

# Adobe solutions for document generation

Enterprise solutions for generating high-quality, customized documents

## Executive overview

Today's enterprises are discovering that documents can do much more than just communicate and inform. Compelling, high-quality documents—from printed one-page invoices to Web-delivered 100-page user manuals—can actually drive business and generate revenue. Targeted marketing programs rely on brochures and other documentation created for highly specific audiences, and other customized documents help build customer satisfaction and loyalty. The key to producing documents that drive business is an enterprise-strength document generation solution that allows corporate publishers to take content from multiple sources, dynamically generate documents, and deliver those documents over a variety of access devices.

Adobe solutions for document generation bring together multiple world-class Adobe document and graphics software technologies in business-critical, IT-friendly toolsets. Leveraging the strengths of XML, Adobe solutions work together with standard content management and enterprise applications to create effective documents that can be delivered in a number of ways, including Adobe Portable Document Format (PDF), print, fax, e-mail, the Web, and wireless devices. Enterprises that choose Adobe solutions for document generation can get to market faster, lower costs, and improve their competitive advantage.

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## Introduction

From financial institutions to global manufacturers, enterprises are now leveraging the power of documents—whether delivered in print or over the Web—to streamline transaction-based business processes, customize content, and deliver information that supports customer relationships. From everyday documents like invoices and packing slips to customized marketing collateral and interactive forms, these business-driving documents represent a new opportunity for innovative enterprises.

***Making everyday business more efficient.*** Enterprises must produce countless everyday documents that keep their businesses running. Invoices and statements can be generated, personalized, and delivered to customers in print or over the Web through secure Web sites or e-mail. Labels, checks, packing lists, and even documents requiring bar codes can be rapidly generated from database applications and locally printed. In addition, complex multipage documents can be dynamically generated and distributed electronically or in hard copy, eliminating the need to manage an inventory of expensive preprinted forms. And all kinds of documents can be rapidly designed with intuitive point-and-click design tools.

By automating and customizing the design and production of everyday documents, businesses can increase efficiency and realize significant cost savings. Enterprises can also use document generation systems as a vehicle of real-time access to information, providing up-to-the-minute availability of critical business documents.

***Personalizing marketing efforts.*** Enterprises are realizing the need to develop personalized marketing programs that provoke the highest levels of response from the most focused groups of potential customers. Whether through regular e-mail newsletters, customized brochures, surveys, or other personalized documents, enterprises are reaching customers with marketing communications specifically tailored to their needs.

***Engaging customers with interactive documents.*** As enterprises deliver more personalized communications to their customers, they are also looking for ways to engage those customers in long-term relationships. By embedding forms and surveys within documents from existing legacy, ERP, and CRM business applications, enterprises establish a two-way dialogue that not only delivers rich feedback but also enables streamlined transaction processing.

For example, a financial institution could accept an electronic request for a loan application, and then deliver a personalized set of application forms with the customer's personal information already filled in. Personalized marketing messages could also be inserted into customer statements to increase upsell opportunities. Delivering interactive documents means more than just promoting customer satisfaction; it also means turning documents into revenue-generating tools that provide enhanced efficiencies and return on investment.

***Enhancing business communications.*** Output generated from existing legacy, ERP, CRM, and other line-of-business applications is often unformatted and difficult to read, reducing the impact of your customer communications. Adobe solutions for document generation transform report-like output into professional-looking, visually rich, customer-oriented documents that improve your corporate image and allow you to communicate more effectively with your customers, partners, and suppliers.

***Generating documents for worldwide business requirements.*** In a global, competitive environment, documents must be created and delivered worldwide. To support businesses operating in multiple countries, Adobe solutions for document generation can generate documents in multiple languages and multiple currencies within the same document.

