



The Rock, Paper, Scissors of Autodesk Vault Security

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Class summary

During this class, we show you what beats what in the Vault security model. We discuss Vault roles and the “role” they play in security. We cover folder permissions, lifecycle state-based security, ACLs and OACLs. After this class, you will be able to win every time with Vault security.

Key learning objectives

At the end of this class, you will be able to:

- Describe Vault roles and their use
- Correctly apply folder-level permissions
- Explain state-based security
- Apply Vault security to real-world scenarios

Roles and Permissions

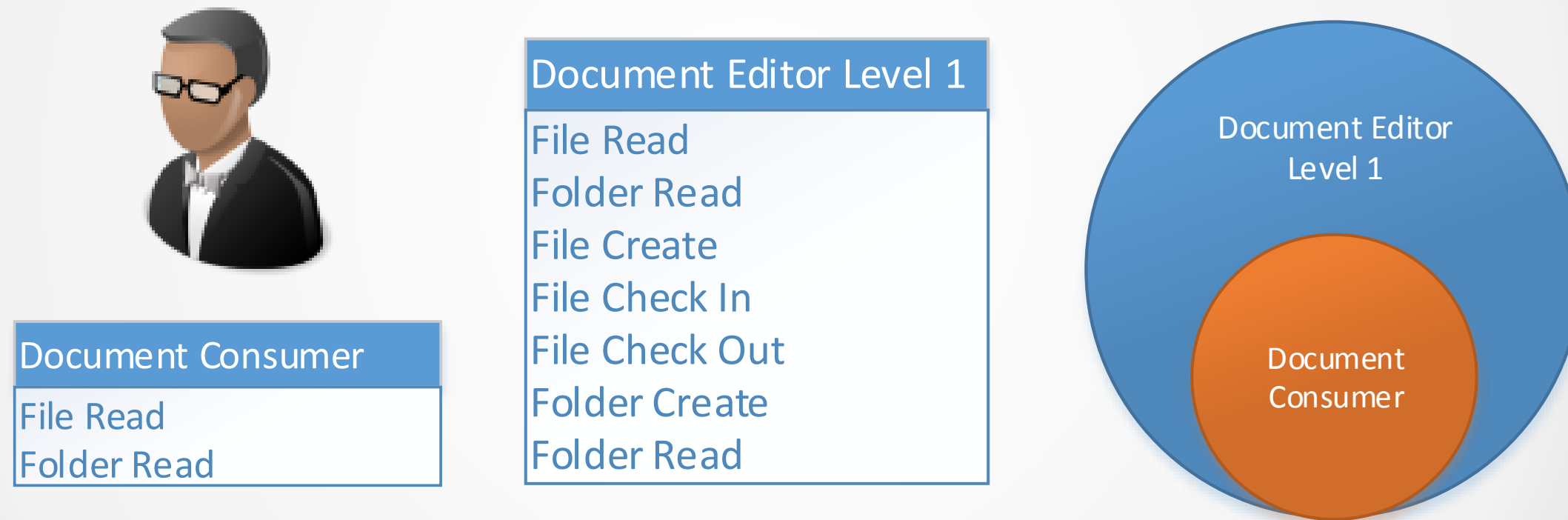
Roles and Permissions

- A group of permissions
- Permissions allows a user to perform a specific task

Role	Details
Custom Object Consumer	Read-only access to Custom Objects only.
Custom Object Editor Level 1	Basic Custom Object adding and editing privileges within the vault, and add/remove Custom Object user-defined properties privileges. Cannot delete Custom Objects. Does not have administrative privileges on the server.
Custom Object Manager Level 1	Privileges to change category, lifecycle, and revision assignments, and to edit user-defined properties.
Document Consumer	Read-only access to files and folders only, including the job server queue.
Document Editor Level 1	Basic file adding and editing privileges within the vault, also add/remove file and folder user-defined properties, but cannot delete files and folders. No administrative privileges on the server.
Document Editor Level	Full privileges within the vault, also add/remove file and folder user-defined properties, but no administrative privileges on the server.
Document Manager Level 1	The privileges to change category, lifecycle, and revision assignments, and to edit user-defined properties.

