

# Doing DSpace Differently

**Kim Shepherd & Stuart Lewis**

Digital Development Team

The University of Auckland Library

# Introduction

- Two talks
  - Creative Configuration with Minimal Coding
  - Breaking out of DSpace

# Creative Configuration with Minimal Coding

# Archive of Māori & Pacific Music





# Archive of Māori & Pacific Music



Custodians of cultural content

Mixed levels of access

~ 45,000 mp3s

~ 9,000 physical media objects

# Archive of Māori & Pacific Music

**Stream audio & video**

**Navigate relationships:**

**Physical Media**

**Performances**

**Performers**

**Affiliations**







# MP3

# AUDIO





# ItemAdaptor

## isPartOf reference in DRI ...

```
<referenceSet rend="relations" type="detailList">
```

```
<head>This item is part of the following resource(s)</head>
```

```
<reference repositoryID="id" type="DSpace Collection"  
            url="/metadata/handle/id/55797/mets.xml"/>
```

```
<reference repositoryID="id" type="DSpace Item"  
            url="/metadata/handle/123456789/12345/mets.xml"/>
```

```
</referenceSet>
```

# Waiata tangi



Performance Item (Song)

## First lines from recording:

E pa to hau he wini raro  
He homai aroha

Location: New Zealand

Accession Number: 72/214.11

## Notes:

*Ancient Maori Waiata; McL 58 NM 71*

## Files in this item

Files	Size	Format	View
-------	------	--------	------

There are no files associated with this item.

## This item is part of the following resource(s)

- [Performance Items](#)
- [72/214: 72/214 WAIATA 3 NZBC](#)  
MURU, Selwyn ( NZBC )

...and the template renders it

# Treat people like objects

## This item is performed by the following people

- [Kim SHEPHERD](#) ( 1983 - )  
Affiliations: University of Auckland  
Also known as: K. Michael SHEPHERD; K M Shepherd
- [Nigel CHAMPION](#)  
Affiliations: University of Auckland  
Also known as: N Champion



