

Open Text Archiving and Document Access for SAP® Solutions

July 2010

Abstract

This white paper provides a comprehensive overview of the Open Text solutions for data and document archiving in the SAP space, covering the three solutions:

- Open Text Data Archiving for SAP Solutions
- Open Text Archiving for SAP Solutions
- Open Text Document Access for SAP Solutions

We explain in detail the value of these solutions for business and IT, such as how they help

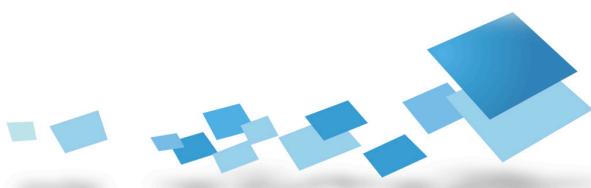
- Improve operational efficiency and productivity by integrating business documents with SAP transactions
- Reduce the total cost of ownership for the IT landscape by supporting data archiving and legacy decommissioning
- Ensure compliance and reduce risk by securely long-term archiving data and documents in a compliant store

The final part covers the key capabilities of the three solutions and provides a deep-dive into the functionality of components like the scanning application, imaging viewers, desktop and email integration components, virtual folder views integrated in SAP, and the archive server as the compliant store beneath.



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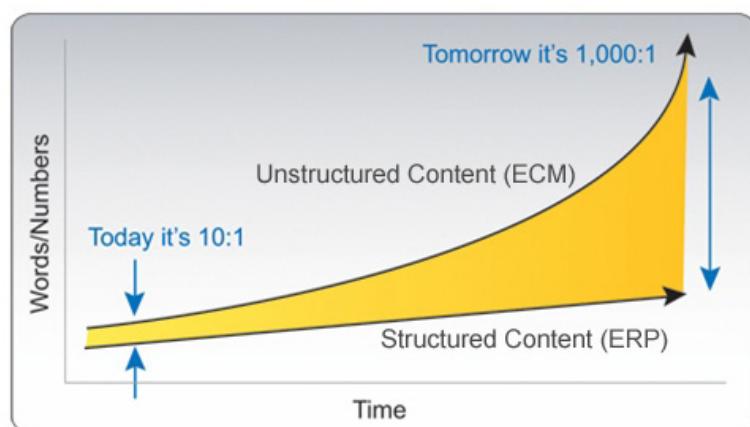


Introduction

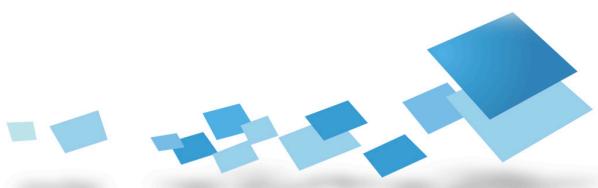
Open Text Corporation has worked closely with SAP since 1992 in the document imaging and document archiving areas. As an innovator in SAP archiving, Open Text partnered with SAP to develop the SAP archiving strategy. As a result, SAP released the ArchiveLink interface, which is now the base technology for integrating external content repositories with SAP. Since the early days of archiving, our document management and document archiving solutions have evolved from an ordinary document repository for SAP to a powerful, enterprise-wide ECM framework with the ability to manage up to several terabytes of SAP documents and to integrate these documents in SAP and non-SAP business processes.

Some analysts say the amount of data created in companies is growing by 80% each year. This data overload includes both structured data (stored in databases and generated by transactional IT systems such as SAP) and unstructured data (emails, office documents, incoming paper documents, images, and so on). This rapid data growth means that IT budgets are spent ensuring data security and integrity, system performance, and availability, which leaves little money to invest in business innovation to gain a competitive edge. Rapid data growth also complicates a comprehensive strategy for corporate and regulatory compliance.

*Figure 1
Estimate of future growth in
structured and unstructured
business content*



In response to this data surplus, companies are looking for solutions that enable them to manage the increasing amount of electronic data with a minimum of effort and resources. Companies are striving to bridge the gap between structured content (such as SAP order data) and unstructured content (such as email or office documents that are associated with the customer order).



Enterprise-wide ECM solution for SAP applications

Whether managing email, pictures, host files, or traditionally printed documents, Open Text's Enterprise Library allows an enterprise to archive its entire collective memory electronically, permanently, and in an auditable form. Open Text Archiving and Document Access for SAP Solutions leverages Enterprise Library for the storage, management, and exchange of SAP-related content, and it provides fast and easy access to the enterprise memory directly out of the SAP user interface, which is integrated into the leading SAP application.

Archiving and Document Access connects business documents with SAP objects and transactions in the context of SAP Industry Solutions (sap.com/industries) and the entire SAP Business Suite (sap.com/solutions/business-suite), which includes Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), Supplier Relationship Management (SRM), Product Lifecycle Management (PLM), Supply Chain Management (SCM), Human Capital Management (HCM), Business Intelligence (BI), and NetWeaver® Portal.

Certified Integration with SAP NetWeaver®

As a result of being fully integrated with SAP NetWeaver, Archiving and Document Access received the endorsements SAP Certified Powered by SAP NetWeaver and SAP Certified Integration with SAP NetWeaver.

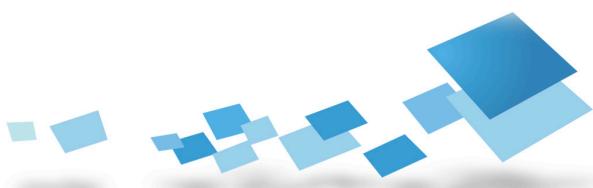
Powered by SAP NetWeaver

“SAP Certified Powered by SAP NetWeaver” is an endorsement granted by SAP to products fully integrated with—and harnessing the full power of—the SAP NetWeaver platform. SAP ABAP Add-On certifies products that integrate into SAP NetWeaver platform using ABAP—SAP’s native programming language. It ensures that the certified product uses SAP standards for installation, provides complete and high quality documentation, and conforms to SAP development standards. These products run within SAP NetWeaver and function as a part of the SAP system.

SAP® Certified Powered by SAP NetWeaver®

Integration with SAP NetWeaver

“SAP Certified Integration with SAP NetWeaver” is an endorsement granted by SAP to partner products certified by SAP in at least one SAP NetWeaver integration category. There are about 80 different certification categories for integration with SAP components, such as SAP ArchiveLink interface, SAP Portals, and Web Application Server. Open Text delivers the highest possible



product quality to customers—a level of quality proven by the SAP certifications our products have received.

SAP® Certified Integration with SAP NetWeaver®

SAP Solution Manager Ready

In the context of the above certifications, Archiving and Document Access received the endorsement “SAP Solution Manager Ready”. Solutions with this endorsement register with the SAP Solution Manager. Archiving and Document Access goes a step further and integrates with SAP Solution Manager Diagnostics for enhanced supportability within the SAP support infrastructure plus an overall lower Total Cost of Ownership.

Archiving and Document Access has received the SAP Certified qualification in the following categories:

- ArchiveLink Interface (BC-AL and BC-HCS)
- WebDAV Storage Interface for ILM (BC-ILM 2.0)
- ABAP Add-On (ABAP Add-On)

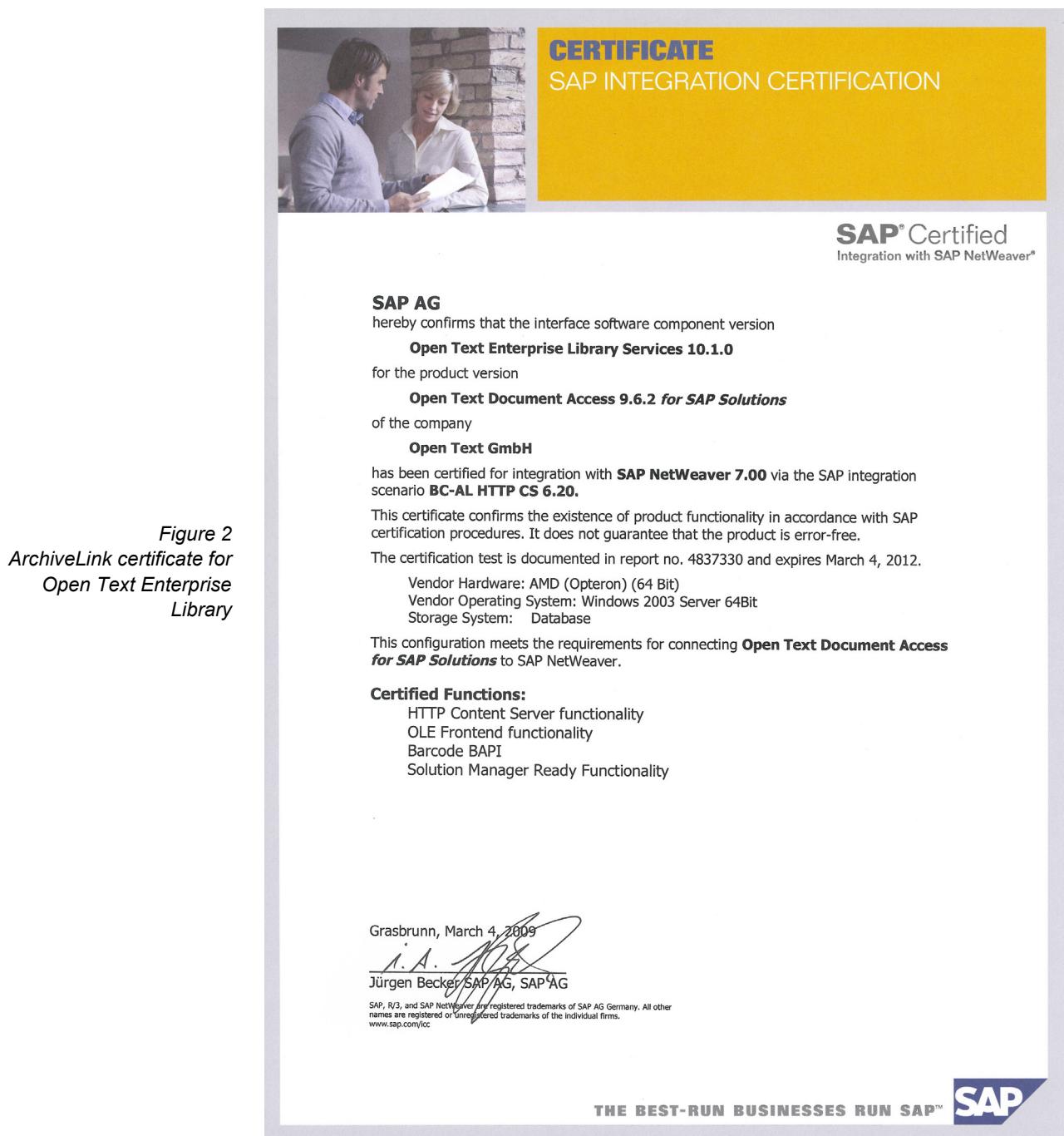
For a list of all certified products, visit the SAP partner directory and search for “Open Text”:

<http://www.sap.com/ecosystem/customers/directories/searchpartner.epx>

SAP ArchiveLink Certification

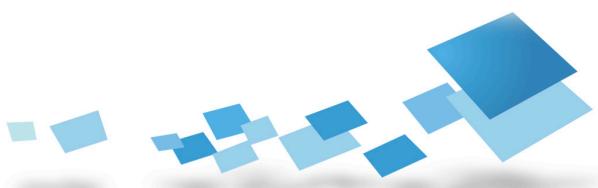
The SAP ArchiveLink Certification attests the ability of an external archiving product to integrate with SAP as a content server for storing and archiving SAP documents and data. This makes the SAP ArchiveLink certificate the most important certificate for all content repository and archive vendors.



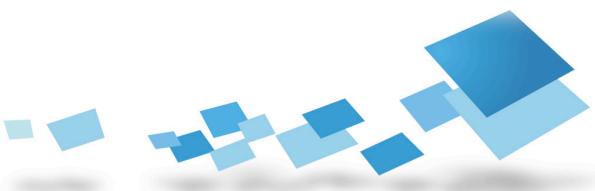


WebDAV ILM Storage Interface Certification

SAP NetWeaver Information Lifecycle Management (ILM) extends the traditional SAP data archiving technologies with information lifecycle management capabilities for retention, holds, and destruction. With this certification, customers receive the assurance that Open Text Document Access for SAP Solutions



seamlessly integrates with SAP NetWeaver ILM via Enterprise Library as an ILM-enabled content store. Enterprise Library enforces retentions and holds on archived SAP data and attached documents, and it executes the deletion command by SAP NetWeaver ILM at the end of the life cycle.

