

IDENTITY & ACCESS MANAGEMENT ON CLOUD

Presented by:
Nguyen Huu Kim
Senior Software Engineer |VNG Cloud



AGENDA

- Introduction
- About IAM structure
- Use cases and solutions

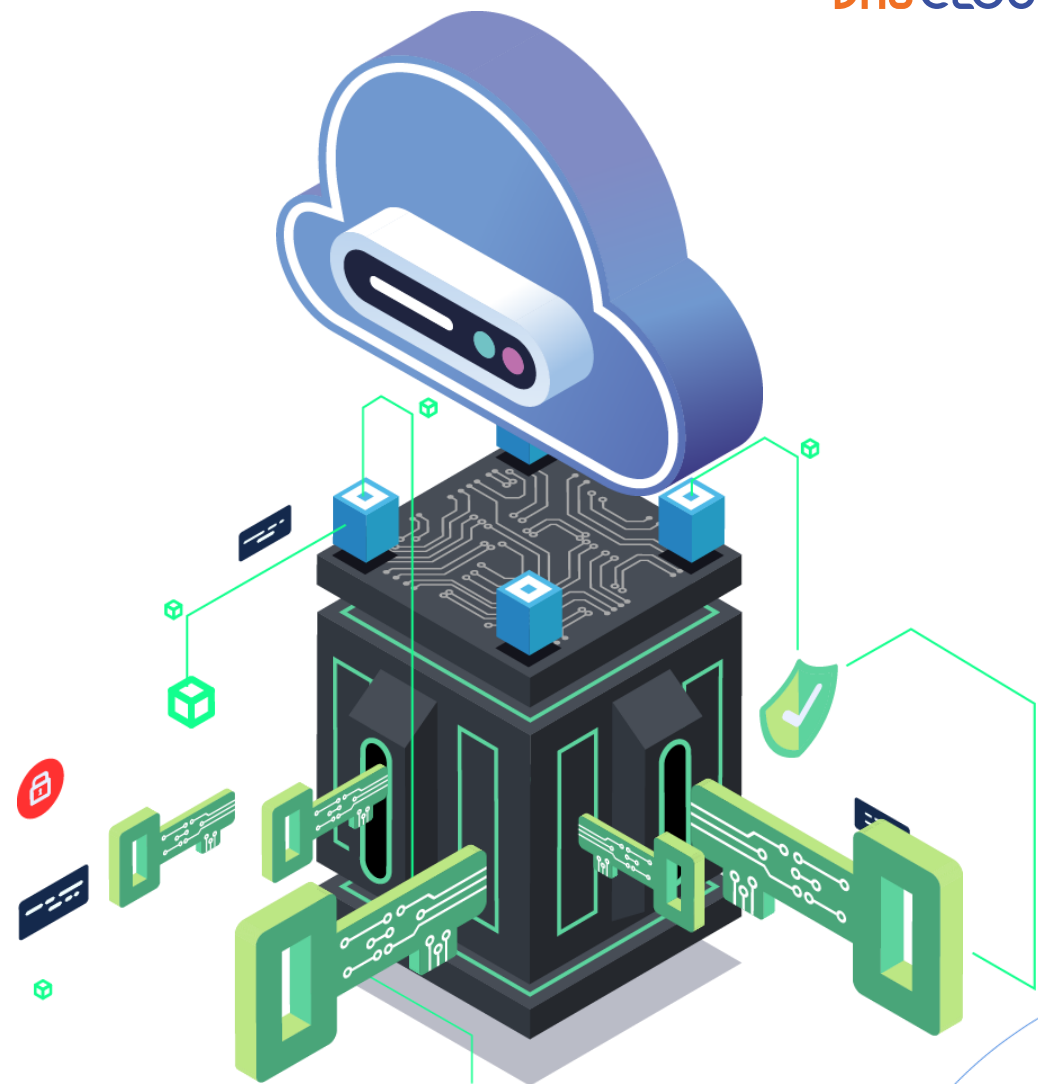


INTRODUCTION

Cloud computing is popular.

Many people want to access shared resources.