# Treat people like objects

## This item is performed by the following people

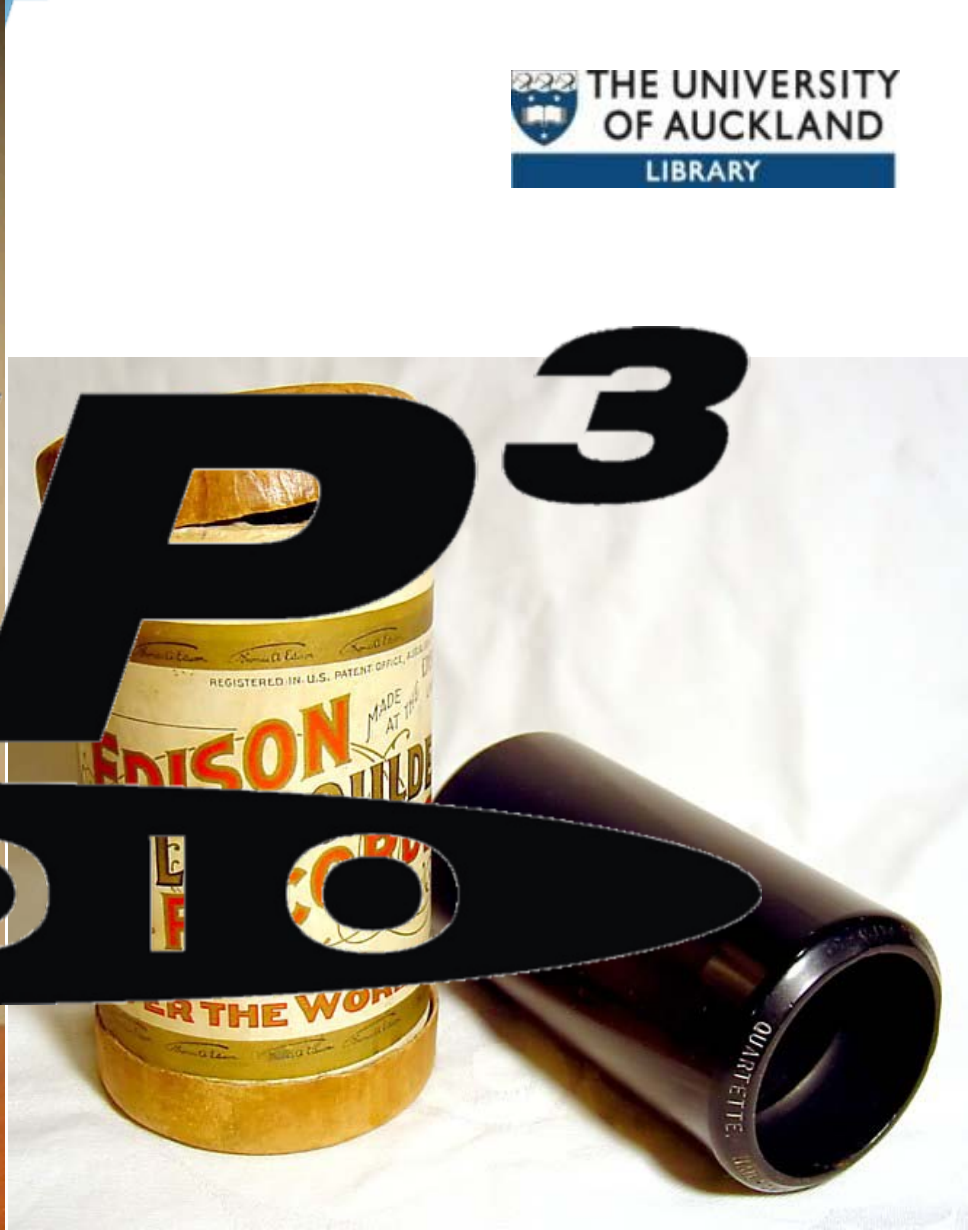
- [Kim SHEPHERD](#) ( 1983 - )  
Affiliations: University of Auckland  
Also known as: K. Michael SHEPHERD; K M Shepherd
- [Nigel CHAMPION](#)  
Affiliations: University of Auckland  
Also known as: N Champion

## Disclaimer

Don't take moral advice from  
software developers

# MP3

# AUDIO



72/214 WAIATA 3 NZBC



Media (Reel)

Accession Number: 72/214

#### Files in this item

Files	Size	Format	View
-------	------	--------	------

There are no files associated with this item.

#### This item contains the following resource(s)

[- Hide](#)

- [72/214.01 : Introduction](#)
- [72/214.02 : Waiata tangi](#)
- [72/214.03 : Apakura](#)
- [72/214.04 : Waiata whaiaaipo](#)
- [72/214.05 : Apakura](#)
- [72/214.06 : Waiata aroha](#)
- [72/214.07 : Paatere whakamanamana](#)
- [72/214.08 : Waiata tangi](#)
- [72/214.09 : Paatere - pookeka](#)
- [72/214.10 : Oriori](#)
- [72/214.11 : Waiata tangi](#)
- [72/214.12 : Waiata apakura](#)
- [72/214.13 : Waiata tangi](#)
- [72/214.14 : Karangatanga](#)
- [72/214.15 : Waiata whaiaaipo](#)
- [72/214.16 : Waiata tangi. Whakapapa](#)
- [72/214.17 : Paatere](#)

