

Project NanoMQ

We would adopt the LF Edge Code of Conduct

Presented to the TAC on July 26, 2023. Recording here: https://zoom.us/rec/share/-M3KVpEpphI_M952v48msAO3hpYww_YpRf88HprFxqAueB67jRtCtwCJ5oODYlpG.Orq9Q-7XLIZ65ql6

TAC voted to approve on August 24, 2023

Governing Board SPC voted to approve on August 30, 2023

Instructions

1. Review the [Project Proposal Process](#)
2. Add New Proposals to the Wiki using the template below and detailed instructions [here](#).
3. If you need help creating your new Project Proposal page - and adding the template below, please email info@lfedge.org

Project Proposal Template

Project Proposal - Project Introduction:

Required Information	Responses (Please list N/A if not applicable)
Name of Project	NanoMQ
Project Description (what it does, why it is valuable, origin and history)	An Ultra-lightweight and Blazing-fast MQTT Broker for IoT Edge
Statement on alignment with Foundation Mission Statement	NanoMQ contributors share the same vision as LF Edge. We are committed to build a powerful, user-friendly, and open-source message broker on edge devices.
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.	EdgeX Foundry Open Horizon Home Edge (archived) Fledge
Link to <i>current</i> 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	Joe Pearson, Jim White
Project license	MIT License
Source control (GitHub by default)	https://github.com/emqx/nanomq
Issue tracker (GitHub by default)	https://github.com/emqx/nanomq/issues

External dependencies (including licenses)	<p>No dependencies for Core functionality (MQTT Broker)</p> <p>https://github.com/nanomq/NanoNNG (A self maintained for of NNG)</p> <p>MIT License</p> <p>Add-on dependencies:</p> <p>https://github.com/GlitchedPolygons/l8w8jwt (If JWT Token is enabled for HTTP authorization)</p> <p>Apache-2.0</p> <p>https://github.com/microsoft/msquic (If MQTT over QUIC is enabled)</p> <p>MIT License</p> <p>(only source code dependencies are counted)</p>
Release methodology and mechanics	Github
Names of initial committers, if different from those submitting proposal	Jaylin Yu
Current number of code contributors to proposed project	23
Current number of organizations contributing to proposed project	2
Briefly describe the project's leadership team and decision-making process	<p>Jaylin Yu as the project leader, whom is also responsible for communicating with community to collect feature request and issue report.</p> <p>New feature/architecture plan is decided among EMQ' governing board.</p>
List of project's official communication channels (slack, irc, mailing lists)	<p>Slack</p> <p>Discord</p> <p>Github Discussion</p>
Link to project's website	https://nanomq.io/
Links to social media accounts	N/A
Existing financial sponsorship	EMQ Technologies
Infrastructure needs or requests (to include GitHub/Gerrit, CI/CD, Jenkins, Nexus, JIRA, other ...)	N/A
Currently Supported Architecture	<p>Windows + Linux/Yocto/Build-root/OpenWRT/QNX/Any POSIX compatible Operating System</p> <p>X86/64, ARM/MIPS/RISC-V</p>
Planned Architecture Support	Android

Project logo in svg format (see https://github.com/lf-edge/lfedge-landscape#logos for guidelines)	
Trademark status	EMQ' intellectual property
Does the project have a Core Infrastructure Initiative security best practices badge? (See: https://bestpractices.coreinfrastructure.org)	NO
Any additional information the TAC and Board should take into consideration when reviewing your proposal?	N/A

Project Proposal - Mapping Criteria and Data:

Stage 1: At Large Projects (formerly 'Sandbox')

Criteria	Data
2 TAC Sponsors, if identified (Sponsors help mentor projects) - See full definition on Project Stages: Definitions and Expectations	
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	

*** For existing Projects requesting Stage 2 or Stage 3 consideration, please update the above with the Stage 2 or Stage 3 Mapping criteria, available at [Project Stages Mapping: Criteria and Data](#)

Project Proposal - Taxonomy Data:

Functions (Provide, Consume, Facilitate, or N/A; Add context as needed)

Functions	(Provide, Consume, Facilitate, or N/A; Add context as needed)
APIs	Provide
Cloud Connectivity	Provide
Container Runtime & Orchestration	Provide

Data Governance	N/A
Data Models	N/A
Device Connectivity	Provide
Filters/Pre-processing	Provide (A simplified rule-engine is embedded)
Logging	Provide
Management UI	N/A
Messaging & Events	Provide
Notifications & Alerts	Provide
Security	Provide
Storage	Facilitate (NanoMQ' persist messages to database via Rule Engine,- auto-cache bridging messages on disk or memory for retransmission)

Deployment & Industry Verticals (Support, Possible, N/A; Add context as needed)

Deployment Type	(Support, Possible, N/A; Add context as needed)
Customer Devices (Edge Nodes)	Support
Customer Premises (DC and Edge Gateways)	Support (As long as the Arch is supported)
Telco Network Edge (MEC and Far-MEC)	Support
Telco CO & Regional	Support
Cloud Edge & CDNs	Support
Public Cloud	Support
Private Cloud	Support

Deployment & Industry Verticals (or X; Add context as needed)

Directly applicable Industry/Verticals use cases	(or X; Add context as needed)
Automotive / Connected Car	
Chemicals	
Facilities / Building automation	
Consumer	
Manufacturing	
Metal & Mining	
Oil & Gas	
Pharma	
Health Care	
Power & Utilities	

Pulp & Paper	X
Telco Operators	
Telco/Communications Service Provider (Network Equipment Provider)	
Transportation (asset tracking)	
Supply Chain	
Preventative Maintenance	
Water Utilities	
Security / Surveillance	
Retail / Commerce (physical point of sale with customers)	
Other - Please add if not listed above (please notify TAC-subgroup@lists.lfedge.org when you add one)	

Deployments (static v dynamic, connectivity, physical placement) - (or X; Add context as needed)

Use Cases	(or X; Add context as needed)
Gateways (to Cloud, to other placements)	
NFV Infrastructure	
Stationary during their entire usable life / Fixed placement edge constellations / Assume you always have connectivity and you don't need to store & forward.	
Stationary during active periods, but nomadic between activations (e.g., fixed access) / Not always assumed to have connectivity. Don't expect to store & forward.	
Mobile within a constrained and well-defined space (e.g., in a factory) / Expect to have intermittent connectivity and store & forward.	
Fully mobile (To include: Wearables and Connected Vehicles) / Bursts of connectivity and always store & forward.	

Compute Stack Layers (architecture classification) - (Provide, Require, or N/A; Add context as needed)

Compute Stack Layers	(Provide, Require, or N/A; Add context as needed)
APIs	provide
Applications	provide
Firmware	N/A
Hardware	N/A
Orchestration	provide
OS	N/A
VM/Containers	Require

Cloud Stack Layers (architecture classification) - (Provide, Require, or N/A; Add context as needed)

Cloud Stack Layers	(Provide, Require, or N/A; Add context as needed)
Applications	Provide
Configuration (drive)	Provide
Content (management system)	Provide
IaaS	N/A
PaaS	N/A
Physical Infrastructure	Require (Software requires a hardware to inhabit)
SaaS	N/A

Attachments (LF Edge PPT template is below, if proposing project would like to leverage):

