

Application Architecture BlackLine

Status	Approved
Owner	MUTHUSAMY-ext, Kunalan
Stakeholders	BECHTER-ext, Alex ANGGREANI-ext, Lisa ANIDO, Marcela RUFFINONI, Francois
LeanIX Link	BlackLine Account Substantiation and Automation

The purpose of this document is to describe the architecture of BlackLine application and the systems it will be integrating with.

Out of Scope:

- Since BlackLine is a SaaS application, network and infrastructure architecture will be considered as out of Scope.
- Information related to product documentation and can be found online will not be documented here.



User provisioning (IdM) and Emergency access management (EAM) designs are not finalized for Blackline. This document will be updated after the designs are finalized.

Key Decisions and Requirement

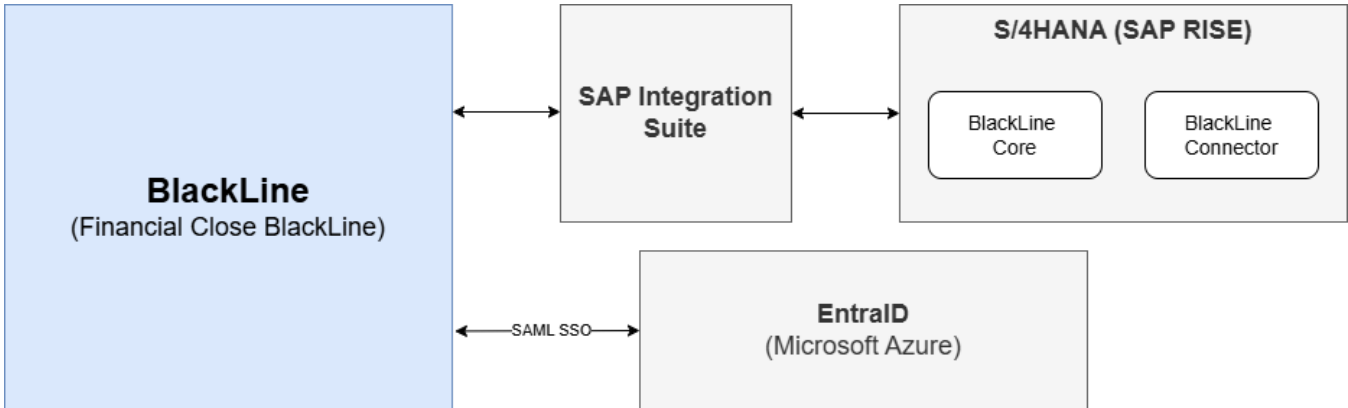
Description	Rationale
Single Sign-On (SSO)	As part of SyWay project, a common authentication mechanism (e.g., SAML) is adopted for ease of access and unified user experience.
Users must access BlackLine using HTTPS.	As part of SyWay standards, all data in transit must be encrypted.
Data stored in BlackLine must be encrypted.	As part of SyWay standards, all data at rest to be encrypted.
BlackLine must have appropriate data protection.	BlackLine performs data backups regularly so that point in time recovery can perform to recover data. Additional, backups must be replicated to another site to protect against a site disaster.

Application Architecture

Overview

SAP Account Substantiation and Automation by Blackline solution is be used to automate account reconciliations, centralizing period-end tasks, and enforcing internal controls.

Financial Close BlackLine SaaS instance is provisioned for Syensqo. This solution leverages Blackline Core and Blackline Connector S/4HANA add-ons to integrate S/4HANA and Blackline application. Blackline is also configured to perform SAML SSO with Syensqo's Entra ID.



Hosting Details

Region	Cloud Provider	Disaster Recovery Region
Frankfurt, Germany	Google	St. Ghislain, Belgium

System Landscape

The BlackLine landscape consists of 2-tiers: Non-Production and Production. The non-PRD system is integrated with all non-PRD S/4HANA instances.

Following are the URLs for BlackLine instances:

- Non-Production: <https://sapsyensqo.sbeu3.blackline.com>
- Production: <https://sapsyensqo.eu3.blackline.com>

Application Security

User Access

BlackLine is a SaaS application and can be accessed by users over the internet via HTTPS using their web browser. No Syensqo infrastructure or application is required to access BlackLine.

User must have their IDs created and assigned with the correct role before they can login to BlackLine.