### Documents that drive today's business

- Checks
- Contracts
- Invoices
- Financial reports
- Loan agreements
- Marketing collateral
- Packing lists
- Product documentation
- Proposals
- Statements
- Surveys
- Welcome packages

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## The Adobe solution

Built on a foundation of powerful and scalable document and imaging technologies, Adobe solutions for document generation comprise two essential capabilities:

- Rich document generation and manipulation
- Flexible document delivery

### **Rich document generation and manipulation**

Adobe solutions for document generation allow enterprises to easily generate Adobe® PDF documents of any length and sophistication. Financial documents—including invoices and statements—can expand or contract to accommodate any number of line items and can include calculations such as subtotals and currency conversions. Longer documents can be intelligently paginated and formatted according to predefined rules for variables such as page overflow. However, the document generation capabilities of Adobe solutions go much further than just accommodating variable document lengths. From support for personalization to advanced document assembly tools, a number of rich document generation features are available to be leveraged by enterprises.

#### **Adobe PDF: The foundation of Adobe solutions for document generation**

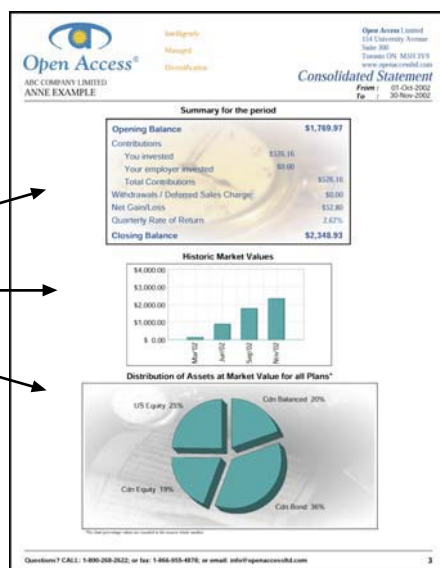
Leveraging industry-standard imaging and document technology from Adobe Systems, Adobe solutions for document generation can convert documents—including highly formatted, visually rich content—into Adobe PDF files. Adobe PDF files are readable across all major computing platforms, making electronic documents universally accessible to anyone using the free Adobe Reader® software. With more than 500 million copies of Reader software deployed worldwide, Adobe PDF has become the de facto standard for delivering documents electronically.

Adobe PDF documents can travel across organizational boundaries and from device to device without losing visual appearance, data, internal logic, or security. They look exactly like their original paper counterparts, retaining all the familiar fonts, graphical elements, and formatting. This is exceptionally important in environments where electronic documents must maintain fidelity to the original paper document. Additionally, high-quality Adobe PDF documents can be delivered over the Web, and then printed locally, giving the end user direct control of the printing process.

**Adobe PDF from XML.** Adobe solutions support the dynamic creation of Adobe PDF documents from XML data. By flowing XML data retrieved from an enterprise application or database into document templates, enterprises can generate customized Adobe PDF documents and automate forms-based transactions. They can also easily convert Adobe PostScript® and EPS files to Adobe PDF files on their servers.

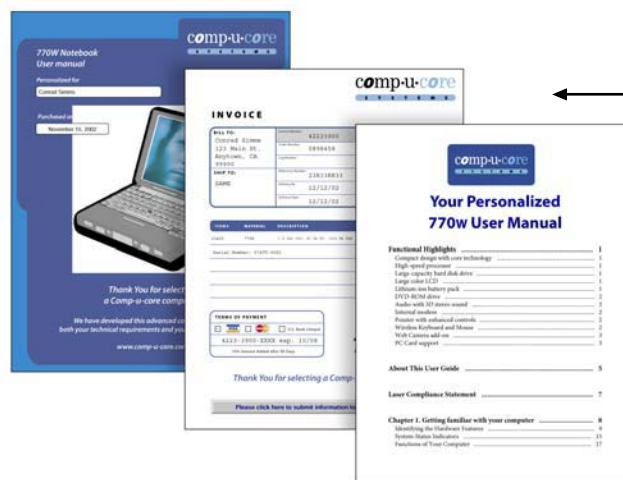
**Personalization.** Increasingly, customers, partners, and employees expect to have the ability to customize documents to suit their own needs. Leveraging customer information that is already stored in their business systems, enterprises can use Adobe solutions to personalize the documents they generate for customers and other recipients. Individual marketing messages can be embedded in documents to increase upsell opportunities, and customized headers and footers can be placed across long, compound documents.

