CINECA

ADA cloud user documentation
Getting started (1):
How to create an instance

HPC Cloud support group

Last update: 30 May 2025

Getting started workflow

STEP BY STEP user GUIDE

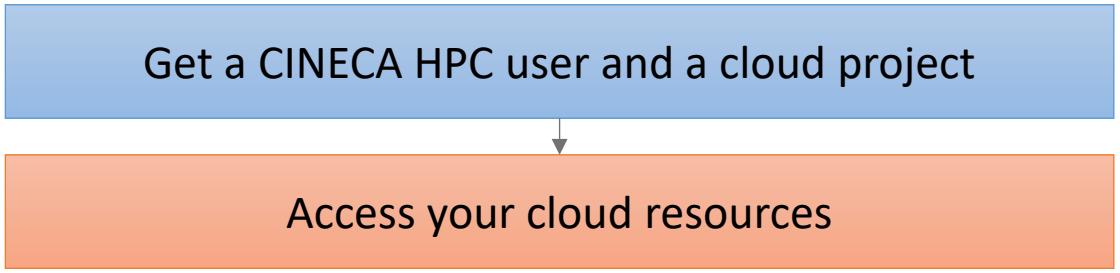
CINECA

Get a CINECA HPC user and a cloud project

Getting started workflow

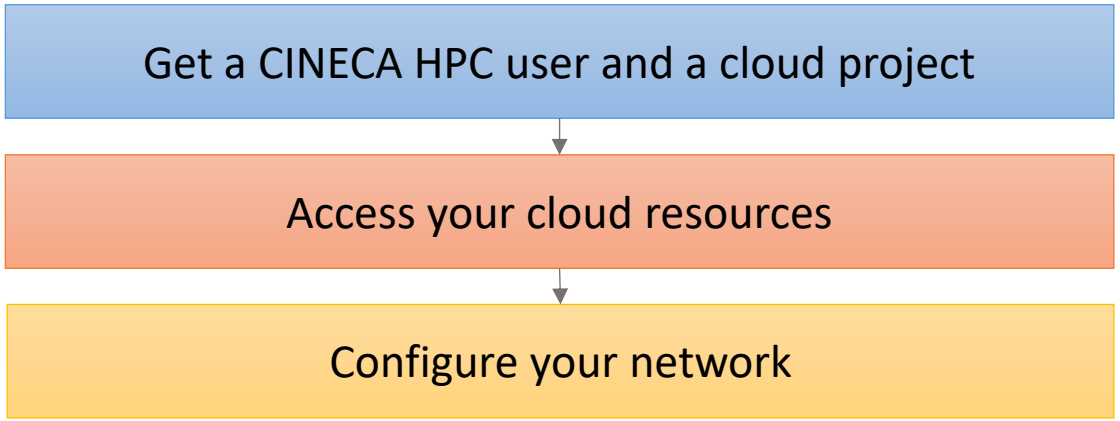
STEP BY STEP user GUIDE

CINECA



Getting started workflow

STEP BY STEP user GUIDE



Getting started workflow

STEP BY STEP user GUIDE

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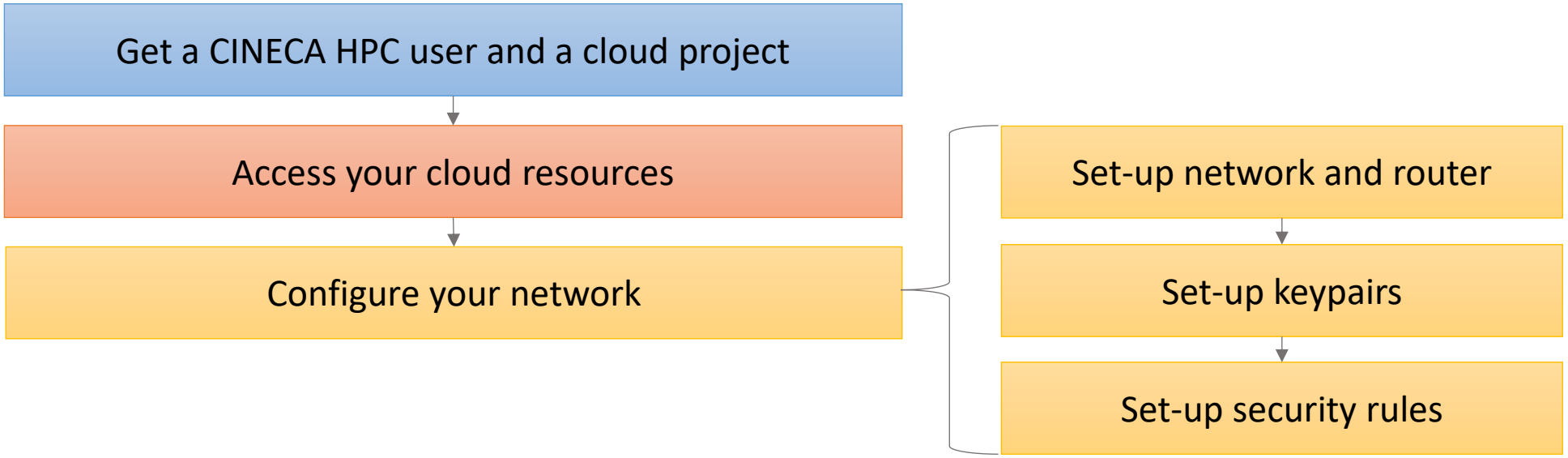

Getting started workflow

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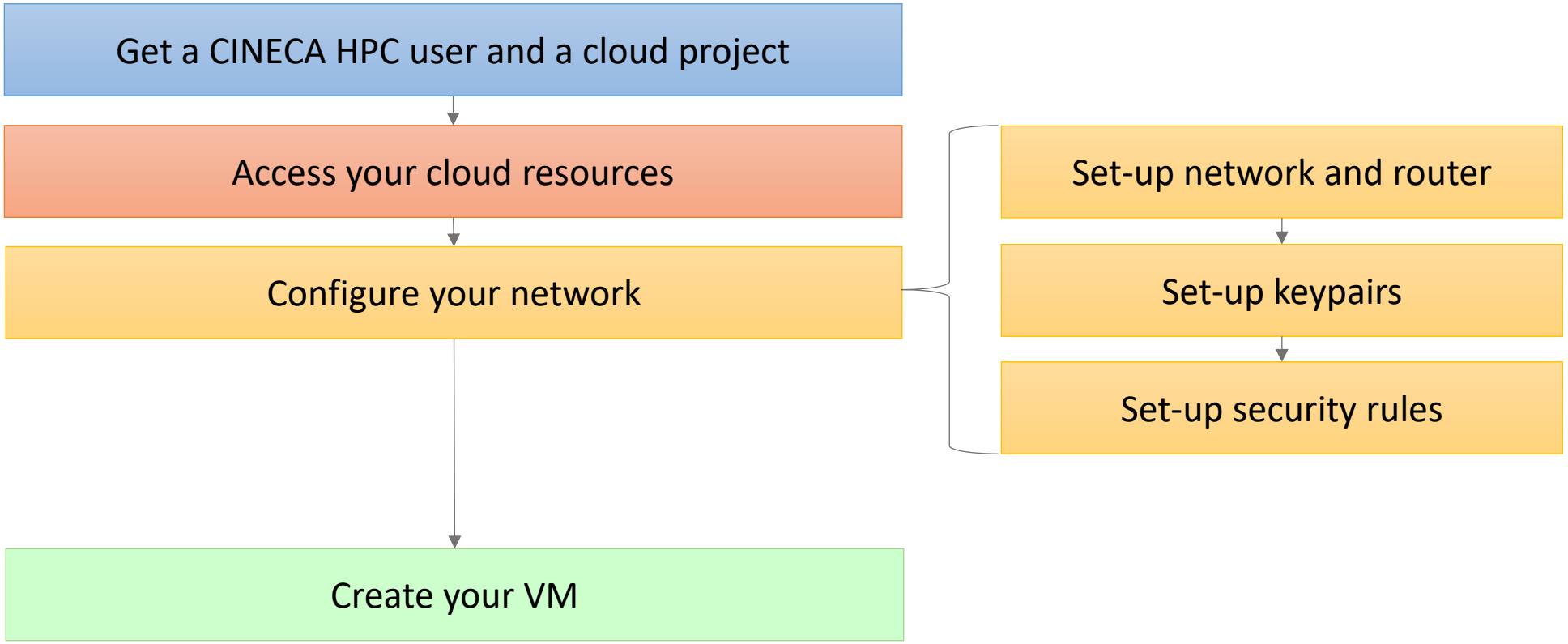

Getting started workflow

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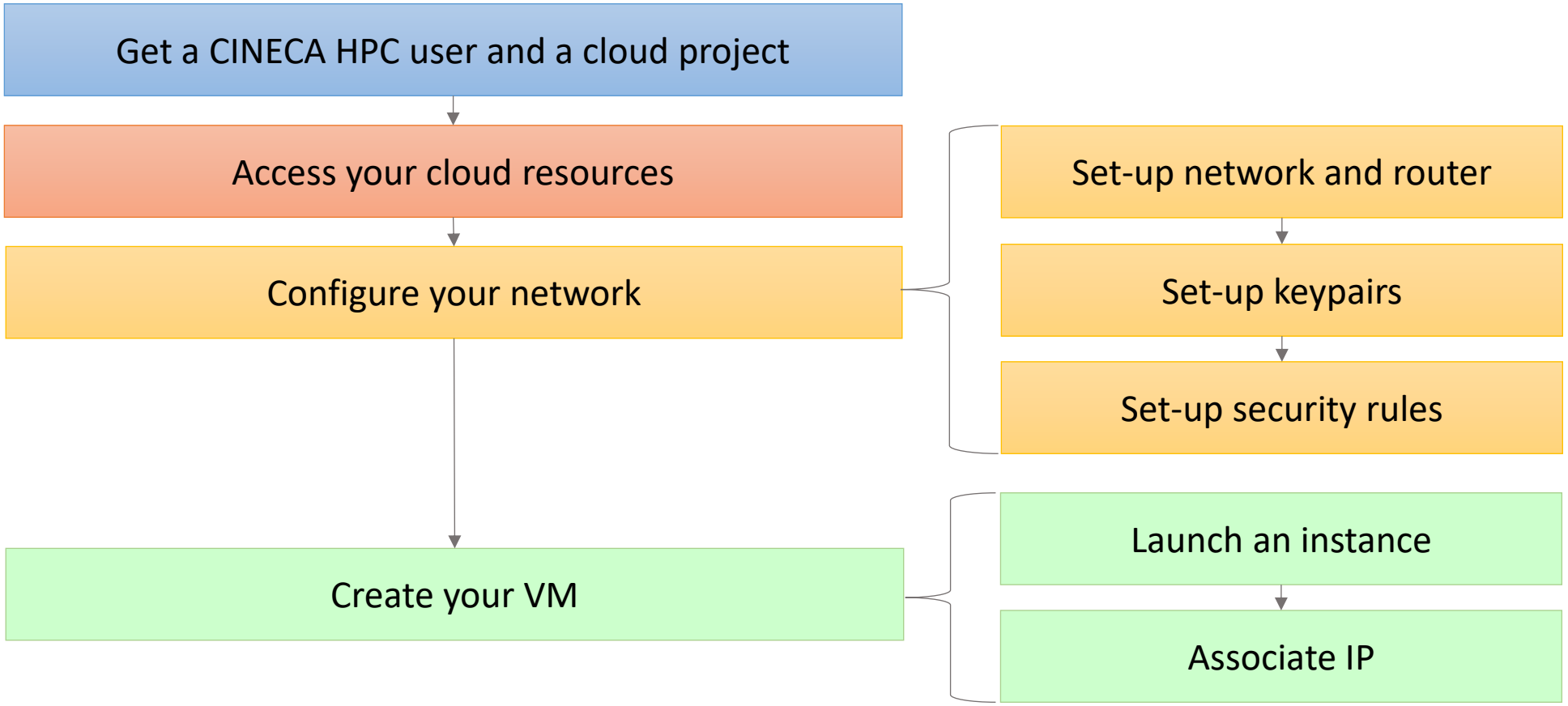

Getting started workflow

STEP BY STEP user GUIDE

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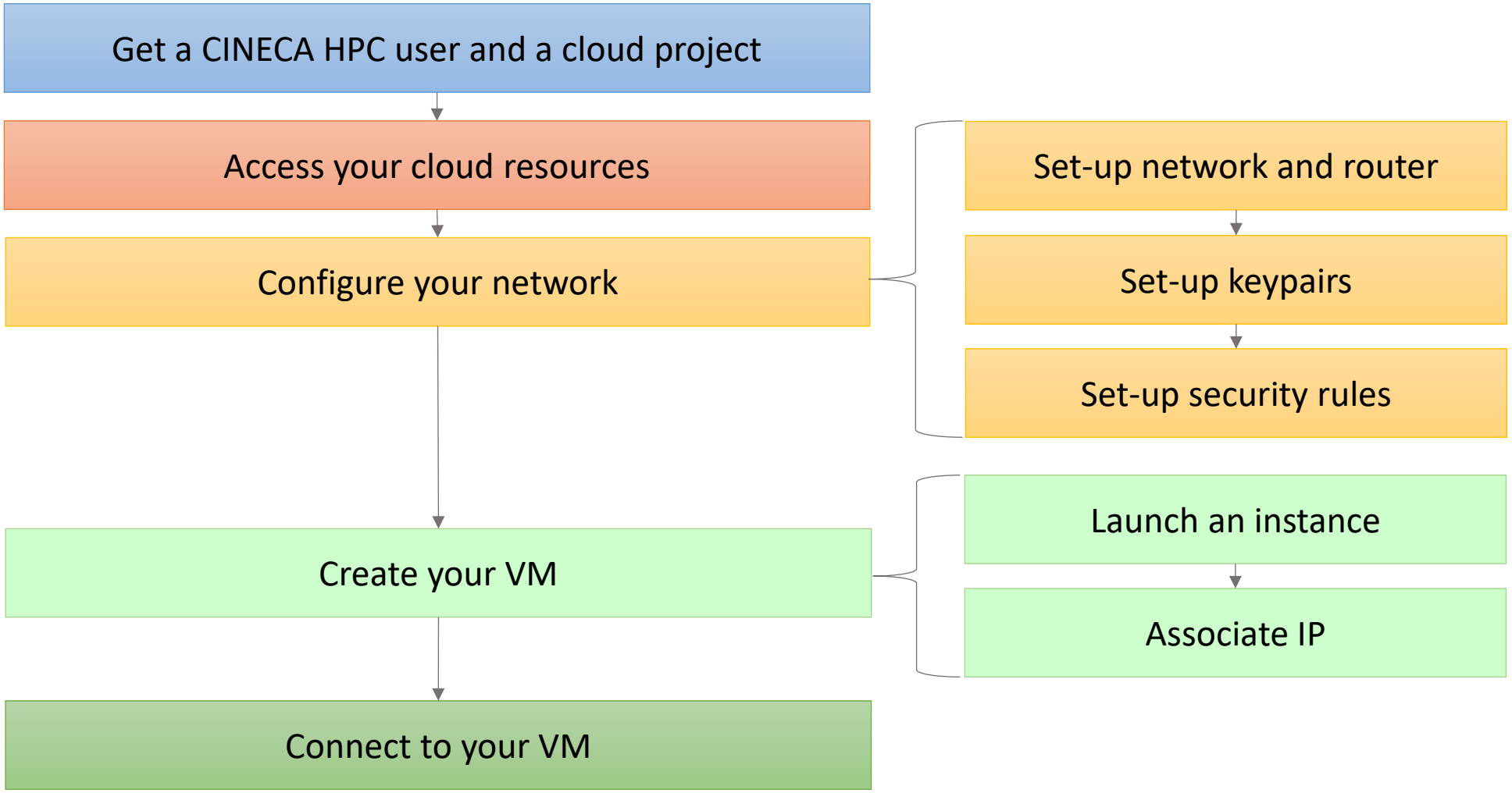

