Rapid Pilot Program 2024

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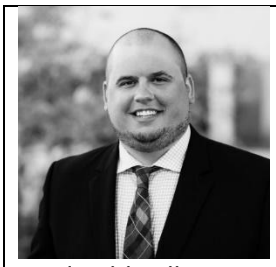
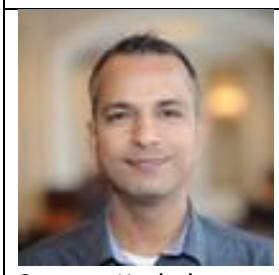
Goals

- Clarity on how to achieve a core clean with BTP and Event Driven Architecture
- Understand how to building extensions with using EDA approach
- Understand the benefits of an Enterprise Event Mesh?
- Understand how to make your ERP environment an active participant in your business
- Understand what it means to be event driven and the potential business outcomes

Your hosts

RPP Day 1

 Brad Caldwell Senior Solution Engineer	 Christian Holtfurth Distinguished Engineer	 Stefan Ressing SAP Chief Architect
 Sumeet Koshal Distinguished Engineer	 Scott Dillon VP SAP Ecosystem	

Scenarios where customers are starting with EDA

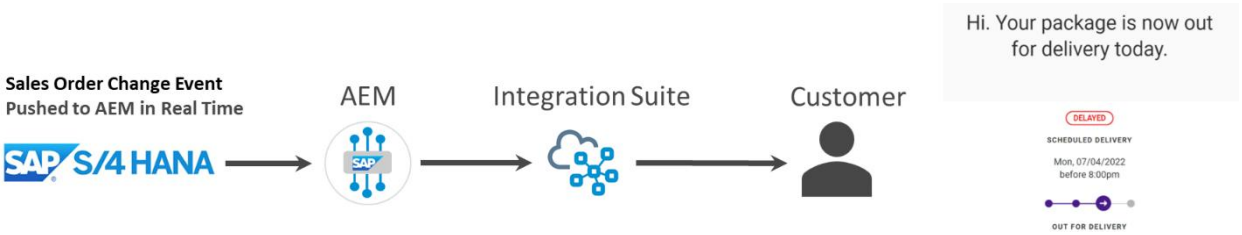
- Do you provide an amazon like customer experience where all order status changes are proactively sent to your customers when their order has been delayed, cancelled or shipped early?
- Do you notify your service technicians when they have a new high priority work order?
- How do you distribute master data changes to both SAP and non-SAP applications in real time to avoid costly manual rework? (for example GL Accounts, Customer, Cost Center, etc...)
- Can you react in real time to employee changes like promotions, transfers, onboarding activities,off boarding, etc...(e.g. removing access for employees once terminated across all applications and systems)
- As part of your adoption and rollout of Integration Suite or as part of your PI/PO move strategy, are you adopting best practices for event driven integration scenarios?
- Are you actively triggering microservices based on Events from S/4 or ECC? (e.g. CAPM services)
- Have you considered feeding your Datasphere (or other Analytics Platforms) environment with real time S/4 or ECC Events?
- As part of SAP Rise, are you aware that there are hundreds of events out of the Box with S/4?

Workshop Scenarios

Scenario 1

How can we use EDA to actively and selectively push updates for operational data to affect the customer experience?

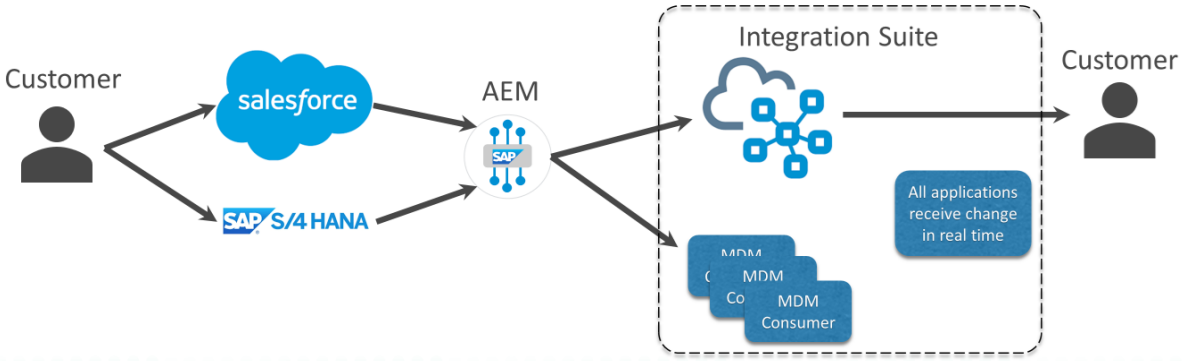
For Example: Customer orders a new pair of gloves via Amazon.



Scenario 2

How can we use EDA to actively and selectively push any and all master data changes to the entire enterprise to enable self serve?

For Example: Customer changes their address information.



Workshop Agenda Day 1

For logistics and ease of delivery, this workshop has been divided into 5 half-days and this covers day 1.

- Accessing AEM Services
- Creating 2 Instances of the AEM Service

- Building an Event Mesh
- Deploying a SAP CAP based Simulator on CloudFoundry
- Testing the Simulator
- Publishing and Subscribing across the Mesh for SAP objects

Prerequisites

You will need the following resources prior to the commencement of the workshop :

1. CPEA Contract in place
2. Approximately 5K of CPEA credits available to activate 2 AEM brokers for 4 weeks
    - Please refer to the following link to activate the service should you need assistance : Enable AEM in BTP
3. Signed ASAPIO trial agreement : ASAPIO Store - Evaluation Licenses - ASAPIO
    - ASAPIO Plugin to be downloaded and installed prior to the workshop
4. SAP Build Process Automation (Free Tier Available)
    - Access to SAP WorkZone
5. Access to Integration Suite (Free Tier Available)
    - Integration Suite Activated prior to the workshop
6. Access and ability to change ERP Environment
7. A BTP Resource who has the appropriate authorizations to activate/use the relevant BTP Services. (E.g. Advanced Event Mesh, SAP Bus. Process Automation and Integration Suite)
8. ASAPIO Plugin to be downloaded and installed prior to the workshop. This will be made available as transport that will need to be installed once the Agreement is signed, link on previous page)
9. Authorization for your development SAP Landscape to send events to the AEM Service.
10. SAP Build Process Automation – a resource who is familiar with Building Processes/Workflows
11. Integration Suite – a resource who is familiar with building iFlows and has the necessary authorizations to deploy new artifacts
12. Relevant Functional Resources who might be responsible for the Sales Order, Business Partner, GL, Material Master or Notification Objects within SAP, so they can fully appreciate the art of the possible once these objects are event enabled.

