



# CYBER RANGE

HCLI  
3.0.0

January 2023 – 1.0

# SUMMARY

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# Introduction

# INTRODUCTION

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- Hcli is a CLI "Command Line Interface"
- Use to interact with hynesim
- Multiplatform
  - Windows PowerShell
  - Linux bash
- Automation needed
- Can realize just most important actions like hyneview
  - List topologies
  - Start/Stop entities
  - Manage users and API Keys
  - ...

# INSTALLATION

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- On the cyber range hcli is already installed
- Hcli's user installers wizard are located in:
  - Windows: /usr/share/hcli/DIATEAM\_hcli\_setup\_3.0.0.exe
  - Linux: /usr/share/hcli/DIATEAM\_hcli\_setup\_3.0.0

# CONFIGURATION

---

- Show hcli's configuration
  - hcli config list

```
~  
→ hcli config list  
field          content  
hapi.port      80  
show.related-objects true  
user.api-key   e651a969-e8d6-4d3f-a36d-879a7777b34a  
hapi.address   api.hns-platform.com
```

- Set new configuration
  - hcli config set user.api-key e651a969-e8d6-4d3f-a36d-879a7777b34a
  - hcli config set hapi.address api.hns-platform.com
  - hcli config set hapi.port 80

# Help

# HELPER

---

- Use the --help flag

```
~  
→ hcli --help  
NAME:  
  hcli - A cli for hynesim  
  
USAGE:  
  hcli [global options] command [command options]  
  
VERSION:  
  3.0.0  
  
DESCRIPTION:  
  It will help you to pilot the platform and run actions, such as loading a topology, listing entities and more. The communication with hynesim is made through the REST API offered by hns-master.  
  
AUTHOR:  
  DIATEAM - military & civil cybersecurity solutions  
  
COMMANDS:  
  topologies  Lists topologies and performs actions  
  entries     Lists entries and performs actions  
  users       Lists users and performs actions  
  apiKeys    Lists API keys and performs actions  
  config      List or set/unset configuration's keys  
  
GLOBAL OPTIONS:  
  --host value  The string value does match with this pattern: addr:port  
  --key value   The string value is the APIKey  
  --help, -h   show help (default: false)  
  --version, -v print the version (default: false)
```



# MAN PAGE

- Use the man command

```
man hcli
```

```
1: man hcli
hcli(1)                                General Commands Manual                                hcli(1)

NAME
    hcli - A cli for hynesim

VERSION
    3.0.0

AUTHOR
    DIATEAM - military & civil cybersecurity solutions

SYNOPSIS
    It will help you to pilot the platform and run actions, such as loading a topology, listing entities and
    more. The communication with hynesim is made through the REST API offered by hns-master.

USAGE
    hcli [global flags] command [flags...] [arguments...]

Global Flags
    • --host value
      The string value does match with this pattern: addr:port

    • --key value
      The string value is the APIKey

    • --help, -h
      show help (default: false)

    • --version, -v
      print the version (default: false)

Manual page hcli(1) line 1 (press h for help or q to quit)
```

# Use hcli

# HCLI COMMANDS

- Hcli version

```
→ hcli --version  
hcli version 3.0.0
```

- List topologies

```
~  
→ hcli topologies  
List of Topologies  
ShortName                               UUID                               Status  
Test Action Manager                     4984fb3e-386a-4c1b-a7e0-786dcedb9a96 ● loaded  
tp-alexis                                cf2bdd6d-8f28-4c0d-be44-21f2392345eb ● unloaded  
IXIA Training                            0e9b96bd-15bf-4b5d-8703-80530dfd102a ● broken  
Topo AV - Internet access                f0a51ce8-6a1e-4edf-85d6-a12ed223e2ca ● unloaded  
Moodle-LMS                               af9b6ca0-66ca-4364-bc66-0e420693f8b6 ● unloaded  
Session#2                                bc169ca1-ce98-4cfd-bac1-ecae4be379ab ● unloaded  
TP_Charles                               a3d91158-6743-48d8-9cd4-3b68a052feea ● broken  
Puppet témoin                           441c02a9-2196-45ee-9cbd-2beb91151853 ● unloaded
```

