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# Sanborn Index Map Workflow

**Front-facing Public Gallery for (Completed) Index Maps:** <https://stanford.maps.arcgis.com/apps/PublicGallery/index.html?appid=eb7b1101da364fd28ee8c45175723199>

**Tracking Google Doc:** <https://docs.google.com/spreadsheets/d/1PWe44cs-ccIuZv4iGgKve-DW86d18w9lhuA4-BtgIeI/edit#gid=0>

**Sanborn Workflow:**

SETUP:

Check the Sanborn index Google Doc for map sets to index (*IncomingSetScans*). Highlighted sets are those not released to SearchWorks (focus on these sets first). Julie will update this sheet as new sets are scanned.

Create a temporary tracking sheet on the Sanborn Google Doc to hold all of the attribute details for each map in the set (*TrackingBySheet* tab), one row per map sheet.

Contact Vitus and provide him with the necessary ckeys so he can retrieve call numbers for each map sheet. Add these to the index tracking sheet (*CallNumInfo\_fromVitus* tab).

Ensure your SUNetID has privileges to access <https://argo.stanford.edu>

FOR EACH SET:

1. **Create a new folder** inside of *Q:\SGC\_Index\_Maps\Working\_IndexMaps\Sanborns.* Name it “SANB\_” followed by the ckey of the map set you’re working on (i.e., SANB\_2725322). Make a copy of the table *Q:\SGC\_Index\_Maps\Join\_template.csv* and paste that copy inside the folder you just created, keeping the name Join\_template.csv. (This is a blank CSV with only column names in place, you’ll fill it in later.)
2. Create a new record on the *TrackingBySet* tab to track the status of the map set’s index work. In [SearchWorks](https://searchworks.stanford.edu/), use the set’s ckey to find the map set record and gather the location, scale, and title information for later use. Add these to the *TrackingBySet* tab.
3. **Get ARGO data:** In [ARGO](https://argo.stanford.edu/), search for the map set’s ckey and pull up the records for its individual map sheets. Record each sheet’s Ckey, Druid, Title, PURL, and Barcode from ARGO onto the *TrackingBySheet* tab in the proper columns. Manually fill in the call number (from Vitus) for each sheet in the Call\_Num column. For your own convenience, write the Sheet Number present on the scanned map image in the “Sheet No.” column of *TrackingBySheet*.
4. **Complete the CSV attribute table:** Open the Join\_template.csv for your specific map set. Copy the cells from *TrackingBySheet* and paste them into the empty CSV under the proper headings: *Ckey, Druid, Title, Purl, Symph\_Bar, Call\_Num.* (If you are having issues with values being rounded after taking the table into Arc, try this in Excel: Change the *format* of the *Symph\_Bar* cells to “Number” with no decimal places before saving as a CSV, so that all digits are displayed without scientific notation.)
5. In ArcGIS Desktop, **georeference the scanned index map** from the map set PURL. Georeference the image using the projection that best preserves the shapes in the map (i.e., California State Plane) even if this projection differs from the resulting index polygons.
6. **Digitize the index polygons** into a new *WGS84 shapefile*.   
   Add a text field called “SHEET\_NUM” and manually input each sheet number *exactly* as it appears in the call number.   
   If there are multiple, noncontiguous polygons that point to the same map sheet, digitize the shapes separately and Dissolve based on the SHEET\_NUM fields to result in multi-part polygons.
7. Join the (multipart) footprint polygons to its corresponding “Join\_template.csv” file which contains that set’s metadata lifted from the Sanborn Google Doc.   
   Export the joined, multipart polygon feature into the final index shapefile “SANB\_” followed by the ckey (i.e., “SANB\_2926203”). Name the map document the same thing.
8. Remove *everything* from your map document except your footprint polygons. Log in to the Index Map AGO account in ArcMap and Share As… Feature Service.
9. Fill out the tags and description boxes and publish to AGO. (see below for more details)
10. On the AGO Content page, move the uploaded index layer to the Sanborn subfolder (*SANB\_IndexMaps*)
11. Create a WebMap following the general map collection template. (See below for more details.) Set polygon colors, set labels, set pop-ups. Save this WebMap in the *SANB\_IndexMaps* folder.
12. Create a WebApp for public viewing, saved in the *SANB\_WebApps* folder. Copy this URL into the Google Tracking sheet, on the *TrackingBySet* tab (Web\_app URL field)

