

YAHOO!® - DELIVERING ESSENTIAL PORTAL CONTENT FOR YOUR ORACLEAS PORTAL

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INTRODUCTION

An enterprise portal provides organized access to essential applications and information on a personal “webtop”. By combining various types of business information, including **Internet content**, enterprise applications, and internal business processes, a portal creates a single point of access to speed decision-making and improve workplace productivity. This essential blend of internal data coupled with Yahoo! content within the framework of **Oracle Application Server Portal** (Figure 1) helps expand portal usage and drive widespread adoption among target audiences. In today’s economic environment, access to timely, relevant information is a key competitive differentiator. **You’re expected to deliver more, but you have fewer resources to get it done.**

My Yahoo! Enterprise Edition portlets

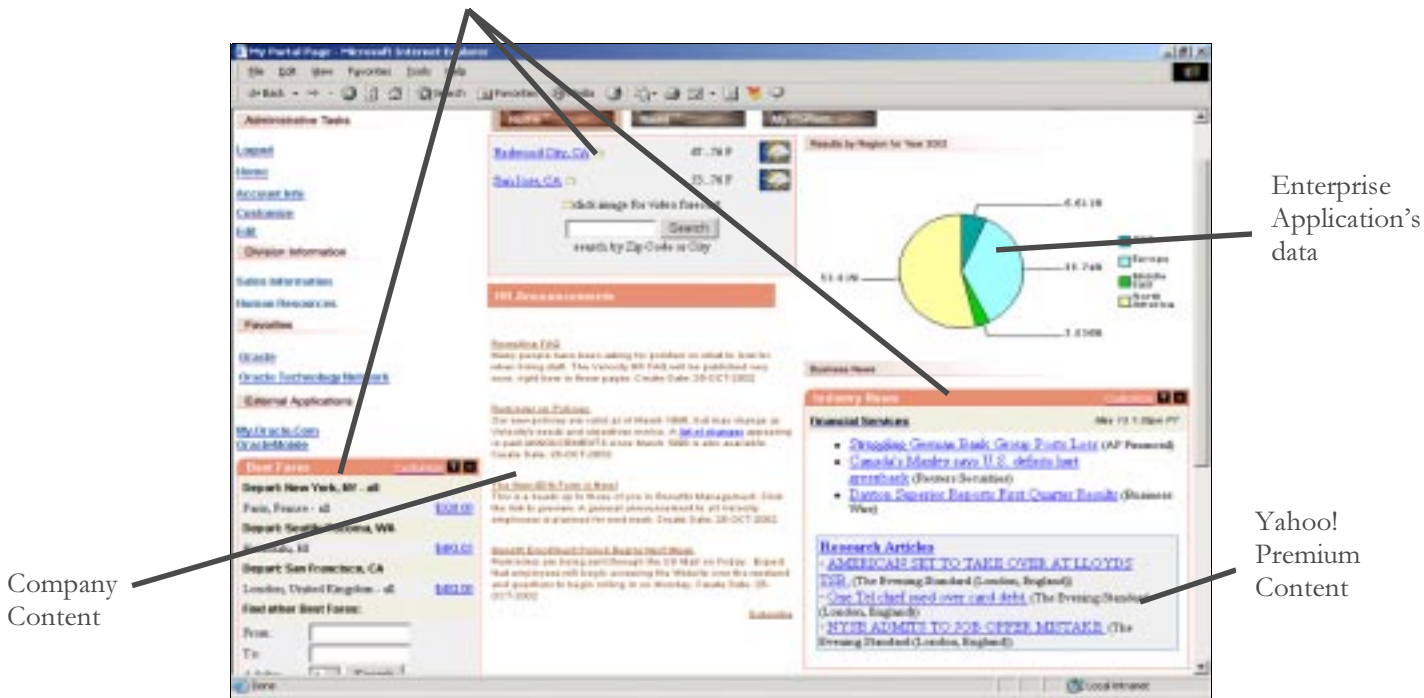


Figure 1: Yahoo! Content in the Context of Portal and Enterprise Content built on OracleAS Portal

Oracle Application Server Portal (OracleAS Portal) is an enterprise portal that combines a rich, declarative environment for creating a Web interface with powerful information publishing and management capabilities. It includes an extensible framework for J2EE-based applications. Using OracleAS Portal, e-businesses have the power to connect employees, partners, and suppliers with the information they need, and the flexibility to create customized views tailored to each community.

