

Creating a Common View

Companies are improving teamwork, consolidating resources, and streamlining compliance efforts with powerful document visualization and collaboration solutions.

Executive Summary

Globalization, outsourcing, and increased merger and acquisition (M&A) activity have changed the business landscape during the course of the last few years. Given today's economy, pressures have never been greater for global organizations to increase efficiencies, improve quality, and lower operating costs. This requires enterprises to leverage globally distributed teams to get more done, more quickly, and in an efficient manner. Whether a manufacturing organization introduces lean initiatives or faster NPI (new product introduction) processes to reduce their time to market, or an engineering and construction firm undertakes global projects that require geographically dispersed design and construction teams to work together, the needs are the same. These activities must be done efficiently, in compliance with company and government regulations, and in the most cost-effective manner.

Global companies are focusing on three main drivers: electronic document collaboration, consolidation of IT tools into a common platform, and ensuring compliance with business processes and regulations.

Oracle's AutoVue Enterprise Visualization is a key solution that enables companies to achieve all three goals. AutoVue allows any authorized user to view, annotate, and collaborate on virtually any document type—regardless of the desktop tool that created it.

Furthermore, by integrating AutoVue with enterprise tools like Oracle applications (ERP, UCM, CRM, ALM) or third-party systems such as Documentum, SharePoint, Enovia PLM, and many others, users can create visual applications (or “visual apps”) and collaborate within the context of critical business processes, such as design reviews, approval workflows, and field service operations, to name a few. AutoVue is purpose-built for distributed collaboration, with markup, Web conferencing, and chat capabilities—all delivered securely using Web technologies.

Introduction: A Changing Business Landscape

Globalization, outsourcing, and increased M&A (merger and acquisi-

tion) activity have forever changed the competitive landscape for many enterprises. In this new business climate, it is common to find com-

panies in many industries whose projects are intrinsically tied with supply chain partners, designers, and service agencies throughout the globe. Working together effectively isn't as simple as it seems, as the process of getting data and documents to flow throughout such organizations is at best challenging, at worst impossible. The overarching goal of document collaboration must be balanced with the equally important drivers of IT tools consolidation and ensuring compliance with business processes and regulations. Each presents unique challenges.

In this paper, we'll discuss these three challenges for distributed enterprises, and explore the ways in which Oracle's AutoVue solutions help companies address all three seamlessly and effectively, enabling organizations to reap the benefits of global document collaboration.

The Document Visualization and Collaboration Conundrum

Every enterprise team must collaborate on business and technical documents as part of its standard and ad-hoc business processes. Whether companies need to design a new product or execute plant maintenance operations, employees need to be able to view and collaborate on complex data with others in the organization.

A collaborative success story

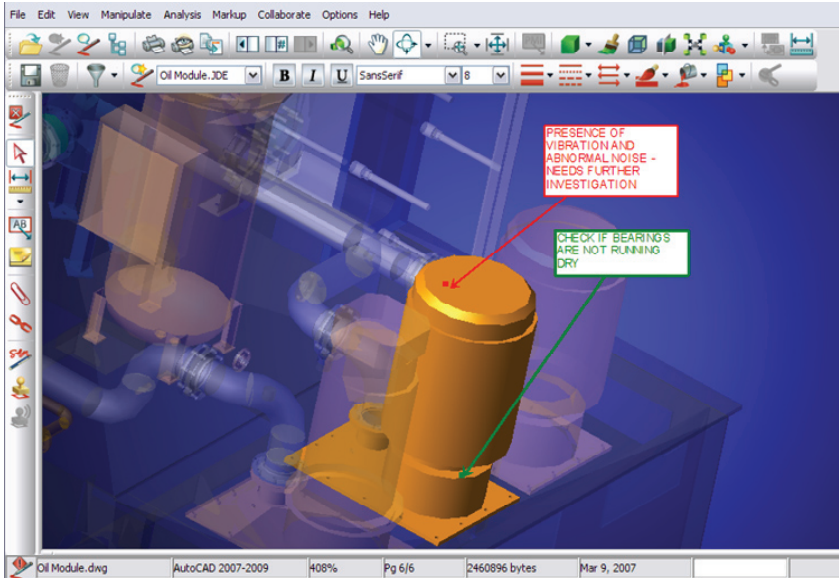
Just one example of AutoVue's game-changing collaborative power comes from an international engineering and construction company based in Denmark. The organization deployed AutoVue to collaborate with global teams on more than 200 projects being carried out simultaneously. These projects involved complex CAD files and documents, but by integrating AutoVue with its Web-based document and project-management system, the company achieved significant efficiencies and savings.

Specifically, the improved collaboration led to expedited design reviews, quicker project completions, reduced paper, shipping, and travel costs, and more satisfied customers.

However, when the stakeholders and contributors are situated in diverse locations around the world, using disparate and incompatible systems and application environments, and working with a variety of documents, certain complications are inevitable.

Challenges to effective document collaboration include:

- Proprietary document formats of common desktop productivity and design tools—such as office automation and CAD—require all collaborators to own and learn the native tools in order to utilize the documents.
- Business and technical documents are—in many cases—sensitive and confidential. They must be distributed under tight control and integrated with a back-office system such as product lifecycle management (PLM), enterprise resource planning (ERP), or document management.
- Users need to collaborate securely and effectively across geographic distance without the benefit of face-to-face interaction.



Oracle's AutoVue delivers powerful, easy-to-use markup tools, even for complex 3-D design files.

