



Institute for the Wireless Internet of Things

at Northeastern University

Colosseum First-time Users

Davide Villa



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Colosseum Credentials

When an account is created, **2 pairs** of credentials are sent:

1. **Freshdesk** Credentials:

- Access guides.
- Open Tickets.



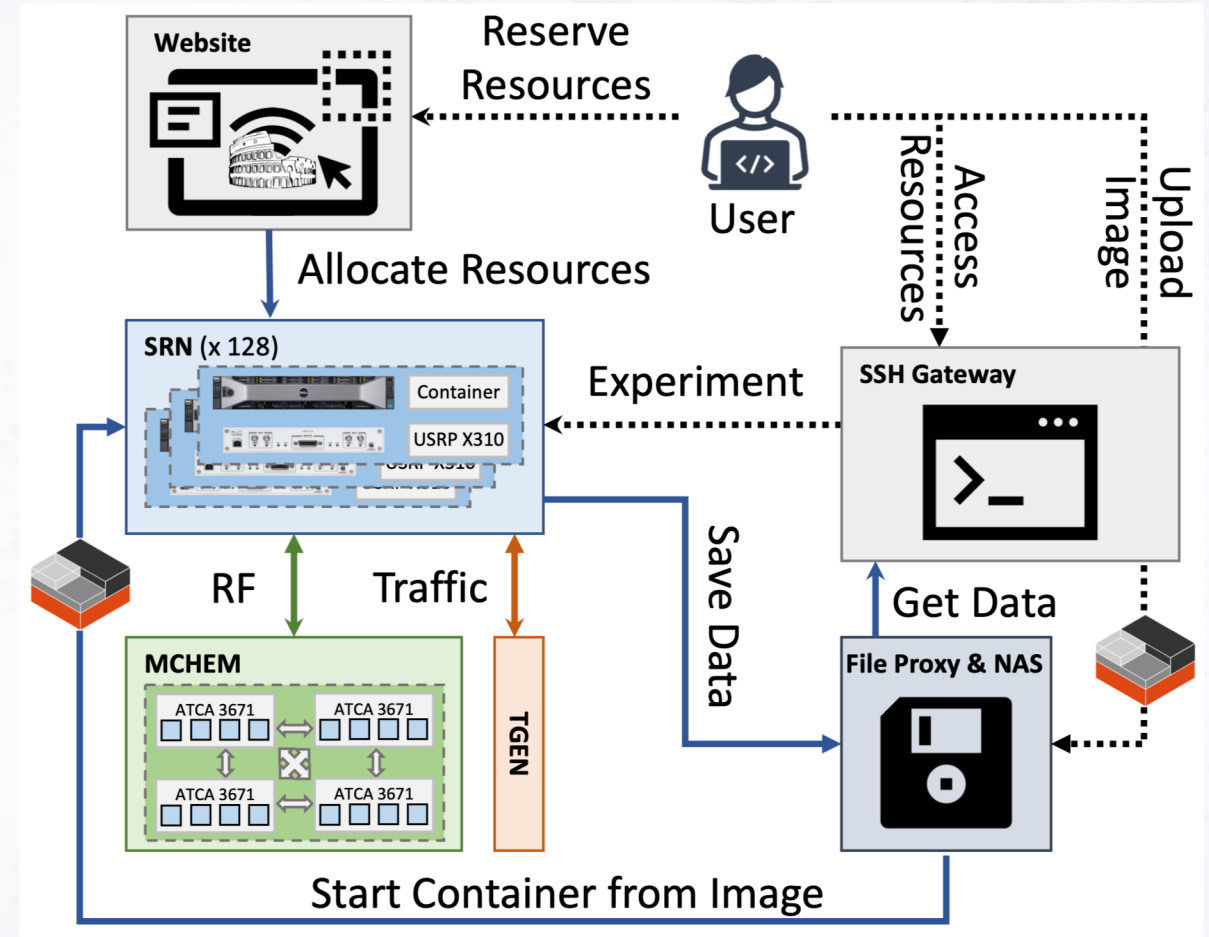
2. **Colosseum** Credentials:

- Access Colosseum Experiment website.
- SSH in the Colosseum environment.



Colosseum Access Components

- **SSH gateway**
 - Allows users to access to the system
 - Allows users to log into the SRNs
- **File-proxy:**
 - Allows users to upload/download container images and configuration files
 - Allows users to retrieve experiment data



SSH Setup (Linux/MAC)

Add the following to SSH config file: ~/.ssh/config

```
# SSH Gateway
Host colosseum-gw
    Hostname gw.colosseum.net
    User <your-colosseum-user-name>
    IdentityFile <path-to-private-key-on-your-
local-machine>

# File Proxy Server
Host file-proxy
    User <your-colosseum-user-name>
    ProxyCommand ssh -W %h:%p colosseum-gw

# SRNs (User Container)
Host <your-colosseum-team-name>-???
    User root
    StrictHostKeyChecking no
    UserKnownHostsFile=/dev/null
    ProxyCommand ssh -W %h:%p colosseum-gw
```

```
# SSH Gateway
Host colosseum-gw
    Hostname gw.colosseum.net
    User <your-colosseum-user-name>
    IdentityFile <path-to-private-key-on-your-local-machine>

# File Proxy Server
Host file-proxy
    User <your-colosseum-user-name>
    ProxyCommand ssh -W %h:%p colosseum-gw

# SRNs (User Container)
Host <your-colosseum-team-name>-???
    User root
    StrictHostKeyChecking no
    UserKnownHostsFile=/dev/null
    ProxyCommand ssh -W %h:%p colosseum-gw
```

Replace these!