You have many choices for external content. You may end up purchasing multiple content feeds that may require costly custom integration with your portal infrastructure. Then there are all the overhead costs – business, legal, development, operational, and support - associated with managing and maintaining these multiple supplier relationships. Yet you still may not be able to satisfy the external content demands of your business users.

Therefore, when implementing your portal, the consideration of the costs involved in blending external business content with internal applications and services cannot be underestimated. Yahoo!'s ability to aggregate, integrate, and deliver high-value, personalized content is continually proven every month through its leading reach into the workplace (72.9%, reported by Nielsen/NetRatings, June 2003). This white paper describes how My Yahoo! Enterprise Edition and Oracle’s portal capabilities can work for your company.

This white paper will demonstrate how:

- The bottom line costs of delivering external content from **multiple suppliers adds up**.
- **My Yahoo! Enterprise Edition** addresses your business needs for external content.
- The **Oracle Application Server (OracleAS) Content Provider for My Yahoo! Enterprise Edition** seamlessly delivers Yahoo! content to OracleAS Portal customers and users.
- Oracle will **save over a million dollars** and how its employees benefit from the addition of Yahoo! content to Oracle’s Employee portal – My Oracle.

DELIVERING ESSENTIAL PORTAL CONTENT AND TOOLS TO THE ENTERPRISE

THE BOTTOM LINE COSTS OF DELIVERING EXTERNAL CONTENT

In seeking answers to their questions, 79% of business users turn to the Web first^{1,2} for their information needs. As Outsell in their study notes, “The Internet is the de facto place to go for external content”. While Web content is free, and offers an abundance of self-service on demand information, it also offers a lot of challenges:

- Quantity - There are millions of pages out there. Do your users know where to find what they’re looking for?
- Quality - Can you really trust everything you find on the Web? In an age where not all Web content is trusted content, disinformation is widespread. You get what you pay for. The pendulum is swinging away from “free” and back to “fee”.
- Usability - No consistency of user interface or user experience across Web sites.

That is why companies across a wide range of industries spend millions of dollars purchasing external content for distribution within their enterprise (see Table 1).

Industry	Central Buyers	Departments/Individuals	Total
Finance	\$1M	\$5.5M	\$6.5M
Manufacturing	N/A	\$5.4M	\$5.4M
Technology	\$1.1M	\$2.8M	\$3.9M
Pharma & Biotech	\$1.6M	\$1.5M	\$3.1M
Chemicals	\$1.6M	\$925K	\$2.5M
Energy	N/A	\$1.4M	\$1.4M
Govt. & Education	\$1.4M	N/A	\$1.4M

Table 1: Companies purchase external premium content to supplement the free Web³

¹ Source: Outsell Super I-AIM Survey of 6300 Knowledge Workers

² Super I-AIM Research, Outsell Inc., 7/2001

³ Table 1 includes total content expenditures (print + electronic) consolidated across multiple buying audiences: central buyers,

What does this mean for your company?

- Users typically spend 20% of their time just searching for external information⁴ (or alternatively one day per week).
- Average cost to US businesses is \$10,000 per professional employee per year in lost productivity.⁵
- In addition, companies spend—and waste—more and more money to make it easier for business users to find relevant content by bringing it inside the company⁶
 - Global 2000 companies on average spend \$3,500 per employee, while smaller companies spend \$2,000 per employee.
 - The average department spends \$300 per employee, while the average individual spends \$1000 each.
 - 70% of desktops have access to premium content, but only 20% actually use it.

THE BOTTOM LINE

The bottom line is that it is costly to manage and meet all your information needs from multiple suppliers. You may have to perform costly custom integration with your portal infrastructure. Then there are all the related business costs associated with managing multiple supplier relationships, even before licensing fees are paid. You will need business, legal, development, operational and support staff to manage and maintain these multiple supplier relationships. As well as their salaries, you'll need to add in all the overhead costs. The costs will also be recurring. With multiple suppliers you'll have to track when the renewals are going to occur. As the 'My Oracle' case study demonstrates, this all adds up.