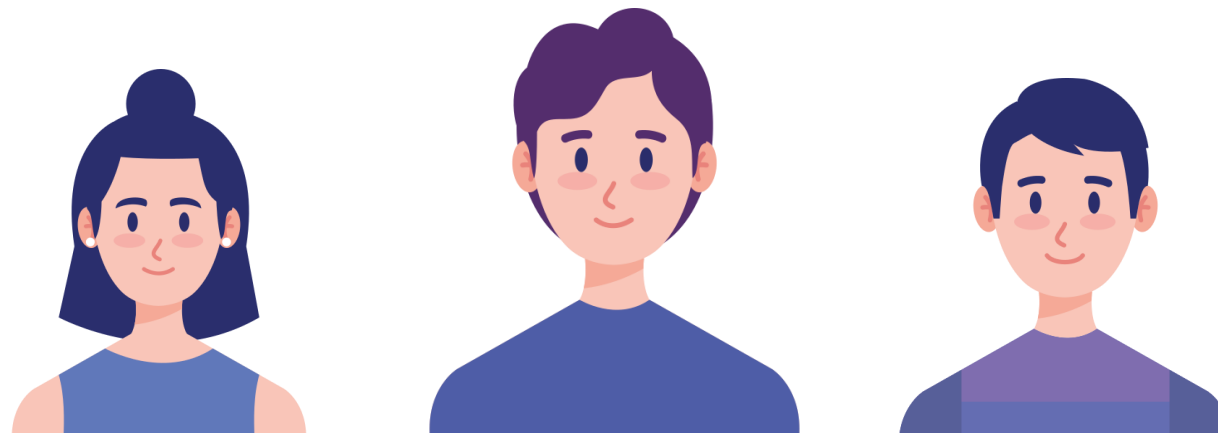
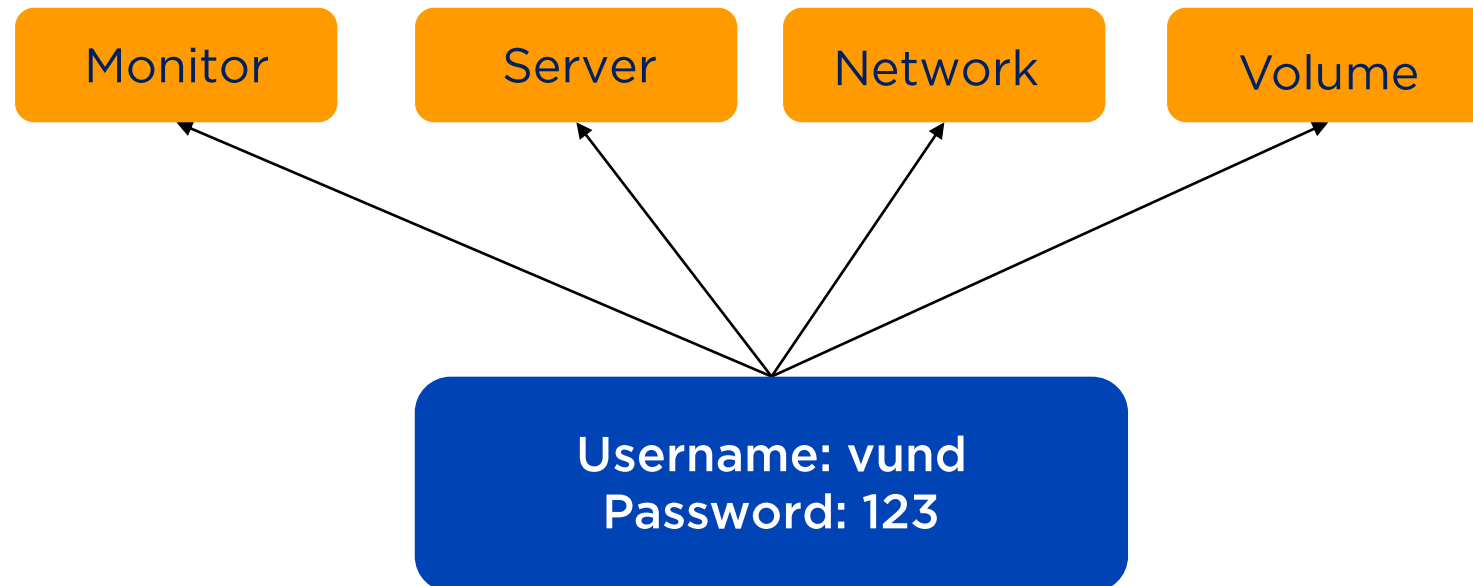
A safety mechanism for accessing shared data is required.



MANYPERSONE ACCESS

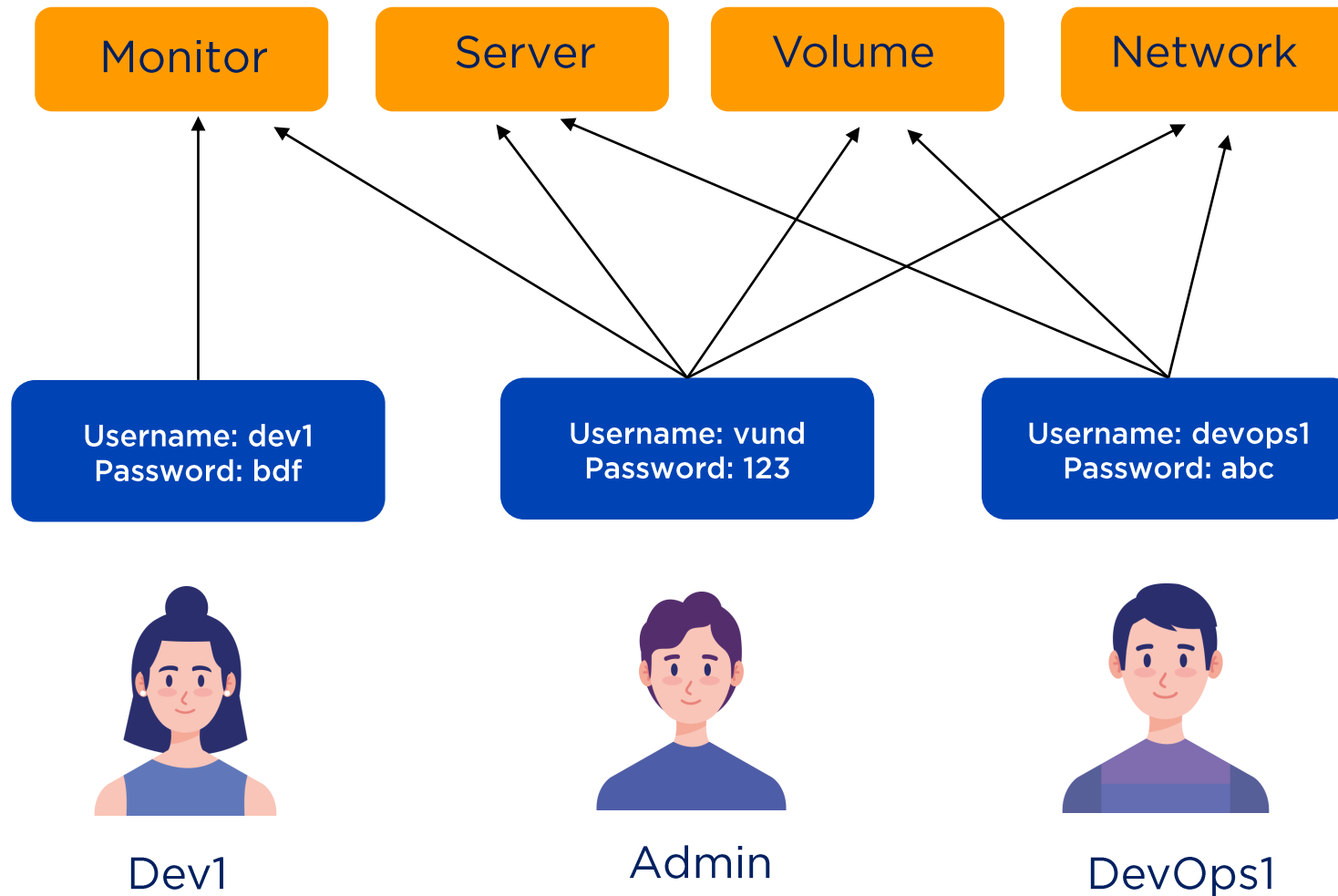
Challenges:

