

industry solutions



**Documentum Solutions for the Chemical Industry**

**Documentum—Enriching Business Processes with Enterprise Content**

In the chemical industry, commodity pricing often squeezes profit margins and puts a premium on the ability to coordinate global suppliers, optimize manufacturing capacity, and increase process efficiency. While volume producers compete on price, specialty companies must constantly look for ways to differentiate their brands, penetrate new markets, and leverage existing intellectual property to reduce R&D expenses. To compete successfully, chemical companies need integrated content value chains because managing information efficiently enables safe, low-cost operations, streamlined compliance, and value-added products and services that boost the bottom line.

| 1: Research and Development   | 2: Manufacturing Operations   | 3: Marketing   | 4: Sales and Customer Service  | 5: Business Operations and Corporate Administration  |
|---|---|--|--|--|
| <p><b>SOLUTIONS</b></p> <ul style="list-style-type: none"> <li>&gt; New Product Development</li> <li>&gt; Formula Development</li> <li>&gt; Collaboration</li> <li>&gt; Patent and IP Management</li> </ul> | <p><b>SOLUTIONS</b></p> <ul style="list-style-type: none"> <li>&gt; Quality Specification Management</li> <li>&gt; SOP Management</li> <li>&gt; Plant and Facility Management</li> <li>&gt; RFP/RFQ Management</li> <li>&gt; MSDS Management</li> <li>&gt; Environmental Health and Safety</li> </ul> | <p><b>SOLUTIONS</b></p> <ul style="list-style-type: none"> <li>&gt; Brand Management</li> <li>&gt; Product Launch Management</li> <li>&gt; Sales Cycle Support</li> <li>&gt; Website Management</li> </ul> | <p><b>SOLUTIONS</b></p> <ul style="list-style-type: none"> <li>&gt; Customer Portal/Customer Self Service</li> <li>&gt; Contract Management</li> <li>&gt; Customer Information Support and Call Center</li> <li>&gt; Bid and Proposal Management</li> <li>&gt; Distributor Portal</li> <li>&gt; E-learning/E-training</li> </ul> | <p><b>SOLUTIONS</b></p> <ul style="list-style-type: none"> <li>&gt; Contract Management</li> <li>&gt; Regulatory Submissions</li> <li>&gt; AP/AR Processing</li> <li>&gt; Supplier Portal</li> <li>&gt; Financial, Legal, Employee Records Management</li> <li>&gt; Corporate Compliance</li> <li>&gt; Corporate Portal</li> </ul> |

*The graphic above illustrates the ability of enterprise content management to integrate the content value chain across the primary functional areas of a chemical industry company.*

**Highlights**

- Enables the consolidation of intellectual property
- Reduces manufacturing downtime
- Ensures regulatory compliance
- Contributes to improved safety
- Enhances collaboration
- Supports the creation of high-margin services

**Documentum—Up to the Challenge**

The content value chain describes how essential processes are related in an organization and how content moves and is used across those processes. And in every area of the chemical industry content value chain, Documentum helps improve safety and emergency response, ensure compliance, reduce plant operating costs and R&D expenses, and deliver products to market faster.

In fact, for every content management challenge a chemical company faces, Documentum provides a solution. And with our standards-based platform and

world-class partner integrations, the opportunities to leverage Documentum throughout your organization are virtually unlimited. Documentum can help you exploit the natural relationships between content and processes that start in research and development and extend through product manufacturing and corporate administration—which means your business becomes more agile, more responsive, and more competitive.

On the following pages, we profile solutions that illustrate the varied ways in which Documentum is being used in every area of organizations in the chemical industry.

For chemical companies, creating an efficient supply chain often means building facilities on a customer's premises or in clusters with other suppliers. But that can only be done cost effectively with streamlined collaboration and secure information exchange.

