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WORK at LIGHTSPEED

Discovery & Service Mapping in a Cloud First World

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Agenda

- What are the challenges in mapping PaaS/cloud-native resources?
- How to Start
- LAB 1.0 – Enter Cloud Credentials
- LAB 2.0 – Create Cloud Service Account
- LAB 3.0 – Discover the Cloud Account Contents
- LAB 4.0 – Run the Pattern
- LAB 5.0 – Top Down Discovery

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Speaker Introduction



Name: Noam Biran

Title: Director, Product Management, ITOM

Function: Product Management

Company: ServiceNow

Experience: 8 years in ServiceNow (5 in Neebula), over 20 years in ITOM in both large and small software vendors

Expertise: ITOM, BSM, Availability Management (Event, Monitoring), CMDB, Discovery

Achievements: Product lead for ServiceWatch from inception to maturity, co-founder of Appilog

Current Projects: Managing roadmap and vision of ITOM's Event, Discovery and Mapping products

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Speaker Introduction



Name: Mike Buckner

Title: Senior Solutions Architect

Function: Solutions Consulting

Company: ServiceNow

Experience: 1.5 years in ServiceNow Solutions consulting. 10 years experience in systems engineering & DevOps.

Expertise: Event Management, Monitoring, CMDB, AWS architecture.

Achievements: ITOM SC Rookie of the Year 2016

Current Projects: Making Operational Intelligence and Machine Learning more accessible to the masses.

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Objectives and What You Will Learn

Objectives

- Top down discovery of PaaS/cloud-native resources

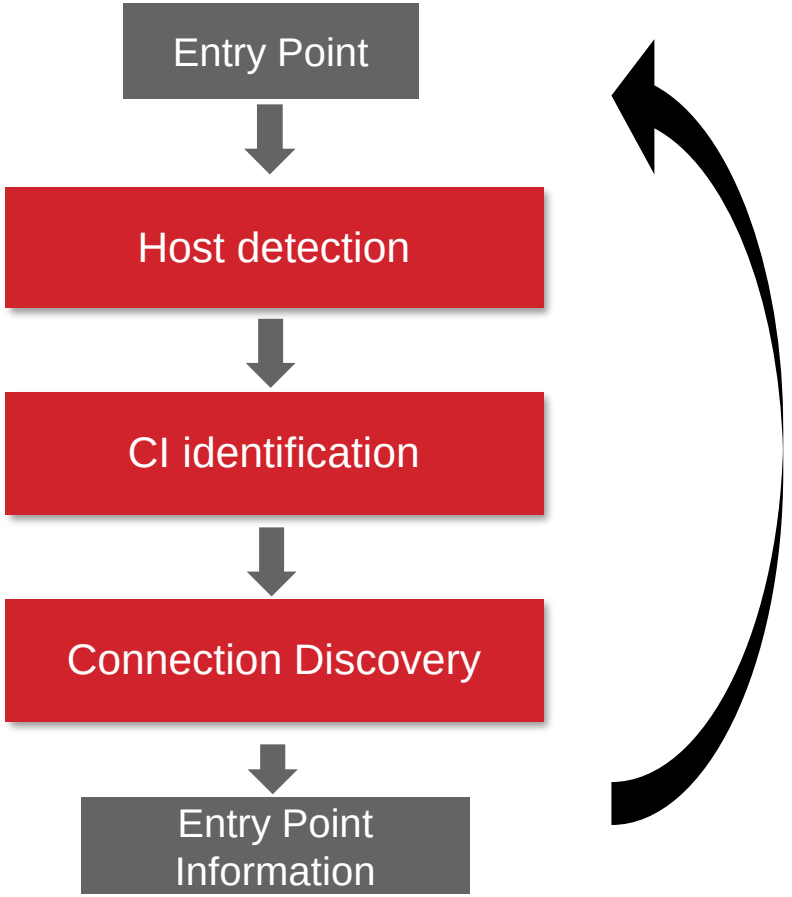
What you will learn

- What are the challenges in mapping PaaS/cloud-native resources?
- What do you need to get started?
- What resources are supported OOTB today?

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What are the Challenges in Mapping PaaS/ Cloud-Native Resources?

