



# MONKEYZOO

GCP testing network for Infection Monkey

## PURPOSE

This document describes each machine in Infection Monkey's private test network and is intended for developers only.

Guardicore™

<b>WARNING!</b> .....	<b>3</b>
<b>INTRODUCTION:</b> .....	<b>3</b>
<b>GETTING STARTED:</b> .....	<b>4</b>
<b>MACHINES' LEGEND:</b> .....	<b>5</b>
<b>ACCESSING MACHINES:</b> .....	<b>5</b>
<b>MACHINES:</b> .....	<b>6</b>
<b>NR. 2 HADOOP</b> .....	<b>6</b>
<b>NR. 3 HADOOP</b> .....	<b>6</b>
<b>NR. 4 ELASTIC</b> .....	<b>7</b>
<b>NR. 5 ELASTIC</b> .....	<b>7</b>
<b>NR. 6 SAMBACRY</b> .....	<b>8</b>
<b>NR. 7 SAMBACRY</b> .....	<b>8</b>
<b>NR. 8 SHELLSHOCK</b> .....	<b>9</b>
<b>NR. 9 TUNNELING M1</b> .....	<b>10</b>
<b>NR. 10 TUNNELING M2</b> .....	<b>10</b>
<b>NR. 11 SSH KEY STEAL</b> .....	<b>11</b>
<b>NR. 12 SSH KEY STEAL</b> .....	<b>11</b>
<b>NR. 13 RDP GRINDER</b> .....	<b>12</b>
<b>NR. 14 MIMIKATZ</b> .....	<b>13</b>
<b>NR. 15 MIMIKATZ</b> .....	<b>13</b>
<b>NR. 16 MSSQL</b> .....	<b>14</b>
<b>NR. 17 UPGRADER</b> .....	<b>14</b>
<b>NR. 18 WEBLOGIC</b> .....	<b>15</b>
<b>NR. 19 WEBLOGIC</b> .....	<b>15</b>
<b>NR. 20 SMB</b> .....	<b>16</b>
<b>NR. 21 SCAN</b> .....	<b>17</b>
<b>NR. 22 SCAN</b> .....	<b>17</b>
<b>NR. 23 STRUTS2</b> .....	<b>18</b>
<b>NR. 24 STRUTS2</b> .....	<b>18</b>
<b>NR. 250 MONKEYISLAND</b> .....	<b>19</b>
<b>NR. 251 MONKEYISLAND</b> .....	<b>19</b>
<b>NETWORK TOPOGRAPHY:</b> .....	<b>20</b>



## Warning!

This project builds an intentionally vulnerable network. Make sure not to add production servers to the same network and leave it closed to the public.

## Introduction:

MonkeyZoo is a Google Cloud Platform network deployed with terraform. Terraform scripts allows you to quickly setup a network that's full of vulnerable machines to regression test monkey's exploiters, evaluate scanning times in a real-world scenario and many more.

# Getting started:

## Requirements:

1. Have terraform installed.
2. Have a Google Cloud Platform account (upgraded if you want to test whole network at once).

## To deploy:

1. Create a service account for your project named "you\_name-monkeyZoo-user" and download its **Service account key**. Select JSON format.
2. Get these permissions in monkeyZoo project for your service account:
  - a. **Compute Engine -> Compute image user**
3. Change configurations located in the config.tf file (don't forget to link to your service account key file):

```
provider "google" {  
    project = "project-28054666"  
    region  = "europe-west3"  
    zone    = "europe-west3-b"  
    credentials = "${file("project-92050661-9dae6c5a02fc.json")}"  
}  
  
service_account_email="test@project-925243.iam.gserviceaccount.com"
```

4. Run `terraform init`

## To deploy the network run:

```
terraform plan          (review the changes it will make on GCP)  
Terraform apply        (apply those changes)
```

## Machines' legend:

"Machines" paragraph describes each network machine one by one.

Background colours meaning:

**Red:** machine is exploited using credentials from configuration (brute-force attack).

**Blue:** machine is exploited through a vulnerability (no credentials needed).

**Green:** machine is secure.

**Grey:** machine is not implemented/doesn't work yet.

## Accessing machines:

You can access island machines through rdp/ssh using **m0nk3y** user and password provided in the corresponding machine's documentation.

