft Word to replace incorrect characters
- Appendix K Instructions on character replacement for PALAU Office staff
- Appendix L Contact information

Appendix A - Side-by-side comparison of possible solutions

		Self Built			Outsource		
		Website	Google Drive	Upgrade dtSearch	PacLII	Fastcase	Casetext
	Search	Basic search functions such as, keyword, phrase, and natural language	Drive can search by: file type, words in file, words in title of file, owner, date modified, location in drive, shared with	Search by keyword, phrase, boolean operators, search by category	Search by keyword, wildcard (*), phrases without quotes, boolean search, by proximity, by title only, http://www.paclii.org/paclii/help/operators.html	search, date, RPPL,	Advanced search functions
Functionality	Browse	Can be set up to browse	Can be organized to browse by folder category and by recently accessed	Cannot browse	Can browse by type of content including Court, Legislation, Constitution, and Other Materials. Can also browse by Recently Updated Content.	Can browse by type of content including Court Cases, Legislation, Constituion, etc.	Can browse
User Restrictio	ons	Can be restricted to users that pay the PALAU office for a subscription by making the website password protected	Access can be restricted to users that pay the PALAU for a subscription. Also able to be shared as a link to those that do not pay for a subscription.	Portable media version can continue to be restricted to only those who purchase a subscription. Web-based version is unrestricted, but can be built into a password protected website or page of a website.	None	Attorneys would need to pay either Fastcase directly or the Palau bar association for a Fastcase membership. Fastcase can also make a basic version of the content available to citizens of Palau for free.	Paid subscription
Compatability		iOS, Windows	iOS, Windows	Web version available for iOS and Windows, portable media version supported only on windows		iOS, Windows, and phone app available in the apple store and google play store for free	iOS, Windows
Storage Space	•	Unlimited	15 GB free	Unlimited	Unlimited	Unlimited	Unlimited
Network Connectivity		Requires internet connection at all times, but individual documents could be downloaded	Requires initial internet connection, entire system can be downloaded to the computer and available without internet. Requires internet connection again to sync for updates	Requires internet connection for website search, requires no internet connection for portable media search	Requires internet connection at all times and individual documents can be downloaded	Requires internet connection, app requires data connection, XML files can be stored on a local computer as a backup if internet is down	Requires internet connection
Cost		\$10 - \$50 / month	free until 15GB storage, then \$5-10 per user	\$999	free	TBD, premium fastcase subscription would cost \$1,000 for attorneys if not paid for through the bar association	\$500,000
IT Support / Ma	aintenence	Marina and the Code Commission need training to have the technical capcity to maintain a website	Marina and the Code Commission need (significantly less) training to have the technical capacity to maintain google drive	Marina and the Code Commission need training to have technical capacity to maintain. dt5earch may provide some additional basic maintenence support. Upgrade support comes with purchase of upgrade.	PacLII staff will maintain the website	Fastcase staff will maintain the application	Casetext staff will maintain the website

Appendix B - Analysis of Interviews

Summary of Notes from Interviews

Interviewed 17 people as of 6/21/2018. This document includes the opinions expressed by people interviewed in no particular order.

Subscription:

- Most offices pay for the subscription fee for attorneys (rather than people paying it out of their own pocket)
- Relatively easy to share amongst people, but not really shared outside of the legal community (no interest)
- \$500/year is more affordable than buying the hard copy
- \$500/year is too expensive for some offices to afford
- Origin of the subscription fee is believed to have come from Jerry Marugg

Search Function:

- Problems:
 - Always need to use quotation marks
 - Searching by keyword, phrase, or name doesn't always get you to the right place
 - Often the search results list what you're actually looking for toward the bottom of the results
 - No ability to browse the content, ex: the constitution
 - Unable to search by reporter citation
 - Difficult to search if you don't know the titles / know what you're looking for
 - Control F is used often to find the word within the text of the search results
 - Index or codification table is usually the top result at 100%
 - Can't toggle between pages (turns out you can, thanks to a tip from Lance, but most people don't know how to do this)
 - To print, you need to copy and paste into word, reformat, and then print
 - Format of headers are inconsistent (sometimes in the middle, sometimes left aligned, etc.)
 - Difficult to find page numbers
 - When you copy a part of the law that has highlighted terms the highlighted terms remain, only solution is to delete and retype the word for each instance of a highlighted word
 - Boolean search function doesn't work
 - When you want to search more than one subsection you need to control click to select multiple subsections (and you need to do this again if you do another search)

- Options like "stemming search" and "fuzzy search" aren't useful because no one knows what they are
- Sometimes RPPLs are included that are not in the code
- How you search (the keywords you use) can be dependent on the way the case decision is written
- Can't find previous versions of the law if it has been repealed

- Would like to see:

- Search by keyword
- Search by name
- Ability to browse
- See things similar to what you're searching for in results
- Search by reporter citation
- Ability to toggle between search results
- More accuracy in search results
- Ability to continue to use control F
- Ability to refine the search
- Clickable "table of contents" within each search result/birds eye view of the legislation
- Search two words within a certain distance of each other
- Hyperlinked citations/references
- Fully comprehensive, all state, national laws, court cases, etc.
- Secure, not hackable, documents that can't be edited or tampered with
- Ability to take one law and send it to constituents
- Similar look and function to westlaw
- Compatible with Mac
- Online and offline access
- Cases in .pdf format
- Shepardize cases the ability to tell if a case has been overruled just by looking at the case
- Search by court
- Search by number within case (ex: civil action number or civil appeal number)
- Creation of new data fields (for example, cases cited, statutes cited) for future searches
- Ability to see which part of the text includes your search terms from the search results
- Have search fields partially filled out so you only need to include certain parts of a term, ex: ____RPPL___
- Trainings on how to use the search system
- A cheat sheet of commonly used keywords or search tips

- Misc.
 - No real problems, easy enough to search through 32 results, for example
 - Westlaw would be just as useful but much more expensive
 - Learning how to use the tool is more important than updating the tool
 - Would be helpful for the laws to be written more clearly (crossed out when something has been repealed, underlined when something has been added)

Internet:

- Would be ok with it being internet based but think other people will have concerns
- Should have a backup for when the internet goes out
- Web based will be challenging, sometimes you can go a full day without internet
- Congress holds many meetings out of the office where internet isn't available so a webbased solution would be problematic
- An app would be helpful so you can use it on your phone or with internet
- Would like to see online and offline access in one system
- The CD is great, up to date, and works well

Other Resources:

- Many people also resort to palaulegal.org, palausupremecourt.net in a pinch
- Palausupremecourt.net is up to date and can be used with advanced google search
- PacLII was mentioned but is thought to be the most out of date
- PacLII doesn't have a great search function

General/Other:

- About 40-50 people per year buy the law search CD
- People rely heavily on the law search CD
- Most people use it every day
- People have separate computers just to use the law search CD
- Some people don't use it because they don't know how
- Right now, there is not a centralized place with up to date laws of Palau that is accessible without paying \$400-500
 - The Code Commission's Mandate is to publish laws
- Division of State in Bureau of Domestic Affairs is interested in combining their state law collection with the law search program, their mandate is not in conflict with the mandate of the code commission. They are interested in ensuring that the work Marina does isn't duplicated in multiple systems.
- Important that things are cited/annotated with consistency moving forward
 - Recent court cases are cited in a standard format ex: 2016Palau1
- More than just Marina should learn the new system
- Would like to see the end of Motoko (the computer used to do the law search CD updates)

- Eventually would like to see the content include all of the treaties Palau has signed
- Should adopt pocketparts like Westlaw uses
- The law should be available for free on the internet
- The Code Commission could hire a part time or full time IT person
- Some people don't know what the Code Commission is or what they do
- The Palau law program should include all state laws too
- Should include the parts of the law that have been repealed so you can refer to what a law used to say before it was amended
- The clerks copied the documents onto the desktop and use those instead, which doesn't require the license. Also is not up to date.

PALAU Office

- Salaries paid by the Code Commission budget, which is a line item in the federal budget
- Money made from purchases of the law search CD goes to an account set up for the PALAU Office. The money is deposited into the account by the Ministry of Finance. That money is used for office upkeep (supplies, electricity, technology updates, etc.)
- When the PALAU Office was under the AG payroll, money spent on IT support, etc. had to be first cleared by the AG. Now the PALAU Office is under the Code Commission but everything is still going through the AG.
- PALAU Office established by Executive Order

Appendix C – List of Requirements and Nice-to-Haves

Requirements for a new system

Store:

- The system should store all legislation for the Republic of Palau, including but not limited to, what is currently stored in the law search CD:
 - Compacts
 - Constitution
 - Court Cases Palau
 - Court Cases Trust Territory
 - Court Rules
 - Executive Administrative Directives
 - Executive Orders
 - Executive Presidential Proclamations
 - International Agreements
 - Management Action Plan (MAP)
 - OEK Resolutions
 - Palau National Code Annotated (PNCA)
 - Presidential Directives
 - Public Corporation Regulations
 - Public Laws (RPPL)
 - Regulations
 - State Constitutions
 - TT Public Laws
 - Uncodified Public Laws (RPPL)
 - Uncodified State Laws

Search:

- The system should allow users to search by:
 - Keyword
 - Phrase
 - Date
 - RPPL number
 - Case number
 - Reporter citation
 - Number within case (ex: civil action number)
 - Court
 - Names of involved parties
 - Two words within a certain distance of each other
- Ability to see which part of the text includes your search terms from the search results

- The system should provide accurate search results
- See things similar to what you're searching for in results
- Ability to refine the search
- Have search fields partially filled out so you only need to include certain parts of a term, ex: ___RPPL___

Browse:

- Table of contents (hyperlink) for each document (RPPL, Executive Order, Court Case, etc.)
- The system should hyperlink references and citations

Security:

- Secure, not hackable
- Ability to require logins for users that purchased access
- The content should not be able to be edited by end users

Compatibility:

- Compatible with windows and mac operating systems
- Ability to print, save, or email a singular piece of legislation without reformatting

Keyboard shortcuts:

- Control F
- Control C
- Control V

Interface:

- Navigation pane to browse content
- Search bar

Usability:

- Accessible online and offline
- Easy to update

Reliability:

- Ability to export data in the future if moving to a new system
- Easy to pass on to new staff (ex: someone new in the PALAU Office or new Chair of the Code Commission)
- Should have a backup for when the internet goes out

Other:

- The system should allow users to toggle between search results / multiple cases at once
- The system should include page numbers for all documents
- A cheat sheet of commonly used keywords or search tips

 Shepardize cases - the ability to tell if a case has been overruled just by looking at the case Creation of new data fields (for example, cases cited, statutes cited) for future searches. 								

Accessing Palau Law via Google Drive

Step 1:

If you have a google account (or gmail email address) log in to your account.

