# Synopsis

We are in 3019... The Intergalactic Universe is controlled by new technologies.

More than ever, your planet is threatened: failures have been detected in your systems! You have to fix them as soon as possible in order for your economy to flourish again! Otherwise, other planets will outgrow you and you will disappear in deep space...

Start by looking for allies! You will need help to solve all the problems at hand, join your development, security and ops strengths!

Only the biggest planet of the universe can win this big intergalactic race...

Go save yours! We all depend on you :)
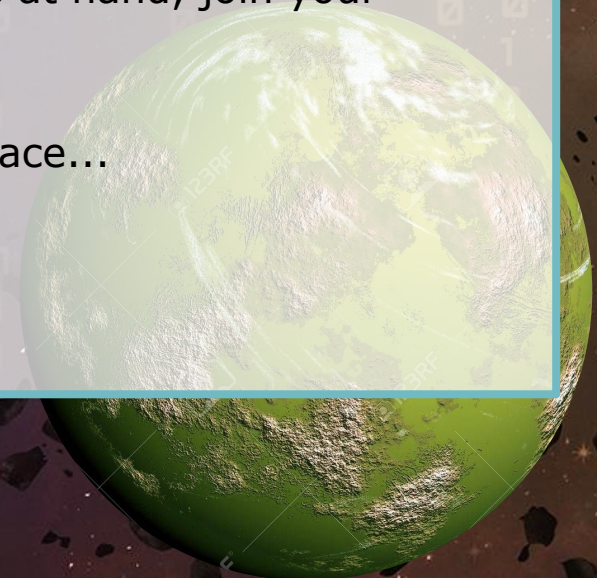
Battle plan

The game will go through 3 phases. You will need to be efficient, smart… and sometimes cheat a bit!

Phase I – Icebreaker
Find your allies: their puzzle pieces have the same color as yours. Solve the puzzle, scan the code… and get access to your planet! Quick, the clock is ticking!

Phase II – Solve challenges
Inspect your system, look for flaws and fix them! Find clues and cheat codes in the conference hall, maybe ask for help online… but remember to work as a team!

Phase III – Attack other planets
Using wormhole space probes, we got a glimpse of the future. Rules will change during the last session. You better be prepared to defend your planet… and attack others!

Phase I – Ice breaker

Your strengths are scattered! To find your allies, look for puzzle pieces of the same colors as yours. Assemble the puzzle to discover the name of your planet and a QR Code to scan.

This will give you access to your systems:

```
IDE URL         : https://eu-west-1.console.aws.amazon.com/cloud9
AWS Account ID  : <The AWS account ID to login>
Login           : <Your login>
Password        : <Your password>
SSH Key         : <Your SSH key>
```

The provided login and password will be the same for all the services in your systems. The SSH key can be used to connect to all your AWS virtual machines.

Phase I – Ice breaker

Here are some things you can do in your online IDE (Cloud9).

Upload your SSH Key to connect to AWS EC2 instances (using the UI)

In `File>Upload local file`, drag and drop a `.pem` file containing your SSH key

Explore your system topology (using the embedded terminal)

```
export TEAM_NAME=<Your team name here>
aws ec2 describe-instances \
    --filter Name=tag:team,Values=${TEAM_NAME} Name=instance-state-name,Values=running \
    --query='Reservations[].Instances[].{ Instance: Tags[?Key==`Name`]|[0].Value, PublicIP:
PublicIpAddress, PrivateIP: PrivateIpAddress }' \
    --output=table
```

Warning! If you copy/paste this, there is no newline in the command after `PublicIP:`

Pull your codebase (using the embedded terminal)

```
eval $(ssh-agent)
ssh-add <your private key>.pem
git clone ubuntu@<PrivateIP of your Build VM>:ugly-system.git
```

Phase II – Solve challenges

Your planet

The leaderboard displays the planets of all 25 teams. Can you see yours?