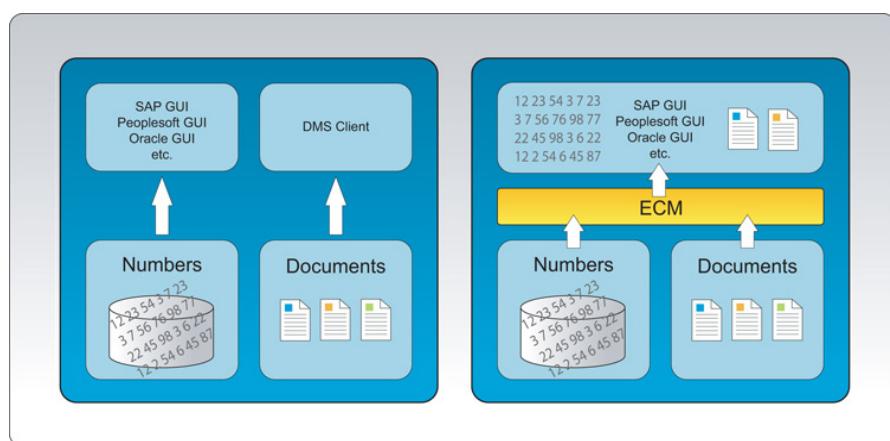


Business Value of Archiving and Document Integration into SAP

Independent of location, industry, or size, there is one basic rule for each and every organization worldwide: all activities within a business are driven by business processes. Business processes play a vital role in measuring, recording, and documenting a vast array of activities across an organization. They are responsible for the development and execution of key strategies, including budgets, cash flows, and procurement. They influence decision such as whether to pursue new directions or develop new products. Accurate preparation of financial reports and the protection of shareholder value are directly impacted by the quality and the execution of business processes. This makes business processes key to ensuring business efficiency, cost control, and legal compliance throughout the organization.

The software industry has developed numerous applications that deal with transactional data in an attempt to efficiently handle business processes. From basic spreadsheets to powerful enterprise applications—such as Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and Supply Chain Management (SCM)—these applications primarily deal with numerical data and incorporate it into core business operations, such as Human Capital Management, Inventory Management, Accounting, and Customer Relations. However, enterprise applications such as ERP and CRM deal only with the structured information and ignore the many processes that are triggered by, include, and generate unstructured content.

Figure 3
ECM Solutions unify numbers and words

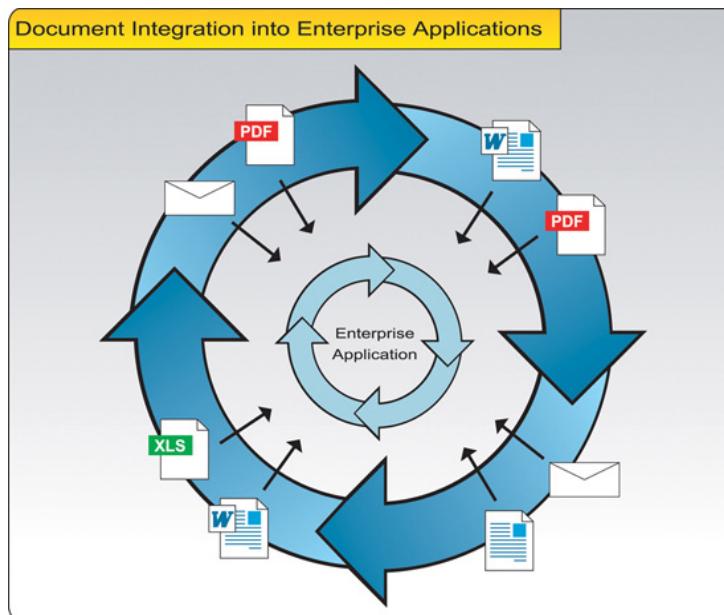


Analysts estimate that approximately 90% of all information exists in an unstructured format; this unstructured information continues to elude companies. On a departmental level, failing to integrate content into core business procedures, such as accounts payable or purchasing, translates into labor-intensive processes, higher costs, and reduced customer service. Other factors compound this situation—business documents are geographically distributed in different sites (for example, HR employee folders) or are distributed in different electronic systems (for example, project documents). In addition, business takes



place internationally and 24 hours a day, seven days a week, across multiple time zones. Historical data and documents need to be retained too since regulations require compliant storage of data and documents beyond operational use.

*Figure 4
Archiving and Document Access links to structured and unstructured information flows*



ECM systems manage unstructured content—paper documents, contracts, proposals, invoices, email, and even Web pages—and incorporate it into the core enterprise application. This practice eliminates information silos, the need for resource-intensive paper mail, express delivery services, and paper archives. Enterprise applications provide the underlying business structure that supports business processes. Integrating ECM into enterprise applications satisfies a great need in managing enterprise content because it enhances numerical data-crunching applications with the unstructured content relevant to each specific business process. ECM systems allow the creation of shared service centers to cope with the requirements of decentralized offices. At the same time, ECM eliminates manual paper processing. These are the reasons why the focus in today's IT departments is shifting rapidly toward integrated ECM systems such as Archiving and Document Access.

Now that we have explored why ECM is important, let's take a closer look at the business value delivered by Archiving and Document Access and examine some sample applications in Accounts Payable (AP), Accounts Receivable (AR), Human Resources (HR), and more.

Connect: Improving operational efficiency and productivity

In many departments, core business operations revolve around optimizing working capital by efficiently handling business processes that deal with volumes of paperwork. Paper-based processes tend to require long cycle times because paper documents must be physically moved around. Other inefficiencies related



to paper handling, such as maintaining a paper archive and creating local copies, add to the problem and increase costs.

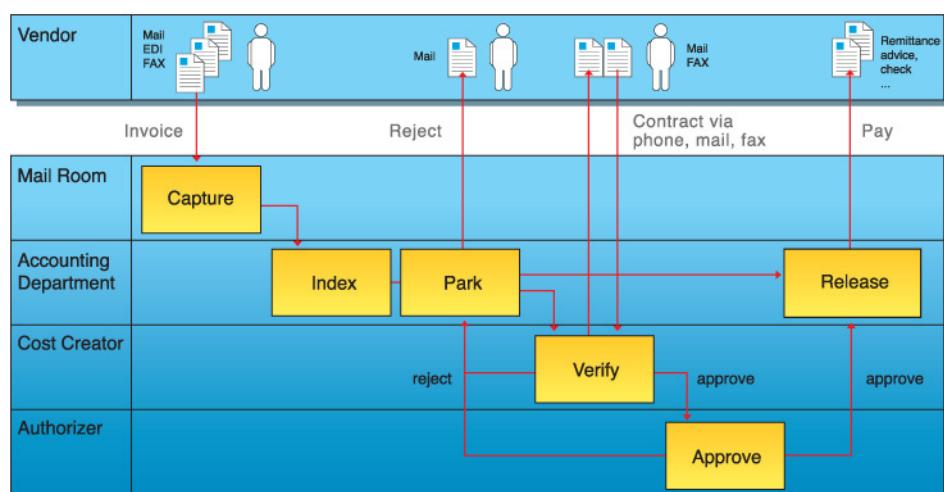
However, the challenge of handling unstructured information is not confined to paper alone. Unstructured business content can also be in electronic formats, such as Microsoft® Word®, Microsoft PowerPoint®, and email. Without a comprehensive view of unstructured electronic information and direct access to it, employees suffer from low productivity and poor decision making.

Archiving and Document Access captures paper documents, electronic documents, and email, securely archives them, and integrates them with SAP transactions and workflows. This provides users with fast and easy access to content, anywhere and anytime. In addition, Archiving and Document Access provides the ability to generate complete, transparent views (virtual folders) of all data and documents related to the entire context of a business transaction.

Accounts Payable: Taking advantage of cash discounts

Invoice processing in the Accounts Payable (AP) department is an example of a typical business process. In the vast majority of organizations, incoming invoices are paper documents. However, most organizations find it increasingly difficult to manage high-volume, paper-based AP processes. Every invoice passes through several people for review, content edits, and final sign-off before payment is made. Initially designed to ensure accurate appropriation and accounting, this lengthy process can cause missed due dates, missed cash discounts for early payment, and late fees.

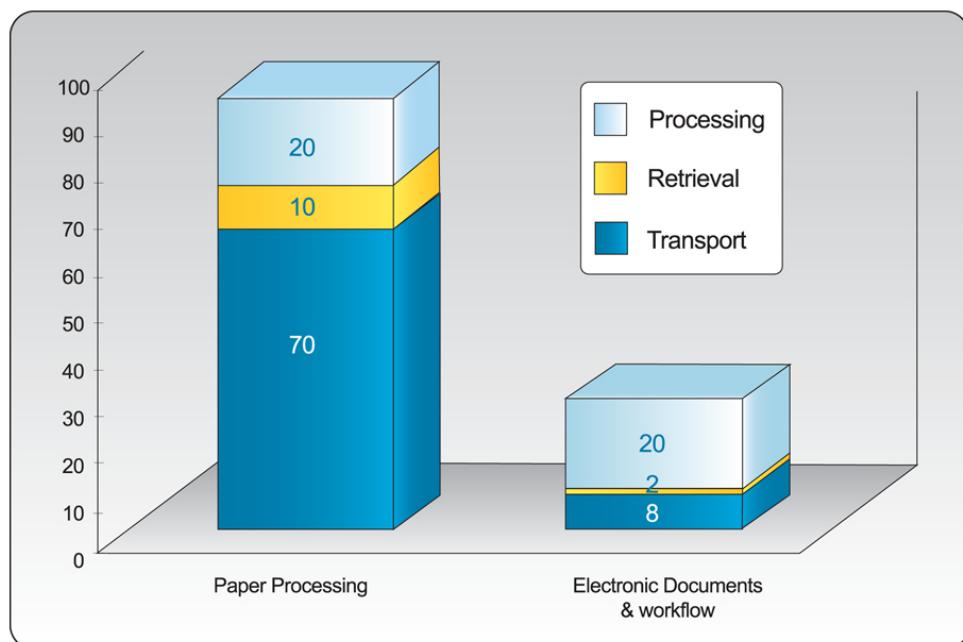
Figure 5
*Example of a typical
Accounts Payable process*



Archiving and Document Access addresses the issues that drive up AP cost per transaction by converting the invoice document from paper to electronic format and integrating it with the SAP workflow. This workflow delivers the right information to the right person at the right time, greatly reducing the paper transport times and making the AP process more efficient by providing instant access to the invoice document.



Figure 6
Typical savings in process cycle time with an automated Accounts Payable solution



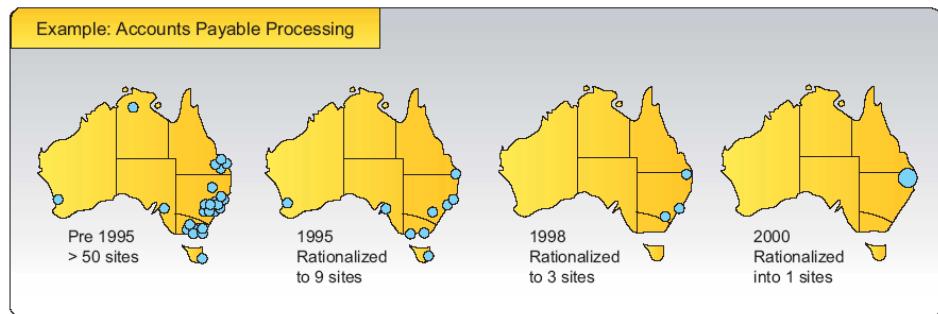
Shared Service Center for accounts payable processing

Organizations consolidating to Financial Shared Service Centers (SSC) have seen dramatic improvements in process efficiency while reducing costs for invoice processing. The ability to have all financial staff in one location allows for standardization and consolidation of processes. This streamlines certain parts of the process, but creates the need for collaboration with those outside of the SSC.

A key component of a successful SSC is the utilization of workflow technology¹ integrated with electronic documents so that all participants in the process have direct access to the documents, regardless of their location or time zone. Thus, electronic documents are an essential enabler for SSC processes, which are provided by the scanning and archiving functionality of Archiving & Document Access.

¹ Open Text delivers a complete invoice processing application with integrated OCR with the product Open Text Vendor Invoice Management for SAP Solutions, which is based on Archiving and Document Access as archiving and imaging infrastructure.





*Figure 7
Example of introduction of a Shared Services Center*

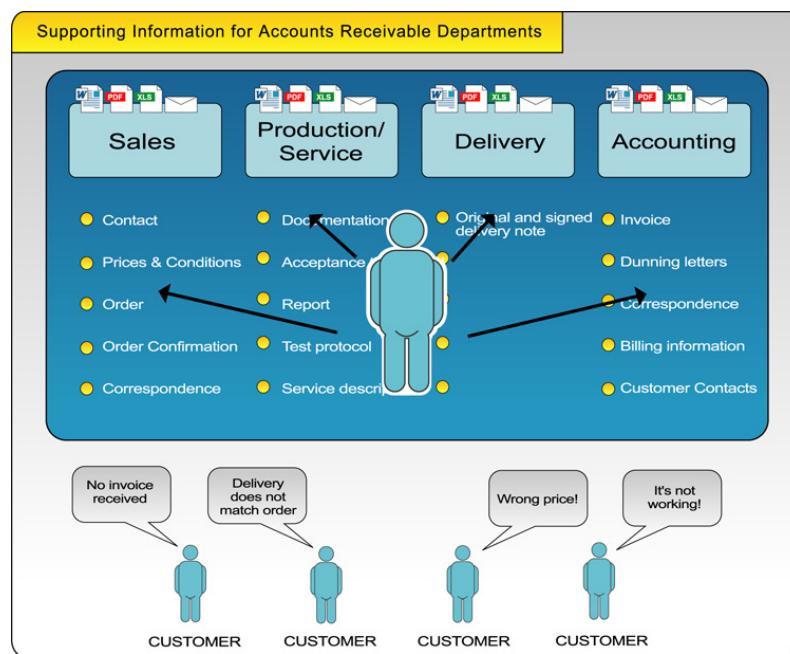
Accounts Receivable: Increasing profitability by reducing DSO

The Accounts Receivable (AR) world revolves around collecting payment, which is critical if companies are to free up cash for important business activities. But there is another reason for the importance of the payment collection process. Experience shows that the longer a payment remains outstanding (known as Days Sales Outstanding or DSO), the less likely it will be paid in full. An inefficient collection process prolongs collection time, increases bad debt, and erodes bottom-line revenue.

