# **OUTWIKI** Project Brief

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# 1. Background

"... The trouble is, our keep-writing-new-stuff-and-never-turn-anything-off approach is catching up with us, and this server is running a lot of legacy stuff. .."

The Library has a history of introducing new software without retiring older / legacy software. This approach has created a large work overhead particularly for BSS. Inherent with this approach has been the monetary,cost of maintaining older infrastructure and licenses. Changes within BSS have brought this to a head, where one of the main drivers for this project is to result in reducing the pressure that BSS find themselves in.

IT Branch Head's considered Legacy Apps in regards to managing the IT environment particularly the challenge of: introducing new applications vs. maintaining/retiring the old

The issue of legacy apps in being considered because of impacts on the IT operational plan

# 2. Project Definition

# 2.1. Project Objectives

- The report generated is to feed into the planning for the IT Architecture and IT Operational Plan.
- · Identify procedure for retiring apps.
- · Identify "turned off" apps so that they can actually be turned off.

# 2.2. Project Scope

- The application list provided by for the production server Shaw.
- It is possible to add exceptions to the scope but these will be addressed in priority and only if resources are available.

### 2.3. Exclusions

These applications will not be considered by this project, but will be removed by X date

- LA
- Kinetica
- NLA Harvester
- PA
- MA
- Trove
- Australia Dancing
- ALG

• ILRS

# 2.4. Outline project deliverables

- A single report, this report will provide recommendations for action regarding the apps listed.
- An application list identifying selected criteria to inform the recommendations in the report.
- A procedure to manage the retirement of app including what to do with data and code.

### 2.5. Constraints

N/A

### 2.6. Interfaces

N/A

### 2.7. Approach

- 1 Hour weekly meetings on Mondays with IT Management.
- Meetings with each branch to gather more information regarding the listed applications.
- Informal meetings with staff identified as the knowledge gatekeepers.
- · Contact relevant business areas for further information and feedback regarding usage and decommission options.

### 2.8. Outline Business Case

N/A

# 2.9. Project Tolerances

The project commences on Monday 8 August with a duration of 4 weeks. The completion date is 16 September. A duration of 1 week is allowed as an accepted tolerance.

### 2.10. Quality

### 2.10.1. Customer's quality expectations

N/A

### 2.10.2. Acceptance criteria

- Application list report with recommendations
- · Decommission procedure
- · Proposal for next steps

### 2.11. Risks

being drawn into Trove work during the project duration

# 2.12. Initiation Stage Plan

N/A



- Applications to Migrate
- Applications to Decommission
- · Application on which no work is required
- Applications to be Replaced
- · Applications That Don't Exist Anymore

#### **Terminology Dictionary:**

Civilise

Means to automate the build system of the application.

Migrate to Jetty

Means the application needs to be deployed onto the Jetty web container using the jetty control infrastructure developed by 4

Guide

Some of these tasks require further information and/or action to complete.

indicates outstanding questions need to be answered, or further communication with stakeholders is needed before the tasks can be completed

# Applications to Migrate

Name	Recommendation		Status	Branch	Business Owner	Responsible
Admin			Moved to SVN (/admin) on 11/02/2011. Ready in dev - 13 February Next:  1. Have requests processed through main web server 2. Have business test and approve 3. Check logs are working 4. Check reporting is working	CAB (	=	
Australian Libraries	Civilise		Moved to SVN (/ALG) on 15/12/2011 Ready - 10 January 2012.	CAB		
Gateway (ALG)	Migrate to Jetty.		Next:  1. Have static pages redirected to Jetty Test  2. Have business test and approve  3. What about Admin application?  4. Check logs are working  5. Are there any reports that need to know where this application is?  6. Check with BSS regarding CRON, URL re-writing, stats as per checklist.			
Contribute publishing service & SOAP service	The page Contribute publishing service & amp; SOAP service does not exist.			WPB		
Digital resolver services - doview,	Decommission piview	0	Migrated - see http://ourweb.nla.gov.au/apps/jira/browse/RFC-1603	CIB		
cdview, msview,	Civilise msview					
piview, nlaredirect	Migrate to Jetty					
GovPubs - the Australian	Civilise.			CAB		
Government Publications	Migrate to Jetty.					

