Position Statement on Deployment

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Dep--1: Objective

This position statement is designed to provide some basic guidelines and points of discussion regarding the deployment requirements for the application developed as part of the ArchivesSpace project. Generalized requirements regarding deployment were identified based on information gathered from the community during the ArchivesSpace planning process. The high-level requirements\(^1\) state that the application must:

- present the lowest possible barriers for acquisition, installation, implementation, and operation for archives of all sizes
- be implementable using simple installers without extensive prior configuration or the installation of complex and/or non-standard dependencies
- be installed/packaged for the following uses:
  - a single user … perhaps packaged as a virtual appliance;
  - one or more repositories in a networked configuration, using widely available server configurations;
  - a hosted service for multiple communities (potentially allows for implementation across multiple servers as a service oriented architecture).

These identified requirements are based on the principle that end-users with varying levels of technical competence should be able to install the application. It is expected that the following uses listed above will represent deployments of increasing complexity, and that end-users deploying single user instances of the application should have the lowest technological and application use barriers possible overall.

Dep--2: Recommendations

The ArchivesSpace makes the following recommendations regarding deployment options.

Single-User Deployment

The preferred deployment scenario for single-user or single-machine deployments is a software appliance that can be downloaded from a website or accessed as a virtual machine image. The virtual machine should be bootable using commonly available (and ideally open source) virtualization software executable on Windows, Mac OS X, and Linux, such as VirtualBox or VMWare Player. The packaged virtual machine will contain all of the application’s dependencies, including any necessary web servers, application’s persistence layer (e.g. relational database management system), and any supporting software necessary to run the application. It is expected that the use of a virtual machine for the application will allow for better cross-platform support for users supporting very small deployments or individuals that wish to evaluate the application. In a single-user deployment, the application will be functionally equivalent to all other deployment scenarios.

Multi-User Deployments

For multi-user deployments, regardless of size, the application’s core code will be available for download and packaged with installation instructions identifying the application’s dependencies and how to satisfy them. Key infrastructural components, such as webservers, database systems, programming languages, etc. should be installable using standard mechanisms (e.g. package management systems) on the host operating system.

Multi-Tenant Deployments

For multi-tenant deployments, the application should be flexible enough to allow its infrastructure to be installed across multiple servers if necessary. For example, the application should not prevent implementers from hosting their persistence layer on a separate host from that which hosts the core application code.

Relational Database Management Systems

Pending discussion with the ArchivesSpace project and the development team, the application will be built on a relational database management system. We intend that the application support commonly available, open source RDBMS platforms, and recommend MySQL and Postgres as the primary platforms for which the project target its development.

Browser support
The ArchivesSpace project recommends that given the application’s implementation as a web-based application that browser support should be considered carefully. The project is considering a tiered support option for browsers, wherein issues identified within the top tier of support are identified as blocking issues. Issues with browsers not included in the list of those the project commits to supporting would not be considered blocking issues.² A draft set of tiers for discussion is included below.

Guaranteed support: Recent versions of Firefox, Chrome

Non-guaranteed support: Firefox 3.6, Safari 5, Internet Explorer 9

² For example, see http://wiki.collectionspace.org/display/DOC/Supported+Browsers