Employees in AR departments need supporting information from multiple sources to reconcile problems that prevent customers from paying open invoices. They must review account information generated throughout the organization before they can effectively field customer questions, troubleshoot problems, or facilitate timely collection. Traditional processes have forced AR agents to manually pull relevant documents from multiple departments and filing systems, query colleagues, and wait for information to be faxed or sent to them.

Archiving and Document Access enables companies to streamline the AR process by integrating disparate accounting, sales, and support information into a central repository and providing a single point of access. It captures order information as soon as it is entered or scanned into the system, links it to corresponding customer information, and then archives the information. AR staff can simply enter basic customer information to access related information, reducing the time spent manually looking for information scattered across multiple systems.

Figure 8
ECM Solution in Accounts Receivable department



By helping AR agents identify issues that can delay payments, AR solutions based on Archiving and Document Access help customers to improve debt collection rates, lower the risk of bad debt write-off, and improve their company's credit line.

Reducing operational costs in Human Resources departments

Human Resources (HR) professionals devote about 70 percent of their time to performing routine administrative tasks such as changing address information, obtaining approval for travel or vacation, and fielding employee questions about payment statements. These tasks generally require searching through stacks of paperwork and matching each document.

Archiving and Document Access improves the overall performance of standard SAP HR operations, such as new employee hiring. Archiving and Document Access, an integrated ECM solution, captures incoming résumés and delivers a summary to all authorized persons without wasting resources on the inefficient transport of paper documents between departments and offices.

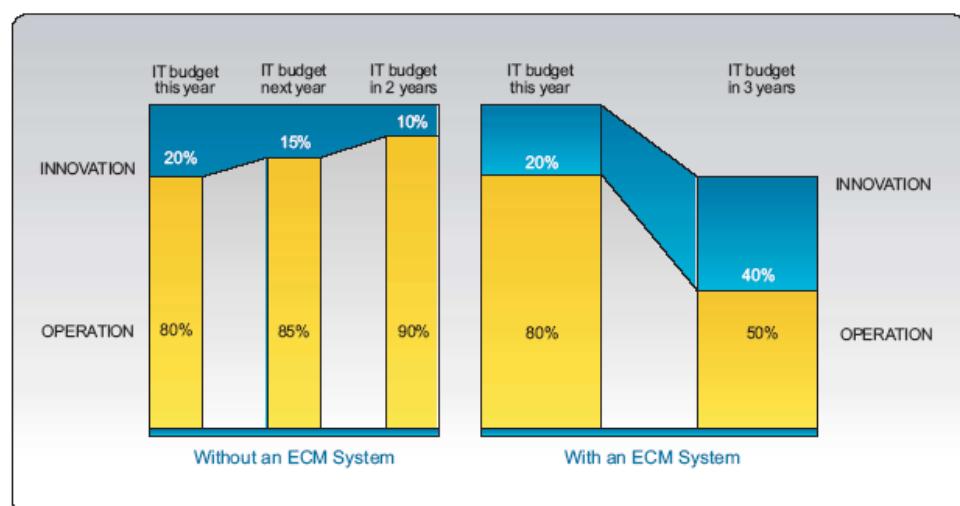


Integrated solutions also increase HR employee productivity and reduce costs by streamlining employee administration², automating key business processes, and offering employees self-service tools. The HR department is relieved from manually processing standard requests, enabling staff to focus on more strategic tasks. Tight security controls enable organizations to comply with privacy regulations. All relevant information about an individual, whether applicant, employee, or former employee, can be stored and maintained in a protected environment, reducing the risk of losing or misplacing confidential documents. ECM integrates this information with key business process applications to, for example, expedite the recruiting process and reduce the risk of losing good candidates due to a lengthy and complex hiring process.

Cut Costs: Reduce Total Cost of Ownership for the IT landscape

Administration departments, IT Administration, and Planning play a critical role in ensuring the long-term health and success of any company. On the other hand, Chief Information Officers today face decreasing budgets and increasing IT operational costs. More efficient IT operations enable organizations to do more with less, and Archiving and Document Access makes IT operations more cost effective.

Figure 9
ECM effect on IT innovation and operation



² Open Text delivers a complete solution to manage all employee-related documents and enable ESS based on Archiving and Document Access with Open Text Employee File Management for SAP Solutions.



Managing transactional data

Every business transaction generates data and increases the volume of an enterprise application's database. The growing volume of data hampers system performance and slows down access to information. The prolonged backup and restoration of information adds to an administrator's workload and increases costs.

Archiving and Document Access, together with standard SAP data archiving tools, offloads old data from the SAP system, providing long-term access to archived information that is stored in a durable, tamper-proof format. This helps companies lower both the costs and risk associated with meeting data retention and disposal requirements. In addition, offloading data facilitates fast backup and recovery times, reduces administrative and hardware costs, and decreases the time it takes to implement enterprise application upgrades and thus system downtime.

Offloaded application data is deleted in the SAP database, freeing up resources and space while still allowing this information to be easily accessed. Users working within a transaction can access both online and offline data within seconds. Administrators can archive data early, thus keeping the database lean and the application healthy and responsive.

Supporting the decommissioning of legacy systems

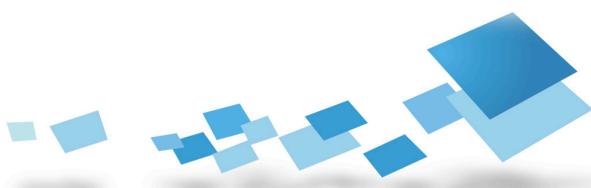
Many primary business systems are relegated to legacy systems when organizations decide to introduce new IT technology and business processes. However, in many cases, historic data managed by these legacy systems has to remain accessible due to, for example, legal requirements for tax audits, for product liability, or because it is required for further business continuity.

This forces IT departments to maintain a fragmented array of legacy systems, which results in ongoing operational costs for system administration or application hosting and high operational risks since legacy applications often run on outdated, unreliable hardware, and the know-how to operate these systems is diminishing.

Archiving and Document Access supports the archiving of legacy data and makes it accessible within SAP. This enables customers to completely sunset legacy systems. Legacy system archiving makes legacy information readily available. It avoids complex migration and associated costs, keeps the new system clean from old data, expedites the decommissioning process, and ensures that regulatory requirements are fulfilled.

SAP system consolidation and upgrading

Archiving and Document Access also facilitates the consolidation and upgrading of SAP systems.



When several distributed SAP systems are being consolidated into one or a few central SAP systems, print lists (reports) can be generated from the SAP systems being retired and stored in the Archive Server. Users of the target SAP business application can then access these print lists easily within their SAP environment.

The new SAP NetWeaver Information Lifecycle Management (ILM) enables the decommissioning of legacy SAP ERP systems with the scenario Retention Warehouse. Archiving and Document Access provides the ILM-certified store for the legacy data in this scenario and complements access to the legacy data with access to the archived print lists.

SAP recommends data archiving to speed up the process of upgrading from SAP R/3 to SAP ERP and to minimize system downtime. The data archiving files can be securely stored on the Archive Server and made available via SAP's standard access to archived data. In addition, Archiving and Document Access can provide views that include archived as well as non-archived data, thus enabling seamless and transparent access to all data for the business user.

Comply: Ensuring compliance and reducing risk

Although regulations vary from country to country, they consistently require that organizations track, manage, and retain critical business information and present it upon request. Developing and implementing best practices for compliance requirements not only protects organizations from risk, but helps them streamline operations, reduce administrative costs, and proactively prepare to comply with emerging regulations.

Archiving and Document Access provides a host of functionality to address the compliance requirements associated with data and electronic document retention for many regulations, including U.S. Security and Exchange Commission, Sarbanes-Oxley, U.S. Food and Drug Administration, Germany's Grundsätze ordnungsmässiger Buchführung, and Germany's Grundsätze zum Datenzugriff und zur Prüfbarkeit digitaler Unterlagen. Most regulations place a number of strict requirements on corporations to not only manage content through its active lifecycle, but also to retain the content for many years or decades after it is no longer in use.

Secure storage of business documents

Archiving and Document Access relies on Open Text Archive Server³, which is perfectly suited to store all types of documents from SAP, Microsoft Exchange®, Lotus Notes®, applications of the Open Text ECM Suite, and other custom applications. Archive Server provides a large set of enhanced security features,

³ For more detailed information about Open Text Archive Server, please read the "Open Text Archive Server" white paper or the product documentation.



such as content replication and distribution with remote standby (data security in case disasters like fire or flooding), encryption and digital signatures (unauthorized access prevention), and hot standby (system availability in case of server failure) for secure and unalterable document storage. In the SAP environment, Archiving and Document Access uses proven SAP authorization.

Archive Server supports optical media such as WORM (Write Once, Read Many), DVD, or UDO (Ultra Density Optical). These can only be written once and thus provide an excellent safeguard against accidental and intentional deletion or alteration. In addition, Archive Server supports hard disk-based storage systems (SAN, NAS, CAS) with WORM-feature and Hierarchical Storage Management (HSM) systems from leading storage platform vendors. The combination of secure, write-only media with the management and security capabilities delivered by Archive Server provides the highest possible level of security for important business documents.

Long-term readability and accessibility

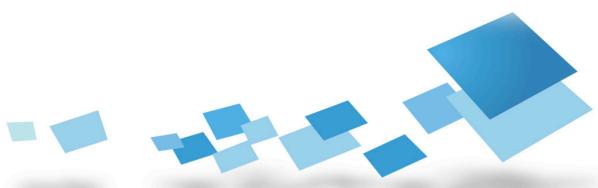
Financial records in accounting practices exemplify a core compliance requirement. Even though organizations generally store financial documents for extended periods, they fail to fulfill many current regulations with long-term storage alone. Organizations must also be able to present requested financial records on demand, demonstrate how each record was used, and identify other records that contributed to the designated process.

Archiving and Document Access addresses these transaction-related requirements and satisfies fundamental storage requirements by archiving all documents in a central repository. The solution enables organizations to prove that financial records are accurate by linking these scanned records with related SAP financial records. If an auditor requests a specific invoice, employees can quickly pull up all supporting documents to confirm the invoice's accuracy and justify its use. Administrators can prevent users from accessing confidential documents by encrypting data before the document is stored or transmitted.

Archive Server is able to store content in any format. However, for long-term storage of business documents, it is important to ensure that documents created in certain formats remain readable after a long period of time, even when the viewer application is not supported or available anymore. Open Text recommends storing documents in standard formats, such as TIFF or PDF/A, rather than proprietary office formats. Open Text Archive Rendition Server, an optional extension to Archiving and Document Access, provides functionality that automatically renders documents to TIFF or PDF/A.

Prevention of unauthorized access or manipulation

Archive Server provides a large set of enhanced security features, such as Encryption, Secure Socket Layer, SecKeys, Digital Signature Support, and Time Stamps, that prevent unauthorized or inappropriate individuals from accessing and modifying documents stored within the Archive Server.



Overview: Archiving and Document Access for SAP Solutions

Open Text Archiving and Document Access is an ECM (Enterprise Content Management) solution designed for companies that use any SAP business application, be it ERP, CRM, Product Lifecycle Management (PLM), or an SAP industry solution based on SAP ERP. Archiving and Document Access integrates perfectly into the leading SAP application and allows SAP users to access all enterprise documents regardless of the time or where they are in the world—all employees have instant access to the same information and can quickly and easily research, retrieve, share, forward, and re-use all data and documents from within the SAP infrastructure. This enables efficient global business processes and a consistent flow of information that integrates not only SAP users, but also employees with limited SAP knowledge, suppliers, and other business partners.

Archiving and Document Access is available in three editions, each tailored to satisfy customer needs for data archiving, document archiving, and document access with virtual folder views in SAP environments.

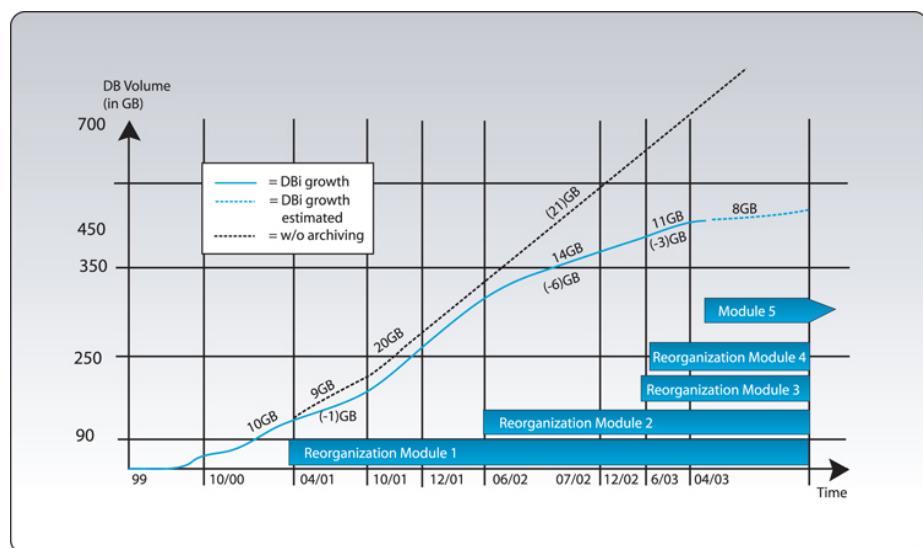
Open Text Data Archiving for SAP Solutions

Every SAP business process generates data that is typically stored within the SAP database. Over time, however, the volume of data hampers SAP system performance and slows down access to information. The prolonged backup and restoration of information adds to administrator workload and increases costs.

