OpenXT Project Governance [DRAFT]

DRAFT

Introduction

The OpenXT Project requires consensus on an extensible systems innovation platform, to enable derivative products to make assurances for diverse markets and use cases. This document records principles to guide decisions within the OpenXT Project. Stakeholders are expected to fairly interpret this document and to objectively apply the principles for the benefit of the OpenXT Project and all contributors.

Project Charter

- To provide an Open-Source software development toolkit for use on modern hardware.
- To enable collaboration on the development of a platform that provides virtualization technology with high assurance security properties that are rooted in the platform hardware.
- To engage with upstream software projects and contribute developments with the dual aims of increasing the use of OpenXT technologies and decreasing the specialization of OpenXT.
- To continually raise the security capabilities of the OpenXT platform and upstream projects.
- To satisfy the OpenXT Current Use Cases and maintain the Platform Properties.
- To actively pursue additional Use Cases where the OpenXT technology is relevant and the attraction of additional contributors would follow from adding support for a new Use Case.

Project Platform

Current Use Cases

- Provide the software platform for a Multi-Tenant Client Desktop.
- Provide the software platform for a hardened Single-VM endpoint.
- Be the best-in-class Open Source toolchain for support of measured launch into a manageable virtualized environment.
- Provide a compelling platform for research and academic projects on hardware-based security technologies.
- Production software environment for validation of new hardware-based security technologies.

Platform Properties

- Measured Launch to detect tampering with core system software and protect the confidentiality of data on the system.
- Disaggregated network functionality to isolate privileged device drivers, VPN software, credentials and user applications and data.
- Enforcing SELinux and XSM policies to protect platform components.
- Containment and isolation of VM device model processes with stub domains.
- Support for modern Windows guest operating systems.
- Support for modern Linux guest operating system distributions, including Debian and OpenEmbedded.
- Extensible base platform, architected to support production of branded commercial derivatives with optional proprietary extensions.
- Interoperability of base platform with guest VMs, providing developers with consistent mechanisms for packaging, deployment and operational support on validated commercial derivatives (validated and versioned interfaces include guest PV drivers).
- Consistent upgrade mechanism for base platform with defined interoperability properties with optional proprietary extensions.

- Defined OEM hardware compatibility with stable releases of base platform and commercial derivatives, validated by manual and/or automated testing.
- Constructed from OSI-certified Open Source software. <<To do: this statement needs checking and possibly qualifying against the current project code. eg. Intel SINIT modules, etc. >>
- << To do: Add more here >>

Layers

OpenEmbedded provides composable software layers to isolate customizations, such as hardware, GUI environments and distributions. Layers create modular governance contexts for specific use cases, target markets and operational models, with a narrowed set of stakeholders and higher chances of alignment.

The OpenXT Project applies the OpenEmbedded layering mechanism to support the coexistence of multiple use cases within a common codebase. This maximizes collaboration on common components while also enabling non-aligned stakeholder requirements to be satisfied in different layers.

Base Platform Layer:

- OpenXT Core Platform

Proposed Optional Layers:

- Switching display and input (surfman) layer <<To do: Link to the RFC for this layer here when ready>>
- Compositing display and input (Qt) layer <<To do: Link to the RFC for this layer here when ready>>

Project Assets

<<To do: Discussion to be had later about legal ownership, how to use and how to protect these items.>>

- PCI and USB vendor namespaces
- Software source code
- JIRA
- IRC channel
- Google Groups mailing list
- OpenXT.org domain name
- OpenXT trademark
- << To do: Add more here >>

Project Roles

Project Governance Board

Structure of the Governance Board: 7 positions on the Board.

An initial body of a seven individuals will be formed by community agreement. This body represents the interests of parties involved in the OpenXT project as well as the interests of the OpenXT platform itself.

The Board is responsible for ensuring that decision making is effective within the project and acting as the decision maker of last resort, for setting the project charter and for driving project activities in pursuit of project goals derived from the charter.

This body will form a decision making authority to resolve issues that impact OpenXT and arrive at decisions on behalf of the whole community that cannot be easily resolved by the Pull Request process. Members of the Board are expected to provide guidance to project contributors on how to address challenges presented by proposed changes in order to seek solutions that are acceptable and desirable to all the project stakeholders and in alignment with the project charter.

The exact nature of the resolution may vary widely on a case by case basis.

- The Board decides to request more information regarding a submission or RFC before further consideration.
- The Board decides to request an alteration to a submission or RFC before further consideration or as criteria for acceptance.
- The Board requests information from an outside expert or agency that can perform an evaluation, provide context and make recommendations to guide decision making.
- The Board votes to accept/reject a proposed feature or change in OpenXT. This is a method of resolution of last resort: other approaches should be exhausted before a vote is required.

Repository Maintainer, Source Code Committer

- Monitors the repositories for Pull Requests and comments and engages with them.

- Apply the Pull Request Process and perform the actual approval or rejection actions of PRs to the source code repositories.
- Monitor mailing list postings that are relevant to RFCs and Pull Requests.

System Administrators

- JIRA and Confluence
- Github
- Google Groups
- << To do: Add more here and outline role responsibilities of each>>

Board Process and Scope

Decision Process

Action by the Governance Board will only be invoked in the situation where no resolution to a technical matter can be reached using the process of interaction with the repository maintainers and informal discussions.

Action is initiated by creating a JIRA ticket to fully describe the technical issue that needs resolution. All activity concerning the resolution process will be tracked in the ticket. When a resolution of some form is reached, it will also be entered into the ticket. When the decided upon resolution is enacted, the ticket can be closed. This leaves a concrete information trail on exactly what transpired and what the resolution ultimately was.

If the decision process involves voting, this will be done with a simple **+1** or **-1** vote by each Board member. Any member can elect to abstain from voting for whatever reason public or private (which is a vote of **0**). Voting can commence when any member of the Governance Board believes it is appropriate. The results of a vote will be recorded in the ticket.

In cases where members cannot participate because they are indisposed for whatever reason or when voting is tied, the Governance Board will have to make a best effort attempt at determining how to proceed.

Scope of Mandate

Any decision which affects the OpenXT software platform, shared resources or development practices, where lazy consensus is not achievable via community dialogue, the mailing list RFC process and monthly community call. Board members are expected to fairly interpret this document and to objectively apply the documented principles for the benefit of the OpenXT project and all contributors.

Changes to this Governance Document, Board Structure, Repository Maintainers and System Administrators

Changes can be made by the following process:

1. Collect and understand the perspectives of affected stakeholders.
2. Send a written RFC to the OpenXT mailing list.
3. Discuss the RFC on the monthly OpenXT community call.
4. Publish revised RFC to the mailing list.
5. Finalize and accept the RFC on the next community call.
6. If consensus exists on the list/call, one Board member (other than the proposer) records the decision and consensus in a JIRA ticket.
7. If no consensus on the list/call, the proposer escalates the decision to the Board via JIRA ticket. The Board uses the "Decision Process" defined in this document.

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