

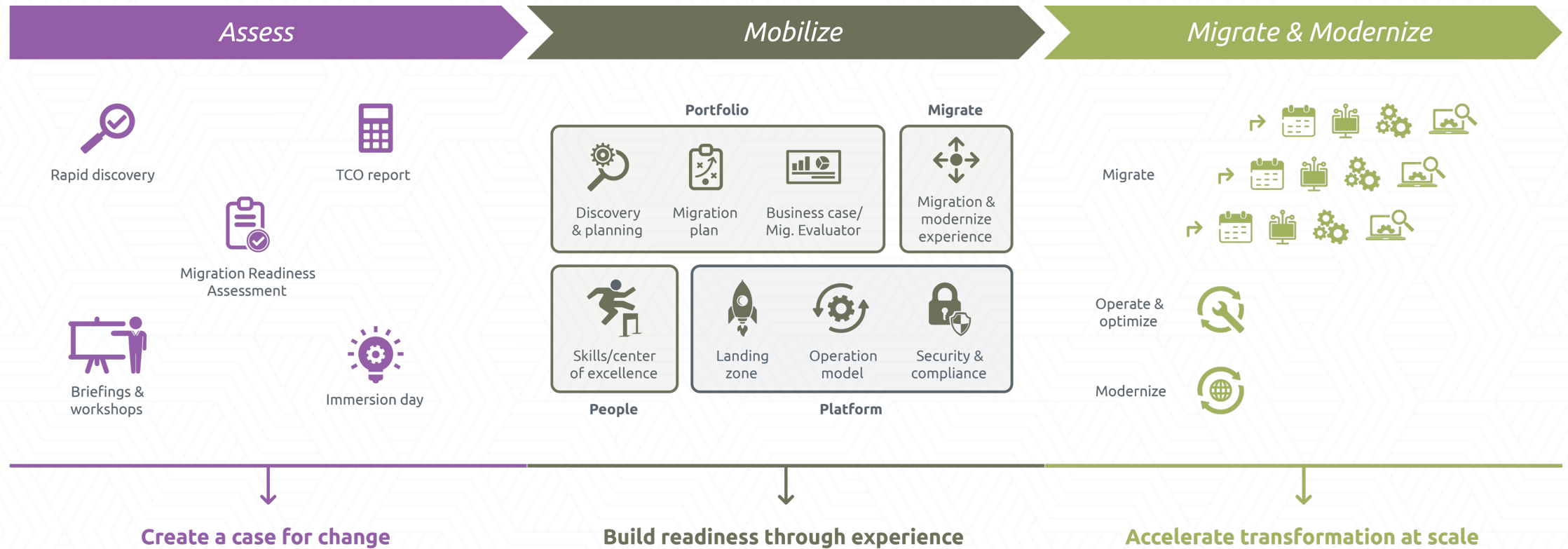


Procjena migracije

PREDAVAČ: Tomislav Herceg (Senior Solution Architect)

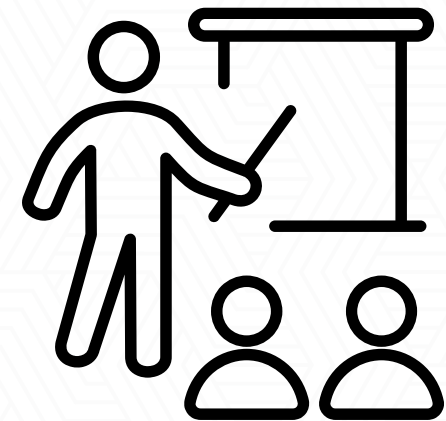


Migration Process



Migration Readiness Assessment Overview

MRA is an interactive workshop designed to generate a specific set of actions needed to build momentum and capability based on your current state, business goals and defined objectives.