Data Archiving is the process of archiving SAP transactional data. SAP provides a development and runtime environment for Data Archiving called the Archive Development Kit (ADK). The ADK allows organizations to select, export, and remove obsolete transaction data from the SAP system database. It collates all relevant business data from the many tables in the database. The transactional data is written to a file and archived on a secure and reliable content repository such as the Open Text Archive Server.



*Figure 10
Example of data archiving in SAP*



Archiving of data extracts, reports, and print lists

In addition to standard SAP data archiving, business content can also be stored as data extracts, reports, and print lists. These allow companies to generate summary reports with data from different transactions and applications and can be converted to formats that are viewable independent of the SAP system. They can range from several megabytes to gigabytes and can be archived at several intervals, such as weekly, monthly, or quarterly. The Archive Server and Imaging Viewer components of Data Archiving for SAP Solutions optimize access, search, and retrieval of data extracts, reports, and print lists. An example of such optimization is the ability to access specific parts of a data extract, report, or print list without having to download the entire object (which may be gigabytes in size). Simple access to data extracts, reports, and print lists guarantees the availability of information. Users can access original archived documents by using hyperlinks in the data extracts, reports, and print lists, searching in them or performing an attribute search.

The benefits of Data Archiving in the SAP environment include

- **Reduced maintenance and support costs (lower Total Cost of Ownership (TCO)):** Manage the growth of the SAP database, keep the SAP application healthy and response times low. Reduce the costs of maintaining and running a growing application infrastructure by removing historical data and documents. Reduce down times during system backup, restore, and upgrading.
- **Reduced risk:** Reduce operational risks by storing data archiving files and print lists securely in a tamper-proof form. Comply with data retention and disposition requirements.
- **Regulatory compliance:** Comply with regulations that govern data and document retention and disposition (for example, data related to tax filings) with secure long-term archiving of data files.



Data Archiving for SAP Solutions includes the following product components:

- Enterprise Library
- Imaging Viewers (Windows, Java, Web)

Data Archiving for SAP Solutions includes the following licensed functionality:

- Secure storage for SAP data archiving files and print lists
- Retention for data archiving files via SAP NetWeaver ILM
- Display of SAP print lists in Imaging Viewers

Open Text Archiving for SAP Solutions

Document Archiving is the process of archiving documents, linking them to an SAP business object, and making them accessible from the corresponding SAP business transaction.

SAP applications can generate a huge volume of outgoing electronic documents during transactional processing. An example of such a process is the weekly billing run, which generates customer invoices. These invoices are then printed out and sent to customers via direct mail.

On the other hand, transactional processes in SAP often require the integration of incoming documents. The best known example of such documents are incoming invoice documents, which trigger the Accounts Payable process in SAP. Other examples of paper-driven processes in SAP are HR processes, Order Entry, and Contract Management. In addition, desktop and office documents in any form can be archived and linked to SAP.

In all of these examples, legal requirements dictate that electronic copies of the involved business documents must remain accessible for years after the process is complete. The ability to archive large volumes of business documents, therefore, not only enhances business efficiency, but also enables regulatory compliance.

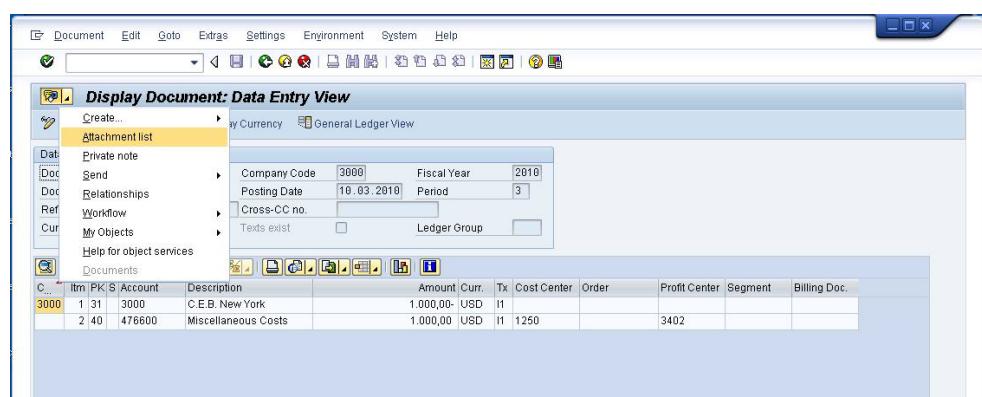
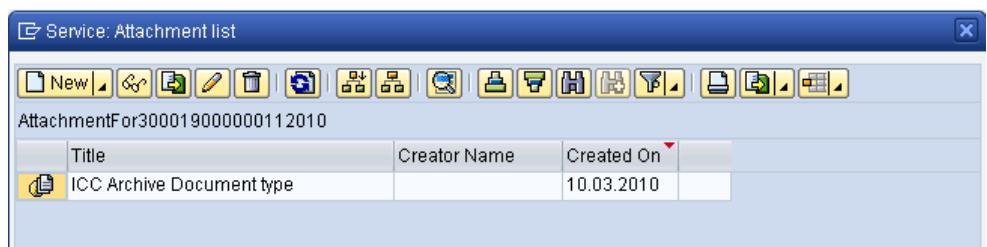


Figure 11
Access to archived documents in SAP GUI via Attachment List



*Figure 12
SAP Attachment List*



Archiving for SAP Solutions enables you to create, access, manage, and securely archive all SAP documents, thereby addressing stringent requirements for risk reduction and operational efficiency. It includes all of the capabilities of Data Archiving for SAP Solutions and provides highly scalable and secure document imaging and archiving services for the complete range of SAP business documents, such as incoming and outgoing invoices, orders, delivery notes, contracts, HR employee documents, and more. Archiving for SAP Solutions represents a complete out-of-the-box solution. It supports all standard SAP business applications, including, but not limited to, Finance and Accounting, Operations, Manufacturing, Logistics, and HR, providing seamless integration with SAP Workflow.

Once a document has been saved in the archive, it is immediately available to users at every workstation. Finding documents involves using standard SAP transactions and the SAP object. Retrieval is through a special SAP menu item: the attachment list of the object services.

In addition, Open Text offers solutions for viewing documents; adding notes and annotations to documents; scanning high, mid, and low document volumes; form overlay of outgoing documents printed on paper forms; and integrating with Microsoft Office® and groupware (Microsoft Exchange and Lotus Notes) applications.

The benefits of business document integration with SAP based on Archiving for SAP Solutions include

- **Higher Process efficiency and reduced operational costs:** Completely eliminate paper or microfiche archives and greatly reduce paper handling inefficiencies. Provide direct access to business documents anytime and anywhere, thereby reducing cost per transaction and enabling shared service centers.
- **Accelerated SAP processes:** Paper-based processes, such as invoice verification or incoming-order management, immediately benefit from electronic workflow with document integration by the elimination of the paper transport time. This results in shorter process cycle times and in a payback period of typically less than one year. The return of investment (ROI) may be driven by taking advantage of cash discounts through instant invoice verification, the competitive advantage gained through same-day order



processing, full access to customer data that ensures a high service level, and so on.

- **Compliance with regulations and internal controls:** Secure, long-term archiving (in a standard format such as TIFF or PDF/A) is a requirement for document retention and disposition in accordance with legal regulations (for example, archiving tax-related documents).
- **Reduced risk:** Content must be protected from loss in natural disasters such as fire, flooding, storms, and so on. With this solution, documents can be replicated to additional, geographically dispersed storage locations. If one of these locations is destroyed, vital documents remain available.

Archiving *for SAP Solutions* includes Data Archiving *for SAP Solutions* and adds the following components:

- Open Text Archiving and Document Access *for SAP Solutions* (ABAP Add-on)
- Imaging Enterprise Scan
- Imaging DesktopLink

Archiving *for SAP Solutions* includes the following licensed functionality

- Secure storage for SAP data archiving files and print lists
- Retain data and attached documents via SAP NetWeaver ILM
- Archive documents and attach them to SAP objects
 - Outgoing Documents (including Forms Management)
 - Incoming Documents (with Early & Late Archiving)
 - Scanning with and without barcode
 - Electronic documents in workflows
 - Desktop Documents
 - Mass document input
- View documents in the Imaging Viewers for core formats with notes and annotation capability

In addition, Archiving *for SAP Solutions* can be extended with the following optional components:

- Imaging ExchangeLink (provides integration with Microsoft Outlook)
- Imaging NotesLink (provides integration with Lotus Notes mail client)
- Rendition Services (provides ability to render office documents and other formats to long-term formats such as PDF and PDF/A)

Open Text Document Access *for SAP Solutions*

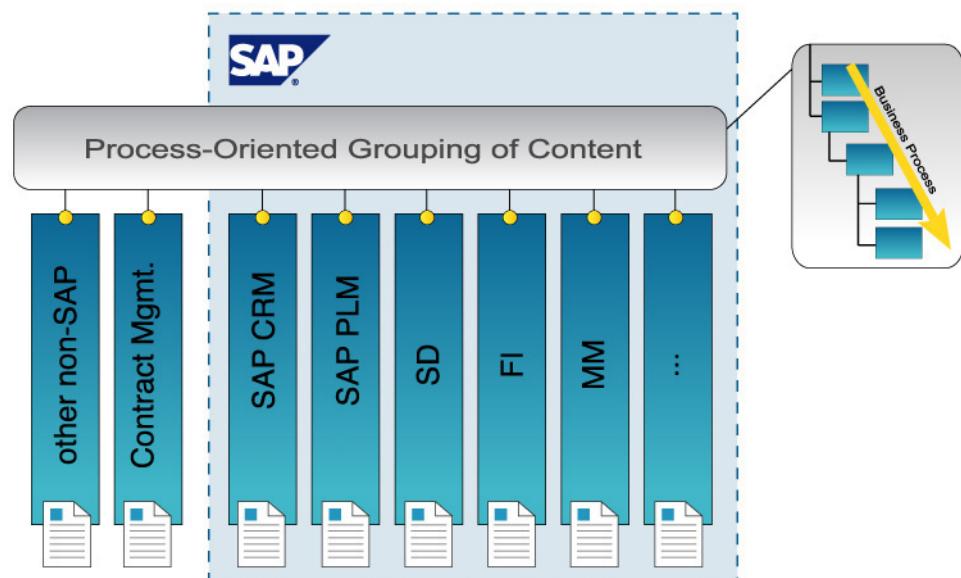
Document Access *for SAP Solutions* includes Data Archiving *for SAP Solutions* and Archiving *for SAP Solutions*, and the offering is enhanced by Open Text DocuLink *for SAP Solutions*, a versatile document management component. Exceeding standard document scenarios in the SAP environment, Document Access *for SAP Solutions* adds a process-oriented view to all business documents and data in addition to document management capabilities.

DocuLink *for SAP Solutions* provides a meta-layer that allows customers to collect and merge data and documents from different applications running in one or multiple SAP systems and also external non-SAP applications. It enables the creation, management, and retrieval of SAP and other (non-SAP) documents,



independent of SAP transactions, modules, or applications. DocuLink *for SAP Solutions*' Windows Explorer®-like user interface gives users a document-centric view of business processes. For example, customer-related documents from different sources both within SAP and from external, non-SAP sources can be consolidated into several views, enabling consistent access from all customer-facing business processes, including accounts receivable, vendor management, contracts management, and customer support. Even occasional users can easily retrieve content using the simple-to-use and customizable navigation in folder hierarchies.

Figure 13
Document Access in SAP applications



DocuLink *for SAP Solutions* is a powerful, fully customizable application that is completely embedded in the SAP system and accesses SAP data directly through existing SAP interfaces. There is no need to copy the SAP metadata or documents to an external system. DocuLink *for SAP Solutions* re-uses the existing SAP user management and authority model to ensure data security and regulatory compliance. This ensures the highest possible security since no security models have to be re-implemented or copied from SAP to an external system.

DocuLink *for SAP Solutions* users can access the application through the standard SAP GUI, either via the Internet as a standalone application or integrated as an iView in SAP NetWeaver Portal. In addition, DocuLink *for SAP Solutions* provides direct integration with SAP transactions via Generic Object Services.

A typical scenario in which SAP users require DocuLink *for SAP Solutions* is the AR process. AR clerks are responsible for contacting customers and resolving problems that might prevent customers from paying an invoice. AR clerks may be confronted with problems such as missing invoices, late deliveries, incorrect invoices, or systems that do not work. To solve these problems, AR clerks need access to many different information sources within a company—price lists,



contracts, billing documents, acceptance test reports, delivery notes, and much more.