Other machines are designed in a black-box fashion and should work as soon as they're booted, however it's still possible to access and modify them using GCP API.

## Machines:

<b>Nr. 2 Hadoop</b> [10.2.2.2]	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	JDK, <a href="#">Hadoop 2.9.1</a>
Default server's port:	8020
Server's config:	<a href="#">Single node cluster</a>
Scan results:	Machine exploited using Hadoop exploiter
Notes:	

<b>Nr. 3 Hadoop</b> [10.2.2.3]	
OS:	<b>Windows 10 x64</b>
Software:	JDK, <a href="#">Hadoop 2.9.1</a>
Default server's port:	8020
Server's config:	<a href="#">Single node cluster</a>
Scan results:	Machine exploited using Hadoop exploiter
Notes:	

<b>Nr. 4 Elastic</b> (10.2.2.4)	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	JDK, <a href="#">Elastic 1.4.2</a>
Default server's port:	9200
Server's config:	Default
Scan results:	Machine exploited using Elastic exploiter
Notes:	Don't forget to <a href="#">add at least a single entry</a> .

<b>Nr. 5 Elastic</b> (10.2.2.5)	
OS:	<b>Windows 10 x64</b>
Software:	JDK, <a href="#">Elastic 1.4.2</a>
Default server's port:	9200
Server's config:	Default
Scan results:	Machine exploited using Elastic exploiter
Notes:	Don't forget to <a href="#">add at least a single entry</a> .



<b>Nr. 6 Sambacry</b> (10.2.2.6)	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	Samba > 3.5.0 and < 4.6.4, 4.5.10 and 4.4.14
Default server's port:	-
Root password:	;^TK`9XN_x^
Server's config:	
Scan results:	Machine exploited using Sambacry exploiter
Notes:	

<b>Nr. 7 Sambacry</b> (10.2.2.7)	
OS:	<b>Ubuntu 16.04.05 x32</b>
Software:	Samba > 3.5.0 and < 4.6.4, 4.5.10 and 4.4.14
Default server's port:	-
Root password:	*.&A7/W}Rc\$
Server's config:	
Scan results:	Machine exploited using Sambacry exploiter
Notes:	

## Nr. 8 Shellshock

[10.2.2.8]

OS:	<b>Ubuntu 12.04 LTS x64</b>
Software:	Apache2, bash 4.2.
Default server's port:	80
Scan results:	Machine exploited using Shellshock exploiter
Notes:	Vulnerable app is under /cgi-bin/test.cgi

## Nr. 9 Tunneling M1

[10.2.2.9, 10.2.1.9]

OS:	Ubuntu 16.04.05 x64
Software:	OpenSSL
Default service's port:	22
Root password:	`))jU7L(w}
Server's config:	-
Notes:	

## Nr. 10 Tunneling M2

[10.2.1.10]

OS:	Ubuntu 16.04.05 x64
Software:	OpenSSL
Default service's port:	22
Root password:	3Q=(Ge(+&w]*
Server's config:	-
Notes:	Accessible only trough Nr.9

### Nr. 11 SSH key steal.

[10.2.2.11]

OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	OpenSSL
Default connection port:	22
Root password:	^NgDvY59~8
Server's config:	SSH keys to connect to NR. 11
Notes:	

### Nr. 12 SSH key steal.

[10.2.2.12]

OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	OpenSSL
Default connection port:	22
Root password:	u?Sj5@6(-C
Server's config:	SSH configured to allow connection from NR.10
Notes:	Don't add this machine's credentials to exploit configuration.