Getting started workflow

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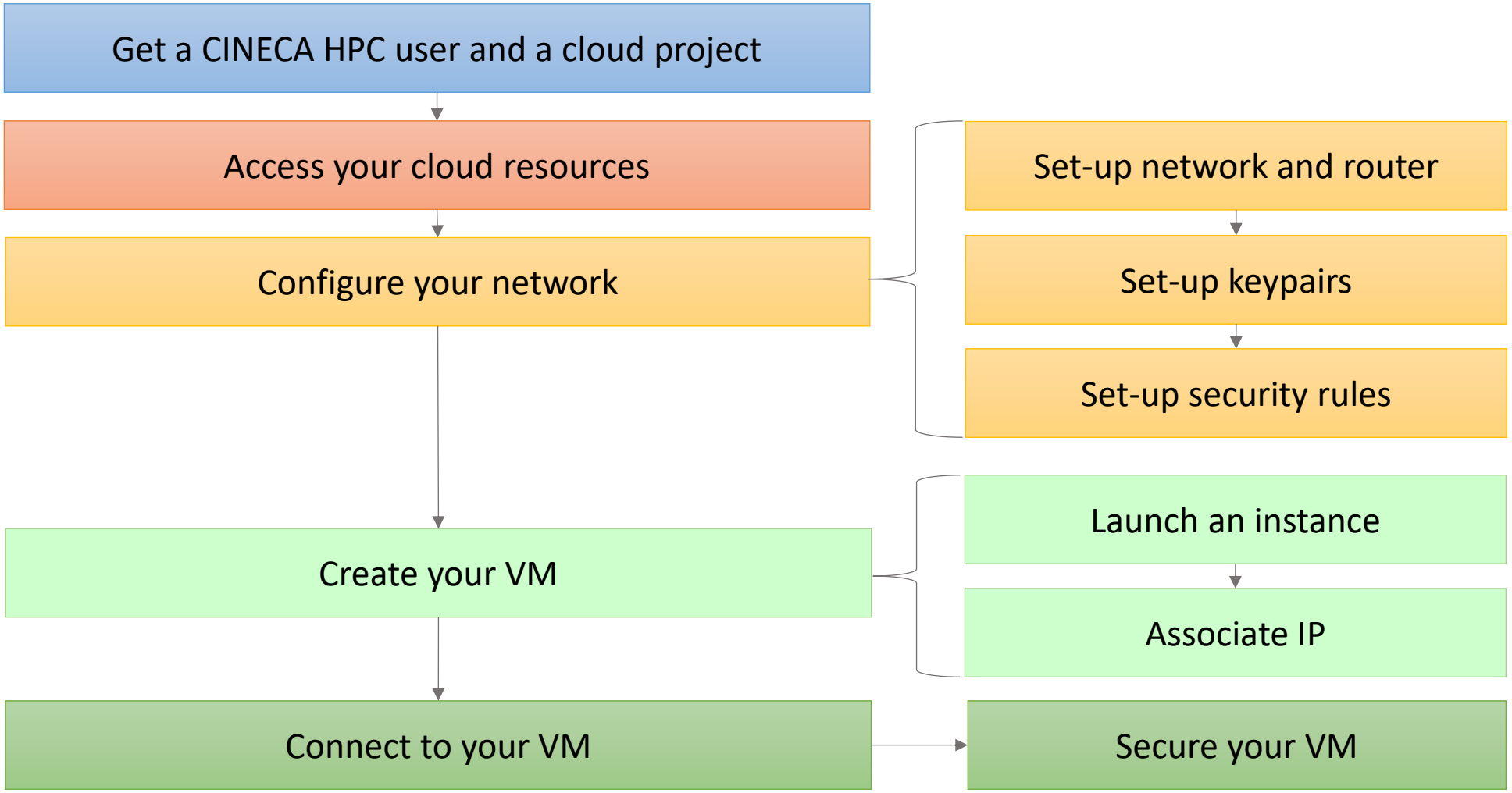

Getting started workflow

STEP BY STEP user GUIDE

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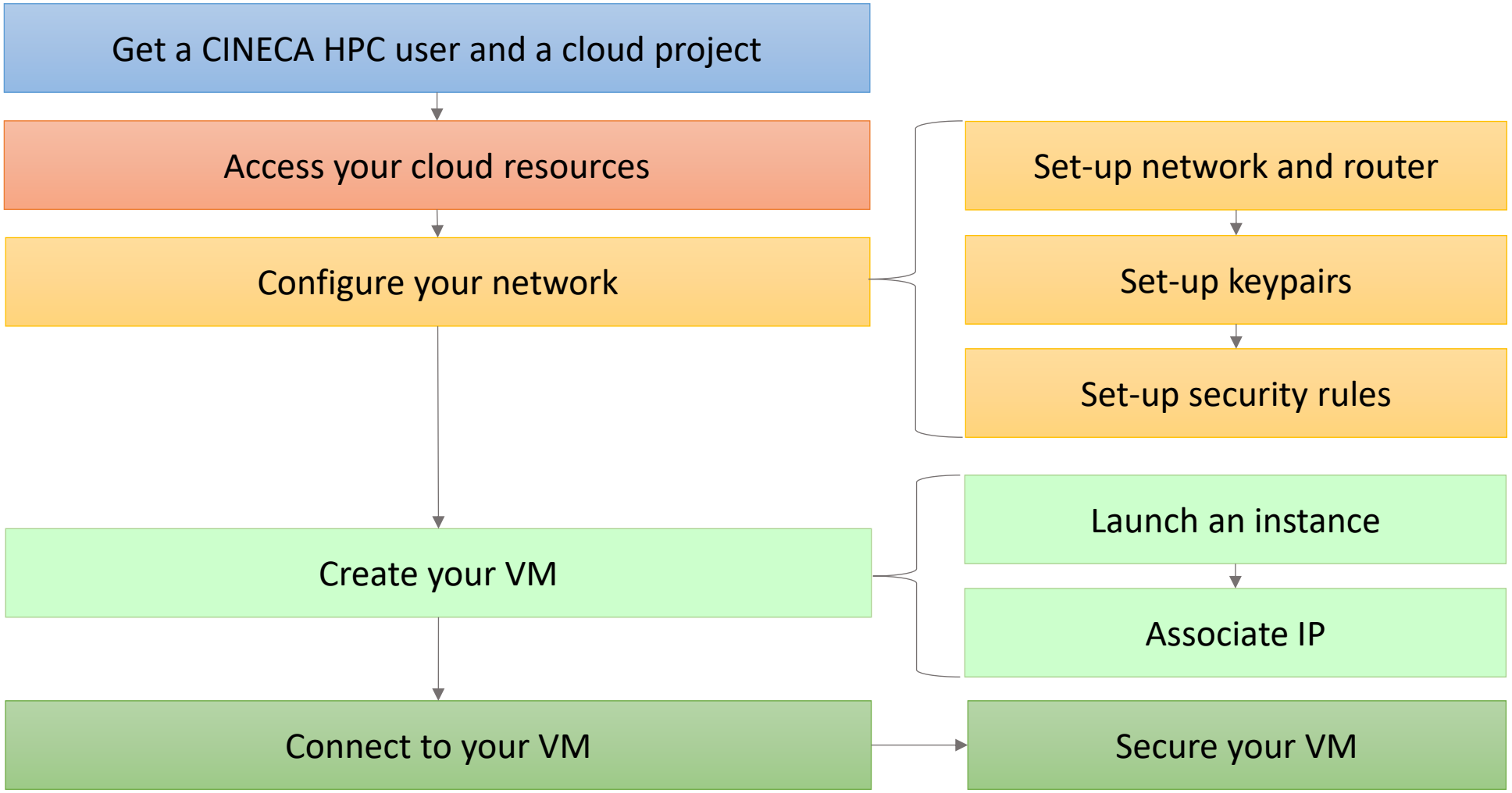

Visit the ADA Cloud User guide for more information

Getting started workflow

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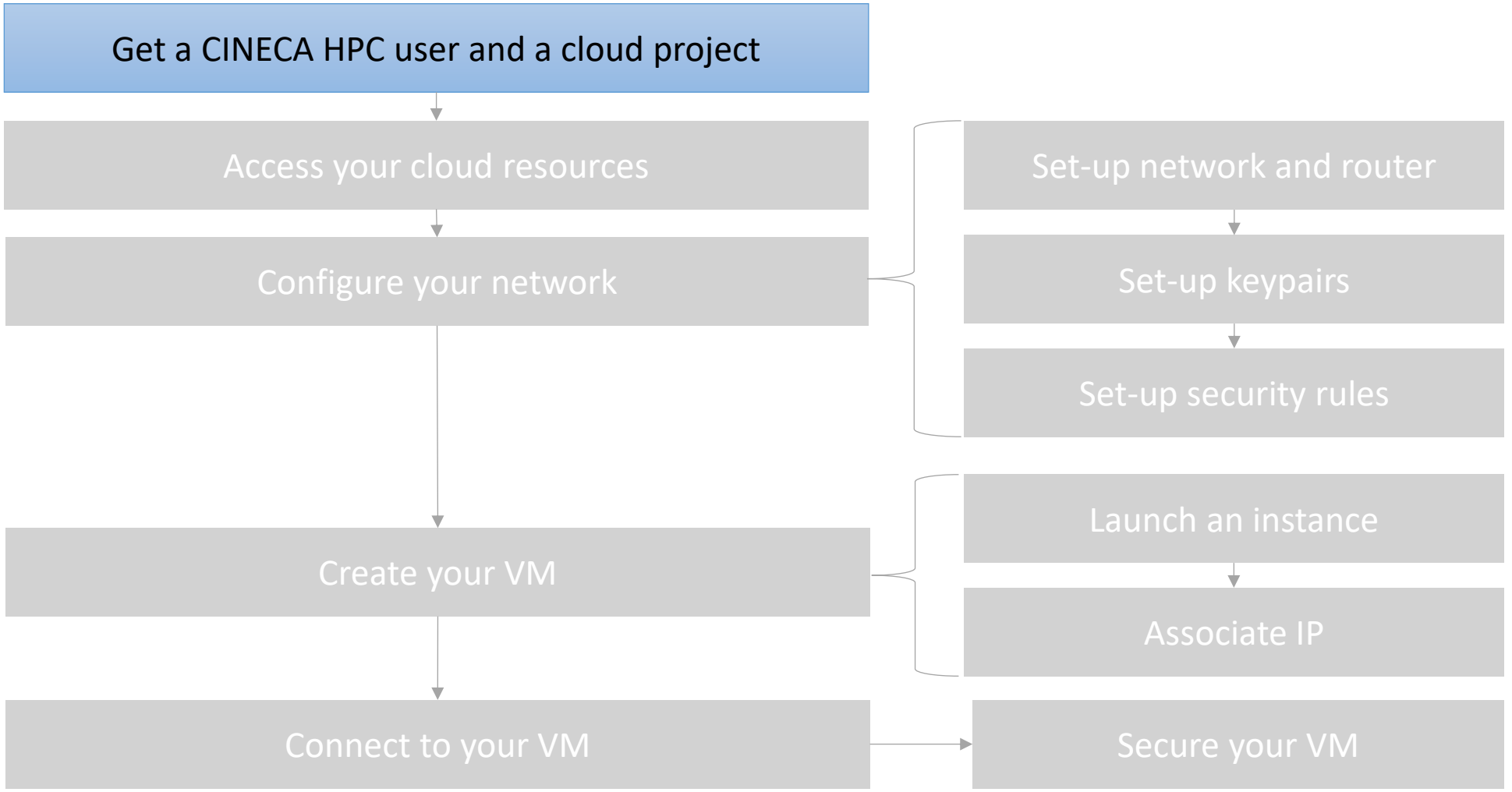


1 - Account and project

How to get a CINECA HPC account and cloud resources

CINECA

Get an HPC CINECA user and a project

Access your cloud resources

Configure your network

Create your VM

Connect to your VM

Get a HPC user

- Account = "personal" username for HPC systems in CINECA
- Register to CINECA UserDB portal
- Ask to be associated with a valid project, as "Collaborator" or as "Principal Investigator"
- **Important:** The access is possible only through two-factors (2FA) authentication

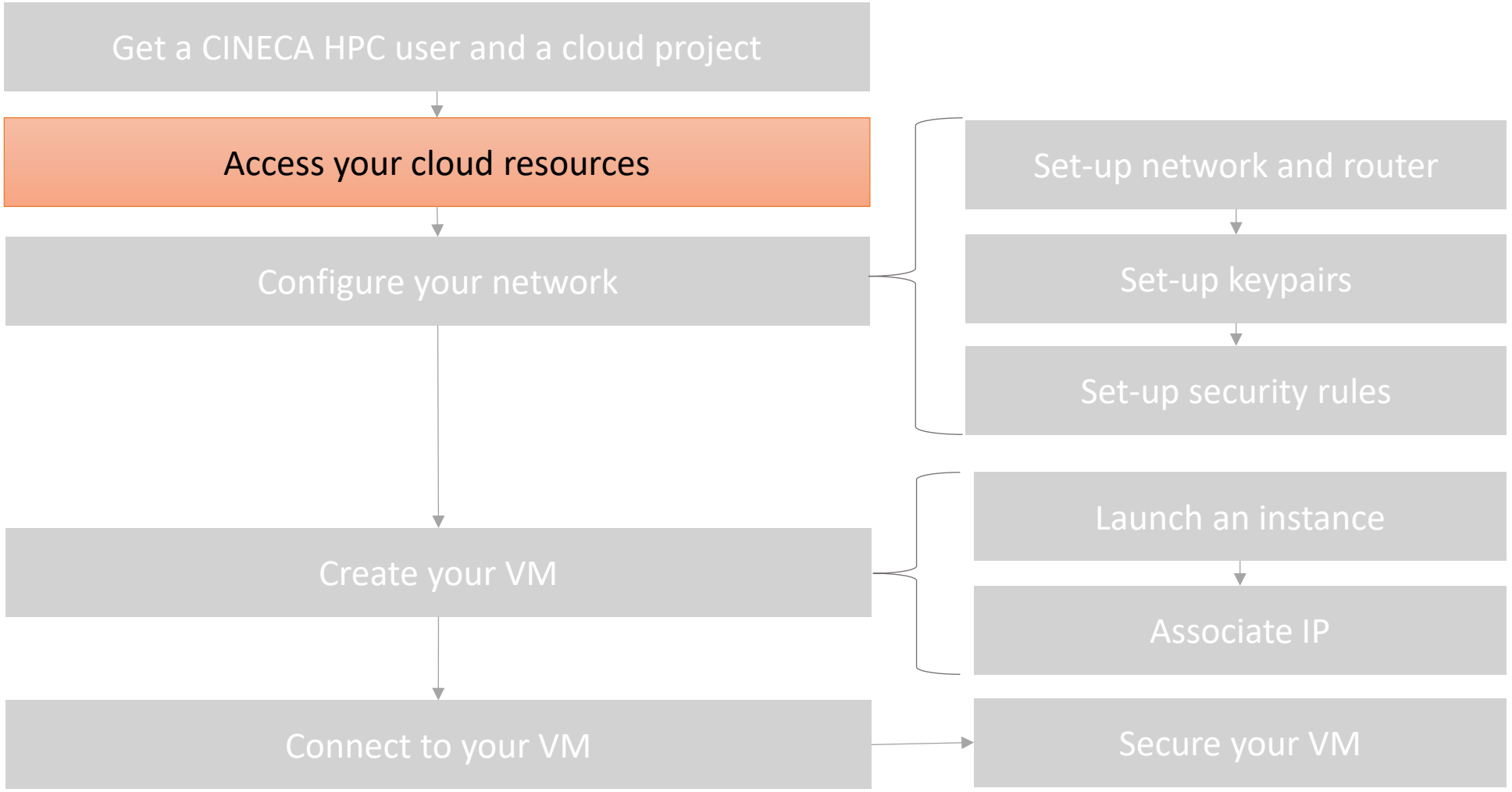
Get cloud resources

- ISCRA Projects: Researchers affiliated with an Italian University or an Italian Research Agency
- EuroHPC Projects: European researchers
- Italian research Institutions, General users and Industrial applications: contact the HPC User support

