

# **Utilizing & Developing Open Technologies for National Defense**

Mil-OSS connects and empowers an active community of civilian and military open source software and hardware developers across the United States.

This grassroots movement is a collection of diverse patriots that work for and with the Department of Defense and believe in adopting open technology innovation philosophies to effectively defend our nation.





#### **Recent News**

A lot goes on between the annual Working Groups; take a look to see what has been happening around the Military Open Source community.

mil-oss.org/news



#### **Presentations & Papers**

Be prepared for your next OSS-related briefing. We've collected quite a few papers and presentations on OSS to help you promote OSS.

mil-oss.org/papers



#### Mil-OSS Google Group

Join the original conversation. Google Groups has served Mil-OSS well, you're invite you to join us.

groups.google.com/group/mil-oss



#### OSS Projects in the DoD

Find an un-classified open source project already underway and in use in the military. We're always adding new projects.

mil-oss.org/oss-in-dod

## Our Mission

Mil-OSS exists to improve technology development and innovation across the DoD by connecting and empowering an active community of patriotic developers and solution providers, improving use of the tax-payers' funds through thorough requirements extraction, wise execution, and increasing the speed new technologies enable the Warfighter by leveraging open source and open technology innovation philosophies.

### Our Goals

- Create new open source solutions that are more effective for the Warfighter
- Increase reuse of code and existing open source projects
- Increase awareness of existing reusable and open source technologies
- Initiate events and opportunities that enable Warfighters to transfer requirements directly to developers
- Educate developers on how to better develop for the Warfighter
- Improve collaboration with allies

## **Our Guiding Principles**

**We believe that** contributing to OSS in the DoD is a patriotic contribution to our national defense.

**We believe that** as stewards of taxpayer funds, we are responsible to be efficient, cost-effective and innovative.

*We believe in* the innovative power of people, especially in large numbers.

**We believe in** finding and meeting challenges—good solutions to real problems will find their needed funding.

## WHY OSS IN THE MILITARY

The military faces virtually every information technology problem that industry does, however the primary focus of technology research for the Department of Defense (DoD) is focused on systems that directly support the war-fighter. Less visible systems tend to have slower improvements and fewer newcomers due to the bureaucratic policies and practices within the infamous military-industrial complex. In spite of the operational tempo, these challenges must be met in a practical, adaptable, and affordable way.

## Re-Deployable Solutions to Redundant Problems

The nature of the military lends itself to redundant problems at a variety of geographically distant locations. Redundant problems should never be met with redundant problem solving. Open Source enables the reuse of solutions to common problems as well as the adaptability to expand from a basic problem into a new solution or service.

## Highly Adaptable

Having the availability of human-readable source code makes adapting that code to meet requirements a practical method of meeting requirements. This practice is what open source developers want, expect and mean when discussing "free software"—free to study, modify, and distribute. This flexibility is the keystone that makes Open Source Software a pragmatic, practical solution for the DoD.

The 451 Group's Report found that before deploying Open Source as a solution 43% decision makers felt that cost was the most important benefit of OSS. After their Open Source project deployments, 13% the same respondents no longer felt that cost was the greatest benefit of OSS, instead found Open Source's flexibility to be its primary strength—a view held by 69% of OSS decision makers.

### **Cost-Effective Solutions**

One of the compelling arguments for using Open Source Software, especially in tight economic times, is that it is cost-effective. By utilizing pre-built foundations, it is quicker and easier to build from them rather than starting from scratch.

Development costs are a driver in the decision to use Open Source Software. A report by the 451 Group found that 43% of decision makers said that lowering costs was the single most important reason for adopting OSS. The report also noted that 84% of respondents acknowledged that the implementation of Open Source Software had met or exceeded their cost savings expectations.

## Vendor-Neutral Rapid Deployment

Because the source code is readable, it is impossible to become locked-in with a specific vendor. Although this has the obvious benefit of future vendor competition, the potential for rapid deployment is a strong case for OSS in the DoD. Open Source enables the DoD to efficiently and cost-effectively pull together large short-term ad-hoc tiger teams that need quick IT tools for evolving mission solutions. An outstanding example of such an effort was the disaster relief efforts in the wake of the earthquake in Haiti--mapping teams worked together to rapidly map the new areas to aid in coordinating emergency workers movements around Port-au-Prince.