

Global vLEI Hackathon 2025

Proof of Concept



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1. TrustSphere Ecosystem PoC

Traditional methods for **establishing and verifying trust** in business-to-business (B2B) interactions are increasingly inadequate for the speed and security demands of modern digital commerce, creating significant **friction** that hinders efficient partnerships and financial transactions.

Imagine a typical KYV scenario:

Alpha Ltd., a manufacturing firm, is in need of a reliable supplier for a critical stock of materials. The first challenge is finding a valid, trustworthy supplier in its geographic area—one that meets quality standards, delivery timelines, and compliance requirements. Once a potential supplier — for example *Beta Inc.* — is found, *Alpha Ltd.* must ensure that it is trustworthy and capable of fulfilling the request.

At the same time, *Beta Inc.* wants assurance that *Alpha Ltd.* can meet its financial obligations—especially if it offers Buy Now, Pay Later (BNPL) terms.

CRIF defines, issues, and continuously manages a **comprehensive set of trust indicators** for each business entity, implemented as custom **ECR** (*Entity Credential Registry*) credentials.

These indicators span multiple dimensions of business reliability, including credit risk, financial health, and ESG performance.

The mechanism is also **proactive**: for example, CRIF continuously monitors company profiles and can revoke the badge if the company's conditions change during its validity period.

This makes the badge a dynamic, real-time guarantee—always up-to-date, secure, and reliable—ensuring that its value as a trust signal is never static, but always reflects the company's true and current status.

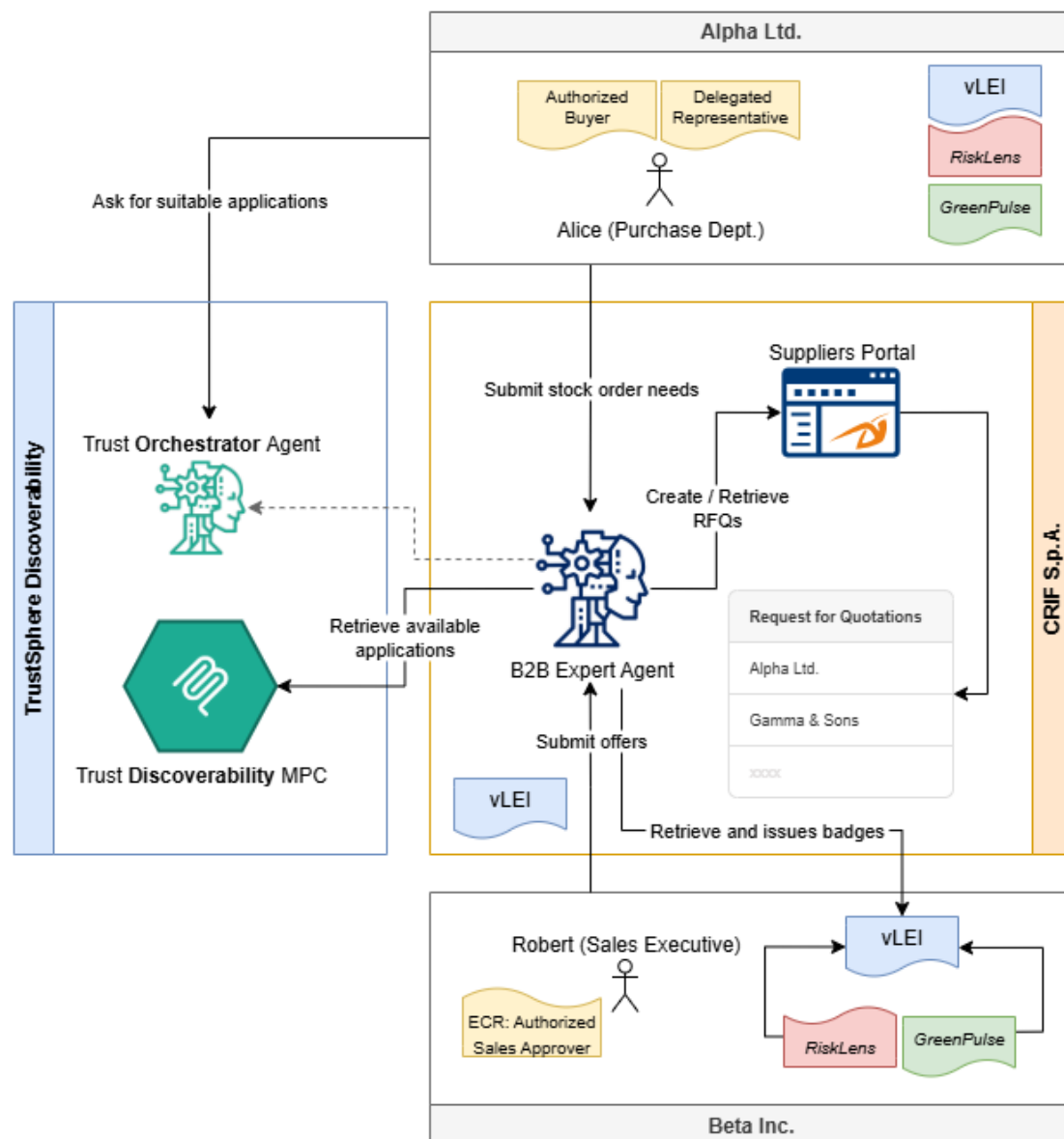
With *TrustSphere*, both parties gain instant, verifiable insights: *Alpha Ltd.* can assess *Beta Inc.*'s credentials through its *GreenPulse* (ESG performance badge) and *RiskLens* (financial health and credit risk badge), confirming its legitimacy and operational reliability.