For more info: Become a user in User Guide

Getting started workflow

STEP BY STEP user GUIDE

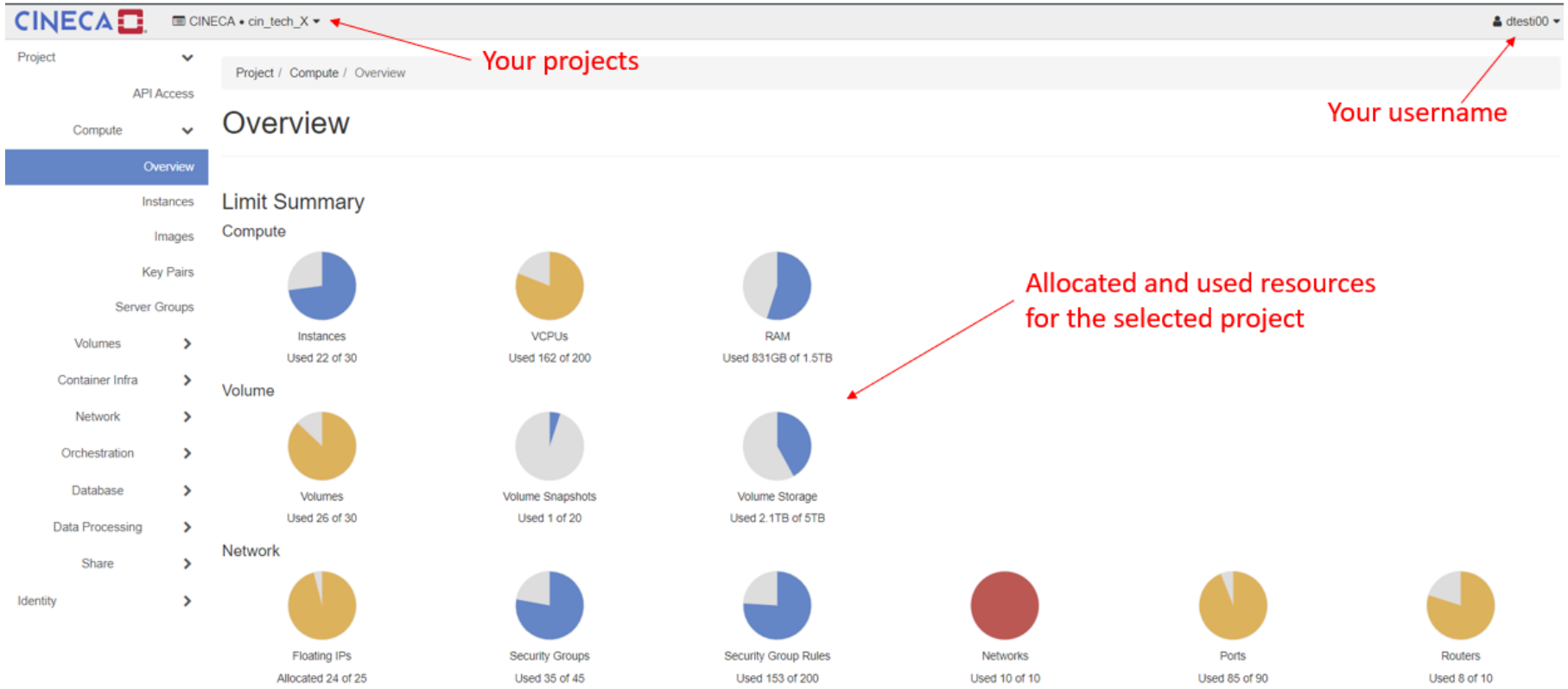


Visit the [ADA Cloud User guide]() for more information

2 - Access your cloud resources

ADA Cloud dashboard

- Go to https://adacloud.hpc.cineca.it
- Select "CINECA HPC" as Authentication method
- Insert your HPC-CINECA credentials to log in
- **NOTE**: the 2nd factor needs to be activated (see section Managing password, 2FA and OTP)



CINECA

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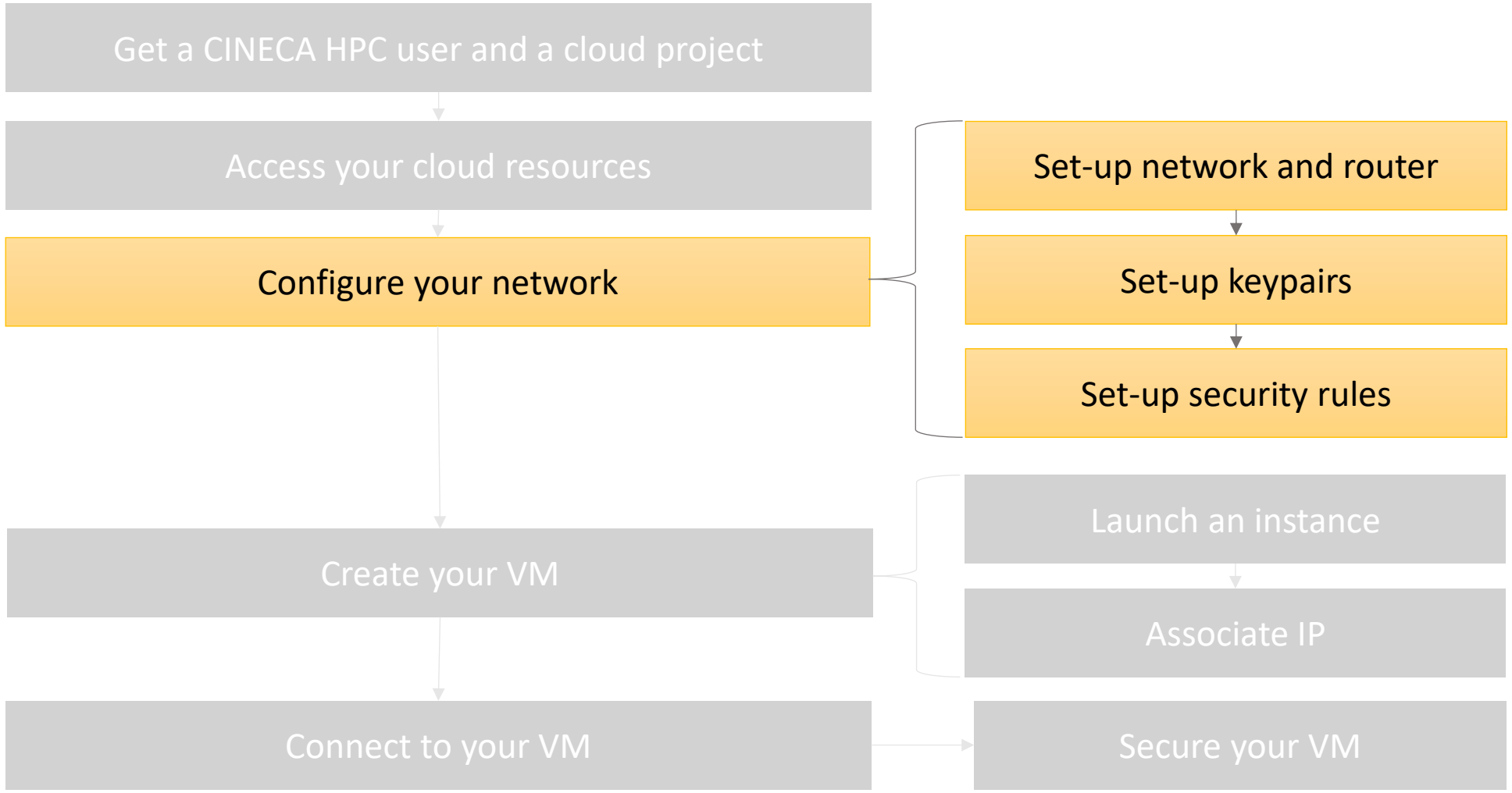

Visit the HPC Cloud User guide for more information

3 - Configure your network

3.1 – Create Network and subnet for the project

CINECA

- Get an HPC CINECA user and a project
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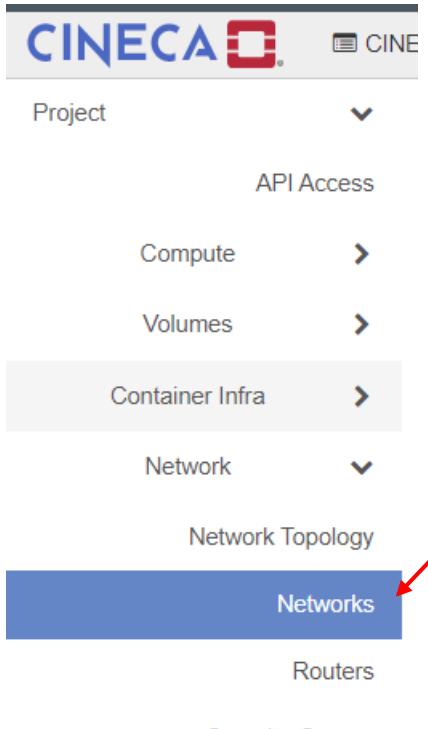
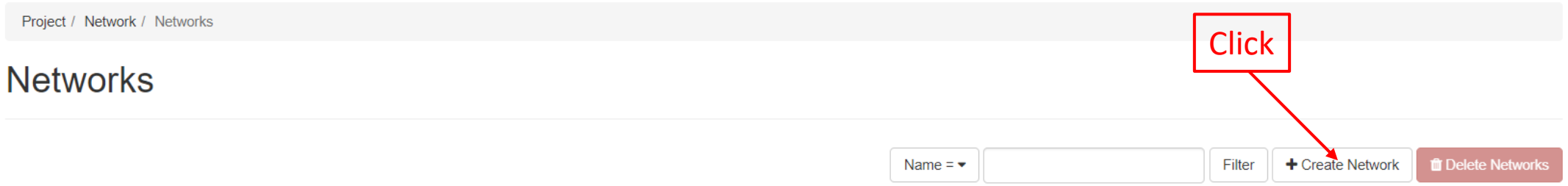


Go to the «Networks» tab under «Network» in the left side menu



Click

3 - Configure your network

3.1 – Create Network and subnet for the project

CINECA

- Get an HPC CINECA user and a project
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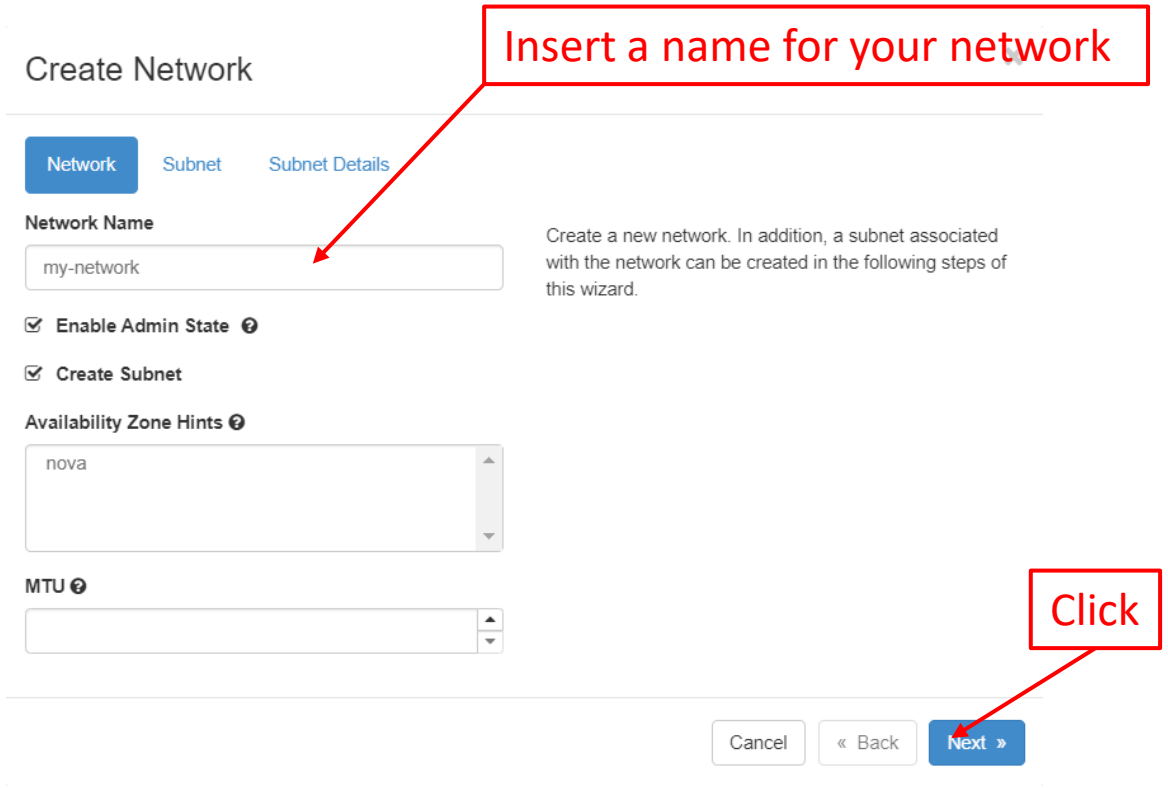
Follow the wizard steps



3 - Configure your network

3.1 – Create Network and subnet for the project

CINECA

- Get an HPC CINECA user and a project
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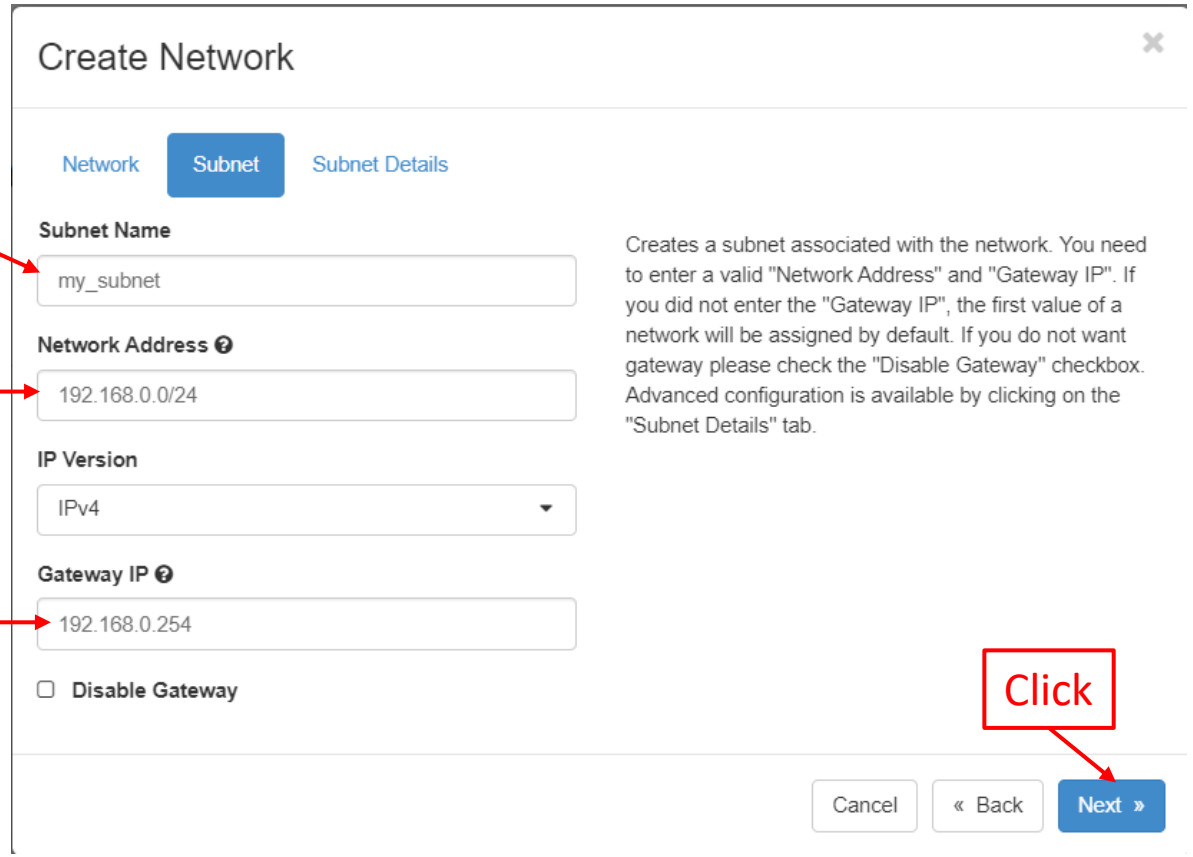
Insert name of your subnet