### Documentum Solutions for the Chemical Industry

*As chemical companies seek to gain and sustain competitive advantage, satisfy regulatory demands, and meet the need for increased operational efficiency, they are pressed to find integrated solutions for optimizing their content value chains. Increasingly, these companies are turning to Documentum whose breadth of experience and market leadership in enterprise content management are second to none. The following solutions demonstrate the expertise Documentum can bring to the business of a chemical enterprise.*

#### Research and Development

New Product Development  
Collaboration  
Formula Development  
Knowledge Sharing  
Patent Management  
IP Management

#### Manufacturing Operations

Plant and Facility Management  
Quality Specification Management  
SOP Management  
Engineering Change Management  
Exceptions Management (SAP)  
Corrective Action/Preventive  
Action Management (CAPA)  
RFP/RFQ Management  
Master Batch Record Storage  
Labeling and Packaging  
Materials Safety Data Sheets  
Management (MSDS)  
Partner Portal  
Environmental Health and Safety

#### Marketing

Competitive Research  
Website Management  
Brand Management  
Product Launch Management  
Sales Support Cycle  
Technical Publications

#### Sales and Customer Service

Customer Portal/Customer Self Service  
Customer Information Support/Call Center  
Bid and Proposal Management  
Distributor Portal  
E-learning/E-training  
Contract Management

#### Business Operations/Corporate Administration

Contract Management  
Regulatory Submissions  
Facilities and Land Asset Management  
Accounts Payable and Accounts  
Receivable Processing  
Corporate Portal  
Supplier Extranet  
E-learning/E-training  
Knowledge Management  
Employee Records Management  
Financial, Legal, Human  
Resources Compliance  
Correspondence Management  
IT Project Management

*If mishandled, virtually every compound a chemical company manufactures is dangerous—to the environment and to anyone who breathes or touches it. So the top priority has to be safety. There is simply no such thing as being too careful or knowing too much.*



**Research and Development:** *Research and development is expensive. So duplicating research is something to be strenuously avoided. It's imperative that a company knows what research assets it has, where they are, and how to share them easily.*

1: Research and Development

2: Manufacturing Operations

3: Marketing

4: Sales and Customer Service

5: Business Operations and Corporate Administration

## Solution: New Product Development

# Rhodia

*“Our organizational matrix enables each participant to access workspaces according to his areas of interest and the projects in which he is actively involved. We’ve seen an enormous reduction in travel costs, because people can meet and collaborate electronically rather than having to do it face-to-face.”*

*Fabrice Fourcot, eBusiness Project Manager, Rhodia*

*Rhodia is a global manufacturer of specialty chemicals and a strategic partner to companies in automotive, electronics, fibers, pharmaceuticals, agrochemicals, food, consumer care, tires, paint, and coatings markets. With 23,000 employees, Rhodia has a presence in more than 150 countries, operating 114 manufacturing facilities and five research and development centers around the world.*

### Challenge

Rhodia’s customers cover a wide range of industries, in geographically dispersed areas around the world. As a strategic partner in customer-specific product development, the company often needed to support collaboration among teams of personnel distributed both functionally and geographically across the company’s five R&D centers. The use of telephones, e-mail, and expensive, time consuming, face-to-face meetings were customary. Rhodia determined that a broad collaborative strategy was needed to streamline internal processes and improve productivity in all areas of the company.

### Solution

Rhodia chose Documentum eRoom as a communication and exchange platform to speed the process of information sharing and provide a Web-based workspace for project teams. Individual eRooms create a unified, electronic workspace to bring together diverse groups of team members such as technical, financial, marketing, customers, suppliers, and business partners all working toward a common goal. For an R&D project, all documents and data are grouped in specific eRooms according to their type, such as test results, exchanges between researchers, and reports on lab studies.

Rhodia uses eRoom to manage full project plans, deliver R&D initiatives, or collaborate on presentations to strategic clients. A key aspect of the organization’s company-wide collaborative strategy was to standardize work environments for project flow and build consistency in work processes, methodology, and scheduling tools. At the same time, it was important to have the capability to tailor each eRoom environment to an individual project’s specific requirements.

### Results

Rhodia has deployed over 100 eRooms in major business units, as well as R&D, human resources, and information technology. Users access eRooms to synchronize and communicate with team members across the enterprise, share documents, and keep projects on time and on budget. Through the increased efficiency of electronic collaboration, Rhodia has reduced the time to market for new projects by up to 20 percent while improving service to customers and business partners.