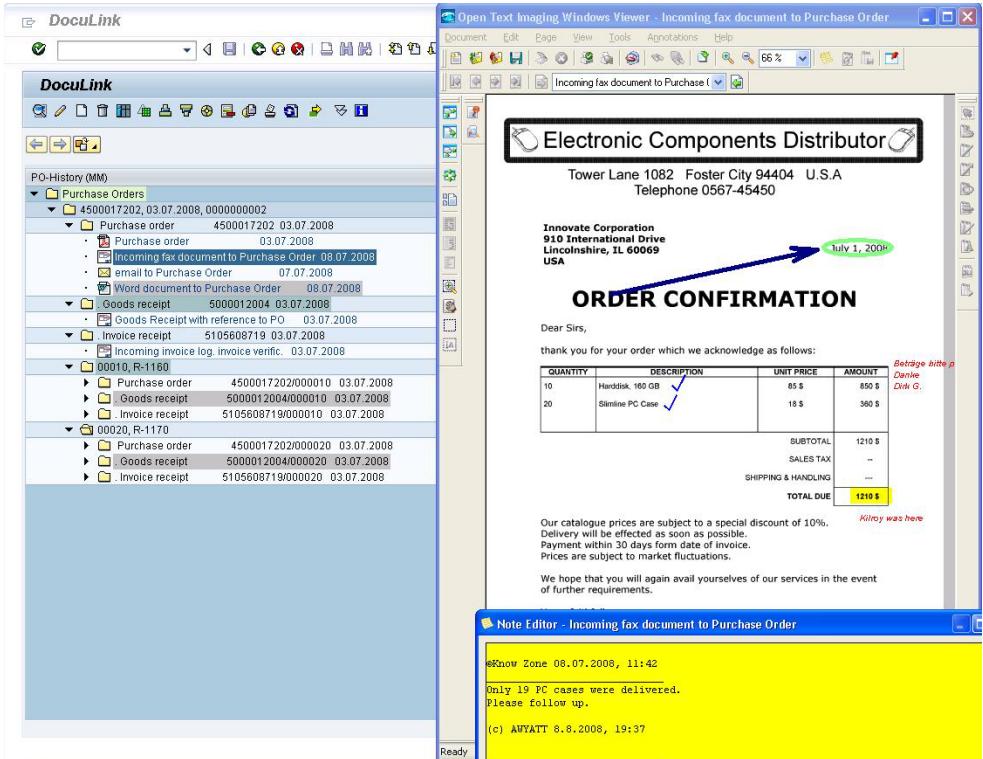


Figure 14
Document Access for SAP Solutions view for Accounts Receivable

In addition to the features provided by Data Archiving for SAP Solutions and Archiving for SAP Solutions, Document Access for SAP Solutions also provides the following:

- Simple-to-use, customizable navigation in folder hierarchies
- Module and system-spanning access (for example, SAP CRM and SAP ERP systems)
- Integration of non-SAP documents and non-SAP data into the SAP environment
- Support of the document creation process (for example, versioning and status assignment)
- Document creation based on templates (for example, contracts or customer correspondence)
- Ability to print, email, or download single documents or entire folders (requires Rendition Services)
- Offline access to data and documents (requires Rendition Services)

The benefits of Document Access for SAP Solutions include

- **Ultimate process transparency in SAP:** Employees can concentrate on results, not on time-consuming searches for information. It provides a single



point of access to all business information, no matter where it originates (for example, transactions, modules, SAP systems, and non-SAP information).

- **Immediate productivity increase:** Users will immediately derive value from Document Access *for SAP Solutions* because it is so simple and intuitive to use. Depending on the user's role, Document Access *for SAP Solutions* generates exactly the structure that the user is already familiar with in everyday business processes. Even occasional users can be integrated into SAP processes.
- **Low training costs:** Document Access *for SAP Solutions* instantly generates value through the seamless integration of the system with SAP applications. Existing SAP processes are enriched by process-oriented document access. Occasional users gain access to the enterprise's information resources.
- **Low TCO:** No separate user rights management is necessary.

Document Access *for SAP Solutions* includes Data Archiving *for SAP Solutions* and Archiving *for SAP Solutions* and adds the following components:

- Open Text DocuLink *for SAP Solutions*

With the licensed scenarios

- Virtual folder views (360 degree views)

In addition, Document Access *for SAP Solutions* can be extended with the following optional components:

- Imaging ExchangeLink (provides integration with Microsoft Outlook)
- Imaging NotesLink (provides integration with Lotus Notes)
- Rendition Services (provides ability to render office documents and other formats to long-term formats such as PDF and PDF/A, enables mass printing and mailing directly out of DocuLink, as well as offline folder capabilities)



Technological Deep Dive: The Product Components

Architecture overview

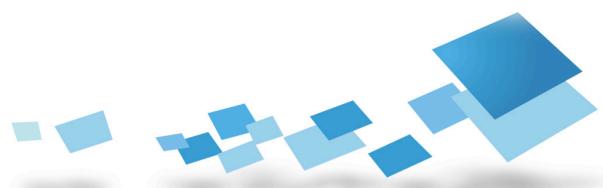
Archiving and Document Access uses the SAP ArchiveLink interface to manage and archive SAP ArchiveLink and SAP Knowledge Provider (KPro) documents. With this interface, Archiving and Document Access can archive and manage the following documents:

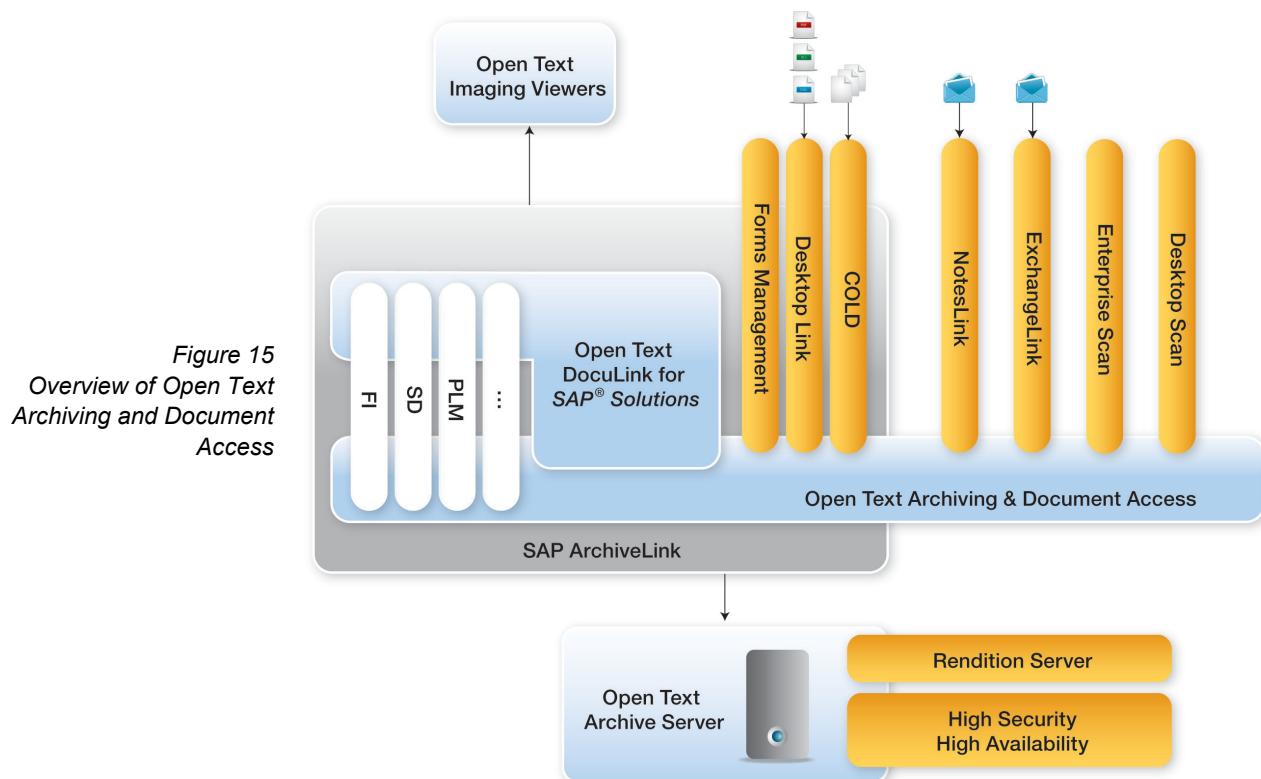
- Outgoing SAP documents (documents that were created by the SAP system, such as purchase orders, invoices, reminder letters, and delivery notes)
- Incoming documents of all types (scanned paper documents, faxes, and electronic documents)
- Print lists (generated by SAP system reports)
- SAP data archiving files, including SAP NetWeaver ILM data files
- Other SAP ArchiveLink and SAP KPro documents created by the SAP system or users in different SAP modules and applications

In addition, Open Text provides a comprehensive product portfolio for all document archiving and document management needs in the SAP environment, as illustrated by the diagram below.

The following figure gives an overview of the components of the solution. The next section will discuss in detail the functionality of these components:

- **Enterprise Library with the Archive Server:** The backbone of the solution, it provides secure long-term storage of data and documents.
- **The ABAP add-ons run in the SAP application on top of the SAP NetWeaver ABAP stack:** The most important part of the add-ons, DocuLink for SAP Solutions, enables the virtual folder views. Other ABAP function modules provide the interface to the client components and Document Pipeline for the document ingestion.
- **Imaging Viewers:** Display archived documents and provide notes and annotation capabilities for *ad hoc* collaborating with documents.
- **Imaging Clients:** Enable the archiving of business documents and the linkage to SAP objects. Enterprise Scan and Desktop scan provide high and low volume scanning for paper documents. DesktopLink attaches desktop and office documents to SAP objects and NotesLink and ExchangeLink integrate emails with SAP.
- **The Document Pipeline for COLD and other formats:** Offer a batch import interface into the solution.





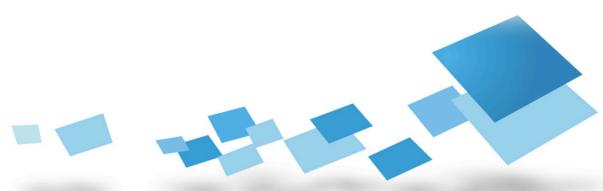
Secure long-term archiving with the Archive Server

Archiving and Document Access relies on Open Text's Enterprise Library for document storage. As a central part of Enterprise Library, the Archive Server provides secure, long-term, unalterable, and compliant archiving of documents and data.⁴

Key capabilities of the Archive Server are

- Secure, long-term storage of data and documents in unalterable, tamperproof form, securing the long-term accessibility of the content and bridging changes in storage technology.

⁴ For more detailed information about Open Text Archive Server, please read the “Open Text Archive Server” white paper.



- High security for content with secured communication channels (HTTPS, SSL, SecKey), document encryption on the media for sensitive areas, proof of unalterability with renewable timestamps and digital signatures.
- High performance document storage with options for document aggregation in ISO images for high write performance. Built-in compression and single instance archiving saves resources.
- High performance document access via caching mechanism on all layers, starting with write and read buffer as local caches up to stand-alone cache servers for remote locations to optimize access to a central Archive Server with a low bandwidth.
- Highly scalable with regards to managed document volume and number of users accessing content, suitable for small, medium, and large enterprises, flexibly supports any strategies for a centralized and distributed architecture.
- Built-in backup for the archived content, replication and distribution of content with Remote Standby Servers, built-in disaster recovery protects content from loss in disasters like fire, explosions, and floods. High availability scenarios based on cluster technology assure access to the content for world-wide installation, 24 hours a day, 7 days a week.
- Comprehensive support of the prevalent Unix and Windows operating systems as well as Oracle and MS SQL Server as databases. Supports the leading storage vendors (CAS, NAS, SAN, HSM) with secure storage platforms (WORM feature and retention support).

Document display with Imaging Viewer

Once a document has been saved in the archive, it is immediately available to users at every work center and can be retrieved using different clients. SAP users can continue to use the familiar SAP GUI while others can use the SAP NetWeaver Portal or a custom Web interface. In addition, employees around the world can access documents through the Internet. These familiar user interfaces simplify the retrieval process, integrate more users in the business processes, and increase user acceptance.

Open Text uses the original application to display proprietary document formats; for example, archived Microsoft Word documents are displayed using the original Microsoft Word application. Before archiving, Open Text recommends its Archive Rendition Server solution to convert proprietary documents into long-term document formats like PDF/A or TIFF. This ensures long-term accessibility to important business data even if the original application is not supported or available any more.