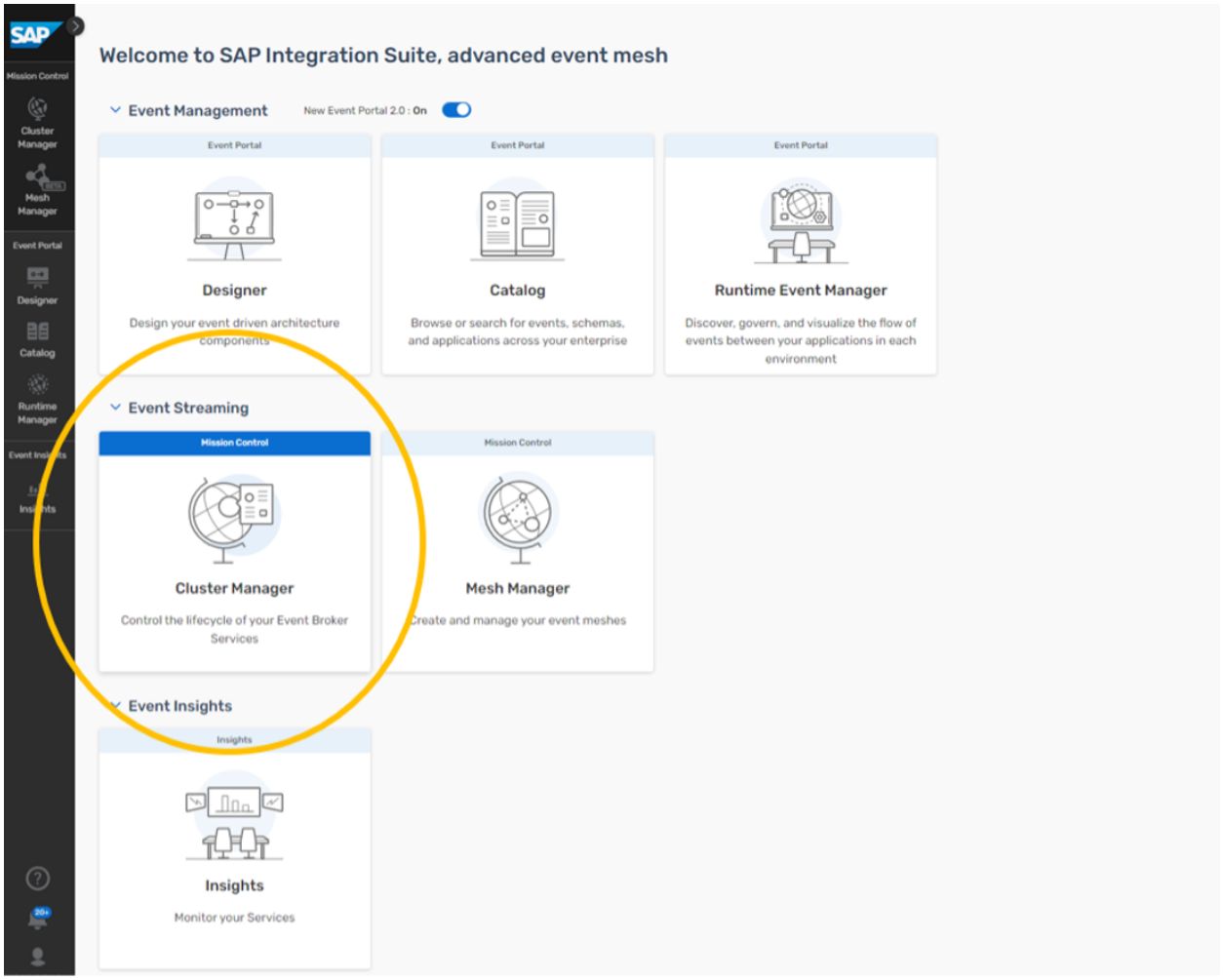
Create AEM Services

In this task, you will be creating two Enterprise AEM services, connecting them to form a mesh and verifying your mesh health.

Before starting, it will be helpful to know what cloud provider and region your SAP environment is in, and the primary cloud provider and region where your cloud applications are deployed. The value of building a mesh topology is realized when placing your AEM services close to your event producing and consuming systems. If your SAP environment is running in an on-premises data center, you will use the geographic region of that site to help select an appropriate location for that AEM service.

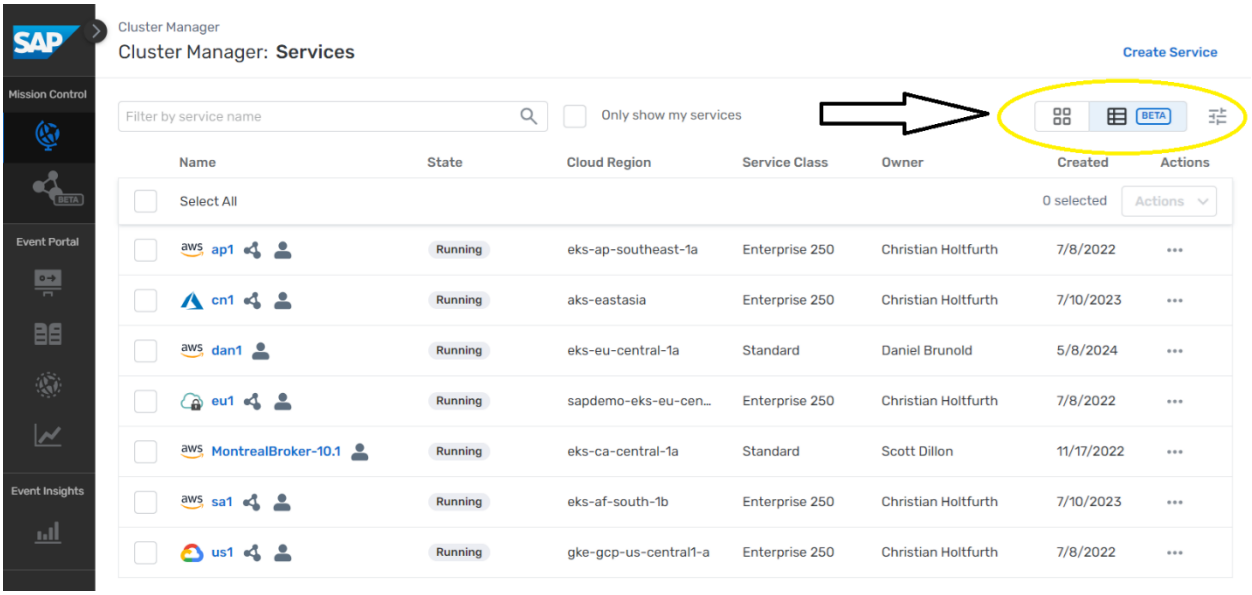
Create your first AEM service:

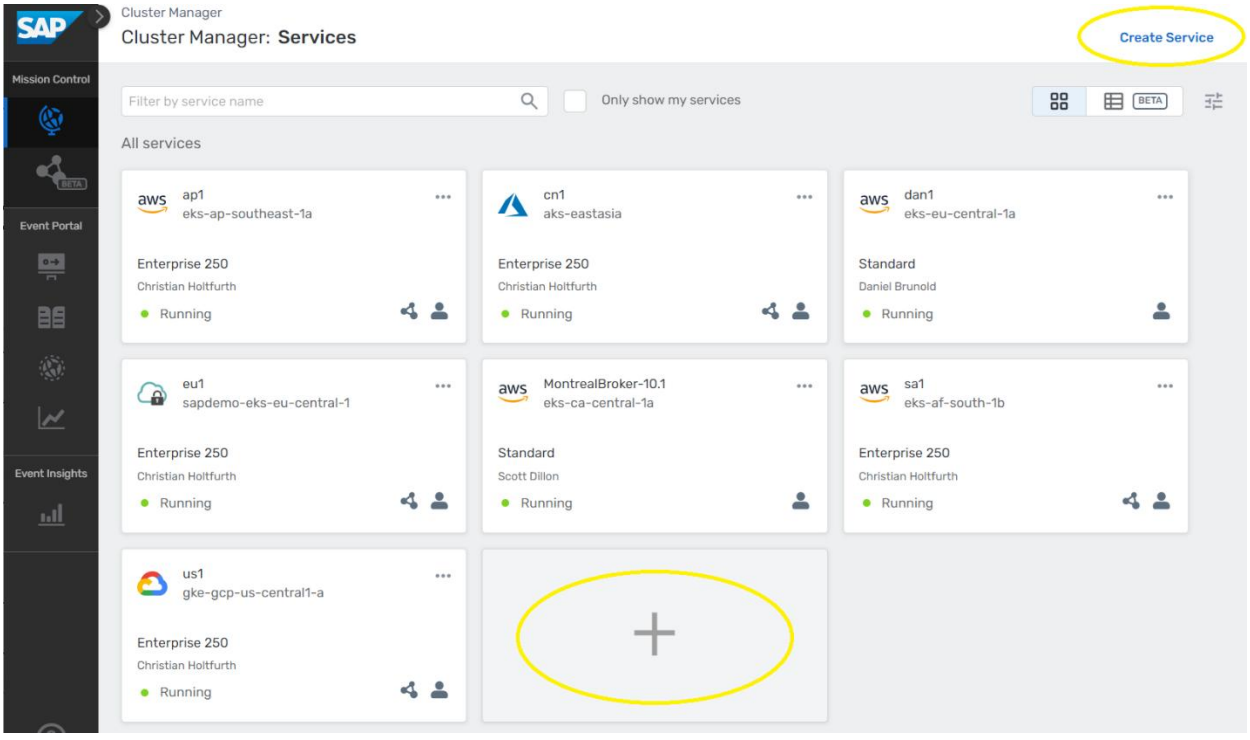
1. From the SAP AEM Console, open the Cluster Manager.