Insert network IP address: 192.168.0.0/24

Insert gateway IP: 192.168.0.254



Click

3 - Configure your network

3.1 – Create Network and subnet for the project

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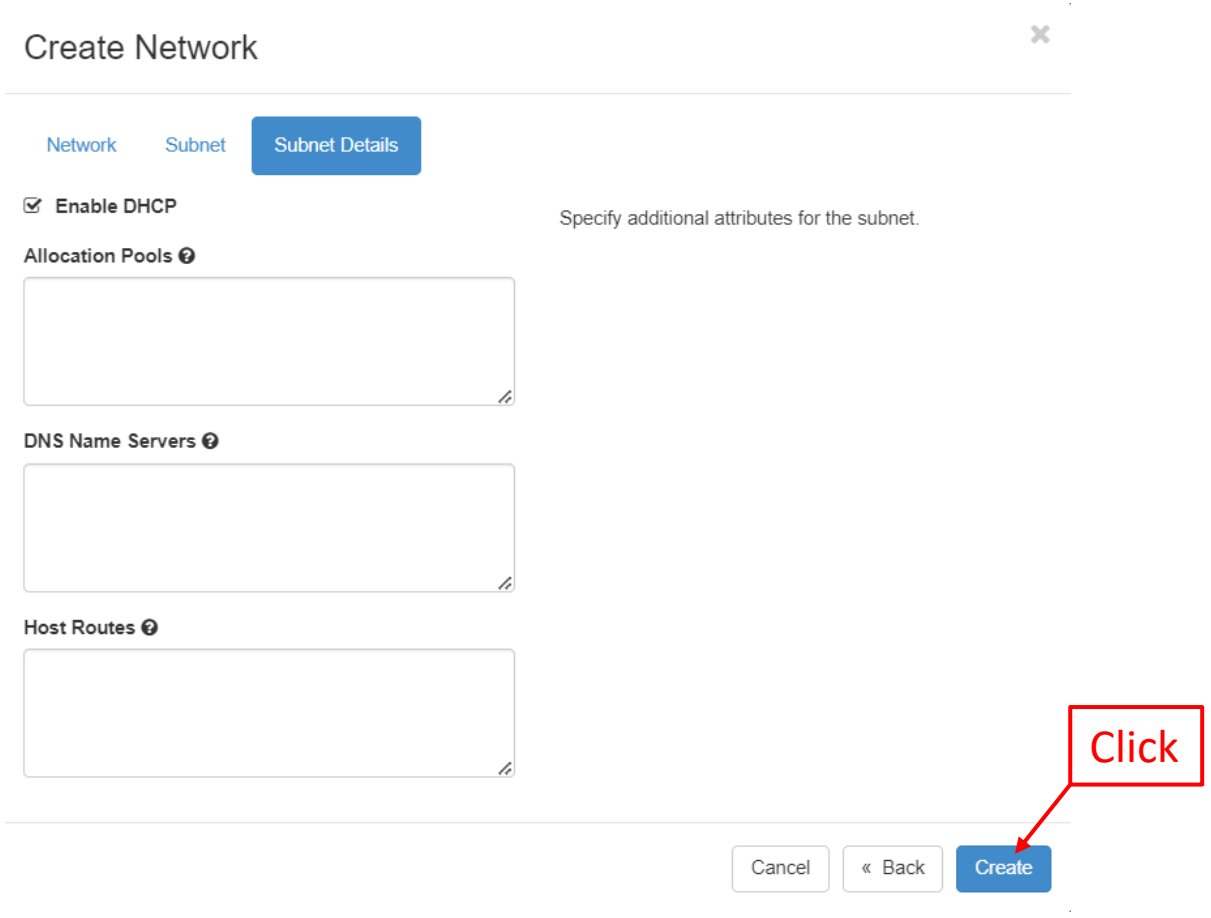
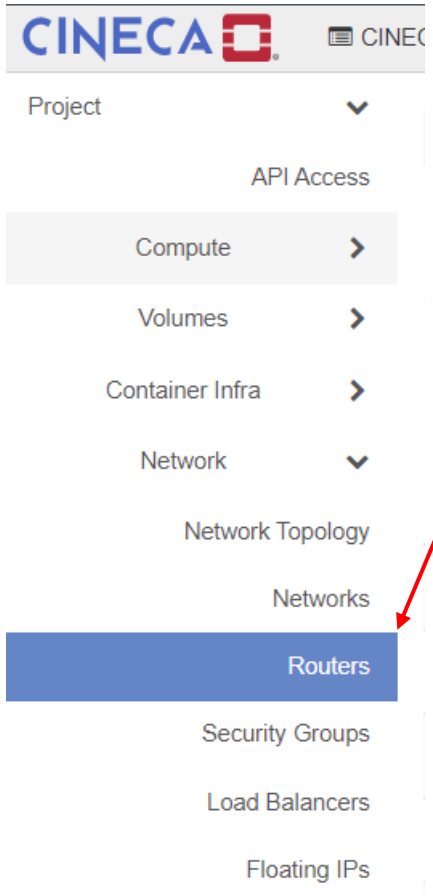


3 - Configure your network

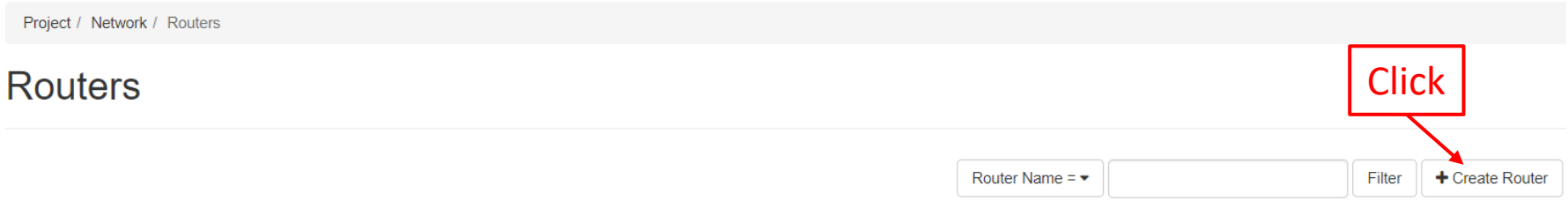
3.2 – Create Router for the Project

CINECA

- Get an HPC CINECA user and a project
- Access your cloud resources
- Configure your network
- Create your VM
- Connect to your VM



Go to «Routers» tab under «Network» in the left side menu



3 - Configure your network

3.2 – Create Router for the Project

CINECA

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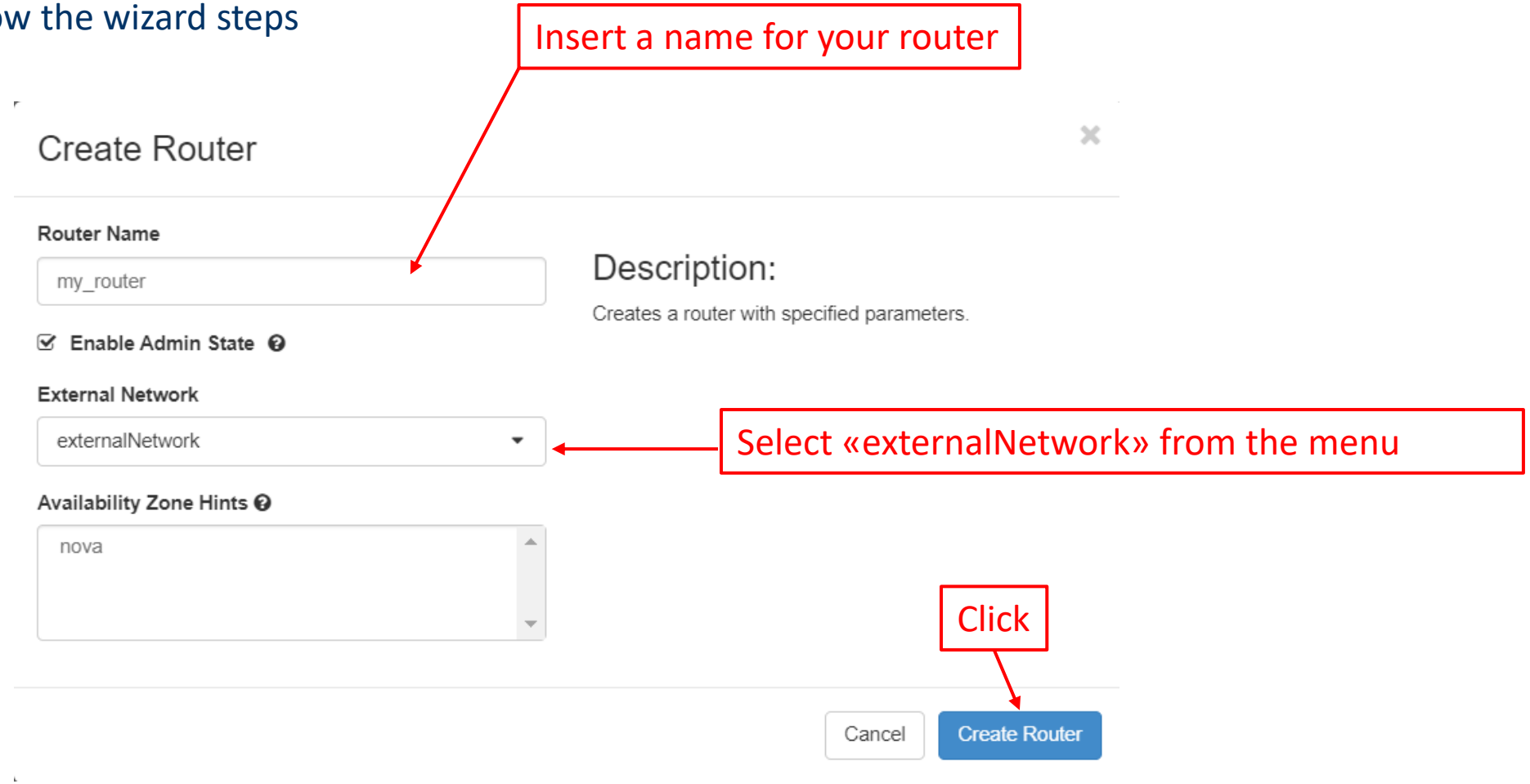
Follow the wizard steps



3 - Configure your network

3.2 – Create Router for the Project

CINECA

- Get an HPC CINECA user and a project
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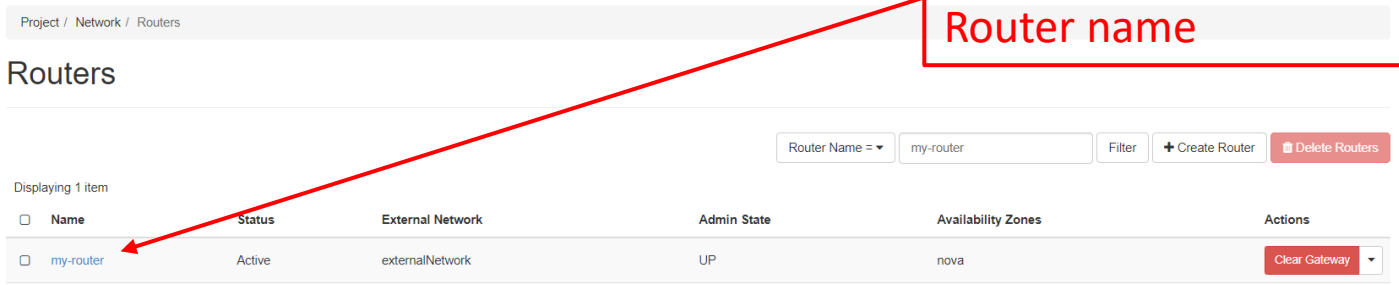
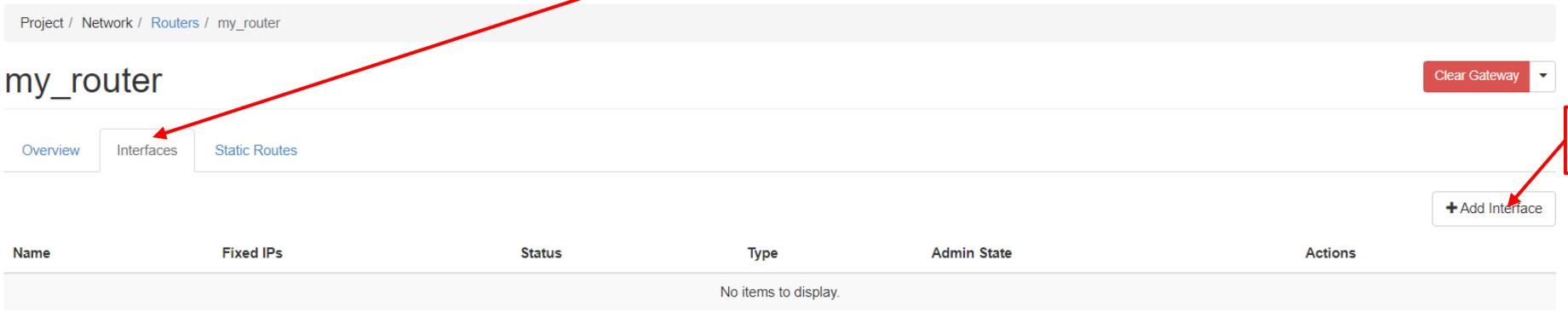
From the list of Routers, click on your Router name



