All code related to ARM.gov is managed using both cloud-hosted as well as ARM-hosted Git repositories that enable cross-institution collaboration. Vagrant is used to simulate the website in a local development environment for easy testing before deployment.

AWS OpsWorks is a service for configuring and running automated deployments using Chef (Ruby). The ARM.gov web servers and CMS server are managed 100% via code. With the click of a few buttons the development team was able to clone the production environment for testing. The testing services remain turned off while not being used in order to keep costs low.

The Content Management System (CMS) behind the website is a WordPress instance where ARM Communications staff log in to control what you see on ARM.gov. It is backed by an AWS-provided MySQL server that is automatically updated and backed up.

AWS provides a hosted, distributed Elasticsearch service that is being leveraged for all content served on the website. Its indexes are synchronized with the AWS-hosted CMS in addition to ARM’s internal, BNL-hosted databases.

The Simple Storage Service (S3) provides fast, redundant file storage. It is currently used for backing up website media from the EFS but in the future it will take the place of EFS as the sole media repository to lower cost even further.