Migration Readiness Assessment Outcomes

Target Outcomes

- Trust and a shared view of the desired target state
- Alignment of domain leaders on gaps and interdependencies to achieve target outcomes
- A reliable implementation roadmap

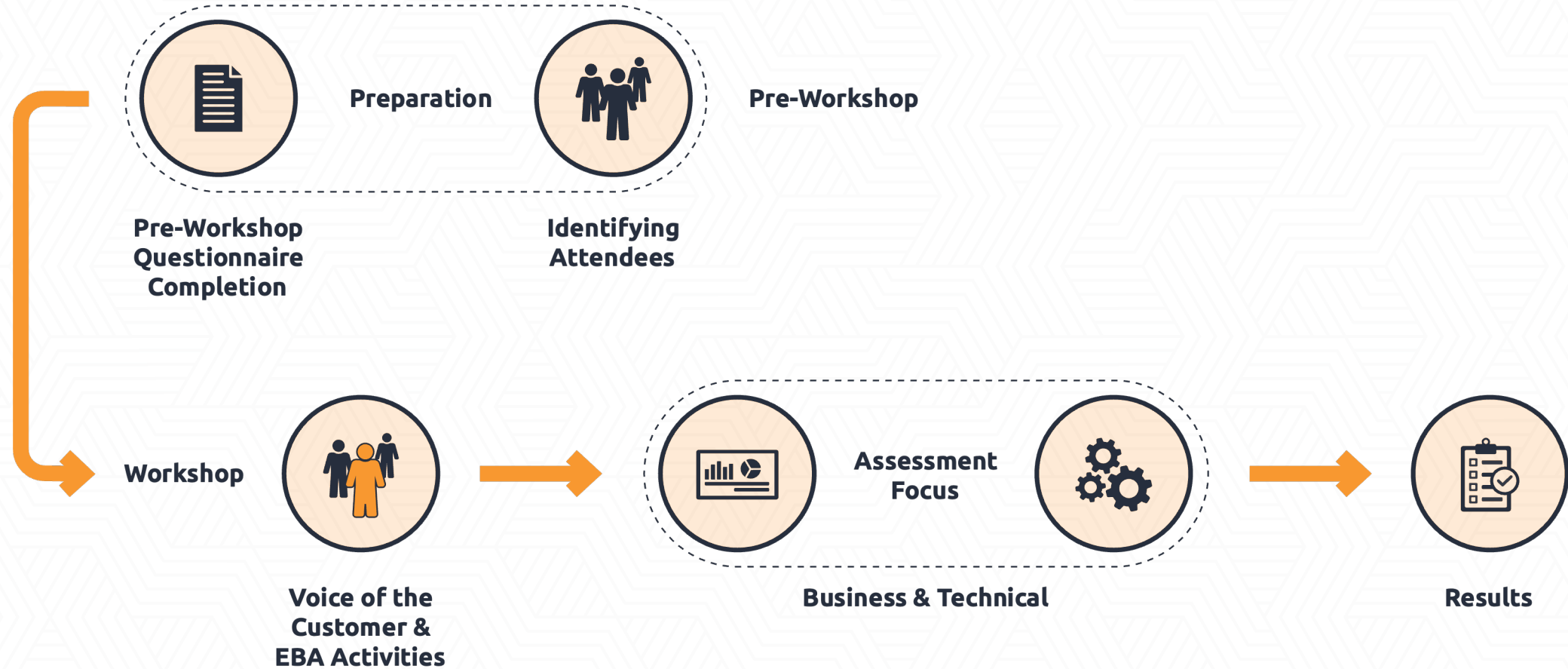
Build of Action

- Accelerates decisions on tactical implementation needs
- Agreement on ownerships for the next phase

Deliverables

- Assessment report
- Prioritized list of actions
- Roadmap

Migration Readiness Assessment Journey



Migration Readiness Assessment Focus

Business Capability Focused

- **Business**
Value Realization
- **People**
Roles and Readiness
- **Governance**
Prioritization and Control

Technical Capability Focused

- **Platform**
Applications and Infrastructure
- **Security**
Risk and Compliance
- **Operations**
Hybrid and Dynamic

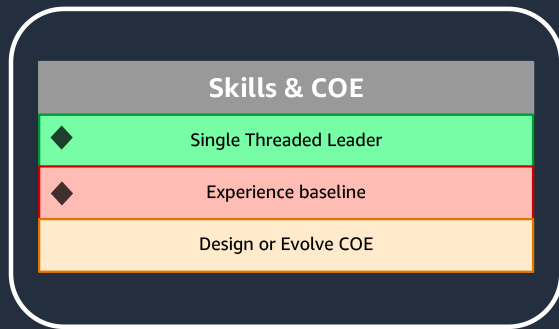
MRA Required Attendees

The MRA workshop should be attended by all members of future members of the Cloud Center of Excellence team.

