Route Traffic between SAP Cloud Integration Tenants

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Agenda

- Common Challenges & Solutions
- Azure Traffic Manager
- Implementation Prerequisites
- Live Demo
- Side effects & things to keep in mind
- Discovery Center & Further Reading
- Q&A
Common Challenge: Downtime of a single tenant

SAP Business Technology Platform

Subaccount EU20 – West Europe

Cloud Integration

Productive Environment

Network

HTTPS


Client
Common Challenge 1: Availability in single tenant environment

SAP Business Technology Platform

Subaccount EU20 – West Europe

Cloud Integration

Productive Environment

Network

HTTPS


Client
Common Challenge 1: Solution

SAP Business Technology Platform

Subaccount EU20 – West Europe
- Cloud Integration
- Custom Domain
- Productive Environment (Primary)

Subaccount US20 – West US
- Cloud Integration
- Custom Domain
- Productive Environment (Secondary)

Network

HTTPS
- https://primary...eu20.hana.ondemand.com/http/flow
- https://secondary...us20.hana.ondemand.com/http/flow

Azure Traffic Manager
- https://my.cloudintegration.com/http/flow

Client
Common Challenge 2: Latency in a single tenant environment

SAP Business Technology Platform

Subaccount EU20 – West Europe

Cloud Integration

Productive Environment

Network

200 ms


35 ms

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Common Challenge 2: Solution

SAP Business Technology Platform

Subaccount EU20 – West Europe
- Cloud Integration
- Custom Domain
- Productive Environment (Primary)

Subaccount US20 – West US
- Cloud Integration
- Custom Domain
- Productive Environment (Secondary)

Network

HTTPS
https://primary...eu20.hana.ondemand.com/http/flow

Cloud Integration

Custom Domain

Productive Environment (Primary)

Subaccount EU20 – West Europe

Subaccount US20 – West US

Microsoft Azure

HTTPS
https://primary...eu20.hana.ondemand.com/http/flow

Azure Traffic Manager

HTTPS
https://my.cloud.integration.com/http/flow

Client

35 ms

Client

35 ms

https://secondary...us20.hana.ondemand.com/http/flow
Implementation Prerequisites

**SAP Prerequisites:**
- 2 SAP Cloud Integration tenants in different regions (e.g. EU20/US20)
- SAP Custom Domain Service
- Auxiliary endpoint (custom REST API) in SAP Cloud Integration (used by Azure Traffic Manager)

**Microsoft Prerequisites:**
- Azure subscription
- Azure Traffic Manager

**Others:**
- Access to the DNS Zone of a domain
- Domain
Azure Traffic Manager

Azure Traffic Manager:
- DNS with policy engine
- Active health monitoring and automatic failover

With Azure Traffic Manager you can:
- Load-balance incoming traffic across multiple endpoints – weighted/geographic decisions
- Automatically fail over between endpoints, for high availability
- Easily add/remove endpoints from active use, allowing seamless upgrades
Demo
Side effects and things to keep in mind

Side effects:

- Multiple **independent** SAP Cloud Integration tenants that need to be synchronized
  - Security Artifacts
  - Integration Content
  - Timer Based Integration Flows

*Scenario should be applied to all involved systems (like S/4, etc.)*
Side effect: Sync tenants (Integration Content)
Tutorial & Further Reading

Discovery Center:

https://discovery-center.cloud.sap/missiondetail/3603/3646

Further Reading:

➢ Blog Post: How to crash your iFlows and watch them failover beautifully (featuring Azure Front Door) by Martin Pankraz, Microsoft

➢ Blog Post: Second round of crashing iFlows in CPI and failing over with Azure – even simpler (featuring Azure Traffic Manager) by Martin Pankraz, Microsoft
Thank you.

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