

## Two-weekly report

Group Number: 6  
Name: **Dinh, Huu Phuc**  
Email: [huu.dinh@stud.fra-uas.de](mailto:huu.dinh@stud.fra-uas.de)  
Project: 3  
Matriculation Number: **1104950**

### 1. What have I accomplished since the last Daily Standup?

I have researched and studied about offline-migration - known as cold migration. Unlike live or online migration, where the system operates during the migration process, in offline migration, the system is temporarily shut down or paused for the migration to take place.

Advantages:

1. Much simpler to implement and manage. There is no need to deal with live state changes, making the process more predictable.
2. Complete data transfer: the states are transferred all at once, ensuring that migrated instance is the replica of the origin.
3. Reduce complexity.
4. Resource utilization: resources can be fully dedicated to the process, that leads to faster data transfer.

Disadvantages:

1. Downtime.
2. Not suitable for continuous operation, such as 24/7.
3. Limited adaptability to changes.

Applications:

1. Infrastructure updates: hardware or operating systems.
2. Non-critical environments:
3. Data center migration: during data center relocations or consolidation, when downtime can be scheduled and planned.

### 2. What will I accomplish until the next Daily Standup?

Discuss with my team to finalize our main goal of research and applications.

### 3. Do I anticipate any obstacles and can the team help me with them?

No.

### 4. References

M. R. Desai and H. B. Patel, "Efficient Virtual Machine Migration in Cloud Computing," *2015 Fifth International Conference on Communication Systems and Network Technologies*, Gwalior, India, 2015, pp. 1015-1019, doi: 10.1109/CSNT.2015.263.