The AutoVue Solution

It's clear that companies need a solution that enables secure and format-agnostic document collaboration—one that also integrates seamlessly with existing workflow and enterprise systems. Oracle's AutoVue does just that.

First off, the user does not need the originating software in order to open, view, and comment on the files. AutoVue provides native support for hundreds of file types, including the latest MCAD formats, 2D formats, EDA formats, and office/graphics programs like PDF and Microsoft Office. Contributors need not worry about incomplete views or dealing with inaccurate and inefficient file conversions, which introduce delays and additional overhead into the workflow; they're seeing the full file, in its original application context.

AutoVue's in-context digital comments and annotations enable visualization and document collaboration within the framework of business processes and workflows, instead of outside them.

In every industry, blueprints and design documents are highly coveted

trade secrets, and companies need to ensure that their intellectual property doesn't fall into the wrong hands. AutoVue is a Web-based solution, delivering simple and secure electronic document collaboration. With Web-based visualization and collaboration, original documents are not distributed or downloaded to an individual's desktop, only a visual representation of the file is streamed to the recipient for viewing.

A consolidation success story

A large nuclear utility in Sweden recently standardized on AutoVue for their single visualization solution, eliminating over 20 other viewing tools deployed throughout the utility and enabling the facility to apply best practices to its processes. Savings in license costs and user productivity are estimated at \$700,000 per year.

In addition, the solution enables the facility to track and record activities, thus creating a repository of employee best practices and knowledge, which helps reduce operational expenses in the long term. The utility also plans to leverage AutoVue in its existing asset lifecycle management solution.

IT Systems Consolidation

Companies are faced with the need to do more with less. On the hardware end, they're consolidating servers and storage devices—sometimes even workforces—and doing their best to maximize resource utilization while controlling costs.

How can AutoVue help enterprises with this strategic goal?

First, AutoVue is a single solution that can be used by anyone in the organization to view and collaborate upon any document format. CIOs no longer have to equip users outside of engineering with expensive and complex CAD authoring tools to leverage the content. Distributing native tools to every stakeholder runs counter to an organization's need for IT systems consolidation and is simply not feasible. Designers need expensive and specialized software tools, but reviewers and stakeholders don't need them to review work in progress, nor do they have the expertise to use such tools. Additionally, training non-specialist (eg, non-CAD) users on how to use several complex tools is an added expense. Licensing AutoVue to view and collaborate on documents—instead of buying expensive authoring licenses for specialized design packages—leads to significant cost savings in license, maintenance, and training fees. More importantly, providing AutoVue to a broader set of reviewers and stakeholders extends an organization's ability to collaborate and allows teams to work with and incorporate technical content in their everyday business processes.

Standardizing on a single visualization solution, instead of deploying multiple file viewing tools, can also cut down on IT complexity and end-user confusion, thus reducing costs. A standard visualization solution is also easier to integrate into existing systems and processes.

In addition, AutoVue integrates with existing IT environments, enabling companies to leverage and add to the

value of the enterprise systems in which they have invested. Oracle is well aware that smart companies may already enforce workflow and approval chains with business process management (BPM) and lifecycle management tools, and AutoVue integrates seamlessly with leading solutions like Oracle Product Lifecycle Management, Oracle Universal Content Management, Microsoft Share-

A compliance success story

A medical device manufacturer based in the USA has nearly 10,000 employees working in 32 countries around the world. The company's research and development operations are tightly regulated by the U.S. Food and Drug Administration.

AutoVue integrated seamlessly with this enterprise's existing product lifecycle management (PLM) solution, reducing the time needed to ensure compliance. With its native support for the PLM's permission settings, fully traceable markups and comments, and embedded metadata, AutoVue relieves the compliance headache and smooths audit processes.

Point, EMC Documentum, SAP Product Lifecycle Management, and others. This way, enterprises take full advantage of the systems they have, while enhancing their business processes and workflows with in-context visualization and collaboration.

Ensuring Compliance and Traceability with AutoVue

Many industries are bound by strict privacy and security regulations for data and procedural requirements for production. Also, standards-setting bodies such as the International Organization for Standardization (ISO) have established protocols around many global industries, including construction, environmental protection, and others. To ensure compliance, companies must have complete traceability in their processes and carry these out in a transparent fashion, so that they may have sufficient

documentation to present auditors.

AutoVue captures a complete audit trail of document activity and offers traceability and accountability in business processes and decisions. This is particularly important to support regulatory compliance and can also be useful in liability cases in the event of legal conflicts. AutoVue's annotation capabilities capture, identify, and time-stamp each stakeholder's ideas and comments. AutoVue even adds metadata—such as when a document was produced, its expiration date, its status, and so on—to printed documents.

On the security front, AutoVue integrates seamlessly with the server permissions and access control measures of the document repositories where the files are stored, keeping unauthorized users out.

Conclusion

Globally distributed enterprises must achieve document collaboration, IT system consolidation, and regulatory compliance without adding more stress to their already tight budgets and processes. Oracle's AutoVue delivers superlative visualization and collaboration solutions that meet all these needs, with unmatched file viewing capability, support for hundreds of the latest and most advanced file formats, comprehensive file security, a full palette of annotation and commenting tools, easy integration with enterprise systems, and end-to-end tracking of modifications for improvements in critical business processes and workflows.

AutoVue enables all stakeholders throughout the global enterprise to collaborate effectively and improve decision making by adding greater visibility into their mission-critical business processes and workflows, thereby making AutoVue the platform of choice for successful and growth-oriented enterprises.

To learn more about AutoVue, visit www.oracle.com/autovue.