MFG463491 – Autodesk Vault 2021 What’s New

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About the speaker

Product Manager for the Data Management Group at Autodesk in Singapore. With Autodesk for the last 15 yrs. In Autodesk, worked as a Product Support Engineer, QA, QA Manager, and Product Owner before becoming Product Manager. Prior to joining Autodesk, worked for Autodesk Distributor, PTC and Delcam.
Irvin is a Product Manager on the Autodesk Vault team based in Novi, Michigan. He has worked at Autodesk for fifteen years starting in product support and as a user experience designer. Irvin is a Microsoft® Certified Professional and has been working in the information technology field for more than 27 years. He helps partners, consulting, and sales develop Vault deployment plans in enterprise environments and system requirements. You can find multiple classes Irvin has presented at Autodesk University, on a wide range of Vault topics.
Vault 2021: More Value for Subscribers

Productivity-boosting functionality you can expect

**Productivity for CAD Users**
Supports Inventor and Revit interoperability and adds significant workflow and usability improvements

**Smart Duplicate Reduction**
Compares 3D shapes and delivers insights on duplicate content

![29.7% Duplicate Ratio]

**More Efficiency for Administrators**
Allows more granularity within the security model and minimizes deployment and maintenance downtime
Productivity for CAD Users
Vault 2021 Supports Inventor and Revit interoperability

For custom fabricators that work in the building and infrastructure industry, Vault 2021 supports the new Inventor and Revit interoperability

- Revit data is stored and archived in Network drive or BIM 360
  - The data is referenced (incl. links) in Inventor and gets synced
- Revit data is not archived and managed in Vault, but Vault can check in Inventor files properly and open the files properly and resolve any linked Revit files
Unused document detection

Vault 2021 can help you clean up unused designs and avoid releasing them

New Property “Has Parent Relationship” to easily recognize orphaned files. Can be used in Filter/Saved Search, state transition, and much more…

Condition for state transition
Copy design

Customer Request
Many companies have very strict controls over properties and standards enforcement

Deliverable
- Copy Design Rule Sets are stored on the server instead of the local disk
  - Configure, export, import rulesets and enforce ruleset for all users
- Set a rule to copy a UDP value from the original file to a different UDP in the new file e.g. for original part number, source drawing file etc.
Wrap friction

Value

Remove friction for more productivity

Deliverable

- Add a **New Filter** to show out of date files to quickly retrieve updated files
- Change state condition is batched for actions including Files, Folders, and Items and presented in one dialog instead of separately and every time – huge time savings
- Option to show more than 1000 jobs in Job Queue
ECO notification
Email template customization

Value
More flexibility and information within ECO notification for easy follow up

Deliverable
- Customize the email template:
  - Include ECO properties in the subject and body of the email
  - Include links to files & Items and more
- Template is stored on the server
Navisworks preview and Shared Views

Value
Share Navisworks information to a wider audience for consumption and review

Deliverable
- Generate DWF files for Navisworks and expose them in the preview
- Shared Views capabilities available for Navisworks files
Smart Duplicate Reduction
A new part is not just about design time, it is about time and costs of documenting, validating, producing and managing the same physical part again and again.

The annual carrying costs of introducing a new part number range between $4,500 and $23,000 per item*

*According to The Aberdeen Group, a leading information technology and business intelligence research analyst
Duplicate reduction

Value for subscriber

Deliverable

▪ Understand the duplicate ratio within environment
▪ Clean up the existing design from duplicate parts during review/release process and before check in process for external parts

Value

▪ Reduce time to market and increase profitability by reducing cost after design phase and avoid introducing quality issues
▪ No disruption for mechanical engineers by allowing them to continue to have the freedom to design the way they want
Data analytics and duplicate reduction

New functionality

Tell me about my data. I need more insights.
How big is the problem in my environment?
Do I need to take any action? If so which actions?

DATA ANALYTICS & INSIGHTS

Tom
Engineering Manager

29.7%
Duplicate Ratio

Detect duplicates and promote more re-use

DUPLICATE REDUCTION

Christina
Mechanical Engineer

Perform geometric search in Inventor and easily replace duplicate parts workflow

I want to continue to have the freedom to design how I want, but before releasing the design I want to know whether duplicate parts are available?
More Efficiency for Administrators
Vault 2021 allows more granularity within the security model and minimizes deployment and maintenance downtime.
Vault 2020 security model

Need more granularity

Design/Folder A/Folder B/Folder C

Read access also allows file download
Shopfloor worker and ME from Team 2 can access and download all files including sensitive data
Security model in 2021

More granularity!

Design/Folder A/Folder B/Folder C

Read access: meta data like Used/Where Used, Thumbnail
Download access: appropriate groups and users download the right design data
More granularity benefits

**Value**
- Increase cross department and external collaboration while continue to protect your data
- Eliminate extra work to re-organize your data to fit security system requirements
- Separate audit logs & configure the system with ease
- Address the most requested ideas in the forum

**What**
- Grant read access to the appropriate groups and users role based while preventing data download
- Flexibility to restrict download access to sensible design data while continue to allow read access for meta data for search, reports etc. object & Lifecycle based
- Track download & Audit Log & several usability enhancements (resizable dialog, hide disabled users and much more)
What does this mean for your existing data?