2. Now we will be creating a new AEM service

Depending on which view, you have selected, Graphical or Table based, you will see one of the following views. In either case, you can either select the “Create Service” option on the top right or the big “+” sign at the bottom.

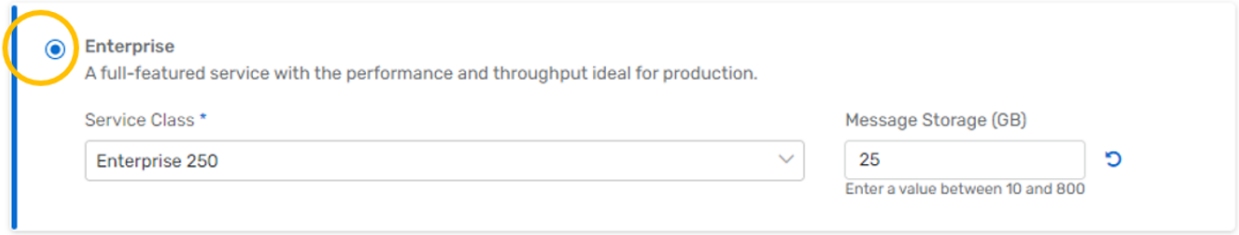




3. Name your service

Note that service names must be unique within your account. We suggest using the mesh name you want, a hyphen, and a service ID to make it unique.

4. Pick Enterprise as the service type.

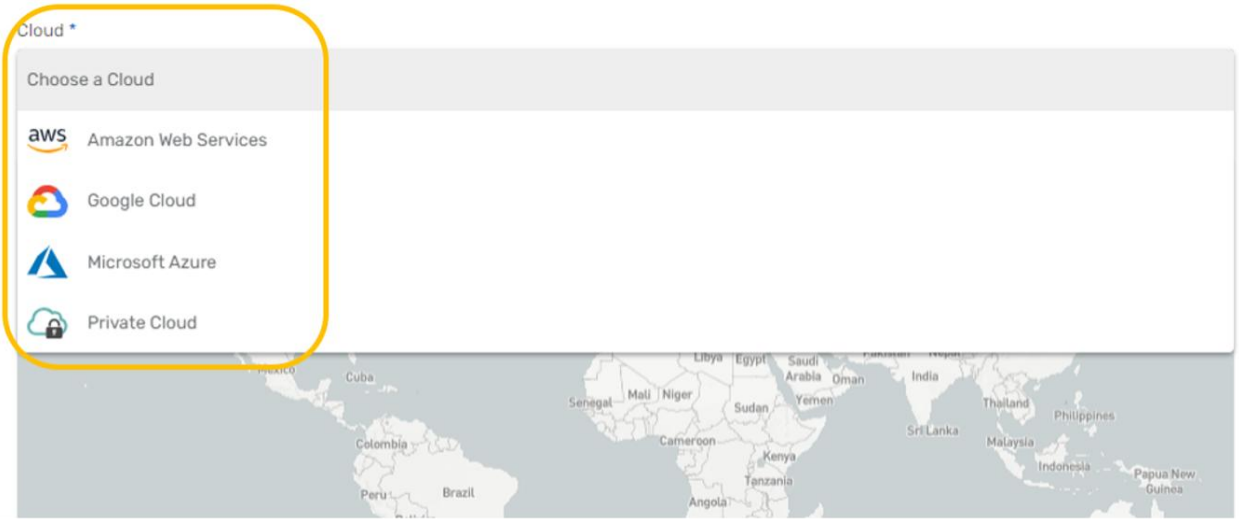


For now, keep the default service class and message storage settings.

5. Choose your cloud provider from the pull down list.

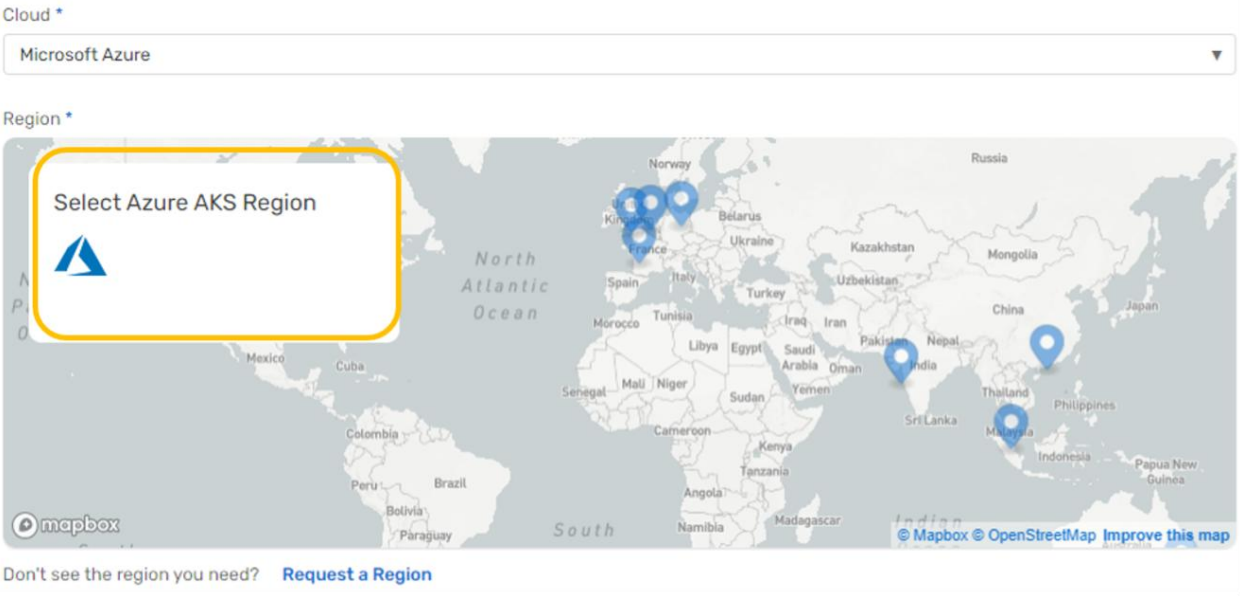
   For the first AEM service, select the same IaaS (Infrastructure as a Service) provider and region where your SAP is running, the RISE provider and region where your SAP Cloud is running, or for an on-premises SAP pick a cloud provider and region closest to where your data center is located.

   For the second AEM service, select the same provider and region where your cloud applications are located. If you have several, pick one that is distant from your SAP environment (you can expand your mesh later to include additional cloud locations).