Roles and Permissions

- Multiple roles combine permissions



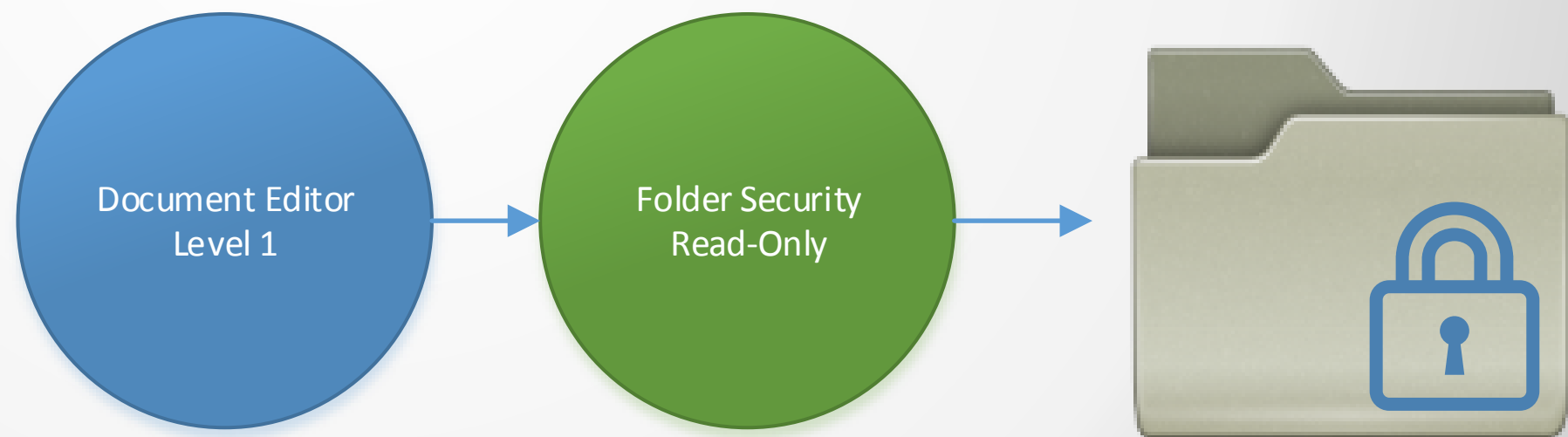
Object Security Types

- Access Control List (ACL)
 - Role-based security
 - Object-based security
 - State-based security
- Permission Precedence
 - Deny
 - Allow
 - No permission

Folder Security

- Read, Modify & Delete
- Most Restrictive when combined

Permission	Access
Read	<ul style="list-style-type: none">• Apply - Vault security to real-world scenarios• Deny - The folder and files in the folder cannot be viewed and this overrides any Read Allow permission.• None - The folder and files in the folder cannot be viewed.
Modify	<ul style="list-style-type: none">• Allow - The folder and files in the folder can be modified.• Deny - The folder and files in the folder cannot be modified. This overrides any Modify Allow permission.• None - The folder and files cannot be modified.
Delete	<ul style="list-style-type: none">• Allow - The folder and files can be deleted.• Deny - The folder and files cannot be deleted. This overrides any Delete Allow permission.• None - The folder and files cannot be deleted.

