
An Integrated Content Services Platform for The Financial Services Industry

*The Sun ONE Content Infrastructure Platform
& the Documentum Enterprise Content Management Platform*

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Abstract

This paper presents the case for proactively developing a broad content strategy and architecture built upon a “content-capable” infrastructure. Optimizing operational efficiency, leveraging existing technology investments and investing in emerging business opportunities are among the many, often competing, demands on today’s businesses. The teaming of the Sun ONE Content Infrastructure Platform with the Documentum enterprise content management (ECM) platform presents an example that illustrates the benefits of an integrated architecture and advanced content management services.



Why an Infrastructure Approach?

Content Volume, Diversity, and Complexity

Today's businesses are faced with an exponential growth in business content. Many companies have deployed enterprise content management systems to control, leverage, and reduce the cost of managing and delivering business critical content. The problem of managing enterprise content however, is too cumbersome for point-application solutions to solve alone. Businesses need to develop a comprehensive content strategy and architecture that is built upon a content-capable infrastructure.

The increase in the volume of content is only part of the problem. Content has become increasingly richer and more complex.

- Content is comprised of multiple data types sourced from disparate repositories and databases.
- The use of rich media content is growing, which adds new requirements in management functionality, bandwidth and storage.
- Businesses are learning the benefits (and difficulties) of more sophisticated use of metadata, which compounds the complexity of content.

Content in the enterprise includes a wide variety of formats, including structured database records, and unstructured text, graphics, audio, video and streaming media. There are a growing number of content application services, including web content management, document management, digital asset management, knowledge management, enterprise search and categorization, collaboration, and syndication that focus on managing either specific content types, or specific aspects of the enterprise content management problem. Many medium to large sized companies now have many of these content services in place, but while these provide important benefits, in most cases their real value is only realized when the content is integrated with larger enterprise data systems, and when a business has implemented disciplined, yet flexible, business process management.

The good news is that more business content is being managed; the bad news is the growing complexity of integrating and managing all of the systems that manage the content.

Content Accessibility & Integration

Most enterprise content is tightly integrated with one or more business applications (although that is not to say it is integrated with all appropriate business applications). Content plays a critical role in business processes ranging from customer relationship management (CRM), supply chain management (SCM), enterprise resource planning (ERP), business intelligence (BI), and other enterprise applications. In order for these processes to provide value, they must be able to incorporate the right data, in the right process, at the right time. Content often comes from diverse repositories across the enterprise and even between enterprises that have business-to-business relationships. Data exists in structured databases or may exist as unstructured data in numerous content repositories – from the desktop to back-up tapes. Furthermore, many companies already have one or more enterprise systems, and most

companies need a strategy for extending the value of, and not replacing, those systems. Yet, there also needs to be a strategy that allows for a smooth migration to new systems when there is a need for technology change.

Not only is content complexity on the rise, but the integration required to make a content solution provide value for the enterprise has become a daunting challenge. Companies need a strategy that simplifies content accessibility and helps to manage this content complexity throughout the content lifecycle

Content Services Infrastructure

The rise in content complexity means that businesses need to follow an infrastructure approach that enables content services throughout the enterprise. It means that IT managers need to deploy an architecture that ties content and content-based applications together in powerful yet flexible ways. The need to share and integrate content is broad based, and not limited to particular vertical or departmental applications. Therefore it doesn't make sense to solve the problem only through individual integration efforts – a strategy that is based on an infrastructure approach is the only way to meet this challenge head on.

Today, this means deploying a stack built on a network-computing infrastructure foundation. It also means an architecture that can support legacy applications, but is designed to optimize the use of web services for both content and application integration.

