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Portal Best Practices

A true services oriented architecture is designed to span different types of application servers, rather than relying on a single type of application server. To fully utilize this architecture, openness to resources developed in different programming environments and hosted on multiple application servers is paramount.

There are two approaches available to a portal when leveraging a distributed services oriented architecture that spans multiple platforms.

One approach places all portlets – modules that provide content to its calling portal container to be displayed on a portal page - within the same application server as the portal server. Services are then accessed remotely. These remote services can include Web services, or Web services for remote portlets (WSRP), and are accessible by adhering to appropriate standards.

An alternate approach places the portlets on disparate application servers, accessible as remote server-side services, in a distributed Hypertext Transfer Protocol (HTTP)-based architecture. This second approach creates an architecture which is more immediately scalable than models in which all portlets run within the same application server as the portal, while supporting multiple platforms. This second approach towards a distributed architecture also allows the portal to integrate more portlets, without requiring additional infrastructure at the portal server.

Both approaches are open to portlets hosted on different platforms when Web services for remote portlets are implemented. A second approach goes beyond the dependency on the WSRP standard and adoption for remote access, when natively it supports simple Web-based services – HTML, JSP, and ASP pages – along with its own portlets to be hosted on different and remote platforms.

Beyond the traditional approach of presenting information from different systems as portlets appearing one beside the other, a comprehensive approach to integrating content, security,

user information and search engines via Web services to be consumed by portlets is the best approach.

Portlet Standards
This architecture includes support for both WSRP and the Java Specification Request 168 (JSR 168) portlet standards. These standards are important because they free the Commonwealth from basing technology decisions on whether a vendor's proprietary conventions prevail in the market. The portal standards allow the Commonwealth to develop industry-standard portlets, and ensure that the investment can yield a return within any portal.

Implementations of WSRP are based on a Web Services Architecture, which allows portlets to run remotely from the application server hosting the portal. The Java JSR 168 specification allows for portlets created for one portal solution, to execute within a non-native hosted Java based portal container. This architecture helps ensure that the portal remains open to resources hosted on a wide range of application servers, and unaffected by faults in any one portlet. This architecture also supports a wide range of other integration components that run as Web Services, for indexing content, importing security information, federating searches and profiling users.

Predefined supplemental document type codes are listed below:
APP = Appendix **BPD** = Best Practice Document **GEN** = General Information Document
OPD = Operations Document **RFD** = Existing Supporting Document Referenced by this ITB **WHP** = White Paper