# AJAX + Discovery

## No Java!

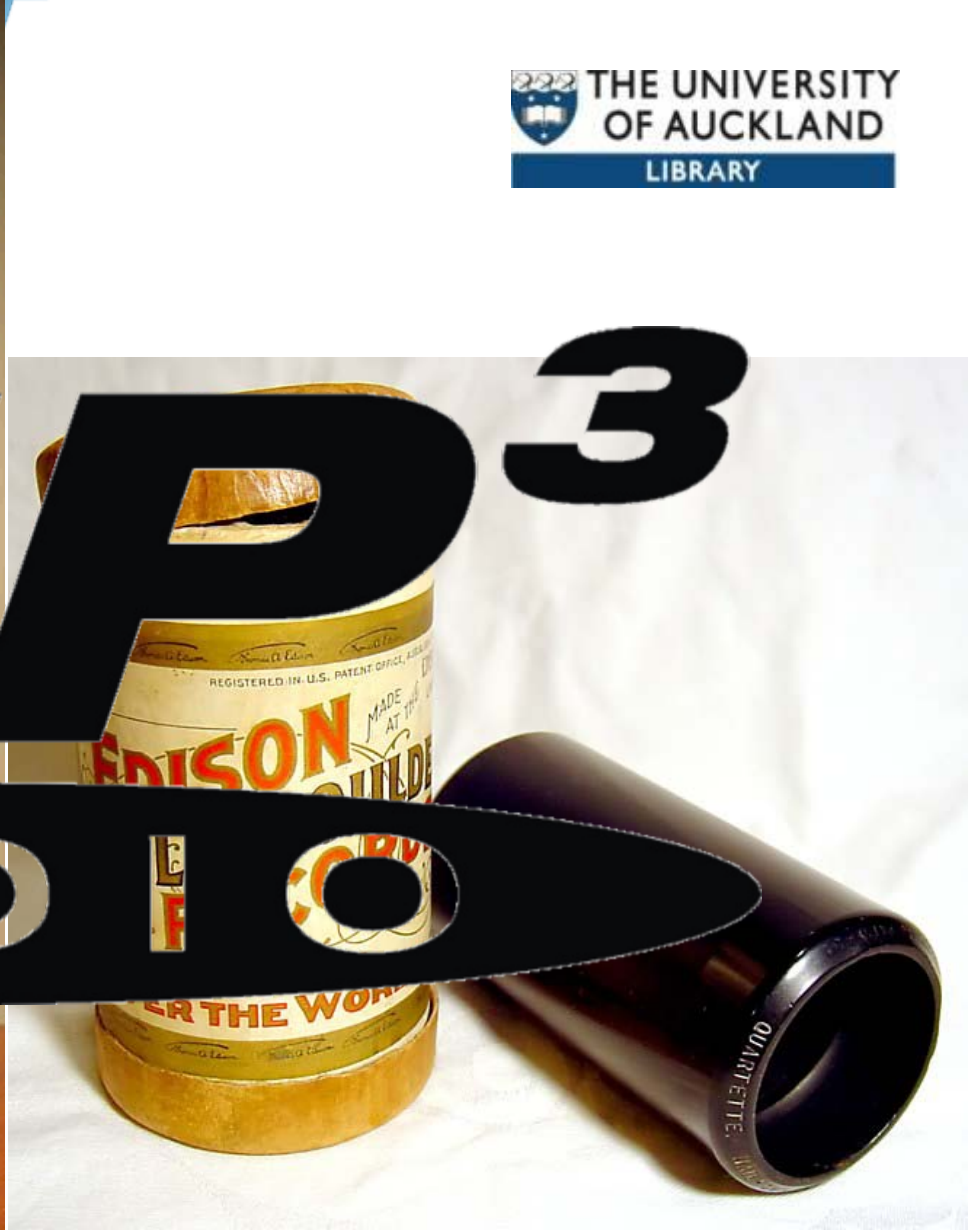
## Search other Repositories

## Solr is easy



# MP3

# AUDIO



red 5

***MIP***<sup>3</sup>

**AUDIO**



**Open Source Java project**

**RTMP (Flash) streaming**

**Wire in services with Spring**





**DSpaceStreamService**

**Doesn't touch assetstore**

**Open Access only**

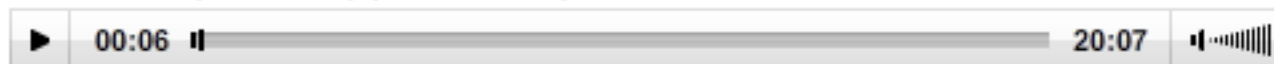
Search Results



Now showing items 1-6 of 6

[81/034.01: Competition performance](#)

