

TO: DEPARTMENT OF ENERGY NATIONAL LABORATORIES

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SUBJECT: POLICY GUIDANCE – OSS LICENSE RELEASE OF SOFTWARE DEVELOPED WITH ASC AND OASCR FUNDING

POLICY:

The U.S. Department of Energy (DOE) Office of Science/Office of Advanced Scientific Computing Research (OASCR) and the Office of Defense Programs/Office of Advanced Simulation and Computing (historically known as ASCI) are establishing the following policy:

- 1) All publicly released DOE Laboratory software, which is developed using funding from OASCR and/or ASCI, shall be either:
  - a. designated and distributed to the public as Open Source Software (OSS); or
  - b. designated as an unrestricted releasable software to the public by delivering the software to DOE's Energy Science and Technology Software Center (ESTSC) for sole distribution using DOE standard software licenses.
- 2) HQ Program approval will be required for software to be restrictively licensed when:
  - a. Laboratory successfully demonstrates that extraordinary circumstances exist such that commercialization of software through restrictive licensing is necessary; or
  - b. the software is subject to export control, classification or contractual requirements.
- 3) The DOE Laboratories will ensure that subcontracts to contractors working directly for Laboratory code development will include provisions consistent with this policy.

BACKGROUND:

OASCR and ASCI have strategic interests in the software products produced at DOE Laboratories to be released to the public. The open-source model for software development and release in the high-performance computing (HPC) community is well established and provides the following benefits:

- OSS provides HPC sites the opportunity to identify and fix bugs quickly;
- The OSS model yields important contributions to the global state of the art, thus providing significant leverage of Government investments;
- The OSS model provides a hedge against "change in support" status for software required to execute the missions of these Programs. This yields protection for the investments made in the software; and
- Access to source code of OSS can enhance cyber security by facilitating rapid identification and repair of security vulnerabilities.

GUIDANCE:

In February 2002, the DOE Headquarters patent counsel issued a policy (IPI-II-1-01: Development and Use of Open Source Software) for authorizing and implementing OSS at the Laboratories.

This policy was subsequently implemented at DOE Laboratories when DOE Contracting Officers issued letters that granted permission to the Laboratories to assert copyright in OSS by following a specific procedure. DOE patent counsel is intending to modify future M&O Laboratory Contracts to include an OSS provision as part of the Rights in Data--Technology Transfer clause.

The following guidance will assist the Laboratory in implementing this ASCI and OASCR policy.

A) Laboratory

In conjunction with procedures that each DOE Laboratory has established for creating, using and distributing OSS, ASCI and OASCR implement the following guidance for DOE Laboratories to follow when distributing software funded by ASCI and OASCR.

- a) For each publicly releasable software package funded partially or in whole with ASCI and OASCR funding, the Laboratory shall either:
  - i) designate and distribute to the public as Open Source Software (OSS); or
  - ii) designate as an unrestricted releasable software to the public by delivering the software to DOE's Energy Science and Technology Software Center (ESTSC) for sole distribution using DOE standard software licenses.
- b) Before releasing the software by the above methods, the Laboratory shall ensure that the software is not subject to proprietary restrictions (i.e. containing third party proprietary software), export control, classification restrictions, or release restrictions imposed by other funding sponsors. If any of these situations apply, the Laboratory shall consult with DOE patent counsel, who will consult with the appropriate DOE funding program office.
- c) In each software development effort, the Laboratory shall select an appropriate OSS license for the software product that is not restrictive in distribution and use of the software. It is the intention of the funding program office to release the software to the public for use by the HPC community. If there are questions regarding specific licenses, the Laboratory should consult with DOE patent counsel, who will consult with the DOE funding program office.
- d) If the Laboratory believes that the software should be released by another mechanism, the Laboratory shall contact the DOE patent counsel, who will consult with the funding program office as prescribed by paragraph (C) below.
- e) Periodically, ASCI and OASCR will conduct a review of each Laboratory's distribution of software funded by ASCI and OASCR. Any suggestions or changes should be implemented in order to continue funding.

B. Subcontracts issued by a Laboratory

The Laboratories routinely issue subcontracts for a multitude of reasons ranging from procurement of entire software packages to independent consultants assisting in creating, improving, debugging

software under Laboratory direction. For the latter-type of subcontractors that develop software directly for the laboratory, the subcontracts shall include a modified data rights provision to implement this ASCI and OASCR policy. It is expected that DOE and DOE/NNSA patent counsel will issue legal guidance with suggested modifications to the RIGHTS IN DATA contract clause. This policy shall not apply to: (a) software that is obtained by the Laboratory in the commercial marketplace (commercial software); (b) commercial software that is modified or adapted by a subcontractor for use at the Laboratory; or (c) software developed by a subcontractor for use by that subcontractor but not by the Laboratory (e.g., the ASCI Alliances code development efforts).

C. Exceptions for Laboratory Commercialization

There may be extraordinary circumstances when a software package should be commercialized or distributed by a different mechanism, and other circumstances where software should not be released at all. For example, the software may be export controlled, contain proprietary software from third parties, or contain classified code (in which case it's not publicly releasable). Another example is where contractual obligations, (e.g., HPSS software commercialized by IBM and Laboratories), require specific distribution based on DOE contracts and agreements. However, these exceptions are likely to be rare. If a Laboratory believes that a software package should be commercialized, then the Laboratory should consult with DOE patent counsel, who will consult with the DOE funding program office for specific approvals. In most cases, the Government will reserve the right to license (nonexclusively and royalty free) to a third party if any Government program is better served by use of the copyrighted software.

Conclusion

ASCI and OASCR expect that this policy will be implemented in conjunction with existing OSS procedures at each DOE Laboratory. ASCI and OASCR intend that the publicly released software developed under its funding reach the HPC community for use and hopefully acceptance. In this way, software developed at the laboratories can be freely used by Government Contractors to further the goals of ASCI, OASCR and other Government programs with a minimum of duplicative efforts.

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