Taming the Tech Dinosaur: Overcoming Challenges in Migrating Legacy Servers to AWS

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tecRacer

AWS User Groups

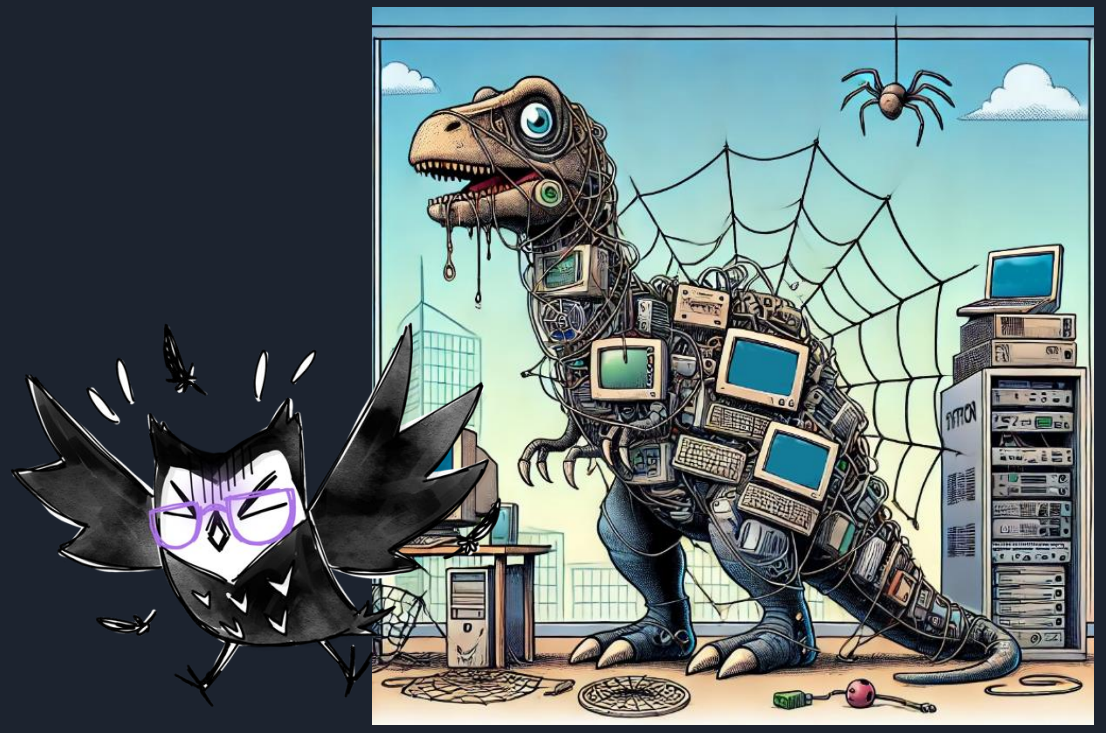
About Me

- André Vidigal
- In IT field since 2017!
- AWS Cloud consultant on tecRacer since 2022
- AWS Journey around the same time
- Last AWS service I worked on...

Legacy Systems

SOMETIMES DATA CENTER = JURASSIC PARK

- A software / hardware can be considered a legacy system when is not updated for about 5 years nor receiving any more official support
- "If it's working, don't touch it"
- Jurassic Problems:
  - Lack of compatibility
  - Vulnerabilities
  - Costs
  - Etc.

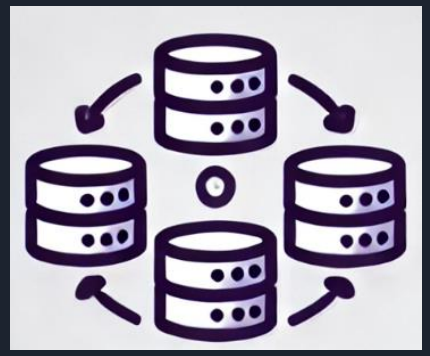


The AWS "Ambar"

BRINGING DINOS TO THE CLOUD

- AWS Application Migration Service
  - Replicate your On-Premises systems onto AWS.
  - Can be used to not only migrate legacy systems (legacy Agent) but to also migrate updated systems.
  - Multi-OS Support.
  - Maintain normal business operations while the replication happens.
  - Free Period of 90 days (2,160 hours)

Why AWS?