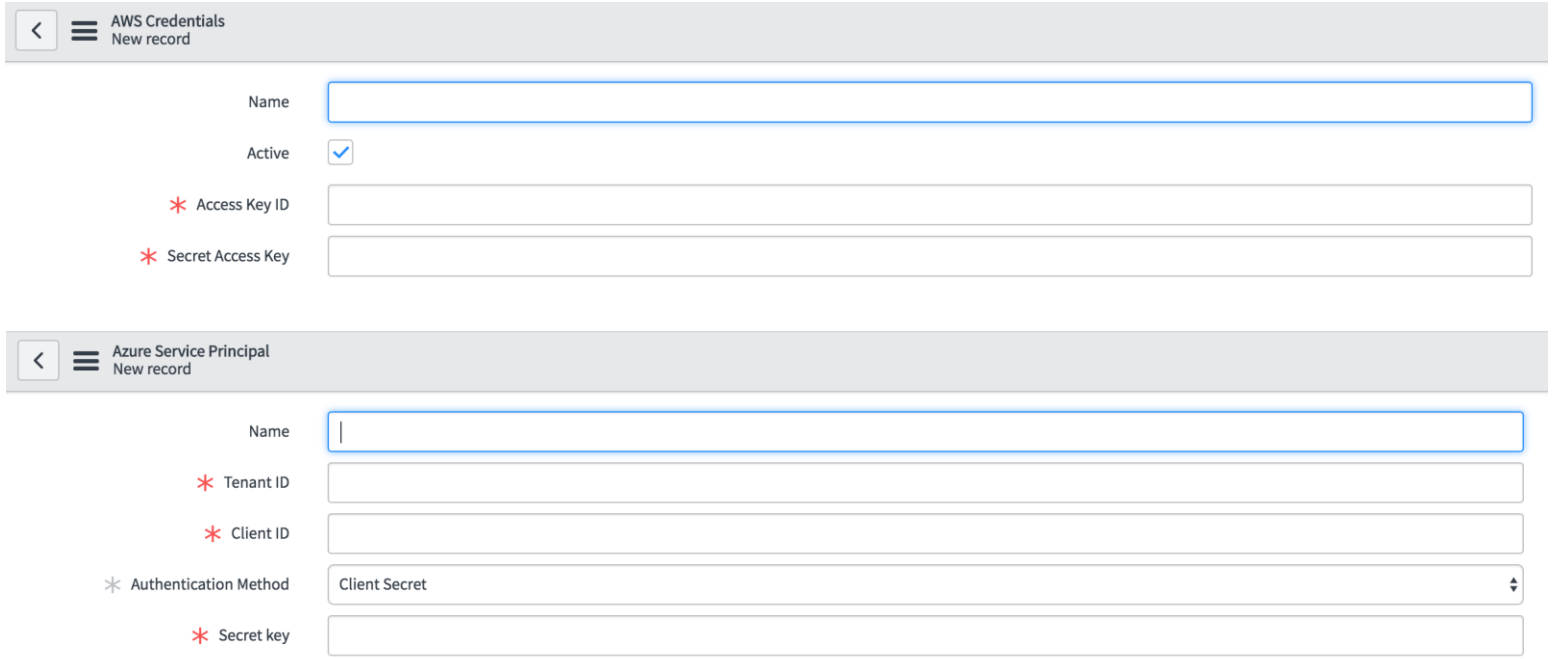
- Service Mapping has traditionally relied upon being able to authenticate against a resource to facilitate discovery of the host and the application that runs on it.
- As more and more organizations adopt ”Cloud First” strategies, there has been an explosion of the use of Platform-As-A-Service (PaaS) resources.
- Technologies like AWS Elastic Load Balancers, AWS Relational Database Service, Azure Web Sites have become broadly adopted technologies.
- These technologies posed a challenge to the traditional Service Mapping model, as there is no underlying operating system to interrogate, simple the API provided by the cloud vendor.



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What Do You Need to Get Started?