Meanwhile, *Beta Inc.* can evaluate *Alpha Ltd.*'s *RiskLens* badge, a tamper-proof credential which reflects the buyer's financial health and payment behavior.

For this demo, we're zooming in on the *RiskLens* indicator, spotlighting two multiple key metrics that showcase its real-world impact:

- **CRIF B2B Risk Score** : A predictive credit risk indicator designed to assess the likelihood of default or financial distress for businesses across various countries and sectors. It is part of CRIF's broader suite of scoring and rating tools used for risk management, onboarding, and credit decisioning.
- **CRIF Credit Limit** : A credit limit indicator that represents the maximum amount of money it is considered safe to expose to a specific company as a supplier or creditor. In other words, it suggests the highest credit line or exposure you can grant to a client while maintaining an acceptable level of risk, based on the company's financial health, payment history, and other relevant data.

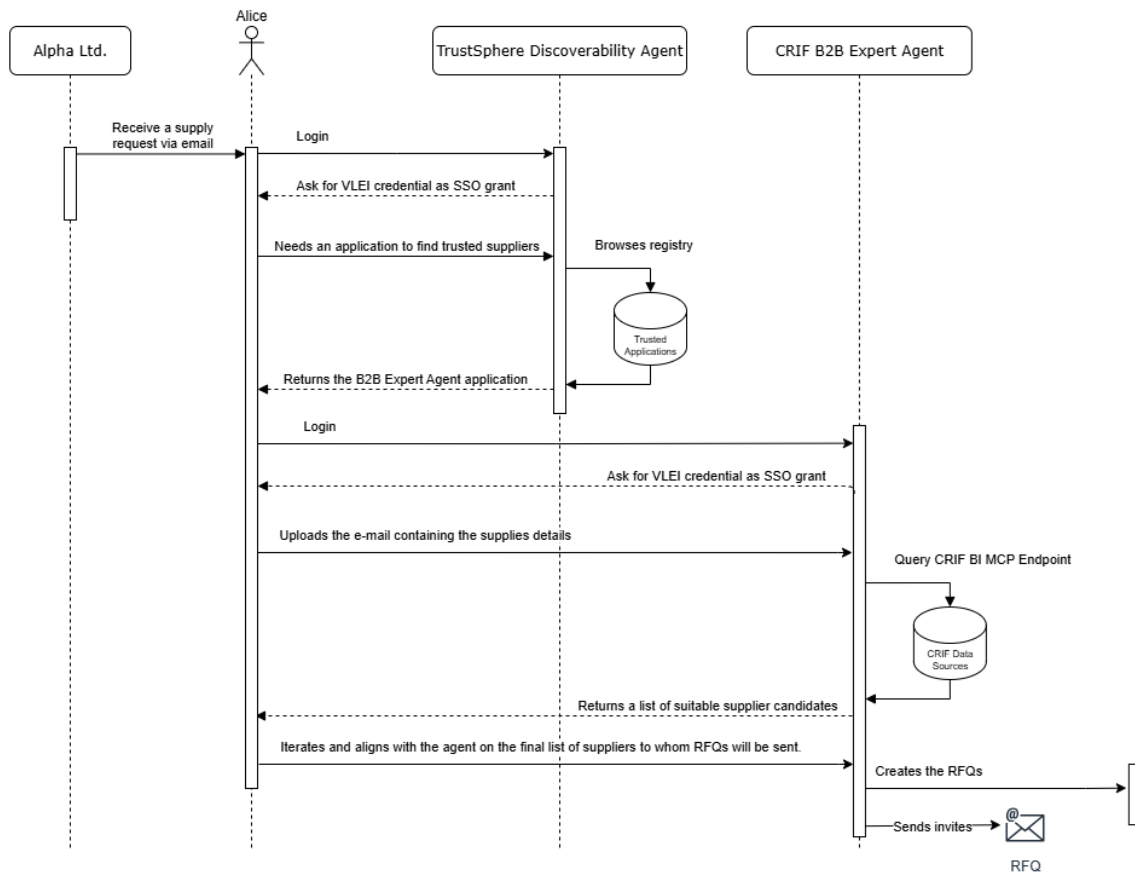
2. Demo Description



Let's consider the following scenario's participants:

Name	Type	Role
Alpha Ltd.	Legal Entity	Manufacturing Firm
Alice	Person	Alpha Ltd. - Purchase Department
Beta Inc.	Legal Entity	Business Supplier
Robert	Person	Beta Inc. - Sales Executive
CRIF S.p.A.	Legal Entity	Domain Expert
B2B Expert Agent	AI Agent	CRIF S.p.A. - Expert B2B Assistant
TrustSphere Browser Extension	Digital Wallet	GLEIF - TrustSphere Badges Wallet
Trust Orchestrator Agent	AI Agent	GLEIF - TrustSphere Expert Assistant
Trust Discoverability MPC	AI Tool	GLEIF - TrustSphere Discoverability Tool
GLEIF	Legal Entity	vLEI Ecosystem Holder

3. Supplier Discovery



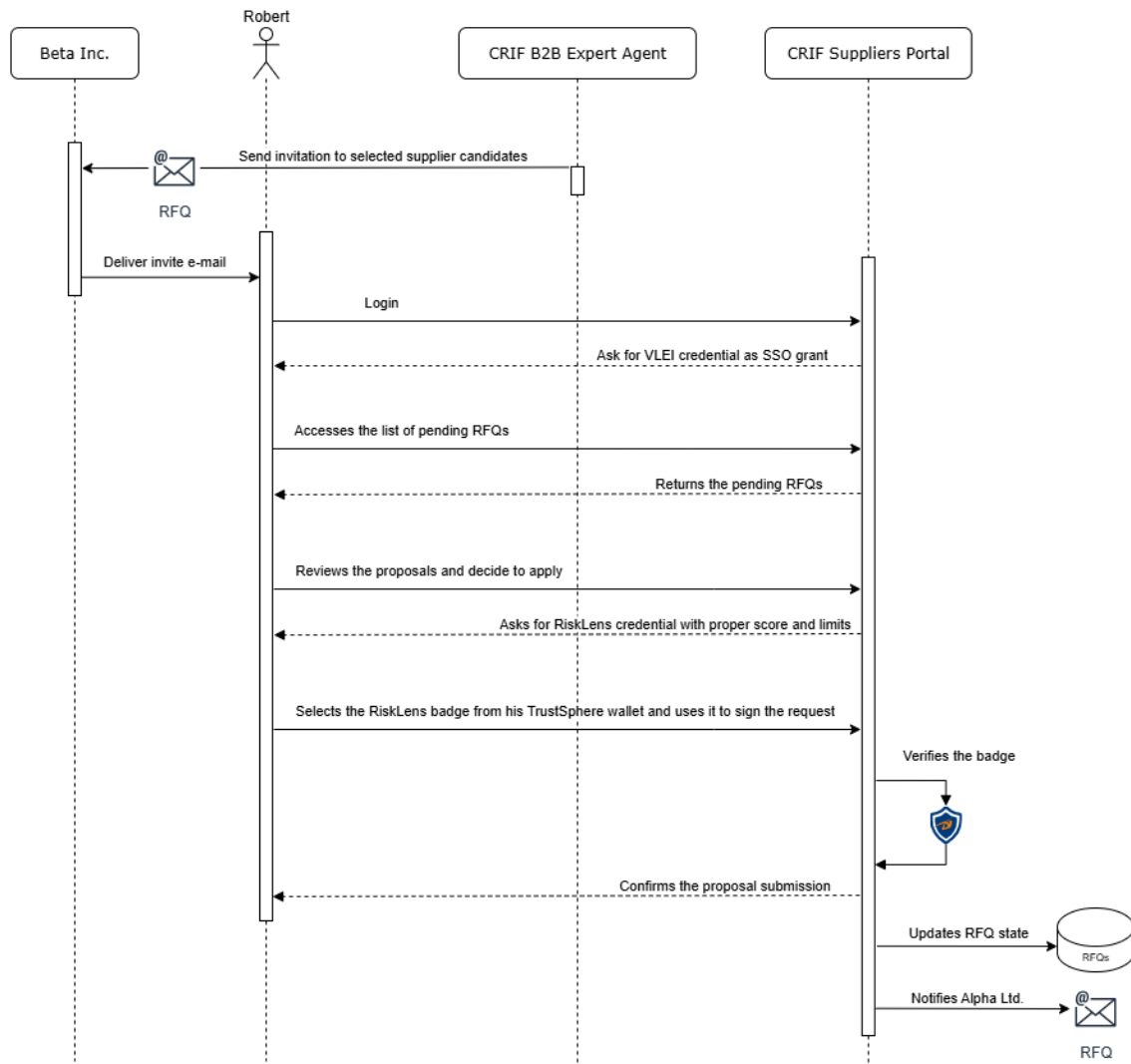
Alice works in the Purchasing Department at *Alpha Ltd.* and has just received an e-mail from her boss asking for three different supplies (office stationery, IT consultancy and catering).