Even free information isn't free, if it leads to the wrong business decision, or if it doesn't provide employees a suitable content solution.

Business users need timely, relevant, personal business information to effectively do their jobs. Your company can't afford to manage multiple content supplier relationships. Portals without good external content are less likely to get used.

Oracle has partnered with Yahoo! to provide OracleAS Portal customers more business news and productivity-enhancing tools for their employee portals. Customers now have access to more than 100 pre-built Web-based applications, called portlets, featuring content from more than 2,000 Web and premium news and trade sources. These Yahoo! portlets aggregate, personalize, and deliver timely content directly to users of enterprise portals running on Oracle Application Server.

MY YAHOO! ENTERPRISE EDITION – ADDRESSING YOUR BUSINESS NEEDS

Employees need timely, relevant, personal business information to effectively do their jobs. Yahoo! has built a successful global business based on the 80/20 rule: 80% of the users are looking for the same 20% of the information. Yahoo! delivers the types of news and trade information that your workers want and need everyday to do their job.

departments and individuals. Source: Outsell Market Sizing Study 2002

⁴ “On average, people in the functions we studied spend 8 hours per week [20%] obtaining, reviewing and analyzing external information. Ten percent of all users spend over 20 hours per week looking for information.” - Outsell: “Managing Online Information to Maximize Corp. Intranet ROI,” July '01- Survey included 10 end-user groups across 20 industries

⁵ Lost productivity: average cost to US corporations of about \$10,000 per year per professional employee, and \$107 billion each year for American companies. Source: Outsell: “Super I-AIM: Executive Summary,” July '01

⁶ All “Wasted Money” dollar figures are attributable to Outsell's Custom Report: Market Sizing Study

My Yahoo! Enterprise Edition provides essential content and tools for your portal that makes users more productive. My Yahoo! Enterprise Edition is:

- **Comprehensive:** 2,000+ Yahoo!-certified sources, all checked for quality.
 - Access to 4,000+ specialty sites, with more coverage than the Web alone can provide.
 - 1,000+ premium news and trade sources from the Gale Group (A Thomson Company).
- **Delivered Directly to Your Portal Page:** Your users can simply and easily add Headlines, Industry News, Company News, NewsTracker, as well as popular portlets such as Stock Quotes, Weather, Maps, etc. to their personal OracleAS Portal page.
 - Full-text content resides on Yahoo!’s network servers, not on your corporate portal infrastructure, sparing you the expense and hassle of content hosting.
 - The OracleAS Content Provider for My Yahoo! Enterprise Edition allows users to link their My Yahoo! content preferences and personalization settings with their corporate portal ID.
 - Blending external content into the corporate portal means end users have a single view to all their personalized business information.
- **Easy to Administer:** Portal administrators can use built-in tools to centrally manage the OracleAS Portal framework and to control which Yahoo! portlets are exposed.
- **Aggregated Content Feed:** OracleAS is pre-integrated to receive content feeds via direct connection to Yahoo!. This minimizes the amount of network traffic required to retrieve all the external portal content, thus optimizing performance.



Figure 2: My Yahoo! Enterprise Edition is the “unified” content suite your company needs

“The Yahoo! content infrastructure and suite of facilities for portal interaction, provisioning, and navigation offer a consistent and reliable model that portal teams can adopt to help bring their own specific objectives into production without the need to ‘reinvent the wheel’ in the area of user interaction.” - Hadley Reynolds, Delphi Group, Portal

Advantage White Paper: Active Content and Best Practices for the Business Portal⁷.

ORACLEAS CONTENT PROVIDER FOR MY YAHOO! ENTERPRISE EDITION

The OracleAS Content Provider for My Yahoo! Enterprise Edition (simply known as the Content Provider) takes the headache out of adding Yahoo!’s rich, dynamic content to your OracleAS Portal. Because the Content Provider and My Yahoo! Enterprise Edition address all behind-the-scenes requirements, you don’t have to worry about a thing. In fact, the Content Provider is the only way to add Yahoo! content to your OracleAS portal without screen-scraping (which results in copyright infringement).