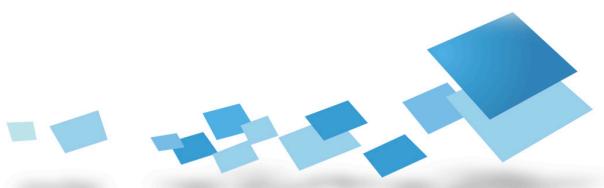
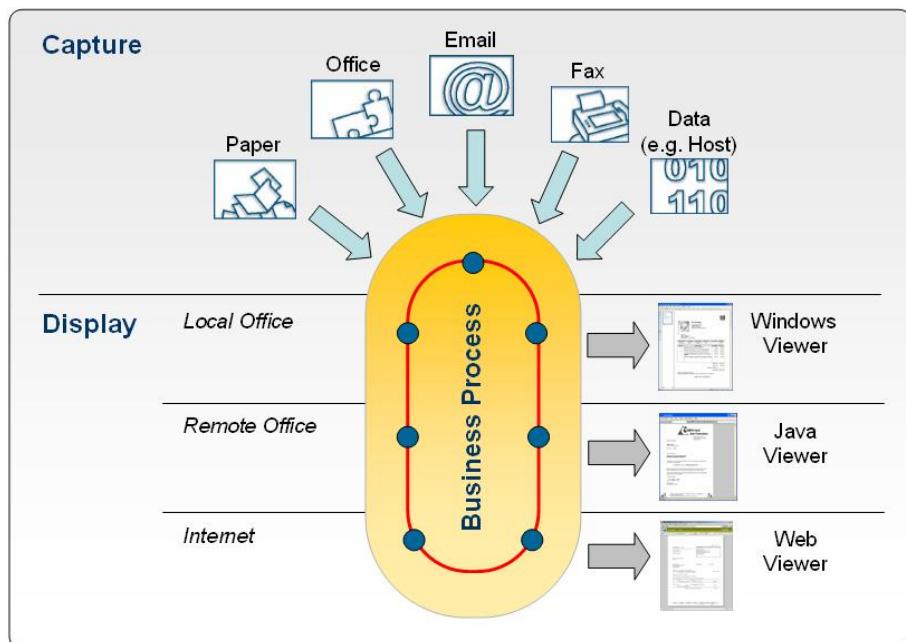


Figure 15
Open Text Imaging Viewers



Online business document viewers

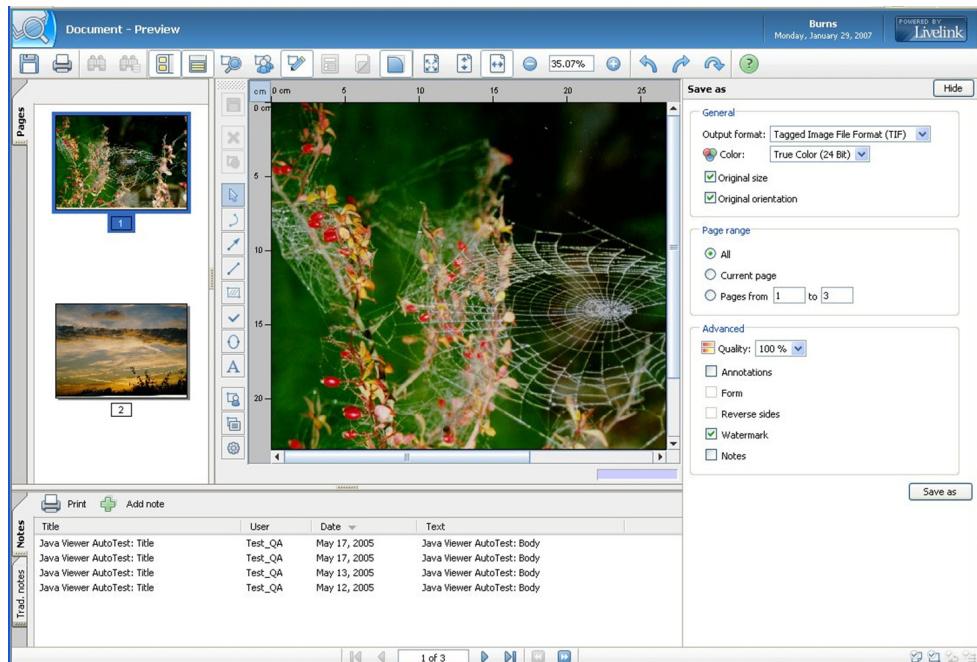
For online display of documents in a set of core formats, including TIFF, JPEG, ASCII, ALF (Advanced List Format), OTF (Output Text Format), and PDF document formats, Archiving and Document Access provides three types of document viewers: Imaging Web Viewer, Imaging Java Viewer, and Imaging Windows Viewer. Each viewer is designed to support customer business scenarios in different technical environments.

The **Imaging Web Viewer** combines the benefits of several technologies and can be used in all imaging scenarios. Based on the new capabilities of Web 2.0, it provides a completely new experience for the end user. Because there is no client installation, TCO and administrative overhead is dramatically reduced. The Imaging Web Viewer is ideal for Internet-based solutions in which different types of users on different desktop environments need access to business documents.

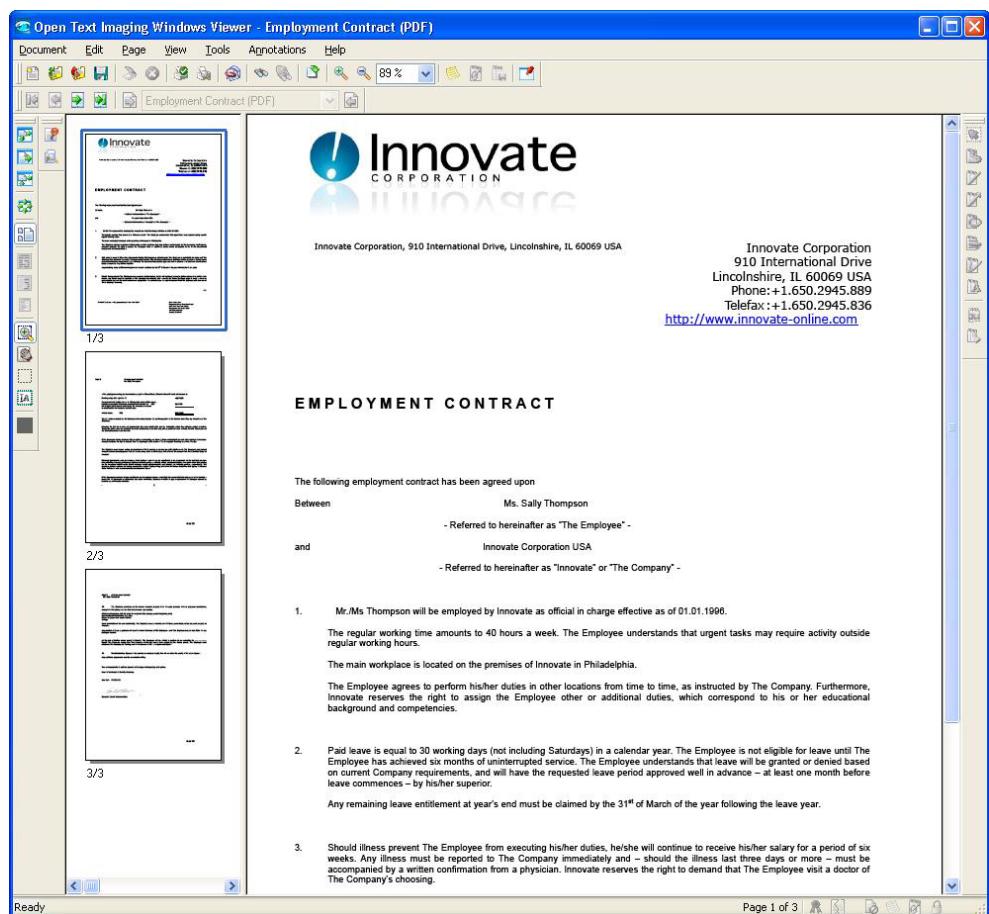
The **Imaging Java Viewer** is a Java applet that automatically loads on user workstations when a link is clicked to open a document. It can be used to display and print documents in Web-based scenarios and supports appending notes and annotations to documents.

The **Imaging Windows Viewer** is a client-side, desktop application that displays archived documents on user workstations. In addition to document display, it supports the TWAIN interface for integration with office scanners and thus can be used as a low-volume scan client.

*Figure 16
Open Text Imaging
Web Viewer*



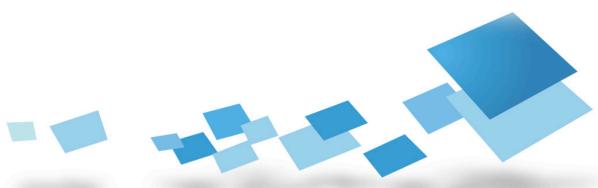
*Figure 17
Open Text Imaging
Windows Viewer*

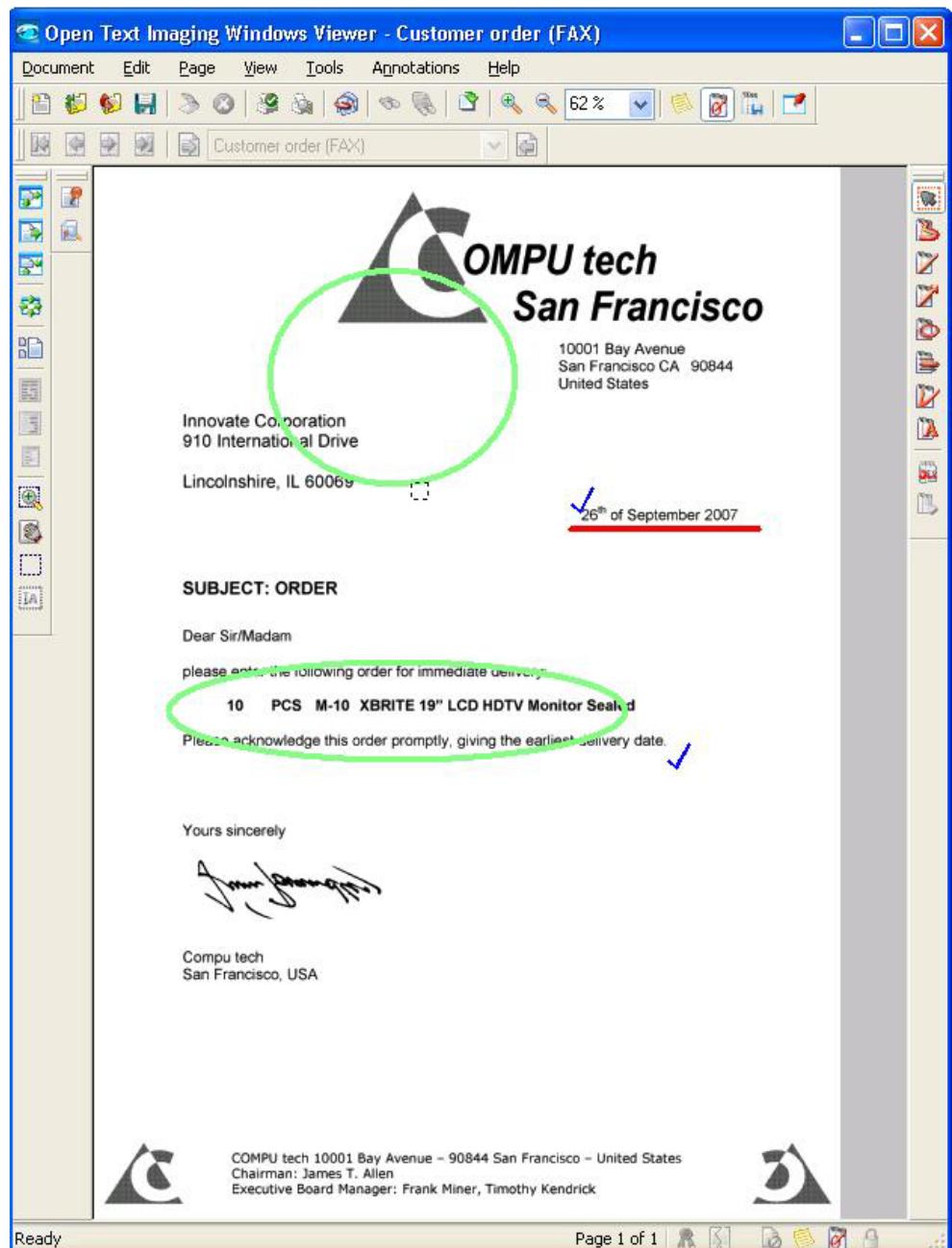


To provide a complete solution for capturing and displaying the complete range of business documents, all three Imaging Viewers support full imaging functionality:

- Locate specific content within a document. Scroll, rotate, zoom in on or out of documents, size to fit window or use thumbnail view for document pages.
- Add and view notes on documents. Note entries are automatically and unalterably tagged with the current date, time, and user name.
- Add, edit, and view annotations, including drawing elements such as arrows, lines, checkmarks, and text.
- Create form overlays, enabling documents to be displayed together with the original form on which they were based.
- Print or save documents locally, with automatic document rendering.
- Search free text in Coded Information (CI) documents like ASCII, ALF (SAP print list), and OTF documents. For efficiency, the search is executed on the Archive Server. For print lists with generated indices, search can be restricted to specific fields

All three viewers support a set of standard document formats, including ASCII, PDF, ALF, OTF, TIFF/FAX, and JPEG. Other document formats are displayed in their originating or associated application.





Form overlay for SAP documents

Some of the documents produced by SAP applications (such as order confirmations or invoices) are printed on standard forms. Because these forms are not created by the SAP system, outgoing documents are normally archived without their corresponding forms. For compliance reasons, however, it is necessary that these documents be available in their final (printed) form.



The Forms Management component of Archiving for SAP Solutions and Document Access for SAP Solutions scans and manages these standard forms, including the different versions these forms typically have. When one of these documents is requested, Forms Management provides the appropriate form template for the SAP document. The form and the document are merged and displayed as one document—exactly the way the document appears on paper.