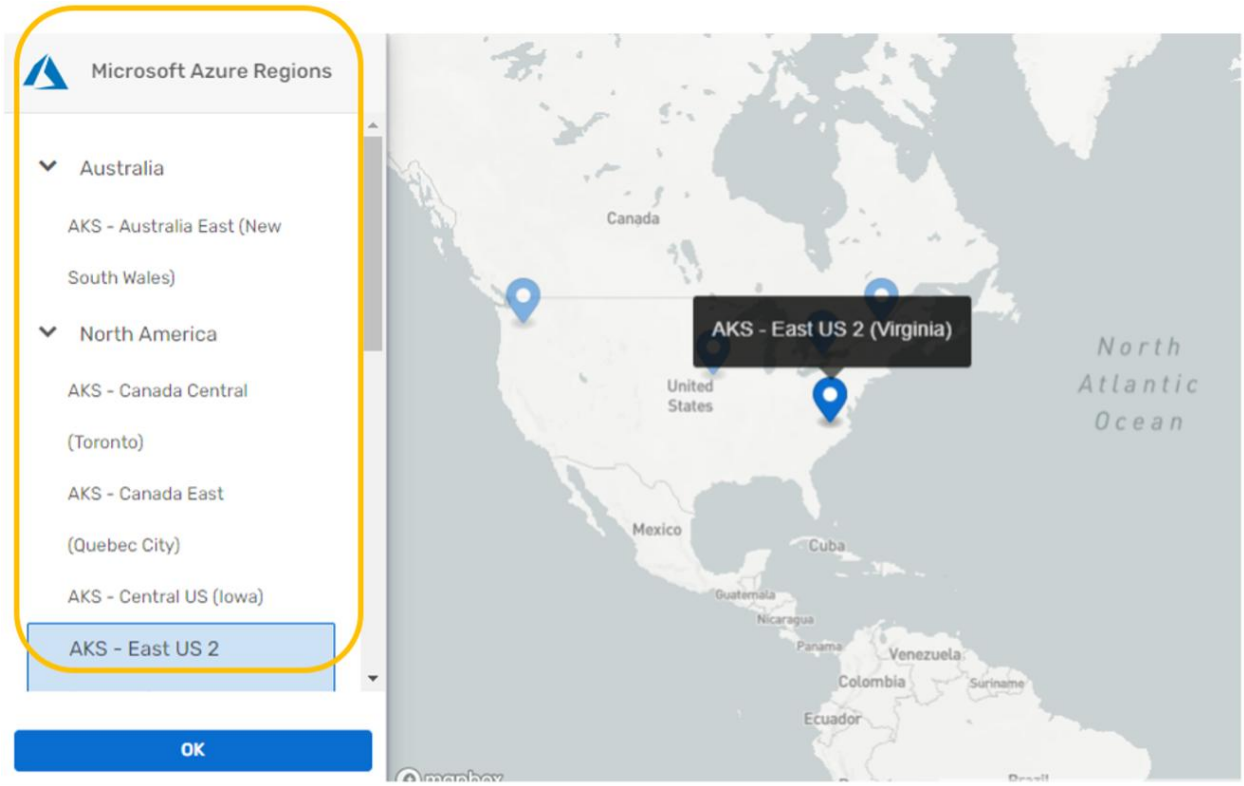


Note that you can also request buildout of a private cloud region on-premises at your data center later, but for now please select the best matching cloud provider.

6. Click the Select Region box inside the map and select your cloud region.



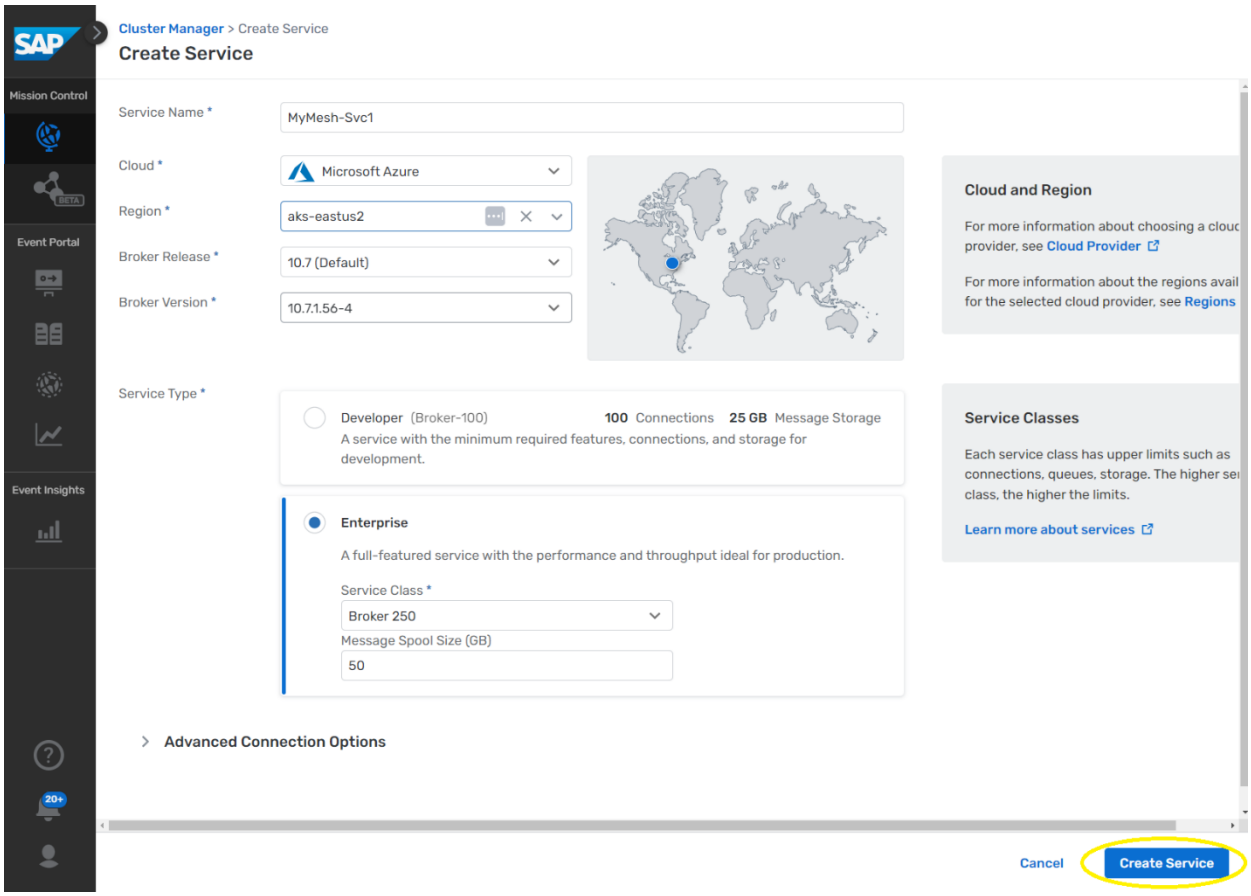
This example shows selecting Azure as the provider and East US 2 (Virginia) as the region:



Please substitute your best provider and region as you make your selection and click OK.

7. Keep the Default Broker Version Selection

8. Click Create Service to launch your AEM service.



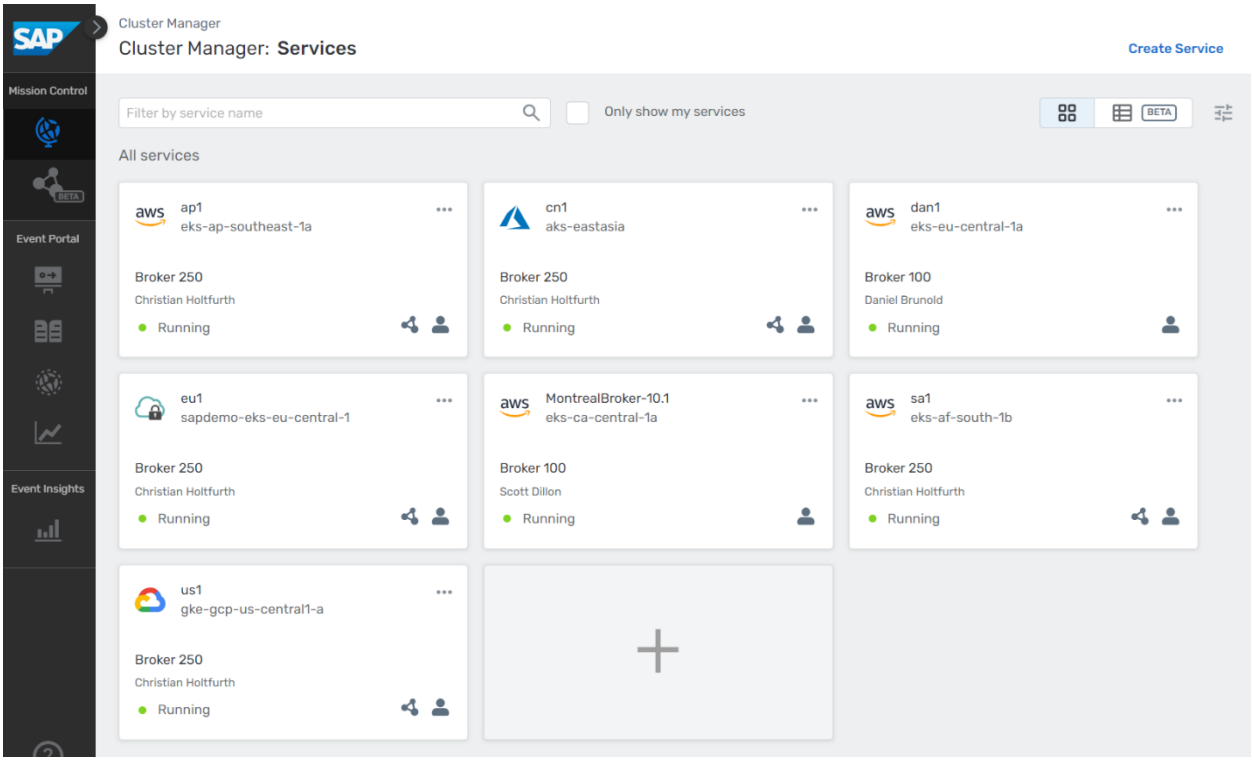
You can proceed with the next step while your first AEM service is starting.

