Data Ingression Plugin Comparison

	easyCSV	Runtime Data Table	Gsheets Operator
Features			
Import local text CSV and parse it into a map at runtime	☑	☑	X
Access CSV data from map as strings at runtime	☑	☑	X
Automatically convert CSV data to struct or class data type	X	☑	X
Convert struct or class data types to CSV string	X	☑	X
Download entire public or private Google Sheet as CSV	X	☑	☑
Download a specific range of a public or private Google Sheet	X	X	☑

Upload entire CSV to public or private Google Sheet	❌	☑	☑
Post data to specific cells or range in public or private Google Sheet	❌	❌	☑
Add new sheets	❌	❌	☑
Delete sheets	❌	❌	☑
Duplicate sheets	❌	❌	☑
Copy sheet to spreadsheet	❌	❌	☑
Hide sheets	❌	❌	☑
Get sheet names, IDs, and other properties	❌	❌	☑
Set rows hidden or frozen	❌	❌	☑

Find and replace text in spreadsheets	❌	❌	☑
Delete ranges of data	❌	❌	☑
Set range formatting	❌	❌	☑
Get spreadsheet locale, time zone, and other properties	❌	❌	☑
Insert, append, hide or move rows/columns	❌	❌	☑
Manually or automatically resize rows/columns	❌	❌	☑
Delete all empty rows/columns	❌	❌	☑
Create editable in-game spreadsheet widget	❌	❌	☑
Send in-game spreadsheet widget data to Google Sheets	❌	❌	☑

Load string from disk	☑	☑	☑
Save string to disk	☑	☑	☑
Platforms*			
Windows 64	☑	☑	☑
Windows 32	☑	☑	☑
Mac OS	☑	☑	☑
iOS	☑	☑	☑
Android	☑	☑	☑
tvOS**	☑	X	X

*** Platforms are listed based on 'official' support - ones that I have built myself. This doesn't mean that the plugins specifically won't work on other platforms unless specifically listed as incompatible. easyCSV should theoretically work on any platform, but Runtime DataTable and GSheets Operator use OpenSSL so only platforms supported by OpenSSL can be supported. If the platform is not listed, it has not been tested by me.**

**** tvOS (Apple TV) is not supported by GSheets Operator at all and is not supported by Runtime DataTable after 4.26 due to incompatibilities with OpenSSL.**

Which plugin is right for me?

easyCSV is a simple CSV parser. It only deals with strings. If all you need is to load a CSV and access its data in a blueprintable two-dimensional array, this is a cheap, fast and effective way to achieve that. You can access table keys or headers separately, iterate over columns and rows, get entire columns or rows as a comma-separated string, and get single cells using a fast header-key lookup method. easyCSV is meant for people who just want the string data from their CSV. It does **NOT** handle any kind of data conversion, so you'll have to handle converting any strings to data types yourself.

Runtime DataTable includes **easyCSV** in full, and in addition to everything listed above it can automatically convert CSV data to the data types you've defined in a struct or object class and convert that same game data back to CSV. The CSV can be local or it can live on a public or private Google Sheet. This plugin is for people who love data tables in the engine but are frustrated with how limited they are. These people want to load tables at runtime and see changes to the data shown in the game in real time.

For example, if you were making a kart racing game, you would set up all of your variables on your kart pawn and start playing and realize it's going much too slow. You want to go fast! So normally, you'd stop the game, go to your source code and edit the speed variable and recompile, play and test again. Nope, still too slow. Let's boost it by 10. Oh no! Way too fast! That's a lot of stop and go to find the right value for a variable.

With Runtime DataTable, you could set up your variables and export all of them to a local CSV or Google Sheet. Then, while you're still playing the game, just edit the value in the spreadsheet and reload the data table all without ever stopping the game. Edit as many variables as you want and see the changes in less than a second (Google Sheets) or instantaneously (local CSV file).

GSheets Operator is a way to edit and manipulate public or private Google Sheets from Unreal Engine. It leverages the REST API to send commands to your sheets that allow you to read, write, delete, rename, duplicate, replace or format anything you want directly from your game, application or editor utility. You can edit entire sheets or specific ranges, sheet and spreadsheet properties and control things like frozen rows and columns, number formats, time zones and locales. You can even automatically delete all empty rows and columns!

Spreadsheets can be represented in-game with the plugin's customizable spreadsheet widget which can then be edited and posted right back to Google Sheets, essentially giving you the power to make an in-game spreadsheet editor! You can display leaderboards, item data or character profiles right in your game straight from the data you already have.

NB! Keep in mind that **GSheets Operator** does not handle any data conversion the way that **Runtime DataTable** does. These two products should be considered separate and serve different needs, while **Runtime DataTable** includes all features of **easyCSV** and more. That is to say no one who buys **Runtime DataTable** will need to purchase **easyCSV**, but buyers of **GSheets Operator** may still want to purchase **Runtime DataTable** for real-time data conversion.