

Instructions to Connect Google Sheets with Firebase Realtime Database

<u>PURPOSE:</u>	Guide for client and Tribe to connect Firebase to Google Sheets
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<u>TARGET AUDIENCE:</u>	GLOBE Translators Tribe and GLOBE client

REQUIREMENTS

- Google Account
 - A Google account that allows you to use google sheets.
- A Google Apps Script account or ensure you can access Google Apps Script via your general Google account.
 - Refer: <https://developers.google.com/apps-script>
- Firebase Account, and relevant access Credentials
 - Refer: <https://console.firebase.google.com/u/0/>

Steps

Firebase Information

1. Go to your Firebase Console. Select the firebase project that you want to connect to google sheets
2. On the left-hand panel, select Develop>Database
3. Select the database you want to connect to. NOTE: At the time of writing, this method of Google Sheets / Firebase synchronisation is only supported with Firebase's "Real-Time Database" product, not Cloud Firestore.
4. Go to "Rules" and ensure both Read and Write are set to True.
5. Go back to "Settings" > "Service Accounts"
6. From the "Legacy Credentials" section, select "Database Secrets"
7. Copy and paste the database URL and secret key for later. We need this to plug in to Google Apps Script.

Google Apps Script

8. Go to Google Apps Script > <https://script.google.com/home>
9. Create a new project
10. *Important* You need to ensure Firebase is enabled for this project.
Go to Resources>Libraries. When the modal pops up, type in "MYeP8ZEet1yIVDxS7uyg9pIDOcoke7-2l" and select Enter. (Further Reference: <https://sites.google.com/site/scriptsexamples/new-connectors-to-google-services/firebase>).
11. Select the latest public release version.
12. Go back to the project. Create a new .gs file called "firebase2sheets.gs". A direct link may be found here: <https://bitbucket-students.deakin.edu.au/projects/GLOBE/repos/globe---t319/browse/googleSheetsIntegration/firebase2sheets.gs>
13. Use the script provided with this guide and paste it into this file.
14. Add the secret keys and URLs that you obtained in step 7. This will allow you to connect the API-enabled Google Sheet to Firebase successfully.
15. Save the project.

Google Sheets

16. Go to Google Sheets.
17. Navigate to the existing spreadsheet.
18. Press the three vertical dots on the button titled "Synchronise Data" and select "Assign Script"
19. Ensure the script assigned to the button is the same as the script you created in Steps 8-15.
20. Press "Synchronise" and watch the data update to reflect the firebase database!

RELATED DOCUMENTS

Bitbucket Link to Google Sheets integration Code:

<https://bitbucket-students.deakin.edu.au/projects/GLOBE/repos/globe---t319/browse/googleSheetsIntegration/firebase2sheets.gs>

DOCUMENT CONTROL

<u>VERSION#</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>CHANGES</u>
0.9	23/04/2020	Ryan Gallagher	List of changes/updates made
1.0	24/4/2020	Steve Crossin	Created content into word doc
1.1	5/5/2020	Steve Crossin	Formatted doc as per template, added doc control
1.2	24/05/2020	Ryan Gallagher	Added to include links to the code for this solution, in the event these files are not located when downloading the entire application source code.