Go to the «Interfaces» tab



Click

3 - Configure your network

3.2 – Create Router for the Project

CINECA

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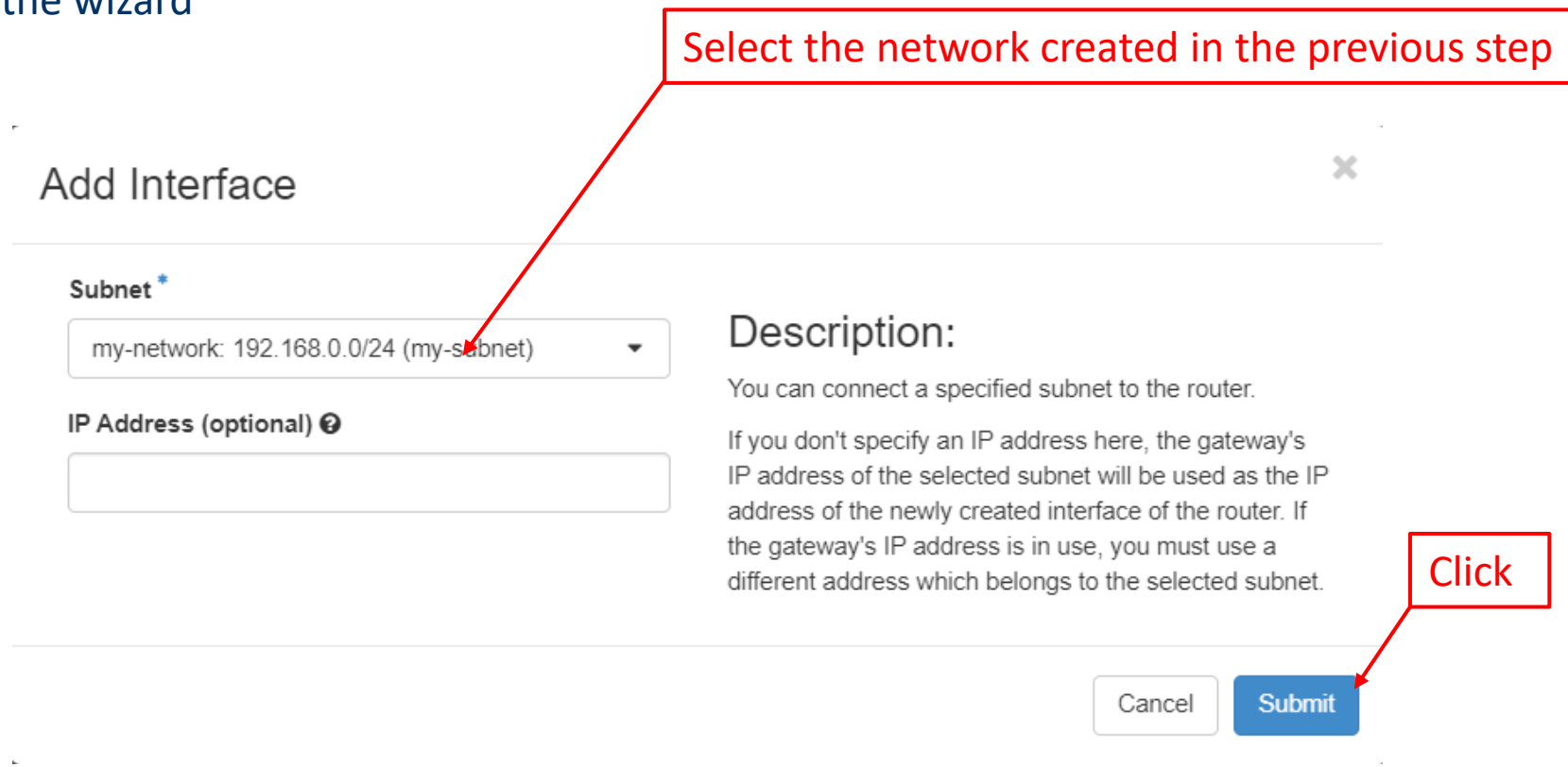
Connect to your VM

In the wizard

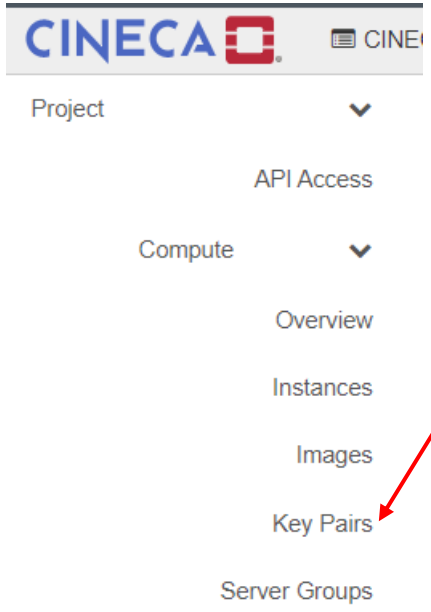


3 - Configure your network

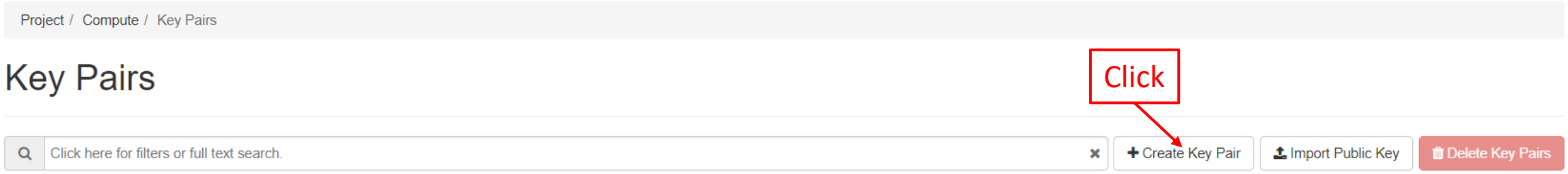
3.3 - Set-up keypairs

CINECA

- Get an HPC CINECA user and a project
- Access your cloud resources
- Configure your network
- Create your VM
- Connect to your VM



Go to the «Key Pairs» tab under «Compute» in the left side menu



3 - Configure your network

3.3 - Set-up keypairs

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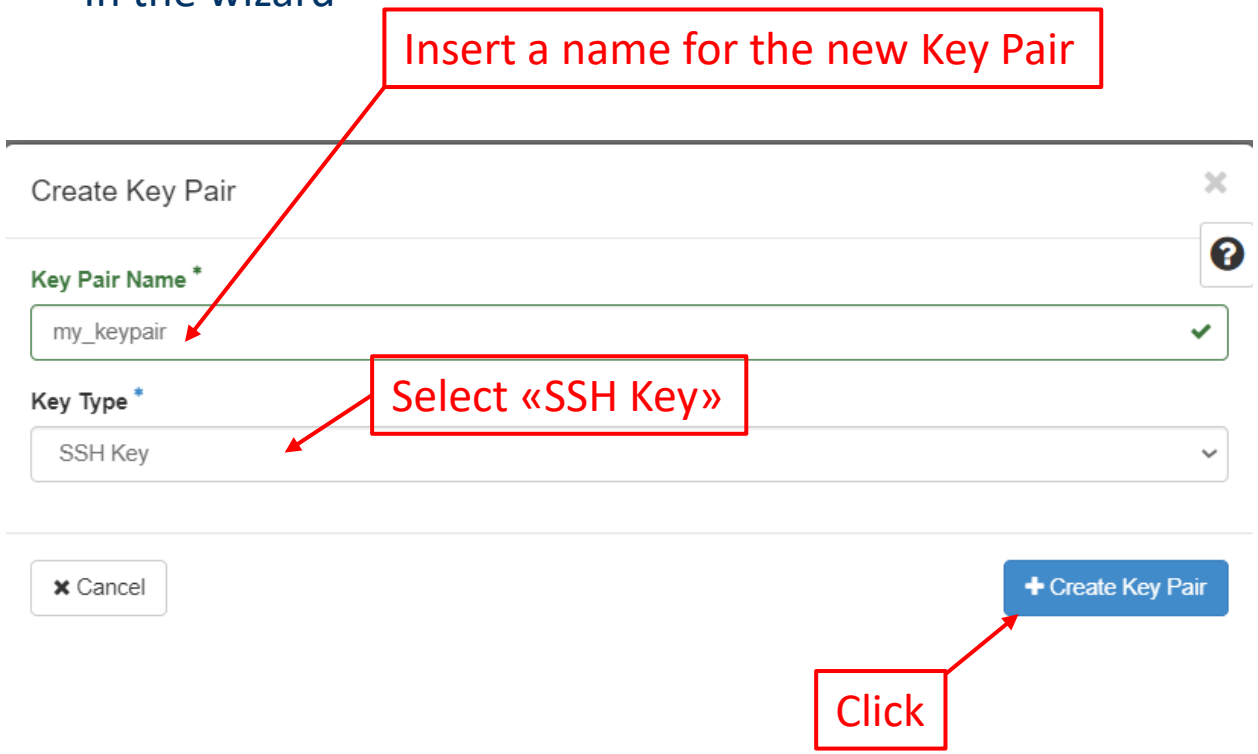
In the wizard



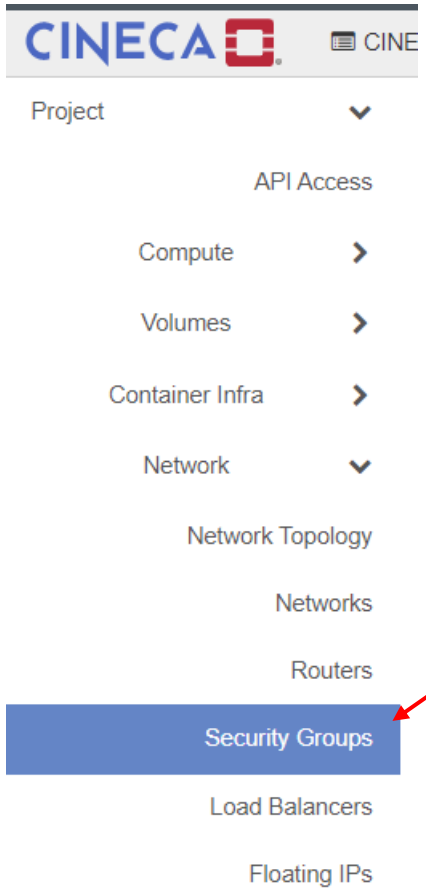
- The **public** key stays on the OpenStack dashboard
- The **private** key is AUTOMATICALLY downloaded locally
- **IMPORTANT NOTES:**
  - The download of the private key will be done ONLY when the keypair is created. If you lose the private key, you will have to create a new keypair.
  - If you are a Linux user, modify the permission of the private key (downloaded file) to read-write for only the user (*chmod 600 <file name>*)

3 - Configure your network

3.4 – Set-up security rules

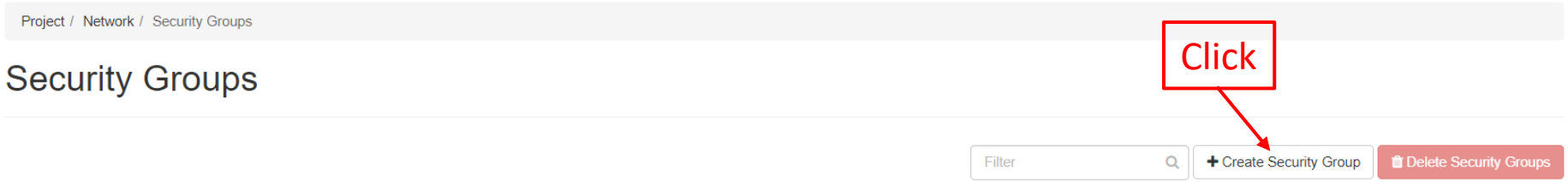
CINECA

- Get an HPC CINECA user and a project
- Access your cloud resources
- Configure your network
- Create your VM
- Connect to your VM



- A **security rule** defines which traffic is allowed to instances assigned to the security group.
- A **security group** is a group of security rules that can be assigned to an instance.

Go to the «Security groups» tab under «Network» in the left side menu



3 - Configure your network

3.4 – Set-up security rules

CINECA

Get an HPC CINECA user and a project

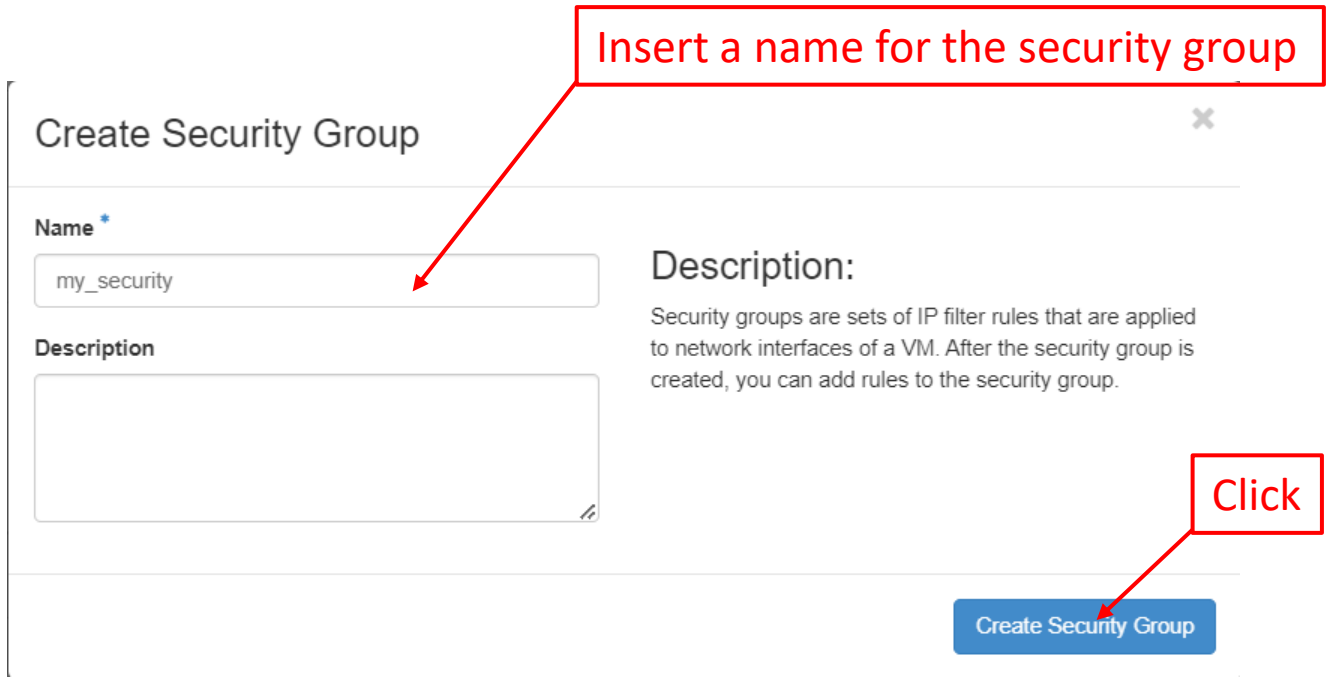
Access your cloud resources

Configure your network

Create your VM

Connect to your VM

In the wizard



3 - Configure your network

3.4 – Set-up security rules

CINECA

- Get an HPC CINECA user and a project
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- Configure your network
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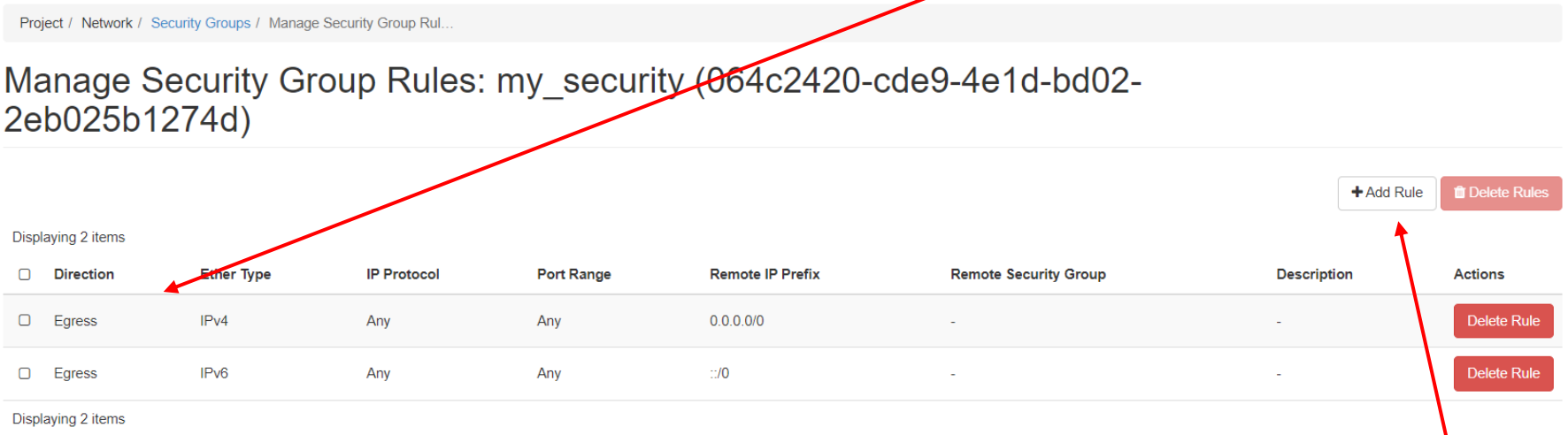
For the security group just created, select «Manage Rules» on the right side

