SOP Reference #: DP037

Operation/Task:	**Data Helpers**			Equipment:	**Quadient Inspire Designer**
Owner:	DP Manager	**Date Created:**	1/29/21	**Department:**	Data Processing
		Revision History:	See last page		

ALERTS (see below): Critical Step 🔶   Quality Check ☑   Tip 😊   Team Safety ➕

Purpose: This SOP/work instruction describes how to create a Data Helper program to facilitate streamlining DP work.

<mark>PREREQUISITE:</mark>

Data Helper programs are highly customizable, and are considered an advanced discipline within the Data Processing skill sets. <mark>Training from Team Lead or Developer should be given prior to independent Data Helper creation</mark>. Because of the nearly endless possibilities of customization that Data Helpers provide, this document serves as a generic overview of the process.

Step #	Alerts	Step Description - "What to Do"	"How to Do it"	"Why to Do it"
1		Use DATA_HELPER_TEMPLATE.wfd as a starting point, and modify as needed for the scope of the job.	Copy the template from the GMC TEMPLATE folder and paste into the "DATA_IN" subfolder of your job directory.	The template contains baseline logic that is applicable to most jobs that would require a Data Helper, and will help to ensure consistency when Data Helper programs are used.
2		Update the Job parameter to populate using your current job number	Open the JobInfo module and set the Job parameter by typing in your current job number	Entering this parameter will allow pre-written logic to populate your job number as needed in various locations throughout the workflow automatically.
3	🔶	Load source file into INPUT FILE module	Open the module and click the ellipses button to map to source file location to load the file. Various other settings can be applied as well – such as file type, delimiters, framing characters, character encoding, etc.	Source data must be read into the Data Helper in order to modify data.

4	☺	Modify Data Input branch(es) as necessary for the file(s) supplied for the job.	If reading in multiple files with a common layout, use the Data Repeater module that is built into the template. This will allow the user to only load one file, and the program will automatically read in all files with the file extension specified in the repeater module. If reading in multiple files without a common layout, use multiple Data Input and Data Concatenator modules as needed to merge files and build a standard file layout.	This allows for an efficient method of reading in multiple input files.
5		Determine if Seed Duplicator branch is needed for job	Review ticket and determine if the Seed Duplicator branch built into the template is necessary for the scope of your project. External seeds can be merged into the output file from the Data Helper, and seed customization can also be achieved using the "CHANGE VALUES" transformer module.	This allows for an efficient method for external seeds to be duplicated, modified and merged into the output of the Data Helper. It provides consistent results for seed records.
6		Update the "output" branch of the Data Helper as needed	Use the FORMAT BCC transformer module in the template, or add additional modules as needed to perform any customization required to the data.	This reduces work that may need to otherwise be done in BCC or composition setups.
7		Produce output	Use production mode to run the Data Output module built into the template to produce the modified source or matchback file	This will create the output file necessary for data processing and composition work.

Notes:

Definitions:

Revision History	Description of Changes	Requested by	Date
Rev 1	Creation of SOP	Jeff Lungstrom	02/21

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