Replication

Upgradability

Managed Services

Modernization

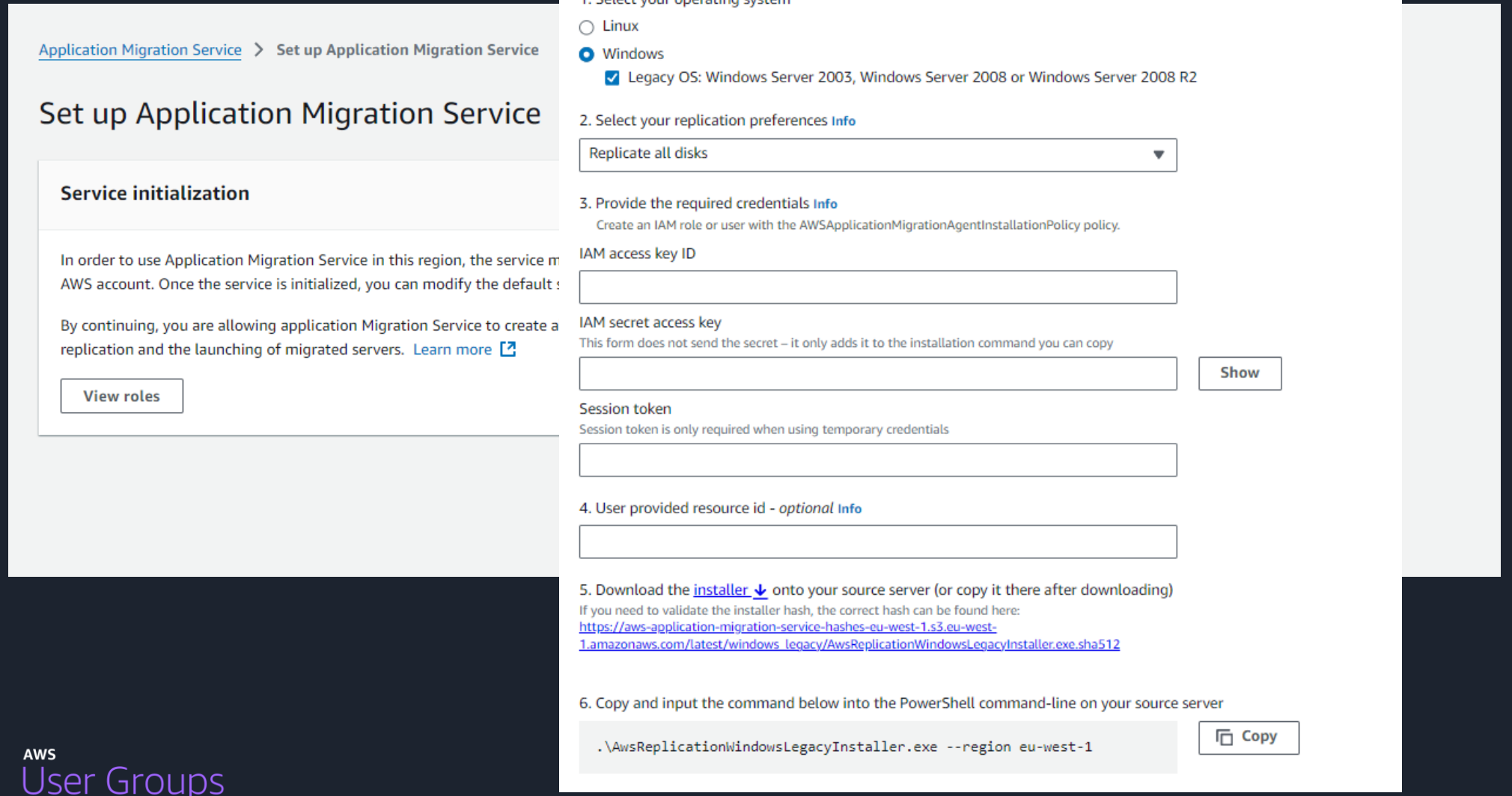
Pre-requirements

BEFORE DIGGING

- Ensure that the source server is supported by AWS
  - If it's a legacy system (i.e., Windows Server 2003, 2008, etc.) you will need the legacy agent
- 4GB free disk and at least 300MB of free RAM
