itaymigdal/Nimbo-C2

github.com/itaymigdal/Nimbo-C2

itaymigdal

itaymigdal/**Nimbo**-



Nimbo-C2 is yet another (simple and lightweight) C2 framework

A 1Contributor

0 Issues

☆ 76

Stars

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Nimbo-C2

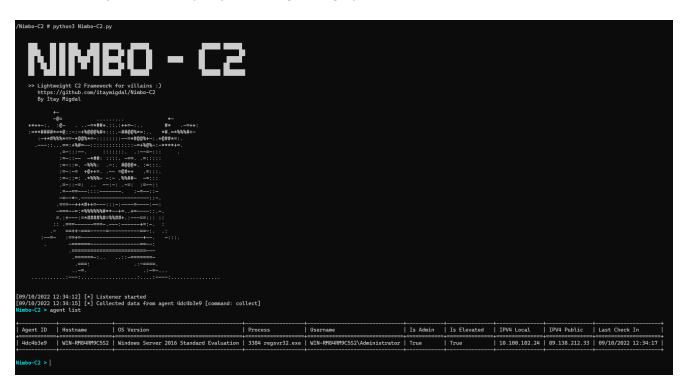


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About

Nimbo-C2 is yet another (simple and lightweight) C2 framework.



Nimbo-C2 agent currently supports Windows x64 only. It's written in Nim, with some usage of .NET (by dynamically loading the CLR to the process). Nim is powerful, but interacting with Windows is much easier and robust using Powershell, hence this combination is made.

All server components are written in Python:

- HTTP listener that manages the agents.
- Builder that generates the agent payloads.
- Nimbo-C2 is the interactive C2 component that rule'em all!

I developed Nimbo-C2 in the past several months mainly at the late evenings while working at my day job and waking up at nights to my boy, in order to learn and maybe contribute my part to the cyber community ...

My work wouldn't be possible without the previous great work done by others, listed under credits.

Features

- Build EXE, DLL payloads.
- Packing payloads using <u>UPX</u> and obfuscate the PE section names (<u>UPX0</u>, <u>UPX1</u>) to make detection and unpacking harder.
- Encrypted HTTP communication (AES in CBC mode, key hardcoded in the agent and configurable by the config. jsonc).
- Auto-completion in the C2 Console for convenient interaction.
- In-memory Powershell commands execution.
- File download and upload commands.
- · Built-in discovery commands.
- Screenshot taking and clipboard stealing.
- Memory evasion techniques like NTDLL unhooking, ETW & AMSI patching.
- LSASS and SAM hives dumping.
- Shellcode injection.
- Persistence capabilities.
- UAC bypass methods.
- And more!

Installation

Easy Way

1. Clone the repository and cd in

```
git clone https://github.com/itaymigdal/Nimbo-C2
cd Nimbo-C2
```

1. Build the docker image

```
docker build -t nimbo-dependencies .
```

1. cd again into the source files and run the docker image interactively, expose port 80 and mount Nimbo-C2 directory to the container (so you can easily access all project files, modify config.jsonc, download and upload files from agents, etc.). For Linux replace \${pwd} with \$(pwd).

```
cd Nimbo-C2
docker run -it --rm -p 80:80 -v ${pwd}:/Nimbo-C2 -w /Nimbo-C2 nimbo-dependencies
```

Easier Way

```
git clone https://github.com/itaymigdal/Nimbo-C2 cd Nimbo-C2/Nimbo-C2 docker run -it --rm -p 80:80 -v ${pwd}:/Nimbo-C2 -w /Nimbo-C2 itaymigdal/nimbo-dependencies
```

Usage

First, edit config.jsonc for your needs.

Then run with: python3 Nimbo-C2.py

Use the **help** command for each screen, and tab completion.

Main Window

```
Nimbo-C2 > help
   --== Agent ==--
   agent list
                               -> list active agents
   agent interact <agent-id>
                               -> interact with the agent
   agent remove <agent-id> -> remove agent data
   --== Builder ==--
   build exe
                                -> build exe agent (-h for help)
   build dll
                                -> build dll agent (-h for help)
   --== Listener ==--
   listener start
                                -> start the listener
                                -> stop the listener
   listener stop
                                -> print the listener status
   listener status
   --== General ==--
   cls
                                -> clear the screen
                                -> print this help message
   help
   exit
                                -> exit Nimbo-C2
```

Agent Window

```
Nimbo-2 [d337c406] > help
   --== Send Commands ==--
   cmd <shell-command>
                                       -> execute a shell command
   iex <powershell-scriptblock>
                                      -> execute in-memory powershell command
   --== File Stuff ==--
   download <remote-file>
                               -> download a file from the agent (wrap
path with quotes)
   upload <loal-file> <remote-path> -> upload a file to the agent (wrap paths
with quotes)
   --== Discovery Stuff ==--
                                       -> show process tree
   pstree
   checksec
                                       -> check for security products
   --== Collection Stuff ==--
   clipboard
                                       -> retrieve clipboard
   screenshot
                                       -> retrieve screenshot
   --== Post Exploitation Stuff ==--
   lsass <method>
                                       -> dump lsass.exe [methods:
direct, comsvcs] (elevation required)
                                       -> dump sam, security, system hives using
reg.exe (elevation required)
   shellc <raw-shellcode-file> <pid> -> inject shellcode to remote process
   --== Evasion Stuff ==--
   unhook
                                       -> unhook ntdll.dll
   amsi
                                       -> patch amsi out of the current process
                                       -> patch etw out of the current process
   etw
   --== Persistence Stuff ==--
   persist run <command> <key-name> -> set run key (will try first hklm, then
   technique (elevation required)
   --== Privesc Stuff ==--
   uac fodhelper <command> <keep/die> -> elevate session using the fodhelper
uac bypass technique
   uac sdclt <command> <keep/die> -> elevate session using the sdclt uac
bypass technique
   --== Interaction stuff ==--
   msgbox <title> <text>
                                      -> pop a message box (blocking! waits for
enter press)
   speak <text>
                                       -> speak using sapi.spvoice com interface
   --== Communication Stuff ==--
   sleep <sleep-time> <jitter-%>
                                       -> change sleep time interval and jitter
   clear
                                       -> clear pending commands
```

```
collect
                                           -> recollect agent data
   kill
                                           -> kill the agent (persistence will still
take place)
   --== General ==--
   show
                                           -> show agent details
                                           -> back to main screen
   back
   cls
                                           -> clear the screen
                                           -> print this help message
   help
   exit
                                           -> exit Nimbo-C2
```

Credits

- OffensiveNim Great resource that taught me a lot about leveraging Nim for implant tasks. Some of Nimbo-C2 agent capabilities are basically wrappers around OffensiveNim modified examples.
- <u>Python-Prompt-Toolkit-3</u> Awsome library for developing python CLI applications. Developed the Nimbo-C2 interactive console using this.
- ascii-image-converter For the awsome Nimbo ascii art.
- All those random people from Github & Stackoverflow that I copy & pasted their code

TODO

Modules

- Improve Unhooking and patching by using syscalls.
- Run .NET assemblies.
- Migrate to another process (Meterpreter-like).
- Getsvstem.
- · Collect installed software.
- Zip & exfiltrate folder.
- Find sensitive files by keywords / regex search.

Misc

- Develop Proxy awareness for the agent.
- Add option to sign PE agent with digital signature. Some very nice Github projects do that to lower detection.
- Support shellcode payload type.
- Support more packers.