Open Horizon - to Stage Two (Growth)

Status

- **Presented to the TAC**: Wednesday, January 27, 2021 - Meeting Recording, Slides
- **TAC Project Review**:
  - Subgroup Review Meeting: February 3, 2021 (Meeting Notes, Meeting Recording)
  - Subgroup Readout: February 10, 2021 (Slides, Minutes, Recording)
- **TAC Vote Approved**: Friday, February 19, 2021
- **Governing Board Vote Approved**: Thursday, March 4, 2021

Project Resources

- **Web site:** https://www.lfedge.org/projects/openhorizon/
- **Wiki:** https://wiki.lfedge.org/display/OH/Community+Membership
- **Analytics:** https://insights.lfx.linuxfoundation.org/projects/lfedge%2Fopen-horizon/dashboard
- **Communication & support:** LF Edge Slack, automatic invite if you have no account there
  - NOTE: Open Horizon's official Slack channels are all prefixed with "open-horizon"
- **Mailing Lists and Calendar:** https://lists.lfedge.org/groups
- **YouTube playlist:** https://www.youtube.com/playlist?list=PLgohd895XSUddtseFy4HxCqTqqlYfW8Ix
- **Mentorship Program:** https://mentorship.lfx.linuxfoundation.org/project/52faa755-1d30-4692-9796-e6bef09fa236

Stage Two: Growth Stage

Definition

The Growth Stage is for projects that are interested in reaching the Impact Stage, and have identified a growth plan for doing so. Growth Stage projects will receive mentorship from the TAC and are expected to actively develop their community of contributors, governance, project documentation, and other variables identified in the growth plan that factor in to broad success and adoption.

In order to support their active development, projects in the Growth stage have a higher level of access to marketing and other resources, which will be agreed upon and reviewed on a yearly basis by the TAC and then the Governing Board. A project's progress toward its growth plan goals will be reviewed on a yearly basis, and the TAC may ask the project to move to the At Large stage if progress on the plan drops off or stalls.

Acceptance Criteria

At Large requirements:

- Two TAC sponsors to champion the project & provide mentorship as needed
- A presentation at an upcoming meeting of the TAC, in accordance with the project proposal requirements
- The typical IP Policy for Projects under the LF Edge Foundation is Apache 2.0 for Code Contributions, Developer Certificate of Origin (DCO) for new inbound contributions, and Creative Commons Attribution 4.0 International License for Documentation. Projects under outside licenses may still submit for consideration, subject to review/approval of the TAC and Board.
- Upon acceptance, At Large projects must list their status prominently on website/readme
- Receive a two-thirds vote of all TAC representatives that do not abstain the vote and a majority vote of the Governing Board's Strategic Planning Committee to enter into the At Large Stage.

Growth requirements:

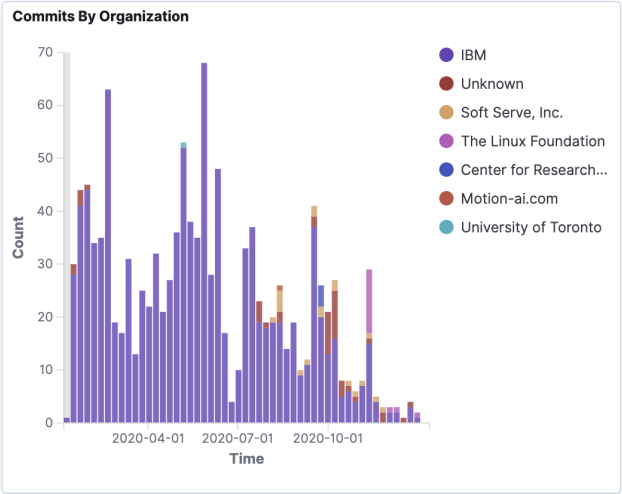
- Development of a growth plan (to include both roadmap of projected feature sets as well as overall community growth/project maturity), to be done in conjunction with their project mentor(s) at the TAC.
- Document that it is being used in POCs.
- Demonstrate a substantial ongoing flow of commits and merged contributions.
- Demonstrate that the current level of community participation is sufficient to meet the goals outlined in the growth plan.
- Demonstrate evidence of, or a plan for, interoperability, compatibility or extension to other LF Edge Projects. Examples may include demonstrating modularity (ability to swap in components between projects).
- Since these metrics can vary significantly depending on the type, scope and size of a project, the TAC has final judgement over the level of activity that is adequate to meet these criteria.
- Receive a two-thirds vote of all TAC representatives that do not abstain the vote and a majority vote of the Governing Board to move to Growth Stage.

