Technical What's New

Autodesk® **Vault**
2013 Products
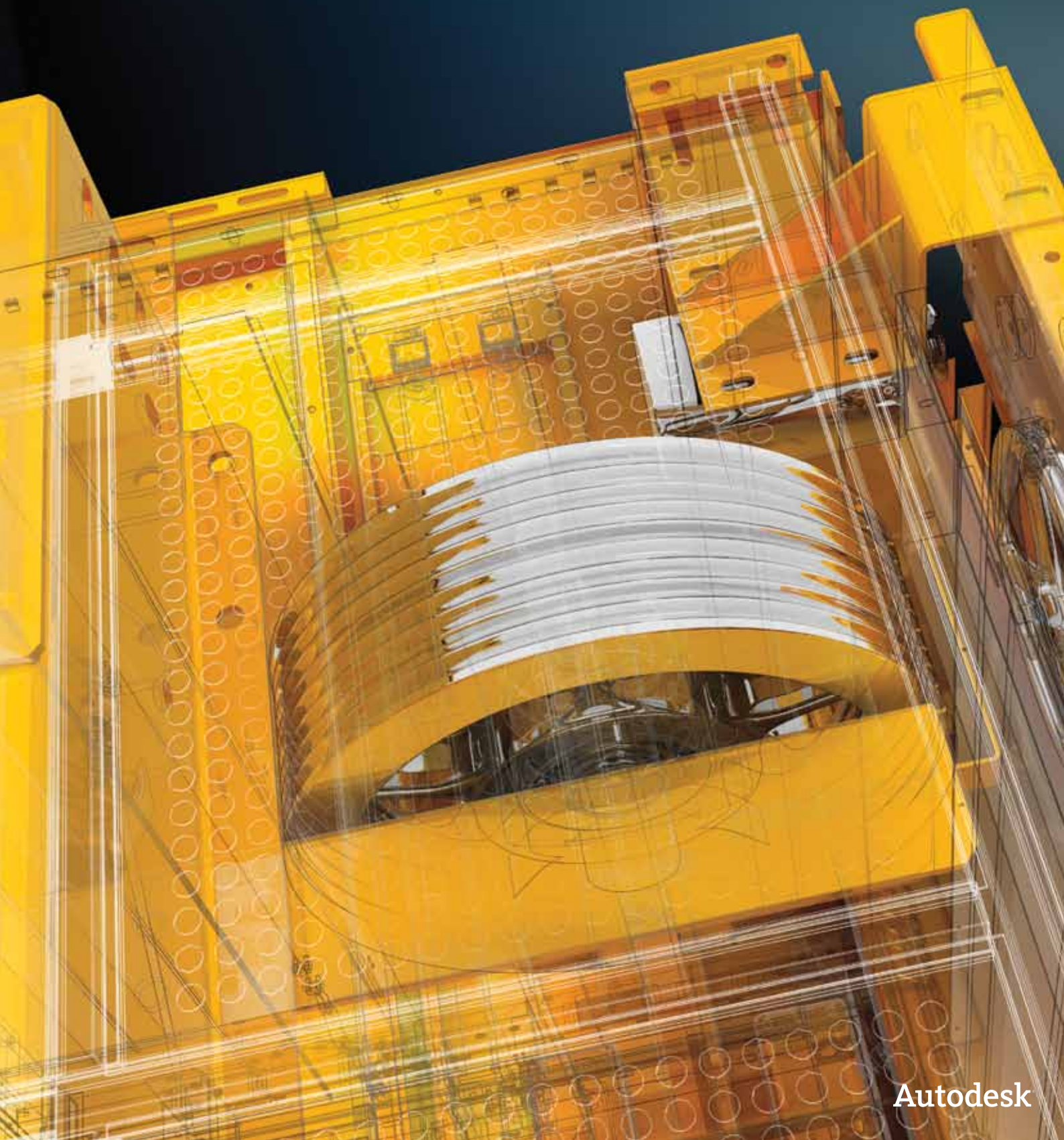
Autodesk

Technical What's New

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Welcome to Autodesk Vault 2013

Autodesk® Vault data management software helps users securely organize, manage, and track data for design and engineering groups.

