DHS report makes recommendations for greater open source software use in government

By Molly Bernhart Walker

A report commissioned by the Homeland Security Department's Science and Technology Directorate say barriers to using and developing open source software must be addressed as IT budgets across government continue to tighten.

Security and the perceptions of security are just as problematic as "non-security" challenges to open source software, or OSS, says the report's authors – David Wheeler, a research staff member at the Institute for Defense Analyses, and Tom Dunn, senior research engineer at the Georgia Tech Research Institute.

The report – based on interviews with 31 OSS experts, suppliers and potential users – exposed fears about low-quality code and malware, concerns about commercial support, inertia, procurement issues, and certification and accreditation, or C&A, problems.

Wheeler and Dunn write that contractors and government employees do not understand the permissions given to them around OSS under existing policy. Instead, many are waiting for further legislation or an executive order to encourage the shift to open source.

The authors add that there is a widespread belief in government that "commercial software" is not open source. But , a five-year-old, landmark Defense Department memo (pdf) asserted that OSS qualifies as a "commercial item" under federal acquisition policy definition of the term.

"Many of these challenges can be addressed by promulgating education and guidance on OSS for different roles," according to the Aug. 29, 2013 report (pdf) that was only recently made publicly available, according to a post on Wheeler's blog Oct. 20.

The report makes 10 recommendations for the government to encourage the OSS use:

- Share success stories of current OSS use in government;
- Diminish fears of transition costs by emphasizing modularity and standards;
- Spread the understanding that OSS can actually assert higher quality code in a more transparent way and that evaluation is possible;
- Tell employees and contractors that there are many options for OSS support and warranty;
- Incentivize program offices and contractors to build collaborative communities and share code;
- Refocus C&A efforts on risk management instead of implementing inflexible processes;
- Switch from proprietary formats and protocols to modular systems and open standards, which are more open to alternative solutions;
- Simplify processes to release software developed using government funding;
- Create guidance on evaluating OSS; and
- Provide OSS education, intellectual rights and licenses on government procurement and C&A.

For more:
-downloadthe report, "Open Source Software in Government: Challenges and Opportunities," (pdf)