The OracleAS Content Provider for My Yahoo! Enterprise Edition combines news headlines, weather, stock quotes, and so on with premium business content not found on Yahoo!. In addition, My Yahoo! Enterprise Edition offers business-focused content such as NewsTracker, Industry Performance, and Company News, that have been tailored to satisfy business users throughout the enterprise. The Content Provider can be downloaded for free from Oracle Portal Center on Oracle Technology Network. For OracleAS Portal customers, Yahoo! Inc is providing a free trial subscription to My Yahoo! Enterprise Edition content.

HOW DOES THE ORACLEAS CONTENT PROVIDER FOR MY YAHOO! ENTERPRISE EDITION WORK?

The OracleAS Content Provider for My Yahoo! Enterprise Edition exposes My Yahoo! Enterprise Edition content within OracleAS as dynamic portlets. Built as a J2EE Web Provider using the OracleAS Portal Developer Kit, the Content Provider does all the heavy lifting, including all connections to the Yahoo! Network, so you don’t have to spend valuable resources on content aggregation, integration, management, and hosting.

THE BUSINESS BENEFITS OF THE CONTENT PROVIDER & YAHOO

Together, the Content Provider and My Yahoo! Enterprise Edition can help maximize your portal investment. Here are some points you should consider:

- **Reduce content spending** – Most likely, you’re under extreme cost-cutting pressure and may find it difficult to cost-justify a “premium” price point to put business content on every desktop. The average Global 2000 company spends \$3500/user on external content⁸. Even if you only spend \$100 per user, you are still paying too much!
 - The Content Provider gives you instant access to more than 2,000+ aggregated content sources, from 25 countries, in 13 languages. Knowledge workers obtain access to business critical information and have the opportunity to purchase new premium industry-focused content modules not currently available via the consumer-oriented My Yahoo! Service.
- **Reduce support for multiple sites** – Information unification is a key driver behind your portal initiative. Unification is not limited to internal information, sites, and applications, but must also include useful external content and information, all blended in one place, all to give you more for less. For example, adding references to external content as part of your business process not only saves workers time, but helps them make more informed decisions.
 - Yahoo!’s ability to aggregate, integrate, and deliver high-value, personalized content is proven every month through the portal’s industry leading reach into the workplace (72.9%, reported by Nielsen/NetRatings, June 2003). The fact that workers already seek this information ensures that — when blended with internal content and applications via the corporate portal — your portal can provide a complete, compelling experience that ensures ongoing usage, resulting in increased adoption and Return on Investment (ROI).

⁷ Available for free download: http://enterprise.yahoo.com/pdf/portal/Delphi_PortalAdvantage.pdf

⁸ Source: Outsell Market Sizing Study 2002

- **Leverage previous investments** – You’ve already made a significant investment in Oracle technology. You now want a higher return than what you already receive. This means getting a Return on your Previous Investment (ROPI) — a key goal of the portal unification. Getting the right blend of content and tools is critical to driving adoption and usage of the portal.
- Personalized content makes the portals more relevant, and leads to increased efficiency and productivity. As Yahoo!'s customer case studies have consistently shown⁹, when employees go to the company portal to check their Yahoo! dynamic information, they're more likely to stay and use other portal resources.

SUMMARY – ORACLEAS CONTENT PROVIDER FOR MY YAHOO! ENTERPRISE EDITION

The OracleAS Content Provider for My Yahoo! Enterprise Edition combines much of the same valuable information found on My Yahoo!, such as headlines, weather, and stock quotes, with business content not found on Yahoo!, all in a controlled fashion as determined by your corporate policy. What’s more, users can access both their existing My Yahoo! personalization settings along with your corporate content and applications, all from the same place. With all these advantages, there’s no need for users to go anywhere else!

MY ORACLE AND YAHOO! CONTENT - CASE STUDY

Over a three-year period, Oracle will save over a million dollars in sourcing its external content through Yahoo!. Within My Oracle, Yahoo! drives portal adoption, which drives portal success.