Authentication

BlackLine is configured to perform SAML SSO with Syensqo Entra ID. The use of SSO is mandatorily enforced via configuration, and users cannot bypass SSO to log in with a password.

Communication Security

Data in transit is encrypted using secure TLS protocols (v.1.2 or greater) with 2048-bit keys.

Data Security

The following controls are implemented to ensure data security:

- Client files and databases at rest are protected using 256-bit AES encryption.
- To ensure system and client data availability, production data is replicated to the DR site every hour.
- Backups are encrypted and have ransomware protection enabled with audit logging.

Other Controls

Blackline is covered by standard availability SLA for SAP Cloud Services - 99.7%

Operation Architecture

Change and Configuration Management

Blackline does not have a transport tool. Users will need to replicate configurations manual from non-PRD to PRD.

Monitoring

Blackline performs the following monitoring:

- Information Security monitoring: Network intrusion detection and unauthorized access.
- Cloud and Data Center Operations: Monitoring of critical hardware, software and performance.
- Backup: Monitoring of backup processes.

Blackline system availability can be monitored via [Trust Blackline](#).

Sizing & Capacity Management

Blackline tenants allocates 2GB of storage per users and monitors the usage for the whole instance.

High Availability & Disaster Recovery

Blackline has implemented high availability throughout its environment to prevent single points of failure.

It has the following DR targets:

- RPO - 2h
- RTO - 24h

BlackLine conducts disaster recovery tests on an annual basis.

Backup/Restore

BlackLine does backups of Production and non-Production instances daily from 9pm to 1am Pacific Standard Time. Backups are retained for 30 days and this can be increase to a maximum of 90 days by opening a support ticket.

Users can request for their Blackline instance to be restored using the daily backups for the last 30 days

Maintenance Plan

Blackline maintenance schedule can be found in [Trust Blackline](#). Syensqo BlackLine tenants are deployed to the following regions:

- Non-PRD: sbou3
- PRD: eu3

See also

- [LeanIX Factsheet - BlackLine Account Substantiation and Automation](#)

Change log

Version	Published	Changed By	Comment
CURRENT (v. 17)	Nov 06, 2025 07:29	WENNINGER-ext, Sascha	added stakeholders
v. 16	Oct 20, 2025 09:43	WENNINGER-ext, Sascha	
v. 15	Oct 20, 2025 09:42	MUTHUSAMY-ext, Kunalan	
v. 14	Oct 20, 2025 09:41	WENNINGER-ext, Sascha	
v. 13	Oct 20, 2025 09:22	MUTHUSAMY-ext, Kunalan	
v. 12	Oct 20, 2025 09:17	MUTHUSAMY-ext, Kunalan	
v. 11	Sept 18, 2025 16:42	WENNINGER-ext, Sascha	
v. 10	Aug 27, 2025 12:45	MUTHUSAMY-ext, Kunalan	
v. 9	Aug 27, 2025 12:43	MUTHUSAMY-ext, Kunalan	
v. 8	Aug 27, 2025 08:11	MUTHUSAMY-ext, Kunalan	

[Go to Page History](#)

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Nov 12, 2025	Actor	Type	Activity	Version
Approved	 CHIEW-ext, Yock Sang	State	changed state to Approved at 12:03 pm	v17
Pending SteerCo Review	 CHIEW-ext, Yock Sang	State	gave <i>Final Approval</i> approval at 12:03 pm <i>Frank's Approval attached</i>	
Nov 06, 2025				
	WENNINGER-ext, Sascha	Edit	updated the page at 7:29 am <i>added stakeholders</i>	
		State	changed expiry date to '20 Nov, 2025 06:30 am' at 6:30 am	
		State	changed state to Pending SteerCo Review at 6:30 am	v17
Pending Stakeholder Review	WENNINGER-ext, Sascha	State	gave <i>Stakeholder Review</i> approval at 6:30 am <i>Endorsed by Marcela Anido and Francois Ruffinoni. Email attached.</i>	
		State	changed expiry date to '13 Nov, 2025 06:29 am' at 6:29 am	
		State	changed state to Pending Stakeholder Review at 6:29 am	v17
Edited following DA Endorsement	WENNINGER-ext, Sascha	State	gave <i>Minor change</i> approval at 6:29 am	
		State	changed state to Edited following DA Endorsement at 6:29 am	v17