Forms Management can also be used for imported COLD documents.

Scanning of documents with Desktop Scan and Enterprise Scan

Enterprise Scan for high-volume scanning of paper documents

Open Text Imaging Enterprise Scan is a component of Archiving for SAP Solutions and Document Access for SAP Solutions that provides a proven solution for scanning and indexing low, middle, and high document volumes, easily scaling from hundreds to many thousands of documents per day.

Imaging Enterprise Scan tightly integrates with SAP systems and supports all existing SAP ArchiveLink document-archiving scenarios, including manual scenarios and scenarios that use barcodes or SAP Workflow technology. Complex business processes are supported through integration with workflow solutions such as SAP Workflow or Open Text Business Process Management (BPM) Server.

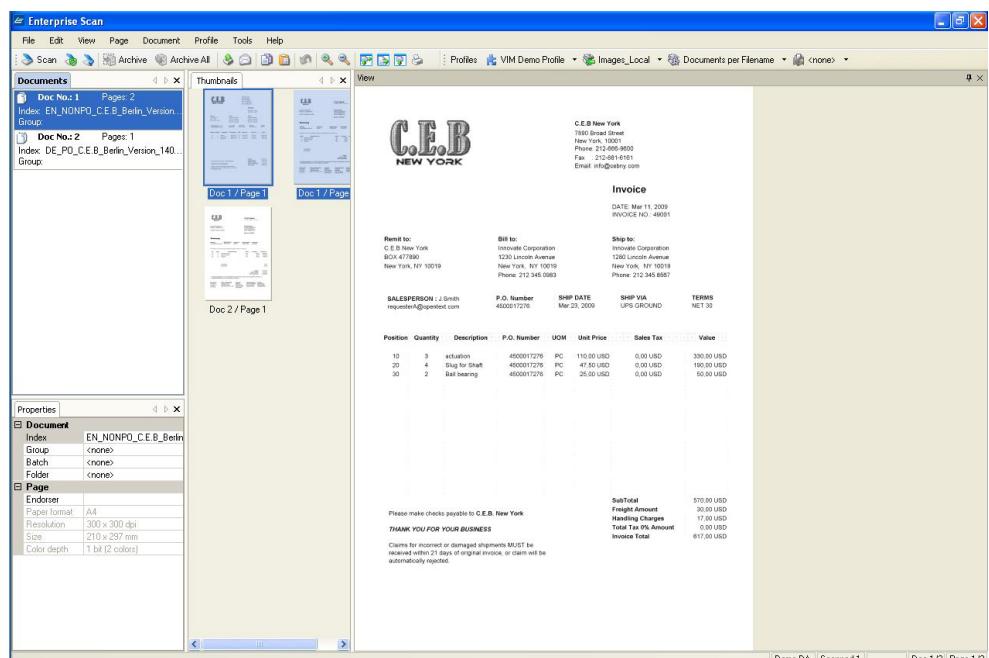


Figure 19
Scanning with Open Text Imaging Enterprise Scan



Document capture and post-processing

Imaging Enterprise Scan enables users to capture black and white and color documents from scanners via Image and Scanner Interface Specification (ISIS) or Kofax VirtualReScan, faxes via Microsoft Exchange or Lotus Notes, file system, or an external storage device.

With the high quality of modern scanners and well-prepared profile management by the Imaging Enterprise Scan administrator, manual post-processing steps are rarely necessary. Most of the post-processing is already performed automatically during scanning. However, if required, Imaging Enterprise Scan offers a complete toolkit of image manipulation and correction functions, such as rotate, sort, separate, and join document pages; change index; homogenize colors; archive documents in the Archive Server; and import document links into the SAP system.

Document indexing

For pre-indexing scanned documents (for example, in a Shared Service Center), Imaging Enterprise Scan provides a set of sophisticated pre-indexing capabilities:

- Filling pick lists and dependent pick lists with values originating in SAP solutions or other systems.
- Enabling values used in documents to be inherited by other documents via sticky fields.
- Viewing via a rectangular zoom tool in addition to the full page view.
- Supporting SAP applications with single sign-on between applications and indexing based on custom and system metadata.
- Sending a part of the scanned document via Zonal OCR to an OCR/ICR engine and reusing the OCR result for document indexing in Imaging Enterprise Scan.

Alternatively, customers can take advantage of the integration capabilities with OCR/ICR software for mass scanning and automated indexing of paper documents.

Capturing incoming faxes

Imaging Enterprise Scan supports scanning faxes from Exchange and Lotus Notes fax connectors. This allows incoming faxes to be archived in the Archive Server and optionally linked with SAP business objects.

Desktop Scan for occasional scanning of paper documents

Users who only occasionally scan paper documents can use an economical desktop scanner with the Imaging Windows Viewer to scan individual documents from virtually any workstation. This approach uses the standard TWAIN interface. Documents are stored in TIFF (black/white) or JPEG (color) format and assigned



to a business transaction. This also allows you to store an existing electronic document, such as a fax, in the archive.

Batch-Import with the Document Pipeline

Both Archiving and Document Access support the mass import of electronic documents in batch mode with the Document Pipeline, a component of the Archive Server. The Document Pipeline processes the documents in the background, archives them, and links them to SAP according to the indexing attributes. Document Pipeline ensures that the archive transaction is safe, reentrant, and highly scalable.

More information on the Document Pipeline can be found in the white paper “Open Text Archive Server – Why Archiving Matters”.

Batch import with attributes supplied (support of external scan providers)

Archiving for SAP Solutions and Document Access for SAP Solutions also support the mass import of electronic documents via the Document Pipeline with the ability to import document indexing information from an external attribute file. This option is often required if companies decide to integrate external scan providers for scanning and indexing incoming paper documents or digitizing large paper archives.

Batch import of documents via COLD

In contrast to scanned invoices or Microsoft Office documents, COLD files and spool files are imported from host systems in American Standard Code for Information Interchange (ASCII) or Extended Binary Coded Decimal Interchange Code (EBCDIC) format. These files are then archived via the Archive Server’s Document Pipeline sub-component, which automatically extracts indexing information out of the documents, stores the index in the SAP system, and creates a link to the archived files. This enables SAP users to access the COLD data within the SAP system.

If the COLD file consists of a document list, each document is stored as a separate entity and assigned an individual attribute record. This attribute record can be used to uniquely identify the document at a later stage. In case the COLD file is a data extract, report, or print list, an attribute record is assigned to describe and uniquely identify the entire contents. Within the SAP environment, customers can use DocuLink for SAP Solutions components to search for and access the imported COLD data.

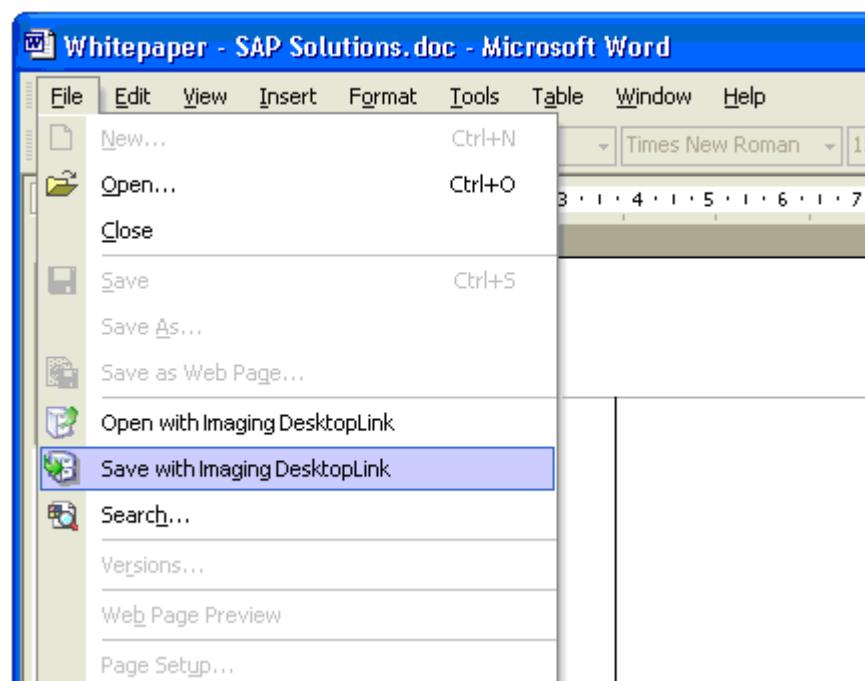
Integration of office documents with DesktopLink

Open Text Imaging DesktopLink enables integration of standard document applications with the Archive Server via the Open Document Management API



(ODMA) interface. Files can be archived in their original format from any ODMA-compatible application, such as Microsoft Office applications. The “Save with Imaging DesktopLink” menu item lets users save documents directly to the archive without requiring special macros. Before archiving Office documents, users can choose whether they want to render the document to a long-term document format like PDF or TIFF.

*Figure 20
Open Text Imaging
DesktopLink “Save as ...”*



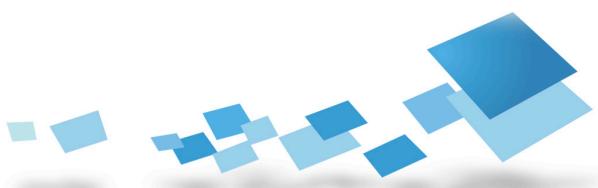
Imaging DesktopLink can archive documents from any ODMA-compatible desktop application and integrate them into SAP business transactions. Imaging DesktopLink supports early, late, and simultaneous archiving scenarios. To store a document in the archive, the user opens the SAP log-in screen. After logging in, the user chooses a suitable document type for the object and an archiving scenario, and then assigns the document to the SAP object. Imaging DocuLink provides the functionality for indexing documents.

The archive also provides options for storing documents from custom applications developed by clients. As with the standard desktop applications, the ODMA interface is used, and the documents are saved in the archive in the long-term TIFF format.

Integration of emails with ExchangeLink and NotesLink

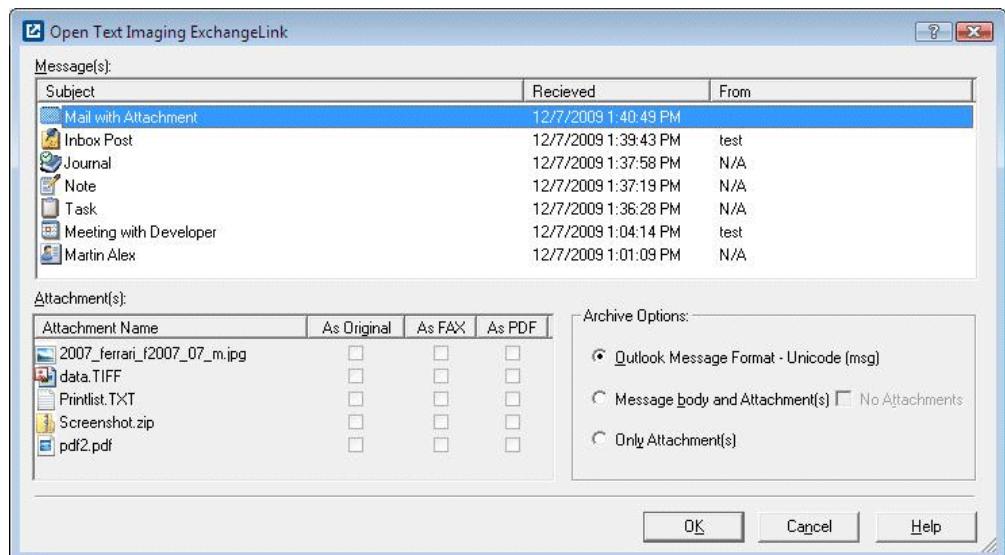
Integration of emails from Microsoft Outlook with ExchangeLink

Email has become one of the key information exchange technologies in almost every company. Virtually all office-based employees are able to access and send emails. Imaging ExchangeLink allows emails to be integrated into SAP



applications. Users are able to select an email in Microsoft Outlook and link that email or an attachment to standard SAP business objects such as invoices, customers, or orders. Imaging ExchangeLink then creates a copy of the email or attachment and archives it in the Archive Server. The archived email or selected attachments are then linked to the selected object in the SAP system. This allows SAP users to access the email directly within SAP GUI.

*Figure 21
Open Text Imaging
ExchangeLink*



Imaging ExchangeLink requires Microsoft Exchange Server and Microsoft Outlook as the front-end mail client.

Integration of emails from Lotus Notes with NotesLink

Open Text Imaging NotesLink provides the same functionality for Lotus Notes as Imaging ExchangeLink provides for Microsoft Outlook.

Virtual folder views in SAP with DocuLink for SAP Solutions

With the SAP ArchiveLink interface, business documents are attached to an SAP object and can be accessed via the attachment list of the corresponding transaction. This means that the SAP business documents are often isolated from other business documents as well as from the overall business process. Such a business process may span not only different SAP transactions and modules, but even different SAP applications (such as ERP and CRM) and ultimately also bridging to the non-SAP world involving a corporate document management system. As a result, retrieving all of the information associated with a customer or related to a purchase-to-pay process can be a time-consuming and inefficient activity.

Document management in SAP applications means more than just the ability to integrate electronic documents with standard SAP transactions. Document



Access *for SAP Solutions* also provides a document-centric business view of SAP data and documents—an alternative to the standard transaction-centric view in SAP applications. In addition to this, it supports the creation and full lifecycle of a document.