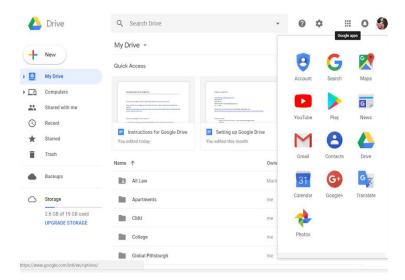
If you do NOT have a google account, follow this link to create one with your existing email address:

https://accounts.google.com/signup/v2/webcreateaccount?hl=en&flowName=GlifWebSignIn&flowEntry=SignUp&nogm=true

Step 2:

Once you are logged in to your account...

1. Click the 9 small squares in the upper right hand corner and click on **google drive** (the yellow, green, and blue triangle) which looks like this:



- 2. On the left hand side, click on "Shared With Me"
- 3. You should see a folder called "All Law" Right click on "All Law" and click "Add to my Drive" (If you do not see the "All Law" folder, please email palaupublicationoffice@gmail.com or call the publication office. Sometimes there can be a slight delay between when the folder is shared with you and when it appears in your drive.)

Step 3:

When you go back to "My Drive" (accessible on the top left hand corner of your google drive screen) you will see "<u>All Law</u>" in your folders. At this point, you can access all of the law files via internet while signed into your google account.

Accessing Palau Law via Google Drive Without Internet

Step 1:

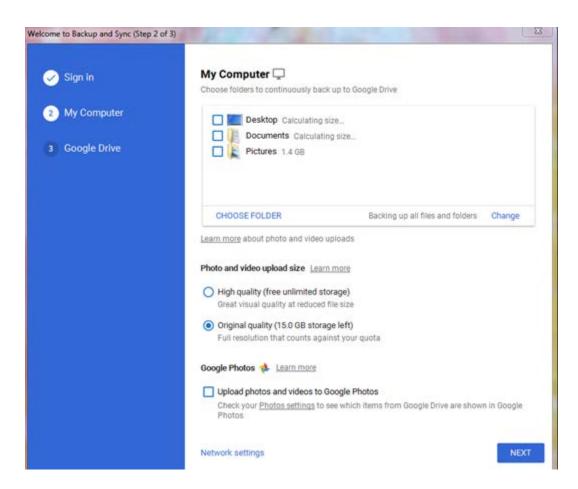
To access the files without internet, you will need to download **Google Backup & Sync** here: https://www.google.com/drive/download/backup-and-sync/

1. When the installation file is finished downloading, click **install**. Please be patient, this may take up to 30 minutes.

Step 2:

You will get a message that says installation complete. On your desktop there will be a window open that says "Welcome to Backup and Sync" click "Get Started"

- 1. Sign in using your google account information.
- 2. Google may ask you to protect your account with your recovery phone number or email. You can opt to do this or to skip it. Then click "Done"
- 3. Google will bring up a page that says "Google Account: Control, Protect and Secure your account all in one place" you can now move on to the next step.
- 4. Google will say that you need to choose folders to backup and sync. Click "Got It"
- 5. First, Google will ask which files from **YOUR COMPUTER** you would like to sync to Google Drive. **Uncheck EVERY** box. You do not want to sync any of your computer files to Google Drive.

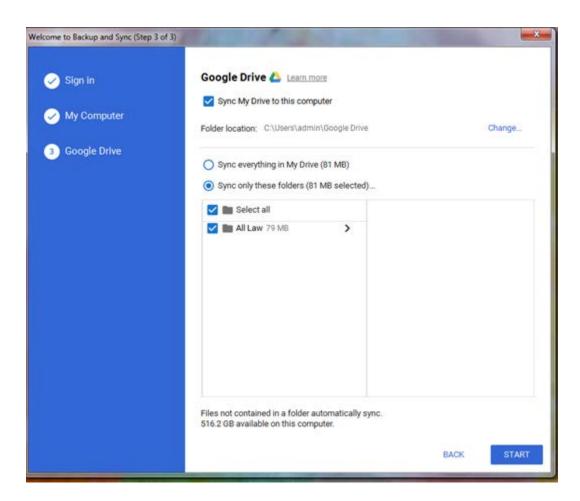


Keep "Original Quality" clicked

Click "NEXT"

6. Google drive will ask what you want to sync to your computer -- don't sync everything, just sync the "All Law" folder - see image below.

*Note for people with a gmail email address: anything in your google drive NOT in a folder will automatically sync. If you have personal things that you do not want to sync you can put them in a separate folder.



Click "START"

Google Drive will then run to sync the "**All Law**" folder to your computer. You can check the status of the sync by click on the cloud on the bottom right corner of your computer screen.



Please be patient - this may take up to one hour.

FINAL RESULT:

Your computer desktop will have the following new folders:

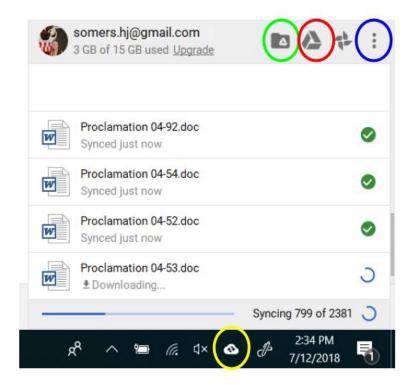


When you click on the Google Drive folder, you will see the "All Law" folder. In that folder, you will be able to access the same content as you are able to access in the "All Law" folder on the internet.

Any new content added to the "All Law" folder by the Publication office will automatically sync to your desktop when your computer connects to the internet.

FURTHER EXPLORING GOOGLE DRIVE

You can also access your computer's Google Drive content via the same cloud button (circled in yellow below) on the bottom right hand of your screen mentioned previously.



Focusing only on the <u>four icons on the top right corner of the above picture</u>, from left to right:

Folder icon with a triangle: this will take you to the Google Drive folder on your computer's desktop.

Triangle icon: this will take you to Google Drive on a web browser.

Windmill-like icon: this is for Google Photos - you can ignore this.

Three vertical dots: this will take you to the settings for Google Drive Backup and Sync.

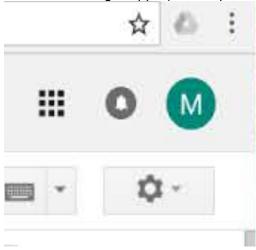
OPTIONAL:

1. You can delete the Google Slides, Google Docs, and Google Sheets folder from your desktop. They are not necessary.

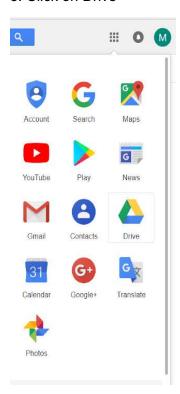
Appendix E – Google Drive Instructions for the PALAU Office

Adding Someone to Google Drive

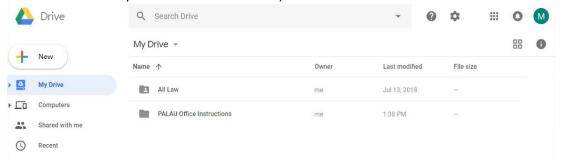
- 1. Sign into the <u>palaupublicationoffice@gmail.com</u> account
- 2. Click on Google Apps (the 9 squares in the upper right hand corner)



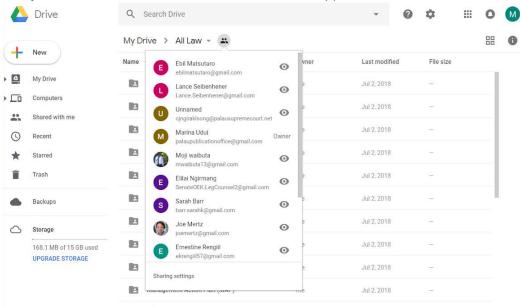
3. Click on Drive



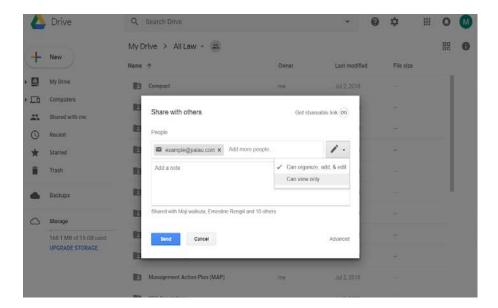
4. Click on the folder "All Law" (you can tell that this folder is shared with other people because it has an icon of a person inside the folder)



5. Click on the person icon next to "All Law" (when you hold your cursor over the icon a list of everyone that the folder is shared with will show up)

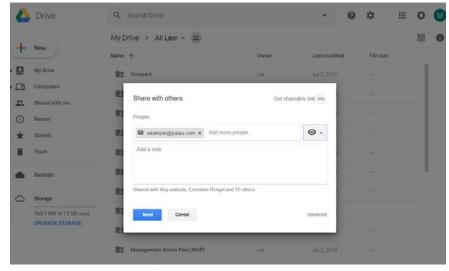


6. When the dialogue box pops up, enter the email address of the person you are giving access to.



7. (referring to the image from step 6) click on the pencil icon next to the field where you typed the email address. **Be sure to click "Can view only"** - this way, they will not be able to edit any of the documents in the All Law folder.

8. Click "Send"



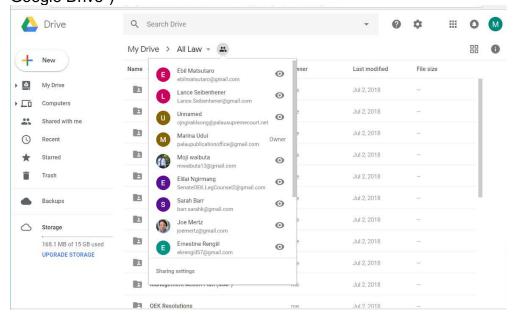
This person now has access to the All Law folder in Google Drive.

Be sure to add their information to the Access database, including the date which they were granted access and the date that their access should expire.

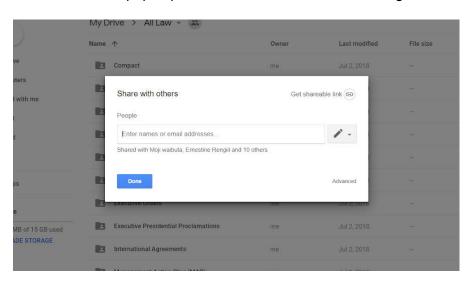
Removing Someone From Google Drive

If someone's subscription has expired and they do not renew it, you can take away their ability to access the Google Drive folder.