# General Collection Index Map Workflow (SULGC)

**Public Gallery of Index Maps:** <https://stanford.maps.arcgis.com/apps/PublicGallery/index.html?appid=d208b1e54a1141bdb5145b88b87516bd>

**Google Doc:** Branner General Collections Map Sets<https://docs.google.com/spreadsheets/d/1YtjodfZ8jBLg-lubBlOqJNLH7JL3JA7m6dWaa_f7lBo/edit#gid=1837074064>

**SULGC Index Tracking Sheet:** tracks map set attributes (# of sheets, ckey, call short, title, AGO map app URL) and work status for each map set index.

**Map Set Working Sheet (sheet1):** tracks individual map sheet attributes. Used to build a temporary attribute table for specific map sets. Later covered to CSV and joined to a map set index .shp.

**Vitus List:** database dump from Vitas that adds details not found in ARGO for filling in the Working Sheet (primarily the call #).

**SULGC Workflow:**

1. Julie will add new general collection map-set ckeys to the SULGC Google Tracking doc as they are accessioned.
2. Create a temporary tracking sheet on the SULGC Google Doc to hold all of the attribute details for each map in the set.
3. Create a new map set record in the main SULGC sheet to track the status of the map set index work.
4. In ARGO, use a ckey search to pull up the records for the individual map sheets in that set.
5. From ARGO record the individual map CKey Barcode, Druid, Title, and PURL into the temp tracking sheet
6. ... … …

# Japanese Military Maps Index Map Workflow

**Public Gallery of Index Maps:** <https://stanford.maps.arcgis.com/apps/PublicGallery/index.html?appid=1ed3022fc7884690a2f137bce9dfe4fe>

**Google Sheets:**

JMM Index Tracking Sheet: Updated by Shizouka, has most of the info we need. <https://docs.google.com/spreadsheets/d/1sHyEQG3IZKDH5PR0u2RgqYV-X-FpcvH6XRy46fzMWAI/edit#gid=0>

Map Scanning Que (Scanning lab Google Doc): Deardra’s live record of map sets through the scanning que. Check for new map sets that have been scanned and accessioned. LINK

**JMM Workflow:**

1. Blah
2. Blah
3. Blah

# ArcGIS Online: Login and Map Configuration

The AGO account is where we currently host the completed index maps.

**ArcGIS Online account information**

User: SGC\_IndexMaps

Pass: SGCINDEX1

Security question: What is your dream job? Answer: cartographer

**Publish a Map Service via ArcMap Desktop**

Log in with the SGC\_IndexMaps credentials. Remove everything from your map document except for the index map shapefile in WGS84, including standalone tables. After you are logged in, share the finished mxd as a service (File > Share As > Service).

Settings in the Publishing Wizard:

* Choose a connection = My Hosted Services (Stanford University)
* Service Name = same as map document, which is same as shapefile name (i.e., SANB\_2926203)
* Capabilities
  + Check Feature Access, uncheck Tile Mapping
  + Operations allowed: leave as default
* Item Description
  + Summary = name of the map set, derived from ARGO
  + Tags = SANB\_*catkey* or SULGC\_*catkey­* or ­JMM\_*batchnumber*
  + Description = Stanford Libraries Index Map Collection
  + Access and Use Constraints: There are no access and use limitations for this item.
  + Credits = SGC\_IndexMaps
* Sharing = Everybody (Public) and Stanford University. (Also, share with the Group corresponding with the map collection in which the index map belongs—Japanese Military Maps group, Sanborn Collections Group, SUL General Collections, etc.)
* Click “Analyze” to see if there are errors or warnings in your parameters or map document. Resolve any critical issues that appear, then click “Publish”

**Configure Web Map: Labels and Basemap**

* Open your hosted Feature Layer in Map Viewer. “Save As” a new Web Map.
  + Title: name of Feature Layer (i.e. “SANB\_2926203”)
  + Tags: name of Feature Layer
  + Summary: name of the map set, derived from ARGO
  + Save in Folder: SANB\_IndexMaps or SULGC\_IndexMaps or JMM\_IndexMaps
* Rename shapefile layer to “In Collection” so that it will appear as such in the Legend of the eventual Web App.
* Change base map to *Light Gray Canvas.*
* Label fishnet polygons using Sheet Number attribute. Size 8 (or whatever size so that every label displays), bold, dark slate gray.