Taniwharau (Waikato A) (08 Feb 1981)



[VD0018.01: Competition performance](#)

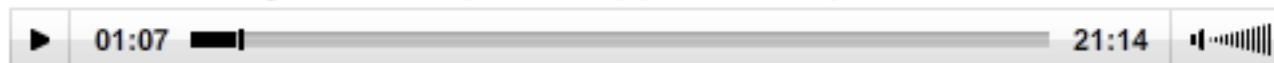
Taniwharau (Waikato A) (08 Feb 1981)

[VD0018.02: Competition performance](#)

Te Whare Wananga o Waikato (Waikato B) (08 Feb 1981)

[81/035.01: Competition performance](#)

Te Whare Wananga o Waikato (Waikato B) (08 Feb 1981)



# WARNING: Live demonstration

```

0x00000005,0x5016A950,0x00000001,0x00000005);
HANDLED*** Address 0016a950 has base at 00100000
.6.2 irq1:if SYSVER 0x10000565
Name Dll Base DateStmp - Name
ntoskrnl.exe 80010000 33247f88 al.dll
atapi.sys 80007000 33248040 SIPTORT.
Disk.sys 801db000 336015a0 A882.SY
Ntfs.sys 80237000 344eeb40 wvid.sys
NTice.sys f1f48000 31ec6e8d floppy.SY
Cdrom.SYS f228e000 31ec6e9d null.SYS
KSecDD.SYS f2290000 335e... .SYS
win32k.sys fe0e2000 34... dll
Cdfe.SYS fdca2000 3...
nbf.sys fdc35000 ...
netbt.sys f1f68000 ...
afd.sys f2008000 ...
Parport.SYS fdc14000 ...
port.sys f1dd0000 ...
  