With Vault, users can quickly find and reuse design data, for easier management of design and engineering information. Whether your team sits in the same office or across multiple sites, Vault helps you collaborate more effectively and share information with other departments, maximizing the value of your design data. Vault technology is deeply integrated with Autodesk® design applications, including AutoCAD®, Autodesk® Inventor®, and Autodesk® Revit® software, making it easy to manage data and processes throughout the entire project lifecycle.

Enjoy more control over design data with change and revision management capabilities extending into change management, bills of materials (BOMs), and connectivity with other business systems.

Following is an overview of the key new features and enhancements to Autodesk Vault 2013, focusing on:
- Improved collaboration across the design and engineering team
- Streamlined workflows to improve productivity and reduce design errors over the life of design tasks
- Increased extensibility to address manufacturing and business process requirements around product data management (PDM)

All of the functionality described is available in Autodesk® Vault Professional 2013 software. Some of the features and enhancements listed are also available in Autodesk® Vault Basic 2013, Autodesk® Vault Workgroup 2013, and Autodesk® Vault Collaboration 2013 software.

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Collaboration

Autodesk Vault 2013 delivers increased coverage of Autodesk design applications. In addition, connectivity with Autodesk collaboration tools and enterprise business systems supports better collaboration across disciplines, company divisions, and third-party suppliers or contractors.

New Integrations

Autodesk Vault 2013 offers compatibility with an ever-broader range of Autodesk's design and collaboration tools, extending the ability to manage industrial design data, electrical controls, and plastics simulation processes. Vault 2013 is now fully integrated with more Autodesk software, including:

- Autodesk® Alias® Design
- Autodesk® Alias® Automotive
- Autodesk® Alias® Surface
- AutoCAD LT®
- Autodesk® Inventor LT™
- Autodesk® Simulation Moldflow®

Microsoft SharePoint Integration

Microsoft and Autodesk have teamed up to deliver a seamless integration that takes advantage of new features and functionality from Microsoft® SharePoint® 2010 and Autodesk® Vault 2013. By integrating these innovative solutions, we're building a crucial connection between design teams and the extended business enterprise.

To expand the consumption of Vault data and better integrate at the enterprise level, Autodesk Vault now offers the ability to integrate directly within the standard Microsoft SharePoint interface using the Microsoft BCS (Business Connectivity Service) to provide user-authenticated access to data, perform federated searches on SharePoint and Vault metadata, and view Vault contents and use Vault objects in custom SharePoint workflows.

Support for Autodesk Inventor Model Dependencies in AutoCAD

Vault 2013 now offers support for users detailing their Inventor 3D models directly in the AutoCAD drawing sheet context. AutoCAD documents resolve model dependencies on check-in, as well as during Pack & Go, move, and rename operations within Vault.

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Project Lifecycles

Expanding on its design project capability, Vault 2013 now enables users to add lifecycle schemes and state-based security to their project folders.

Building on transitional rules and category settings, users can now provide conditional restrictions on folder state changes and apply security overrides to folder access control lists and folder content not already managed by file state-based securities.

This feature introduces several security override paradigms.
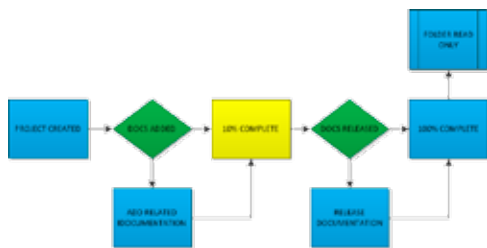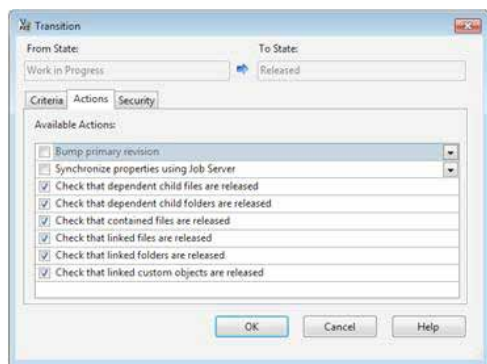
The Lifecycle Transition tab now includes new transitional rules that enable users to configure the folder release process to help ensure that all files within the project folder are released prior to the change, as well as any subfolders or linked objects.

This functionality can also be used to lock any unmanaged file types as part of the release process and provides the administrator control over the folder or file security with access to the folder state overrides.