Points

Each solved challenge gives you `DevPoints`, `SecPoints` and `OpsPoints`. During each round (of ~1 minute), space probes will scan your system to check how many challenges are solved at this precise moment, and compute the sums `SumOfDevPoints`, `SumOfSecPoints` and `SumOfOpsPoints` by adding up the points corresponding to these solved challenges.

Score

All planets start with a score of `0`. At the end of each round, your score is incremented by `Min(SumOfDevPoints,SumOfSecPoints,SumOfOpsPoints)`. For instance, if you have solved two challenges `(Dev=1,Sec=0,Ops=2)` and `(Dev=0,Sec=5,Ops=1)`, your score is incremented by `1` point every minute (because `Min(1+0,0+5,2+1)=1`). In other words, dev expertise alone is not enough! Just like in real life, Dev, Sec and Ops need to work together to deliver value.

Phase II – Solve challenges

There are three kinds of challenges: flaws to fix, flags to discover and quizzes to solve

Flaws
Your system is already up and running, and a basic CI/CD is configured. You can start trying to fix issues through your IDE. You will find attached a copy of the report from your spies regarding the flaws to fix ASAP. Each fixed issue gives you `Dev`, `Sec` and `Ops` points.

Flags
If you search the conference hall, you might stumble upon hidden QR Codes leading to flags (secret codes). Expose them in your system's `/flags` endpoints to earn more points... A secret weapon is always useful during a race!

Quizzes & workshops
In the conference hall, you will also find workshops and quizzes testing your skills...
If you succeed, you will get a flag. More skills, more points!

Phase III – Attack other planets

During the last round, rules will change. We don't have more information at the time, but terrible things will happen. Let's hope you fixed everything… and be ready to benefit from other teams lagging behind!

Use everything you learned.