By default, only security rules to get out of your VM are created



Security rules to access your VM needs to be added

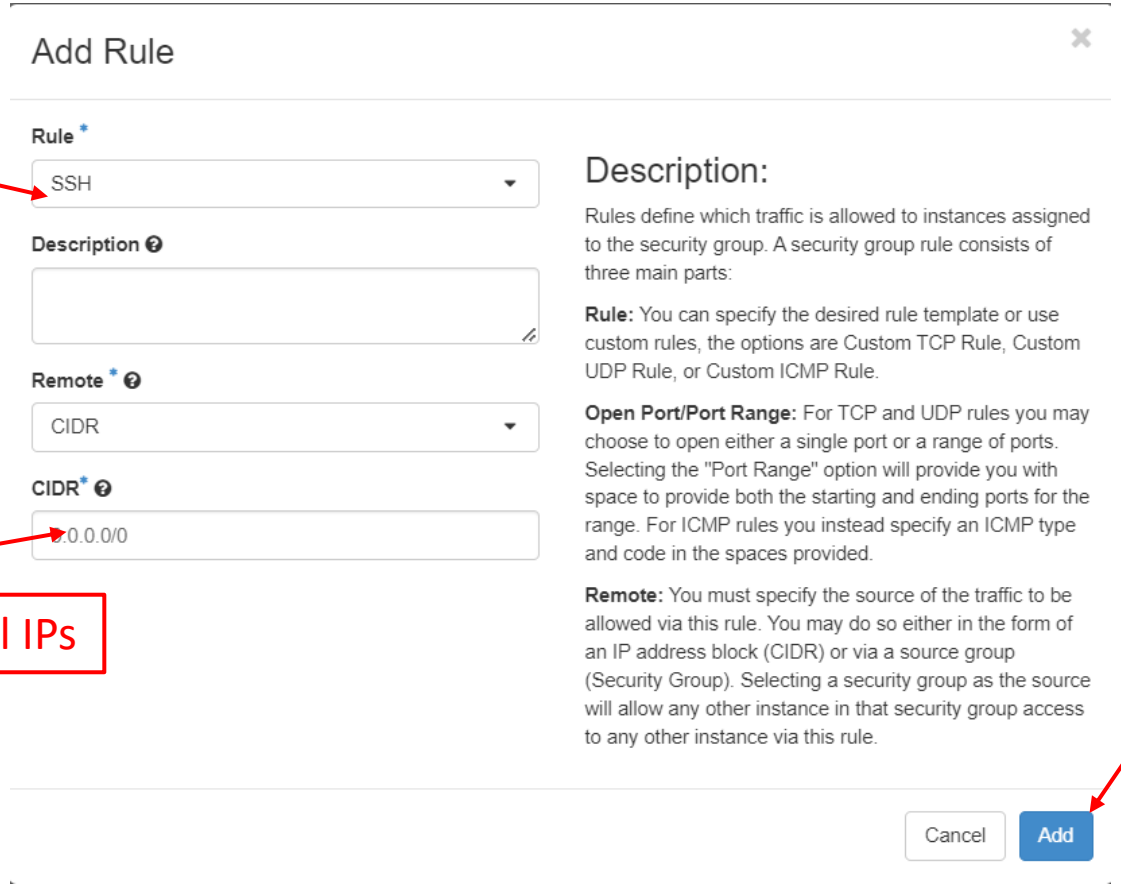
3 - Configure your network

3.4 – Set-up security rules

CINECA

In the wizard

Select «SSH» from the list

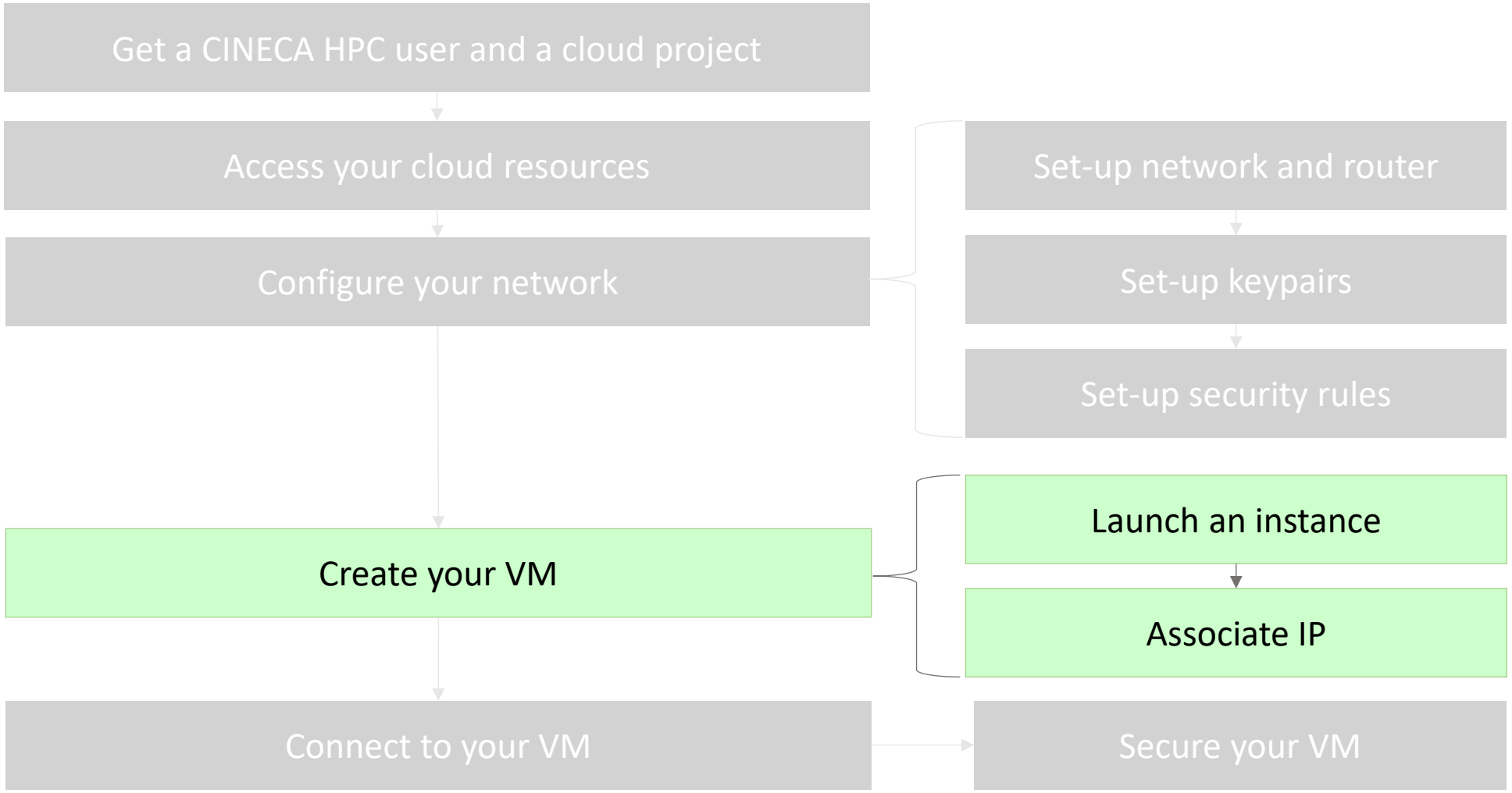


By default, access is enabled for all IPs

Click

Getting started workflow

STEP BY STEP user GUIDE



Visit the HPC Cloud User guide for more information

4 - Create your VM

4.1 - Launch an instance

CINECA

- Get an HPC CINECA user and a project
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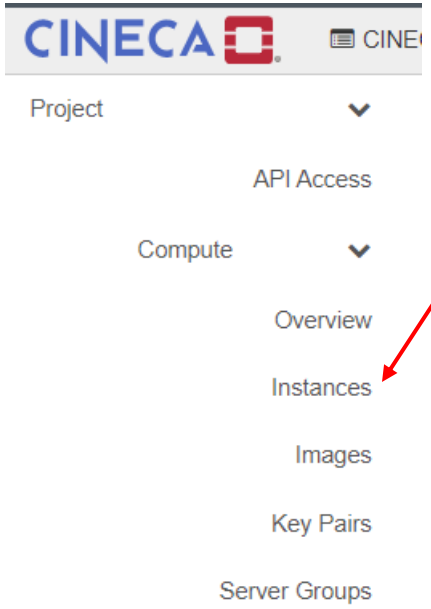
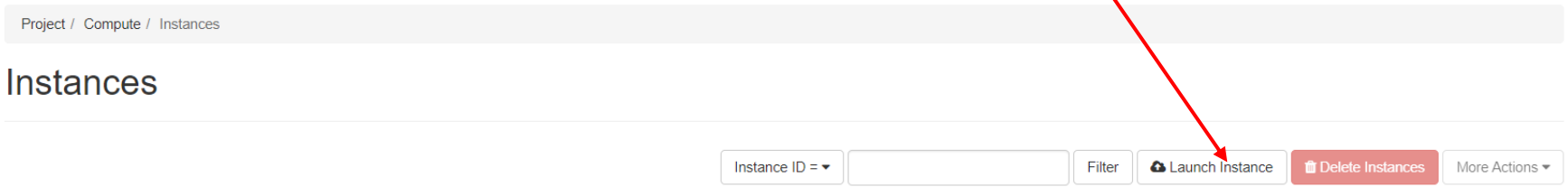


Go to the «Instances» tab under «Compute» in the left side menu

Click «Launch instance»



4 - Create your VM

4.1 - Launch an instance

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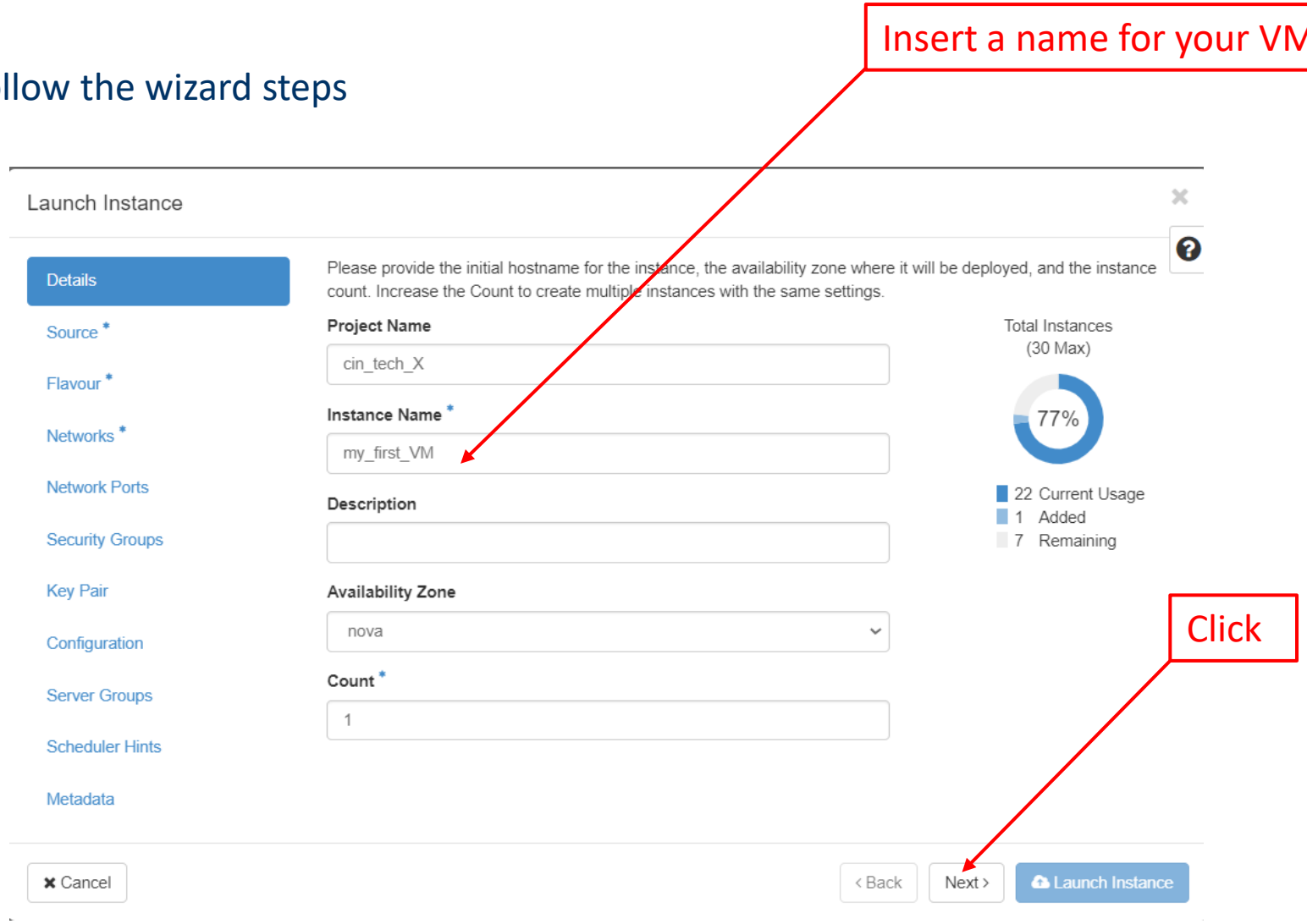
Follow the wizard steps



4 - Create your VM

4.1 - Launch an instance

CINECA

- Get an HPC CINECA user and a project
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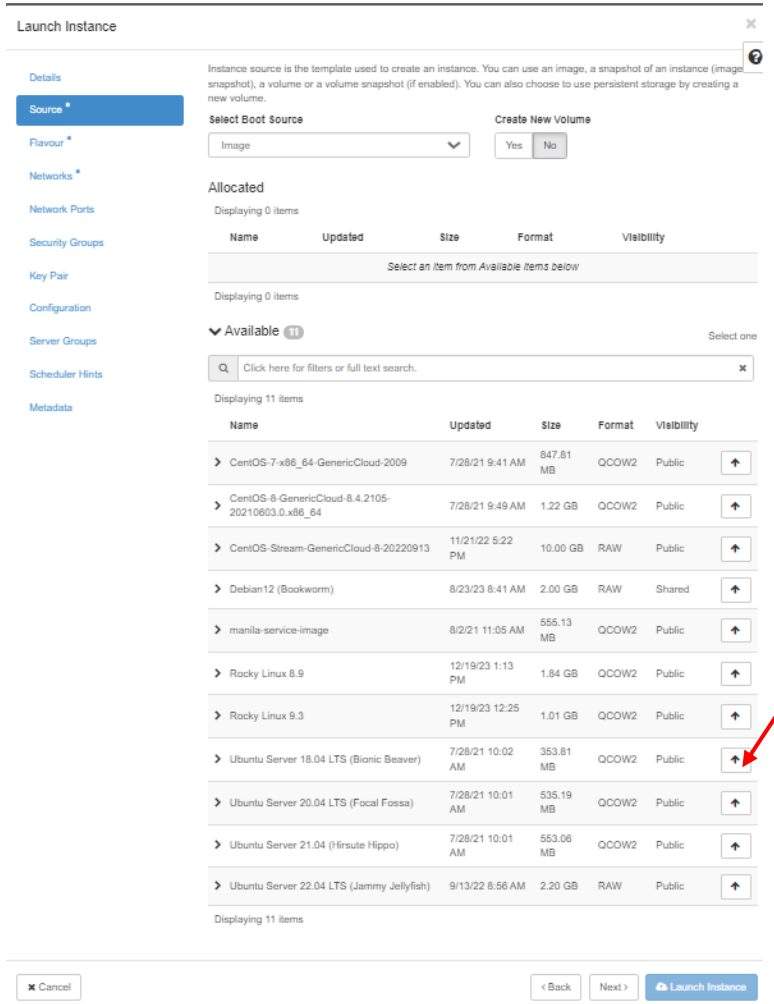
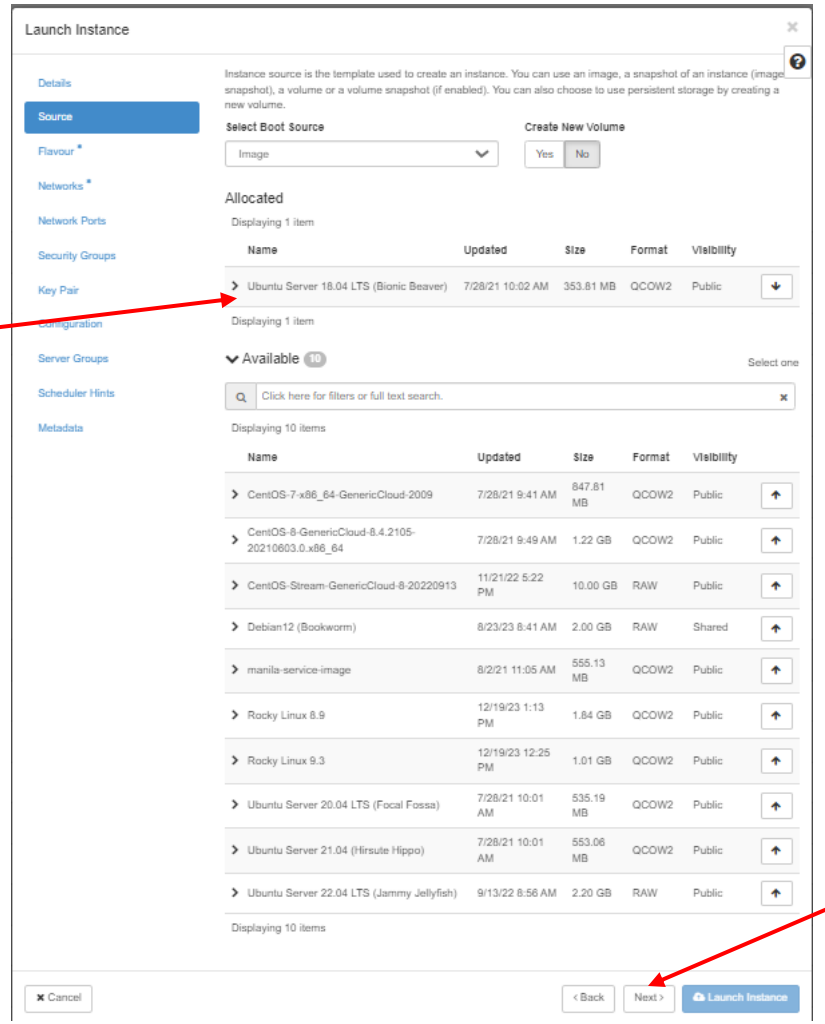