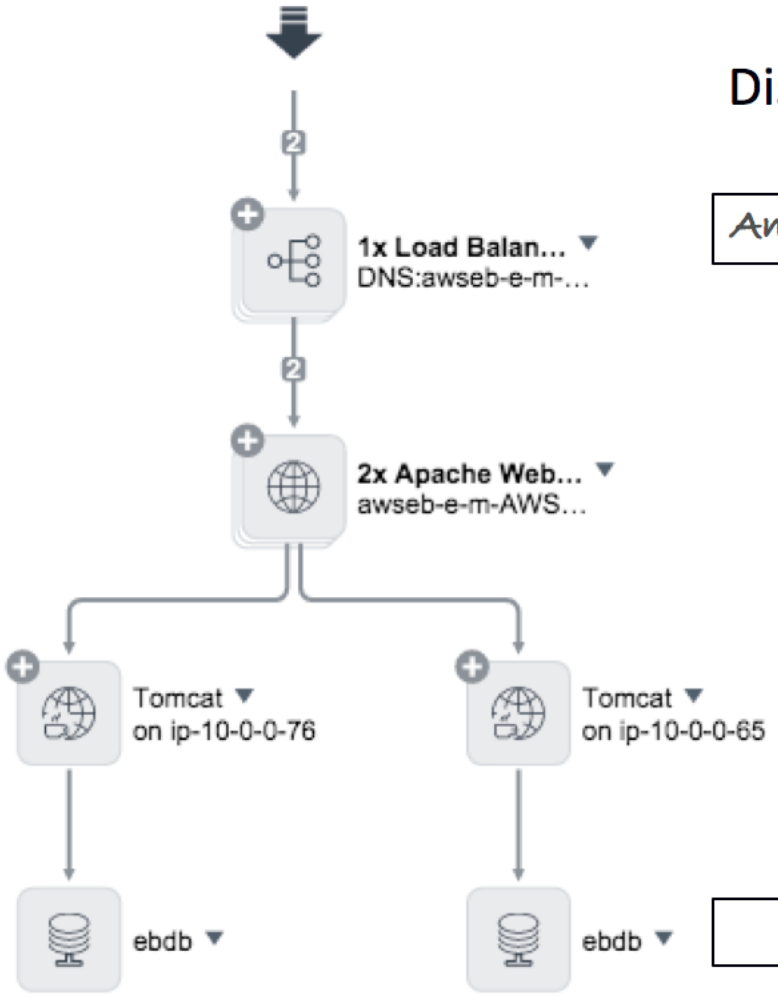
- An AWS or Azure Account
  - Read-only permissions in AWS IAM or Azure RBAC
  - AWS Access Key ID & Secret Access Key
  - Azure Tenant ID, Client ID, & Secret Key



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What Resources Are Supported OOTB Today?

1. Amazon ELB
2. Amazon RDS
3. Azure Load Balancer
4. Azure Web Sites
5. Azure SQL Database



Discovery of PaaS Service

Amazon Elastic load balancer as PaaS

Amazon RDS as PaaS

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LAB 1.0

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LAB 1.0 – Enter Cloud Credentials

- Navigate to the Credentials screen
- Enter AWS credentials
  - Click **New** and select **AWS Credentials**

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LAB 2.0

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LAB 2.0 – Create Cloud Service Account

- Navigate to the Cloud Service Accounts
  - Click **New**
  - Use the magnifying glass to select the previously entered AWS credentials
  - Click **Submit**
- Click the Discover Datacenters UI action
  - Wait until the discovery status changes to Completed
- Right click on the header and reload the form
  - Review the discovered datacenters (AWS regions)

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LAB 3.0

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LAB 3.0 – Discover the Cloud Account Contents

- Create a discovery schedule for the cloud account
  - In the Cloud Service Account page, click **Create Discovery Schedule** under Related Links.
  - Change the **Run** (frequency) and **Time** (start time) fields to define when discovery of this cloud account will take place.
  - Click **Update**.
- Search for **Discovery Schedules**.
  - Click **Discovery Schedules** under Discovery (not under Service Mapping!).
  - Click the **Discover now** link under Related Links.
  - Click on the discovery schedule that you just initiated.
  - In the Discovery Status screen, click **Refresh** under Related Links, until the state field changes from Active to Completed.
- When you refresh, notice the number of tasks in the **Started** and **Completed** fields increase. You can also view the progress in the Discovery Log tab on this page.

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LAB 4.0

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LAB 4.0 – Run the Pattern

- Run Quick Discovery
  - From the list of suggestions, select **AWS demo account** (the service account CI that you previously created).
  - In the map, right-click the **AWS Datacenters** icon and select **Expand**.
  - In the resulting map, you can review all of the objects that were discovered.
- Try to find in the map objects of the following types:
  - Cloud Database
  - Virtual Machine Instance
  - Storage Volume

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LAB 5.0

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LAB 5.0 – Top Down Discovery

- Create a Business Service
  - Search for **Service Mapping**.
  - Click **Business Services** (under **Services**).
  - Click **New**.
  - Enter the following information:
    - Name: **AWS test service**
  - Click **Save**.
- In the **Entry Points** table, click **New**.
  - Enter the following information:
    - Name: **AWS test service**
  - Click **Save**.
  - Click **Submit**.
  - Click **View Map** in the top-right corner.

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Top Takeaways

1

Service Mapping in Jakarta has support for the most commonly used cloud PaaS resources.

2

The cloud resource discovery engine is extensible. Customers can build support for a broad range of resources.

3

ServiceNow is cloud and vendor agnostic. Whether your business services live on-prem or in the cloud, we will help you discover and map them.

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Thank You

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