Fire at will.

```
leader@pc:~$ sudo planetmap
[sudo] password for leader:
-- Welcome to PlanetMap 0.0.0.0.1 (Alpha) --


              +-----------------------------------------------+
              | /!\ Incoming alien probes detected here /!\ |
              +-----------------------------------------------+
                                  |
                       +-----------------+
                       | Load Balancer |
                       | (nginx: 443)  |
                       +-----------------+
                                  |
                       +-----------+-----------+
                       |                       |
              +-----------------+     +-----------------+
              |    Node 1       |     |    Node 2       |
              | (spring: 8080)  |     |       ()        |
              +-----------------+     +-----------------+
                       |                       |
                       +-----------+-----------+
                                  |
              +-----------------------------------------------+
              |                    Build                      |
              | (Git, Jenkins: 80/jenkins, Sonar: 80/sonar)  |
              +-----------------------------------------------+
                                  |
                       +-----------------+
                       |      IDE        |
                       |   (Cloud 9)     |
                       +-----------------+


leader@pc:~$
```
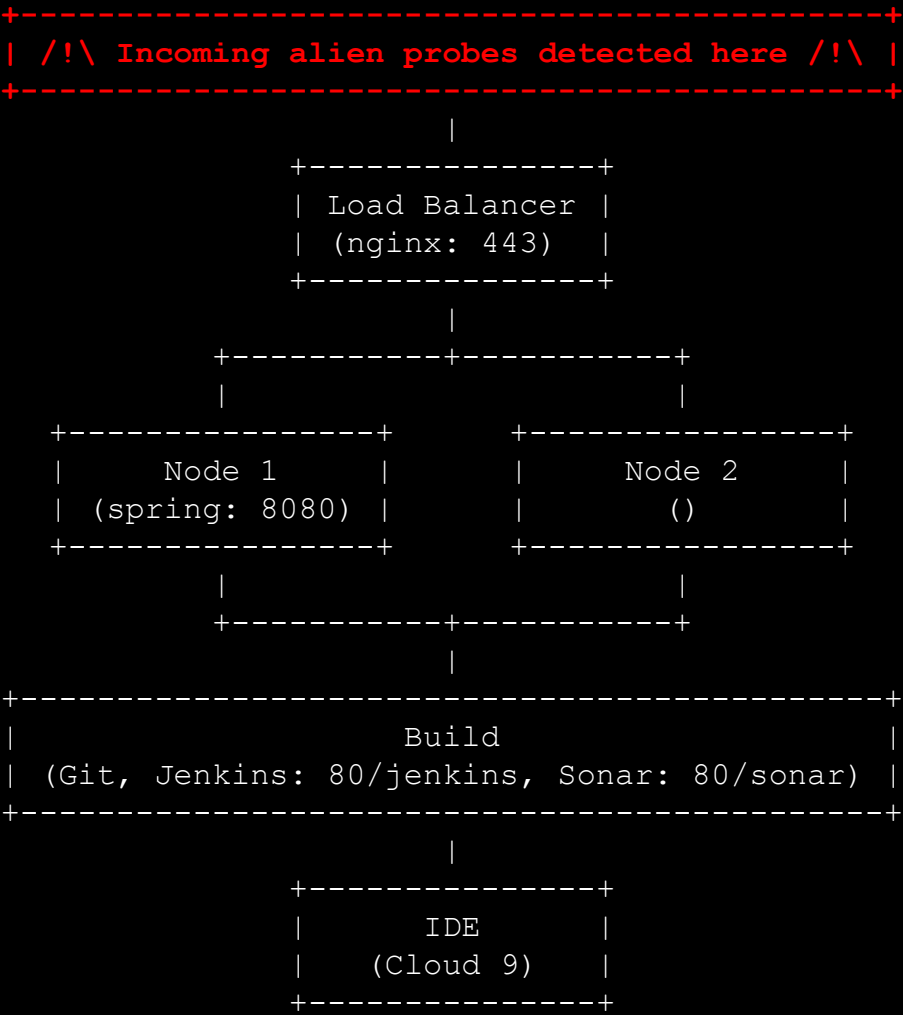
```
spy@pc:~$ sudo spytool connect
[sudo] password for spy:
-- Welcome to SpyTool 3.0.19 --
spytool> scan --all


+----------------------+--------------+-------------------------------------------------------+
| FLAW                 | SEVERITY     | INFO                                                  |
|                      | (DEV,SEC,OPS)|                                                       |
+----------------------+--------------+-------------------------------------------------------+
| Uptime               | 1, 1, 1      | You must always be available to answer interplanetary calls |
+----------------------+--------------+-------------------------------------------------------+
| Spring Actuator      | 1, 3, 0      | You should not exhibit sensitive data to your enemies |
+----------------------+--------------+-------------------------------------------------------+
| Dependencies         | 0, 2, 2      | Your "Dependency-check" security expert detected security |
|                      |              | failures within your system                           |
+----------------------+--------------+-------------------------------------------------------+
| Default error page   | 1, 1, 0      | The internal structure of your system can be guessed from the |
|                      |              | default error page                                    |
+----------------------+--------------+-------------------------------------------------------+
| Load Balancing       | 0, 0, 5      | Your system must be resilient to galactic transmission failures |
+----------------------+--------------+-------------------------------------------------------+
| Sonar                | 0, 0, 2      | The "Sonar" satellite must analyse the air quality of your planet |
+----------------------+--------------+-------------------------------------------------------+
| Quality              | 4, 0, 0      | 80% of the air must be covered by tests, with no bugs nor smells |
+----------------------+--------------+-------------------------------------------------------+
| Logs                 | 1, 2, 0      | We found compromising information in your planet's activity logs |
+----------------------+--------------+-------------------------------------------------------+
| Secure transmissions | 0, 2, 3      | All transmissions must be secured                     |
+----------------------+--------------+-------------------------------------------------------+


spytool> exit
-- Bye --
spy@pc:~$
```