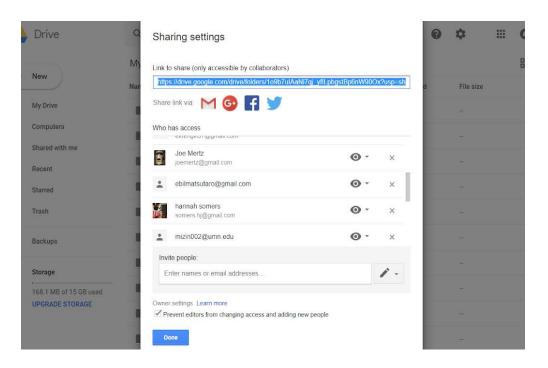
1. Go back to the person icon next to the All Law folder (step 5 of "Adding Someone to Google Drive")



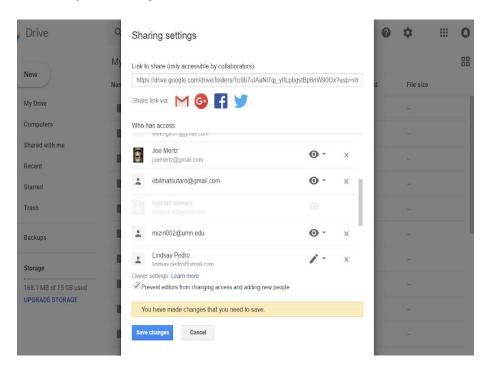
2. When this box pops up, click "Advanced" in the bottom right hand corner



3. You will see the list of everyone who currently has access to the All Law folder in Google Drive. Next to their name there will be an eye icon and an x. To end someone's ability to access the All Law folder, simply click on the x next to their email address.



4. Save your changes



Appendix F – Communications between the Student Consultant and PacLII

hannah somers <somers.hj@gmail.com>

Jun 18

to Kym

Hi Kym,

Sure! Thank you! I just have a few brief questions.

- How you currently get laws and cases from Palau / who (if anyone) is your contact in Palau?
- In what format do you require new documentation to be sent to you? (word, pdf, hardcopy etc.)
- The search system is custom built, correct? But someone (it looks like Wilford) is on staff to work on any updates/technical errors?
- Do you require any funding from the countries that have their legislation listed on PacLII?

I think that should be enough to get me started for now. Currently, Palau's laws are stored and searched using a program called dtSearch, which includes burning new CDs with updates to the law for members of the Palau legal community every 4-6 months. It is not compatible with macs and the search functionality is not always accurate. So, we are looking for new solutions. I am conducting research about law storage and search solutions across the surrounding islands and in the US and will present the results of this research to the Code Commission at the end of the week (hence the tight timeline).

Thank you again for your help. I'm available at any point tomorrow if you'd like to talk on the phone (+680 7793251) or just answering the questions via email is fine, too.

Sincerely, Hannah

Kym Freriks < Kym. Freriks@vanuatu.usp.ac.fj>

Jun 19

to me

Hi Hannah,

- 1. Judgments we get emailed to us directly by the Supreme Court on a regular basis Legislation – we have no current contacts. Our last contact that I know of was Aaron Etsy, Senate Legal Counsel, who sent through the PNC that we have online and public laws, sometime in 2014 or 2015.
- 2. Our publication format is in HTML and therefore require documents to be in word version. We have a conversion software that turns .rtf documents into HTML. We also accept PDF in addition to the word version, which we attach as a download option for users. These documents can be sent to a dedicated email address: documents@paclii.org
- 3. We use the same system as AustLII (Australasian Legal Information Institute) which incorporates their custom made SINO search engine. Our editors use an interface to add materials and then we do a build of the updated registry. We do have Wilford here to assist with technical problems and to do development work. Any larger issues we have assistance from AustLII. We have a local site here that we

work on, but our public site is hosted at AustLII and three times a day our data is transferred across. This means that we have also have a back-up of materials sitting with AustLII.

4. We publish all legal materials whether we are funded by the jurisdiction or not. However, in saying that, we believe that a contribution from all jurisdictions will sustain PacLII into the future. There are many good reasons for keeping PacLII around – the lower cost of maintenance in having a central hub, the preservation/backup of materials, and the ability to search across all pacific materials at the same time. Some countries have started to contribute, namely PNG & Vanuatu, and we are hoping other countries are able to assist as well.

I hope this helps! The technical side of things is not my area but if you need a technical description can certainly ask Wilford for that. Let me know anything else that you need.

Kym

hannah somers <somers.hj@gmail.com>

Jun 19

to Kym

Hi Kym,

Thank you so, so much!! This is wonderful. I'm going to share this information with our committee at the end of this week and will reach out to you after they discuss. I'd like to think that we can at least get a permanent contact on the legislative side here.

Thank you again and so sorry for bothering you so much last week. I really appreciate your assistance!

Kym Freriks < Kym. Freriks@vanuatu.usp.ac.fj>

Jun 19

to me

No bother at all and sorry for the delay. It was unusually busy last week with reports due and some country visits to plan. But we are definitely keen to update our legislation databases for Palau, even if an alternative publishing option is decided. Doesn't hurt to have it in more than one place!

Kym

hannah somers <somers.hj@gmail.com>

Jun 25

to Kym

Good Morning Ms. Freriks,

I hope you had a nice weekend!

Republic of Palau – Code Commission Hannah Somers, Student Consultant Page **37** of **75** August 2018

I have just a quick question hypothetically, would Palau be able to request that the organization of content or
the website be changed slightly? For example, when you click on Palau Consolidated Legislation
(http://www.paclii.org/pw/legis/consol_act/), the content is organized such that you click on a letter of the
alphabet to find legislation beginning with that letter. In my conversations with attorneys here on island, I know
that browsing by letter is not very helpful. Would we Palau be able to request that it be organized in some other
way?

Thank you!

Appendix G – Communications between the Student Consultant and Fastcase

hannah somers <somers.hj@gmail.com>

Jun 25

to sales

Good Morning,

My name is Hannah Somers and I am writing as a consultant for the Republic of Palau's Publication and Law Office to inquire about the use of fastcase for the country of Palau.

A handful of lawyers here have access to fastcase through their bar association membership in the states and have mentioned that it might be a good solution for Palau.

Do you have any time to speak with me this week about the possibility of using fastcase in Palau? It is difficult to speak via telephone as Palau is 13 hours ahead of NYC, but we can either coordinate a time or correspond via email.

Thank you for your assistance.

Sincerely, Hannah Somers +6807793251

Karli Hannan < khannan@fastcase.com>

Jun 25

to Joe, me, Sales

Good evening Hannah,

I'm looping in Fastcase's Alliances Manager, Joe Patz, who works with bar associations. He'll follow up on your inquiry with information and a time to connect.

Warmly,

Karli

Karli Hannan Director of Sales & Customer Experience 202-999-4758

Sent from my iPhone

hannah somers <somers.hj@gmail.com>

Jun 25

to Karli, Sales, Joe

Hi Karli and Joe.

Thank you so much for your quick response! I should clarify that I am not involved in the bar association here in Palau, but I am sending this request on behalf of the government. Our real inquiry is whether or not it would be

Republic of Palau – Code Commission Hannah Somers, Student Consultant Page **39** of **75** August 2018 possible to include Palau's law (less than 5GB of text-only content) in fastcase's database. If that were possible, then we would also want to discuss what the cost would be to lawyers in Palau / the Palau Bar Association. I apologize for not being more clear in my inquiry.

Thank you again for your help!

Karli Hannan < khannan@fastcase.com>

Jun 25

to me, Joe

Ah, ok! Let me talk with our Product team to find the best contact for you.

I'll follow up in the morning.

Thank you for clarifying!

Karli

Sent from my iPhone

Karli Hannan < khannan@fastcase.com>

Jun 25

to me

Good morning Hannah,

I spoke with our Director of Product this morning and she was excited to hear you reached out. She and I came up with a couple questions that will help us determine next steps:

- What type of documents are within the text-only file case law, statutes, regulations, etc?
- Is everything in English?
- I see that the Palau Bar Association member contact list is their website (http://www.palausupremecourt.net/upload/P1408/1858024348838.pdf), would you be OK with us marketing to these attorneys that Palau content is available on Fastcase?

Marketing and selling Fastcase to non-US bar association members would be the only way we could recoup the cost of converting the files into Fastcase. Do you know who I could speak with to get that permission?

Let me know if email communication is OK or if we could schedule a Google Hangout sessions to talk live.

Talk soon,

Karli

Karli N. Hannan

Director, Sales & Customer Experience

o 202.999.4758

Republic of Palau – Code Commission Hannah Somers, Student Consultant e khannan@fastcase.com

hannah somers <somers.hj@gmail.com>

Jun 26

to Karli

Hi Karli!

Thanks again for your prompt response. Sorry for always getting back to you in the evening your time!

- 1. Below is the full list of what is included:
 - Compacts
 - Constitution
 - Court Cases Palau
 - Court Cases Trust Territory
 - Court Rules
 - Executive Administrative Directives
 - Executive Orders
 - Executive Presidential Proclamations
 - International Agreements
 - Management Action Plan (MAP)
 - OEK Resolutions
 - Palau National Code Annotated (PNCA)
 - Presidential Directives
 - Public Corporation Regulations
 - Public Laws (RPPL)
 - Regulations
 - State Constitutions
 - TT Public Laws
 - Uncodified Public Laws (RPPL)
 - Uncodified State Laws
- 2. Yes, everything is in English. There might be a few titles that are in Palauan and OEK is found often in the texts, which is "Olbiil Era Kelulau", the name for the congress. But the content is all in English.
- 3. Let me check in with the bar association rep here that I know and get back to you as soon as I can. Would that be ok? Do you know how many people would need to purchase it in order for it to be worth it?

I should also give a bit more background... right now, Palau stores laws on a program created through dtSearch. It is portable media, so attorneys have CDs or flash drives that contain the content listed above. It has basic search capabilities and has been in use here in Palau since 2002. The trouble is that there is no one on island that can maintain and update this system, which is why they are still using a system from 2002! I'm here to help them find an alternative solution that is accessible, easy to maintain, compatible on windows and macs, and searchable.

I've reached out to a few other companies which have quoted the cost of adding Palau's law to their system to be in the hundreds of thousands (well out of our price range), so I had all but given up on using a pre-existing solution until I spoke with an attorney here last week who mentioned that she has fastcase access through her NY bar membership. There are probably 40 attorneys or offices who purchase access to Palau's dtSearch system now, so I would anticipate approximately the same number would need access were Palau's content in fastcase.

Given this background information, let me know what you think! If we don't get all of the details ironed out immediately it's ok -- I am planning to present my findings to the committee on Friday, so I'm trying to gather just enough information to present it to them for a decision.

Email is fine for now, but as we move forward if at any point it is more convenient to talk via google hangouts I can certainly do that!

Thank you so much for your help!

Karli Hannan < khannan@fastcase.com>

Jun

26

to me

Hi Hannah!

No worries. I have little ones so I'm usually back online in the evenings to wrap up the day, and email is OK as well. We'll figure this out.

As for the questions/answers... thank you!!

- 1. This is great. And you said the total file weight is ~5MB, correct?
- 2. Great. And good to know what OEK stands for.
- 3. It's TBD on how many attorneys would need to convert for us to make it worth converting. I'll relay the information to question 1 and 2 to our Director of Product to determine cost/benefit. She might request a sample document to get an idea, but I'll find out.