Compliance with Requirements

At Large

Requirement	Evidence
Two TAC sponsors	Joe Pearson (IBM), Jim St. Leger (Intel), Anil Vishnoi (Red Hat), Henry Lau (EdgeX Foundry)
Presentation to the TAC	Original presentation deck and recording from **March 11, 2020**
IP Policy: licenses for code and documentation, DCO for contributions	• Primary and all other code repositories use Apache 2.0 license • Documentation uses CC-BY-4.0 International license • DCO is **mandatory** for all repositories, commit check **automatically** enforced
List project (Stage One) status on web site or README	Updated LF Edge project page to reference (thanks, Brett!)
>= 2/3 approval vote of TAC & majority of Governing Board SPC	• TAC two-thirds vote approval reached on **March 30, 2020**. • Governing Board Strategic Planning Committee approval reached on **April 9, 2020**. link to page

Growth

Requirement	Evidence
Used in PoCs	1. DLR in Germany has created two pieces of hardware (GeoBox, HofBox) for farmers, and is proposing to work across the country in a public/private partnership program. This technical project uses Open Horizon as a key component for their offline-first approach to edge computing. video link: Geobox_ENG_Small_201110_01.mp4 2. Foxconn Industrial Internet has ported the Open Horizon agent to work on their 5G AI Box and is using it as an integral piece of their vertical farming solution - MES Agricultural System. It will be initially featured in their Beijing Client Demo Center. video link: demo_EN.mp4 3. I could list a few other PoCs, but they use a commercial downstream distribution, so I'm not sure if they're valid examples. For instance, the Port of Barcelona is using it in an MVP to detect and identify boats (and their bow and stern) approaching the harbor, and is using deployed inferencing algorithms to derive the location/position of those boats, all being inferred on the edge. link: https://es.newsroom.ibm.com/announcements?item=122614
Substantial ongoing commits and contributions	 Chart from https://tinyurl.com/yykvcfg5 showing commits over the last year. Notice that the diversity of organizations making commits increased quite a bit beginning in the July timeframe, two months after we officially became an LF Edge project. Attached are a few slides showing highlights of 2020 project stats.

Growth plan	Growth plan for 2021: • Add non-IBM voting members to the TSC (at least 30%) • Add 20 or more active volunteer contributors • Add three project partners contributing value • Bring two new members to LF Edge • Create a project web site • Mentor twelve new candidates • Establish ties with at least one university • Publish the beta release of the Open Retail Reference Architecture • Launch the Open Edge Services Catalog
Community participation meets growth plan goals	Growth plan for 2020: • Regular, scheduled TSC and Working Group meetings with active public community participation in Working Groups Met • Three active SIGs meeting and supporting users and solutions Partially Met: Created two SIGs (Manufacturing and Smart Agriculture), and the Open Retail Reference Architecture (ORRA) sub-project • Active effort underway with three or more partner organizations to define Open Deployment standards Ongoing: Arnaud Le Hors has volunteered to help lead this effort, will begin with standards around ORRA • At least twenty new active (volunteer) contributors Missed: 8 new contributors, not 20 • At least two Partner companies contributing value to the project Met: Foxconn Industrial Internet and SoftServe • Apply for Stage Two maturity project In Progress • Investigate opportunities for collaboration with universities Ongoing
Evidence of interoperability, compatibility with other LF Edge projects	1. Open Horizon and SDO hosted a joint demo at ONES-NA last September. Open Horizon integrates SDO rendezvous services into the management hub and CLI since SDO 1.8, and is continually upgrading that support as new SDO releases come out. Open Horizon now supports SDO 1.10. Open Horizon also has a technical and project liaisons to the SDO project. 2. Open Horizon is almost complete with integration into EdgeX Foundry's Sensor Fusion demo, which also updates Open Horizon's EXF integration work. We're participating in their Kubernetes Support sub-project. And we just announced our participation in the Open Retail Reference Architecture, an EXF Vertical Solutions WG sub-project, which **you're all invited to participate** in as well. We plan to create an Akraino blueprint from this effort. 3. Open Horizon has worked with SOTE by providing project information, updating landscape information, submitting postcards from the edge, and providing a project liaison that regularly attends their meetings. 4. Open Horizon is about to begin collaborating with Fledge on specific deliverables. We're now in the process of creating a sub-group under the Open Horizon TSC for those efforts. 5. We have plans and ideas about collaborations with EVE and Home Edge, and hope to make further progress on those in 2021.
>= 2/3 approval vote of TAC & majority of Governing Board	