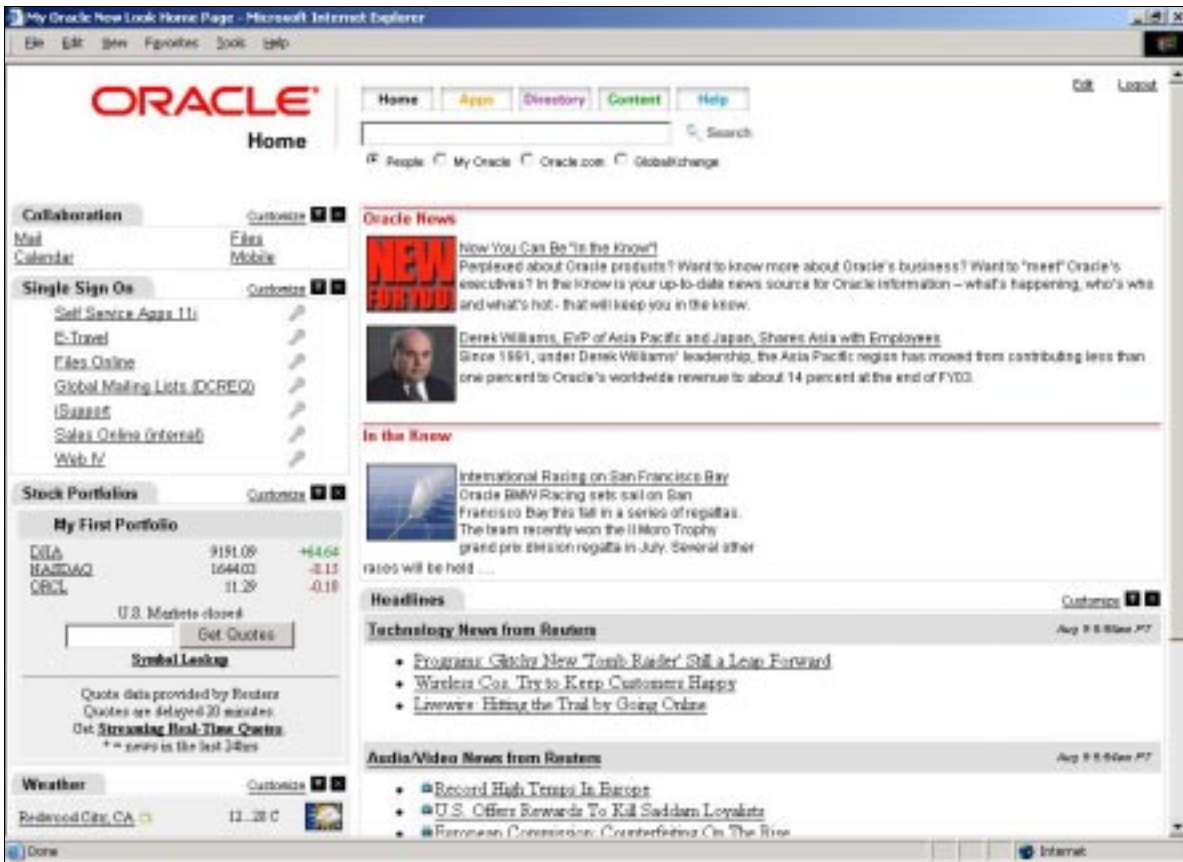


Figure 3: Yahoo! Content in My Oracle

⁹ For example, http://enterprise.yahoo.com/pdf/portal/case_study_honeywell.pdf

This case study shows how Oracle will benefit by abandoning its multiple content feeds in favor of single-sourcing all its external content needs from Yahoo!. To learn how Oracle deployed the Content Provider, please see Appendix 1.

My Oracle is the portal for Oracle employees. A top request from employees is to provide popular external content, such as stock information and industry news. Over the years, several solutions have been implemented, including sourcing external content from over a hundred different providers. This involved at least ten Oracle employees managing the effort, including licensing and administration. With Yahoo!, Oracle not only receives more content from more sources aggregated by one provider, it also saves money. Only one person - on a limited basis - will be responsible for external content for Oracle’s employee portal. In other words, **Oracle gets more content with less... Less effort from far fewer resources.**

MY ORACLE - OVERVIEW

My Oracle (My.Oracle.com) (<http://my.oracle.com>) is an Internet portal that provides Oracle employees with a personalized, single entry point to essential applications and information. The site creates a destination for all of Oracle’s 40,000+ global employees to access all of Oracle’s online services and leading business information sources, including My Yahoo! Enterprise Edition.

