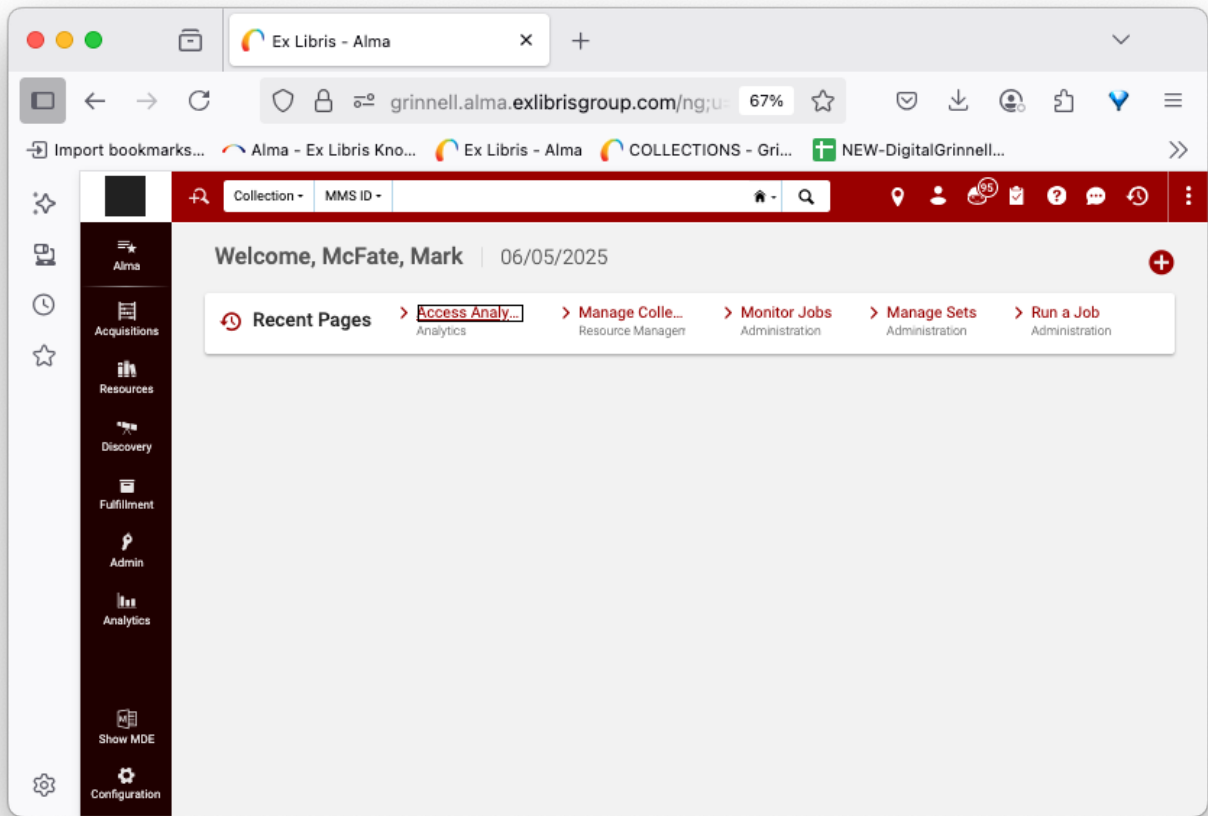


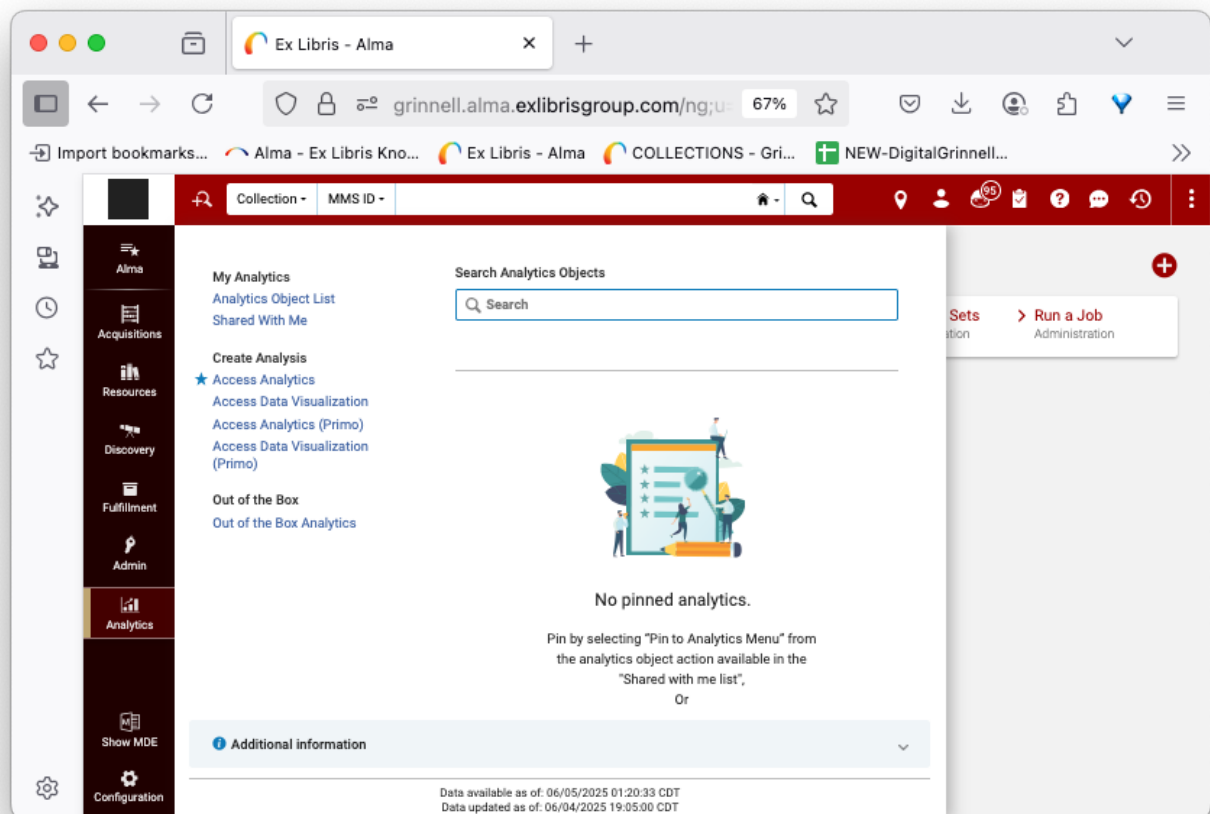
# Typical Data Workflow

This documents a typical workflow engaging **Alma Analytics** to produce a **.csv** file, importing that CSV into a Google Sheet, the using **XLOOKUP** or similar method of merging the data into a larger set with additional fields.

## Alma Analytics

The workflow typically begins by opening *Alma* and then **Access Analytics** like so:

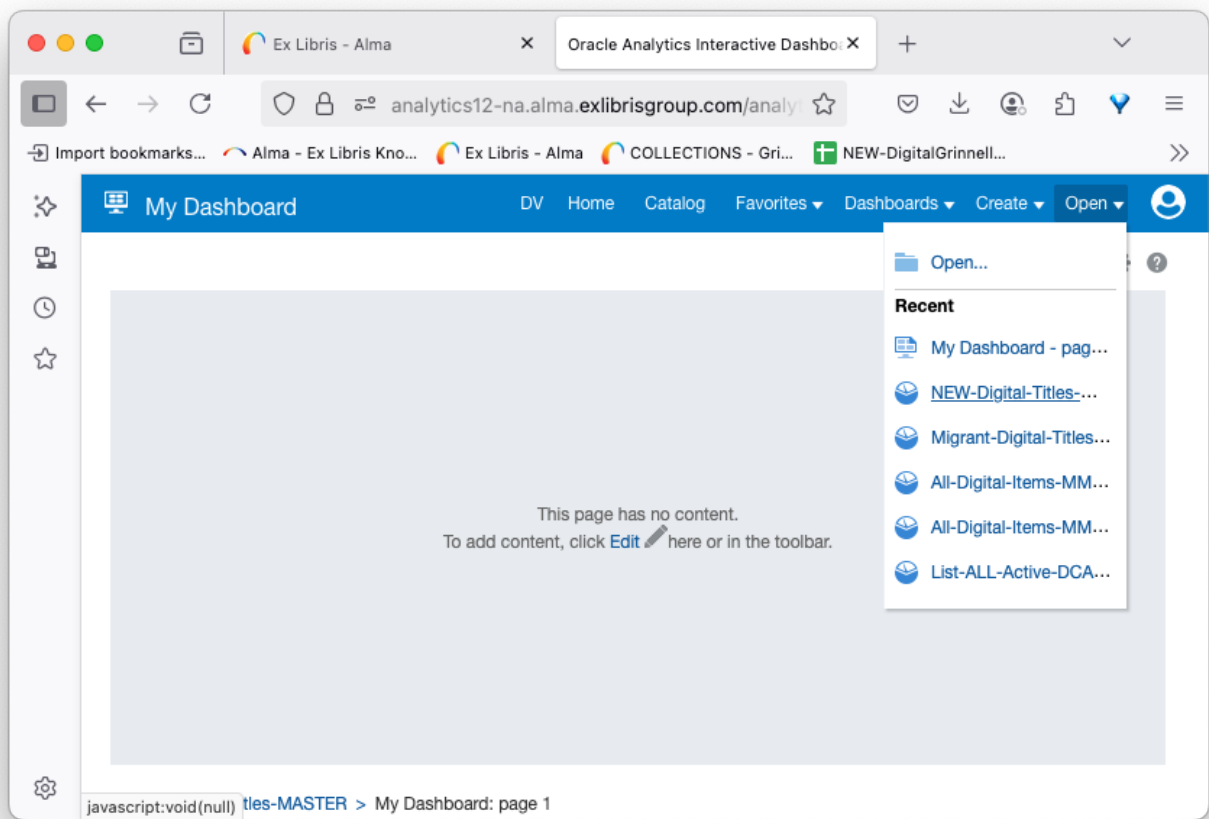




Inside **Analytics** I have defined two "MASTER" reports...

- 1) `Migrant-Digital-Titles-MASTER` - Holds key information about digital titles (items/objects), with `grinnell:xxxxx` identifiers, that migrated from Islandora.