9. Repeat steps 2 through 8 for your second AEM service.
   Substitute the name (Svc2) along with the appropriate cloud provider and region.

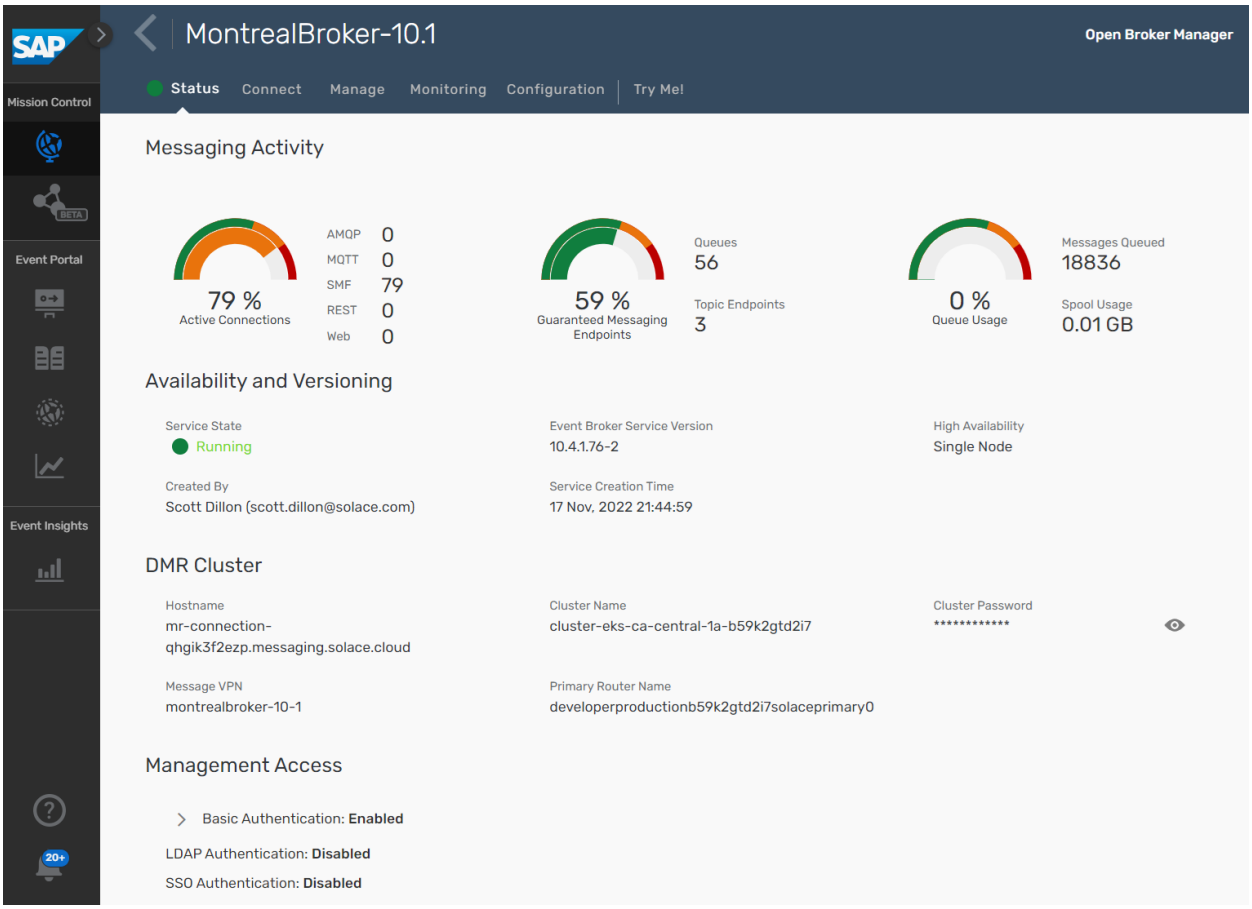
IMPORTANT - For your second AEM service:

Select a Different Region for the 2nd service (with the same or different cloud provider).

Once the services finish starting up, you should see the 2 services you created and you can click on each of them to see the status.

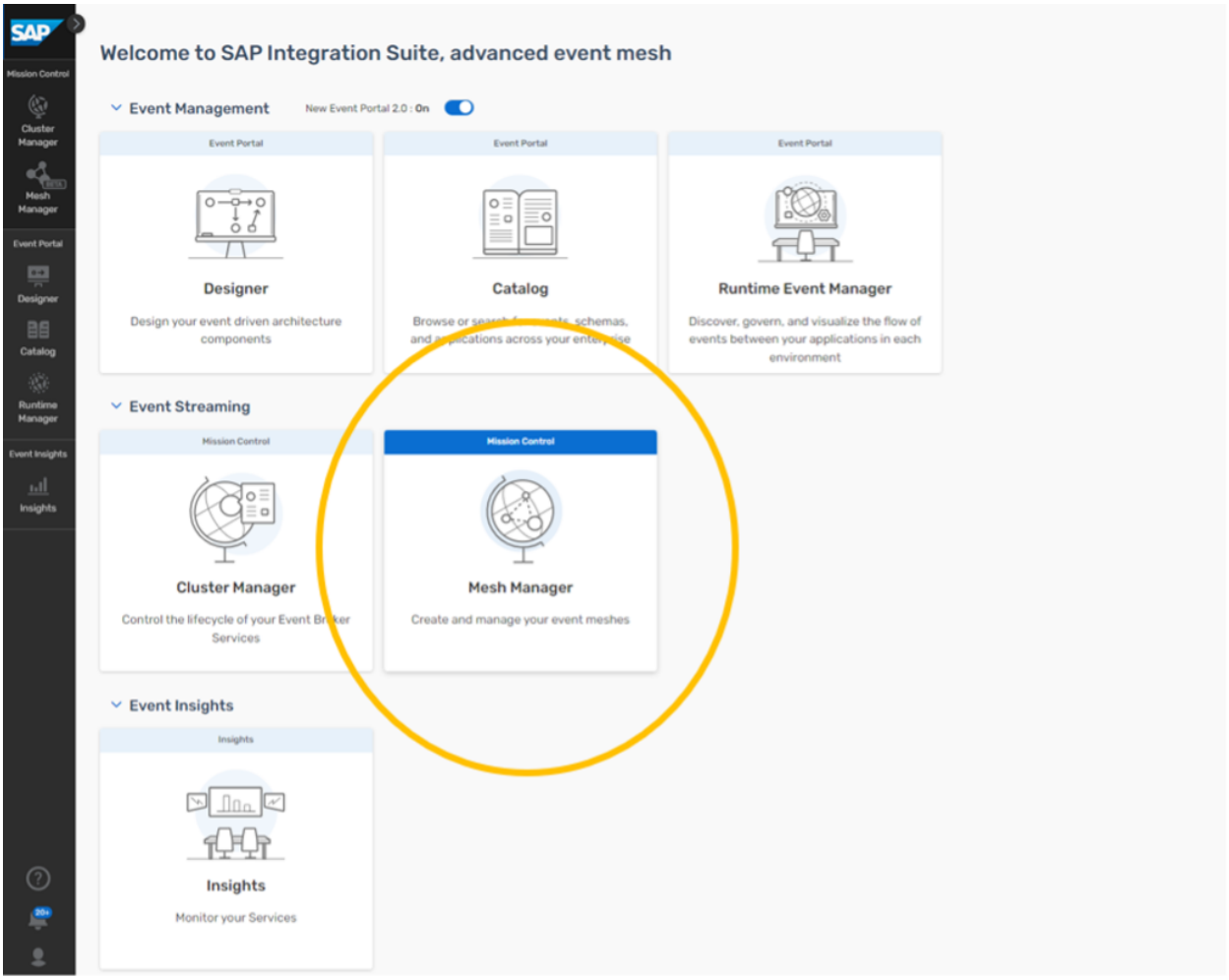


For example, clicking on our MontrealBroker, provides me with the following view:
From this view, I can see for example that I have 79 SMF connections open.
Question: Do you know what SMF stands for?

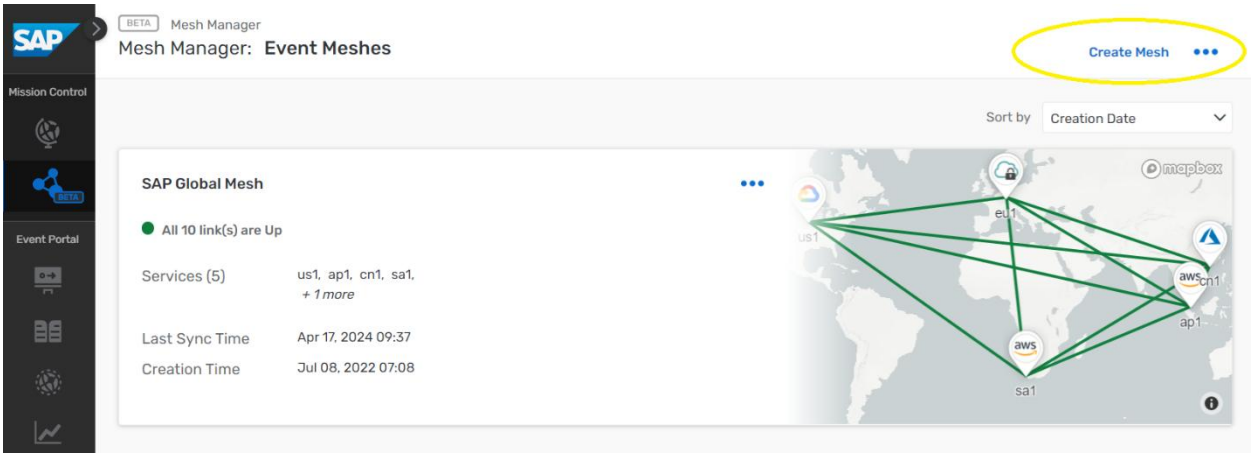


Build an Event Mesh

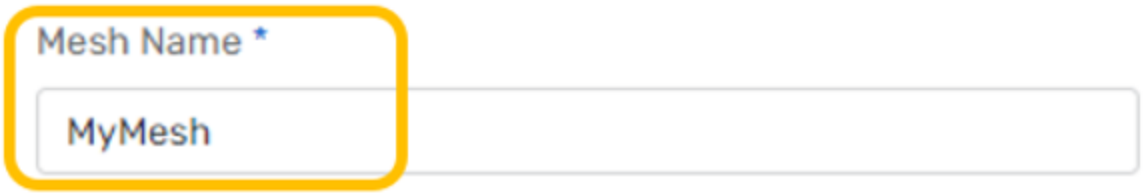
1. Define a new mesh. From the SAP AEM Console, open the Mesh Manager:



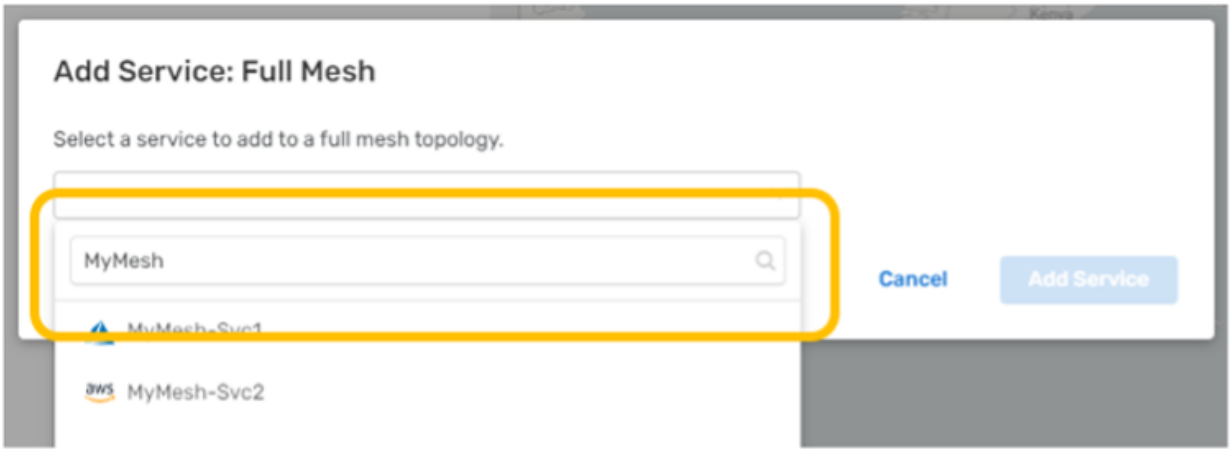
Click the Create Mesh



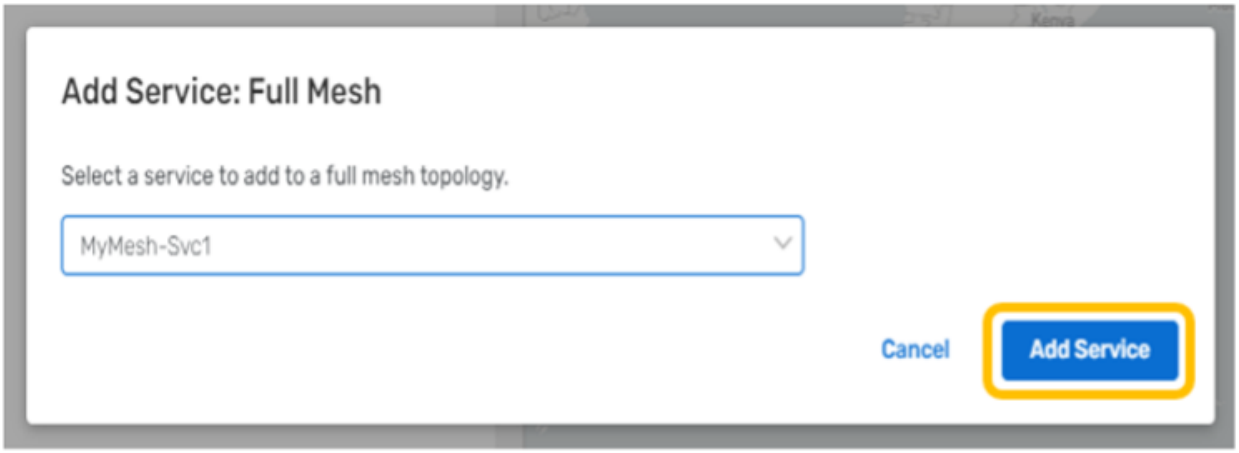
Enter the same mesh name used when defining your AEM services.