<b>Nr. 13 RDP grinder</b> <b>[10.2.2.13]</b>	
OS:	<b>Windows 10 x64</b>
Software:	-
Default connection port:	3389
Root password:	2}p}aR]&=M
Scan results:	Machine exploited using RDP grinder
Server's config:	Remote desktop enabled Admin user's credentials: m0nk3y, 2}p}aR]&=M
Notes:	

<b>Nr. 14 Mimikatz</b> [10.2.2.14]	
OS:	<b>Windows 10 x64</b>
Software:	-
Admin password:	lvrrw5zEzs
Server's config:	Has cashed mimikatz-15 RDP credentials <a href="#">Turn on SMB</a>
Scan results:	Machine exploited using SMB Found cashed credentials
Notes:	

<b>Nr. 15 Mimikatz</b> [10.2.2.15]	
OS:	<b>Windows 10 x64</b>
Software:	-
Admin password:	pAJfG56JX><
Server's config:	Credentials cashed at mimikatz-14 <a href="#">Turn on SMB</a>
Scan results:	Machine exploited using SMB (creds stolen with mimikatz)
Notes:	<a href="#">Turn on SMB</a> If you change this machine's IP it won't get exploited

<b>Nr. 16 MsSQL</b> <b>[10.2.2.16]</b>	
OS:	<b>Windows 10 x64</b>
Software:	MSSQL Server
Default service port:	1433
Server's config:	xp_cmdshell feature enabled in MSSQL server Server's creds (sa): admin, }8Ys#"
Notes:	Add server's credentials to /test/creds before testing Enable SQL server browser service <a href="#">Enable remote connections</a> <a href="#">Change default password</a>

<b>Nr. 17 Upgrader</b> <b>[10.2.2.17]</b>	
OS:	<b>Windows 10 x64</b>
Default service port:	445
Root password:	U??7ppG_
Server's config:	<a href="#">Turn on SMB</a>
Notes:	

<b>Nr. 18 WebLogic</b> [10.2.2.18]	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	JDK, <a href="#">Oracle WebLogic server 12.2.1.2</a>
Default server's port:	7001
Admin domain credentials:	weblogic : B74Ot0c4
Server's config:	Default
Notes:	

<b>Nr. 19 WebLogic</b> [10.2.2.19]	
OS:	<b>Windows 10 x64</b>
Software:	JDK, <a href="#">Oracle WebLogic server 12.2.1.2</a>
Default server's port:	7001
Admin servers credentials:	weblogic : =ThS2d=m(`B
Server's config:	Default
Notes:	



## Nr. 20 SMB

[10.2.2.20]

OS:	Windows 10 x64
Software:	-
Default service's port:	445
Root password:	YbS,<tpS.2av
Server's config:	<a href="#">Turn on SMB</a>
Notes:	Add administrator's password to test/creds

<b>Nr. 21 Scan</b> <b>[10.2.2.21]</b>	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	-
Default server's port:	-
Server's config:	Default
Notes:	Used to scan a machine with no vulnerabilities (to evaluate scanning speed and etc.)

<b>Nr. 22 Scan</b> <b>[10.2.2.22]</b>	
OS:	<b>Windows 10 x64</b>
Software:	-
Default server's port:	-
Server's config:	Default
Notes:	Used to scan a machine with no vulnerabilities (to evaluate scanning speed and etc.)

## Nr. 23 Struts2

[10.2.2.23]

OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	JDK, struts2 2.3.15.1, tomcat 9.0.0.M9
Default server's port:	8080
Server's config:	Default
Notes:	

## Nr. 24 Struts2

[10.2.2.24]

OS:	<b>Windows 10 x64</b>
Software:	JDK, struts2 2.3.15.1, tomcat 9.0.0.M9
Default server's port:	8080
Server's config:	Default
Notes:	

<b>Nr. 250 MonkeyIsland</b> (10.2.2.250)	
OS:	<b>Ubuntu 16.04.05 x64</b>
Software:	MonkeyIsland server, git, mongodb etc.
Default server's port:	-
Private key passphrase:	05f8jU5ma
Notes:	Only accessible trough GCP

<b>Nr. 251 MonkeyIsland</b> (10.2.2.251)	
OS:	<b>Windows Server 2016 x64</b>
Software:	MonkeyIsland server, git, mongodb etc.
Default server's port:	-
Private key passphrase:	UXvvuKv5V
Notes:	Only accessible trough GCP

# Network topography:

