

Connecting Evergreen to External Services



Rogan Hamby (Equinox Open Library Initiative)

Who This is Not For



What We Will Talk About

What you can do from the staff client or web browser.

What information you can give a vendor.

When you should escalate it to your IT staff or hosting provider and how to make that easy.

Technical stuff - enough so that you know what it is.

Topics to Cover

Record Extracts

Supercat

Unapi

OpenSearch

Web Scraping

Reports

SIP2

Database Access

Bibliographic Record Extracts

Use the staff client when:

1. Exports are infrequent or one off.
2. A few thousand records.
3. You can identify the IDs with a report.
4. When you need to pull the bib IDs from a bucket.

Bibliographic Record Extracts

Request Server Side :

1. Exports are recurring and frequent.
2. It is a large number of records.
3. The criteria for records is too complicated for a staff client report.

Bibliographic Record Extracts

What IT Staff Need to Know :

1. Where to send the output to?
2. All records or from some criteria?
3. MARC21 or MARCXML?
4. Include holdings?

Supercat

https://docs.evergreen-ils.org/eg/docs/latest/development/data_supercat.html

Supercat is a web service in Evergreen that allows you through URLs to retrieve information on bibs, ISBNs and metarecords.

Supercat

You can get formats by going to:

[https://**yourhost**/opac/extras/supercat/formats/record](https://yourhost/opac/extras/supercat/formats/record)

opac htmlholdings html htmlholdings-full html-full marcxml ris marcxml
marcxml-full marcxml-uris marc21 marc21-full marc21-uris oai_dc
mods32 mods32-full mods32-uris mods3 mods3-full mods3-uris fgdc
mods mods-full mods-uris atom atom-full atom-uris rss2 rss2-full
rss2-uris mods33 mods33-full mods33-uris srw_dc rdf_dc

Supercat

You can get formats by going to:

[https://yourhost/opac/extras/supercat/formats/
record](https://yourhost/opac/extras/supercat/formats/record)

authority

metarecord

Supercat

http://<hostname>/opac/extras/supercat/retrieve
/<format>/<record-type>/<record-ID>

Supercat

<https://innsmouth.lib/opac/extras/supercat/retrieve/atom/record/2015492>

```
<?xml version="1.0"?>
<atom:feed xmlns:atom="http://www.w3.org/2005/Atom" xmlns="http://www.w3.org/2005/Atom">
  <author>
    <name>innsmouth.lib</name>
  </author>
  <updated>2021-04-30T14:29:46+00:00</updated>
  <atom:entry xmlns="http://www.w3.org/2005/Atom" xmlns:dc="http://purl.org/dc/elements/1.1/">
    <id>urn:tcn:2015492</id>
    <updated>20171123181855.0</updated>
    <title>THE HOBBIT.</title>
    <author>
      <name>Tolkien, J. R. R. (John Ronald Reuel), 1892-1973,author.</name>
    </author>
    <summary>1000L</summary>
    <dc:identifier>URN:BIBID:2015492</dc:identifier>
  </atom:entry>
</atom:feed>
```

Supercat

<https://innsmouth.lib/opac/extras/supercat/retrieve/htmlholdings-full/record/2015492>

[Tolkien, J. R. R. \(John Ronald Reuel\), 1892-1973, author.](#)

THE HOBBIT.

1000LLexile

[Dynamic Details](#)

#5492

Holdings

- [YA PBK TOL](#)
 - [35301002659424](#)
 - [Circulating from Chester - Lewisville Branch](#)
 - [Located at Adult Paperbacks](#)
 - [Status is In transit](#)

The Problem

These pull single record information so they're mainly useful to someone in combination with a list from somewhere. That could be a report but ...

supercat has another tool.

Supercat - Recent Records

http://<hostname>/opac/extras/feed/freshmeat/
**<feed-type>/<record-type>/<import-or-ed
it>/<limit>/<date>**

Supercat - Recent Records

<https://innsmouth.lib/opac/extras/feed/freshmeat/atom/biblio/edit/100/2020-01-01>

```
<?xml version="1.0"?>
<atom:feed xmlns:atom="http://www.w3.org/2005/Atom" xmlns="http://www.w3.org/2005/Atom">
  <title>Up to 100 recent biblio edits from 2020-01-01 forward</title>
  <author>
    <name>innsmouth.lib</name>
  </author>
  <updated>2021-04-30T15:25:51+00:00</updated>
  <link rel="alternate" href="https://innsmouth.lib/opac/extras/feed//freshmeat/rss2-full/biblio/edit/100/2020-01-01" type="application/rss+xml"/>
  <link href="https://innsmouth.lib/opac/extras/feed//freshmeat/atom-full/biblio/edit/100/2020-01-01" type="application/atom+xml" rel="self"/>
  <link rel="html" type="text/html" href="https://innsmouth.lib/opac/extras/feed//freshmeat/html-full/biblio/edit/100/2020-01-01"/>
  <link rel="unapi" href="https://innsmouth.lib/opac/extras/unapi" type="application/x-unapi+xml"/>
  <link rel="OPAC">
```

When to Use Supercat

When a vendor needs real time updates of records added and information about them. An example would be a discovery layer.

