

**National Aeronautics and Space Administration**  
**Headquarters**  
Washington, DC 20546-0001



Reply to Attn of: **Office of the Chief Information Officer**

**TO: Distribution**

**FROM: Chief Information Officer**

**SUBJECT: NASA Federal Source Code Framework**

This memo defines NASA OCIO activities and provides roles and responsibilities to ensure compliance with Office of Management and Budget (OMB) M-16-21 “Federal Source Code Policy: Achieving Efficiency, Transparency, and Innovation through Reusable and Open Source Software.”

In 2016, OMB released M-16-21, which seeks to ensure that new custom-developed Federal source code be made broadly available for reuse across the Federal Government. M-16-21 also requires agencies, when commissioning new custom software, to release at least 20 percent of new custom-developed code as Open Source Software (OSS) for three years, and to collect data concerning new custom software to gauge performance. This approach is consistent with the Digital Government Strategy “Shared Platform” approach, which enables federal employees to work together—both within and across agencies—to reduce costs, streamline development, apply uniform standards, and ensure consistency in creating and delivering information.

NASA OCIO is the responsible office for developing, maintaining, disseminating, and implementing new policy and procedural requirements of M-16-21.

The following actions are assigned to the NASA OCIO Information Management Office:

**By December 6, 2016: Inventory and publish a machine-readable source code project inventory that conforms to the code.json schema for cataloging metadata of code projects on code.nasa.gov.**

**Annually, beginning in FY 2017: Release a minimum of 20% of custom code as Open Source Software each year. The percentage calculation shall be based on the total number of code projects in the code inventory.**

**By July 2017: In coordination with the Office of Procurement and the Office of General Counsel, develop and implement a policy or process that requires NASA to apply the 3-Step Software Solutions Analysis (as outlined in the M-16-21) during the**

procurement phase for new IT systems. When contracting for developer services, NASA will encourage vendors to use open source technology wherever possible.

By FY 2018: Implement a policy or process that will ensure appropriate rights to custom code, recognizing that a vast majority of code produced within NASA is written by contractors. In order to increase the percentage of delivery of source code using free and open licensing, OCIO will work with the OMB code.gov and Tech Transfer teams to develop core contract language to disseminate within the agency. NASA OCIO will coordinate with the Office of Procurement, Office of General Counsel, Office of the Chief Engineer, the Space Technology Mission Directorate, and other stakeholders to ensure appropriate contract language is in place by FY 2018.

More information about the implementation of these requirements will follow. This is for your general awareness. The OCIO will work to meet the initial inventory of machine-readable source code for the December 2016 milestone. All questions regarding this memo should be directed to Jason Duley at (650) 604-1834 or [jason.duley@nasa.gov](mailto:jason.duley@nasa.gov).



Renee P. Wynn  
Chief Information Officer

#### Attachments

OMB M-16-21 "Federal Source Code Policy: Achieving Efficiency, Transparency, and Innovation through Reusable and Open Source Software."

#### cc:

Administrator/Mr. Bolden  
Deputy Administrator/Dr. Newman  
Associate Administrator/Mr. Lightfoot  
Chief of Staff/Mr. French  
Deputy Associate Administrator/Ms. Roe  
White House Liaison/Ms. Kornell  
Associate Administrator for Strategy and Plans/Mr. Cremins  
Chief Financial Officer/Mr. Radzanowski  
Chief Information Officer/Ms. Wynn  
Chief Engineer/Mr. Roe  
Chief Health and Medical Officer/Dr. Williams  
Chief Safety and Mission Assurance/Mr. Wilcutt  
Chief Scientist/Dr. Stofan  
Chief Technologist/Vacant  
General Counsel/Ms. Thompson-King  
Inspector General/Mr. Martin