This is a very interesting backstory and very similar to one we have with South Dakota. Interestingly, they too set-up their own digital, searchable case law database called Dakota Disc: https://www.fastcase.com/dakota-disc/. They've been entrusting Fastcase to maintain and represent it on their bar association's behalf ever since. It's a great relationship and we're honored to be given the responsibility.

Depending on how the conversation with your bar association contact goes, I'd like to re-loop in Joe Patz. I'd also like to loop in our President and Co-Founder, Phil Rosenthal. Phil is the one who received closely worked with South Dakota to receive, convert and maintain their Dakota Disc. He would be able to talk through what a similar process could look like for Palau.

Fastcase is a unique company. We aren't quick to say "no." We like to explore all inquiries to see if they make sense because we never know unless we try. It also goes back to our founders, Ed Walters and Phil Rosenthal, who started Fastcase with the intent to make legal research smarter (easier to use and easier for attorneys to afford) and to democratize the law.

The Fastcase research application has really interesting features that no other legal research provider allows. For example, "Public Links" – we literally will give attorneys public links to case laws and statutes so they can share it with colleagues or students, or to post in their blogs! And we have "Cloud Linking" – attorneys can upload a motion or brief, the application reads the citations and turns them into public links, which enables the attorney to easily reference the cited cases or share the brief/motion with

citation hyperlinks with peers or opposing counsel. It's a well-thought out program with forward-thinking attorneys.

Let me know if you have any questions. I'll be online for a couple more hours.

Karli

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Monday, June 25, 2018 7:48 PM **To:** Karli Hannan < khannan@fastcase.com>

hannah somers <somers.hj@gmail.com>

Jun 26

to Karli

Hi Karli,

- 1. I misspoke about the size previously, I apologize! I just checked again looking at the raw data that I have on my computer right now and it is 160 MB, with 4,894 individual files. I hope this doesn't drastically change the amount of work required.
- 3. Got it, it shouldn't be a problem at all to share some samples.

Thank you for the back story about Dakota Disc! That's interesting and encouraging :) Is the Dakota Disc system available online as well, or just via CD?

The public link aspect is excellent, I'll be excited to share those details with the committee. I know part of the concern with making the laws available only through a preexisting solution like fastcase, casetext, lexinexis, etc. is that the public can't access it without paying for a subscription, but the public link seems to solve that! I love it!

Emailing the bar association contact now -- will report back!

Thank you thank you!

Karli Hannan < khannan@fastcase.com>

Jun 26

to me

Hi Hannah,

No worries about updating the size of the database. 5MB seemed very small to me. I'll pass all the details along to the team to get their thoughts.

Dakota Disc is available on a CD and through the Fastcase application. At this point, we provide the CDs when requested since many machines no longer come standard with CD-Rom drives.

I'm happy to know the Public Link feature would be helpful. There will be an exciting public link partnership with Fastcase that will soon be announced. It might hit this Friday (US time), but it will likely hit early next week. I'll be sure to share the industry coverage and press release as soon as it's public.

I'm happy to help!

Karli

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Monday, June 25, 2018 9:13 PM

hannah somers <somers.hj@gmail.com>

Jun 26

to Karli

Hi Karli!

I have one more request/question. I've created a list of requirements based on requests from people who will be using the new system. It's a bit messy looking, but I'm wondering if you could help me identify which of these requirements fastcase meets? If it is too difficult to go through the list and know these off the top of your head don't worry! I'm also going through the FAQ to see if i can identify which requirements fastcase meets. I'll attach it so you can take a quick look.

Thanks so much!

Karli Hannan < khannan@fastcase.com>

Jun

27

to Christina, me

Hi Hannah.

I connected with the team this morning and looping in our Director of Product, Nina Jack, to participate in our conversation. We have a couple ideas on how we could move forward and a few next steps/questions. We also reviewed the requirements document and I've noted our feedback. Please find it attached.

From our perspective, this isn't complicated and this is something we're interested in exploring further. We're looking to get more specifics on the file formats and the best way we could deliver the information back to get a better sense of resources needed on our end and how much this would cost.

Ideas for moving forward – 2 options:

- 1. Fastcase could convert the data into XML files for Palau to distribute via an application. This could mean you have the digital files to update and maintain the dtSearch tool your attorneys currently use.
- 2. Fastcase could convert the data and add it to a basic Fastcase search application, which the Government of Palau could give its citizens access to. Attorneys could upgrade their service to have even more search functionality within the application.
 - o Note this is a similar relationship Fastcase has with a state in the US. We've geofenced Fastcase to allow citizens in the state to access the application and the state pays a fee to have the content added and maintained in the application.

For the bar association relationship, the team would like to evaluate the data first and determine which of the above options is most interesting to you before we loop in marketing and selling the application to Palauan attorneys. I apologize for likely jumping us ahead and having you get in touch with your local bar association.

Next steps and follow-up questions:

- 1. Could you send us a representative sample of the files to evaluate? For example, are files from 2002 2005 in a format, files from 2005-2010 in a different format, etc. If yes, then we'd like to see a file from each format.
- 2. Review the above ideas and tell us which would be of interest to the Government of Palau a straight data conversion vs data conversion + research application access.
- 3. Could you confirm if you're only looking for Fastcase to convert 2002 current files? Or are you looking to convert all files on the dtSearch CD in addition to the 2002 current files? If you're looking for both, could you confirm the file with and number of documents on the dtSearch CD?
- 4. Once we receive the file samples and hear which option the government prefers for moving forward, we can then evaluate the scope of work and determine a potential cost to initially convert the files and maintain the files.

We look forward to hearing your responses.

Karli

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Tuesday, June 26, 2018 1:23 AM

hannah somers <somers.hj@gmail.com>

Jun 27

to Karli, Christina

Hi Karli and Nina,

First, thank you for taking the time to go through the (messy) requirements document! That is so helpful and I'm thrilled to see that it meets almost all of the requirements!

With regard to the two options, I would like to explore option 2. I imagine that the committee will want to move away from the dtSearch tool for a few reasons - it is difficult to maintain and no one on island has the technical capacity to update it, the search functionality is poor, and with most attorneys buying newer laptops the CD is no longer practical.

That being said, I can't say with 100% certainty that option 2 sounds better until I speak with the committee on Friday, but I think our best bet would be to move forward exploring the idea of adding the content to a basic Fastcase application.

No worries about the bar association. Ebil likes to be in the loop anyway, so no problem at all!

Next Steps:

1. Sure, I've attached the files in the Compact Folder (Compact Guam Accord, Compact of Free Association, and Compact Subsidiary Agreements) and the Constitution Folder (ROP Constitution).

Right now, all of the data is in word perfect format (which is what the version of dtSearch we're using requires). If the conversion is made more difficult because it is in word perfect please let me know. I want to explore the possibility of converting from wordperfect to word (or .pdf) on our end.

3. We would want all files to be in fastcase. Currently all of Palau's laws (from the origin of Palau to now) are in the dtSearch program. We would want to take all of those laws and move them to fastcase instead. This is the 160 MB and 4.889 individual files.

As a note -- the way that we currently update the dtSearch system has two parts. First, the new legislation is entered into the Palau National Code Annotated (PNCA), then the updated PNCA and the new legislation is entered into the dtSearch system (this usually happens after 2-3 months, so all new legislation is updated at one time. And then a new CD is burned for each attorney with a subscription to the Palau Law Search / dtSearch program). I just wanted to make you aware of this process as we move forward and think about how updates to the content will work.

Last question -- I read on your website that there is an app for phones as well. Would this be accessible for Palau?

Am I missing anything? Let me know. And thank you, thank you, thank you!!

Christina Steinbrecker Jack <christina.jack@fastcase.com>

Jun 27

to me, Karli

Hi Hannah,

Nice to meet you. Thanks for the samples, it's very helpful to see these files. I have a couple questions about the source content:

- 1. It'll be great to know which formats (Word Perfect, Word, PDF) you might be able to provide for your data. This will help us as we begin the process of pricing out data conversion.
- 2. In the near term, we'll want to understand the breakdown of the 4889 files. How many cases are in the backfile? How many would we be updating per month?
- 3. Is there a reporter where case law is published in your jurisdiction?
- 4. Your explanation of the code updates is very useful, thank you! Would we be receiving an updated code each year that could be converted and published as-is?

The app is available in the iPhone app store and Google Play store, and it is available to anyone free of charge. Once a user also has access to our desktop application, the mobile app can be linked for increased functionality. When you're ready, we're happy to set up trial accounts for the Desktop application as well.

Please don't hesitate to reach out if there's anything else that you need ahead of your meeting on Friday. I'm looking forward to exploring this opportunity with you.

All the best, Nina

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Tuesday, June 26, 2018 8:16 PM

To: Karli Hannan < <u>khannan@fastcase.com</u>>

Cc: Christina Steinbrecker Jack <christina.jack@fastcase.com>

hannah somers <somers.hj@gmail.com>

Jun 27

to Christina. Karli

Hi Nina!

- 1. The easiest thing on our end would be to send it in Word Perfect. However, if that drastically would increase the cost then I think it would be best for me to convert it on our end to word or pdf.
- 2. Good question. Let me try to get a better idea of that. Most of it doesn't get updated regularly Executive Orders, Court Cases, and RPPLs in addition to the PNCA are the most frequently updated sections. For an update that occurs every 6 months there are probably 25 new additions or changes.
- 3. Yes. The court publishes the reporter (a separate office from our office). We don't update any case law until the reporter is complete and sent to our office. Currently, it looks like the most up to date cases we have are from 2015.
- 4. Yes, I think we would be able to work out a way to still have our office update the code and then send you the updated version. Maybe more frequently than once a year, if possible.

I am so thankful to you, Karli, and the rest of your office for being willing to explore this possibility with us! My biggest hesitancy, or place where I could see us hitting a roadblock, is cost. Obviously we will need to compensate for services provided by fastcase, but I have no idea how much money the committee would be willing to spend. Right now, the office that publishes our law search program charges \$500/year for a subscription, so they bring in about \$20k/year. Using fastcase, that money would go to fastcase instead of the office, so I'm working right now to figure out where any additional revenue to pay fastcase would come from. Of course, there is likely money in sources that I'm not familiar with, so this is certainly not a road block yet! I just want to make sure you are both informed about every possible guirk or problem that I can think of.

Thanks again, Hannah

Christina Steinbrecker Jack christina.jack@fastcase.com

Jun 27

to me, Karli

Thanks Hannah! Let's catch up again after your meeting.

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Tuesday, June 26, 2018 9:44 PM

To: Christina Steinbrecker Jack <christina.jack@fastcase.com>

Cc: Karli Hannan < khannan@fastcase.com>

hannah somers <somers.hj@gmail.com>

Jun

28

to Christina, Karli

Hi Nina and Karli,

I just have a quick question -- do you have any idea (ballpark) of what it might cost to put the data in fastcase? I understand that it might be too early to even make an estimate, but if I had even a general idea of the cost it would be helpful to share at the meeting. If not, no problem!