- Reveal sensitive information
- The system do not know who is accessing
- The same access rights

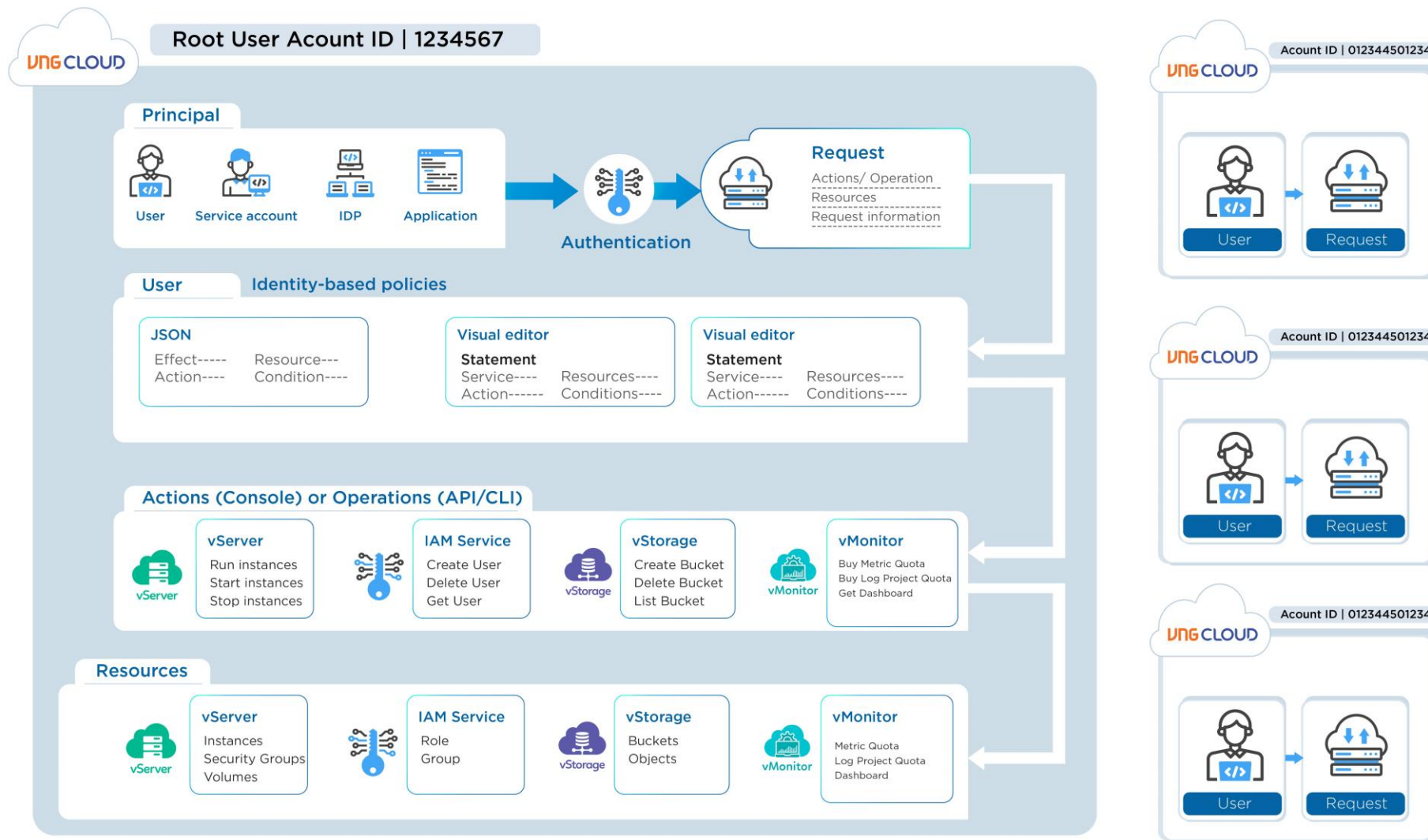


SOLUTION

- Each member has a different account
- Each member has different rights

