

# ActiveSierra

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# Context

# **Sierra database transition**

# Prior work

**PGadmin**

**Shell scripting**

**Cron**

**Ruby on Rails!!!**

# Ruby on rails

**Key components**

# **ActiveRecord and ActiveRecord**

# Examples of how this makes life easier

```
User.first
```

```
User.where(name: 'James')
```

```
User.each do |user|  
  puts user.name  
end
```



# Rails Engines

<http://guides.rubyonrails.org/engines.html>

# ActiveSierra

[https://github.com/uclibs/active\\_sierra](https://github.com/uclibs/active_sierra)

# app/models/bib\_view.rb

```
class BibView < SierraTable
  has_many :varfield_views, foreign_key: 'record_id'
  has_one :bib_record, foreign_key: 'id'
  has_many :item_records, through: :bib_record
  has_many :item_views, through: :item_records
  has_many :order_records, through: :bib_record
  has_many :order_views, through: :order_records
  has_one :record_metadata, foreign_key: 'id'

  self.table_name = 'bib_view'
  self.primary_key = 'id'
end
```

# ActiveSierra calls

```
VarfieldView.last
```

```
VarfieldView id: 108526768, record_id: 450976600050,  
record_type_code: "i", record_num: 5033970,  
varfield_type_code: "m", marc_tag: nil, marc_ind1: " ",  
marc_ind2: " ", occ_num: 0,  
field_content: "Wed Jul 22 2015 08:34PM: IN TRANSIT from ulastud to..."
```

```
BibView.limit(10).each { |b| puts b.title }
```

```
The day in Bohemia or Life among the artists. Being a jeu d'esprit containing much that  
Spinoza now  
The shape of medieval monetary history  
A kick in the head : an everyday guide to poetic forms  
The Liars' Club : a memoir  
Hooray for Amanda & her alligator!  
Accessions list, South Asia  
Multinational enterprises and employment : the Canadian experience  
Origine et préhistoire du langage.  
Trace elements from soil to human
```

# More ActiveSierra calls

```
BibView.limit(5).each do |b|  
  puts b.item_views.each { |i| puts "#{ b.title }\t#{ i.last_checkin_gmt }" }  
end
```

```
The day in Bohemia or Life among the artists. Being a jeu d'esprit containing much that  
Spinoza now 2014-12-05 20:05:25 UTC  
The shape of medieval monetary history 2013-08-19 18:39:25 UTC  
A kick in the head : an everyday guide to poetic forms 2014-02-27 16:49:27 UTC  
The Liars' Club : a memoir 2015-07-01 18:46:25 UTC
```

And to deal with the database timing out...

```
BibView.find_in_batches do |records|  
  records.each do { |r| r.foo }  
end
```

# SQL statement

```
SELECT  "item_view".* FROM "item_view"  
INNER JOIN "item_record"  
    ON "item_view"."id" = "item_record"."record_id"  
INNER JOIN "bib_record_item_record_link"  
    ON "item_record"."record_id" = "bib_record_item_record_link"."item_record_id"  
INNER JOIN "bib_record"  
    ON "bib_record_item_record_link"."bib_record_id" = "bib_record"."record_id"  
WHERE "bib_record"."id" = $1  
ORDER BY "item_view"."id"  
ASC LIMIT 1  [["id", 420907795010]]
```

becomes ...

# ActiveRecord call

```
BibView.find_by_record_num('1000002').item_views.first.barcode
```

# Scripts and Applications

# Script examples

## KBART holdings based print collection analysis

[https://github.com/jamesvanmil/kbart\\_collection\\_analysis](https://github.com/jamesvanmil/kbart_collection_analysis)



# Script examples

## Comprehensive journal order reporting

<https://github.com/jamesvanmil/cereal>

# Script examples

## One-off recipes for quick information from the console

```
require 'active_sierra_models'
require 'clipboard'

## Looking up information about orders:

# Copy your truncated order numbers into a comma delimited list on your clipboard
os = (Clipboard.paste).split(",")

order_objects = os.collect{ |o| OrderView.find_by_record_num(o) }
output = order_objects.collect do |o|
  puts o.record_num
  bib = o.bib_view
  ## Add other fields as needed
  title = bib.title
  puts title
  payment = o.order_record_pays.order(:paid_date_gmt).last.paid_amount unless o.ord
  fund = o.order_record_cmf.fund
  format = o.material_type_code
  status = o.order_status_code
  acq_type = o.acq_type_code
  "#{title}\t#{payment}\t#{fund}\t#{format}\t#{status}\t#{acq_type}"
end
```

# Tricerashopper

Content Services portal developed for acquisitions support. Web application includes expenditure reports, materials request form, and other utilities.

<https://github.com/jamesvanmil/tricerashopper>

# Rake tasks to run reports

Constructed activerecord calls to populate local database

```
def dda_create(x)
  if x.order_view.record_creation_date_gmt > fiscal_year_beginning(Time.now)
    DdaExpenditure.create(
      title: x.order_view.bib_view.title,
      paid: x.paid_amt,
      fund: x.order_view.order_record_cmf.fund,
      paid_date: x.order_view.record_creation_date_gmt
    )
  end
end
```

# Materials Request Form

- Built-in Workflow status with notifications
- MARC record export for brief bib and order loads
- User accounts with roles and authorizations

**Other ideas?**

# Thank you!

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## Questions?

Slide source: <https://github.com/jamesvanmil/ActiveSierra-c4libmw15>