Project Alvarium

Helpful links:

Current working project deck

Recent Dell/IOTA/Intel webinar on Alvarium (registration required)

Project splash page with vision video and original Linux Foundation press release (https://alvarium.org)

Required Information	Responses (Please list N/A if not applicable)
Name of Project	Project Alvarium
Project Description (what it does, why it is valuable, origin and history)	Project Alvarium aims to build out the concept of data confidence fabrics by layering trust insertion technologies with a system-based approach. A video and presentation can be found at https://alvarium.org and the current project working deck is linked above. The project was initially incubated within Dell Technologies with contributions from The IOTA Foundation. It was announced as an emerging Linux Foundation project in November 2019 but the effort to open source the code was put on hold due to COVID. Meanwhile Dell, IOTA and Intel continued to evolve the concept behind the scenes. We have been running a project formation working group hosted by the Linux Foundation for the past several months and the group feels that the best home within the LF is LF Edge. Members of the working group include interested parties from Accenture, Anylog, Arm, Dell, Intel, IOTA Foundation, Juniper Networks, Swisscom and VMware.
Statement on alignment with Foundation Mission Statement	Project Alvarium is well-aligned with LF Edge's mission to foster industry collaboration, scale the adoption of edge computing and harmonize the OSS edge ecosystem. The Alvarium framework unifies existing upstream and downstream projects into a holistic approach for data trust. We believe Alvarium is best suited for LF Edge due to the focus down to silicon and the importance of inserting trust from the moment data is created at the edge.
High level assessment of project synergy with existing projects under LF Edge, including how the project compliments /overlaps with existing projects, and potential ways to harmonize over time. Responses may be included both here and/or in accompanying documentation.	Alvarium is highly complementary to existing LF Edge projects. Within the reference architecture, EdgeX Foundry and Fledge can serve as trusted application frameworks within, EVE-OS as a trusted foundation, Open Horizon as a delivery mechanism, Secure Device Onboard to simplify bootstrapping across the supply chain. Akraino would be a vehicle to create blueprints of different trust fabric applications in real-world use cases.
Link to current Code of Conduct	We would adopt the LF Edge Code of Conduct
2 TAC Sponsors, if identified (Sponsors help mentor projects) - See full definition on Project Stages: Definitions and Expectations	Trevor Conn (Dell), Erik Nordmark (ZEDEDA), Jim St. Leger (Intel)
Project license	Apache 2.0
Source control (GitHub by default)	https://github.com/project-alvarium
Issue tracker (GitHub by default)	https://github.com/project-alvarium
External dependencies (including licenses)	Apache 2.0 License IOTA Chrysalis v1.1.0 – C Bindings (Apache 2.0 License) github.com/davecgh/go-spew v1.1.1 (ISC License) github.com/eclipse/paho.mqtt.golang v1.3.5 (Eclipse Public License v2.0) github.com/oklog/ulid/v2 v2.0.2 (Apache 2.0 License) github.com/stretchr/testify v1.7.0 (MIT License) gopkg.in/yaml.v3 v3.0.0-20210107192922-496545a6307b (MIT License)
Release methodology and mechanics	Will be established as part of official project formation
Names of initial committers, if different from those submitting proposal	Trevor Conn, Karim Elghamry, and Ali Amin (Dell Technologies), Dyrell Chapman (IOTA Foundation)
Current number of code contributors to proposed project	4

Current number of organizations contributing to proposed project	4 – Dell, IOTA Foundation, Intel, Zededa
Briefly describe the project's leadership team and decision-making process	The leadership team consists of Steve Todd (Dell Technologies) as strategy lead, Trevor Conn (Dell Technologies) as lead architect and code contributor, Mat Yargar (IOTA) for strategy and ecosystem development, Tristan Thoma (IOTA) as architect, and Jason Shepherd (ZEDEDA) for ecosystem and community development. The project is currently making decisions within the project formation working group and would form a regular TSC if admitted into the LF Edge portfolio.
List of project's official communication channels (slack, irc, mailing lists)	We are currently leveraging general Linux Foundation mailing lists as part of formation and would switch over to LF Edge infrastructure if admitted
Link to project's website	alvarium.org
Links to social media accounts	Would set up as part of project onboarding
Existing financial sponsorship	Currently being funded by Dell Technologies with resourcing contributions from IOTA, Intel, ZEDEDA and more
Infrastructure needs or requests (to include GitHub/Gerrit, CI/CD, Jenkins, Nexus, JIRA, other ...)	Github+Jenkins integration for CI/CD, part-time consulting role from LF would be helpful. We would also set up a Slack (or Dischord) instance and email lists managed by the LF, similar to other LF Edge projects.
Currently Supported Architecture	Linux (x86/64, ARM) with Go language support
Planned Architecture Support	Java language support and others based on community need. No current plan for Windows/MacOS support.
Project logo in svg format (see https://github.com/lf-edge/lfedge-landscape#logos for guidelines)	
Trademark status	Not applied for yet
Does the project have a Core Infrastructure Initiative security best practices badge? (See: https://bestpractices.coreinfrastructure.org)	No, we would seek one as we work through the LF Edge stages
Any additional information the TAC and Board should take into consideration when reviewing your proposal?	Data trust is a foundational need for digital transformation, with reasons including interconnecting ecosystems to drive new customer experiences and business models, maintaining compliance with privacy regulations like GDPR, and detecting fake data automated by AI. The concept of trust fabrics being developed within Project Alvarium is unique in that it takes a system-level approach to automate trust down to the silicon level and includes an embedded algorithm to establish measurable confidence scores as data flows through interconnected systems. These attributes complement other efforts focused on data trust such as the Confidential Computing Consortium, Trust Over IP Foundation, International Data Spaces (IDS) and GAIA-X. As a community we are reaching out to these organizations to collaborate, in addition to working to harmonize within the LF Edge portfolio. Also noteworthy is that the Alvarium framework is loosely-coupled and individual components in the reference architecture can be exchanged. Finally, due to the importance of the topic and unifying nature of the project we expect it to drive additional LF Edge membership.