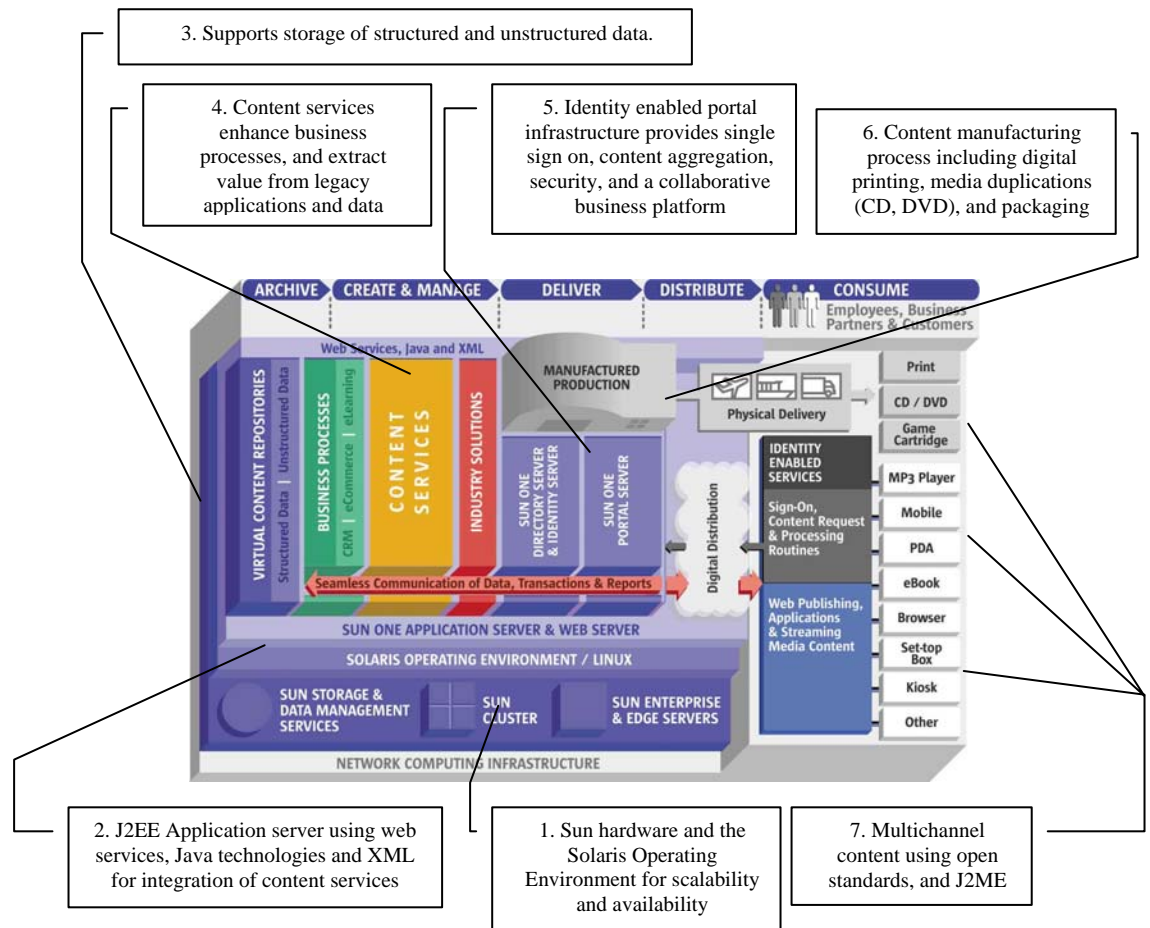
Sun ONE Content Infrastructure Platform

The Sun Open Net Environment (Sun ONE) Content Infrastructure platform in Figure 1¹ is an example of what we mean by an integrated infrastructure for content services. The figure illustrates the way business content and processes fit into infrastructure stacks both vertically and horizontally. This requirement for an integrated content services approach cuts across various industries such as manufacturing, retail, healthcare, government, media and entertainment, and of course, financial services.

Figure 1 is designed to show the range of solutions that Sun provides, from servers, storage and operating system, to application server, identity management, and portal technologies. On top of this network computing infrastructure Sun partner technology can be integrated into this modular architecture. This illustration also suggests how one could incorporate other component technologies into an integrated infrastructure. Note that if you think of an infrastructure in this way, light is shed on the relationship and scope of the components, which is very useful given the extensive functional overlap between many of the functional categories. It is important to understand the functions and features of the various components, so as to better able to make your own choices to match your business requirements, and to be able to substitute components with minimal effort, and cost.