Customer-specific data is pulled from internal systems so that each statement contains the most up-to-date, personalized information.



**Document assembly and manipulation.** Personalization also extends to include document assembly and manipulation. Using Adobe solutions for document generation, users can combine individual Adobe PDF documents—such as cover letters, contracts, and terms and conditions—into compound Adobe PDF documents that are personalized for each recipient. For example, an enterprise might assemble customized service manuals that include hyperlinked tables of contents for easy navigation. Additionally, forms can be incorporated into assembled documents, allowing customers to provide opt-in information, register for special offers, and interact with enterprise publishers.

A customer who purchases a computer system online immediately receives a personalized user manual in Adobe PDF.



Transactional documents, such as invoices and service contract terms, are included in the documentation for the customer's convenience.

The contents of the document include only the information that is relevant to the system configurations specified by the customer.

**Document formatting.** With the document template design tools found in Adobe solutions for document generation, enterprises can quickly and easily create sophisticated, professional-looking documents while providing optimal flexibility in document deployment. Formatting attributes—such as text, fields, lines, boxes, fonts, and logos—are easily moved, changed, added, or deleted with the click of a mouse. With support for dynamic graphics standards—including Scalable Vector Graphics (SVG)—enterprises can include personalized business graphics like pie charts, bar charts, and line graphs in linear and 3D formats. By eliminating the need to hire expensive custom programmers or to store and manage preprinted forms inventories, Adobe solutions for document generation save you both time and money.

Left: Report-like document produced by a line-of-business application.

Right: Professional, customer-focused document produced by Adobe solutions for document generation.

**Real-time generation.** Adobe solutions for document generation can deliver Adobe PDF documents to the Web in real time. For instance, users can view financial statements—such as trading information—that include the most up-to-the-minute information. With real-time document generation, enterprises can deliver time-sensitive information in professional-looking, regulatory-compliant documents that are an exact representation of paper documents, thereby assuring familiarity and compliance.

### XML: Integrating data and documents

XML has become the recognized standard for data interchange. It enables easier sharing of information between applications and facilitates long-term document archiving. The use of XML provides a high degree of flexibility, leading to quicker, easier application integration and lower implementation costs. Support for XML provides significant value because it is:

- An industry standard
- Independent of platforms and applications
- Aware of multiple locales and languages
- Suitable for long-term retention and archiving
- Easy to implement
- Highly extensible

Along with related technologies like the Adobe XML Forms Architecture (XFA), XML Forms Data Format (XFDF), Scalable Vector Graphics (SVG), eXtensible Stylesheet Language Transformations (XSLT), and eXtensible Stylesheet Language Formatting Objects (XSL-FO), XML helps enterprises shift their business processes from paper to the Web.

### Flexible document delivery

Generating the documents that drive business is only part of Adobe solutions for document generation. Because today's customers and end users are accessing documents from a wide variety of devices and technologies, Adobe provides a number of flexible document delivery options that match recipients' preferences.

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**Adobe PDF.** Adobe solutions can generate output in Adobe PDF for an end user or for preview purposes. Generating Adobe PDF documents enables your organization to optimize the delivery of professional-looking, compliant documents—in print or over the Web—to customers and other end users.

**Print.** Adobe solutions support high-volume, distributed, and on-demand printing using a variety of print standards, including PostScript, Adobe PDF, and PCL. And because Adobe print drivers are faster than operating system drivers, enterprises can deliver output at maximum print speeds.