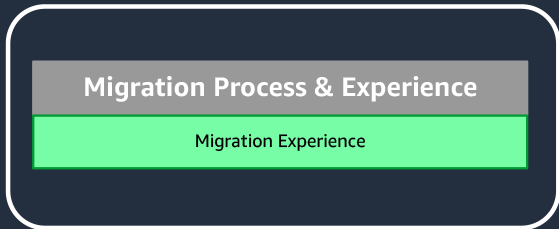
- Executive Sponsor
- App Development Leader
- Cloud Program Manager/Executive
- Escalation / Incident Manager
- Finance (Business Case and Financial Governance)
- Infrastructure Leader/Key Staff
- Network Leader
- Operations Leader/Key Staff
- Product/Business Unit Owners
- Project Manager
- Security Leader

MRA Outcome – Assessment Report

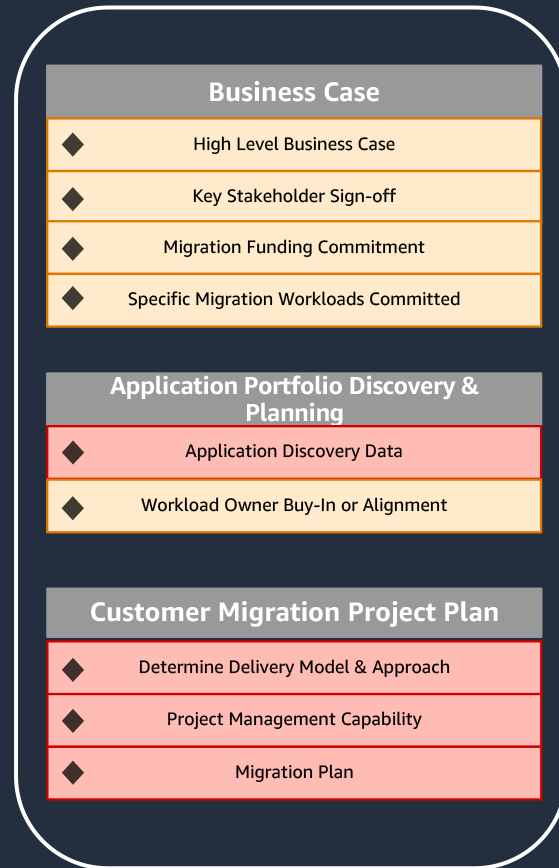
MRA Workstream Summary



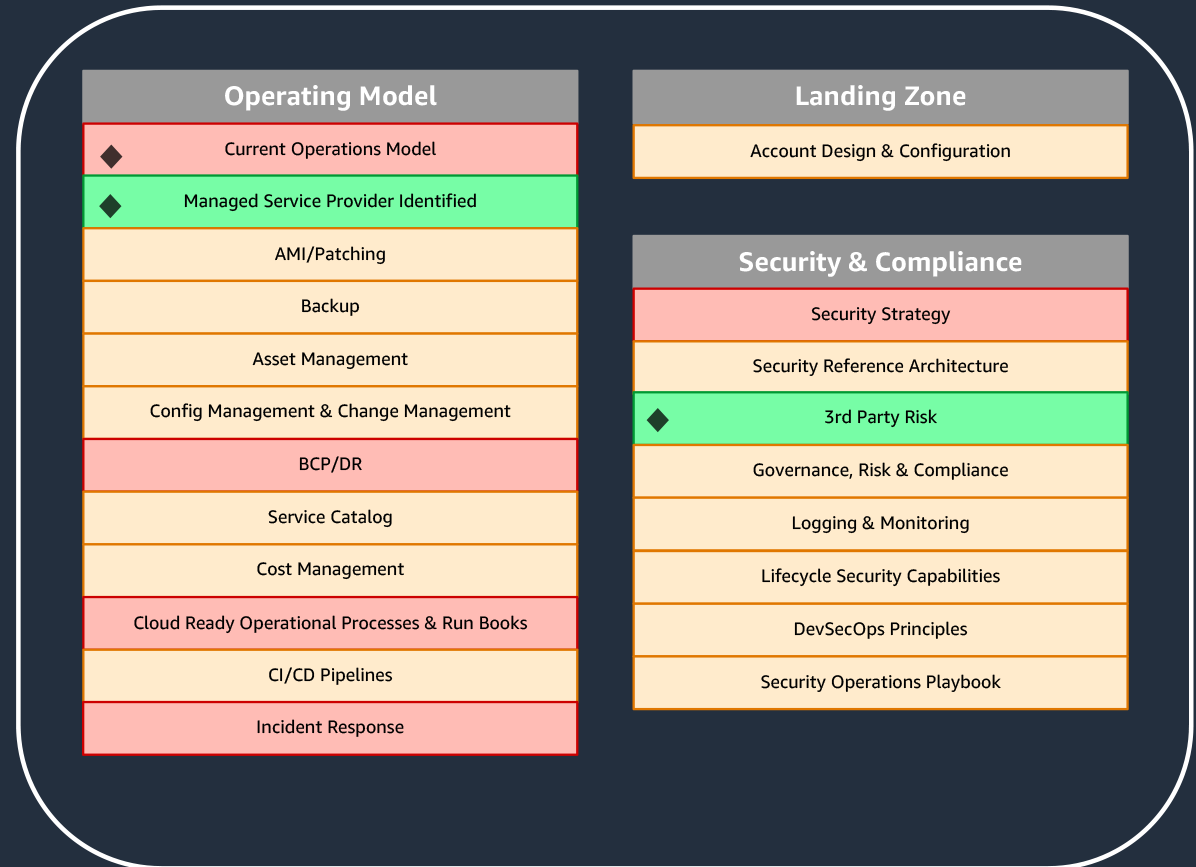
People



Migration



Portfolio



Platform

- Green - Readiness mature needing minimal assistance
- Amber - Areas which need attention to accelerate Cloud Migration
- Red - Needs immediate assistance to start Cloud Migration

◆ Pre-Mobilize/Areas that need attention early-on

MRA Executive Summary

Strategy and Desired Outcomes

Company goal is to adopt cloud first strategy. Reduce time to market and increase competitive differentiation through app modernization and innovation.

Company business and technical targeted outcomes:

- Reduce operating cost and risks by eliminating on-premise data centers
- Increase stability through platform modernization
- Increase use of automation



Strength

Standard account structure

Business stakeholders alignment

MRA Objectives

Assess current-state relative to the target-state needed to support business goals

Jointly measure successes, challenges, needs, and gaps.