ILRS	Civilise  Migrate to Jetty		Moved to SVN 2011 READY - 10 January 2012.  Mavenised and Jettified. Now working on protecting application from cross-scripting vulnerablity. The view technology used in this application is particularily vulnerable and the only solution I have found is to protect each page that accepts input with its own customised Javascript. Also HtmlEncoded returned data. Seems to work now.  Liaising with Web publishing as they are moving static content to Drupal. Note also the logs are still an issue.  Test is now running on Jetty. Code is in SVN. Still to do: logs, move CVS code, check stats work. (PS20111215)  Next:  1. Have business test and approve TEST version (disentangle from Web Publishing project as they seem unlikely to be ready	CAB
	. **		in time) 2. Check logs are working 3. Are there any reports or other applications that need to know where this application is? 4. Check with BSS regarding CRON, URL re-writing, stats as per checklist.	
ISMN Admin	Civilise			CIB
	Migrate to Jetty			
Nutch - Ourweb Search	Migrate.			WPB
OAlcat	Civilise			CIB
	Migrate to Jetty.			
Oral History - Audio Delivery	Already civilised.	3	migrated - see	CIB
System	Migrate to Jetty.  Does not use any database.			
Oral History - OH Summary	Already civilised.	5	Migrated - see	CIB
	Migrate to Jetty.		Migrated to Oracle 9 - see	
Orbeon forms		Ö	Migrated	WPB
and Enigma	Migrate.  Web publishing currently investigating a replacement option but probably won't be ready by the end of the financial year.			
Pandas - Prod and Training	Migrate		In progress  The progress are the GUI. Only the backend to be done. Will be migrated just before the Shaw is turned off.	BSS
People Australia OAI	Migrated.  No further work required.	3	Migrated - see f	САВ
RDC (Reporting Data Collector)	Migrate. Involves the entire RDC		Needs to be Mavenised - so it can be built more easily - and then deployed.  Documentation and dependencies need to be stated somewhere. There are 4 apps that seem to interact with one specthar. Also peed to desument how do you establish that it's	САВ

	^	ınfrastructure.		anomer. Also need to document now do you establish that its working properly - there is no GUI.		
•	SOA - Active Directory Service	Very important Perl service that requires migration.		Will be migrated just before the Shaw is turned off.	BSS	•
	SOA - Copyrightstatus Service	Already civilised. Migrate to Jetty	0	Migrated -	CIB	
	SOA - DCMDB Service	Already civilised.  Migrate to Jetty	0	Migrated -	CIB	
	SOA - DCM Ingest Service	Already civilised.  Migrate to Jetty			CIB	
	SOA - DIR Service	No work is required.  NOTE: This service is no longer used BUT still referenced in the DCM codebase.			CIB	
	SOA - Libraries Australia OAI Service	Civilised.  Migrate to Jetty.  Uses the Libraries  Australia TeraText database.	0	Migrated -	CAB	
·	SOA - Music Australia OAI Service	Civilised.  Migrate to Jetty.  Uses the Music Australia TeraText database.	0	Migrated - 1562	САВ	
	SOA - Pandora authorise service	Migrate		Will be migrated just before the Shaw is turned off.  will migrate along with the Pandas Prod and Training.	BSS	
	SOA - Thesaurus and Location (PHP) Services	Migrate to new machine and test. Used by E- Resources.		May not be required when the new e-resources drupal module is released.	WPB	
	SRW	Already civilised. Unable to deploy on Jetty as it has a Tomcat dependency.		Need to deploy to test, test then move to prod	САВ	
	Staff Directory - Internal	Won't need to migrated as it's being replaced.		Will be turned off as soon as Stafftime and Temporary Employment Register are no longe rusing it.	CIB	
	Stafftime	currently civilising it.		In progress  Needs to be amended so that it uses Active Directory instead of Staff Directory.	CIB	

Migrate Stafftime 2 to Jetty.

Not sure about Stafftime (original)

Temporary Employment Register

Civilise

In progress

CIB

Needs to be amended so that it uses Active Directory instead

Migrate to Jetty of Staff Directory.