To learn more about My Oracle, please see the ‘Portal Implementation Case Study: My Oracle’ White Paper on Oracle Portal Center on the Oracle Technology Network.

MY YAHOO! ENTERPRISE EDITION – SAVING ORACLE MILLIONS OF DOLLARS

At the beginning of 2003, My Oracle had 106 external content providers. In total these providers delivered 150 worldwide news and resource portlets. Analysis of these providers revealed that Oracle spent millions of dollars in overhead costs!

The management and administration of all these providers involved at least \$1.5 million (Table 2) of initial full costs, followed by an estimated \$450,000 (Table 3) of annual costs thereafter. Extrapolating back to when My Oracle was launched internally in 2000, the total amount Oracle has spent on external content is an estimated \$2.6 million. And these are just the administration costs, irrespective of the costs associated with licensing the news feeds.

Estimated First Year Costs			
Resource Type	Estimated head-count	Estimated Full Cost per Person (\$000)	Estimated Full Cost (\$000)
Legal	1	200	200
Business Development	2	150	300
Development	3	130	390
Quality Assurance	2	120	240
Operations	2	150	300
Support	½	140	70
Total	10.5		1,500

Table 2: Estimated First Year Costs for external content offerings on My Oracle

Estimated Annual Recurring Costs			
Resource Type	Estimated head-count	Estimated Full Cost per Person (\$000)	Estimated Total Cost (\$000)
Legal	1/2	200	100
Business Development	1/2	150	75
Development	1/2	140	70
Quality Assurance	1/2	120	60
Operations	1/2	150	75
Support	1/2	140	70
Total	3		450

Table 3: Estimated Annual Recurring Costs for external content offerings on My Oracle

The analysis also revealed:

- Some content was outdated, because the providers were no longer servicing their feeds (e.g. had gone out of business).
- Support no longer existed for some content providers because the individuals or groups that had developed them were no longer available.
- Different implementations required different hardware and software configurations. For example, it was discovered that a single provider needed two hardware boxes to support its news feed.
- Many different sources covered the same areas of content; for example, news was provided by five different sources.
- A lot of external content either had a low usage rate or was not being used at all.
- Some content could not be personalized to meet user’s individual needs.
- Different implementation required different user behaviors to interact with the content. This wasted time, as users had to learn and then remember which interaction model to use with each provider.

The availability of My Yahoo! Enterprise Edition for OracleAS Portal will save Oracle an estimated \$400,000 a year. Over three years that’s a saving of \$1.2 million. Oracle will no longer have to invest in the administration overhead in managing all the different providers, nor will it have to invest in the development, support, and maintenance of the existing providers for My Oracle. In anticipation of Yahoo! content deployment on My Oracle, Oracle has begun to reduce the 106 providers to approximately five. The surplus infrastructure and resources are now being redeployed onto other Oracle projects, such as developing new features that employees have requested for My Oracle.

BUSINESS BENEFITS

In addition to the financial benefits listed above, how will Oracle and its employees benefit from the addition of Yahoo! Content in My Oracle? Take a look:

- Oracle Corporation benefits:
 - Lower cost of providing external content to employees.
 - Yahoo! provides content that employees had previously not thought of as being useful; for example, industrial journals read by Oracle’s customers.
 - Yahoo!’s content feeds scale to meet the demands from Oracle’s employees.
 - Increased My Oracle portal usage:
 - There are 12 million hits to the yahoo.com domain from the oracle.com domain on average per month. As these users turn to My Oracle to get their Yahoo! content, they spend more time on Oracle’s employee portal. They see the external news they need, such as their stocks, blended in with the internal company news Oracle wants them to read. Thus, employees are increasingly “in the know” about what is going in their company.
 - Adding Yahoo! content to My Oracle brings employees to My Oracle. The portal is used more. Employees no longer have to go to Yahoo! to see their Yahoo! content, because they see it in their employee portal. There is no need for them to go anywhere else.
- My Oracle user benefits:
 - Higher quality, personalizable content kept continually up-to-date.
 - Consistent user experience with little or no training required. Many users are familiar with using My Yahoo!, and the Content Provider enables the same user experience. Users can leverage their current behavior instead of wasting time trying to learn a new one.
 - Content delivered faster. Employees spend less time waiting for external content to be rendered on their portal page. Less time wasted staring at a blank screen means more productive employees.
- My Oracle portal administrators and DBA benefits:
 - Low administration after installation.
 - Low involvement, since the content resides on Yahoo!’s servers.

SUMMARY – MY ORACLE AND YAHOO! CONTENT

Both Oracle Corporation and its employees benefit from the addition of Yahoo! content in My Oracle. Oracle employees receive more relevant content. The corporation saves money through lower costs of providing that content. My Oracle employee users receive industry-leading content with very little effort from the portal administrators or the DBAs. For My Oracle, installation of the provider involved three easy steps:

- Deploying the Content Provider according to the installation instructions.
- Registering for a Yahoo! Enterprise Edition subscription.
- Placing the Yahoo! portlets on the My Oracle.

Oracle is experiencing productivity gains and cost savings via the OracleAS Content Provider for My Yahoo! Enterprise Edition.

CONCLUSIONS

Adding My Yahoo! Enterprise Edition to your OracleAS Portal can help facilitate your portal adoption:

- Find it faster, manage it better. Blending business and My Yahoo! Enterprise Edition content within your OracleAS Portal means your users get the information they need easier and faster.
- Empower your users. My Yahoo! Enterprise Edition tools, such as trackers (Stocks, News), allow users to manage information that matters, and to personalize that information so that it is specific to their organizational role.
- Self-service tools for on-demand access. My Yahoo! Enterprise Edition delivers a familiar user interface so there are no associated training costs.
- Reduce ad-hoc buying. The average Global 2000 company spends \$3500/user on external content¹⁰. But if quality information is available via your portal, users are less likely to purchase individual subscriptions. You'll soon have your users checking your portal before looking elsewhere.

You've seen the benefits of My Yahoo! Enterprise Edition and how the Content Provider makes it simple for you to expose Internet content to your employees. You've seen the business benefits that Oracle and its employees have experienced. Now it's your turn to experience the benefits of My Yahoo! Enterprise Edition within your OracleAS Portal.

**Download the OracleAS Content Provider for My Yahoo! Enterprise Edition from www.oracle.com/start:
Keyword: yahoo. In three easy steps you'll be up and running.**

¹⁰ Source: Outsell Market Sizing Study 2002

FOR MORE INFORMATION

Please visit OracleAS Portal Center at <http://portalcenter.oracle.com> for in-depth information on all aspects of OracleAS Portal, including all the resources listed here:

- OracleAS Content Provider for My Yahoo! Enterprise Edition:
 - FAQs
 - Viewlets
 - Installation Instructions
 - Downloads
- 'Portal Implementation Case Study: My Oracle' White Paper

Please visit enterprise.yahoo.com for in-depth information on all aspects of My Yahoo! Enterprise Edition.

APPENDIX 1 - DEPLOYMENT OF THE CONTENT PROVIDER FOR MY ORACLE

For performance and security reasons, the My Oracle management team decided to deploy the OracleAS Content Provider for My Yahoo! Enterprise Edition onto separately installed Oracle9iAS Release 2 (Figure 3), within the provider.oracle.com architecture (see the ‘Provider.Oracle.Com’ Section in the ‘Portal Implementation Case Study: My Oracle’ White Paper).

Separate infrastructure for the Content Provider allows Oracle to scale component hardware according to specific request requirements without having to worry about the trade-off caused by other components of My Oracle. The distributed provider architecture also allows Oracle to manage access and security independently from the My Oracle machinery. For example, if the Content Provider must be taken offline for maintenance reasons, this can occur without compromising the operational performance of the My Oracle or login.oracle.com architectures.