You have a new download permission

Migrate existing roles, objects, and lifecycle security read permission to read plus download permissions

Flexible

Read/Download permissions can be applied to roles, objects, and lifecycle state

<table>
<thead>
<tr>
<th>Operation</th>
<th>Read</th>
<th>Download</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties Read (incl. Thumbnail)</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Search, Reports, Send a link</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Open, View in Window, Insert into CAD</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>GET, File Download in Thin Client, Pack &amp; Go, Copy Design</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Create PDF, DWF, Edit/ Update Properties, Job Processor</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Share Views, Update View, Manual Upload to Cloud Drive, Job Processor</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Note: DWF & PDF files continue to have a different ACL than CAD files
Track download and audit log

- Enhanced logging for download to track “real” download operations only
- GET, Open, View in Window, Insert into CAD, Update View
- Pack & Go, Send File, Share Views
- UI setting to turn on/off logging for download and delete
- Separate Audit Logs file for download and delete
Usability enhancements in Object security dialog

Customer request
Very difficult today if you are managing 100's of users to navigate through the Object security dialog

Deliverable
Resizable Details dialog for better usability on Security Tab
Usability enhancements in user management dialogs

Customer request
Easy administration of disabled users

Deliverable
Option to filter out disabled users and groups in Users, Groups management dialogs as well as in “add Members dialogs” within object security tab, state security tab, transition definition, etc.
Usability enhancements for vault admins

Customer request
“Easy Recognize” login user with administrator permissions

Deliverable
Configure status bar color in security tab for users assigned to admin roles
Minimize downtime for backup / maintenance

Customer challenge
Backup, restore upgrade workflows are taking a very long time by big databases and file-stores

What
▪ Allow purge for legacy versions which are under lifecycle control
▪ File store validation is optimized
▪ You can also use quick file store option for quick validation

Value
Minimize downtime during Backup, Restore, and upgrade by reducing file stores and database size
More Flexible Deployment

Allows Vault installation/configuration to connect to an Instance not named AUTODESKVAULT

- Naming conventions that must be kept for company standards
- When several Vault Servers reside in the same IT infrastructure
- Separate DEV/ QA environment that is running a mirror image of production Vault
- Several Vault Server versions within the same SQL Server
More efficiency for Administrators and collaboration workflows

Value

▪ Increase cross-department and external collaboration while protecting data and eliminating extra work to reorganize data to fit security system requirements
▪ Separate audit logs and ability to configure the system with ease
▪ Reduce file store size impact downtime during Backup and Restore
▪ Comply and IT naming converting and maintenance costs for test environment

Deliverable

▪ Grant read access to the appropriate groups and user roles while preventing data download
▪ Flexibility to restrict download access of sensitive data while allowing read access of meta data for search, reports, etc. by object and lifecycle
▪ Track download and audit log and several usability enhancements (resizable dialog, hide disabled users, and much more)
▪ Quick file store validation and purge historical data functionality
▪ Flexible instance name
Vault 2021.1 Update
Vault 2021.1 Update - Productivity for CAD Users

Inventor Revit Interoperability

- Check in the Revit files within the Inventor assemblies.
- Add the Revit file type using the Open from Vault dialog.
Vault 2021.1 Update - Productivity for CAD Users

Exclude Path – Inventor Vault Add-in

As a CAD Admin, I want to exclude path by using Vault Options within Inventor/Vault Add-in. Those files within the excluded paths will not be included during check-in.

Example:
- Revit files managed in BIM 360
- Point Cloud
Vault 2021.1 Update - Productivity for CAD Users

Access Contextual Data

- Enhancements to Show Details
  - Show Details dialog box is also floating and dockable.
  - New tabs are added (Uses, Change Order, and Bill of Materials) to display information about the model.
  - Assign Items directly from Uses Tab
  - Commands to Go To Item and Go To ECO
Vault 2021.1 Update - Productivity for CAD Users

Saved Search Enhancements

- Ability to group Saved Searches
- Ability to create custom view for Saved Searches
Combined Geometric & Properties Filtering

Properties Filtering supports the Mechanical Engineer to find quickly the right part for replace workflow

- Advanced Search
- Exclude different Materials
- Identify the exact match
- Exclude mirror parts
- The process can now be done before the replace workflow for all files within one group
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Video Links

Please visit the following links for all the videos featured in the Presentation.

Autodesk Vault 2021 What's New
https://www.youtube.com/watch?v=UZdaknmjThE

https://www.autodesk.com/campaigns/vault-roadmap/overview

https://www.autodesk.com/products/vault/features?plc=VLTM&term=1-YEAR&support=ADVANCED&quantity=1
Make Your Voice Heard

Vault Feedback Community
https://autode.sk/VaultFeedback

Vault Ideas Page
https://autode.sk/vaultidea

Vault Ideas
Share ideas for future product features directly with the Vault team and collaborate on existing suggestions with your peers.

SUBMIT IDEA