# **Applications to Decommission**

Name	Recommendation		Status	Branch	Responsible
Australian Historic	Decommision.			CAB	
Records Register (AHRR)	From "My suggestion has been that we should see if we can output the various entries as static pages, archive the whole lot in PANDORA with clear signage to say that it is out of date and we can no longer assist				
	researchers to track down owners of the material."				
	Export data into some format that can accessed.				
Australian Journals	Decommision.			CAB	=
Onliņe (AJOL)	Data will need to be exported into a CSV file to be trimmed.				
Australian Periodical	Decommission.		Needs ingest of content in NCM.	CIB	
Publications 1840-1846	Investigation into importing the content into Trove is underway.				
	There are two applications. Only the public facing one needs to be migrated. Ensure that static tiff files and pdf's are migrated.				
	Another application mentioned by called FergusonSearch can't be tracked down.				
Copies Direct - CP	Decommission.			CIB	
Search	Business area wants to collect some stats before the application is decommissioned.				
	Please confer with before decommission.				
E-Resources	There are plans to decommission. Chat to for more information.		has developed a drupal replacement which is currently with the business area for testing.	WPB	
HERRD - Health	Decommission.	0	Decommissioned	BSS	
Education Rural Resources Database	It's the only working example of this technology. One option is to zip it all up with a readme and archive in the IT archive suggested by				
Indexes and Databases (ixdb)	Decommission dependent on removing a link from E-Resources.				
<b>3</b>	The intention is to use enhanced catalogue records to link to e-resources.				
	It appears that the new E-Resources is using a file from this application.				

	IZin-Ai					
Ę	Kinetica	Decommision.  No longer used. Replaced by LA Admin.				
	LAPS Directory	Decommission.			CAB	
	©	they need to be consulted about the fate of the app. She is presenting a paper to CDNLAO late May and will raise the issue of LAP then."				
	Mapsdir - Map Collections in Australia	has agreed to decommission. A dump is required of the data that is to be sent to			CAB	=
	Mura Gadi	Decommission.  Negotiate with Business Area to put the content into another place like the catalogue or trove.  "I dont think we can decommission without a thorough review and a resourcing solution to making the high quality content available through other means."			CAB	
	Nutch - NLAweb Search	Do nothing as it is to be replaced by the Drupal search by the end of the calendar year.				
	Oral History - Australia's Oral History Directory	Decommission.			CAB	
	PADI	Decommissioned.	0	Decommissioned		
		Can be removed once a redirect link to the relevant title entry page on PANDORA, at				
	Performance Review System - PRS	Turn it off as all the data has been migrated when the application was replaced many years ago.	0	Decommissioned	CIB	
	RAAM Search	Decommissioned. It redirects to Trove.	0	Decommissioned	CAB/BSS	2
	Cearch	There is also an intermediate redirect page				
		Refer to email notes for more information.				
	SOA - CBD Service	thinks this is only a bunch of redirects now and is handled by Get A Library Card Application.			BSS	
		Will be migrated when the Apache SOA webserver is migrated.				
	SOA - Events	Decommission.				
		Has been replaced by the new WhatsOn.				
	Surveys - Internal and External	Ready for Decommission.	0	Decommissioned	CIB	
	The Argus Index	Decommission.			CAB	
	<b>@</b>	Usage extremely low.				

Data to be imported into Trove.

Whatson (External)

Decommission the old java app.

AKA Events Web Publishing currently looking to replace the PHP app with Drupal pages.

Currently developing WPB a drupal replacement.



# Application on which no work is required

Name	Recommendation	Assigned to
Copies Direct+	No work required.	
	The old application is no longer used.	
	Code does not need to be migrated.	
	The application was redeveloped in Ruby in 2010/2011 and has been migrated to MySQL.	
	NOTE: Not sure what to do about old Oracle database.	
Jira	Has been migrated already.	
NLA Harvester	Already civilised.	
	Already migrated to Jetty.	
	Upgrade to Oracle 11.	
People Australia Data Admin	Already migrated.	
	No work required.	
SOA - Identity Service	No work required.	
	Already migrated to Jetty in July 2011.	
SOA - Rights Service	No work required.	
_	Already decommissioned. Replaced by Sprightly in 2009.	
	NOTE: This service is no longer used BUT still referenced in the DCM codebase.	
Staff Directory - External	Decommissioned.	