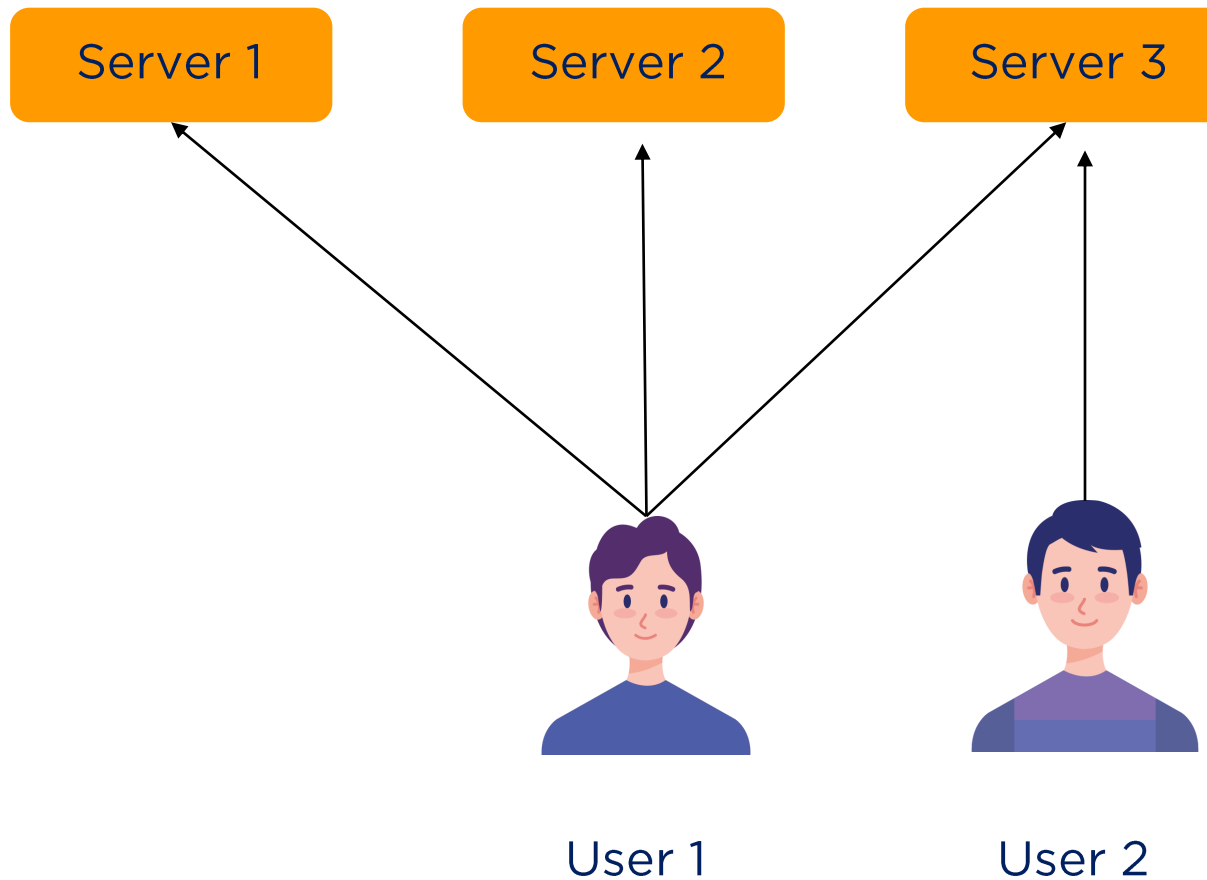


About IAM structure



SPECIFIC TO EACH ACTION

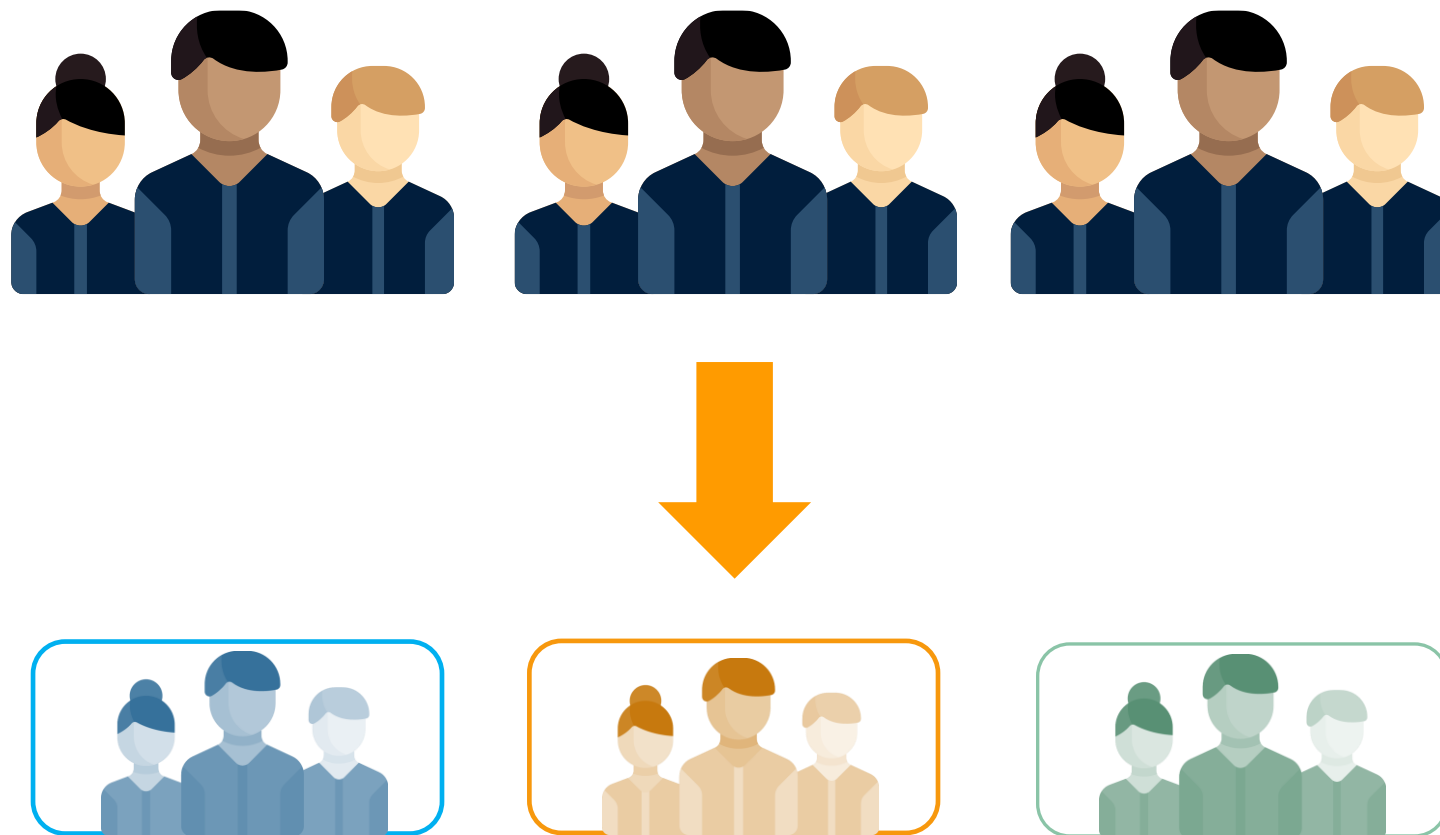
- User 1 can stop server 1, 2, 3
- User 2 can only stop server 3