Select an operative system of your VM



Click

4 - Create your VM

4.1 - Launch an instance

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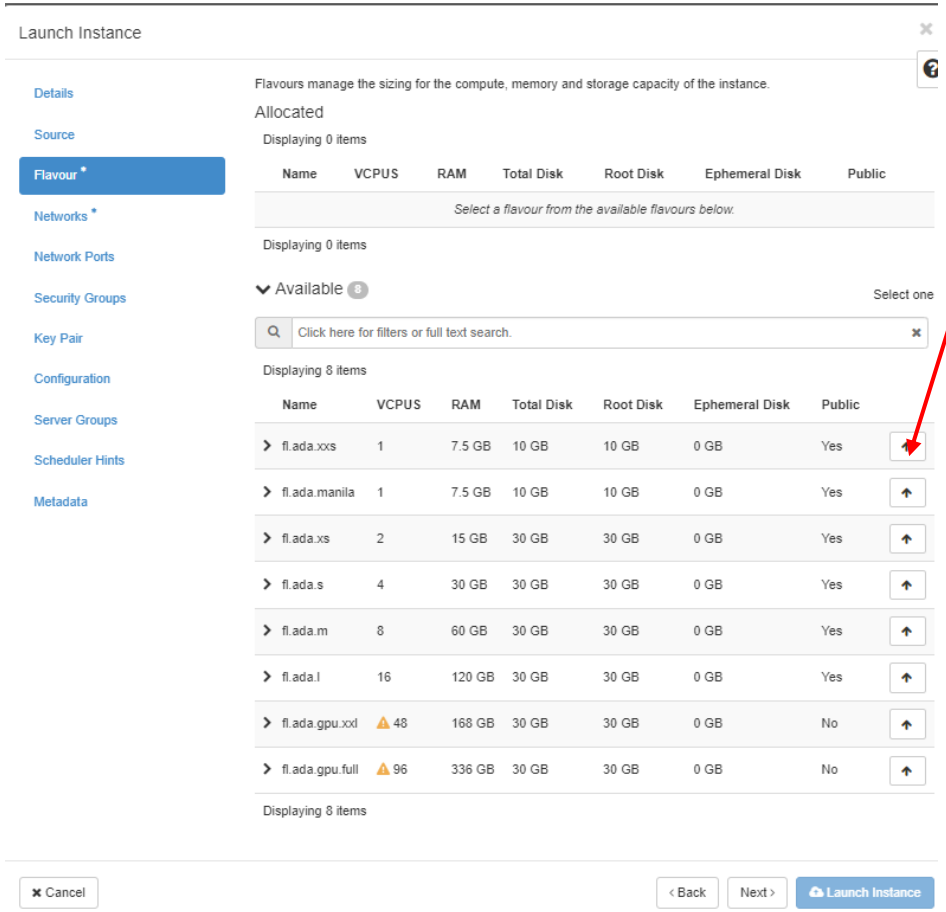
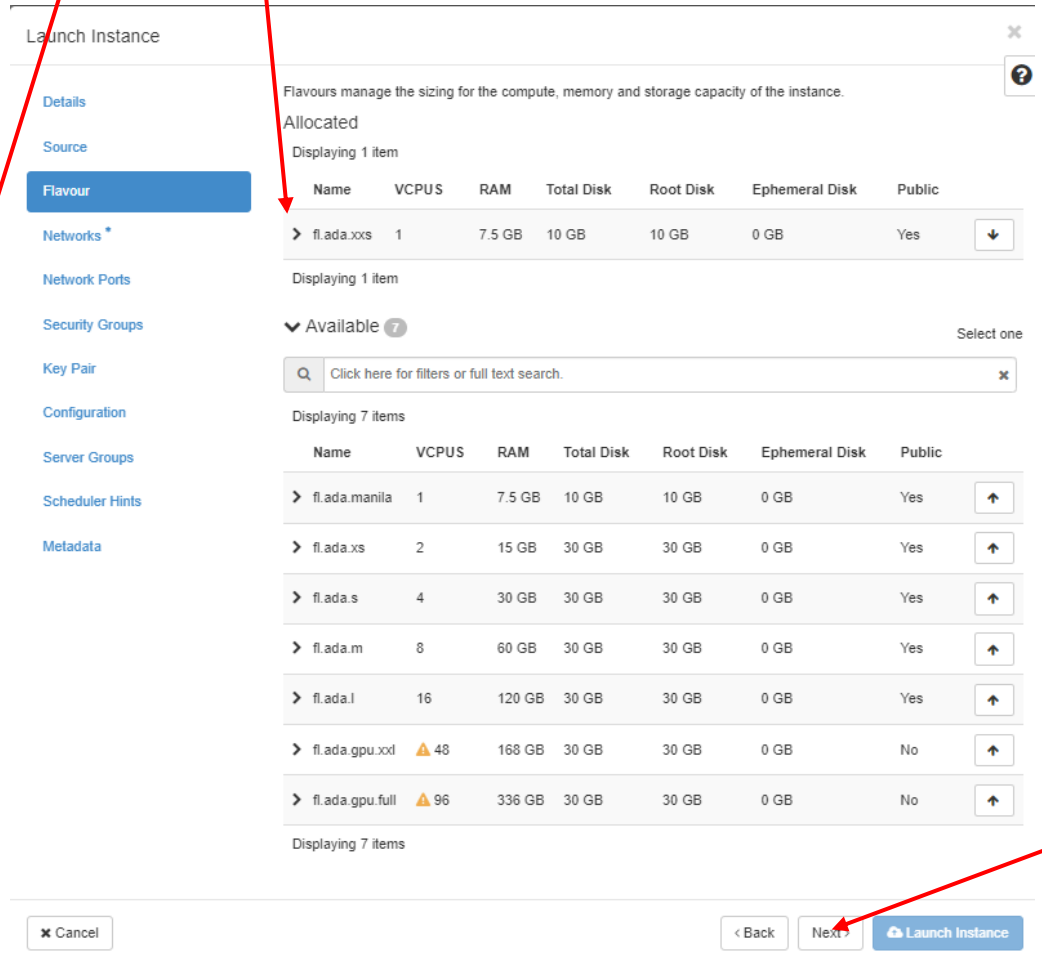
Select the flavour of your VM





Click

4 - Create your VM

4.1 - Launch an instance

CINECA

- Get an HPC CINECA user and a project
- Access your cloud resources
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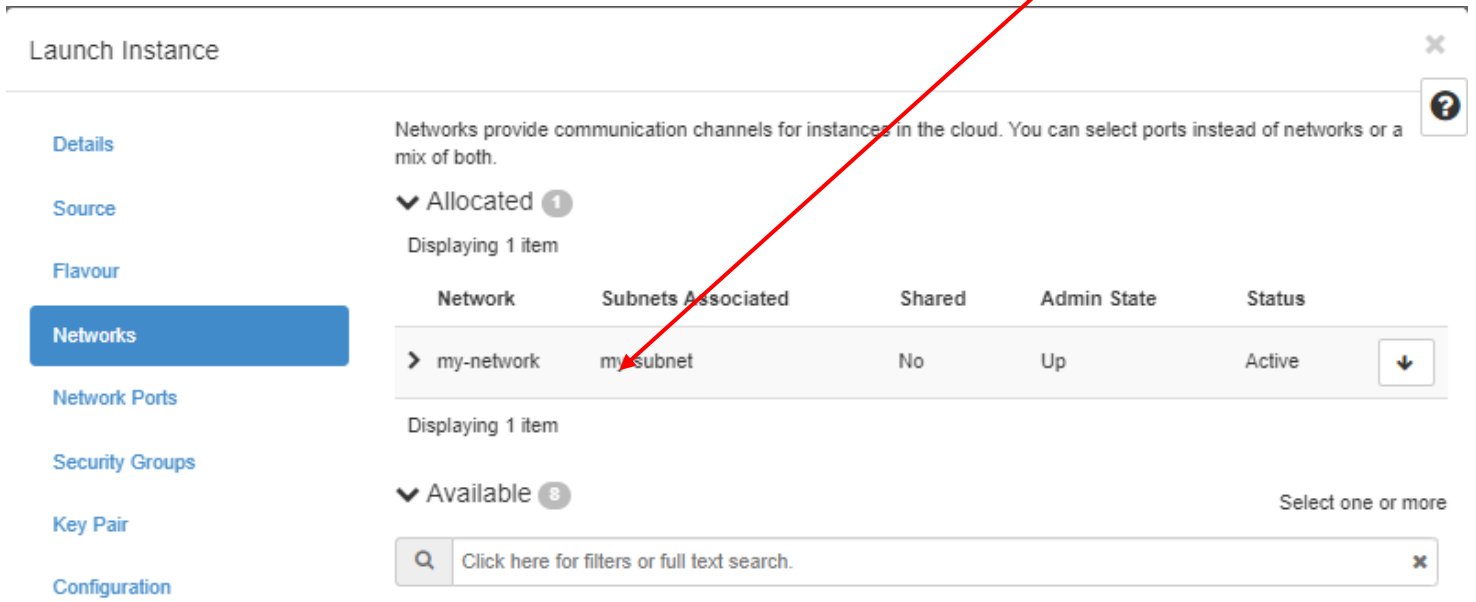
- Connect to your VM

Select the network created in the previous «configure your network» step and click «Next»



4 - Create your VM

4.1 - Launch an instance

CINECA

- Get an HPC CINECA user and a project
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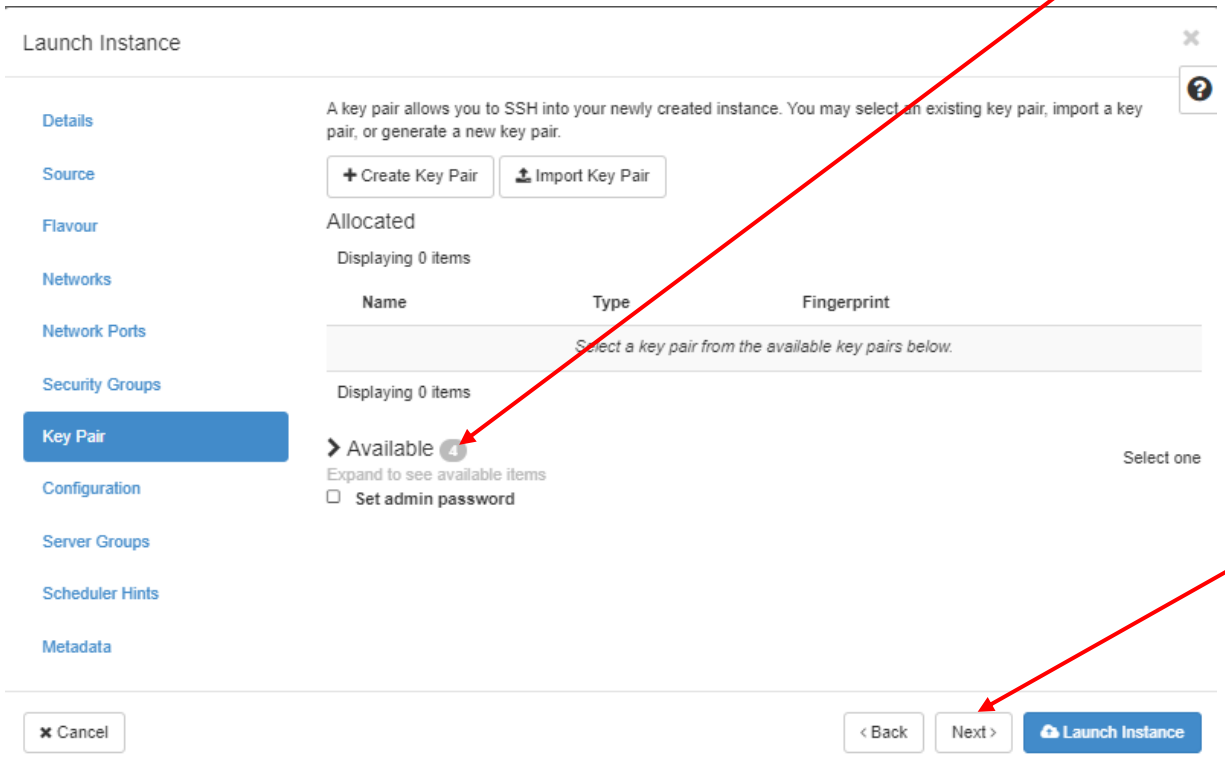
- Connect to your VM

Select the Key Pair created in the previous «configure your network» step



Click

4 - Create your VM

4.1 - Launch an instance

CINECA

- Get an HPC CINECA user and a project
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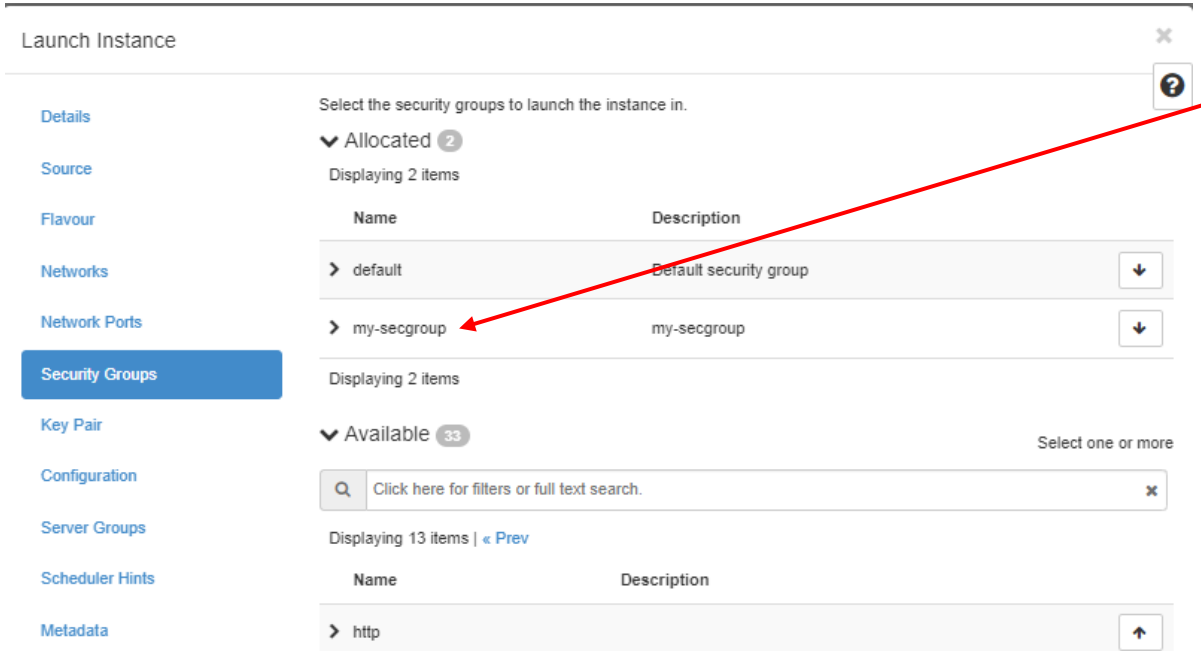
Select the Security Group created in the previous «configure your network» step and click «Launch Instance»