Streamlined Workflows

With standardization of the Vault interface and enhancements to CAD integration, Vault 2013 continues to improve and simplify the user experience, so that managing data becomes a natural part of the design process. Vault 2013 includes improvements to drawing creation and document management in Revit, enhancements to file management and searching from Autodesk® Navisworks® software, as well as support for more standard Inventor workflows around drawing management, iParts, iAssemblies, level of detail, open, and insert from Vault. The introduction of project workflows also advances the management of project work.

Open from Autodesk Vault

Vault 2013 has overhauled the Open and Place dialog box, complete with a customizable grid view that enables users to assign columns, filter, and sort as they do in the Vault Explorer main pane. Users can also quickly search the grid contents of the current folder and create quick view references to toggle columns on and off. In addition, it is now possible to display traditional file lists and icon views with extended file open list.

The left pane has now been updated to enable basic or advanced searches on file properties. Save time without needing to activate the Advanced Find dialog box for the creation and display of shortcuts as well as listing available saved searches.
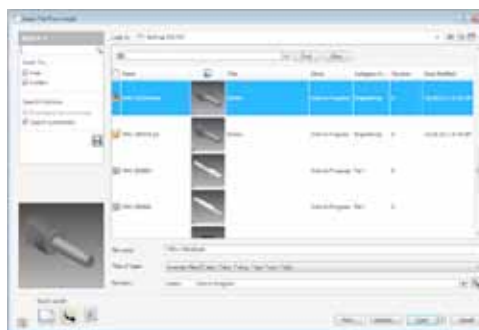
Increased Check-in Efficiency

A major request from users is the ability to check in files related to the current open model. The new check-in settings enable users to scan the current project or model folder for related documentation, including IDW, DWG, and IPN files. This feature offers a major productivity enhancement for users who do not regularly check in their design documentation as they create it.

In addition to associated files, the new release also enables users to check in assemblies with components not loaded into memory. Users can now add assemblies with suppressed parts or alternate levels of detail.

Improvements to iPart and iAssembly Workflows

Autodesk Vault 2013 offers improved relationship management, streamlining the management of iParts and iAssemblies.

iPart factory members are now kept in sync with the factory via automatic check-out on creation of new or updated members.

Likewise, Vault now fully supports place and replace member operations, including support for revision bias, automatically downloading the correct iPart member to your local workspace.

Change Category

With Vault 2013 you can now categorize your documents easily as you design. The Vault ribbon within Inventor now adds the Change Category command, so you can change the category assignment through the design process without going back to the Vault Explorer interface.

The new command supports multiselect in the Vault browser as well as extending support to AutoCAD.
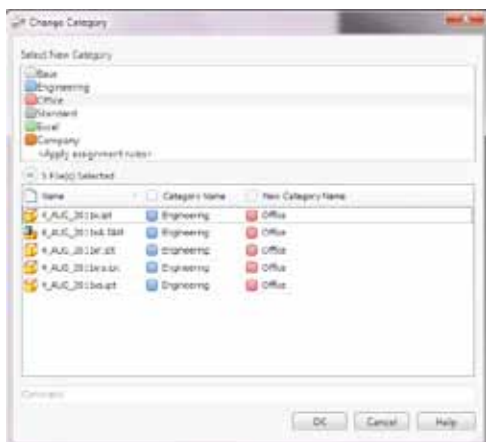
Access to Related Parents

Autodesk Vault 2013 introduces the ability to open parent model or drawing files directly from the File Details dialog box. Now, in addition to looking at file history, users can switch to the Where Used tab and open parent files up and down the relationship list.

In addition, filters make it easier to identify or isolate 2D documentation related to a component.

Extensibility

Autodesk Vault 2013 extends its flexibility and enterprise-level functionality with the addition of custom objects and bill of materials (BOM) properties. Vault 2013 also continues to improve server-side performance, enhancing ease of maintenance, replication, compatibility, and data transfer.

Custom Objects

Autodesk Vault Professional 2013 now enables users to define objects to store and manage unique content to fit business processes, from simply storing contact information through to creating document packages or lifecycle managed tasks.

The software introduces a new set of security levels to deal with creation of and access to custom objects. These security levels take advantage of the category functionality, complete with properties and object security provided with lifecycle schemes.

Objects can be assigned an access control list (ACL) on creation or state-based controls.

BOM Properties

Autodesk Vault Professional 2013 introduces BOM-specific values to track administrative-level manufacturing bill of materials (MBOM) information and provides a method to store unique information for a single component across several different BOMs. These new properties are accessible through client and server APIs (application programming interfaces).