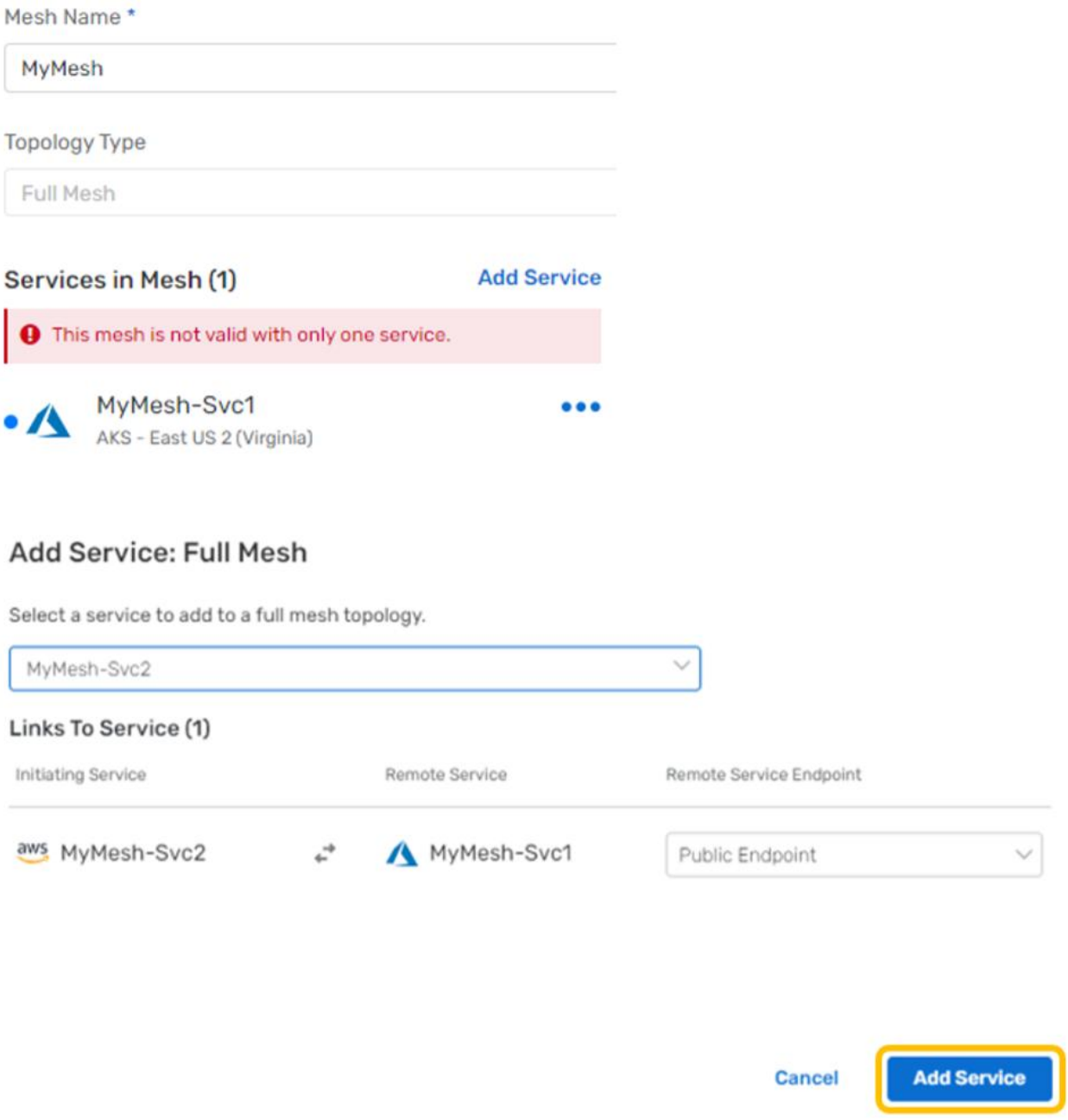
2. Add your AEM services to the mesh.
   Click Add Service, then use the pull down search box to find and select your first service

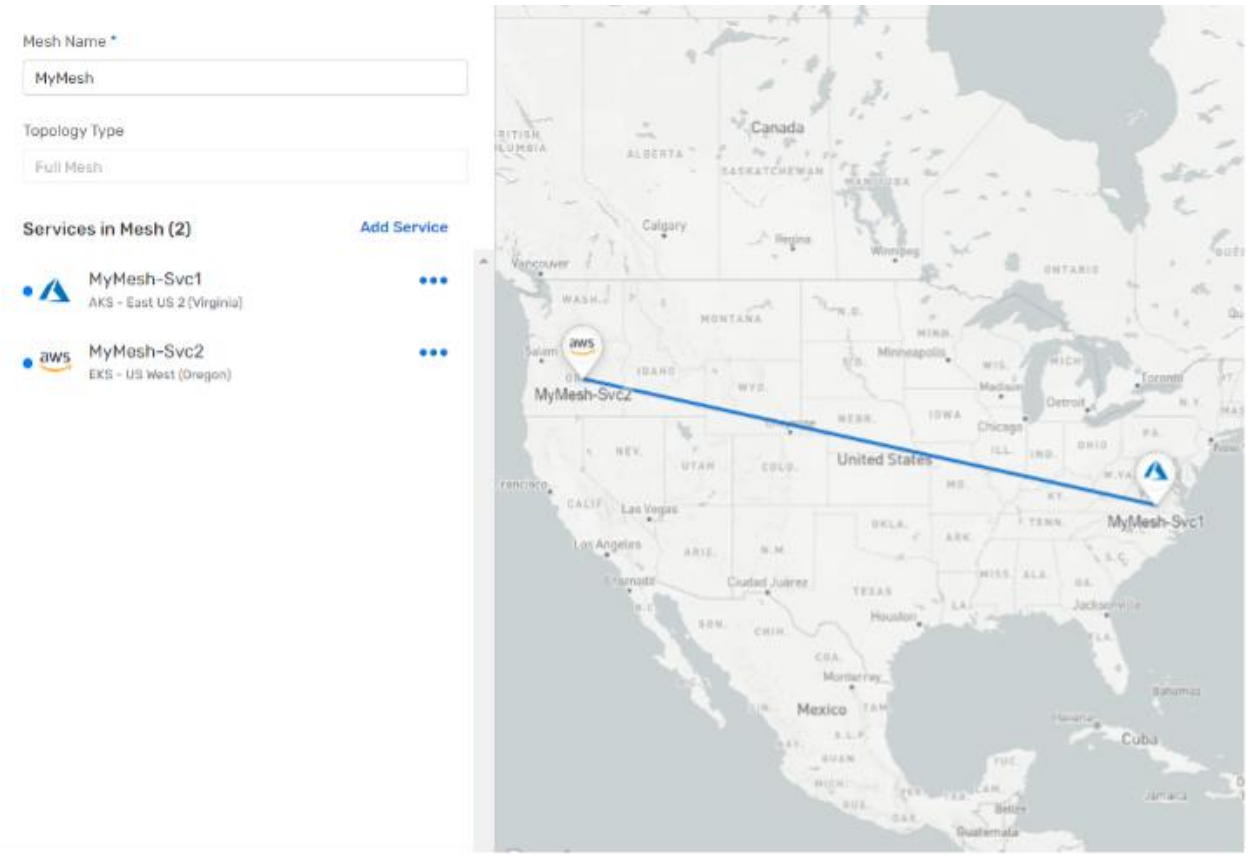


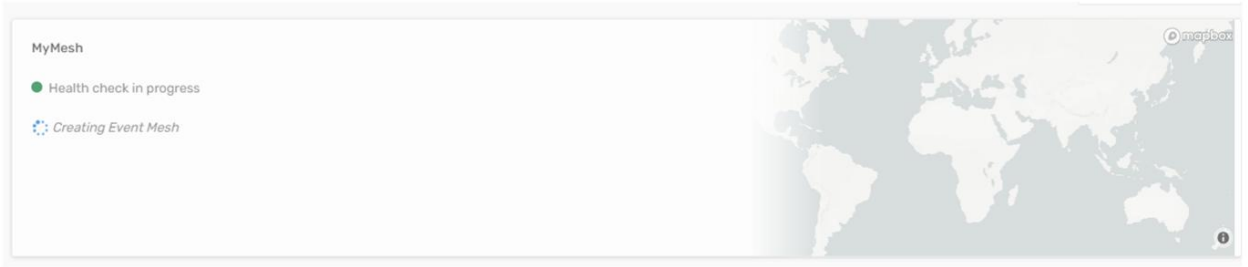
Click Add Service in the dialog to complete the action:

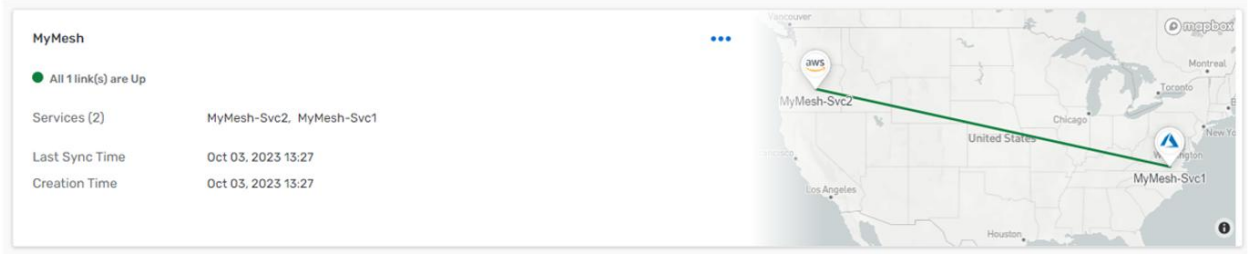


Click Add Service again and add your second service.