Note that in most cases they probably should start with a baseline export, not pull every record in the system with Supercat. And occasionally reconcile.

So, how do I setup Supercat?

You don't. Just point them to the docs.

Unapi

https://docs.evergreen-ils.org/eg/docs/latest/development/data_unapi.html

Alternative to Supercat.

Like Supercat all you need is to call a URL but provides some API like functions.

Unapi

[https://**yourhost**/opac/extras/unapi?id=tag::U2@bre/**bibid{1orMoreClasses}**&format=**format**](https://yourhost/opac/extras/unapi?id=tag::U2@bre/bibid{1orMoreClasses}&format=format)

Leave format blank for available ones. Currently:

holdings_xml, marcxml, mods32

CLASSES

bre biblio_record_entry_feed acl acn acnp acns
acp acpn aou ascecm auri bmp cbs ccs circ
holdings_xml mmr mmr_holdings_xml mmr_mra
mra sbsum sdist siss sisum sitem sssum sstr ssub
sunit

Unapi

https://innsmouth.lib/opac/extras/unapi?id=tag:U2@bre/2015492{holdings_xml,acn}&format=mods32

```
<volume id="tag:open-ils.org:U2@acn/2992629" vol_id="2992629" lib="CHS-LCL" opac_visible="true" deleted="false"
label="YA PBK TOL" label_sortkey="YA PBK TOL" label_class="1" record="2015492">
  <owning_lib xmlns="http://open-ils.org/spec/actors/v1" id="tag:open-ils.org:U2@aou/181" shortname="CHS-LCL"
name="Chester - Lewisville Branch" opac_visible="true"/>
  <uris/>
  <call_number_prefix ident="-1" label="" owning_lib="tag:open-ils.org:U2@aou/1" label_sortkey=""/>
  <call_number_suffix ident="-1" label="" owning_lib="tag:open-ils.org:U2@aou/1" label_sortkey=""/>
</volume>
</volumes>
```

Unapi

https://innsmouth.lib/opac/extras/unapi?id=tag::U2@bre/2015492{holdings_xml,acn,acp}&format=mods32

```
<copy id="tag:open-ils.org:U2@acp/4292798" copy_id="4292798" create_date="2012-06-01T09:12:19-04:00"
edit_date="2021-04-30T08:56:15.424104-04:00" circulate="true" deposit="false" ref="false" holdable="true"
deleted="false" deposit_amount="0.00" price="0.00" barcode="35301002659424" circ_modifier="BOOK"
opac_visible="true" age_protect="0">
  <status ident="6" holdable="true" opac_visible="true">In transit</status>
  <location ident="6917" holdable="true" opac_visible="true" prefix="" suffix="">Adult Paperbacks</location>
```

Unapi - Above and Beyond Supercat

- Limit and offsets.
- Can specify org units and org unit depth.
- Retrieval by item barcode.

When to Use Unapi

Similar to SuperCat when they start asking about API access for a custom app, or a discovery interface or something like that.

OpenSearch

https://docs.evergreen-ils.org/eg/docs/latest/development/data_opensearch.html

"OpenSearch is a collection of technologies that allow the publishing of search results in a format suitable for syndication and aggregation. Since 2005 it is a way for websites and search engines to publish search results in a standard and accessible format." – Wikipedia

Web Scrapping

Please Don't do this. But if you do ...

- Talk to your ILS provider first.
- Not during active hours.
- Limit concurrent hits.

Better Ways

Web scraping bad.

List of initial bib IDs + Supercat and/or Unapi good.

Still want to limit concurrent hits though.

Reports

We mentioned using reports for bib ids but they work for many other purposes. They can be a valid way to extract data for an external application.

Beyond Here Be Monsters

As we talk about reports and other options we begin talking about patron data. Things like how we transfer files and who has access to the retrieval methods become very important.

Reports

Advantages

- Can be scheduled
- Notifications sent
- CSV or XLS

Reports

Disadvantages

- Content can not be sent
- Somethings reports won't do
- No support for alternative formats

Reports

Option – Server Side Automated Report

- Can support more complicated logic than the staff client.
- Can transfer the output.
- More output options.

SIP2

- Not to be confused with telephony protocol.
- A standard only if you squint really hard.
- The lingua franca of the library world.
- Supports both information and transactions.
- Is not encrypted (unless it is).

Demystifying SLP2



SIP2

SIP2 is a protocol – a series of rules for asking questions and answering them.

Ebook vendor: "Hey here is a barcode and password, are they legit?"

Evergreen: "Yep."

Asking to have a SIP2 account made

What your ILS help desk will need:

- The vendor's IP if you whitelist traffic.
- The name for the account.
- They will create an Evergreen account, a server SIP account and have to restart SIP2.

For your vendor

- "vendor" and version
- SIP server address and port
- username and password
- Institution or location code

Database Access

Major privacy concerns.

Check any laws governing your patron information.

At a very least there should be legal protection in the form of legally prepared waivers.

API access

"hey can we have API access"

If none of the above options work they are looking to do something that is likely to involve development.

Questions