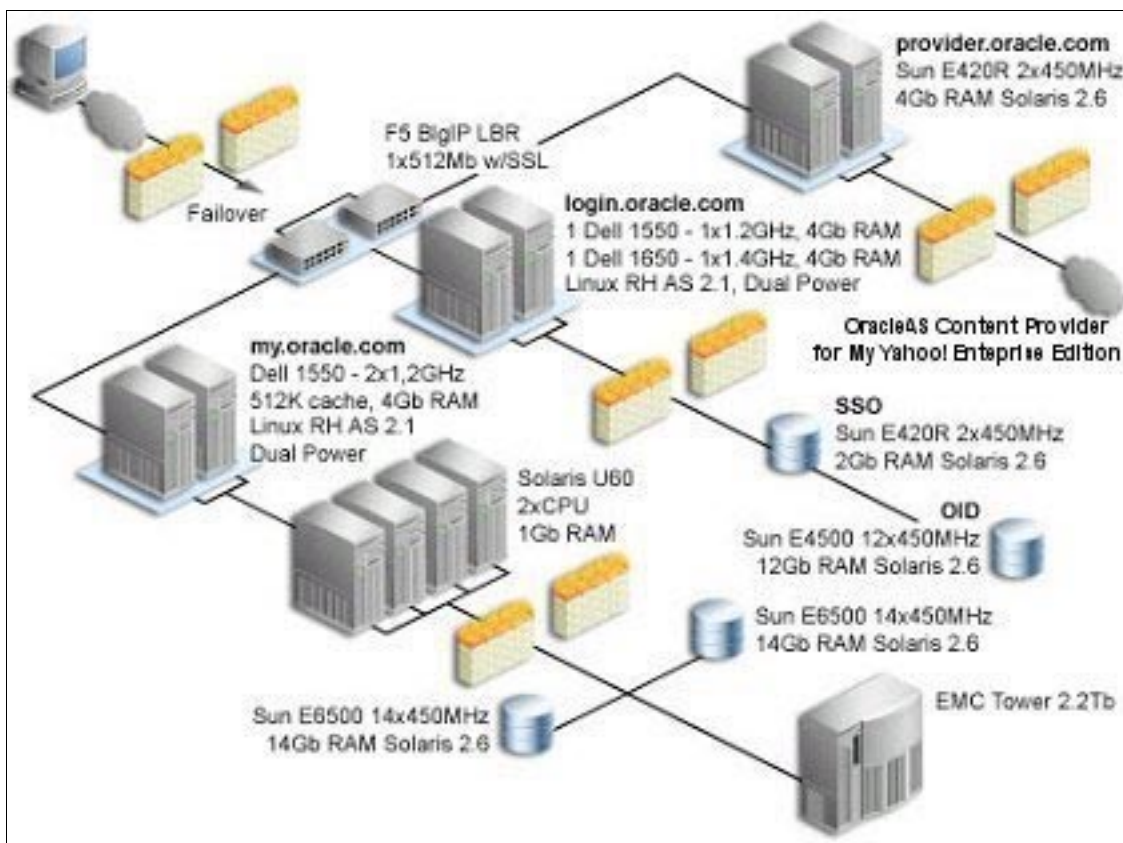


Figure 4: The Content Provider within My Oracle

Since both My Oracle and the Content Provider are on Oracle9iAS Release 2 (9.0.2.6) repositories, the Content Provider can take advantage of the ‘invalidation based’ caching support provided in OracleAS Web Cache¹¹. This allows the Content Provider to send an invalidation SOAP/HTTP message to the cache when and only when the content is no longer valid. As a result, Yahoo! content on My Oracle can, on average, be surfaced to a user in less than 0.1 second per portlet.

CONTENT PROVIDER CONFIGURATION FOR MY ORACLE

No changes have been made to the Content Provider executables in order to deploy it on My Oracle. The Content Provider is configured to use a deployment key and number provided by Yahoo!. Two Yahoo! Model Accounts were created: one for the My Oracle public page and a second to provide default user settings for employees.

¹¹ To learn more about OracleAS Web Cache, see <http://www.oracle.com/ip/deploy/ias/wc/>.

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