4 - Create your VM

4.2 - Associate a floating IP to your VM

CINECA

- Get an HPC CINECA user and a project
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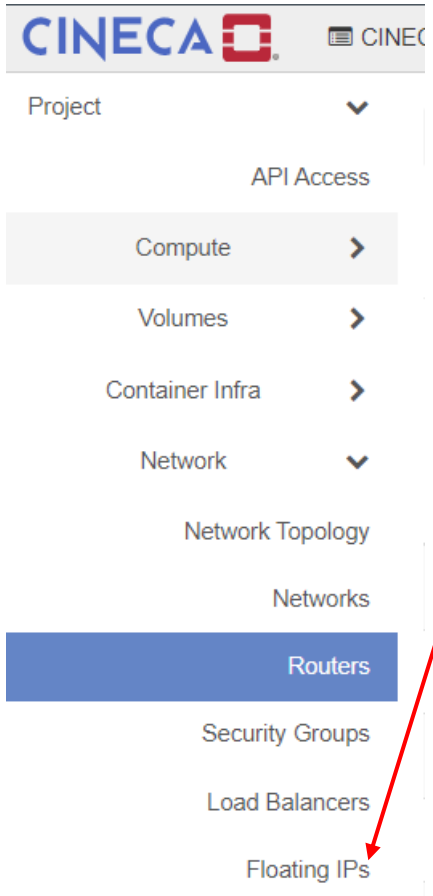
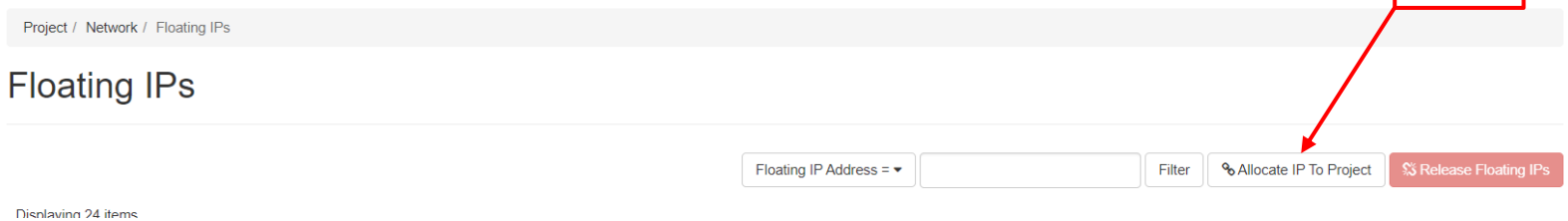
- Create your VM
- Connect to your VM



Go to the «Floating IPs» tab under «Network» in the left side menu



Click

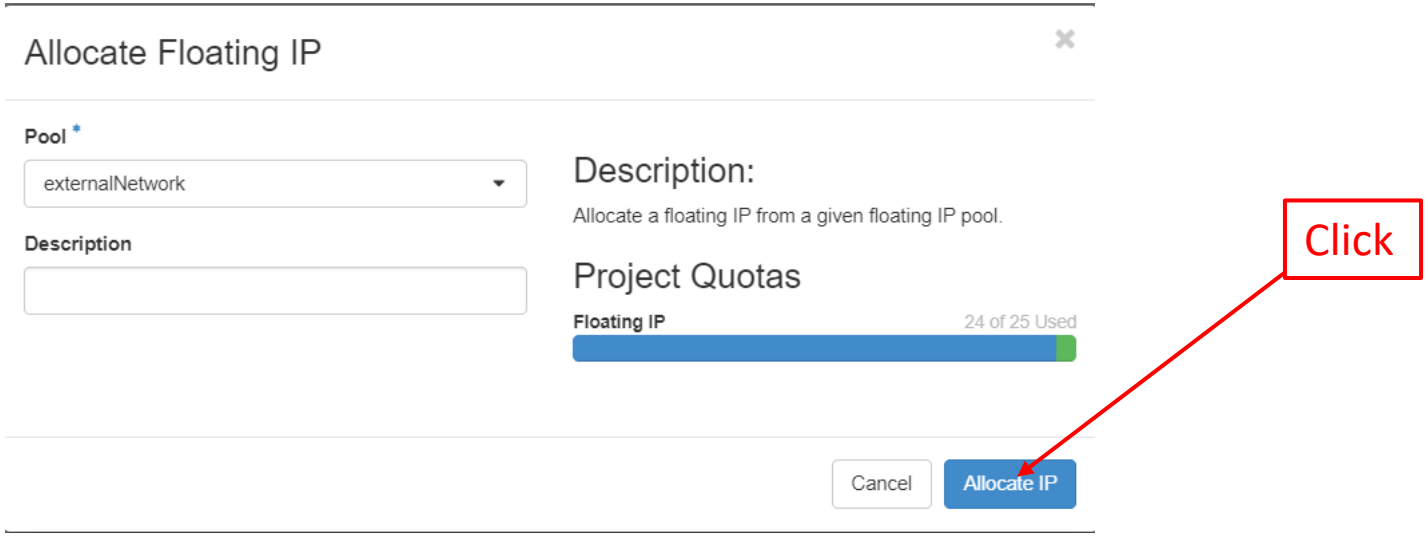
4 - Create your VM

4.2 - Associate a floating IP to your VM

CINECA

- Get an HPC CINECA user and a project
- Access your cloud resources
- Configure your network
- Create your VM
- Connect to your VM

In the wizard



Click

4 - Create your VM

4.2 - Associate a floating IP to your VM

CINECA

- Get an HPC CINECA user and a project
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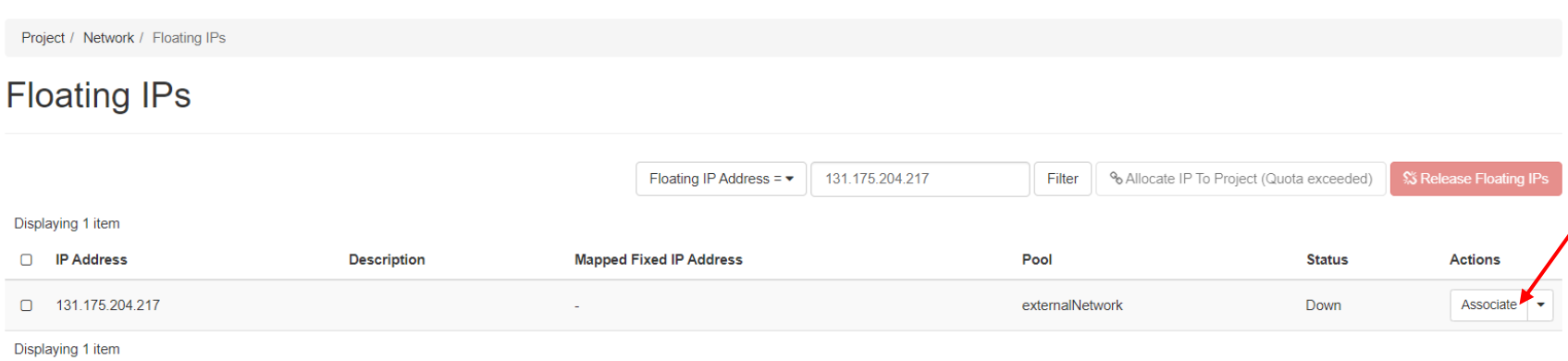
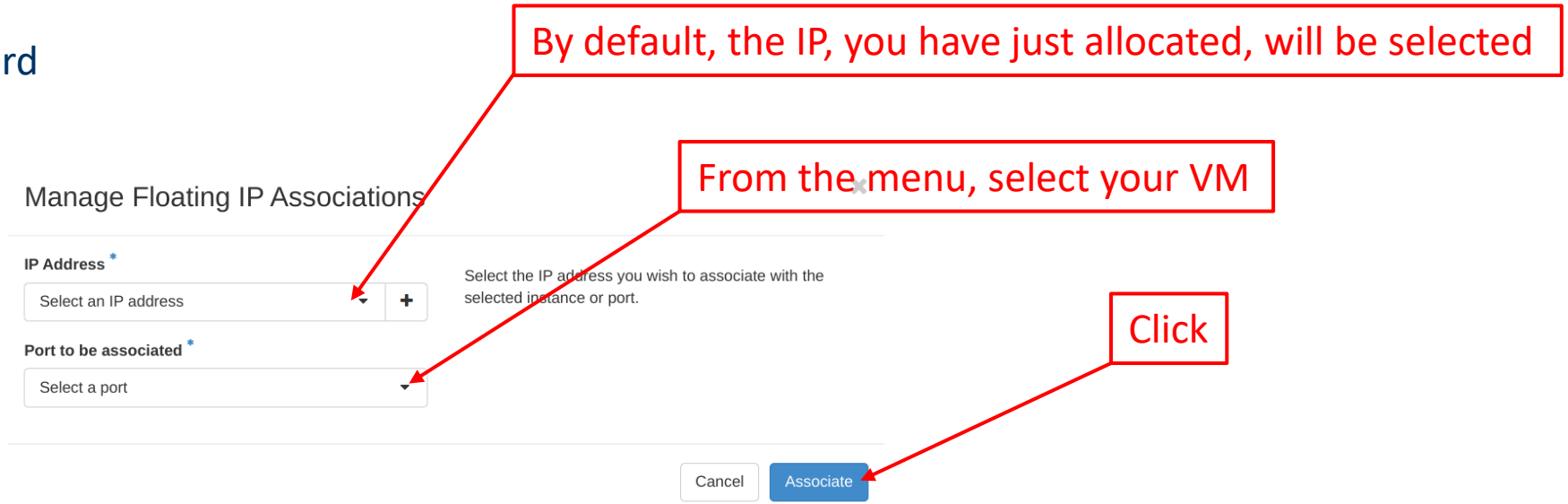
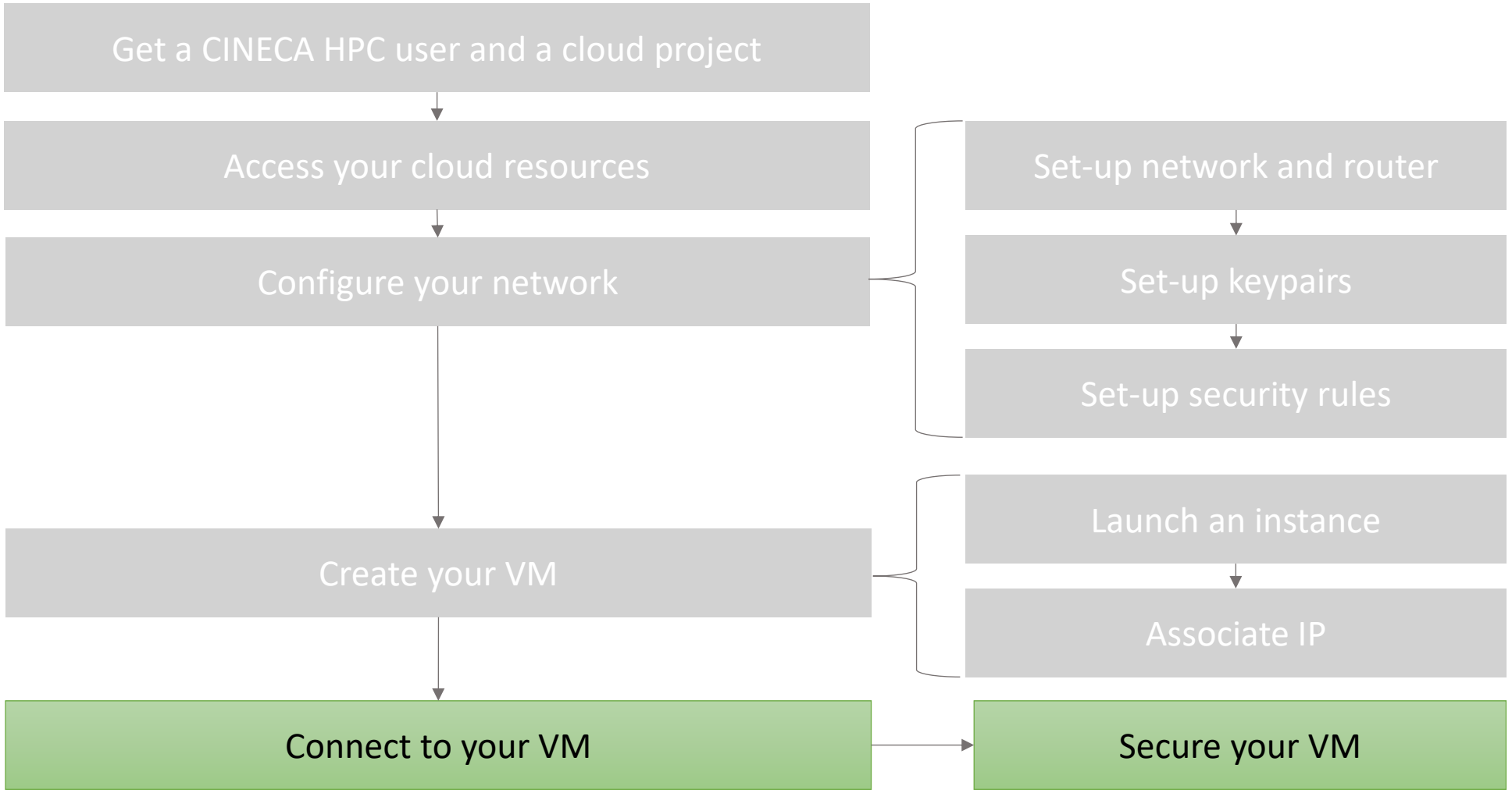


In the wizard



Getting started workflow

STEP BY STEP user GUIDE



Visit the HPC Cloud User guide for more information

5 - Connect to your VM

5.1 – Log in to your VM

CINECA

Get an HPC CINECA user and a project

Access your cloud resources

Configure your network

Create your VM

Connect to your VM

- Your VM is now ready to be used
- Login using the default user (of the OS you have chosen for your VM) and your private key (see step 3.3)
- Suppose you have used the default ubuntu cloud image, you can login as:

$ ssh -i my_keypair.pem ubuntu@<floating IP address>

5 - Connect to your VM

5.2 – Secure your VM

CINECA

Get an HPC CINECA user and a project

Access your cloud resources

Configure your network

Create your VM

Connect to your VM

At the first log in, remember to:

- Update the OS and relative packages

Follow the basic security guidelines:

- activate automatic updates
- only install software from reputable sources
- disable unneeded services
- use encrypted and secure communication protocols to avoid man in the middle attacks
- keep logs of your applications
- monitor accounts created on your system and do not enable password login, use SSH keys instead

More information at: Security guidelines

CINECA

For any issue or question please contact the HPC User support at superc@cineca.it