Open Text DocuLink *for SAP Solutions*

Going far beyond standard document scenarios in the SAP environment, the DocuLink *for SAP Solutions* component of Archiving and Document Access adds a process-oriented view to all business documents and data in addition to document management capabilities.

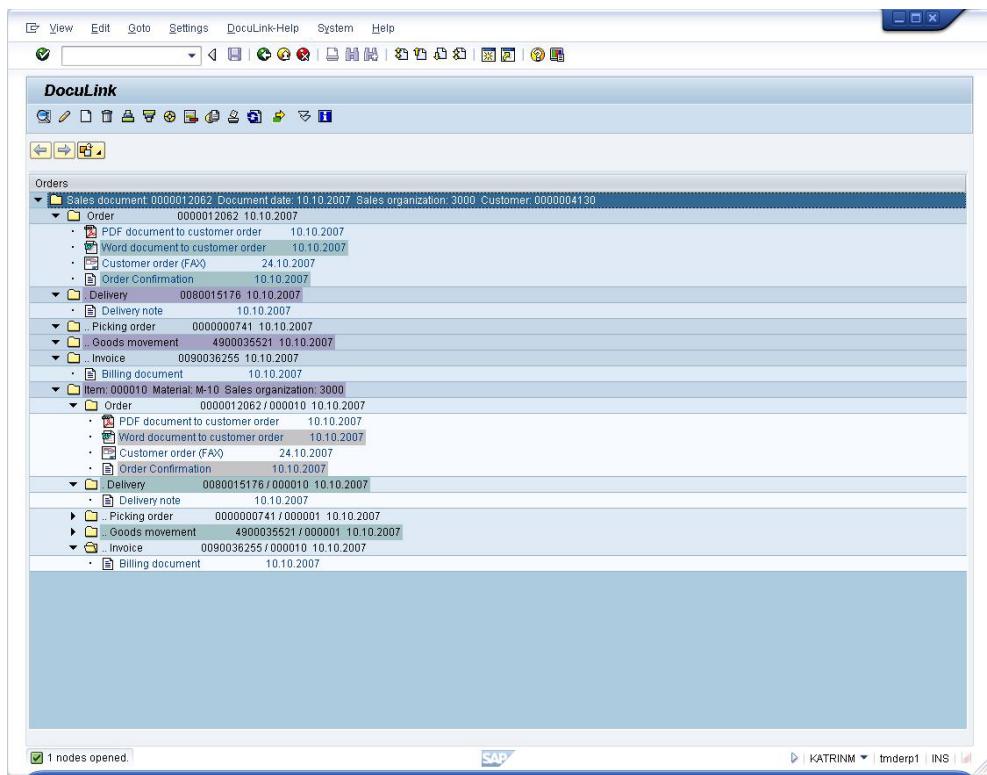
Business processes in SAP systems often incorporate documents that are created in different areas of the system. DocuLink *for SAP Solutions*, a key component of Document Access *for SAP Solutions*, provides you with the ability to build document-centric views of data and documents from almost any source within the SAP infrastructure. Data and documents can originate from different transactions, modules, and even different SAP systems. DocuLink *for SAP Solutions* fully supports all SAP ArchiveLink documents and is also able to integrate with the SAP Knowledge Provider (KPro) document models of SAP PLM Document Management System (DMS) and SAP CRM.

Important business processes often incorporate not only SAP documents but also data and documents from other IT systems, which frequently have no direct reference to SAP objects. DocuLink *for SAP Solutions* allows you to integrate non-SAP data and documents into SAP with a minimal data footprint. This allows you to set up, for example, electronic customer folders that automatically contain information from different SAP modules and systems (invoices from SAP FI, customer data from CRM, and so on); outgoing invoices from a host application as well as data; and documents from office applications, email, faxes, and digitized paper documents.

No matter where they originate, documents are displayed in dynamically generated, hierarchical folder structures that resemble the familiar Microsoft Windows Explorer. Users can retrieve documents by browsing the DocuLink *for SAP Solutions* folder structure or by using standard search dialogs. To find a document, users don't need to know the SAP menu paths or individual transactions. SAP transactions can be integrated into the folder structure, which allows users to start SAP transactions directly out of the DocuLink *for SAP Solutions* folder tree. This helps even occasional SAP users quickly find the information they need.



Figure 22
Open Text DocuLink for SAP Solutions – Virtual Folder View



DocuLink for SAP Solutions supports the document creation process and also supports standard templates for documents such as contracts, presentations, and customer correspondence. It provides document management functions like check-in/check-out and versioning. Using the Status Management function, users can assign a status to documents, define the status flow, and customize predefined actions that are triggered by a status change. Predefined steps include rendering office documents to PDF or TIFF and moving documents between content repositories (for example, from a hard disk to long-term media such as DVD).

DocuLink for SAP Solutions includes the following components:

- **Customizing:** This tool lets you adapt DocuLink for SAP Solutions to meet the needs of individual users. To create DocuLink for SAP Solutions views, the tool makes two customizing modes available to the administrator:
 - Standard mode, for quickly creating a simple DocuLink for SAP Solutions structure
 - Expert mode, for developing complex operations such as linking several tables to a node
- **Administration:** This administration tool lets you adapt DocuLink for SAP Solutions to meet the individual user's needs. DocuLink for SAP Solutions' administration includes log tables, COLD statistics, and generated programs.
- **User Interface:** The user interface provides a process-oriented, cross-module display of SAP and non-SAP data and documents, and it ensures



that DocuLink *for SAP Solutions* is easy to use. There are three types of user interfaces available:

- Classic user interface in SAP GUI
- iView for SAP NetWeaver Portal
- Web-based GUI for use in Internet or intranet scenarios. The Web user interface is restricted to read-only access to documents and data. It might be used in a standalone application or as part of a custom Web portal.

Building DocuLink *for SAP Solutions* projects

To set up a DocuLink *for SAP Solutions* project, the administrator defines the data to be displayed in DocuLink *for SAP Solutions* and the order hierarchy. Data is selected by defining so-called attribute objects (data clusters), which include the SAP attributes and links to related documents. A typical example is an invoice attributes object. Usually, the invoice attributes include information like invoice and customer number, tax, total sum, and a link to the corresponding electronic invoice document. Another typical example for an attribute object is a customer attribute object. This could include customer-related data such as customer number, name, or type. Attribute objects usually represent a database table, database view, functional module, or SAP report, thereby allowing dynamic content assembly.

Once attribute objects are specified, the administrator needs to build the hierarchical folder tree structure. This is done by defining the relationships between attribute objects. In this example, each customer has a customer number and each invoice refers to a customer number. The customer number is also the key to building the relationship.

DocuLink *for SAP Solutions* accesses the attributes and displays the relationships between business objects and documents in a dynamic Windows Explorer-like folder structure. For example, you can define a view where invoices are represented by a folder node and documents belonging to each invoice are displayed underneath. Depending on configuration and attributes, an individual folder or document can belong to a higher-level folder, and the query can be automatically restricted to values of the corresponding parent folder. This allows the administrator to represent complex business dependencies in a simple structure. For example, it is possible to display a customer entry in DocuLink *for SAP Solutions* as a top-level folder and show all invoices linked to this customer as sub-folders underneath the customer folder node. Documents belonging to invoices will then be displayed below the corresponding invoice folder node.

It is also possible to define search input at the folder level. For example, you could search for a specific document by entering the customer number first and then locating the invoice document by browsing the folder hierarchy.

It is also possible to configure different retrieval paths as views in DocuLink *for SAP Solutions*. For example, the system administrator might configure an overview of all documents for a specific customer for the sales staff. Processing clerks, on the other hand, would find it more useful to search for needed documents through the specific document number or contract number.



One or more views related by subject or business aspects can be grouped to form a project. All metadata is stored in standard but separate tables in the SAP database.

Integration of archived SAP data

DocuLink *for SAP Solutions* allows you to integrate SAP data that has been archived into business process views. This solution gives SAP users seamless access to SAP data and the attached document, regardless of whether this data is still present in the SAP database or has already been archived.

Integration with standard SAP transaction via GOS

DocuLink *for SAP Solutions* supports SAP Generic Object Services (GOS). GOS is an SAP Service that enables you to call an SAP application out of a standard SAP transaction menu bar. This allows SAP users to start DocuLink *for SAP Solutions* directly from a standard SAP transaction. It is even possible to transfer transaction parameters, allowing DocuLink *for SAP Solutions* to switch immediately to the right project and view.

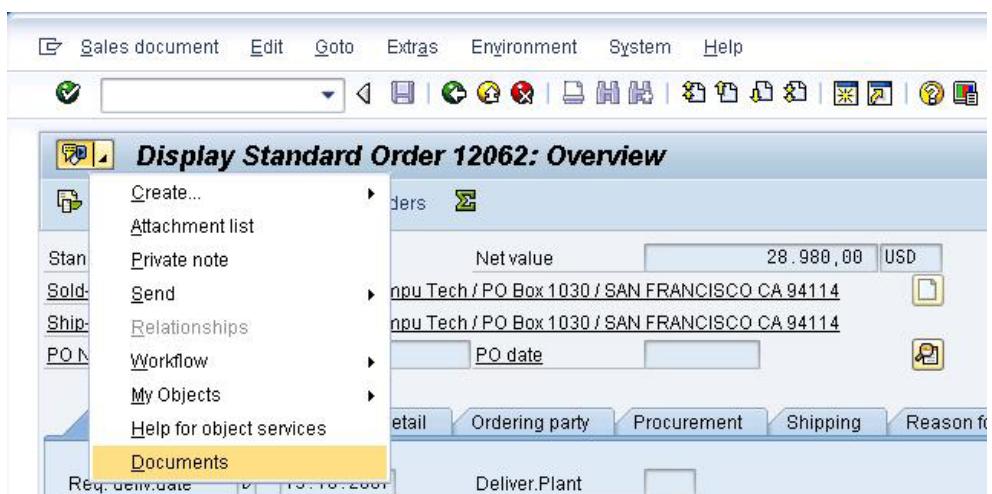
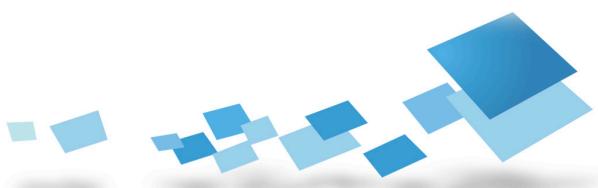


Figure 23
DocuLink *for SAP Solutions*
integrated as GOS in a
standard SAP transaction

Integration in SAP NetWeaver Portal and custom Web portals

DocuLink *for SAP Solutions* integrates into SAP NetWeaver Portal as an iView

It can also be integrated in any custom Web portal via the DocuLink Web UI, a dedicated Web application. Data from DocuLink *for SAP Solutions*' views can be displayed in a Web browser without having to install an SAP GUI.



Offline documents, mass printing, and mailing with Rendition Services

Offline access to SAP documents

Archiving and Document Access integrates with Rendition Services to provide authorized staff with offline access to SAP documents (without a permanent connection to the SAP server or the Archive Server). The functionality is available via an ABAP function library for use in projects and built into DocuLink for SAP Solutions.

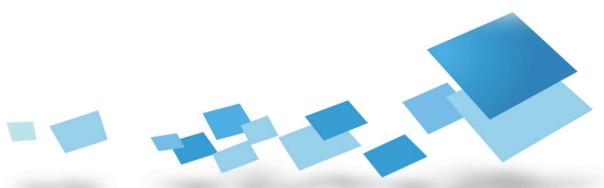
With DocuLink for SAP Solutions, a user can select a specific document or an entire folder to download. The system retrieves the documents from the archive, renders them, if required, to an independent format, and copies them to the client workstation. At the same time, it generates an HTML file that presents a view of the selected folder containing SAP data that is similar to its appearance in the native SAP interface.

This generated HTML view provides links to the local documents on the client, allowing users to view the entire folder offline using a browser in a user-friendly folder structure. For example, if the documents are provided in PDF format, the documents can be viewed independently of Archiving and Document Access software. In this way, a self-contained CD or DVD can be generated and provided to a third party.

Printing and mailing of SAP documents

In a similar way, Archiving and Document Access integrates with Rendition Services to provide mailing and printing functionality. This may be done either for a single document or for a complete folder, such as a specific customer folder or project folder. The Rendition Services are designed to handle mass scenarios that provide the ability to download, send, or print large collections of documents in one batch.

When printing several documents in one batch, the print output can be enhanced with a front page and a common header and footer to create a binder of information.



About Open Text

Open Text is a leader in Enterprise Content Management (ECM). With two decades of experience helping organizations overcome the challenges associated with managing and gaining the true value of their business content, Open Text stands unmatched in the market.

Together with our customers and partners, we are truly The Content Experts,™ supporting 46,000 organizations and millions of users in 114 countries around the globe. We know how organizations work. We have a keen understanding of how content flows throughout an enterprise, and of the business challenges that organizations face today.

It is this knowledge that gives us our unique ability to develop the richest array of tailored content management applications and solutions in the industry. Our unique and collaborative approach helps us provide guidance so that our customers can effectively address business challenges and leverage content to drive growth, mitigate risk, increase brand equity, automate processes, manage compliance, and generate competitive advantage. Organizations can trust the management of their vital business content to Open Text, The Content Experts.

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