Use cases and solutions:

GROUP USERS

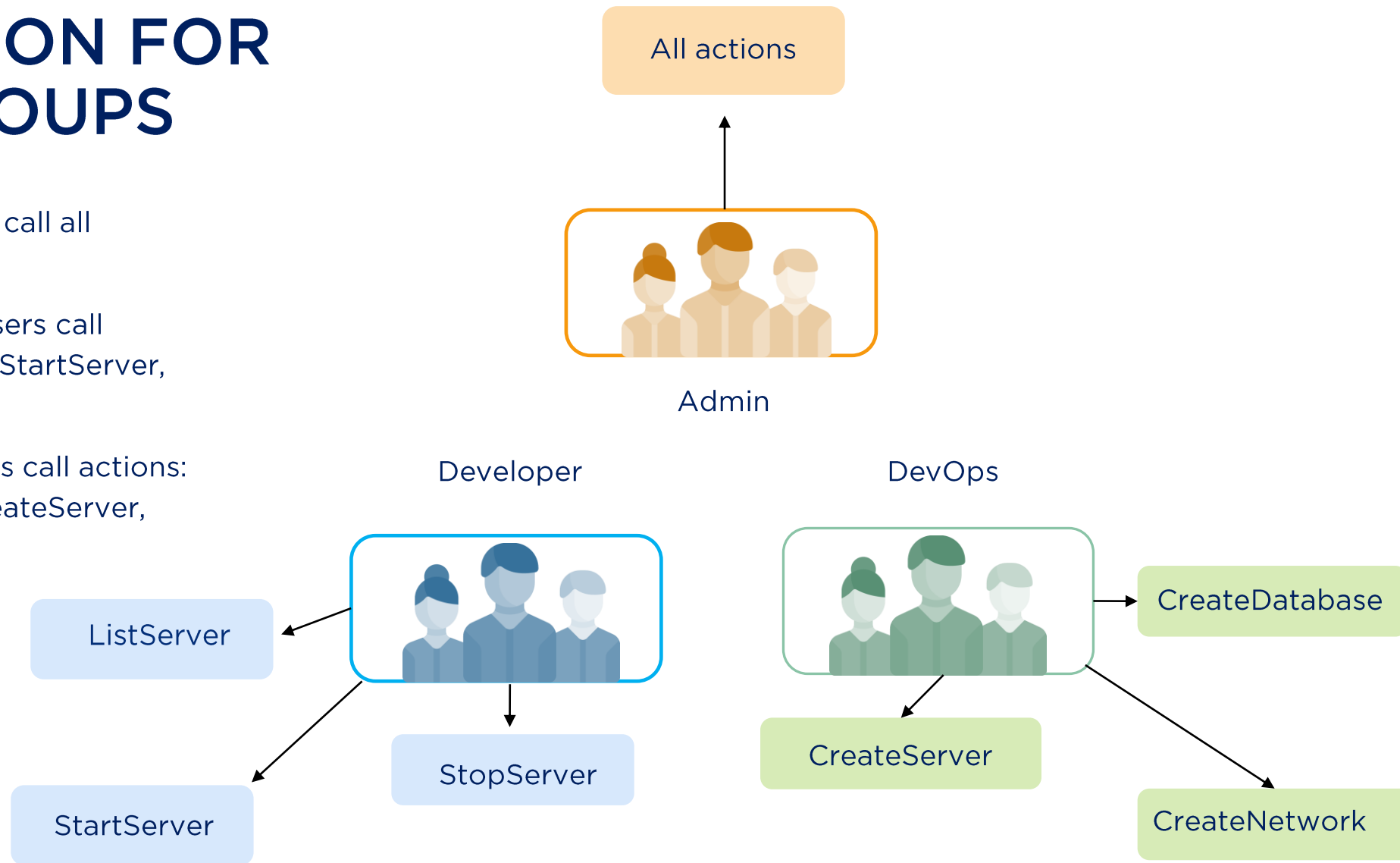
- Help group IAM users and policies together
- IAM users in a group will be further affected by policies in the group



Use cases and solutions:

PERMISSION FOR USER GROUPS

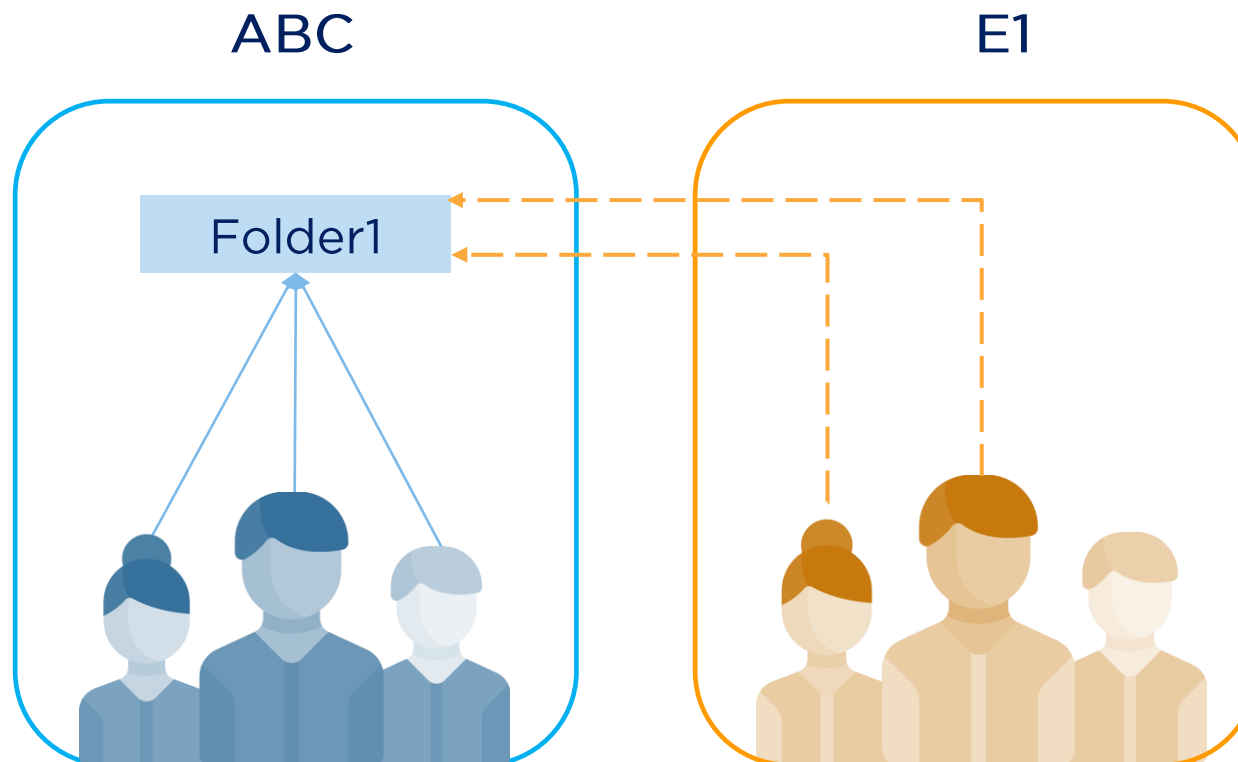
- Admin: Allow users call all actions
- Developer: Allow users call actions: ListServer, StartServer, StopServer
- DevOps: Allow users call actions: CreateNetwork, CreateServer, CreateDatabase



Use cases and solutions:

INTEGRATION WITH A THIRD-PARTY

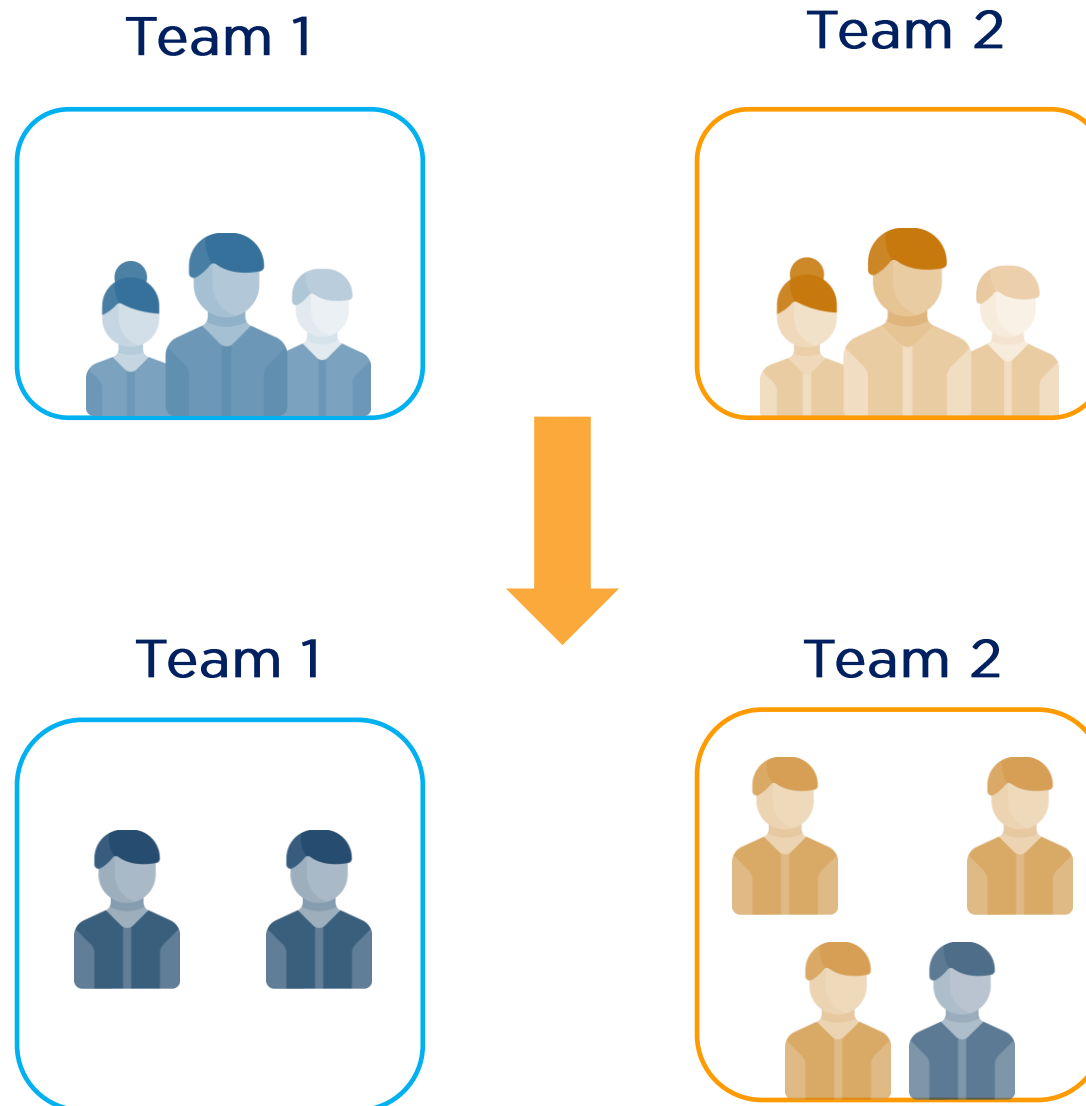
- Company ABC has a storage folder. It's named "folder1".
- Company E1 is a third-party of ABC.
- Some employees of E1 need to transfer data to "folder1".