Develop action-oriented recommendations to a critical path roadmap



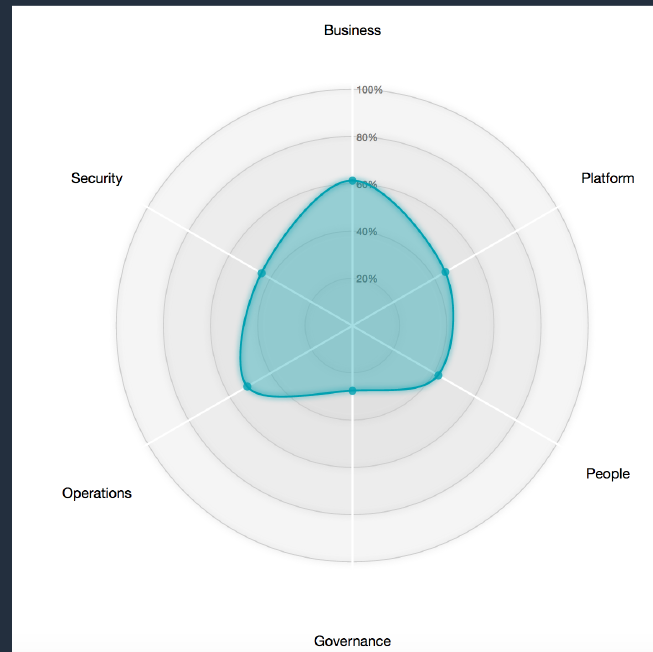
Gaps

Business Case

Application candidate pipeline

Security posture

Single threaded leader and training plan



MRA Prioritized List of Actions

Objective	Action
Create and communicate a Business Case	Share the initial business case with the broader team to build consensus and buy-in AND/OR MAP Accelerator: Start the "Rapid Migration Business Case" engagement with AWS Cloud Economics team, including TSO Logic based infrastructure discovery, software licensing optimization, and TCO saving estimation
Have the initiative Leader named	Customer to identify a single-threaded leader who has authority within the organization to increase decision velocity and identify key stakeholders across the value chain
Build a CCoE	Engage AWS to build/refine CCOE functions AND/OR MAP Accelerator: Run the "Cloud Center of Excellence (CCoE) Educational Workshop" to educate leaders on the value of a CCOE function, and provides best practice insights on structure maturation, and initial steps to optimal decision-making and functionality
Ensure right skills to support the initiative	Identify a training leader to help drive initiative AND/OR Engage the AWS Training team for a learning needs assessment
Gain experience and change the way you work	EBA Accelerator: Conduct the "Platform Party" to stress test and validate the AWS landing zone and move your first applications (for customers not leveraging ProServe led Mobilize but using prescriptive guidance from AWS via EBA) AND/OR , MAP Accelerator: Participate in the 1-day "Migration Immersion Day" that introduces AWS discovery and migration tools (e.g. CloudEndure, Application Discovery Service) and migrate an app in a simulated environment
Assure security is considered at front of the initiative	MAP Accelerator: Run the "Security Briefing" to educate key stakeholders on security model and cloud security foundations AND/OR Get the 3rd party risk assessment completed. Engage AWS as needed to ensure passage
Determine preferred operating model	Evaluate AWS Managed Services (AMS) to see if it makes sense to offload mundane activities/infrastructure ops to that and keep resources focused on innovation and differentiating activities
Get discovery tooling in place	Select and implement automated discovery tooling from one of the AWS partners that can assist in inventory and dependency mapping with expert guidance AND/OR MAP Accelerator: Participate in the 1-day "Migration Immersion Day" that introduces AWS discovery and migration tools (e.g. CloudEndure, Application Discovery Service) and migrate an app in a simulated environment
Determine and engage partners involved in the initiative	Confirm decision regarding roles of internal teams, Partner, and AWS, and involve Partner (if applicable) in the migration strategy and planning as early as possible
Identify first movers	Identify initial movers (generally require App Owner who is a promoter and an App that is not complex)

Discovery Tools

Application Discovery Service (ADS) Agentless Collector

- VMware only
- No network visualization
- Supported DB engine: Oracle, SQL Server, MySQL,
- PostgreSQL

AWS Discovery Agent

- Virtual server & physical server
- Network visualization
- Supported DB engine: No

Discovery Tools

Migration Evaluator Collector

- Virtual server & physical server
- Network visualization
- Supported DB engine: SQL Server

Import (import template)

- Virtual server & physical server
- No network visualization
- Supported DB engine: No

AWS Discovery Agent

- Software that you install on an on-premises server and virtual machine
- Capture system configuration, system performance, and details of the network connections between the system
- Requires root/admin privileges
- Securely transfer data to the Application Discovery Service (Migration hub)
- Support Linux (Amazon Linux, Ubuntu, RedHat, CentOS, Suse) and Windows (2003 R2 SP2 to 2022)

AWS Discovery Agent - Setup

- AWS account
- Migration Hub – Migration Home Region

Migration Home Region

Your Migration Hub home Region is where all discovered inventory data and migration status data is stored. You can migrate into any AWS Region supported by your migration tools.