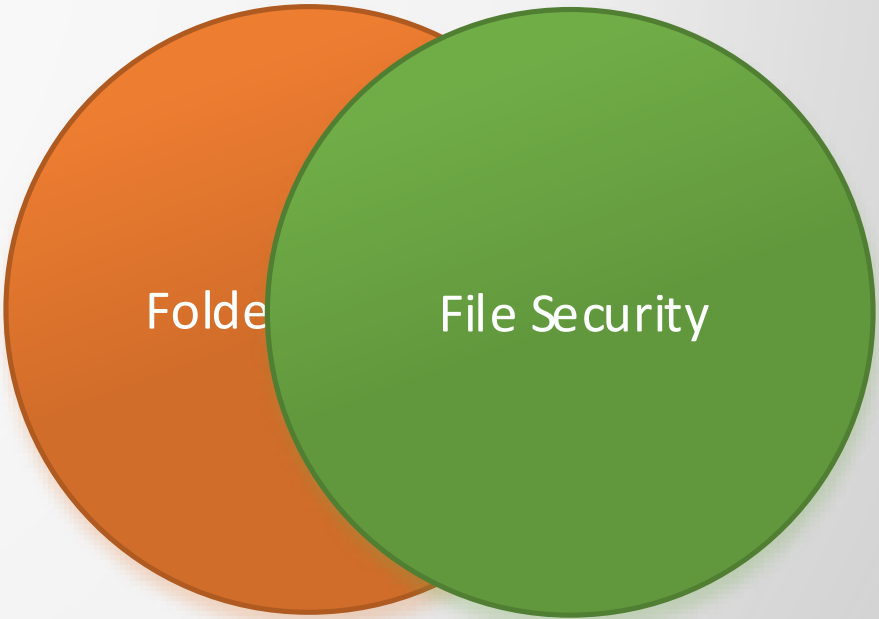


Demo

File Security

File Security

Permission	Access
Read	<ul style="list-style-type: none">• Allow - Files can be viewed.• Deny - Files cannot be viewed. This overrides any Read Allow permission.• None - Files cannot be viewed.
Modify	<ul style="list-style-type: none">• Allow - Files can be modified.• Deny - Files cannot be modified. This overrides any Modify Allow permission.• None - Files cannot be modified.
Delete	<ul style="list-style-type: none">• Allow - Files can be deleted.• Deny - Files cannot be deleted. This overrides any Delete Allow permission.• None - Files cannot be deleted.

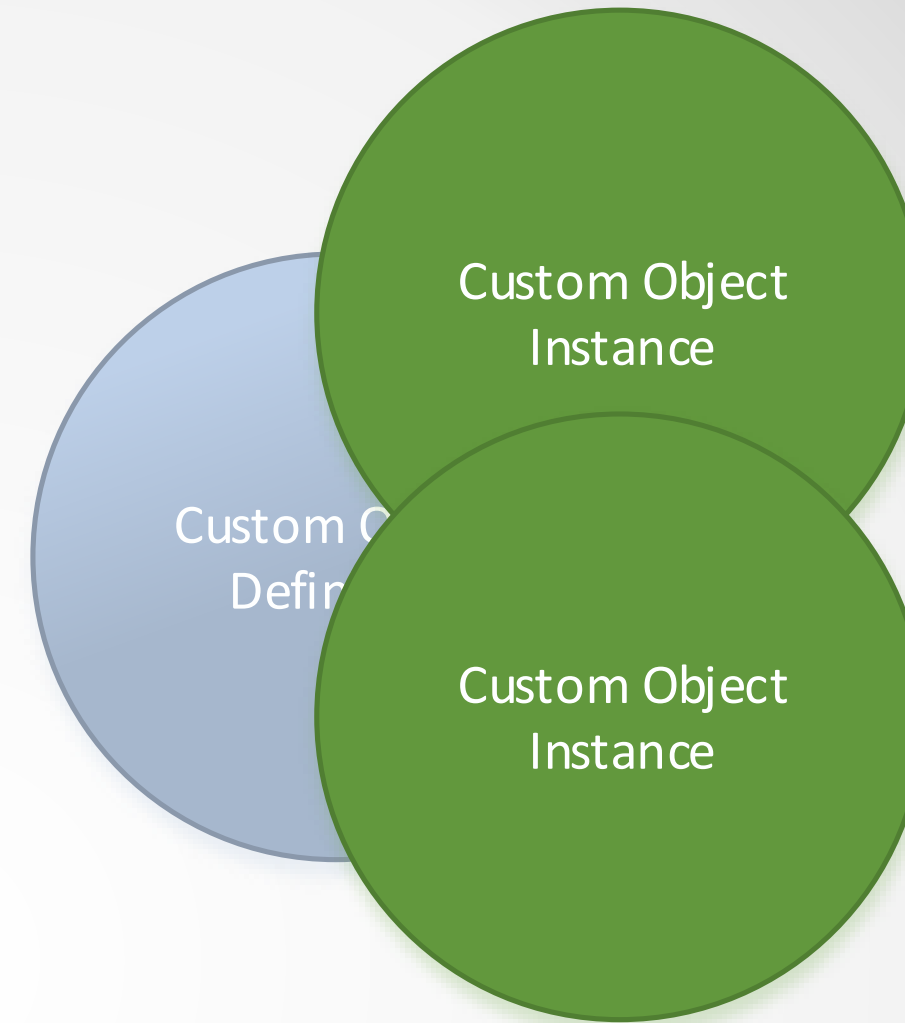


Demo

Custom Object Security

Custom Object Security

- Security Starts with the definition
- An Instance can have its own security
- What can I do