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Forward Compatibility

Vault 2013 makes managing implementation and configuration easier by introducing the ability for Autodesk® Data Management Server (ADMS) to support client integrations from the previous release. This feature enables enterprise and SMB operators to stagger the client and server-side rollout. The ADMS server can now be migrated to 2013 and commissioned without any need to upgrade or otherwise patch the numerous client machines connecting to their current 2012 server.

Moving forward this means extended support of integrations with the previous two CAD releases and Vault Explorer.

Replication File Ownership Improvements

Autodesk Vault 2013 introduces improvements to the overall speed and simplification of replication and file ownership, thereby improving the user experience within a replicated environment.

The introduction of streamlined file ownership procedures minimizes the need to request file ownership from alternate sites. The initial document ownership request is now carried out as a background process upon check-out. The default lease period has been reduced to 0 minutes—meaning that it becomes immediately eligible for ownership transfer to another site as soon as the user has completed the required file changes and checks it back into the local site.

These changes simplify and streamline processes, so users do not have to leave their CAD application to manage ownership as a separate task.

Replication Site Affinity

A second improvement around replication is the concept of site affinity, which optimizes the speed in which data is accessed and replicated. In the previous model, the system administrator had no direct control over the source of a given site's replication.


Autodesk Vault 2013 introduces the ability to set, in order of preference, the locations where a member server will seek to replicate its filestore data. This means that sites connected by a strong, reliable network connection can be given preference over workgroup servers located further from the site with higher latency.

Property Re-Index Improvements

Several controls have been added to the 2013 ADMS console, enabling administrators to filter by extension, provider, and date range to help reduce the number of files affected by a re-index operation.

This effort to simplify re-indexing is further reinforced by the new User Defined Property (UDP) mapping, which removes the requirement for users to index files that are not affected by UDP updates.
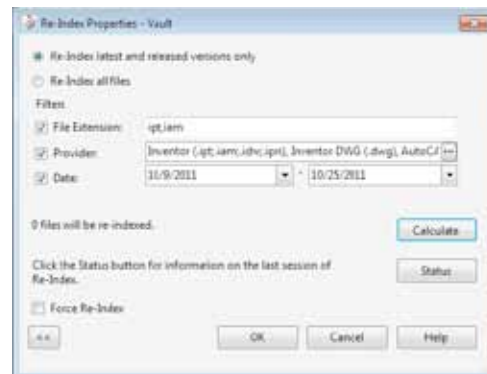
Performance and Scalability

Autodesk continually seeks to improve the quality and speed of our products. To this end, Autodesk Vault 2013 now offers support for 64-bit Windows Server® software.

Vault 2013 also improves the overall file transfer speed between servers in replicated environments as well as from server to client.

Reduction of Redundant File Copies

Autodesk Vault 2013 offers more performance and administrative updates with major enhancements to file version creation. In previous releases, metadata-only changes to a document required creation of a new physical file, resulting in duplicate files in the filestore. Vault 2013 no longer requires this file duplication, resulting in a smaller initial filestore size and reduced growth over time.

Because this functionality is backward compatible, migrated vaults are scanned to remove known duplicates.

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Conclusion

We thank you for your continued support of the Autodesk Vault products: Autodesk Vault Basic, Autodesk Vault Workgroup, Autodesk Vault Collaboration, and Autodesk Vault Professional.

We strive to listen to your needs, and we trust that the new and enhanced product functionality helps make you more productive and your company more competitive while returning true value to your bottom line.

Feedback

Autodesk Vault customers can interact with the Autodesk development team through a number of methods, including the Autodesk Manufacturing Community at **mfgcommunity.autodesk.com.**

Learn More or Purchase

Access specialists worldwide who can provide product expertise, a deep understanding of your industry, and value that extends beyond your software. To license Autodesk Vault products, contact an Autodesk Authorized Reseller. Locate a reseller near you at **www.autodesk.com/reseller**.

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Autodesk offers students and educators a variety of resources to help ensure that students are prepared for successful design careers. Educators can access design software, curricula, and teaching resources, while students can access free* software, training videos, design competitions, and career resources. Anyone can get expert guidance at an Autodesk Authorized Training Center (ATC®) site, and validate skills with Autodesk Certification. Learn more at **www.autodesk.com/education**.

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