# **Applications to be Replaced**

The following applications are scheduled to be replaced by July 2012:

- Australia Dancing
- Music Australia
- Picture Australia (includes MPS Harvester)

# **Applications That Don't Exist Anymore**

- Nutch PADI search
- · Relais backend



# Recommendation

Decommission.
Usage extremely low.
Data to be imported into Trove.

# **Details**

Name	Url	Public / Internal	Usage	Branding	IT Branch	Business Owner	Documentation	Technology Platform	Civilised	Version Control	Shaw Location
The Argus ( index		External	Very low,	N/A	CIB, Library OPerations	Manuscripts	?	NLA Framework, Oracle 9	No	Yes,	

# Note



- Overview
- Summary
- · Project Deliverables
- Timeframe
- Time Estimate
- Recommendations

#### **Overview**

The Legacy Application Review Project was undertaken as a response to BSS's need to migrate all production applications from the server Shaw. The scope of the applications to review were limited to those actually residing on Shaw. The original list were identified in an email from (Refer: Available Application Lists). The final roundup was around 78 applications that were identified as running on shaw.

Early on in the project the database migration of Oracle 9 to 11 and Oracle to MySQL was identified as another key issue facing IT. After initial investigations it was deemed to be out of scope for this project.

The process for each application involved created a simple profile that included components, source control location, location on shaw, documentation etc. and initiating discussions with the Business Owner for the possibility of decommission. This detective work uncovered many more applications than originally listed and also revealed that some of the applications had already been decommissioned. Initial discussions with the Business Owners also proved fruitful as agreement was reached to decommission some applications like PADI and Australian Journals Online (AJOL).

Overall most Business Owners were quite receptive to many of the "old" applications being decommissioned. A key point for them has been about the data. In many instances options for the data need to be investigated and agreed to. Those investigations fell outside the scope of this project, but where it seemed appropriate, data questions where directed towards the IT experts of the "new" applications.

One of the key points to be made to the Business Owner's is the low of usage of the application. Main usage of these applications is monitored via AWStats listed on After many discussions with and and regarding the stats interpretations, it was universally acknowledged that most of the old applications have little to no usage. Most are "hit" by non-human search engines. According to white pageviews that Google Analytics records on average around 30% of the pageviews that AWStats records. So if you want an accurate indication of 'real' pageviews, take 30% of what AwStats is giving you and you start to get in the ballpark." The table below uses this metric on some of the true legacy applications. But even this metric is often far too generous when a deeper look is taken. For example in Gov Pubs, the 3rd most usage comes from a pc at the NLA with the other users in the top 5 being search robots. This means that "real" usage is much lower.

Application	The Hagon Metric
Gov Pubs	376
Maps Directory	65
Oral History Directory	99
Mura Gadi	156

Part of the detective work involved tracking down all the Available Application Lists held by IT. An interesting point to note that there isn't a single definitive list of applications. Each of the lists had a "bent". For example Bruce's List only focused on public facing applications and Narelle's List did not list any of the key SOA services that are shared. More of an issue were the lists maintained by the IT branches. They were often incomplete or completely out of date or did not link to any relevant documentation that exists

Weekly Meetings were also held with IT Management to make decisions and discuss the status of the project.

### **Summary**

- Shaw will be turned off at the end of June 2012.
- 78 applications/services were identified as running on shaw that will be migrated or decommissioned. The Application Report divided those applications into 55 key application groups.
- Total time required for decommission and migration activities is estimated at more than 115 days.
- 4 Key recommendations were made.

1 of 4 15/06/2012 2:16 Pl

# **Project Deliverables**

Include the following documents:

Project Report The overarching document outlining the findings, decisions and recommendations of the

Legacy Application Review Project.

Application Report Identified 78 applications placing them into 55 application groups. Each group includes a

Recommendation, Summary of technical information and email correspondence.