Migration Home Region
EU (Frankfurt)

- IAM user – AWS managed policy
AWSApplicationDiscoveryAgentAccess
- Access key for IAM user

AWS Discovery Agent - Installation

```
powershell -command "& { iwr https://s3-us-west-2.amazonaws.com/aws-discovery-agent.us-west-2/windows/latest/AWSDiscoveryAgentInstaller.exe -OutFile AWSDiscoveryAgentInstaller.exe }"  
.\AWSDiscoveryAgentInstaller.exe REGION="eu-central-1"  
KEY_ID="AKIAQABQRI5ACASJJKJI"  
KEY_SECRET="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" /q
```

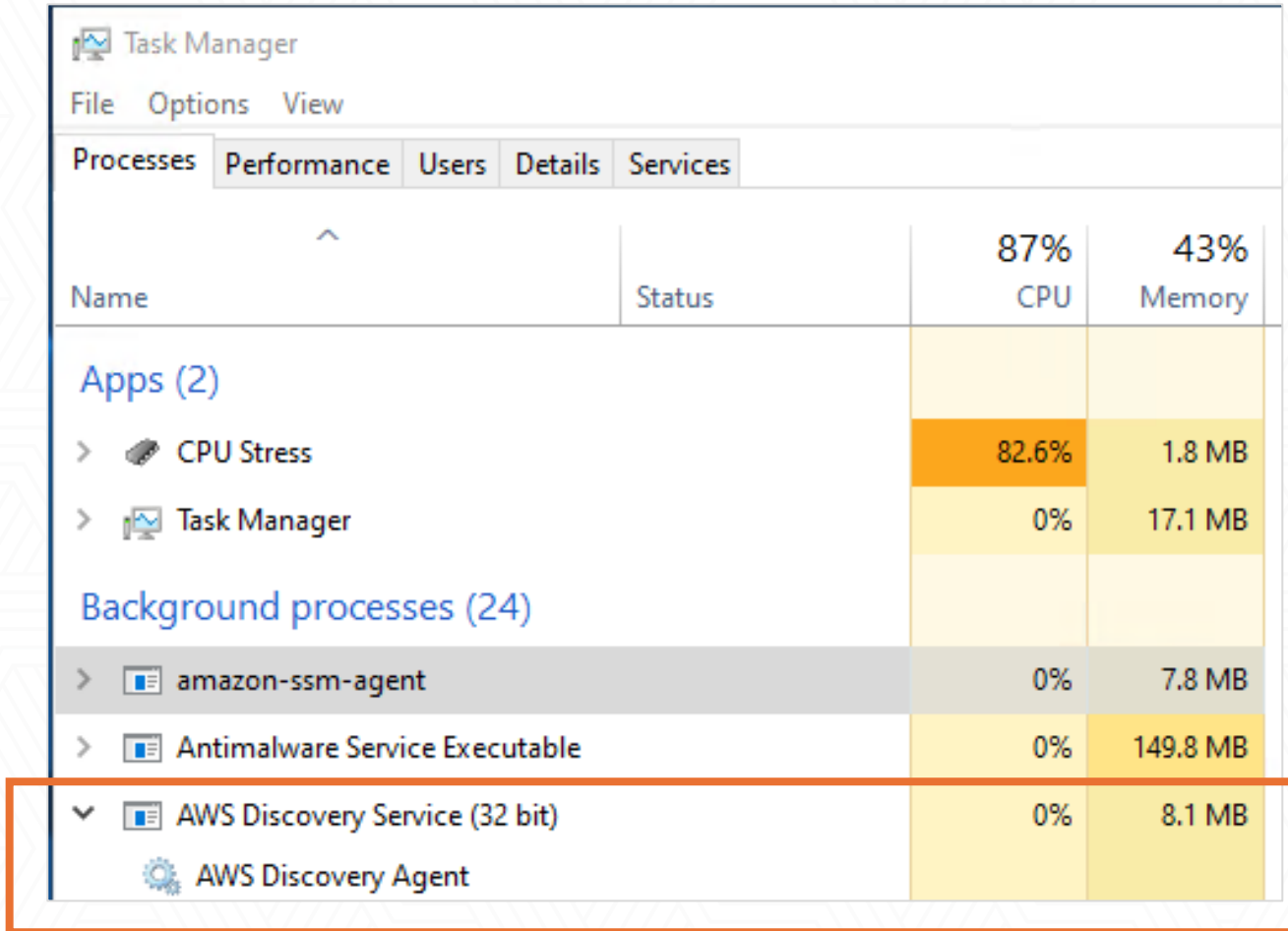
AWS Discovery Agent – Data Storage

```
C:\Users\tomislav.herceg>nslookup arsenal-discovery.eu-central-1.amazonaws.com
Server: Unknown
Address: 10.70.226.1

Non-authoritative answer:
Name:   arsenal-discovery.eu-central-1.amazonaws.com
Addresses: 18.193.168.198
          3.125.176.164
          52.29.157.235
```