Republic of Palau – Code Commission Hannah Somers, Student Consultant Page **47** of **75** August 2018 Thanks!

Karli Hannan < khannan@fastcase.com>

Jun 28

to me, Christina

Hi Hannah,

Great question. We are still evaluating the file samples with the team to determine what the conversion process would be, and what time and resources are needed to complete the process.

Your responses last night/yesterday morning were helpful for us to answer other factors that impact the cost.

Nina and I will connect in the morning to determine a time we will follow-up with a cost.

Talk soon,

Karli

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Wednesday, June 27, 2018 9:22 PM

hannah somers <somers.hj@gmail.com>

Jul 5

to Karli, Christina

Hi Karli and Nina!

Sorry for my delayed response -- we met on Friday but have continued our discussions into this week.

Unfortunately, the committee voted down fastcase because it does not allow them to charge users. The Executive Order that established this committee in Palau mandates that they attempt to earn money by providing access to the laws, and the committee felt that using fastcase would not allow them to meet their mandate.

I will pass along a record of our conversation and your contact information in the event that sometime down the road they change their minds!

Thank you both so much for your willingness to work with us. You stepped in where no other preexisting service we spoke with would, and I so appreciate your time and willingness to help.

Thank you so much!

- Hannah

to me, Karli

Hi Hannah, Thanks so much for your note, and I'm sorry to hear that the committee voted down the proposal. We'd love to see the conversation notes to learn how we could write a proposal that meets your needs next time.

We would likely propose a model where Fastcase does the data conversion and provides search software at a fee to the government and then makes everything available to end users free of charge (we do this for the State of Oregon, in fact!). It seems like this would meet the board's requirements, and I hope that we'll still have the opportunity to work together in the future!

All the best, Nina

From: hannah somers [mailto:somers.hj@gmail.com]

Sent: Wednesday, July 4, 2018 10:51 PM

hannah somers <somers.hj@gmail.com>

Jul

to Christina, Karli

Hi Nina!

I unfortunately don't have the minutes but if I can get my hands on them I'll send them over.

The tricky part about what you suggested (because I'm still trying to figure out if it is at all possible to go back to them with any new information that may change their minds...) is that the Palau office (that currently publishes the laws) is required by mandate to try to make money. They do that by charging for our current law search CD.

If Fastcase were adopted, can you imagine a scenario in which the Palau office is able to profit from attorneys use of Fastcase? The roadblock we kept hitting is that attorneys would need to pay Fastcase (or the bar) for premium features, rather than the Palau office.

Let me know if you think of anything, and if not, no worries! I might be more attached to Fastcase than the committee is :)

Hannah

Sent from my iPhone

Karli Hannan < khannan@fastcase.com>

Jul

to me. Christina

Hi Hannah,

I think we're equally as attached to helping you and Palau find the right solution. Let Nina and I put our heads together to come up with an idea for you to take back to the committee.

Stay tuned...

Karli

hannah somers <somers.hj@gmail.com>

Jul 10

to Karli, Christina

Hi Karli and Nina,

Thank you!! If nothing will work out no worries -- just thought it might be worth revisiting once again.

Just so you two are aware of the timeline, my time in Palau will end at the beginning of August. If there were a solution that might be of interest to both fastcase and Palau I would connect you to the right person and help it move forward with that person as your contact.

Again, thank you both so much! I so appreciate your time.

Appendix G-1 – Fastcase responses to requirement document as mentioned in Appendix G

Requirements for a new system

Store: Fastcase needs to evaluate the file formats to determine the resources needed to digitally convert the files and maintain them. However, we have the ability to digitally store and organize the content accordingly.

- The system should store all legislation for the Republic of Palau, including but not limited to, what is currently stored in the law search CD:
 - Compacts
 - Constitution
 - Court Cases Palau
 - Court Cases Trust Territory
 - Court Rules
 - Executive Administrative Directives
 - Executive Orders
 - Executive Presidential Proclamations
 - International Agreements
 - Management Action Plan (MAP)
 - OEK Resolutions
 - Palau National Code Annotated (PNCA)
 - Presidential Directives
 - Public Corporation Regulations
 - Public Laws (RPPL)
 - Regulations
 - State Constitutions
 - TT Public Laws
 - Uncodified Public Laws (RPPL)
 - Uncodified State Laws

Search: Responses for each are listed accordingly.

- The system should allow users to search by:
 - Keyword yes, the Fastcase research application is able to perform this feature
 - Phrase yes, the Fastcase research application is able to perform this feature
 - Date- yes, the Fastcase research application is able to perform this feature
 - RPPL number yes, the Fastcase research application is able to perform this feature assuming that it's similar to a docket numbering system.
 - Case number yes, the Fastcase research application is able to perform this feature
 - Reporter citation

- Number within case (ex: civil action number) yes, the Fastcase research application is able to perform this feature
- Court yes, the Fastcase research application is able to perform this feature
- Names of involved parties yes, the Fastcase research application is able to perform this feature
- Two words within a certain distance of each other yes, the Fastcase research application is able to perform this feature through traditional Boolean search functionality.
- Ability to see which part of the text includes your search terms from the search results yes, the Fastcase research application is able to perform this feature
- The system should provide accurate search results yes, the Fastcase research application is able to perform this feature
- See things similar to what you're searching for in results Yes, Fastcase has a feature called "Forecite" that surfaces cases that might not have met the search results criteria, but are important for the attorney to references they could be a related or seminal case.
- Ability to refine the search yes, the Fastcase research application is able to perform this feature
- Have search fields partially filled out so you only need to include certain parts of a term, ex: ___RPPL___ yes, the Fastcase research application is able to perform this feature through traditional Boolean search functionality.

Browse:

- Table of contents (hyperlink) for each document (RPPL, Executive Order, Court Case, etc.) yes, the Fastcase research application is able to perform this feature
- The system should hyperlink references and citations yes, the Fastcase research application is able to perform this feature, but requires the source files to have modern citation formats and the referenced cases need to be published cases.

Security:

- Secure, not hackable yes, the Fastcase application lives on secure servers.
- Ability to require logins for users that purchased access yes, the Fastcase research application is able to perform this feature
- The content should not be able to be edited by end users yes, the Fastcase research application has traditional developer, administrator, and end user roles to limit who's able to edit or adjust settings and content within the application.

Compatibility:

- Compatible with windows and mac operating systems yes, the Fastcase research application is able to perform this feature
- Ability to print, save, or email a singular piece of legislation without reformatting yes, the Fastcase research application is able to perform this feature

Keyboard shortcuts - yes, the Fastcase research application is able to perform these features

- Control F
- Control C
- Control V

Interface:

- Navigation pane to browse content yes, the Fastcase research application is able to perform this feature
- Search bar yes, the Fastcase research application is able to perform this feature

Usability:

- Accessible online and offline Fastcase is accessible online only. The application does not have an offline version. The XML files would be stored on a local machine for attorneys to use, when internet access isn't available.
- Easy to update yes, the Fastcase research application is able to perform this feature

Reliability:

- Ability to export data in the future if moving to a new system Fastcase would provide the government of Palau an XML file of the Palau database, which can be used on whatever application or service the government of Palau would choose.
- Easy to pass on to new staff (ex: someone new in the PALAU Office or new Chair of the Code Commission) Fastcase is an easy research application that includes many basic search features that anyone with some technical experience would be able to adapt to.
- Should have a backup for when the internet goes out The Fastcase application does not have an offline version. The XML files would be stored on a local machine for attorneys to use, when internet access isn't available.

Other:

- The system should allow users to toggle between search results / multiple cases at once We are unsure of this requirement. Could you provide an example? The Fastcase application does allow users to search, review documents, go back to refine the search and view subsequent documents, if that's what the question is getting at.
- The system should include page numbers for all documents This is possible as long as the source documents are numbered and are in the correct order.
- A cheat sheet of commonly used keywords or search tips Yes, this can be provided and training videos are available on the Fastcase.com website:

 https://www.fastcase.com/support/
- Shepardize cases the ability to tell if a case has been overruled just by looking at the case Fastcase uses something similar called "Bad Law Bot," which is an algorithm that looks across citations and summary judgements for negative treatment to know if a case has been overturned. The benefit of the algorithm versus traditional editorial methods is

- attorneys are able to see if a case is potentially "bad law" sooner as "Bad Law Bot" is automated.
- Creation of new data fields (for example, cases cited, statutes cited) for future searches if necessary, yes, the Fastcase application can adapt to new fields and information needed to perform accurate searches.

Appendix H – Communications between the Student Consultant and dtSearch

hannah somers <somers.hj@gmail.com>

Jun 14

to info

Good Morning,

My name is Hannah and I am writing on behalf of the Republic of Palau's Publication and Law Office. We currently use dtSearch 6.05 to store and search the laws of Palau.

I'm wondering if you can help talk me through our upgrade options, including pricing and whether or not we would need to rebuild the index if we were to use a new version.

Thank you, Hannah Somers

Kate Tretter < ktretter@dtsearch.com>

Jun 14

to Elizabeth, me

Dear Hannah,

Thank you for your email. I will ask Elizabeth to assist you.

Kind Regards,
Kate Tretter
dtSearch Corporation
Phone 800-IT-FINDS (483-4637) or 301-263-0731
Fax 301-263-0781
www.dtsearch.com
ktretter@dtsearch.com

Elizabeth <elizt@dtsearch.com>

Jun 15

to me, Kate

I appreciate your email! So that I can get you the right upgrade information, I just want to make sure I understand what combination of dtSearch products you are currently using.

- 1) dtSearch Publish to publish materials to portable media like CD, DVD, portable harddrive, etc. and then make them searchable. (And if so, are you making a lot of portable media products, or just a few, for example?)
- 2) dtSearch Web with Spider to all searching of the materials from an Internet or Intranet Windows IIS Web server
- 3) dtSearch Desktop/Network with Spider running from individual PCs or laptops to provide searching -- and if so how many individual workstations are you looking at here?

Republic of Palau – Code Commission Hannah Somers, Student Consultant

Page **55** of **75** August 2018

Thank you very much!

Elizabeth

Director of Sales dtSearch Corp. (301) 263-0731 fax (301) 263-0781 www.dtsearch.com (direct line 301-263-9335)

hannah somers <somers.hj@gmail.com>

Jun 15

to Elizabeth, Kate

Hi Elizabeth!

Thank you for your quick response.

I believe we are only using option 1. We burn CDs with the dtSearch program on it containing Palau's laws and code and share the CDs with lawyers in the community.

We probably publish about 40 cds and update them (so new cds) 1-2 times per year.

Right now, we can only run the dtSearch program to burn the CDs on an old computer (it was new in 2002 and nothing has been updated since then) which is what is prompting our need for an update.

Were we to update dtSearch (rather than switch to a new program, for example) we would want something compatible with Mac and windows (which it looks like exists) and preferably available online and offline.

Does that help?

Thanks, Hannah

Elizabeth <elizt@dtsearch.com>

Jun 16

to me. Kate

If you are using the current dtSearch Publish as an "off the shelf" product, the portable media that you build will still run under Windows, although it will be updated to support all current "Windows everything."

However, if you use dtSearch Web with Spider to publish that data to an Internet/Intranet site, then that data can be accessed by a browser from pretty much any computer or device -- PCs, Macs, Android devices, iPhones, iPads, etc. If you want to see what looks like with the current HTML5 default interface, please see http://support.dtsearch.com/Support/forms/ -- or just type a search request in our home page top left at dtSearch.com for something that will be on our site (such as publish, web, fuzzy, international, etc.).

In terms of an upgrade, the license that I think that you have going all the way back to 2002 includes a dtSearch "Publish 250" component and a dtSearch Web with Spider component. You can upgrade just the

Republic of Palau – Code Commission Hannah Somers, Student Consultant dtSearch Web component to the current version for \$350. Or you can upgrade both components together to the current version for \$999.

You can see all of these options at https://www.dtsearch.com/developerUpgrade.html.

I can send you downloads to try the current version of both dtSearch Publish and dtSearch Web if you want. dtSearch Web will require a Windows Web Server (IIS) on the technical end to run. Please let me know if you want current downloads.

Thank you!

hannah somers <somers.hj@gmail.com>

Jun 18

to Elizabeth, Kate

Hi Elizabeth!

Thank you for your detailed response. I want to make sure I'm understanding something correctly. With the version that we think we have (a dtSearch "Publish 250" component and a dtSearch Web with Spider component) should it be accessible on all types of operating systems, or just on windows? I want to make sure that we're not misunderstanding how our current version can be used, because right now it seems to run only on windows.

Please forgive my ignorance here, I'm new to dtSearch, but if we upgrade to the new versions of dtSearch Publish and dtSearch Web (and use them on a Windows) will all of the data we have currently stored in the computer be maintained in the new program, or will we need to start from scratch?

Finally, and I may have missed this on the website, but is the search functionality updated in these newer versions?

It would be helpful to see test out the current version of dtSearch Publish and dtSearch Web. Thank you for the offer

Thank you again, Hannah

Elizabeth <elizt@dtsearch.com>

Jun 19

to David, me, Kate

Downloads are attached to try dtSearch Publish and dtSearch Web as 30-day evaluation versions. You will need an IIS Web Server available to try dtSearch Web on the technical end. I am cc'ing David Maggin from our support team if you have questions on getting started with both products.

For both products, you will use dtSearch Desktop (included with the downloads) to build new indexes (these are needed in light of the the fact that the other version dates to 2002!). And then use dtSearch Web to publish to your website and dtSearch Publish to publish to portable media.

Please see additional answers below.

On 6/18/2018 1:34 AM, hannah somers wrote: Hi Elizabeth!

Republic of Palau – Code Commission Hannah Somers, Student Consultant Page **57** of **75** August 2018 Thank you for your detailed response. I want to make sure I'm understanding something correctly. With the version that we think we have (a dtSearch "Publish 250" component and a dtSearch Web with Spider component) should it be accessible on all types of operating systems, or just on windows? I want to make sure that we're not misunderstanding how our current version can be used, because right now it seems to run only on windows.

dtSearch Publish in your version and still remains a Windows-only product.

(For programming usage, we have a dtSearch Engine for Mac version but that is a developer product requiring programming. It is not an "easy to use" off-the-shelf solution like dtSearch Publish.)

dtSearch Web with Spider runs on a Windows IIS Web server. However, you can access that product and run searches from any computer or device with a browser interface.

Please forgive my ignorance here, I'm new to dtSearch, but if we upgrade to the new versions of dtSearch Publish and dtSearch Web (and use them on a Windows) will all of the data we have currently stored in the computer be maintained in the new program, or will we need to start from scratch?

Because your existing product dates back to 2002, you would need to rebuild your dtSearch indexes. The index building process does not affect the original file data at all and this is easy. Your renewal will include support, so our support team can walk you through that if needed, but really it just a "select the folders and leave it to dtSearch to do the rest" matter. For more details on the dtSearch indexer, please see https://www.dtsearch.com/PLF howdtworks.html

Finally, and I may have missed this on the website, but is the search functionality updated in these newer versions?

The entire user interface is different now for dtSearch Web and Publish -- updated to HTML5. If you want to see what looks like with the current HTML5 default interface, please see https://support.dtsearch.com/Support/forms/

It would be helpful to see test out the current version of dtSearch Publish and dtSearch Web. Thank you for the offer.

I am attaching downloads to try both dtSearch Web with Spider and dtSearch Publish current versions in full.

David Maggin <davidm@dtsearch.com>

Jun 19

to me

Hi Elizabeth!

Thank you for your detailed response. I want to make sure I'm understanding something correctly. With the version that we think we have (a dtSearch "Publish 250" component and a dtSearch Web with Spider component) should it be accessible on all types of operating systems, or just on windows? I want to make sure that we're not misunderstanding how our current version can be used, because right now it seems to run only on windows.

Hannah,

Elizabeth Thede forwarded your inquiry to me.

dtWeb requires Microsoft Internet Information Server (IIS) 6 or later, and requires that the IIS MetaBase be installed. Therefore, dtWeb cannot be installed on a web server other than IIS.

Before running dtWeb, you must log into Windows as the Administrator and make sure Microsoft Internet Information Server (IIS) is installed (*in most cases, IIS is not installed by default*). Then, make sure your web server is configured as per the link for your Windows Version atop the **System Requirements**.

Once you've installed and configured Microsoft IIS, dtWeb should generally require a web Administrator just

minutes to install and configure. The <u>illustrated dtWeb Quick Start Guide</u> takes you step-by-step through the process of creating your dtWeb search page. If you experience an error message, see <u>Troubleshooting IIS</u> <u>Error Codes</u>.

IMPORTANT: It is much easier to work with dtWeb if all of your documents and indices are physically located on the same Microsoft Internet Information Server (IIS), with the documents configured in a *virtual directory* in IIS. Otherwise, a Microsoft Windows security issue known as *delegation* makes document access difficult and **access** errors likely. Because of the difficulties involved in dealing with Microsoft delegation, we recommend that your documents, indices, and dtWeb all be physically located on the same Microsoft IIS web server, even if this means keeping an extra copy of the documents. If, however, this is not possible, please see the "Delegation" section near the end of this FAQ for workarounds: dtweb.document.com/dtweb.document.com/dtweb.access-problems.

dtWeb is designed to make it easy for Web Administrators to create a basic web search form that allows visitors to your Windows-based [Internet or intranet] web site to search your documents (in Supported Formats) using their standard web browser (e.g., Microsoft Internet Explorer, Netscape, etc.). The customer can modify our basic html search form using a standard web- or text-editor (e.g., Dreamweaver, FrontPage, Windows Notepad, etc.) to match the search page to an existing website design. For web developers, dtWeb includes an ASP interface and sample ASP application, as well as access to the full dtSearch Text Retrieval Engine programming API (please refer to the Web Developers' help guide, dtSearch_Web.chm, located in your \dtSearch developer\help folder for additional information).

If you require additional/future assistance, please include the serial number -AND- 3-digit version number of the dtSearch product or evaluation you are using (you can find this information in dtDesktop--which is including with all versions of dtSearch--by clicking Help->About dtSearch). David

David Maggin Technical Support Services

dtSearch Corporation Instantly Search Terabytes of Text davidm@dtsearch.com www.dtsearch.com

Elizabeth <elizt@dtsearch.com>

Jun 28

to me. Kate. David

Hi

I just wanted to circle back and see how you were doing with trying the current versions of dtSearch Web and dtSearch Publish. Thank you!

Elizabeth

Director of Sales dtSearch Corp. 1-800-IT-FINDS (301) 263-0731 fax (301) 263-0781 www.dtsearch.com (direct line 301-263-9335) to Elizabeth, Kate, David

Hi Elizabeth!

Thanks for following up. So far so good, I'm having a meeting on Friday with the committee who will decide what option we will use moving forward. At that time I will share the dtSearch upgrade details and see what they say! If they decide to move forward with the upgrade I will reach out.

Thanks!

hannah somers <somers.hj@gmail.com>

Jul 24 (8 days ago)

to Elizabeth, Kate

Hi Elizabeth!

Thanks for reaching out. I'm so sorry to have kept you waiting for so long. Our committee has had a few meetings since we last talked and are debating whether or not to build a new website vs. upgrade dtSearch. On Friday they will make their final decision, so I will let you know if they choose to upgrade!

If not, I will be leaving a report of the research I've done as well as contact information, so I will include your contact info and the details of the possibility of upgrading dtSearch in the event that they choose to do so in the future.

Thank you so much for all of your help!

Elizabeth Jul 24 (8 days ago)

to me, Kate

We appreciate the update! In the meantime, if there is anything we can assist with on the technical end, please let us know. Thank you!

hannah somers <somers.hj@gmail.com>

Jul 24 (8 days ago)

to Elizabeth, Kate

Will do! If they do choose to update I will probably bother you incessantly with technical questions. Actually, I am wondering how you accept payment for an upgrade? Electronic check, regular check, credit card, pay pal, etc.?

Republic of Palau – Code Commission Hannah Somers, Student Consultant Thanks!

Elizabeth Jul 24 (8 days ago)

to me, Kate

Checks are fine, as well as AmEx, Visa, MC. Our online Digital River store (please see https://www.dtsearch.com/DeveloperUpgrade.html for renewals) also accepts PayPal, although we don't accept PayPal here directly. Thanks!

hannah somers <somers.hj@gmail.com>

Jul 24 (8 days ago)

to Elizabeth, Kate

Got it! In Palau we actually do not have the ability to make electronic payments (no credit card, paypal, etc.) but someone told me they might be able to do electronic checks... Going to look into it a bit more so we're prepared to pay if they do choose to upgrade.

Thanks!

Elizabeth Jul 24 (8 days ago)

to me, Kate

We can invoice "net 30," and conventional check is fine. :-) Thank you!

hannah somers <somers.hj@gmail.com>

Jul 27 (5 days ago)

to Elizabeth, davidm, Kate

Hi dtSearch team!

The Palau committee that I am working with has decided to move forward with upgrading dtSearch, but we have many questions (I apologize in advance):

- 1. I have reviewed what David mentioned in a previous email, we do need to install the IIS server which I will try to do on Monday. After that is done, how long should this entire process take?
- 2. Essentially, can we just start from scratch as if we are purchasing dtSearch for the first time since we are installing it on a new computer? Or should I copy the old version of dtSearch onto the new computer and update it there?
- 3. I'm sorry if you've answered this question above but I wanted to double check the portable media is still only available for windows machines, correct? But you can access the web based version of dtSearch from any computer with internet access?
- 4. Does the web based version of dtSearch require that we have our own internet page? I'm guessing yes but again, just want to double check.

