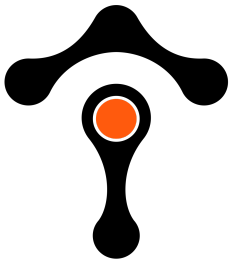

Tetrate

Proof of Concept / Proof of Value
Hosted Tetrate Service Bridge

Company: ACL Digital

Date: July 2022

Lead Tetrate Sales Engineer: Mike Timmers
Tetrate Account Executive: Amos Wasgatt

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Document Information

Version	1.0
Created By	Dave Borsh
Last Modified	07/27/2022
Modified By	<SE Name>

Table 1 - Document Information

Draft Date	Review Date	Version	Author(s)	Reviewer(s)
7/27/22		1.0	Dave Borsh	Amos Wasgatt
		1.1		

Table 2 - Document Versioning

1.1 - Overview

The Purpose of this document is to outline the POC efforts to conduct an evaluation of Tetrate Service Bridge (TSB) in a hosted environment. Tetrate will provide the Management Plane which will be hosted on the Tetrate cloud environment. This reduces complexity and costs for the customer. Once the TSB Management Plane is deployed, our engineers will work with your team to onboard target kubernetes clusters (up to 3), VM workloads and associated pilot applications (up to 3) .

As a service mesh solution, our team will demonstrate the value of Tetrate Service Bridge (TSB) in aiding enterprise organizations to more effectively operate Cloud Native application deployments.

1.2 - Scope

To complete this POC tetrate will assign 1-2 Field Engineers from either our Sales Engineering or Customer Engineering teams. These resources will work directly with the customer resources named in section 3. This effort usually consists of 4 weeks but may be modified shorter or longer based on use cases. The evaluation use cases and success criteria will be defined in section 2.

2 - Evaluation Criteria

Below is a list of all evaluation criteria that define a successful POC for this engagement. We will document results for each scenario as the POC is completed. When appropriate, we will Include screenshots.

Use Case 1: Application onboarding

Demonstrate the following
:

- Kubernetes cluster gets onboarded to TSB
- Application gets deployed to the cluster (via CI/CD or any other way) by Developer persona
- Access to the application is configured as defined by Network Persona
- Traffic pattern (shaping, distribution, rate limiting) is implemented in accordance with requirements coming from Network and Security personal
- Egress to external service is configured per requirements
- Every persona has ability to monitor the application behavior according to their access level

Was this Scenario Successful: Yes No Partially Addressed

Comments:

Scenario Details and Observed Outcomes/Details Results:

Use Case 2: Security (Zero Trust, Encryption)

Expected results:

Demonstrate the following:

- Use mTLS that is integrated with customer Enterprise CA trust chain
- SPIFEE and SPIRE integration reviewed
- Authorization policies service to service level using SPIFEE
- Authorization policies service to service level using JWT scopes
- TSB UI ability to monitor the application
- TSB separation of duties (per customer security guidelines) is demonstrated
- Integration with external Authentication (LDAP, OIDC) services for TSB management reviewed

Was this Scenario Successful: Yes No Partially Addressed

Comments:

Scenario Details and Observed Outcomes/Details Results:

Use Case 3: Availability (Traffic Management, Multicluster)

Expected results:

Demonstrate the following in a multi-cluster environment:

- Active - Active / Active - Passive configurations:
    - Service1 in cluster A failover to Service1 in cluster B
    - Service1 in cluster A calling service2 failover to cluster B
- Traffic management:
    - Canary/weight based
    - Header/Cookie based
    - Retries and timeouts
    - Circuit Breaking
    - Egress to external service
    - Rate limiting

Was this Scenario Successful: Yes No Partially Addressed

Comments:

Scenario Details and Observed Outcomes/Details Results:

Use Case 4: Observability (Tracing, Topology)

Expected results:

Demonstrate the following:

- Distributed tracing cumulative view from all clusters
- Metrics and live traffic view across all clusters
- Troubleshooting using Pod logs

Was this Scenario Successful: Yes No Partially Addressed

Comments:

Scenario Details and Observed Outcomes/Details Results:

Use Case 5: Manageability (TSB Concepts Tenants, Users, etc)

Expected results:

Demonstrate the following:

- Create custom roles per customers' security guidelines.
- OIDC/LDAP integration with the customer enterprise authentication system
- Assign users to roles and object (such as clusters, tenants, workspaces)
- Demonstrate the ability to only operate objects in scope with permissions of the role
- Demonstrate that TSB logs are only available for the objects that users have access to