Additionally, organizations can print checks, labels, and bar codes:

- **Checks.** Printing checks, deposit slips, mortgage coupons, or draft statements requires special MICR fonts. For example, an MICR font is used to print the encoded information that appears at the bottom of checks in North America and many other countries. Adobe solutions support MICR fonts so organizations can print compliant checks on-the-fly. In addition, Adobe solutions also enable enterprises to print checks on specialized check stock while enabling automatic tray selection to print additional detail lines onto less expensive plain paper. For organizations with high-volume check printing requirements, this can result in a significant cost savings.
- **Labels and bar codes.** Adobe solutions for document generation provide software-based support for printing labels and bar codes on standard laser printers, as well as bar code printers. Bar codes can be added to any document without special bar code fonts or hardware additions to laser printers. This allows enterprises to mix label printing and other printing needs within the same infrastructure. For example, enterprises can print a packing list and shipping labels on two separate printers at the same time. Adobe solutions also enable your organization to meet regulatory requirements with compliant, multilingual labels, including graphics and logos.

**Fax.** Because Adobe solutions for document generation do not use proprietary software, enterprises can generate and fax documents using industry-standard fax servers.

**Web.** With Adobe solutions, organizations can leverage the Web to deliver personalized documents to customers, suppliers, partners, and employees 24 hours a day, seven days a week. For instance, a financial institution could generate Adobe PDF versions of monthly statements that customers could then view online. Customers could also download these documents and then print them offline. In both cases, you can be sure that the document looks exactly as you intended.

**E-mail.** Enterprises can send Adobe PDF documents as e-mail attachments to customers, suppliers, partner, and employees. Enterprises can also leverage customer profiles to automatically send e-mail notifications that documents are available online.

**Wireless devices.** The same customized data used to populate Adobe PDF documents can be dynamically delivered to wireless devices, including mobile phones, SMS devices, and PDAs. For example, financial institutions could alert customers via mobile phone that new bills or mortgage documents are available. Because the dynamic content is driven from a single data stream, enterprises don't have to modify their core business applications.

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**Worldwide reach.** In a global, competitive environment, documents must be created with worldwide delivery in mind. To support enterprises operating in multiple countries, Adobe solutions for document generation support many languages, including English, French, German, Swedish, Spanish, Italian, Finnish, Norwegian, Danish, Portuguese, Czech, Polish, Hungarian, Russian, Simplified Chinese, Traditional Chinese, Korean, and Japanese.

## An IT friendly solution

Adobe solutions for document generation integrate easily into today's complex IT environments and include many features designed to simplify implementation, deployment, and maintenance of the solutions.

**Archiving.** Archiving electronic documents in a database eliminates the hassle of physically searching through paper files and reduces the number of lost or misfiled documents. Enterprises can store Adobe PDF documents in a specified archive and then retrieve those documents based on filenames, field contents, and tags. Additional archiving capabilities include support for a full text search and worldwide secure document access from the Internet or intranet for document retrieval, processing, and storage.

**Output management system (OMS).** Companies spend significant resources on printing and print management. Adobe provides the ability to manage print output, leading to overall improvements in business efficiencies across the enterprise. Organizations save the time and money associated with managing challenging print environments with the following features:

- Load balancing promotes more efficient use of printer resources by dividing print jobs according to printer capability and run-time usage.
- Reprint eliminates the need to rerun or resubmit failed print jobs.
- Print redirection moves print jobs from stalled or busy printers to printers that are available, resolving print process backlogs.

**Custom solutions.** Custom agents can be created to easily extend and enhance the Adobe solution to meet the unique needs of each individual company. For instance, it is possible to connect multiple applications, or to pull data from disparate data stores. You can also develop business rules that create personalized marketing messages based on data pulled from an existing database. The open architecture of Adobe solutions enables a custom agent to be invoked at any point during the transaction processing in order to perform a wide variety of actions.

**Application connectivity.** Adobe has developed specific connectivity components to enable easy integration with existing ERP, CRM, legacy, and line-of-business systems. Specialized Output Paks developed for major ERP and CRM vendors minimize the time required to implement Adobe solutions. Adobe Output Paks include standard ready-to-use document templates and all of the integration components needed to get organizations up and running quickly.

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## Solution components

Adobe solutions for document generation can be built from a combination of the following technologies, depending on each customer's specific requirements.

### Dynamic transactional document generation

#### **Adobe Output Designer**

Adobe Output Designer software is an easy-to-use design tool that lets you create electronic document templates for use with Adobe solutions for document generation. Using Adobe Output Designer, you can create electronic documents that exactly replicate existing paper documents—even the most complex—quickly and easily.

#### **Adobe Central Pro Output Server**

Adobe Central Pro Output Server software enables businesses to generate professional-looking documents from core applications such as CRM, ERP, and legacy systems for improved customer communications. Documents such as purchase orders, invoices, and checks are dynamically generated for delivery via Adobe PDF, the Web, e-mail, fax, or print.

#### **Adobe Output Pak for mySAP.com®**

Adobe Output Pak for mySAP.com software enables businesses to generate professional-looking documents from their SAP® systems for improved customer communications. Documents such as purchase orders, invoices, and checks are dynamically generated for delivery via Adobe PDF, the Web, e-mail, fax, or print.

#### **Adobe Output Pak for Oracle® E-Business Suite**

Adobe Output Pak for Oracle E-Business Suite software enables businesses to generate professional-looking documents from their Oracle systems for improved customer communications. Documents such as purchase orders, invoices, and checks are dynamically generated for delivery via Adobe PDF, the Web, e-mail, fax, or print.

#### **Adobe Web Output Pak**

Adobe Web Output Pak software enables businesses to provide their customers with access to up-to-the-minute information via the Web or wireless devices. Professional-looking documents are dynamically generated and delivered in Adobe PDF, HTML, or WML, with the content growing or shrinking depending on the data.

### Dynamic document and graphics generation, assembly, and manipulation

#### **Adobe Document Server**

Adobe Document Server software enables businesses to dynamically generate customized Adobe PDF documents for more targeted and effective customer communications. XML-based data from enterprise applications is flowed into Adobe PDF templates to create, assemble, and manipulate complex, content-rich documents on a server.

#### **Adobe Graphics Server**

Adobe Graphics Server software automates the creation and repurposing of graphics for print and the Web. Maintain compelling visualization by ensuring that you are always using the most recent, approved assets. And, since Adobe Graphics Server integrates easily with asset management and content management systems, you can integrate it into your existing automated workflows.

## Complementary desktop content creation tools

### **Adobe Acrobat® family**

Convert business plans, spreadsheets, graphically rich brochures, and Web sites to Adobe PDF files with Adobe Acrobat software. Your team can open, approve, and add comments to Adobe PDF files from within their Web browsers. And whether you distribute Adobe PDF files in print or online, they'll look exactly as intended—with layout, formatting, and images intact.

### **Adobe FrameMaker®**

Adobe FrameMaker software delivers an enterprise-class authoring and publishing solution that combines the simplicity of word processing with the power of XML. A fully structured, WYSIWYG authoring environment complements long document support and rich publishing options for print, Adobe PDF, the Web, and more.

### **Adobe Illustrator®**

Adobe Illustrator software defines the future of vector graphics with groundbreaking creative options and powerful tools for efficiently publishing artwork on the Web, in print, and everywhere. Produce superb Web graphics using symbols and innovative slicing options. Explore creative ideas with live distortion tools. Publish graphics in record time with dynamic data-driven graphics and other productivity features.

### **Adobe Photoshop®**

Adobe Photoshop software, the professional image-editing standard, helps you work more efficiently, explore new creative options, and produce the highest quality images for print, the Web, and anywhere else. Create exceptional imagery with easier access to file data; streamlined Web design; faster, professional-quality photo retouching; and more.

## About Adobe

Adobe helps people and businesses communicate better through its world-leading digital imaging, design, and document technology platforms for consumers, creative professionals, and enterprises. Adobe's revenue in the last fiscal year exceeded US\$1 billion. For more information about Adobe, visit [www.adobe.com](http://www.adobe.com).

### FOR MORE INFORMATION

To learn more about how Adobe solutions for document generation can help you, visit [www.adobe.com/products/server/generation.html](http://www.adobe.com/products/server/generation.html).

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