¹ Diagram courtesy of Sun Microsystems, Inc.

An Integrated Infrastructure for Content Services



One Architecture, Multiple Choices

Paradoxically, the one-to-many relationship between an architecture and the suppliers that populate that architecture is both the root of the value proposition, and often the cause of anxiety for businesses that must assimilate and build out that architecture. This anxiety often results in avoidance strategies that rely unnecessarily upon service-laden “one-stop” solutions at the high-end or simpler, more proprietary solutions at the low-end.

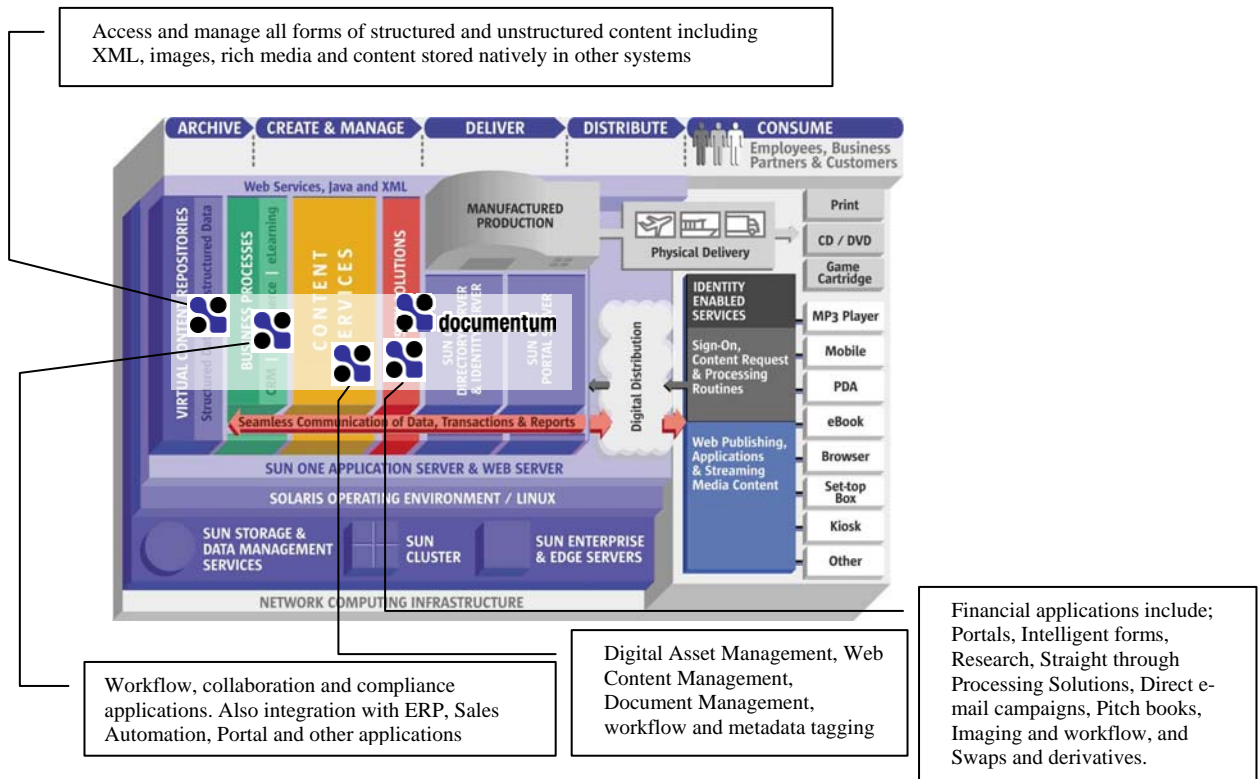
A compelling characteristic of the Sun ONE Content Integration Platform is that it provides an infrastructure that frees content technology providers to focus valuable resources on their areas of expertise by providing easy and reliable access to critical portal, networking and storage services. The following section illustrates the value of this approach by taking a closer look at the synergistic characteristics of the combined Sun ONE Content Integration Platform and the Documentum ECM platform.