**Configure Map Symbology (In Web Map view, before creating Web App)**

Next, “Change Style” of this shapefile.

* Choose an attribute to show: If some but not all of your index footprints are held by Stanford, select the binary field in your attribute table indicating whether the sheet is held or not. If all sheets are held (i.e. Sanborns), you don’t have to create a distinct variable for this. Symbolize on the basis of “ckey” to ensure the symbology for all polygons is the same.
* Select a drawing style: Types (unique symbols)
  + Label “Yes”: fill #38A800 75% transparent; outline #267300 0% transparent 1px line width.
  + Label “No”: fill #E64C00 100% transparent; outline E60000 0% transparent 1px line width.

**Configure Pop-Up (In Web Map view, before creating Web App)**

* *Pop up Title* should display the \*map series title derived from Argo, followed by Sheet Number wildcard. eg. “[Title]: {SHEET\_NUM}”
  + Example: “Wasco, Kern Co., Calif., Sept. 1926: SHEET4”
  + *\*NOTE\* Map Series Title* – currently based on the Argo listing, using the part of the name that falls before the dash. Check for uniqueness (do a search by title) before copying over to AGO & spreadsheet.
* Pop up Contents should include, in order: Title, Sheet\_Num, Call\_Num, Druid, PURL
* Click “Configure attributes” to assign human readable aliases: *Title, Sheet Number, Call Number, Druid, URL* (by changing the alias)
* Save your web map before proceeding.

**Configure Web App**

* Open you Index Map in Map Viewer mode, click Share, choose “Create a Web App.” On the Configurable Apps tab, navigate to Page 2 and select Simple Map Viewer and “Create.” Save the new web app in the proper “\_WebApps” folder. Fill in the following data before clicking “Create App”.
  + Title: LOCATION, SCALE (make sure to change from default)  
    e.g. *Korea, 1:50,000* … take scale and location tags from the SearchWorks record for the map set
  + Tags: “GRIDS (Cartography)”, “INDEX MAPS”, [LOCATION of your map… city, state, and/or country]
  + Summary: Index map to LOCATION, SCALE (LABEL)  
    e.g. *Chile, 1:250,000 (Gráfico de los trabajos jeodésicos)* … LABEL = the map set title.
  + Make sure the option to share this web app with the same audiences is checked.
* You should then be navigated to the “Configure” page for your new Web App. Add these details to the left-hand column to be inserted in your map. Leave all other default settings.
  + Title: LOCATION, SCALE (LABEL). Be sure to change from default  
    e.g. *Chile, 1:250,000 (Gráfico de los trabajos jeodésicos)* … LABEL matches the map set title.
  + Description:
    - *NOTE: The WebApp retains text formatting from the copy/paste source, but doesn’t allow you to change the font/line spacing once pasted into the app. Copy and paste the pre-formatted text below – Verdana size 12, 1.0 line spacing, color = black. Edit Set text size to “small” in the web app. Type in the appropriate location, scale and label.*

Interactive index to the map set for LOCATION, SCALE (LABEL). Green index grids indicate maps from this set that are in the Stanford collection and available to view and download, red grids indicate maps from this set that are not in the Stanford collection.

* Save and Close the Configure App page. You should then be taken to the Overview tab of your new Web App. Fill in the rest of the Web App metadata using the following template.
  + Description:

Interactive index to the map set for LOCATION, SCALE (LABEL). Green index grids indicate maps from this set that are in the Stanford collection and available to view and download, red grids indicate maps from this set that are not in the Stanford collection.

