Creating author-level statistics dashboards in the Eprints repository at QUT

Matthew Kerwin  Senior Web Developer
matthew.kerwin@qut.edu.au
Paula Callan  Scholarly Communications Librarian
p.callan@qut.edu.au
QUT at a glance

- 48,500 student enrolments
- 2,600 research students
- 2,000 academics
- $101 million research income
- Refereed publications in 2016
  - 2800 journal articles
  - 500 published conf. papers
  - 400 books & chapters
  - 400 theses
QUT’s repository - QUT ePrints

Launched 2003
- 38,369 open access items
- 6188 items under embargo
- 32,248 metadata only
Statistics
Dashboards

Repository Statistics

Key Figures
- Collection: 77,098 Works
- 56.4% Full-text
- 43.6% Open-access
- Total Usage: 22,461,606 Downloads
- 97.9% External
- Yesterday: 0 Downloads
- 1 Deposits

Reports
- Demographics
  - Downloader Geographic Location
- Usage
  - Downloads
  - Copy Requests
  - Copy Request Approvals
- Most Popular
  - Most Popular Authors
  - Most Popular Works

Author/Creator Statistics
- e.g. Smith, John
  - View

Organisational Unit Statistics
- e.g. Faculty of Health
  - View
Author-level statistics
IRStats

- The old one (*not* IRStats2)
- Dashboards, Reports, Views

**URLs:**
- `/statistics/` → dashboard
- `/statistics/<report>/` → report
- `/statistics/<dashboard>//<set-member>/` → dashboard
- `/statistics/creators/Foth,%20Marcus/`
- `/statistics/creators/Foth,%20Marcus/downloads_by_country/`
Dashboard Config

creators:
  set_id: 'creators_name'
  graph:
    view: 'downloads_by_period'
    chart: 'column'
  metrics:
    - id: 'collection'
      metrics:
        - view: 'Deposits::Count::HTML'
          params:
            eprint_status: 'archive'
        - view: 'Deposits::FullText::HTML_Percentage'
          params:
            open_access: 1
    - id: 'usage'
      metrics:
        - view: 'Downloads::Count::HTML'
        - view: 'ByDomain::IntExtDownloads::HTML_Percentage'
      view:
        - view: 'ByItem::TopItems::HTML_Paginated'
          report: 'most_popular_works_complete'
          params:
            current_period: '-28d'
  view:
    - view: 'ByItem::TopItems::HTML_Paginated'
      report: 'most_popular_works_complete'
      params:
        number_of_rows: 10
  reports:
    - id: 'demographics'
      reports:
        - 'downloads_by_country'
        - 'intextdownloads'
    - id: 'downloads'
      reports:
        - 'downloads_by_period'
        - id: 'most_popular'
          reports:
            - 'most_popular_works_complete'
downloads_by_period:
  graph:
    view: 'downloads_by_period'
    chart: 'column'
    view: 'ByPeriod::Downloads::HTML_Paginated'
  hit_types:
    - 'fulltext'
    - 'official'
  metrics:
    - id: 'downloads'
      metrics:
        - view: 'Downloads::Count::HTML'
          params:
            - hit_type: 'fulltext'
              display_help: 1
        - view: 'Downloads::Count::HTML'
          params:
            - hit_type: 'official'
              display_help: 1

downloads_by_country:
  graph:
    view: 'downloads_by_country'
    chart: 'geo'
    view: 'ByLocation::TopCountries::HTML_Paginated'

downloads_by_type:
  graph:
    view: 'downloads_by_type'
    chart: 'pie'
    view: 'ByType::Downloads::HTML'

collection_statistics:
  screen: 'Report::Collection'
  views:
    - id: 'deposits_by_type'
      view: 'ByType::Deposits::HTML'
      params:
        - eprint_status: 'archive'
    - id: 'deposits_by_faculty'
      view: 'ByDivision::Deposits::HTML'
      params:
        - type: 'faculties'
          eprint_status: 'archive'
Views

- E.g. IRStats::View::ByLocation::TopCountries::HTML_Paginated
- Populates its own list of EPrints, similar to EPrints::Search
  - Filter using subjects tree (e.g. for divisions)
  - Use data inferred by IRStats (e.g. for countries)
  - Query other datasets (e.g. ‘request’ for copy requests, ‘history’ for approvals)
- Passes list to general-purpose renderer, e.g. IRStats::Visualisation::Table::HTML
Charts

• Uses Google Charts API, with a link to:

/cgi/irstats_datasource?view=downloads_by_country&eprints=creators_name_Foth,%20Marcus&…

• Uses another IRStats::View object, defined in config:

$c->{irs_datasources} = {
    # ...
    downloads_by_country => {
        json => 'ByLocation::TopCountries::JSON_Google'
    },
    # ...
}
Questions