Was this Scenario Successful: Yes No Partially Addressed

Comments:

Scenario Details and Observed Outcomes/Details Results:

3 - Participants, Contacts, & Responsibilities

Participants

Name	Role	Phone	Email
Mike Timmers	Tetrate Sales Engineer		timmers@tetrate.io
TBD	Tetrate Sales/Customer Engineer		
Amos Wasgatt	Tetrate Account Executive		amos@tetrate.io
Suresh Galam	ACL		suresh.g@acldigital.com
Santha Ram	ACL		santhram@acldigital.com

Table 1- Participants

Customer People Requirements & Responsibilities

The following resources, functions, and access to them are necessary for the POC;

- Main Point of Contact - This person will be Tetrate's main point of contact for POC related matters including: timing, requirements access to other members, roadblock elimination, etc
- Platform/Infrastructure Team - to evaluate TSB and provide insight into customer environment, architecture and approaches
- Network Team - Ensure proper communication is established between customer pre-production environment to Tetrate Hosted environment for POC MAnagement Plane
- Security Team - standby for any security related issues and to review the Zero Trust approach by TSB when POC is completed
- Application Team - to provide application details, configurations and requirements to Tetrate engineers for POC testing

4 - Logistics

Tetrate Managed POCs are conducted remotely. We will need the following to properly execute a hosted POC:

- Regularly scheduled working sessions with video capability such as Google, Zoom, webex, etc
- List of email addresses from the customer for questions and troubleshooting
- Agreed upon start and end dates

POC Dates

POC Start Date: TBD

POC End Date: 30 days after start date

POC Costs

For normal POC efforts Tetrate will not charge for POCs. In some circumstances, customer requirements may dictate a different approach that requires special handling. In these cases Tetrate may need to charge time for the resources necessary to complete the POC. These charges are documented below if applicable.

5 - Software License and Usage

Tetrate products included in this POC will be licensed for use at the customer site or by the customer for the duration of the POC. This includes any extended time specified here or as described under the topic of “Delays”.

6 - Customer Prerequisites

The following are requirements that ACL Digital must provide prior to beginning the POC effort:

- Agreed upon POC Document
- Technical staff for Tetrate to work with

7 - General Limitations

Tetrate provides comprehensive solutions for Service Mesh. This proof of concept (POC) is intended to show ACL Digital how Tetrate solutions work in a live pre-production environment for presale evaluation. The POC is not intended as a professional services engagement. Work requiring professional services, formal business analysis, statement of work, and/or customizations will not be included unless specifically stated herein.

Knowledge transfer and explanation of solution functionality will be provided by Tetrate Field Engineering during the POC. It should be noted that Tetrate can provide more in-depth training for the solution(s) involved. Such training is available for purchase.

8 - Contingency Plans

Environment Not Ready

If the environment is not ready for the POC or if pre-requisites are not completed the POC will be rescheduled. This will be determined during the pre-requisite review meeting.

Information Not Available

If required configuration/environment information is not available or is inaccurate both ACL Digital and Tetrate will work to obtain the proper and complete information. If missing or inaccurate configuration/environment information is not resolved related components will not be tested.

Incompatibilities

If software and/or hardware incompatibilities such as unsupported versions are found, the related components will not be installed, configured, or tested, and will be excluded from the POC.

Customizations

The following components are customizations. These are subject to exclusion from the POC based on incompatibilities, onsite analysis of feasibility, and time available regarding all other POC definitions. Please note these can be implemented using Professional Services which would require analysis and a statement of work, etc.

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9 - Delays

Both Tetrate and ACL Digital will make every effort to successfully complete the POC in the time specified. If the successful completion of the POC is delayed for any reason both Tetrate and ACL Digital agree to work to resolve the delays and schedule

additional time to complete the POC. This is subject to limitations regarding ACL Digital resource scheduling and business requirements.

10 - Summary of POC Results

General Results

<Document general results, successes, and issues discovered during the POC here. >
<Link business value associated with technical use cases here >

Use Case Description	Results	Comments

Table 2 - Summary of POC results

Lessons Learned:

Examples

1. Did we meet the success criteria within the timeframe allotted?
2. Were all the test scenarios delivered?
3. Was there any scope creep?
4. What could we have done differently?
5. Are there any outstanding tasks/issues remaining to be completed?