- 2) `NEW-Digital-Titles-MASTER` - Holds key information about digital titles, with `dg\_xxxxxxxxxx` identifiers, that were NOT previously in Islandora.

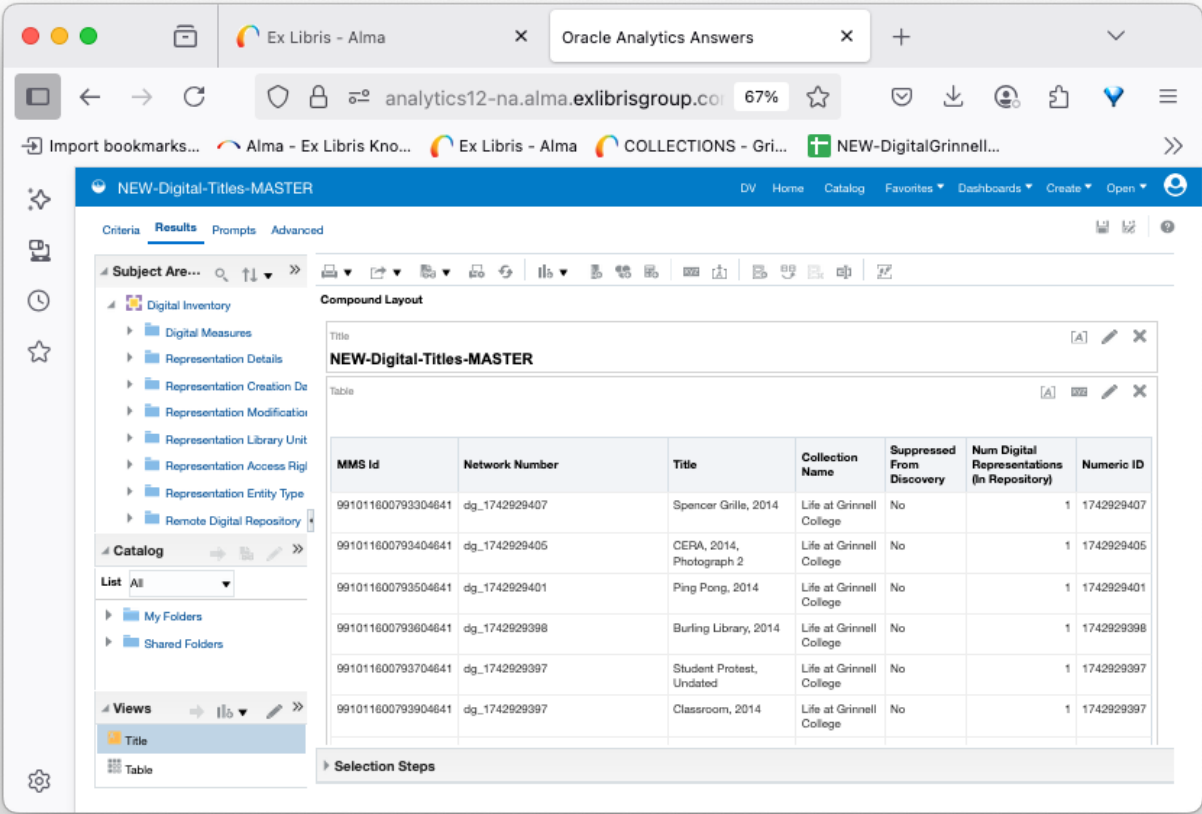
These reports can easily be copied, and the new copies modified to add more detail if needed.



In the dashboard screen shown above you'll see the two reports listed in the pull-down under **Open** on the right-hand side of the window.

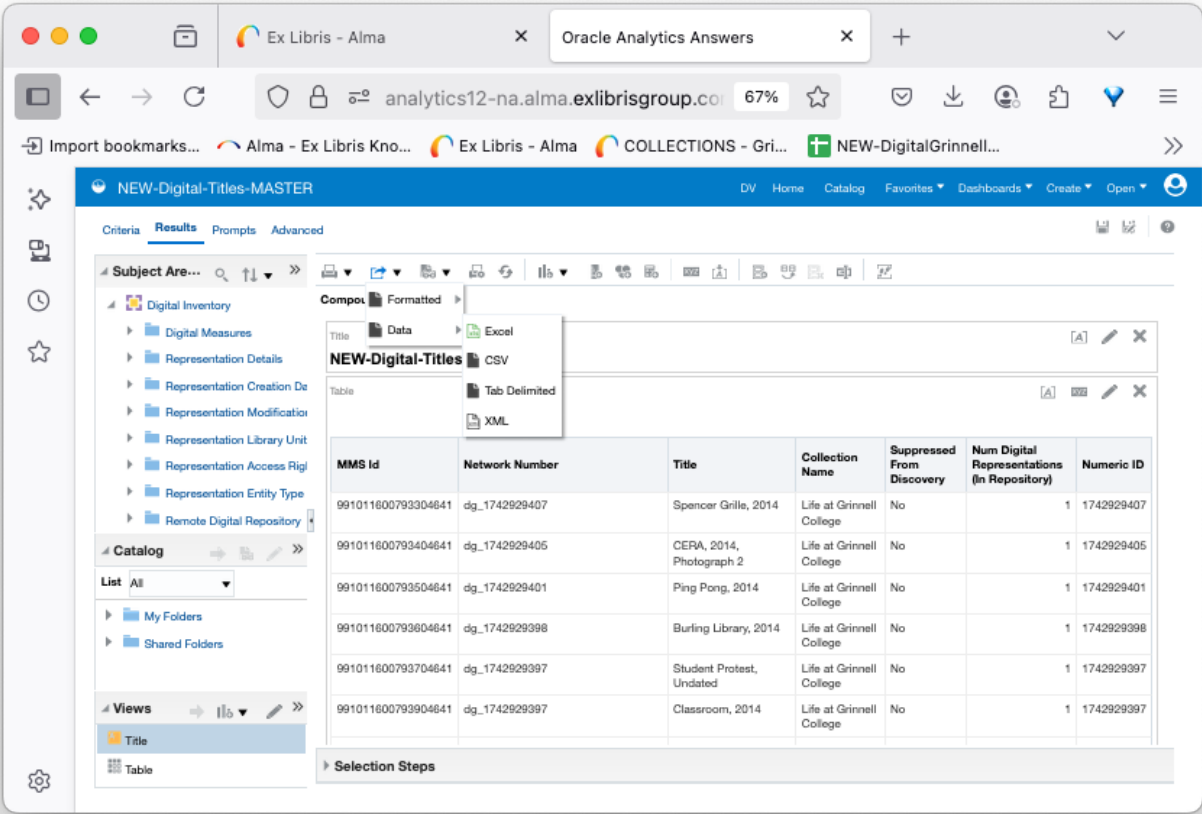
Numeric ID

A key component of each "MASTER" report is the **Numeric ID** column which contains **regex** logic to extract an object's Handle suffix from the **Network Number** column. As illustrated below, **Numeric ID** is the column farthest to the right.



Export Results to CSV

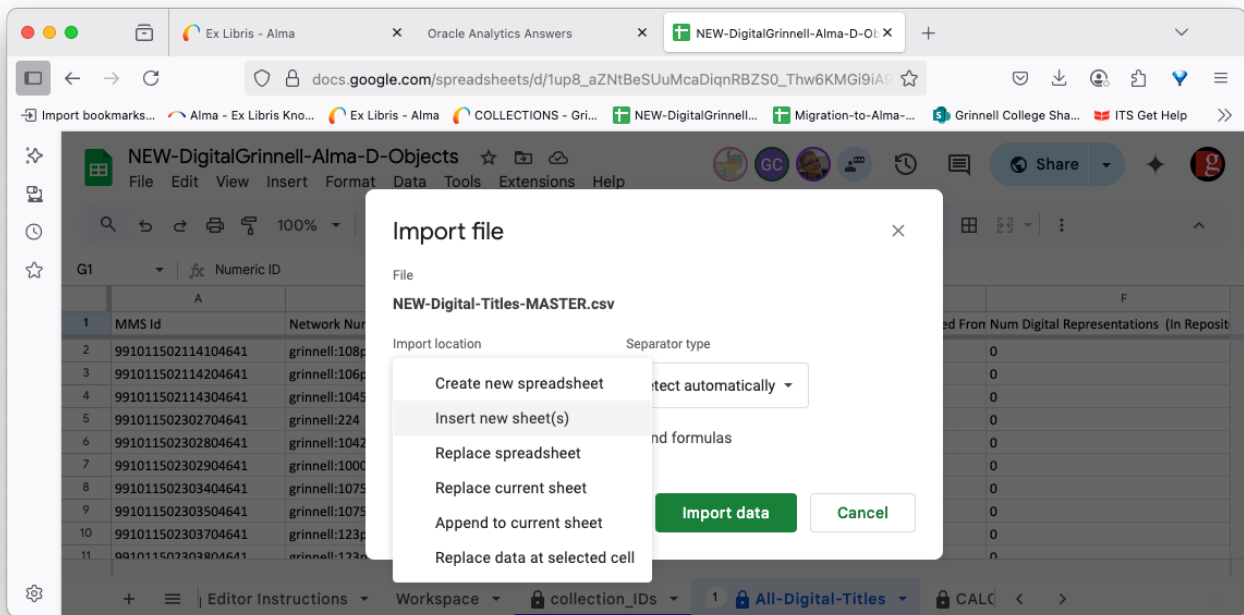
Typically I will export the *Analytics* results to a tab-delimited CSV file (really a TSV) as shown in the illustration below.