The Documentum ECM Platform

Enterprise Content Management Platform Provides Real-Time Control over Enterprise Content and Documentation

Just as Sun has considered the complete solution as it delivers a “content capable” infrastructure, Documentum has also anticipated the broad requirements an enterprise will have in order to manage content throughout a customer’s own product lifecycle including design, manufacture, sales, marketing, customer support, and maintenance.

The Documentum architecture hosts and integrates each of its product components including web content, digital asset and compliance management. However, the value of Documentum’s architecture is that its approach ensures that their suite of components can leverage an infrastructure such as the Sun ONE Content Integration Platform.



Targeted Feature Functionality for the Financial Services Industry Clarifies Value Proposition and Speeds Adoption

A comprehensive content architecture that is built upon a content-capable infrastructure is by its very nature a generalized, scalable solution whose value stems from an ability to ingest, manage and distribute all kinds of content across the complete spectrum of use cases. Paradoxically, it is the generality, or horizontal design, that often makes specific applications and use cases difficult to evaluate and specify, and expensive and time consuming to deploy.

Financial professionals live in a world filled with funds, portfolios, trades, customers, regulations and reports. They do not think in terms of content infrastructure services. Generalized technology that has been embedded in specific applications targeting particular use cases is often simpler to cost justify, easier to deploy, and more valuable to the customer.

Documentum offers financial services applications designed to increase the value of their ECM services platform to financial service institutions. These solutions are intended to reduce expenses while addressing complex enterprise content management issues. Documentum's premise is that, while financial services convergence has created many opportunities, it has also increased the importance of automation and increased the complexity of regulatory compliance. Further, each financial sector: insurance (and the multiple lines with-in it) retail, commercial and investment banking, continue to have unique content management requirements. With the goal of addressing both the broader integration issues and sector-specific requirements, Documentum has packaged their products and technology into four "solution suites:"

- Compliance and Regulatory
- Infrastructure Operations and Automation
- Client and Corporate Communications
- Banking and Insurance Operations

It is Documentum's assertion that their solutions are more than enabling technology. They are prepackaged stacks that directly address a specific class of business problem. For example, one Compliance and Regulatory "solution suite" is designed to simplify SEC 17a² compliance as well as Sarbanes Oxley. The suite includes records management to address the SEC 17a regulations for "books and records" and for communications such as email and instant messaging. In addition to this, their collaboration features are offered to facilitate communication and coordination with internal and external auditors and counsel to create and implement business controls that are key to complying with Sarbanes Oxley³.

² For the complete text of SEC 17a visit <http://www.law.uc.edu/CCL/34Act/sec17A.html>.

³ For complete text of the Sarbanes-Oxley Act of 2002 visit <http://www.law.uc.edu/CCL/SOact/soact.pdf>.

Straight through Processing (STP): A Case in Point

According to SWIFT (the industry-owned cooperative that supplies secure messaging services and interface software), the lack of STP across the securities industry costs the industry \$12 billion every year. This comes from the need to manually intervene as the record of a trade passes between systems from pre-trade to fulfillment.

To achieve STP, communications between the various parties connected to a trade need to be streamlined and the manual intervention in the trade process needs to be limited or completely removed. STP requires a comprehensive content architecture that is built upon a content-capable infrastructure such as the Sun ONE and Documentum solution.

STP minimizes manual handling and redundant processing which can be automated, leading to greater efficiency, as well as reduced cost and risk exposure. The value of this specialized version of a content infrastructure and service solution is easily measured in terms of

- Lower costs per trade
- Faster settlement time
- Better risk management and risk reduction

The trend of building commercially available specialized solution stacks built upon generalized infrastructure and content management services is extremely encouraging and is likely to become highly popular as customer successes are more widely understood.

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