Each application group is listed as either:

· Applications to Migrate

• Applications to Decommission

· Applications on which no work is required

· Applications That Don't Exist Anymore

· Applications to be Replaced

Checklist for Decommissioning Applications from Shaw

This document identifies key steps needed to be performed during the decommission process.

from Shaw

Checklist for migrating applications This document identifies keys steps needed to be performed to move the application from Shaw onto a new production server.

#### **Timeframe**

BSS has agreed that SHAW will be turned off at the end of June 2012. The implication is that all applications must either be decommissioned or migrated by this date.

### **Time Estimate**

The breakdown per application are listed in the Application Report.

- The Checklist for migrating applications from Shaw contains the rough formula that was used per application.
- · The Checklist for Decommissioning Applications from Shaw contains more information on the time estimate formula.

Action	Total Days	Application Groups
Migration	62.5	21
Decommission	52	20

NOTE: Application groups often contain more than one application, for example Digital Resolver Services is a single group consisting of 4 applications to migrate and 1 to decommission.

NOTE: Applications like Mura Gadi, Australian Periodicals Online, Argus Index, Gov Pubs all require the data to be migrated somewhere. That somewhere may be Trove or NCM. Estimates for that work is not included.

#### Recommendations

Database Migration Project	A project be initiated to scope the issues surrounding the migration of applications from Oracle 9 to 11 including a review of the possibility of migration applications from Oracle to MySQL. Additionally a few key applications should be identified and be migrated to Oracle 11 as a "test".
Improve Application Documentation	Each IT Branch perform a review of their wiki pages referring to "Applications We Maintain" and improve the quality, accuracy and detail of those pages. The review should determine the minimum information to be recorded for each application.
Application Migration and Decommission Project Manager	A new project needs to be initiated to ensure that the identified applications are migrated and decommissioned within the timeframe. This project requires a project manager to liaise with IT Branches for resourcing, communicate/negotiate with Business Owners and be a single contact point. Without someone overseeing this process it is not likely that the migration/decommission work

will be completed by the end of June 2012.

Onus on business owners to make case for application

For all applications that IT has identified for decommission, the onus should be placed on business owners to present a case to either keep the application or for the data to be migrated into another application. This is to prevent situations where no decisions are made by the business area or the case to keep the application is very weak.

From: Sent:

Friday, 23 December 2011 2:58 PM

To:

Subject:

FW: IT review of legacy applications

DATE: 21/18521

For info and file please.



Accountability and Reform Branch National Library of Australia Phone

Fax Email

Sent: Thursday, 8 September 2011 11:29 AM

**Subject:** RE: IT review of legacy applications

Thanks Thanks

Accountability and Reform Branch National Library of Australia

Phone: Fax Email

From:

Sent: Thursday, 8 September 2011 9:50 AM

To:

Subject: Re: IT review of legacy applications

Thank you for the info.

We are providing a document for discussion about decommissioning of apps to business areas and CMG. At that point I think it is the most appropriate time to advise of what apps will be decommissioned - some may well be migrated and therefore

I will ensure that the process is followed, and will provide you a list of the apps that may be affected when the report is completed.

Regards

Assistant Director General IT (Acting) National Library of Australia

Prom: Date: Wed, 7 Sep 2011 09:49:24 +1000 To:

Cc:

Subject: FW: IT review of legacy applications

Hi To

has forwarded the email below re IT Legacy Systems to me. This is just a reminder (in your capacity as acting that the Recordkeepingpolicy requires IT staff to liaise with RMU prior to systems being decommissioned so any records issues are considered and addressed. Anextract of the policy follows:

IT support staff, including system administrators are responsible for:

- maintaining the technology used to support systems that capture and keep records electronically ensuring that all documents are reliable, available and accessible to staff when required.
- liaising with the Records Management Unit when new systems are to be developed/implemented or old systems are to be decommissioned to ensure that relevant records are retained appropriately.

Would you like me to ask to discuss this with now or would you prefer for us to wait until the decisions on decommissioning are closer?