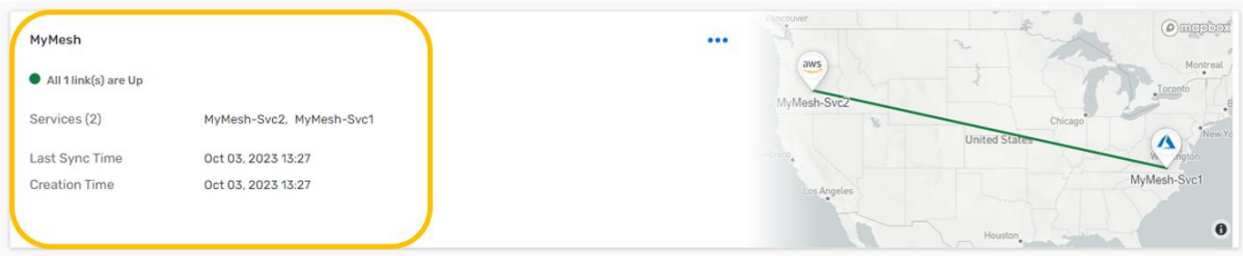

Mesh Name *
MyMesh
Topology Type
Full Mesh
Services in Mesh (1)
Add Service
This mesh is not valid with only one service.
MyMesh-Svc1
AKS - East US 2 (Virginia)
Add Service: Full Mesh
Select a service to add to a full mesh topology.
MyMesh-Svc2
Links To Service (1)
Initiating Service
Remote Service
Remote Service Endpoint
MyMesh-Svc2
MyMesh-Svc1
Public Endpoint
Cancel
Add Service

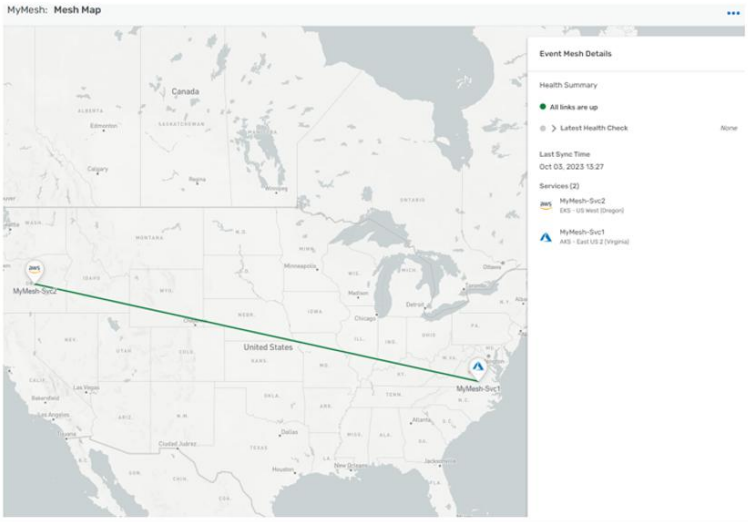




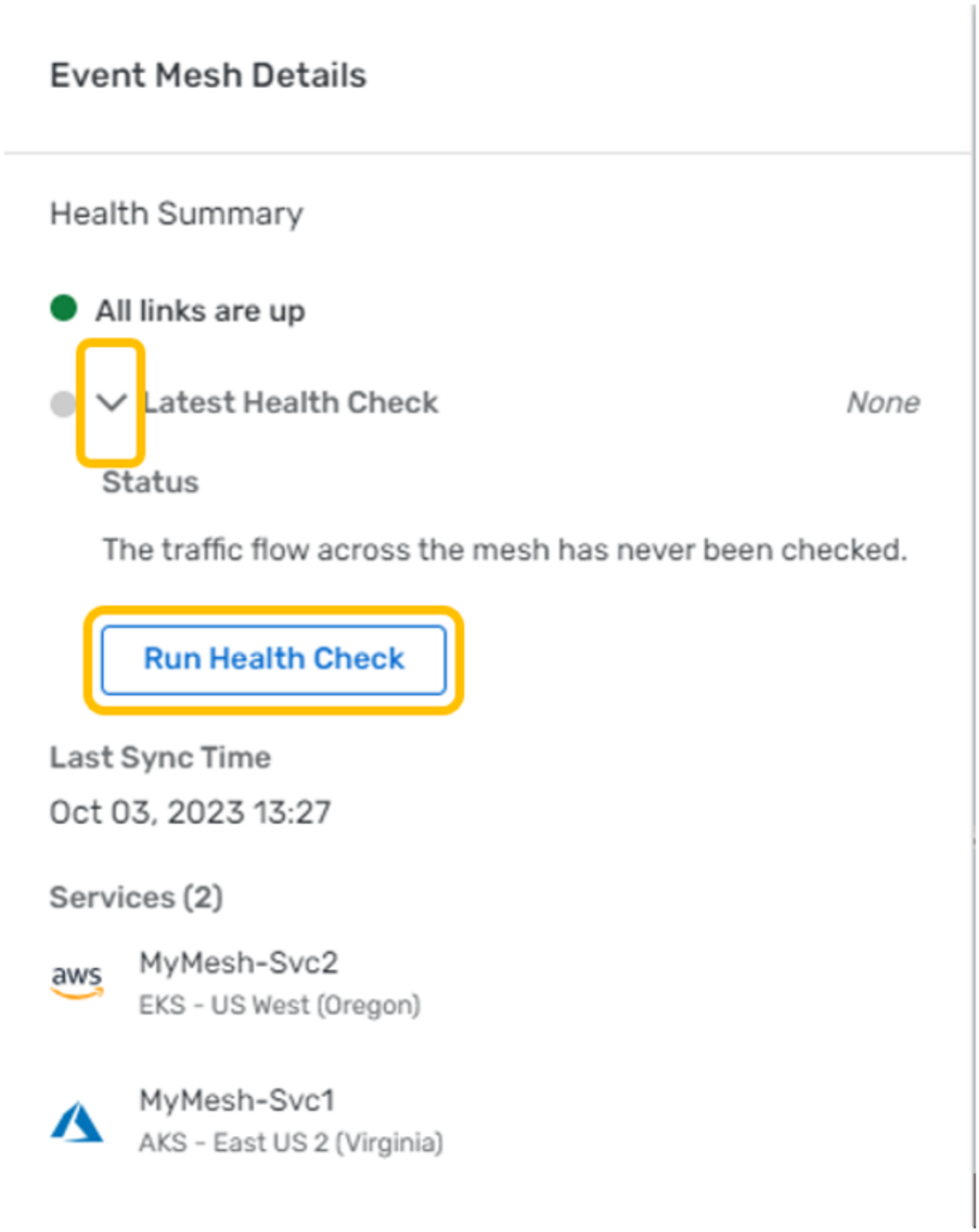


3. (**Optional**) Run a health check on your event mesh. From the Mesh Manager, click on your event mesh to open the status page :





Expand the Latest Health Check and click Run Health Check action:


Event Mesh Details
Health Summary
All links are up
Latest Health Check
None
Status
The traffic flow across the mesh has never been checked.
Run Health Check
Last Sync Time
Oct 03, 2023 13:27
Services (2)
MyMesh-Svc2
EKS - US West (Oregon)
MyMesh-Svc1
AKS - East US 2 (Virginia)

The health check progress is shown, followed by the health check status: