FlindersRedbox-rif2website: Development documentation

See the INSTALL document for information regarding application environment, installation and configuration.

The program is written mostly in Ruby 1.8.7 with 2 scripts written in the bash shell.

Purpose

At Flinders University, it was decided to expose neither ReDBox nor Mint web applications to the internet for reasons of security. However, we recognised the need to expose published metadata records created by ReDBox and Mint to the internet for the following reasons.

- Collection, party and institutional project metadata records are assigned a handle (ie. Handle.net persistent ID) at publication time and we wanted a target web page for each handle.
- Party metadata records are assigned an NLA (National Libraries of Australia) Trove ID at publication time and we wanted a target web page for each NLA Trove party entry.
- In addition to institutional staff web pages which are removed once a staff member leaves the institution, we wanted to store party information which persists after the staff member has left.

Once a linked set of ReDBox-Mint metadata records are published, they appear at the OAI-PMH RIF-CS portal of the corresponding ReDBox or Mint web application. Therefore it was decided that an application would be created (ie. rif-2website) which would read RIF-CS records and transform each into a single web page.

High level description

The program makes a network connection to the ReDBox OAI-PMH RIF-CS portal and creates a static web page for each RIF-CS record assuming rules exist for each record type (eg. collection) and subtype (eg. dataset). Once all the web pages (corresponding to records) have been created, a summary page (index.html) is created containing hyperlinks to the individual pages. The RIF-CS portal URL, the output website directory and other parameters are set via a configuration file. This whole process is repeated for Mint.

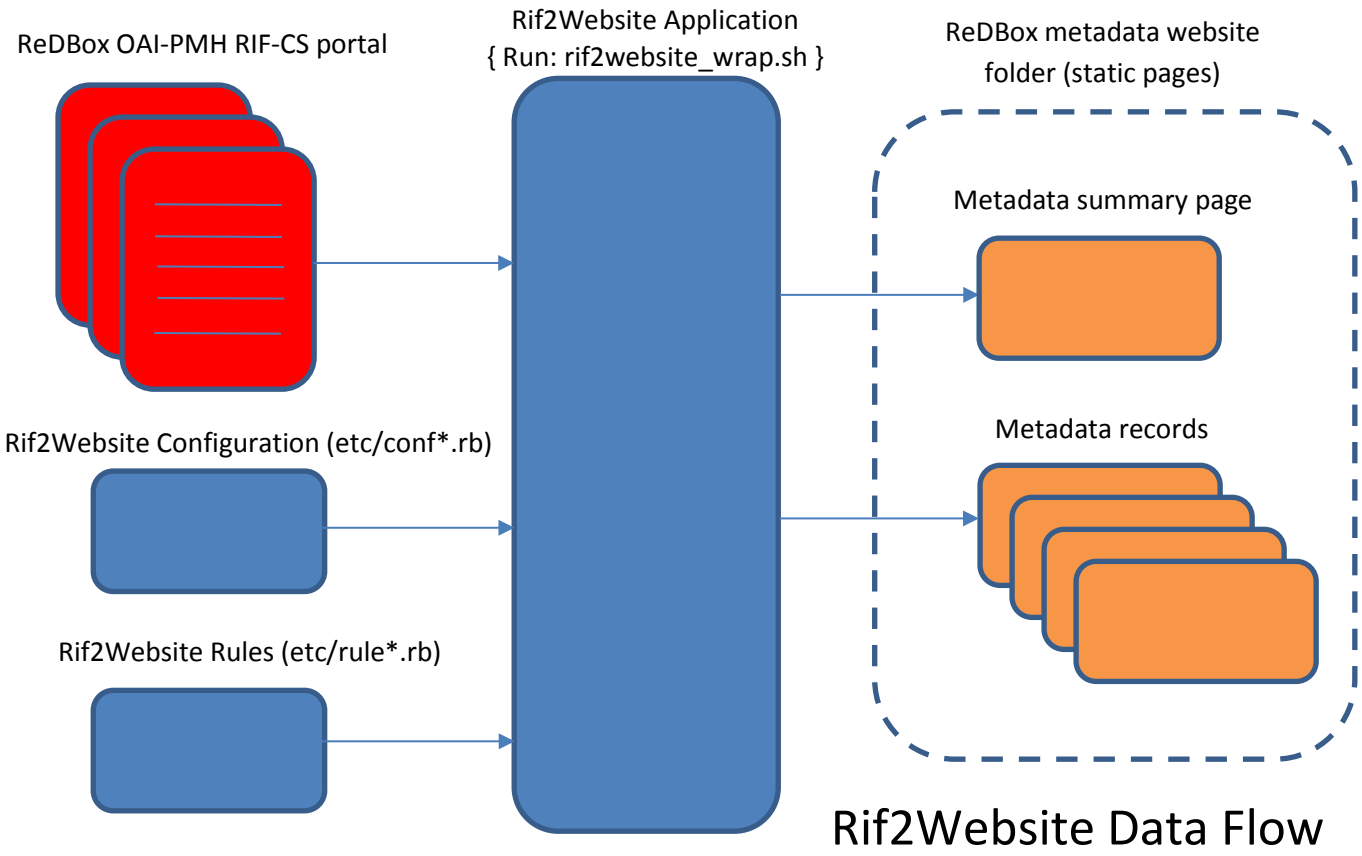
It is expected that the program will be run on a regular basis (eg. once per hour or once per day) via a Unix/Linux cron job.

Data Flow

The diagram below shows the data flow for processing ReDBox RIF-CS records.

The diagram for processing Mint RIF-CS records is identical with the following changes.

- The input data is sourced from the Mint OAI-PMH RIF-CS portal rather than the ReDBox one.
- The output website consisting of static web pages is written to a different folder than the ReDBox metadata website (to avoid OID name clashes). That is it will write to a Mint metadata website folder.



Source code documentation

Assuming Ruby is installed on your computer, the API documentation can be generated in html format as follows.

- Download the application from github
- Change directory to the top level directory
- Run the rdoc command.

Hence, in Linux as an unprivileged user, one could use:

```
mkdir ~/opt

git clone https://github.com/grantj-re3/FlindersRedbox-rif2website.git ~/opt/rif2website

cd ~/opt/rif2website

rdoc -U -a -o /my/html/destination/dir *rb lib/*rb
```