* + Terms of Use: There are no access and use limitations for this item.
  + Credits (Attribution): Stanford University Libraries, Stanford Geospatial Center
* Set the Thumbnail.
  + Open the application, drag and position the map such that the bulk of the index sheets are in the upper left hand corner area. Open the Snipping Tool in Windows and take a screenshot of the map, capturing the entire area of the map including the title bar and navigation buttons, but excluding the legend side panel and “find address” search bar. You do not need to capture the entire coverage of indexes. See other map thumbnails for an example. Save as the default Capture.PNG in the corresponding Working\_IndexMaps folder on the Q drive.
  + On the Web App’s Overview page, click Edit Thumbnail to change the image.
* SHARE the Web App with the appropriate groups, so that the App appears on the Public Gallery page of the corresponding collection.
  + On the Web App’s Overview page, click “Share” to share the item with Everyone (public), Stanford University, and the Group of choice. (i.e., SUL Sanborn Map Collections Group)
  + You may be prompted to Update Sharing permissions of other content referenced by your web app. Ex: “These items referenced by the web application may not be visible to others because they are not shared in the same way as the web application.” Click yes to update.
* When the Web App is finished, add the URL of its “Overview” page to the appropriate Google tracking sheet.

# Creating a new Public Gallery for a Group of Maps

**Link for Web App template to use:** <https://stanford.maps.arcgis.com/home/item.html?id=34505d89a3b34be09b65b98938974390>   
Note: this Public Gallery template is now in [“Mature” phase](https://blogs.esri.com/esri/arcgis/2017/08/21/configurable-apps-announcement-public-gallery-template-moving-to-mature-support-phase-with-september-update-of-arcgis-online/); ESRI will not be adding new features to it or fixing bugs going forward. Users can still create apps from this template even in the Mature phase, though the template is no longer listed in ESRI’s Configurable Apps Gallery.

* Clicking the link above and viewing the template info page *while signed in to the SGC\_IndexMaps account* will allow a “Create App From Template” button to appear. Choose this button to create a new map gallery

**LINKS:**

Main Map Scanning Queue: <https://docs.google.com/spreadsheets/d/1HhDceJnHEf1p7YQ2NRBn9o--822K8HjG8FuqVHk60DA/edit#gid=540440617>

Check Completed Scanning Queue on Google spreadsheet for new JMM maps (column B). Check column AB to see if the map has been accessioned, check column AC to see if an index map can be made from this set. If both are yes, move the details for the new map set to our local sheet for tracking. Once each JMM map index has been completed in AGO fill in the Google doc column AF with the AGO URL.

Consul page: <https://consul.stanford.edu/display/SULAIRGIS/2015-08-11+Meeting+notes+-+Japanese+Military+Maps+Discussion>

Item level Master Spreadsheet (Deardra) OLD: <https://stanford.box.com/s/a5ge8uqv9hmxkc7wqj3bzuh2ds8wqum2>

Shizuka Doc: https://stanford.app.box.com/files/0/f/4118712717/Japanese\_Military\_Maps\_GIS

**Workflow (old):**

**Gather attribute values for new map (call number, ckey, druid, barcode, purl, title):**

Check the Map Scanning Que doc for completed JMM map series, verify in our spreadsheet that the map does not already have an index created for it. Note batch number and ckey. Verify there is an index map upstairs at Branner for that map.

Open ArcGIS and connect to the Working\_IndexMaps folder. Create a new subfolder for the JMM map index. Inside the working JMM map folder create a new empty .gdb.

Open the Item Level Master Record doc. Find the batch tab that matches the current working JMM map and sort the records by ckey. Select only the matching ckey records and copy into a new tab to save as a separate CSV (into the working JMM map folder). Import the new csv into the working JMM map gdb.

Open ArcMap and add the the JMM\_Collection\_ARGO\_accesioned table from the master\_ARGO\_table gdb. Add the new JMM map table from the working JMM gdb. Join tables based on matching barcodes, keep only matching, export new table to working JMM gdb.

Join this new table to the index map fishnet grid based on call number (with sheet ID).

**Create Index shapefile:**

Create index map in ArcGIS with Fishnet tool.

Edit fishnet to match index sheet map.

Add sheet ID attribute for each sheet (use multiple field columns and concatenations to derive unique IDs).

Export index map attribute table to Excel.

From ARGO record, update for each sheet details for \*map series title, druid, call #, c key, PURL…

Join tables in ArcGIS.

Upload new index map to AGO Index Maps account.

Set up symbol styles and Pop Up attributes.

Save map

Record changes on Map Scanning Queue spreadsheet

* Update map series column with the title
* Web map up, style updates finished

Go to map details and rename: [index id] Map Index