- In order to find proper suppliers for this request, she connects to *TrustSphere Discoverability Agent*, presenting Alpha Ltd.'s **vLEI badge** which is requested as access credential to the service.
- The login phase is completed smoothly, thanks to the **TrustSphere Browser Extension** acting a tamper-proof badge wallet which use the stored vLEI credential to sign the request to Discoverability Agent.
- The agent explores the *TrustSphere's* Trusted Application catalog to identify certified applications **capable of retrieving verified B2B suppliers** within the required region or sector.
- The agent identifies the **CRIF B2B Expert Agent** as the ideal solution for Alice's supplier search needs and shares the access link to the application.
- Alice connects to the CRIF B2B Expert Agent using her vLEI credential, ensuring secure and authenticated access.
- She then uploads an email containing the details of the required stock supplies and specifies **additional criteria** such as geographic proximity.
- The agent utilizes the **CRIF Business Information MCP** endpoint to search for suppliers that meet Alice's specified criteria, moreover, based on its know-how, he adds more filters like

mandatory certifications or guarantees expected from potential suppliers. Once the query is processed, the agent returns a curated list of candidate suppliers to Alice.

- Together, Alice and the agent review and refine the list, iterating through the options to **filter out unsuitable candidates**. After careful evaluation, Alice confirms the final selection of target suppliers.
- The agent then proceeds to create a **Request for Quotation (RFQ)** entry on the **CRIF Supplier Portal** and dispatches the RFQs directly to the verified contact points of the selected suppliers.

4. Supplier Onboarding



- Robert, a member of the Sales Department at *Beta Inc.*, receives an e-mail from **CRIF B2B Expert Agent** notifying him that *Beta Inc.* has been shortlisted as potential supplier from *Alpha Ltd.*, a verified company inside the vLEI ecosystem.
- Robert clicks the link provided in the email and securely accesses the **CRIF Supplier Portal** using his vLEI credential, ensuring authenticated and trusted entry.
- Upon login, the portal displays a list of pending RFQs along with detailed information about the requested supplies.
- After reviewing the requests, Robert decides to respond to one of them.
- When he clicks the Apply button, the **CRIF Supplier Portal** sends a request to Robert's **TrustSphere Wallet** for a RiskLens badge.
- Since *Beta Inc.* already holds a valid RiskLens badge, the wallet automatically suggests the appropriate credential. Robert confirms the selection, and the wallet signs the response with the badge.

- The portal verifies the badge and checks whether *Beta Inc.* meets the required score and credit limit criteria.
- As all conditions are satisfied, the portal **confirms the acceptance** of the proposal to Robert.
- Finally, the portal updates the RFQ status and sends a notification to *Alpha Ltd.*, confirming *Beta Inc.*'s participation.

5. Out of Scope Flows

To demonstrate the potential of the TrustSphere ecosystem in B2B interactions, this proof of concept focuses on a **simplified scenario**.

However, the same business case could support a broader range of use cases leveraging verified credentials, for example:

5.1. Role Verification and Access Control

To ensure that only authorized individuals can initiate procurement actions, *Alpha Ltd.* can issue a custom **Engagement Context Role (ECR)** credential titled “*Authorized Buyer*” to Alice.

This credential formally designates her as empowered to purchase goods or services on behalf of the company.

When accessing the supplier portal, users are required not only to present their vLEI credential for identity verification, but also an **Authorized Buyer ECR** to confirm their role-based entitlement.

This dual-verification mechanism strengthens trust and ensures that sensitive operations are performed only by properly credentialed representatives.

5.2. Order Acceptance and Buyer Verification

When Alice receives an offer from *Beta Ltd.* and confirms her interest—proposing a 90-day deferred payment—*Beta Ltd.* may seek assurance of *Alpha Ltd.*’s **financial reliability** before accepting the terms.

To do so, it can consult the **CRIF B2B Expert Agent** to determine which trust credentials or badges (like TrustLens) *Alpha Ltd.* should present as guarantees.

This ensures that the buyer is not only legitimate but also capable of honoring the proposed payment conditions.