- 5. Can the documents that we are indexing be in .doc and .docx format, or do they still need to be in .wpd format? (We have recently converted all of the documents from .wpd to .doc, .docx, or .pdf. Many of these documents still need to be cleaned up and reformatted, so IF we are able to upload .doc/.docx/.pdf documents in dtSearch, then we would upload what we have now but later replace those documents with cleaned up, properly formatted version over the course of the next year.)
- 6. Is it possible to limit access to dtSearch to those that have a "license" (which is what we currently do now) with this version?
- 7. What type of "support" is included when we purchase the dtSearch upgrades? I will be leaving the island next week and we are trying to assess who can be the one to upgrade the system if I can't complete it before I leave, so understanding what type of support is available and how we can contact the support team would be helpful.

Again, I apologize for all of the questions and thank you!

David Maggin

Jul 27 (5 days
ago)

to me

Hi dtSearch team!

The Palau committee that I am working with has decided to move forward with upgrading dtSearch, but we have many questions (I apologize in advance):

- 1. I have reviewed what David mentioned in a previous email, we do need to install the IIS server which I will try to do on Monday. After that is done, how long should this entire process take?
- 2. Essentially, can we just start from scratch as if we are purchasing dtSearch for the first time since we are installing it on a new computer? Or should I copy the old version of dtSearch onto the new computer and update it there?
- 3. I'm sorry if you've answered this question above but I wanted to double check the portable media is still only available for windows machines, correct? But you can access the web based version of dtSearch from any computer with internet access?
- 4. Does the web based version of dtSearch require that we have our own internet page? I'm guessing yes but again, just want to double check.
- 5. Can the documents that we are indexing be in .doc and .docx format, or do they still need to be in .wpd format? (We have recently converted all of the documents from .wpd to .doc, .docx, or .pdf. Many of these documents still need to be cleaned up and reformatted, so IF we are able to upload .doc/.docx/.pdf documents in dtSearch, then we would upload what we have now but later replace those documents with cleaned up, properly formatted version over the course of the next year.)Â
- 6. Is it possible to limit access to dtSearch to those that have a "license" (which is what we currently do now) with this version?Â
- 7. What type of "support" is included when we purchase the dtSearch upgrades? I will be leaving the island next week and we are trying to assess who can be the one to upgrade the system if I can't complete it before I leave, so understanding what type of support is available and how we can contact the support team would be helpful.Â

Again, I apologize for all of the questions and thank you!

- HannahÂ

Hannah.

Re 1: Once you've installed and configured Microsoft IIS, dtWeb should generally require a web Administrator just minutes to install and configure. The <u>illustrated dtWeb Quick Start Guide</u> takes you step-by-step through the process of creating your dtWeb search page.

Re 2: Unfortunately, you cannot move a Windows application from one PC to another because the new PC will be missing the Windows Registry entries that are created during the initial installation and setup. Like all Windows applications, you must perform a complete install on the new PC. Attached are download links to the current 30-day dtWeb eval (v7.91 - see **Upgrade Instructions**).

To register the dtSearch eval: Open dtDesktop, click Help->About dtSearch, click Serial Number and enter your serial number to register the program (note: serials are Case-Sensitive). *If you*

do not have your serial number or it produces an error, please ring dtSearch Sales at: 1.800.IT.FINDS (483.4637) to verify your license status.

Re 3: Correct. We have a developers-only version of <u>dtEngine for Linux</u>, but this requires the customer to compile the program. All of our end-user programs are Windows only (see <u>dtWeb System Requirements</u>). However, because dtWeb runs on your website and is accessed via a standard web browser, the visitor's operating system is irrelevant.

Re 4: Yes. Microsoft IIS and your default web site must be configured -before- installing dtWeb (refer to Quick Start Guide above).

Re 5: See Supported Formats.

IMPORTANT: It is much easier to work with dtWeb if all of your documents and indices are physically located on the same Microsoft Internet Information Server (IIS), with the documents configured in a *virtual directory* in IIS. Otherwise, a Microsoft Windows security issue known as *delegation* makes document access difficult and **access** errors likely. Because of the difficulties involved in dealing with Microsoft delegation, we recommend that your documents, indices, and dtWeb all be physically located on the same Microsoft IIS web server, even if this means keeping an extra copy of the documents. If, however, this is not possible, please see the "Delegation" section near the end of this FAQ for workarounds: **dtWeb document access problems**.

Re 6: dtWeb does not alter Windows security settings and only provides access to documents when the user seeking access has the necessary permissions. To secure a site, see How does dtWeb handle security. **Re 7:** In general, your dtSearch license provides one year of free upgrades and support. However, I would recommend that you speak with Elizabeth Thede re licensing options.

Elizabeth Jul 28 (4 days ago)

to me, davidm, Kate

Hi

Please see answers below.

On 7/27/2018 2:20 AM, hannah somers wrote:

Hi dtSearch team!

The Palau committee that I am working with has decided to move forward with upgrading dtSearch, but we have many questions (I apologize in advance):

1. I have reviewed what David mentioned in a previous email, we do need to install the IIS server which I will try to do on Monday. After that is done, how long should this entire process take?

The key steps are rebuilding your indexes and "publishing" that data plus the indexes to your IIS server and/or the portable media. dtSearch Web and Publish are both set up as "ready to go" products. The Welcome/Introduction dtSearch Web page is at https://www.dtsearch.com/intro-web-spider.html. This links to the Quick Start, etc. The Welcome/Introduction dtSearch Publish page is at https://www.dtsearch.com/intro-publish.html

2. Essentially, can we just start from scratch as if we are purchasing dtSearch for the first time since we are installing it on a new computer? Or should I copy the old version of dtSearch onto the new computer and update it there?

No need to copy the old version; you are welcome to start from scratch, and I think that might be best given how old your current version is.

- 3. I'm sorry if you've answered this question above but I wanted to double check the portable media is still only available for windows machines, correct? But you can access the web based version of dtSearch from any computer with internet access? Yes, and yes.
- 4. Does the web based version of dtSearch require that we have our own internet page? I'm guessing yes but again, just want to double check.

You don't need a domain name for this site, but it does need to be an IIS server over which you full administrative rights.

5. Can the documents that we are indexing be in .doc and .docx format, or do they still need to be in .wpd format? (We have recently converted all of the documents from .wpd to .doc, .docx, or .pdf. Many of these documents still need to be cleaned up and reformatted, so IF we are able to upload .doc/.docx/.pdf documents in dtSearch, then we would upload what we have now but later replace those documents with cleaned up, properly formatted version over the course of the next year.) dtSearch support WordPerfect, .doc, .docx and PDF -- as well as a large variety of other data types. Please see https://www.dtsearch.com/PLF_DocFilters.html. Our support for all of these formats is "automatic." dtSearch will figure out what type of document it is all by itself and handle it accordingly. For more on the "automatic" nature of this support, please see https://www.dtsearch.com/PLF howdtworks.html

6. Is it possible to limit access to dtSearch to those that have a "license" (which is what we currently do now) with this version?

dtSearch Web end-users don't need a dtSearch license at all! For example, with no dtSearch installation at all, you can go to https://support.dtsearch.com/Support/forms/ and execute a search of your website and other different data sets. (Putting this another way, one of the many, many reasons organizations like dtSearch Web is that the license is "per server" *not* "per user"!)

With your "Publish 250" license, you can give out this license to up to 250 end-users. They don't need a separate dtSearch Desktop, for example, license here; the dtSearch Published portable media will be a self-contained unit. All that said, if in the long-run, you find that you more than 250 end-users for dtSearch Publish, we also have an unlimited user dtSearch Publish "Annual Service Bureau" license. Please see page 2 of our renewal form at https://www.dtsearch.com/images7/dtSearchDeveloperUpgrade.pdf for details on both licenses.

7. What type of "support" is included when we purchase the dtSearch upgrades? I will be leaving the island next week and we are trying to assess who can be the one to upgrade the system if I can't complete it before I leave, so understanding what type of support is available and how we can contact the support team would be helpful.

We're here via email and also phone support during standard US East Coast working hours. I am sorry that you are leaving the island -- it sounds like a really, really nice place! If you can give us the contact information of your successors before you go, that would be great.

hannah somers <somers.hj@gmail.com>

Jul 30 (2 days ago)

to Ebil, Elizabeth, davidm, Kate

Hi Elizabeth and David,

Thank you both for your detailed responses! You have been so helpful over the course of the past few months. Because I am leaving the island in four days, I am hesitant to start the upgrade process now, as we need to start with the IIS server and conclude with training the employees and troubleshooting any problems that might arise.

I have cc'd Ebil Matsutaro, Vice Chair of the Code Commission here in Palau. We wanted to inquire about the possibility of the Code Commission flying someone from dtSearch here to Palau to perform the upgrade. Is this something that dtSearch would be open to? And if so, do you have a ballpark estimate of your fees for this service?

It would require installing the IIS server, installing the new version of dtSearch, training the two office employees on how to use it and regularly add new content, troubleshooting any immediate issues, and discussing a plan for upgrades moving forward.

Please let me know your thoughts.

Thank you, Hannah

Elizabeth Jul 31 (1 day ago)

to me, Ebil, davidm, Kate

I've been told by our support team that while Palau is no doubt amazing, this would be complete "overkill" in terms of the project :-)

The IIS server would be set up using standard Microsoft documentation. Once that is done, the dtSearch Web Quick Start will take you through everything you need.

To use dtSearch Publish, you don't even need to install the IIS Web server. Just start with the dtSearch Publish Quick Start. And we are standing by if you have any questions!

Appendix I – Communications between the Student Consultant and M&D Web Creations

Denise C. Ajimine

Jul

16

to me

Good afternoon Hannah,

Great hearing from you. Sebastian did mention to expect an email from someone working with the Palau Code Commission. We'd be happy to assist. We are able to build, host, and regularly maintain Wordpress websites. We do this for www.palaugov.pw and other Palau and local Guam organizations.

Currently, for a static, informational WP site that doesn't integrate any external databases (other than WP's own database for static content), we charge a \$750 setup fee and \$900 per year (for a minimum of 2 years, but can be paid annually). This takes care of everything the organization will need to get set up on a website, including domain registration, hosting, and updates/maintenance. For these packages we typically source WP themes with plugins that allow for easy updating. However, since we provide the update services, staff prefer to send us their updates so we can do it for them.