Note: Users need to copy their public key in the Colosseum portal

Reservation Modes

- **Interactive**: control Colosseum resources through the command line interface
- **Batch**: automatically perform (preconfigured) experiments on Colosseum

Interactive Mode	
Pros	Cons
Can verify status of MCHEM and TGEN before running experiment	Experiment must be run in real time and require user input to instantiate RF and TG scenarios.
Allows to debug programs on-the-fly	CLI mode uses more tokens per experiment than batch mode

Batch Mode	
Pros	Cons
Can be scheduled to run at a given time, without requiring specific user input during experiment runtime	The container cannot be accessed by the user
Automatically perform experiments and large data-collection campaigns	Takes a longer setup time

Start an Interactive Reservation

Experiment schedule and duration

of network nodes

Container images

Options

Reservation cost

Home

Reservations

Batch Jobs

Scenarios

Images

gladiators-admin

< Reservations

Request New Reservation

Name: test-reservation

Start date: 2023/06/04

Start time: 01 : 08 PM First slot

Duration: 60 minutes

Note: 5 minutes of your reservation will be used for data transfer

Number of SRNs: 2 7 max available

Default image: webinar-interactive-v1 Reset all

Node 1: webinar-interactive-v1

Node 2: webinar-interactive-v1

Octoclock: ☐

Check this option to reserve SRNs with radios connected to an Octoclock clock distributor (currently SRNs available: 7).

Number of GPUs: 0 7 max available

GPU node type: ☒ DGX ☐ LMN

Quad 1 4 available

Quad 2 0 available

Quad 3 3 available

Quad 4 0 available

Quad GPU 14 available

Sun 4 June

Mon 5 June

12:00 am 12:00 pm 4:00 pm 8:00 pm 12:00 am 4:00 am 8:00 pm

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

Current Cost Remaining


Tokens 3480 24 3456

Reset

Request



View Existing Reservations



HomeReservationsBatch JobsScenariosImages

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Token budget for reservations

Manage gladiators Reservations

Your team has 3456 tokens left this week. Your team will reset to 3480 - Tue Jun 6th at 9am
Please contact Colosseum help desk in case of issues.

+ New Reservation

Sat 3 June
8:00 pm

Sun 4 June
12:00 am

4:00 am

8:00 am

12:00 pm

4:00 pm

134142: ti

Reservation Details

ExportLast 7 days

Type	Res ID	Name	Status	Nodes	Start	End	Duration(min)	User
All	Reservation Search...							
Interactive	134142	test-reservation	Future	2 node(s)	2023/06/04 - 1:09:00 PM	2023/06/04 - 2:09:00 PM	60	gladiators-admin

Reservation list


View Node status

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Quick Start Guide

FreshDesk

View Reservation Details



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< Reservations

View test-reservation (Interactive)
gladiators - gladiators-admin

Export

ID: 134142Status: ActiveNodes: 2Time: 2023/06/04 1:09:00 PM - 2023/06/04 2:09:00 PM (60 minutes)

Node	Image	Hostname	Port	Status
SRN-1	webinar-interactive-v1	gladiators-001	-	Allocated
SRN-3	webinar-interactive-v1	gladiators-003	-	Allocated

Hostnames of the nodes in the reservation

Node status

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Quick Start GuideFreshDesk

Login to an SRN

- Option 1:

Access as root
from gateway

```
~ ssh colosseum-gw  
gladiators-admin@gw:~$ ssh root@gladiators-037  
root@gladiators-037's password:  
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.0-109-generic x86_64)  
  
* Documentation:  https://help.ubuntu.com  
* Management:    https://landscape.canonical.com  
* Support:        https://ubuntu.com/advantage  
  
Get cloud support with Ubuntu Advantage Cloud Guest:  
http://www.ubuntu.com/business/services/cloud  
  
0 packages can be updated.  
0 updates are security updates.  
  
Last login: Fri Mar 25 22:13:36 2022 from 172.16.1.200  
root@gladiators-base-1604-nocuda-srn37:~#
```

Access
Gateway

Node hostname

Successfully
logged-in!

Container name

- Option 2:

From your pc
(need ssh config)

```
~ ssh gladiators-035
```

Node hostname

Links to Colosseum Resources and Documentations

- Young Gladiator GitHub Page
 - <https://github.com/colosseum-wiot/colosseum-school-2023>
- Colosseum Home Page
 - <http://colosseum.net>
 - <https://northeastern.edu/colosseum>
- Colosseum Experiment Portal
 - <https://experiments.colosseum.net>
- Freshdesk Users Support
 - Knowledge Base: <https://colosseumneu.freshdesk.com/support/solutions>
 - Helpdesk: <https://colosseumneu.freshdesk.com/support/tickets>
- Colosseum Users Google Group
 - <https://groups.google.com/g/colosseum-users>



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Thank You!



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