

## 5.1.1.1.5

5.1.1.1.5 - The repository shall have software technologies appropriate to the services it provides to its designated communities.

Long-term technical sustainability depends upon the ability of the infrastructure to evolve gracefully over time in response to changing conditions. The micro-services approach places a strong emphasis on service modularity and clean public interfaces. Adherence to these principles facilitates both the incremental enhancement and wholesale replacement of system components without impinging on overall service availability or established workflows. Since each microservice is small and self-contained, they are collectively easier to implement, maintain, and enhance. Although the scope of any given micro-service is narrow, complex global behavior is nevertheless an emergent property of strategic combinations of these services. All of the Merritt micro-services will soon be publicly available for download, evaluation, and deployment under a BSD open source license. (See Table 2.) The specifications for all services and their subcomponents, also publicly available, have undergone significant community review. An important validation of the Merritt approach has been demonstrated by a number of independent implementations of key specifications and services.

Version	Date last updated	Updated by
1	May 21, 2012	pw