```



# What did we learn?



**DRI isn't scary**

**Solr is easy and powerful**

**Secure RTMP streaming is possible  
without modifying Dspace**

**Curators & users want different UIs**



# Breaking out of DSpace

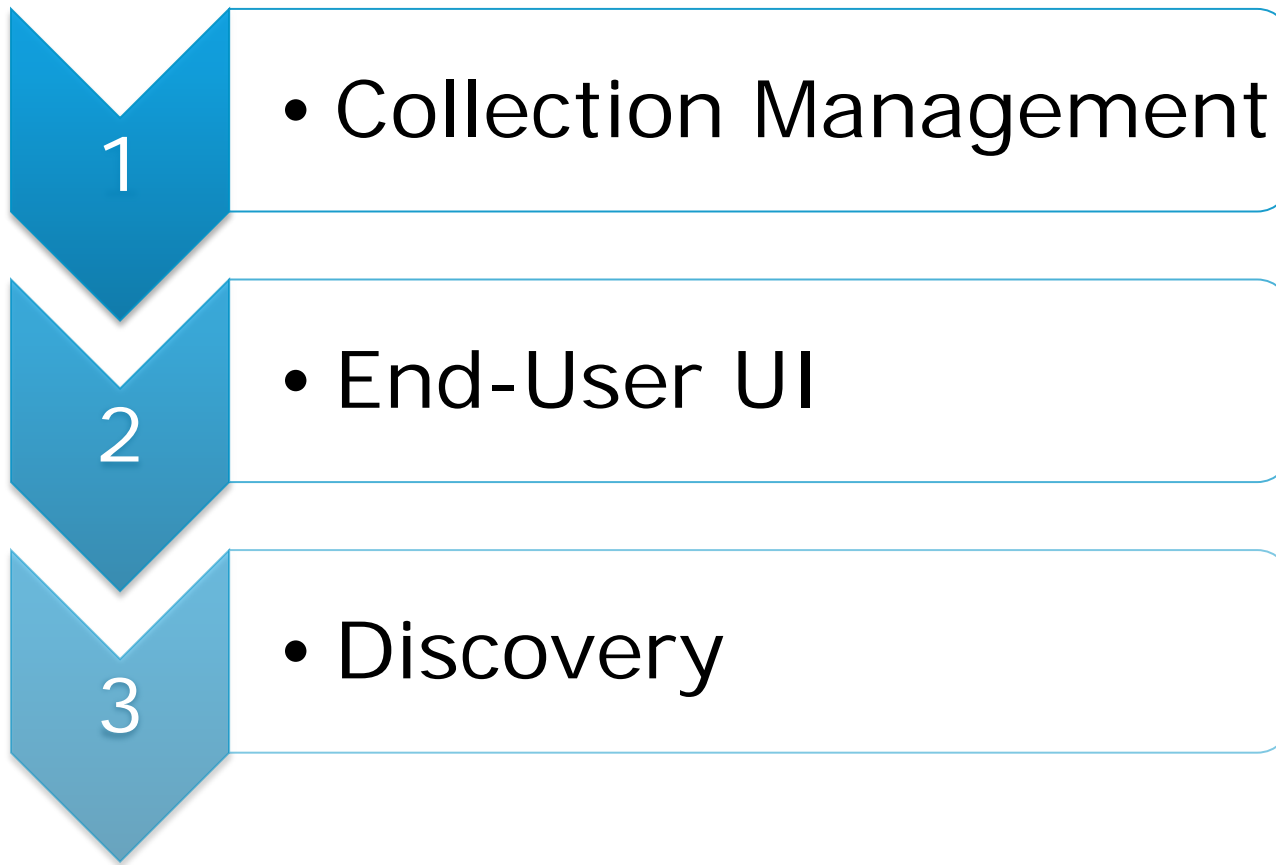
# SuperIndex

- The problem we had to solve
  - Disparate collections, each with different access requirements
  - Managed in different systems
  - Upgrade nightmare
  - No formal links to digital objects
  - Discovery via Primo

# SuperIndex

- The context
  - Large University library
  - 3 experienced DSpace developers
  - Fast delivery required
  - Needs to scale: 300,000 items so far (6 collections)
  - Read-only customisable views
  - Need a 'reproducible product'

# Three levels to the 'product'





# 1) Collection management

- Vanilla DSpace
- Collections
  - Delegated administrators (if required)
- Import
  - Via CSV (less than 1,000 items)
  - Via batch import (more than 1,000 items)

## 2) User interface

- Integrates using the DSpace Discovery solr service
- 'Skylight' user interface
  - Lightweight
  - Developed in less than six weeks
  - PHP MVC
  - Faceted search, simple search, advanced search
  - No fighting with the repository
  - Easy to develop - no admin functions / authZ problems
  - One installation, multiple configuration based on URL
  - Themes

# 3) External discovery

- Lightweight OAI-PMH proxy on top of DSpace's OAI-PMH
  - Rewrites URLs to point back to skylight
  - Makes use of DSpace's sets

# Skylight demo



# Other uses

- Customised user interfaces for specific collections
  - #or11 tweets with MIT Simile timeline widget
- Proxy for other repositories
  - Collections held in DigiTool

# SkylightUI project

- Open source
- <http://skylightui.org/>
- Can sit on top of any solr index

**Any questions?**

# Photo/Image Attributions

- Māori and Pacific Island performers c/- AMPM homepage:  
<http://www.library.auckland.ac.nz/ampm>
- Reel-to-reel tape player © William A. Franklin, CC BY-ND 2.0  
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