Enterprise Portals – What Are They?

The Enterprise Portal, despite having been around in one form or another for a decade, is still not a broadly understood technology platform. This problem has been compounded by the overloading of the word "portal" across a host of web technologies, to the point where the word has largely lost its meaning.

So, what is an Enterprise Portal? At its core, it is a single gateway website for all users to find and access all the services and content provided by the enterprise. To that end, the Enterprise Portal provides three major capabilities: Aggregation, Personalization, and Access Control.

Aggregation

To provide access to all the services and content of the enterprise, the portal must aggregate them. This is not to say that everything is directly managed by the portal or always accessed through the portal – quite the contrary. The enterprise portal simply provides a view or a path to everything within the enterprise. This can consist of anything from simple deep links into websites, to dashboard-style displays of services, to full-fledged applications (simple or complex) that run completely within the portal, to any combination of these. All that gives enterprise users a single place to start, no matter what they are looking for.

For simpler activities, it is preferable to keep the user within the portal, so that it is easy to switch around to other activities. For more complex activities, it may be better to go to the native application user interface rather than to try and force everything to exist in the portal. To soften the boundary between the portal and other user interfaces, portals are combined with single sign-on infrastructure so that the user only authenticates once to everything.

For further aggregation, enterprise portals can federate content from multiple portal platforms. Since the ultimate goal of the enterprise portal is to have a single gateway to everything the enterprise provides, federation can be a valuable tool in large enterprises.

Personalization

The interests and needs of each user in the enterprise will vary substantially. For an enterprise portal to be useful, it must not attempt to provide everything to everyone in the same way. In a big enterprise with a wide variety of services and content, this can be overwhelming and will ultimately make the portal impossible to use efficiently. Instead, the portal must be personalized for each user.

This personalization comes in two major forms. The first is automatic personalization based on the groups, roles, or attributes that the user inherently has. By understanding more about the nature of the user, the enterprise portal automatically provides prominent placement of services and content most relevant to the user.

The second form is manual personalization that allows the user to customize the portal to suite their own preferences. This personalization includes the ability to add or remove elements from the portal layout, the ability to change how the portal elements are organized, and the ability to configure the details of the individual elements themselves.

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Access Control

Given that the portal aggregates a wide range of services and content, not all elements will be appropriate for access by all users. So, the enterprise portal provides a way to control access to individual elements. Based on the privileges, groups, roles, attributes, etc. of the user, the portal decides if the user has access to each element. If services or content are not accessible to the user, then they gracefully disappear from the user view of the portal. If elements are accessible to the user, then the specific abilities of the user within the service or content are still managed by the portal.

Service-Oriented Architecture

In recent years, a major trend in enterprise computing is the Service-Oriented Architecture (SOA). Generally speaking, this means to build the enterprise as a set of loosely-coupled services that can easily be combined to accomplish various tasks, instead of as a set of vertical applications that are hard to integrate. This approach allows the enterprise to easily adapt itself to new needs by making it simple to create composite services and UIs.

Within a truly Service-Oriented Architecture, the Enterprise Portal becomes the natural home for the user. Because services are no longer tightly-coupled with native user interfaces, it is easy to build simple UIs for a variety of tasks within the portal and then connect them to the enterprise services they need. In effect, the Enterprise Portal *is* the User Interface of the Service-Oriented Architecture.

What is *not* an Enterprise Portal?

As mentioned previously, the word "portal" has become overloaded in enterprise computing. So it is important to point out other solutions that might be termed portals, but that do not provide the full capabilities of an Enterprise Portal.

Content Portals – There are a wide range of systems that are primarily about managing and delivering web content. These are frequently used as websites that can be easily and quickly updated by a number of users without requiring a lot of technical skills. While these content portals do typically provide some level of personalization and access control, they do not aggregate services and content from throughout the enterprise. In fact, these may be one of the content systems that an enterprise portal aggregates in turn.

Collaboration Portals – Some platforms are built primarily as places for users to collaborate through a variety of tools and content. These may include discussion forums, wikis, blogs, and others collaboration tools. While collaboration tools are great candidates for inclusion in an enterprise portal, these collaboration portals do not typically aggregate other enterprise services and content in order to provide a single enterprise portal.

Vertical/Application Portals – Increasingly, large enterprise applications are providing a portal of their own. Within the domain of that application, these portals provide the aggregation, personalization, and access control of an enterprise portal. However, since they are limited to the domain of the application, their scope is not broad enough to be a true enterprise portal. These application portals are good candidates for federation.

As we can see, a common theme in these other portal platforms is that they may well provide some amount of personalization and access control, but they do not provide aggregation that truly extends across the enterprise.

These platforms, like many other enterprise applications, provide the material that the Enterprise Portal seeks to unify. This allows the Enterprise Portal to deliver a single gateway into all the services and content that the enterprise has to offer.