- In case of legacy Windows systems must have .NET Framework version 3.5 or 4.5 depending on the system
- For legacy, Non-Nitro based instances only.
- Create a IAM user or IAM role with the policy "AWSApplicationMigrationAgentInstallationPolicy"
- Open TCP Port 443 and TCP Port 1500

First Steps

LET'S START DIGGING



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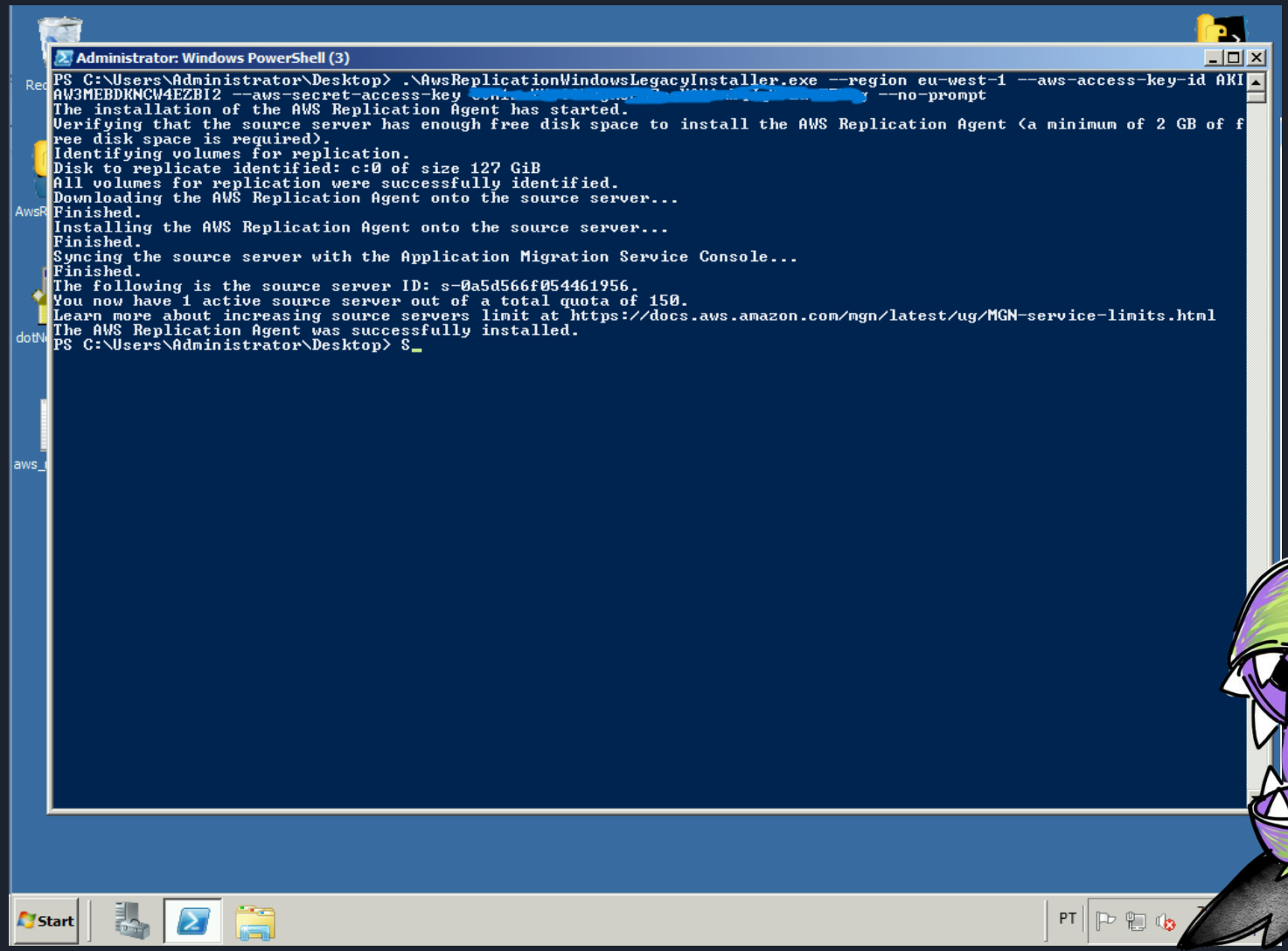
The "Dinosaur"