Use cases and solutions:

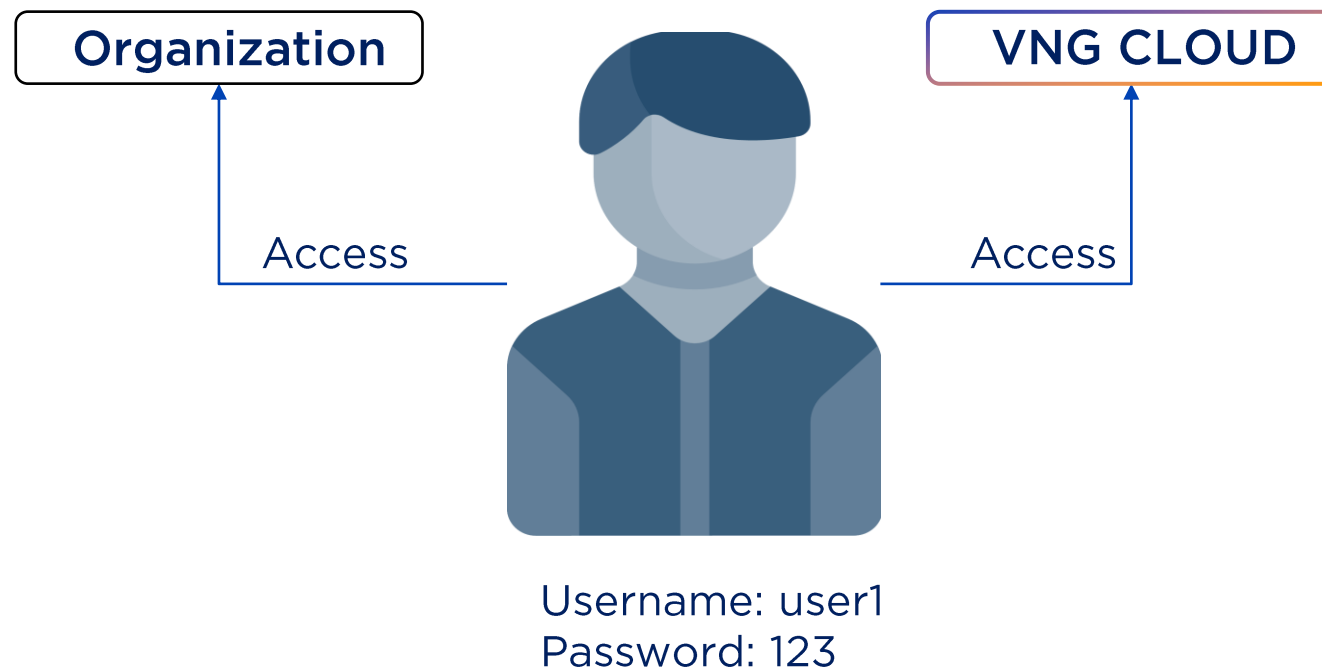
MEMBERS CHANGING TEAM

- Need to update permissions once users change position
- Move those users to another group
- Users' permissions will be updated accordingly



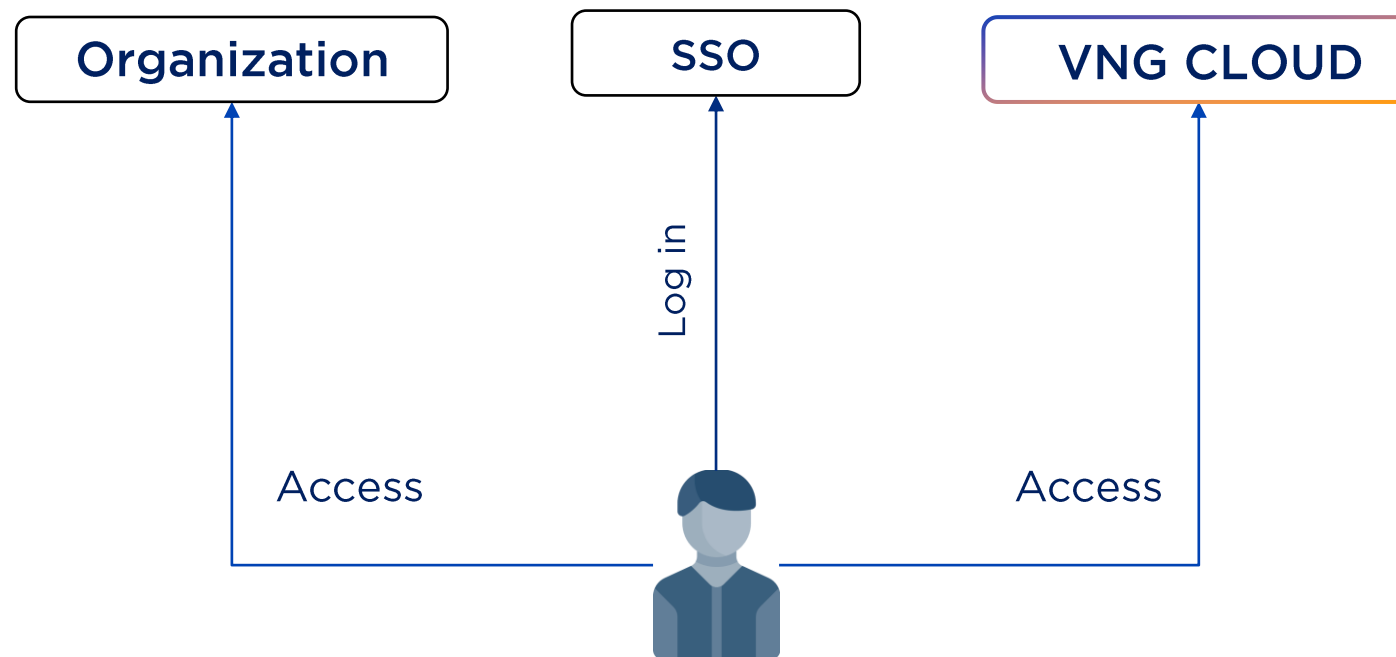
Use cases and solutions: **ONE ACCOUNT FOR ALL**