# HCLI COMMANDS

---

- Topology's information

```
~  
→ hcli topologies af9b6ca0-66ca-4364-bc66-0e420693f8b6  
General information  
ShortName      Moodle-LMS  
UUID           af9b6ca0-66ca-4364-bc66-0e420693f8b6  
Description  
Status         ● unloaded  
  
List of entity entries  
ShortName      UUID           Type           Status  
Moodle ubuntu  4794e06e-7d1e-45a0-8309-6d189a541a69  domain.kvm     ● not loaded  
Topology gate - internet-hub  7c93bfc9-f055-487a-a871-dadaf799c9d7  topologyGate  ● not loaded
```

- Start the entity

```
~  
→ hcli topologies entities start --entity 4794e06e-7d1e-45a0-8309-6d189a541a69 af9b6ca0-66ca-4364-bc66-0e420693f8b6  
start entity: 4794e06e-7d1e-45a0-8309-6d189a541a69
```

# HCLI COMMANDS

- Result

```
~  
→ hcli topologies af9b6ca0-66ca-4364-bc66-0e420693f8b6  
General information  
ShortName      Moodle-LMS  
UUID           af9b6ca0-66ca-4364-bc66-0e420693f8b6  
Description  
Status         ● loaded  
  
List of entity entries  
ShortName      UUID           Type           Status  
Moodle ubuntu  4794e06e-7d1e-45a0-8309-6d189a541a69  domain.kvm     ● started  
Topology gate - internet-hub  7c93bfc9-f055-487a-a871-dadaf799c9d7  topologyGate  ● undefined
```

# HCLI COMMANDS

- Entity information

```
~  
→ hcli entries 4794e06e-7d1e-45a0-8309-6d189a541a69  
General information  
ShortName      Moodle ubuntu  
LongName  
Description    user moodle  
               pwd hns  
UUID          4794e06e-7d1e-45a0-8309-6d189a541a69  
Type          domain.kvm  
Locked        Normal  
Immutable     false  
Status        ● started  
  
Resources  
vCPUs         1  
Memory       8.0 GiB  
  
Network  
Source  Model  MacAddress  
eth0   e1000  00:11:9A:27:a9:c1  
  
List of Topologies  
ShortName  UUID                      Status  
Moodle-LMS af9b6ca0-66ca-4364-bc66-0e420693f8b6 ● loaded
```

# Documentation

# DOCUMENTATION

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- Hcli's user documentation is located at:
  - `/usr/share/hcli/hcli_documentation.md`
- In Windows, the man page is located at:
  - `%USERPROFILE%\AppData\Local\DIATEAM\hcli\man`



# Script examples

# SCRIPT EXAMPLES

---

- Script bash

```
61 #####
62 # Program #
63 #####
64
65 echo "Verify if topology is loaded"
66 hcli topologies $TOPO_UUID > $TMP/topology
67 formatFile "$TMP/topology"
68 status=$(checkTopologyStatus "$TMP/topology" "loaded")
69 if [[ $status != "loaded" ]]; then
70     echo "Topology not loaded"
71     exit 1
72 fi
73
74 echo "Start the topology"
75 hcli topologies start $TOPO_UUID
76 if [[ $? -eq 1 ]]; then
77     exit 1
78 fi
79
80 #Sleep 2s because start VM is not fast
81 sleep 2
82
83 echo "verify if entities are started"
84 hcli topologies $TOPO_UUID > $TMP/entities
85 formatFile "$TMP/entities"
86 checkEntitiesStatus "$TMP/entities" "started"
87 echo "topology is started"
```

# SCRIPT EXAMPLES

---

- Script PowerShell

```
bla.ps1
1  if ($args.length -ne 1) {
2      Write-Host "Set topology name in argument of this script !"
3      exit 1
4  }
5  $TOPO_NAME = $args[0]
6  Write-Host "Search the topology: $TOPO_NAME"
7
8  $regex = "^($TOPO_NAME\s.*)$"
9  $TOPO = (hcli topologies search $TOPO_NAME)
10 if ($TOPO -eq "no topology found") {
11     Write-Host "Topology not found with this name: $TOPO_NAME"
12     Exit
13 }
14 $TOPO = $TOPO | Select-String -pattern "$regex"
15
16 $UUID = ($TOPO -split "^.*([a-fA-F0-9]{8}-[a-f0-9]{4}-4[a-f0-9]{3}-[89aAbB][a-f0-9]{3}-[a-f0-9]{12}).*$")
17
18 Write-Host $UUID
```



# DIATEAM

MILITARY & CIVIL CYBERSECURITY  
SOLUTIONS



**MANY THANKS !  
QUESTIONS ?**