Thanks and regards,



Accountability and Reform Branch National Library of Australia

Fax Email

From:

Sent: Tuesday, 6 September 2011 1:25 PM

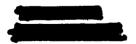
To:

Subject: FW: IT review of legacy applications

FYI



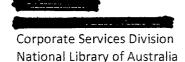
Corporate Services Division National Library of Australia

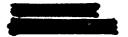


From:

Sent: Thursday, 25 August 2011 10:00 AM

To: d **Subject:** FW: IT review of legacy applications





From:

Sent: Thursday, 25 August 2011 8:54 AM

**Subject:** IT review of legacy applications

**Folks** 

Here is some background to the comments I made in CMG this week.

is undertaking a review of legacy applications running on our IT infrastructure. The report of this review, due mid September, will feed into the shaping of the IT operational plan for this year. The current list of applications under review is available at

The Library has a history of introducing new software without retiring older / legacy software. From time to time the Library has tried to decommission a few applications, but apart from meetings and emails, little actual decommissioning has happened. This approach has meant that older applications are simply ignored, rarely updated and not maintained. In addition it has created a cost and work overhead particularly for the IT Services Branch through the maintenance of old infrastructure and licenses. This has come to a head as changes in system software and server hardware mean that IT can no longer keep some legacy system environments operating.

Support for the current production application server expires at the end of the financial year and the applications running on this machine are the scope of this review. More than 50 applications and services have been identified asrunning on this machine.

Broadly speaking these applications can be divided into three categories:

- 1. Applications developed or maintained over the last few years. They are widely used. Relatively easy to migrate to the new server.
- 2. Applications that have been identified for decommissioning this year, for example, Picture Australia, Australia Dancing and Music Australia. This work is in progress and must be completed by June.
- 3. Applications developed a LONG time ago. Many are more than ten years old. The most important point is that most (if not all) of these applications have extremely low usage. Many have no users and are merely accessed by search engines. An example of the low usage of some of these applications is the case of AHRR and Mura Gadi which were accidentally shutdown during routine system maintenance earlier this year - no-one noticed/reported a problem until one month later. The majority have not been updated in years. They use old technology like BAT and TeraText. They will be expensive and difficult to migrate to the new production server.

Business areas are being consulted to assess the role and future of the effected services and to identify options for their decommissioning, migration or redevelopment. Some of the older applications which will need to be decommissioned may contain important or valuable data. Part of the review process is to identify options where to put this data. For example, based on consultation with business owners, PADI will be harvested into Pandora, The Argus Index could potentially be imported Trove, AJOL will have the data exported into a CSV file to be trimmed, Mura Gadi could potentially be imported into Trove or have catalogue records created, active Surveys will point to Ref Tracker, CP Search will either have the data exported into a spreadsheet or will have some stats generated.

Regards

--

Information Technology National Library of Australia

Phore Fax Web www.nla.gov.au

From:

Sent:

Wednesday, 28 March 2012 1:18 PM

To:

Cc: Subject:

Re: A few more Argus questions from



The server decommissioning effects approximately 78 applications/services.

Examples of services that will or have been decommissioned (the content of some will be available through Trove, in other cases the content is being archived in Pandora and available with reduced functionality, and in some cases the content will be archived and no-longer available online) include:

Australia Dancing

Music Australia

Picture Australia

Australian Historic Records Register (AHRR)

Australian Journals Online (AJOL)

Australian Periodical Publications 1840-1846

HERRD - Health Education Rural Resources Database

Oral History - Australia's Oral History Directory

**RAAM** 

Examples of services that are being migrated:

Australian Libraries Gateway (ALG)

GovPubs - the Australian Government Publications Guide

**ILRS** 

**Pandas** 



Information Technology

National Library of Australia Web www.nla.gov.au

On 28/03/2012, at 10:57 AM,

wrote:



I met with yesterday re Argus and he is reviewing the documentation we have.

One question from in regard to the decommissioning of the server was 'is anything else on that server'? I said that I understood that we were decommissioning or archiving all services on the server, but I would check with you.

Was I right? What else 'lives' on the server? Some of our smaller things we are putting to bed, or is this the server for Picture Australia and/or Music Australia?

### Thanks



Resource Sharing | National Library of Australia | Canberra ACT 2600 | t: | www.nla.gov.au