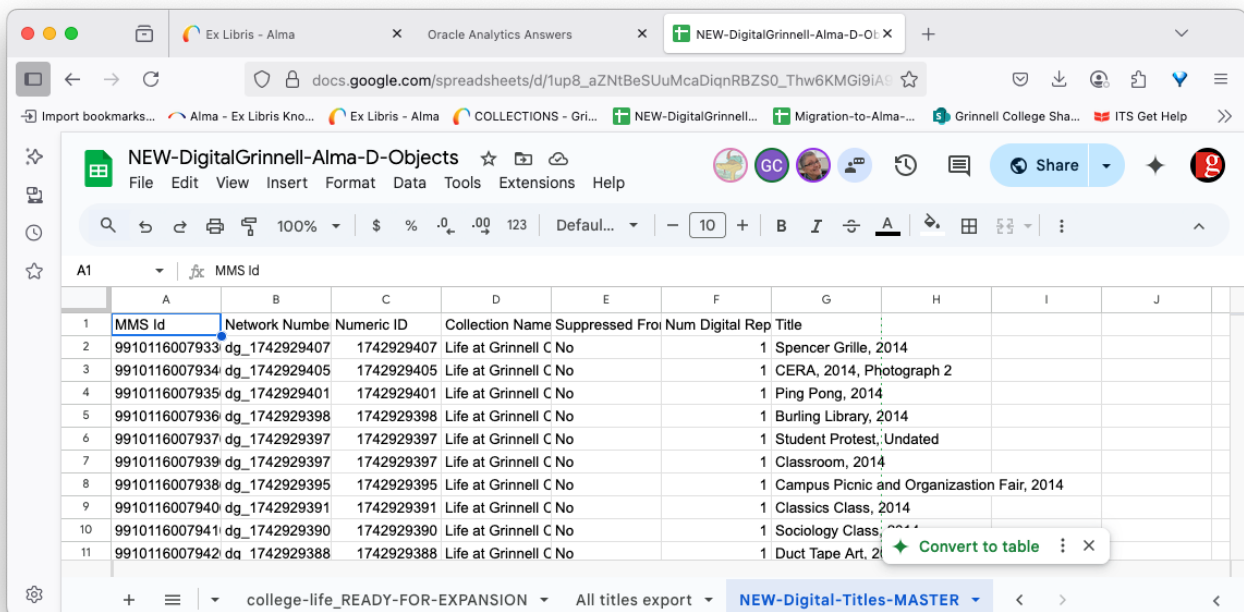
Exporting in this manner will create a new `.csv` file in my `~/Downloads` directory with a name matching the name of the report, so `~/Downloads/NEW-Digital-Titles-MASTER.csv` in the example above.

Importing to a Google Sheet

In Google Sheets I generally use menu selections `File`, `Import` and `Upload` to select my exported `.csv` (tab-delimited export from Analytics) and bring it into a sheet as a "new" worksheet as illustrated below. I always choose the `Detect Automatically` option so that the tab-delimited (IMO tabs work better in most cases than comma-delimited) data is properly parsed.



The newly imported worksheet will have a name matching the *Analytics* report name, and should look something like you see illustrated below.



## A Typical Merge Example

My aim is typically to bring a portion of our exported TSV data into an existing Google Sheet where I can easily manipulate or merge it with other data. For example, as I am writing this I have a **Complete Object Data** "review" worksheet at [https://docs.google.com/spreadsheets/d/1CcU7y\\_TMoq6BZO3lQvWmTsHmSAAL8Z9mQSbFQcUR0n0/edit?gid=652937759#gid=652937759](https://docs.google.com/spreadsheets/d/1CcU7y_TMoq6BZO3lQvWmTsHmSAAL8Z9mQSbFQcUR0n0/edit?gid=652937759#gid=652937759). This will be our "target" worksheet for this example. That sheet includes an all-important **MMS ID** column -- we typically use **MMS ID** as our "key" data for lookup -- but an empty **HANDLE** column that needs to be populated.

Our **HANDLE** data will be built from the **Numeric ID** column of another worksheet that was imported from different *Analytics* export, specifically

[https://docs.google.com/spreadsheets/d/1up8\\_aZNtBeSUuMcaDqnRBZSO\\_Thw6KMGi9iA9QixYM/edit?pli=1&gid=53763122#gid=53763122](https://docs.google.com/spreadsheets/d/1up8_aZNtBeSUuMcaDqnRBZSO_Thw6KMGi9iA9QixYM/edit?pli=1&gid=53763122#gid=53763122). I'll refer to this worksheet as "to-be-merged" in our example.

### **XLOOKUP to Merge Data**

In this example, I'm going to pull values from the **Numeric ID** column (Column C of the to-be-merged data) back into corresponding cells of the **Handle Suffix** column (B) of the target worksheet. I do so using an **XLOOKUP** formula in the **Handle Suffix** cells of our target. In the case of row 2 (cell **C2**) the formula is:

```
=XLOOKUP(A2, 'NEW-Digital-Titles-MASTER'!A:A, 'NEW-Digital-Titles-MASTER'!C:C)
```