WORKING ON THE SOURCE SERVER



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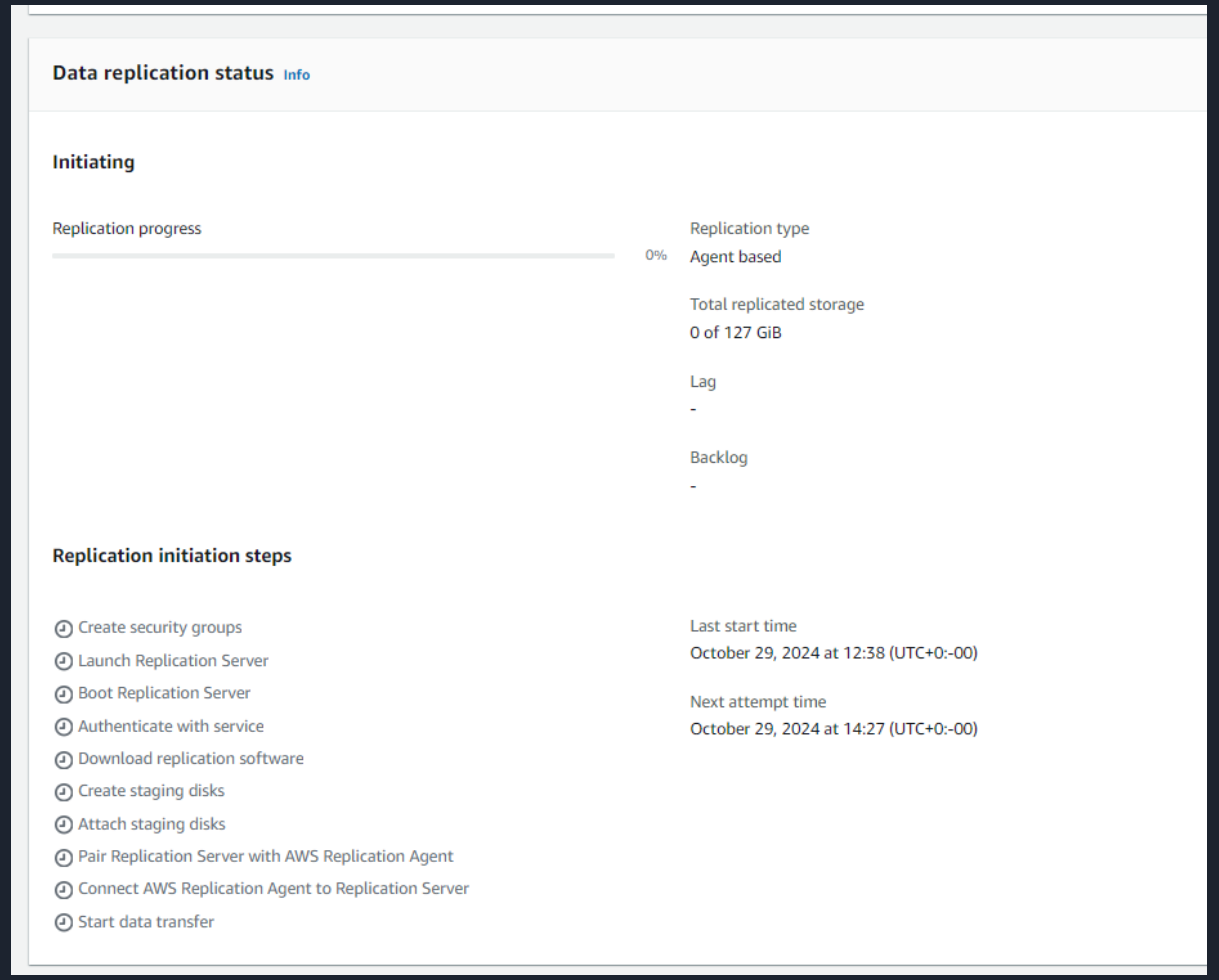
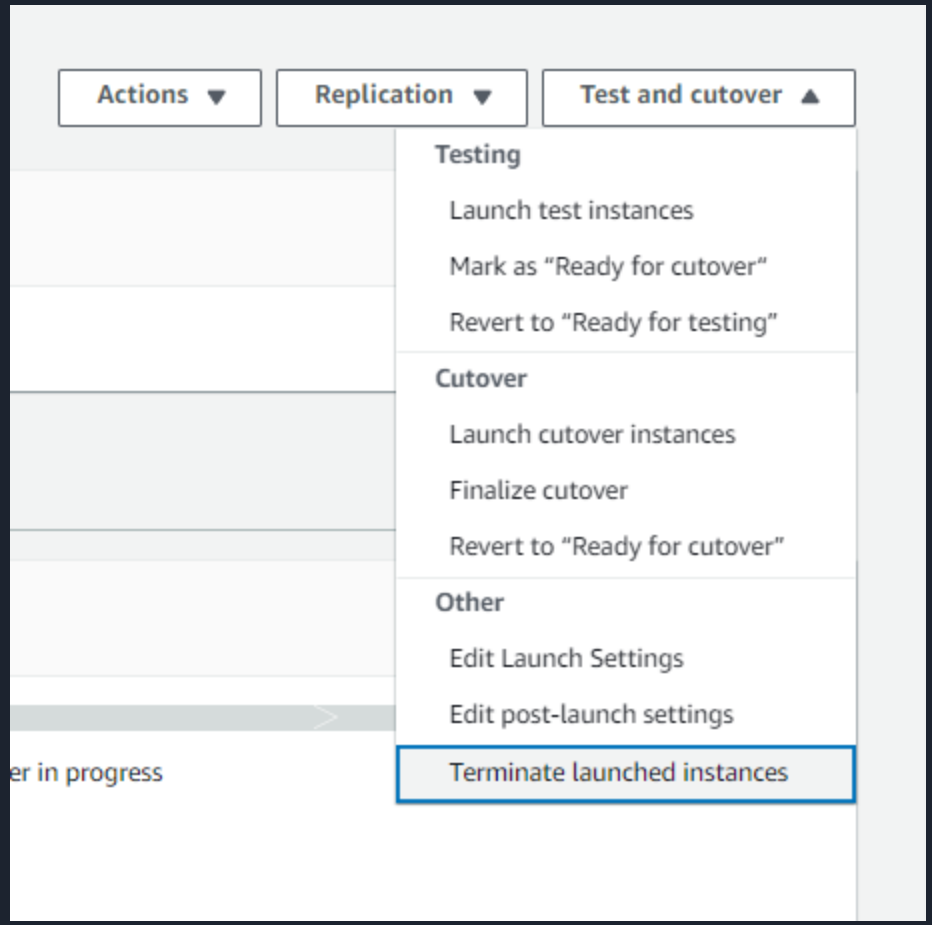
Migration Status