If you don't need us to set up the site since you will be doing that for them, and are only looking for domain registration, hosting, and updates/maintenance, only the annual cost of \$900/year is required (for a minimum of 2 years, but can be paid annually). As you know, handing off a static HTML site to another web hosting provider doesn't require as much as maintenance/updates as a WP site, so if you will be working with a WP theme and only needing our company to host and maintain, we have recommendations on the best WP themes to use. Sebastian was at one point looking at WP theme on Themeforest for his project and it looked like he was seeking out the highest rated themes on Themeforest with the most sales. We would make those same recommendation as those authors provide ongoing support and are usually on top of their theme and plugin updates, compared to other authors. I find that having Visual Composer as a compatible and required plugin makes it easier for content management later on, should the pages and content have to expand.

If any of the above works for the Commission, please let me know and we can see how we can get you started up. They can make the \$900 annual payment for the first year and then we can make the appropriate purchases of all the required tools (domain/hosting/WP themes) and then provide you with the theme files and login credentials to upload the site.

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

Tel: (671) 864-3068 | E-mail: denise@mdwebcreations.com Visit our online portfolio: www.mdwebcreations.com **From:** hannah somers [mailto:<u>somers.hj@gmail.com</u>]

Sent: Friday, July 13, 2018 9:57 AM **To:** denise@mdwebcreations.com **Subject:** Inquiry from Palau

Hi Denise,

Sebastian Guerrero gave me your contact information and I wanted to reach out with a few questions.

I am currently working for the Palau Code Commission, responsible for codifying and publishing the laws of Palau. We are attempting to create a website but having trouble because the office has no way to make electronic payments to a web builder / host like wordpress, for example.

Sebastian mentioned that you take check and payment through the bank of hawaii, which may be a more suitable option for our office.

This website would host most of the laws of Palau but would also need to be updated with relative frequency maybe once or twice a month. The updates would, for the most part, be adding new content (laws) to the website.

I know your organization builds websites and hosts them. Is it easy enough to update websites that your organization builds?

Do you offer hosting services for websites that are built by an organization on a platform like wordpress?

I'm sure your fees vary from website to website, but do you have a general pricing plan?

Thank you! Hannah Somers

hannah somers <somers.hj@gmail.com>

Jul

18

to Denise

Hi Denise!

Thank you so much for your detailed email!

This is really helpful. One of the problems we're having right now is the inability to make any electronic payments, as the code commission does not have a credit card / paypal account, etc. The other tricky thing right now is that I am leaving the island in 2.5 weeks, so that may influence whether or not we want to build it ourselves or have it built by your company.

Let me pass this information along to the code commission and get back to you! Just to double check, if we have you build it it's \$750 + \$900/year for two years, vs. if we build it ourselves, it's just the \$900/year for two years cost?

Thanks again!

Denise C. Ajimine

Jul

18

to me

Yep! The costs you indicated below is correct. And again, it's for a static, informational site not connected to any external databases. Is the site mostly PDFs or will the laws be laid out as paragraphs on their own pages?

Also, have a Red Rooster for us!

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

Tel: (671) 864-3068 | E-mail: denise@mdwebcreations.com Visit our online portfolio: www.mdwebcreations.com

From: hannah somers [mailto:<u>somers.hj@gmail.com</u>]

Sent: Wednesday, July 18, 2018 2:06 PM

To: Denise C. Ajimine

Subject: Re: Inquiry from Palau // Palau Code Commission

hannah somers <somers.hj@gmail.com>

Jul

18

to Denise

Yeah, exactly! Either .pdf or on the page itself -- if possible maybe hyperlinked within the website, but no external database. With updates taking place whenever a law is passed, and so far in 2018 there are ~8 laws, so not too often.

Haha, gladly! I'm on it!:)

I passed the info along and will be in touch!

Denise C. Ajimine

Jul

18

to me

Ok, the only thing I'm worried about is the entry of information for the setup. Usually that package is for small businesses, organizations but if it requires more data entry than a typical site, I may have to adjust the setup fee. What do you think the Code Commission can reasonably afford for set-up fee?

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

Tel: (671) 864-3068 | E-mail: denise@mdwebcreations.com Visit our online portfolio: www.mdwebcreations.com

to Denise

Totally fair. It is a lot of data - I just converted it all from word perfect to Microsoft word to put it on google drive and it was not a fast process!

I'm honestly not sure — it may depend on when in the budget cycle it takes place if they need to appropriate more money than they currently have available. Let me find out.

Hannah

Sent from my iPhone

Denise C. Ajimine

Jul 24 (8 days ago)

to me

Hi Hannah,

Hope your week is going well so far. I thought I'd follow up on this. Thanks!

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

Tel: (671) 864-3068 | E-mail: denise@mdwebcreations.com Visit our online portfolio: www.mdwebcreations.com

hannah somers <somers.hj@gmail.com>

Jul 24 (8 days ago)

to Denise

Hi Denise!

Thanks for follow up. We are still in a holding pattern right now... the Code Commission will meet on Friday, at which point they will decide whether or not they'd like to move forward with a website. I've forwarded them the details you sent over and will be talking to the Chair of the Commission about the maximum they can afford for setting up the website (I haven't had a chance to meet with him yet to discuss). Once they decide I will let you know. Sorry to keep you waiting.

Thanks, Hannah Denise C. Ajimine

Jul 24 (8 days
ago)

to me

Hi Hannah,

No worries. Typically, for agencies requiring this kind of initial data entry as part of the setup, the setup is definitely higher. We may be willing to work with \$2,000 setup fee. So if they have the budget for the \$2,000 setup fee + \$900 annual fee, then we would be willing to work with that. Then the following and subsequent years thereafter will only be \$900 per year.

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

Tel: (671) 864-3068 | E-mail: denise@mdwebcreations.com Visit our online portfolio: www.mdwebcreations.com

From: hannah somers [mailto:<u>somers.hj@gmail.com</u>]

Sent: Tuesday, July 24, 2018 10:25 AM

hannah somers <somers.hj@gmail.com>

Jul 24 (8 days ago)

to Denise

Hi Denise,

Perfect - it's helpful to have a ballpark number to work with. I'll see what they have budgeted and report back!

Thanks, Hannah

hannah somers <somers.hj@gmail.com>

Jul 27 (5 days ago)

to Denise

Hi Denise!

Happy Friday!! Today the Code Commission decided not to move forward with creating a website for the time being. If this changes I will of course let you know! In the meantime, I am going to put your price quote and contact information in a report that I am writing up for the Code Commission so that they can contact you in the future if they change their minds or just need a website at any point.

Thank you so much for your patience and help. I really appreciate it! Now off to have that red rooster for you:)

Denise C. Ajimine

Jul 27 (5 days
ago)

to me

Alii Hannah,

Thank you! No worries – I look forward to hearing back from them in the future. Do you mind giving me the point of contact there at the commission so I can send them a separate email to establish communications?

Best,

Denise C. Ajimine

Owner, Project Manager

M&D Web Creations

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From: hannah somers [mailto:<u>somers.hj@qmail.com</u>]

Sent: Friday, July 27, 2018 4:45 PM

Appendix J – Macro used with Microsoft Word to replace incorrect characters

Public Sub BatchReplaceAll()

Dim FirstLoop As Boolean Dim myFile As String Dim PathToUse As String Dim myDoc As Document Dim Response As Long

PathToUse = ActiveDocument.Path & "/"

'Error handler to handle error generated whenever 'the FindReplace dialog is closed

On Error Resume Next

'Close all open documents before beginning

Documents.Close SaveChanges:=wdPromptToSaveChanges

'Boolean expression to test whether first loop 'This is used so that the FindReplace dialog will 'only be displayed for the first document

FirstLoop = True

'Set the directory and type of file to batch process

myFile = Dir\$(PathToUse & "*.doc")

While myFile <> ""

'Open document

Set myDoc = Documents.Open(PathToUse & myFile)

If FirstLoop Then

'Display dialog on first loop only

Dialogs(wdDialogEditReplace).Show

FirstLoop = False

Response = MsgBox("Do you want to process " & _ "the rest of the files in this folder", vbYesNo)

If Response = vbNo Then Exit Sub

Else

```
'On subsequent loops (files), a ReplaceAll is 'executed with the original settings and without 'displaying the dialog box again
```

```
With Dialogs(wdDialogEditReplace)
.ReplaceAll = 1
.Execute
End With
```

End If

'Close the modified document after saving changes

myDoc.Close SaveChanges:=wdSaveChanges

'Next file in folder

myFile = Dir\$()

Wend

End Sub

Appendix K – Instructions on character replacement for PALAU Office staff

Formatting Documents Converted from .wpd (WordPerfect) to .doc or .docx (Microsoft Word)

Every document should be reviewed individually to ensure accuracy with characters, formatting, and spacing.

If you notice strange characters in a document that has been converted from .wpd (Word Perfect) to .doc (Microsoft Word), you will need to replace the strange characters with the appropriate ones. Below is a list of character replacements that I've used the most throughout this process.

What the symbols is in Word (after converting the document)	What the symbol SHOULD BE
ζ	\perp
=	,
A	" (begin quote)
@	" (end quote)
1	§ (alt0167)
>	,
Y	•••
7	(r)
8	(c)
В	-
Ø (alt0216)	"" (begin or end quote)

You can easily do this in Microsoft Word using the "Find and Replace" function BUT if you attempt to use "Find and Replace" with incorrect characters that are also normal letters or numbers (highlighted above), it will replace every normal symbol with a new symbol – which we don't want. In that case, it will need to be done individually.

Be sure to consider the order in which you do this, and which symbols already exist in the document. For example, if the document has the 'symbol in correct places (ex: the president's staff said...) AND in incorrect places '213 (should be § 213), you do not want to turn all of the correct symbols into the wrong symbol.

Also pay attention to font changes, spacing, and alignment. When in doubt, compare to the original hard copy (or .wpd) version of the document.

Appendix L – Contact information

Relevant Contact Information for the Code Commission and the Law Search CD Project

Hannah Somers

Student Consultant Phone (US) +1 412-216-9643 Phone (Palau) 779-3251 Email: somers.hj@gmail.com

dtSearch

www.dtsearch.com

Main Contact: Elizabeth Thede, Director of Sales, elizt@dtsearch.com, 301-263-9335

<u>Technical Support Contact</u>: David Maggin, <u>davidm@dtsearch.com</u> <u>Secondary Contact</u>: Kate Tretter, <u>ktretter@dtsearch.com</u>, 301-263-0781

PacLII

Main Contact: Kym Frericks, Managing Editor, Kym.Freriks@vanuatu.usp.ac.fj

Fastcase

www.fastcase.com

Main Contact: Karli Hannan, Director of Sales & Customer Experience, khannah@fastcase.com,

202-999-4758

<u>Secondary Contact</u>: Nina Jack, Director of Product, <u>Christina.jack@fastcase.com</u> <u>Bar Association Contact</u>: Joe Patz, Alliances Manager, <u>ipatz@fastcase.com</u>

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Computers Plus

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Palau Wifi

488-3278