IP address or hostname	IP address or hostname	IP address or hostname
<input type="text" value="18.193.168.198"/>	<input type="text" value="3.125.176.164"/>	<input type="text" value="52.29.157.235"/> <input type="button" value="Find"/>
LOCATION	LOCATION	LOCATION
City Frankfurt am Main	City Frankfurt am Main	City Frankfurt am Main
Region Hesse (HE)	Region Hesse (HE)	Region Hesse (HE)
Postal code 60313	Postal code 60313	Postal code 60313
Country Germany (DE)	Country Germany (DE)	Country Germany (DE)
Continent Europe (EU)	Continent Europe (EU)	Continent Europe (EU)
Coordinates 50.1187 (lat) / 8.6842 (long)	Coordinates 50.1187 (lat) / 8.6842 (long)	Coordinates 50.1187 (lat) / 8.6842 (long)
Time 2024-04-18 17:23:17 (Europe/Berlin)	Time 2024-04-18 17:24:12 (Europe/Berlin)	Time 2024-04-18 17:25:44 (Europe/Berlin)
NETWORK	NETWORK	NETWORK
IP address 18.193.168.198	IP address 3.125.176.164	IP address 52.29.157.235
Hostname ec2-18-193-168-198.eu-central-1.compute	Hostname ec2-3-125-176-164.eu-central-1.compute	Hostname ec2-52-29-157-235.eu-central-1.compute.amazonaws.com
Provider AMAZON-02	Provider AMAZON-02	Provider AMAZON-02
ASN 16509	ASN 16509	ASN 16509

