

Cyber Range Presentation

The course is intended to team willing to learn and practice programming techniques.





- Platforms
- Services





Platforms

Platforms

CYBER TRAINING









CYBER LABS



TEST & ANALYSIS



PROTOTYPING & EVALUATION

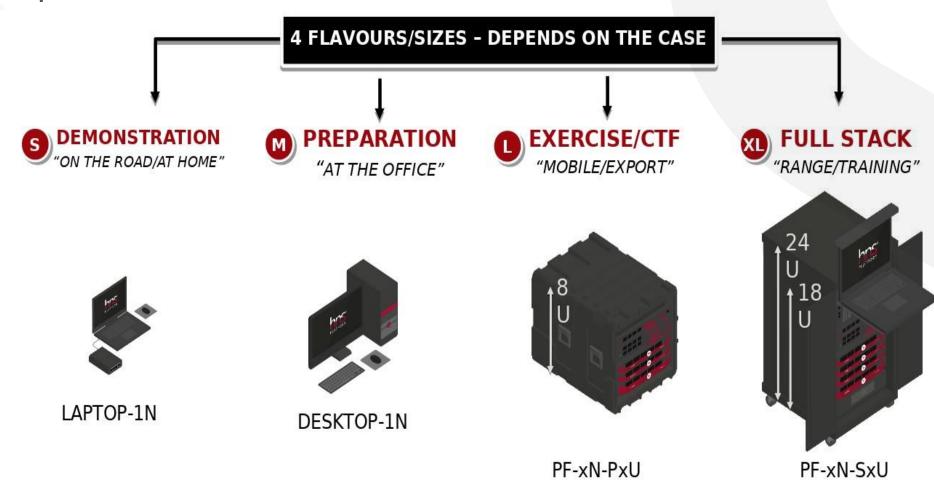


MAINTAIN IN SAFE CONDITIONS



Platforms

Multiple sizes





Examples









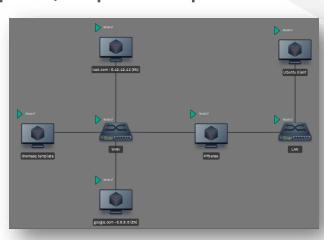


- Hynesim services
 - hapi
 - ActionManager
 - hcli



- Hynesim presentation
 - Virtual equipment orchestration (machines, switches, ...).
 - Easy creation of network between machines.
 - Hybrid capabilities, connection to real equipment.
 - Distributed architecture allowing for load balancing.
 - Multi users.
 - Easy to share entities and topologies via the import/export capabilities.







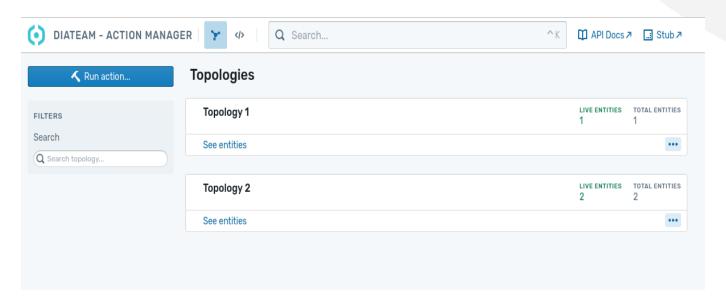
- Hynesim vocabulary
 - Master: the service, that oversees nodes.
 - Node: the service, that oversees virtual machines.
 - Hyneview: graphical client, used to give orders to the master.
 - Topology: a representation of a network architecture.
 - Domain: a virtual machine. This name is borrowed from libvirt.
 - Hybrid netcard: a virtual equipment used to connect a simulated network with a real network
 - Topology gate: a virtual equipment allowing the connection of multiple virtual topologies.



- hapi presentation
 - REST API to interact with hynesim.
 - Allows automating actions that could be done manually via hyneview. (topology building, starting entities, clones...).
 - Authenticated the same way hynesim is (separated users).



- ActionManager presentation
 - Agent allowing the control of a virtual machine from the inside
 - Serial port in the virtual machine
 - REST API to automate action launching
 - Web application





- hcli presentation
 - Commande line interface
 - Created to interact with hynesim
 - Allow to perform actions on topologies, entities, users...

```
hcli topologies af9b6ca0-66ca-4364-bc66-0e420693f8b6
                Moodle-LMS
ShortName
UUID
                af9b6ca0-66ca-4364-bc66-0e420693f8b6
Description
Status

    unloaded

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
```





HNS Presentation

MANYTHANKS! QUESTIONS?