### Recommended Product Suite

- Documentum eRoom

**Documentum helped Rhodia reduce time to market for new products by up to 20 percent.**



**Manufacturing Operations:** *Chemical manufacturing facilities are often very old and very complicated, and undergo frequent renovations. The ability to track documentation through generations of retrofits means less costly downtime and safer working conditions.*

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## Solution: Quality Specification Management

### Bayer

*“Documentum is the foundation of our BayCovin® process, which automates the management of quality specifications. It ensures that our published quality processes are totally accurate and creates the audit trail necessary for ISO certification.”*

**Dr. Norbert Hunsmann, Bayer Business Services GmbH**

Headquartered in Leverkusen, Germany, the Bayer Group comprises some 350 companies employing more than 115,000 people. The group's central IT-based commercial and scientific services are combined in the Bayer Business Services GmbH. As an all-around outsourcing partner, Bayer Business Services has a proven track record for its process-oriented services, ranging from consulting to the development of technical solutions, systems operation as well as entire business processes.

#### Challenge

In 2000, Bayer Business Services (BBS) initiated an ISO 9001 certification project for one of the Bayer Group's chemical and polymer companies. The project would create a system to document all manufacturing processes, establish automated review and approval procedures, assemble and store all ruling documents such as standard operating procedures (SOPs) and link them to their respective process, and train employees to use the system. Although the project was begun with a specific goal, Bayer wanted the system to be applicable to the management of quality information for any business unit. In addition to general ISO environments, the system is therefore used today in several GMP/21CFR Part 11 and SOX environments within Bayer.

#### Solution

Bayer had been a Documentum customer since 1995. With 60 repositories worldwide, the company already employed Documentum applications in SOP management, engineering, law, and patents. Using Documentum, BBS developed the BayCovin Process system, a Web-based solution that automates the management of business processes, enables electronic review and approval, and eliminates manual effort. It provides universal access for those involved in quality management, controls information by user role, and enforces consistency in the change request and change notification process. The

BayCovin Process uses a Web form to collect process information, which is managed and stored as XML, dynamically assembled, and displayed as Web pages. Modification, review, and approval all take place over the Web using Documentum workflow and document lifecycle management.

#### Results

The BayCovin Process, powered by Documentum, streamlines the gathering and distribution of process information. Process teams can use a work-in-progress (WIP) environment to create business processes and share them immediately over the Web. Review and approval also takes place using the Web, with Documentum workflow ensuring that final versions are completely accurate. The BayCovin Process enables users to customize their view of the system based on role, process, or document. The solution has enabled Bayer to have an active quality manual on its intranet, with the complete history of changes that is necessary for ISO certification.

#### Recommended Product Suite

- Documentum Content Server
- Documentum Business Process Manager
- Documentum Compliance Manager
- Documentum Portal Integration Kit



Using Documentum, process teams can use a work-in-progress environment to create business processes and share them immediately over the Web.



1: Research and Development

2: Manufacturing Operations

3: Marketing

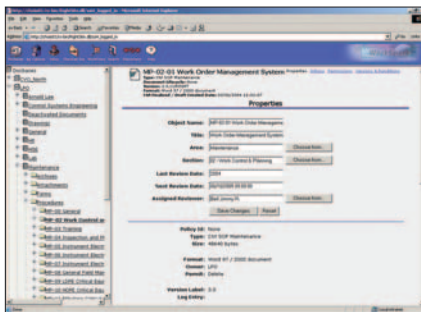
4: Sales and Customer Service

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## Solution: SOP Management

# Lyondell and Equistar

Headquartered in Houston, Lyondell Chemical Company is a leading producer of propylene oxide (PO), PO derivatives, and styrene monomer and MTBE as co-products of PO production. Through its 70.5% interest in Equistar Chemicals, LP, Lyondell is one of North America's major producers of ethylene, propylene, polyethylene, specialty polymers, and polymeric powder. Through its 58.75% interest in LYONDELL-CITGO Refining LP, Lyondell is also one of the largest refiners in the United States, processing extra heavy Venezuelan crude oil to produce gasoline, low sulfur diesel, and jet fuel.



Lyondell's controlled documents solution improves plant safety and ensures compliance with OSHA PSM regulations.

*"Documentum has streamlined the process of editing and approving documents and dramatically reduced the time spent rendering documents to a protected format that prevents tampering. All in all, Documentum has greatly improved our ability to ensure compliance with all applicable regulations."*

**Michael Wright, Training Coordinator, Equistar Chemicals, LP**

### Challenge

Lyondell must comply with the Occupational Health and Safety Administration's (OSHA's) process safety management (PSM) standard, which applies to the handling of hazardous chemicals. Compliance entails controlling the review and approval of standard operating procedures (SOPs), unit manuals, certification manuals, and other documents. Eight thousand documents at Equistar's LaPorte, Texas facility must be managed to meet OSHA standards. At other facilities thousands of technical drawings, diagrams, equipment files, and maintenance manuals also require a controlled document lifecycle. The company wanted to review, revise, approve, and store these documents electronically, within a process that automatically notified users of compliance-mandated review milestones and created a permanent audit trail.

### Solution

Lyondell deployed Documentum to manage its controlled documents—more than 200,000 across five facilities. When controlled documents are indexed in the Documentum repository their properties include "next review date" and "assigned reviewer." Thirty days prior to a review date, the reviewer is notified through Microsoft Outlook. After a document has been revised, it is routed through a customized Documentum workflow for

approval. Not until a document has been approved is it visible to the user community. If major revisions were made, a coordinator manually routes the document to specific users using a customized Documentum router. Workflow history is captured and stored as an audit trail.

### Results

More than 4,000 employees can access the controlled-documents solution through Lyondell's intranet. Over 475,000 drawings are stored in Documentum and available to employees worldwide. Having drawings accessible electronically saves hours in search and retrieval. On-demand access to technical documents reduces the time required to take a plant offline, maintain it, and get it back into production. The controlled documents solution also plays a vital role in plant safety and compliance with OSHA PSM regulations. Version control for SOPs that govern operations has been enhanced. The most recent, approved version of an SOP is available to plant and technical personnel.

### Recommended Product Suite

- Documentum Content Server
- Documentum Compliance Manager
- Documentum Business Process Manager



1: Research and Development

2: Manufacturing Operations

3: Marketing

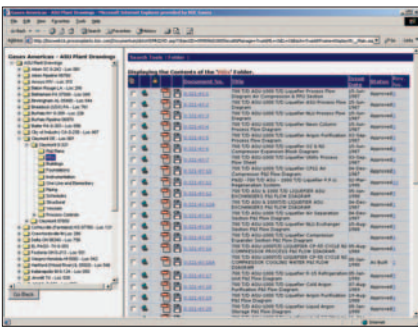
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5: Business Operations and Corporate Administration

## Solution: Plant and Facility Management

### The BOC Group

*The BOC Group is a worldwide leader in industrial gases, vacuum technologies, and distribution services, serving two million customers in more than 50 countries. For more than a century, BOC gases and expertise have contributed to advances in steel-making, refining, chemical processing, environmental protection, wastewater treatment, food processing and distribution, glass production, electronics, and health care.*



*Using Documentum, BOC leverages its engineering knowledge while reducing the level of plant staffing.*

*“Documentum is a major contributor to achieving our strategic goals of centralizing operations and developing the capability to manage plants remotely.”*

*John Koerwer, Global Program Manager-Process Gas Solutions, BOC Group*

#### Challenge

BOC operates and maintains over one thousand plants around the world serving customers such as oil refineries, chemical manufacturing facilities, and steel mills. The cost of retaining skilled engineering personnel onsite at every plant is substantial. As BOC has continued to expand its presence in new manufacturing centers such as China, the company wanted to create centralized operations centers that could run a number of plants remotely, reducing and in some cases eliminating onsite staff. To make the centers a reality would require a knowledge base that included the technical documentation for every plant and that was easily accessible regardless of location.

#### Solution

Leveraging its experience with Documentum in plant design and construction, BOC gathered operating and maintenance documents that had resided at individual plants and put them in a central repository. These documents included CAD files, scanned drawings (when the original CAD files were no longer available), plot plans, and detailed electrical and controls drawings. The

repository was made accessible to engineers all over the world through BOC’s intranet drawing portal and to contractors with specialty engineering skills through an extranet portal.

#### Results

Using Documentum in combination with network technologies that enable remote operation of plant equipment, BOC leverages its engineering knowledge while reducing the level of plant staffing. When maintenance or repair situations occur that require onsite attention, BOC gives local contractors instantaneous access to the drawings and schematics they need. Based on their hands-on experience in the plant, contractors can mark up drawings with suggested revisions that will be reviewed by BOC personnel. This type of collaborative feedback increases the value of the engineering knowledge base.

#### Recommended Product Suite

- Documentum Content Server
- Documentum eRoom Enterprise
- Captiva InputAccel
- McLaren CADLink



**Marketing:** To increase revenue, chemical companies must constantly seek ways to extend their core expertise in commodity markets and build high-margin businesses in growth markets. The success of this effort depends largely on their ability to leverage information assets.

1: Research and Development

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## Solution: Sales Cycle Support

### The BOC Group

*“With Documentum, we can extend our technical expertise to support the sales process anywhere in the world. The system can provide step-by-step assistance across a broad range of experience levels.”*

*John Koerwer, Global Program Manager-Process Gas Solutions, BOC Group*

*To support its sales staff, the BOC Group leverages the same Documentum enterprise content management platform that enables remote plant and facility management.*

#### Challenge

In recent years, as manufacturing grew in Asia, South America, and Eastern Europe, BOC realized that its engineering expertise was concentrated in areas such as the U.K., Australia, and the U.S, where growth was stagnant or declining. Moving resources to these new growth areas or educating local experts would have been costly and time consuming, and that option ran counter to the company’s overall strategic goal of streamlining and centralizing many operations. BOC wanted a tool that would be accessible from any location and that would automatically provide technical support to sales people throughout the sales cycle. Unfortunately, much of its technical expertise and best practices were not documented, but resided instead in the minds of the engineering staff.

#### Solution

Using many of the Documentum Web applications it had already developed, BOC began to formally document technical processes and procedures and create a knowledge base that automatically delivered appropriate content to sales people depending on where they were in the sales cycle. This knowledge base was linked to a business process map,

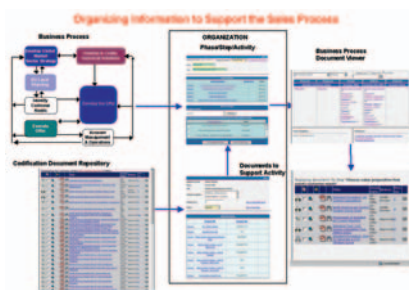
which today enables the technically experienced to pick and choose information as needed while it provides step-by-step assistance to those who require it. The knowledge base helps the sales people address issues such as environmental controls, emissions, and the average cost for specific technologies. It also helps them configure solutions based on BOC applications and provides the drawings, materials lists, and configuration documents when a solution needs to be built and installed.

#### Results

BOC’s business process mapping solution has enabled the company to reduce sales costs and extend its expertise into high-growth manufacturing areas. It also supports BOC’s efforts to drive the business from a global perspective. With Documentum, BOC has a universal platform for all its document management initiatives, which delivers an interface and methodology that can be used anywhere in the world.

#### Recommended Product Suite

- Documentum Content Server
- Documentum Web Publisher
- Documentum Site Caching Services
- Documentum Portal Integration Kit



*The Documentum business process mapping solution enables BOC to drive its business from a global perspective.*



1: Research and Development

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Corporate Administration

## Solution: Website Management

# A Global Chemical Manufacturer

*This global chemical and semiconductor manufacturer offers a wide variety of products in the areas of semiconductor technology, silicone chemistry, specialty chemicals, and ceramic materials. The company is among the top 100 industrial enterprises in Germany.*

**Documentum helps deliver a consistent brand image across websites and inexpensively launch customized extranets for partners and suppliers.**

*“With the Documentum platform, we have dramatically accelerated the process of making content available online. Building, maintaining, and deploying a website no longer requires specialized technical personnel, but can be done by content owners and authors.”*

**Senior Vice President, Business Services**

### Challenge

The company believed that automating and streamlining content-related business processes would improve efficiency and contribute to its continued success. For example, it needed to maintain 24 external websites and 25 intranet sites. The company relied on outside agencies or systems integrators to make updates, which meant publishing costs were high and difficult to control. With Web publishing responsibility concentrated in the hands of outsourced webmasters around the globe, it was nearly impossible to maintain timely, consistent content online. The company wanted to make online content available faster, increase content accuracy, reduce Web publishing costs, and ensure a consistent brand image across sites.

### Solution

The company deployed the Documentum ECM platform, a high-performance content management infrastructure that has enabled the company to achieve a seamless flow of information across organizational boundaries and bring its intranet, extranet, and consumer websites together in one system. With the assistance of Documentum Consulting, it has also created a navigational framework, XML templates, XSL style sheets, and translation workflows to support its multilingual corporate site. Documentum enables business users to create, approve, revise, and publish documents to the Web,

and then retire them when appropriate. They do so quickly, without HTML programming knowledge or any outside IT involvement. Content is fresher and more accurate while the publishing process is streamlined, efficient, and cost effective.

### Results

Using Documentum, the company consolidated 24 independent, external websites into a single, multilingual Web presence. Today, its corporate site supports five languages with others to be added in the future. Documentum also enables the company to quickly, easily, and inexpensively launch personalized extranets for partners and suppliers. The company has now deployed 40 new extranet sites. Documentum helps deliver a consistent brand image across websites, provide up-to-date, accurate information, and significantly reduce IT systems and maintenance expenses. Since Documentum drives content for all of the company's websites, the same content can be repurposed across multiple channels, lowering cycle time for other content initiatives.

### Recommended Product Suite

- Documentum Content Server
- Documentum Site Caching Services
- Documentum Web Publisher
- Documentum Site Deployment Services



**Sales & Customer Service:** *The ideal sales process mirrors the customer's procurement environment, which means that efficient collaboration along the supply chain is essential. Customer service, on the other hand, often includes emergency response where health and safety information must be available instantly from any location.*

1: Research and Development

2: Manufacturing Operations

3: Marketing

4: Sales and Customer Service

5: Business Operations and Corporate Administration

## Solution: Customer Portal/Customer Self Service

# DuPont Dow Elastomers

*“Documentum helps us move from a regional, internal focus to a global focus for laboratory data and product information. Now corporate interdisciplinary teams and customers, through a self-help interface, can access the same data sources.”*

*Steve Garrison, Ph.D., Developer, DuPont Dow Elastomers*

*DuPont Dow Elastomers is a joint venture between DuPont and the Dow Chemical Company. Since opening for business in 1996, DuPont Dow Elastomers has been the leading global supplier of synthetic, rubber-like polymers known as elastomers. With more than 60 years of experience between the two companies in elastomer research and production, DuPont Dow Elastomers provides innovative solutions to help customers stay ahead of the competition.*

### Challenge

DuPont Dow Elastomers provides elastomers and supporting technologies that customers use to build a variety of products. A number of industries, including aerospace, auto, and semiconductor manufacturing, compound DuPont Dow elastomers with other materials to create a finished product. Critical technical information must be available to assist each customer in compounding their own unique elastomers from a variety of materials. The company relies on a central repository of technical data including Microsoft Word and Excel documents, CAD drawings, and a variety of reference materials. Customers must have easy, quick, and efficient access to detailed, up-to-date information from virtually anywhere in the world.

### Solution

Documentum enables DuPont Dow Elastomers' customers to access information, such as technical data sheets and Material Safety Data Sheets (MSDS), through the company's external website and customer extranet. Employees can also access information through an intranet, allowing technical service personnel, sales team members, chemists, and researchers to contribute, update, and retrieve documents relevant to their tasks. Documentum Webtop provides the

DuPont Dow Elastomers technical service team with online, anytime access to data during customer calls and ensures that technical information is always consistent and accurate. Custom workflows ensure that original documents are securely archived, while versioning and search make the most recent ones available through Webtop and other web interfaces.

### Results

DuPont Dow Elastomers substantially reduced its operating costs during the company's first year with Documentum. Time and costly rework were eliminated as the reliability and accuracy of technical information improved. The system now delivers up-to-date product data while ensuring that original documents and lab tests are preserved. Immediate access to relevant data improves customer service and reduces the burden on in-house technical support teams.

### Recommended Product Suite

- Documentum Webtop
- Documentum Content Rendition Services
- Documentum JDBC Services
- Documentum Content Intelligence Services
- Documentum Content Server



*Documentum delivers up-to-date product data while ensuring that original documents and lab tests are preserved.*

**Business Operations/Corporate Administration:** *In a tightly regulated industry, corporate functions such as product registration and contract management are complex and resource intensive. Administering them efficiently and streamlining their associated business processes has a direct impact on profitability.*



1: Research and Development

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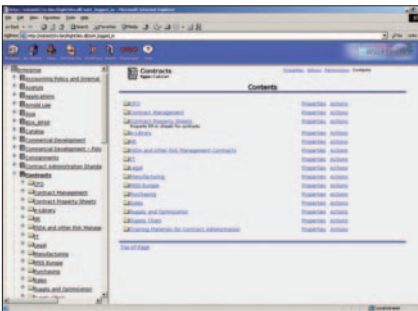
5: Business Operations and Corporate Administration

## Solution: Contract Management Lyondell and Equistar

*“Documentum has improved the contract management process and efficiency within the Enterprise. Parties have access to other contracts and information and this allows the business units to adopt a best practices approach in developing their agreements. The work flow process in Documentum allows the Contract Owner to manage the review process and secure comments in a timely manner.”*

*Steve Williams, Associate General Counsel, Lyondell Chemical Company*

*Lyondell is continually extending the reach of the Documentum platform to support essential business processes such as contract management.*



*Documentum manages nearly 20,000 contracts. Search and retrieval has been reduced from weeks or months to seconds.*

### Challenge

Much of Lyondell’s business, like any global organization, is defined and managed through contracts. Thousands of contracts circulate between sales, procurement, legal, and various product and service groups. As the company’s business continued to grow, contracts were frequently delayed during the approval process, which might include as many as 10 people. Often the originals couldn’t be found when it was time to review contracts for renewal. This was particularly troubling with “evergreen” contracts, which renew automatically unless intentionally terminated. Some of these contracts were renewed—because the notice period lapsed—when Lyondell would have preferred to modify or terminate them. Drawing on its success with Documentum for managing engineering drawings, Lyondell deployed a contract management system to create, manage, and store contracts and make them easily accessible throughout the organization.

### Solution

The company started with a small pilot in the legal department, scanning 1,200 contracts into the Documentum repository and indexing them to speed search and retrieval. Response to the pilot was

positive and the company began migrating all of its contracts to Documentum. The solution team created three document types: sales contracts, purchase contracts, and IT contracts, with templates for each. From that point on, contracts were created, routed, approved, published, and stored in Documentum. Gradually, as employees throughout the company were trained, the solution was rolled out worldwide.

### Results

Today, Documentum manages nearly 20,000 contracts for Lyondell of which more than 2,000 are evergreen. Through an Internet client, the solution makes every contract available on demand, complete with a history of when it was approved and by whom. Alerts are sent automatically to appropriate personnel 60 days before the renewal date of an evergreen contract, virtually eliminating the risk of contracts renewing inadvertently. Through the use of simultaneous review and version control, contracts are approved more quickly with fewer errors. Search and retrieval has been reduced from as long as weeks or months to seconds.

### Recommended Product Suite

- Documentum Content Server
- Documentum Webtop



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## Solution: Regulatory Submissions

# A Major Provider of Crop Science Products

*“We now have one source for a product’s registration documents. With Documentum, we’ve eliminated the confusion caused by a staggering amount of paper and we’re meeting multinational regulatory requirements in a fraction of the time.”*

*Documentation Project Manager*

*This company provides the agricultural sector with crop protection products for grain and specialty crops, as well as forestry and vegetation management. It has offices and operations in 40 countries around the world, supplying global herbicides, fungicides, and insecticide products and services.*

**Product dossiers that used to require 2 months to assemble manually can now be assembled in a week.**

### Challenge

The company manufactures and sells products around the world in a highly regulated environment. Every aspect of a crop protection product is contained in a lengthy dossier that must be registered with the U.S. Environmental Protection Agency and its international equivalents. These dossiers require a tremendous amount of detailed paperwork—as large as two pallets full when produced in hardcopy—that must adhere to the tenets of each country’s regulations. Tracking, controlling, and accessing the huge product dossiers (all of which were custom agricultural registration reports within a proprietary, homegrown system) was a major undertaking and extremely cumbersome to manage.