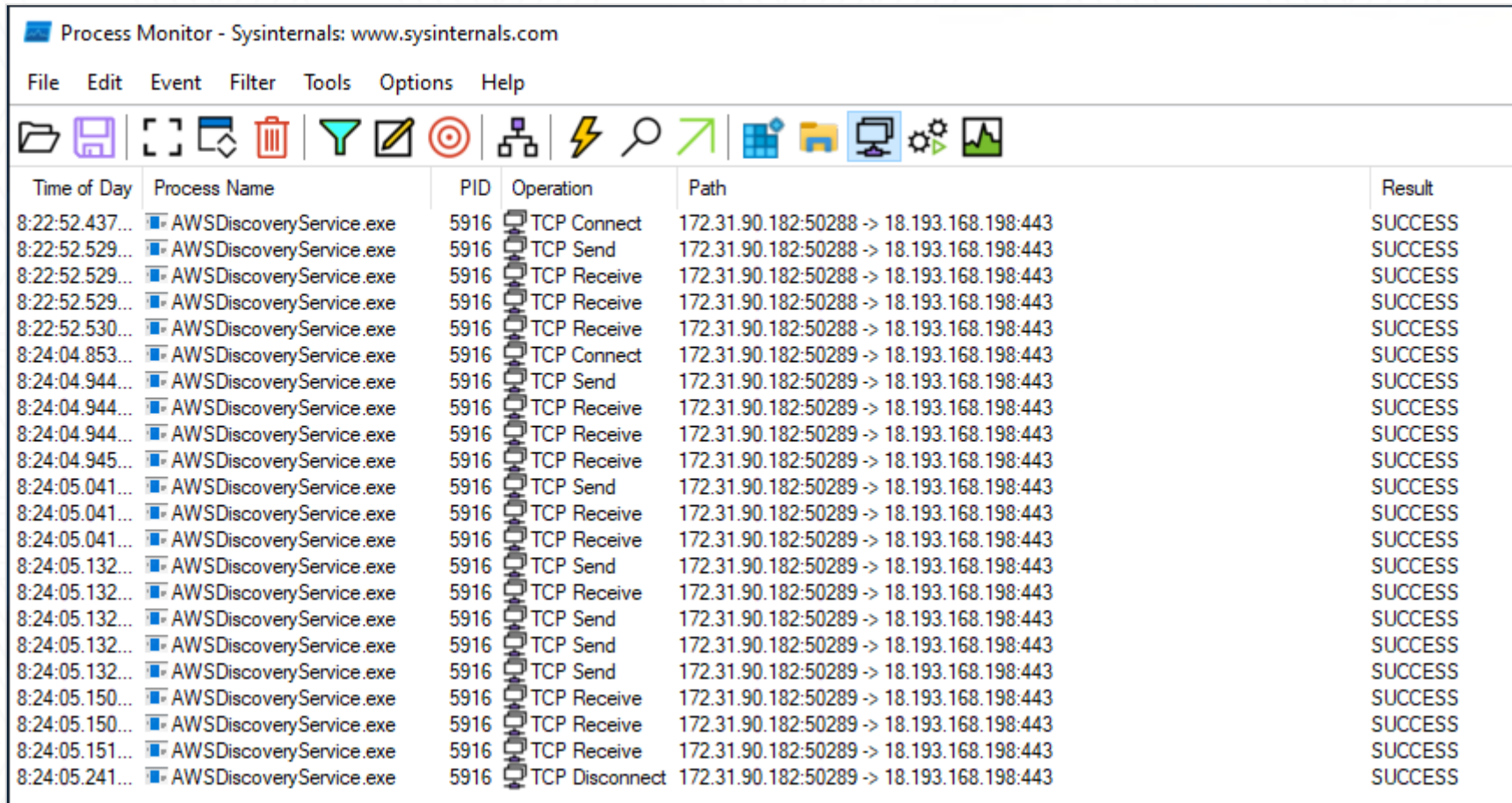
AWS Discovery Agent – Utilization



The screenshot shows the Windows Task Manager Performance tab. The overall system usage is 87% CPU and 43% Memory. The table below lists the processes and their individual CPU and Memory usage.

Name	Status	CPU	Memory
Apps (2)			
> CPU Stress		82.6%	1.8 MB
> Task Manager		0%	17.1 MB
Background processes (24)			
> amazon-ssm-agent		0%	7.8 MB
> Antimalware Service Executable		0%	149.8 MB
▼ AWS Discovery Service (32 bit)		0%	8.1 MB
AWS Discovery Agent			

AWS Discovery Agent – Data Transfer



The screenshot shows the Process Monitor application window with a menu bar (File, Edit, Event, Filter, Tools, Options, Help) and a toolbar. The main area displays a table of network events for the process AWSDiscoveryService.exe. The table columns are Time of Day, Process Name, PID, Operation, Path, and Result. The operations shown are TCP Connect, TCP Send, TCP Receive, and TCP Disconnect, all with a Result of SUCCESS. The Path column shows the IP address range 172.31.90.182-50288 to 18.193.168.198-443.

Time of Day	Process Name	PID	Operation	Path	Result
8:22:52.437...	AWSDiscoveryService.exe	5916	TCP Connect	172.31.90.182:50288 -> 18.193.168.198:443	SUCCESS
8:22:52.529...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50288 -> 18.193.168.198:443	SUCCESS
8:22:52.529...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50288 -> 18.193.168.198:443	SUCCESS
8:22:52.529...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50288 -> 18.193.168.198:443	SUCCESS
8:22:52.530...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50288 -> 18.193.168.198:443	SUCCESS
8:24:04.853...	AWSDiscoveryService.exe	5916	TCP Connect	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:04.944...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:04.944...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:04.944...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:04.945...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.041...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.041...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.041...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.132...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.132...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.132...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.132...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.132...	AWSDiscoveryService.exe	5916	TCP Send	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.150...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.150...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.151...	AWSDiscoveryService.exe	5916	TCP Receive	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS
8:24:05.241...	AWSDiscoveryService.exe	5916	TCP Disconnect	172.31.90.182:50289 -> 18.193.168.198:443	SUCCESS

Q&A

Hvala na pažnji!

Tomislav Herceg

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