Some rocks are bound to be found

HERE'S SOME HELP

Unfortunately, things could go wrong... But there's always hope and coffee 😉

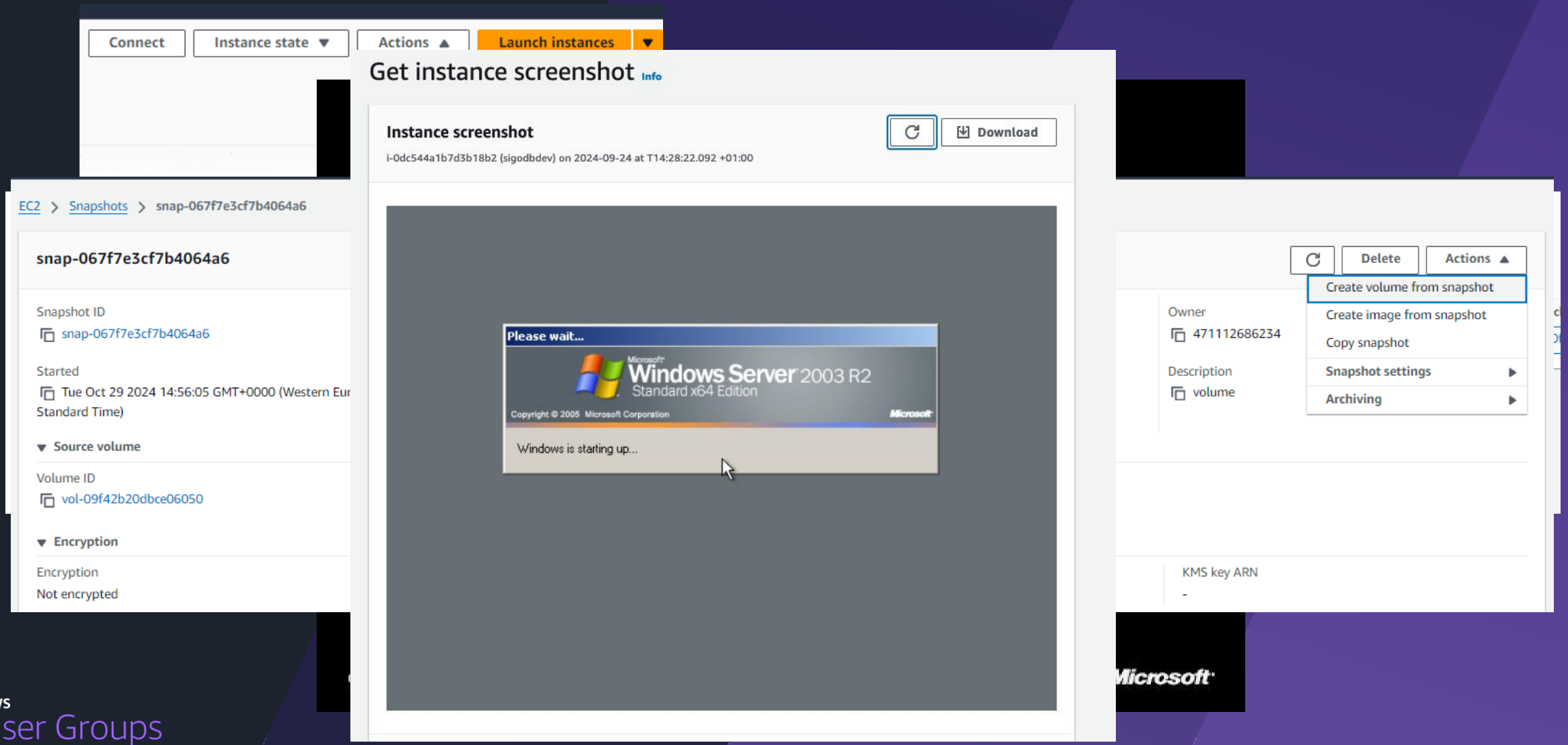
- Check network and firewalls
  - Use VPN if necessary
  - Security Groups on AWS side
- In case of legacy systems like Windows, check pre-installed drivers or install through registry
- Look out for Lag / Backlog (Read/Write VS Bandwidth)

Lag
-

Backlog
-

My Jurassic Adventure

REAL-WORLD PROBLEMS



Next Steps

"IT IS NOT THE STRONGEST OF THE SPECIES THAT SURVIVES, NOT THE MOST INTELLIGENT THAT SURVIVES. IT IS THE ONE THAT IS THE MOST ADAPTABLE TO CHANGE"

Refactor and Upgrade

Modernization

Final thoughts

- Not a perfect solution, especially for older systems.
- Be prepared for troubleshooting and trial and error.
- If able, perform any kind of backup / snapshot on source servers.
  - To help with backlog, have a replica of the source server on premise.
- Don't be afraid to test and recreate replicated instances

Thank you!

Q&A Time

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