- Take time to create accounts for members in the company
- Security of authentication gateway is worrying



SOLUTION

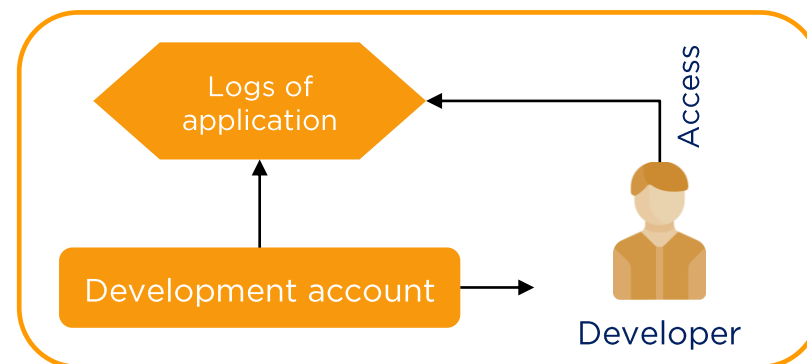
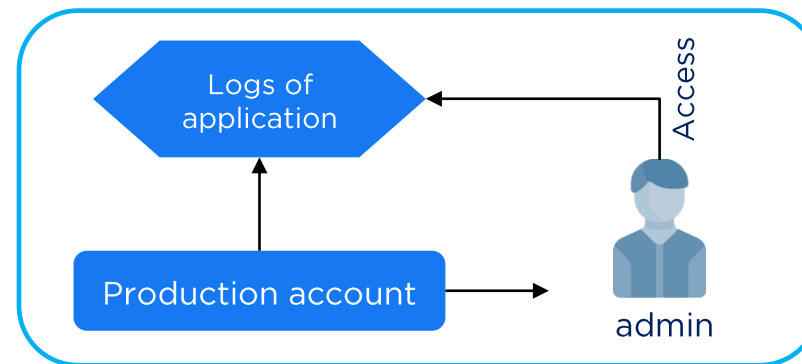
- Use identity provider in VNG CLOUD.
- Import organization accounts to cloud.



Username: user1
Password: 123

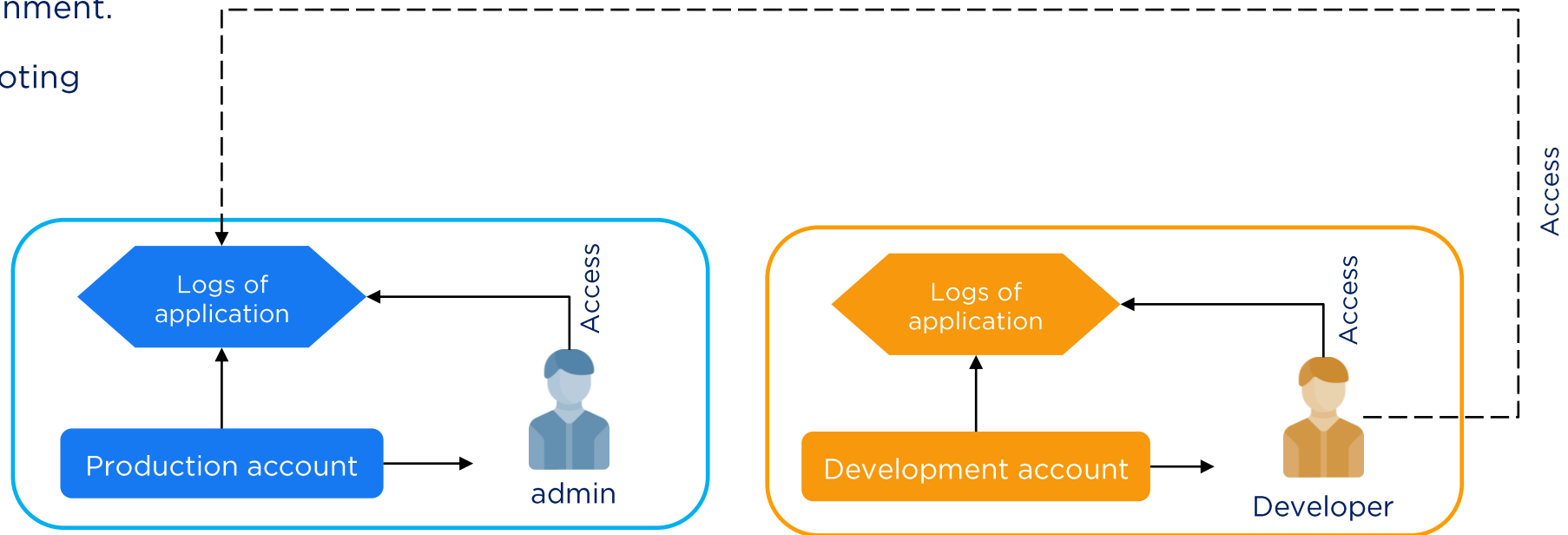
COMPANY ENVIRONMENT

- In DEV environment, developers, testers are allowed to free access.
- In production environment, only a few people have access. Usually, they do not know how the application works.



ACCESS NEEDS

- Developers need access to logs of application on production environment.
- Faster troubleshooting



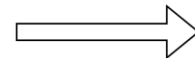
TIME RANGE CONTROL

- Allow access in a time range.
- Automatically grant or cancel access without editing policy.

1-8-2023 00:00:00



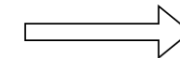
Deny access



10-8-2023 00:00:00



Allow access



15-8-2023 00:00:00



Deny access



Thank you