### Solution

With Documentum, the company’s strictly paper-based procedures were transformed into an easy-to-use, scalable, highly accessible electronic process. Corporate information was centralized into a single repository, holding more than one million objects of product information. Documentum delivered complete control over content and

versions that were being made for registration and dossiers for specific pest control products. With a central repository, the company can access dossiers from previous products, reusing content effectively to accelerate current product registration.

### Results

Pallets of paperwork can now be delivered via CD-ROM or on hard copy depending on a country’s requirements. With a single source for documentation, dossier updates can be controlled with complete security and with confidence in data accuracy. Because the company’s documents are in a single repository, it can now assemble a product dossier for any given country in a week, rather than the two months it used to take doing it manually. Regulatory submissions are accelerated, and the end result is that products get to market faster.

### Recommended Product Suite

- Documentum Content Server
- Documentum Compliance Manager
- Documentum Trusted Content Services

## Documentum—The Solution of Choice for Companies in the Chemical Industry

For chemical companies, managing compliance and environmental safety while controlling costs and optimizing production are Herculean tasks. To succeed, they must manage, distribute, share, and protect enormous stores of technical and market information. That's why these organizations rely on Documentum. Award-winning Documentum solutions unite content and business processes from research, procurement, and manufacturing to marketing, sales, and corporate administration. When there's no margin for error with your business-critical content, you need Documentum. To learn how Documentum can deliver improved business performance to your chemical enterprise, visit us online at [www.emc.com/documentum](http://www.emc.com/documentum) or call 1.800.607.9546 (outside the U.S.: +1.925.600.6754).

For more information about Documentum, visit [www.emc.com/documentum](http://www.emc.com/documentum) or call **800.607.9546** (outside the U.S.: +1.925.600.6754).

### About Documentum

Documentum, a division of EMC Corporation, provides enterprise content management (ECM) solutions that enable organizations to unite teams, content, and associated business processes. The Documentum set of integrated content, compliance, and collaboration solutions support the way people work, from initial discussion and planning through design, production, marketing, sales, service, and corporate administration. With a single platform, Documentum enables people to collaboratively create, manage, deliver, and archive the content that drives business

operations, from documents and discussions to e-mail, Web pages, records, and rich media. The Documentum platform makes it possible for companies to distribute all of this content in multiple languages, across internal and external systems, applications, and user communities. As a result, Documentum customers, which include thousands of the world's most successful organizations, harness corporate knowledge, accelerate time to market, increase customer satisfaction, enhance supply chain efficiencies, and reduce operating costs, improving their overall competitive advantage.

### A Partial List of Customers in the Chemical Industry

|                                     |                                     |                                   |
|-------------------------------------|-------------------------------------|-----------------------------------|
| Lenzing                             | Lonza                               | Rhodia                            |
| Wacker-Chemie                       | Vantico                             | Ruhr Oel                          |
| Borealis                            | Shin-Etsu Chemical Company          | Dow Corning                       |
| Hydro Agri Sluiskil                 | EQUATE Petro Chemical               | International Fabricare Institute |
| DSM Fine Chemicals Austria          | Ciba Specialty Chemicals            | Lyondell Chemical Company         |
| American Chemical Society           | Kumiai Chemical Industry Company    | The BOC Group                     |
| Centre International de Toxicologie | ARCO Chemie Nederland               | Air Products and Chemicals        |
| E.I. DuPont de Nemours              | Centre International de Toxicologie | Kerr-McGee Corporation            |
| Union Carbide Corporation           | Eastman Chemical Company            | Olin Corporation                  |
| The Polyolefin Company              | Mitsubishi Chemical                 | LG MMA                            |
| Solutia                             | Bayer                               |                                   |



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