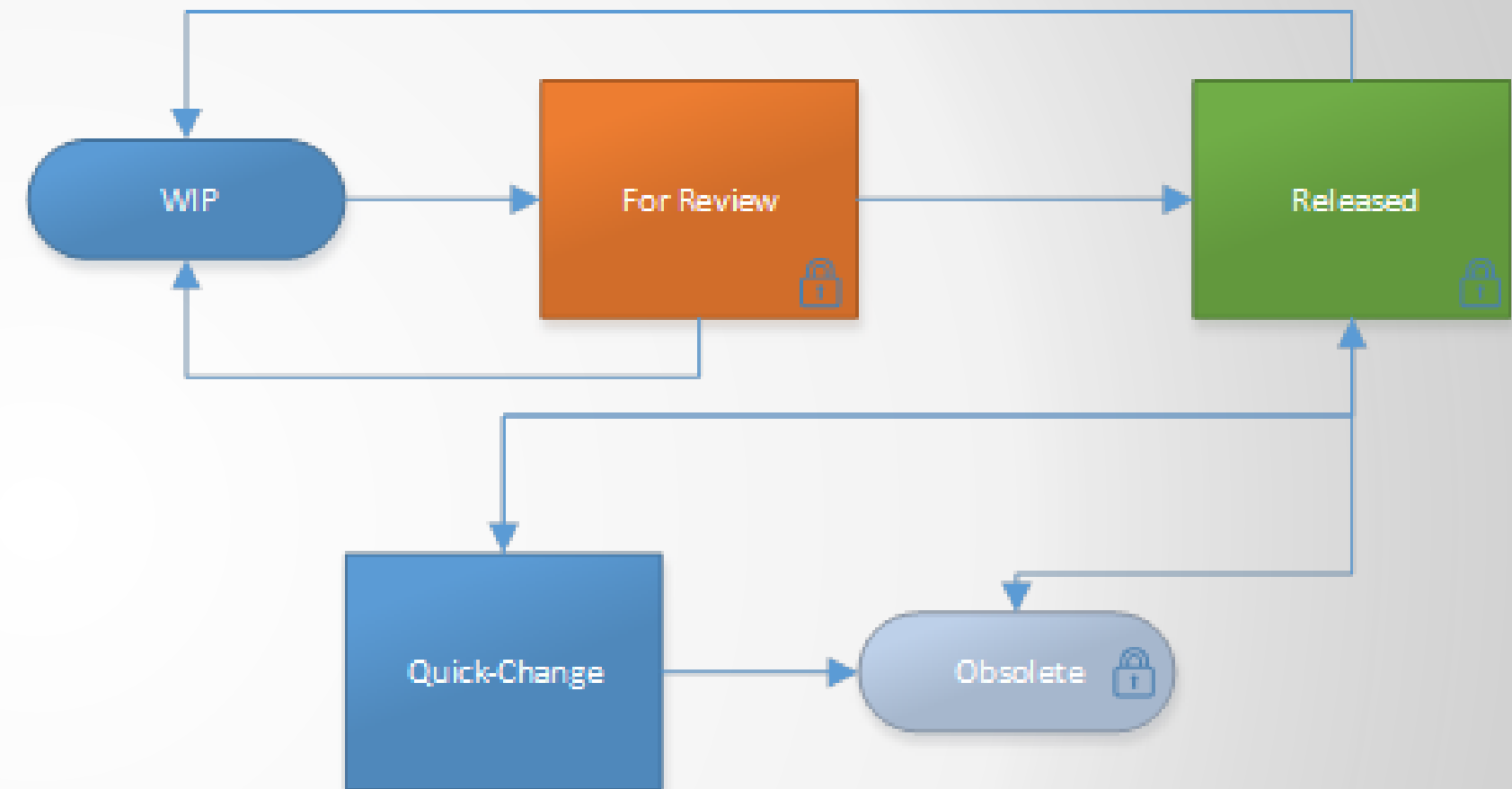
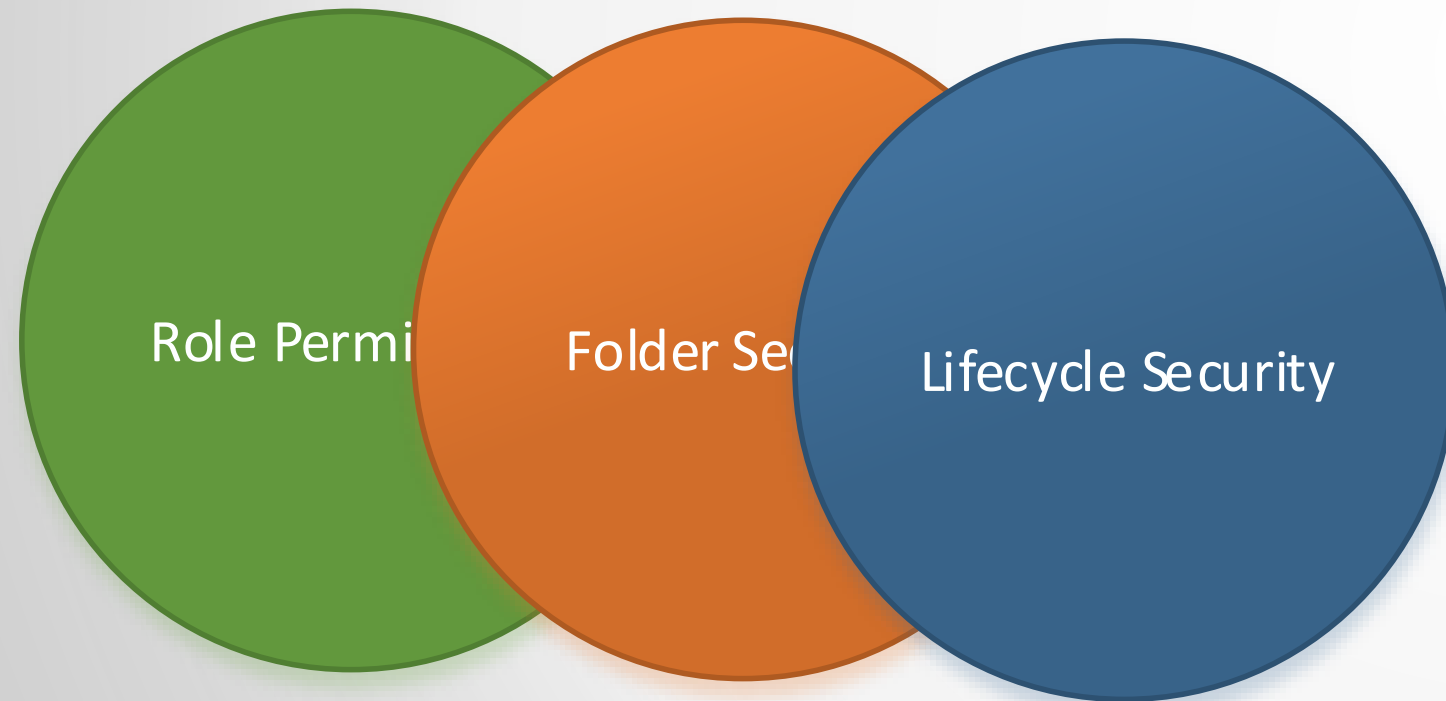
Permission	Access
Read	<ul style="list-style-type: none">• Allow - Object can be viewed.• Deny - Object cannot be viewed and this overrides any other Read Allow permission.• None - Object is not visible to the user
Modify	<ul style="list-style-type: none">• Allow - Object can be modified.• Deny - Object cannot be modified and this overrides any other Modify Allow permission.• None - Object cannot be modified.
Delete	<ul style="list-style-type: none">• Allow - Object can be deleted.• Deny - Object cannot be deleted and this overrides any other Delete Allow permission.• None - Object cannot be deleted.

Demo

State-based Security

State-based Security

- Security based on State
- State can be different



State-based Security

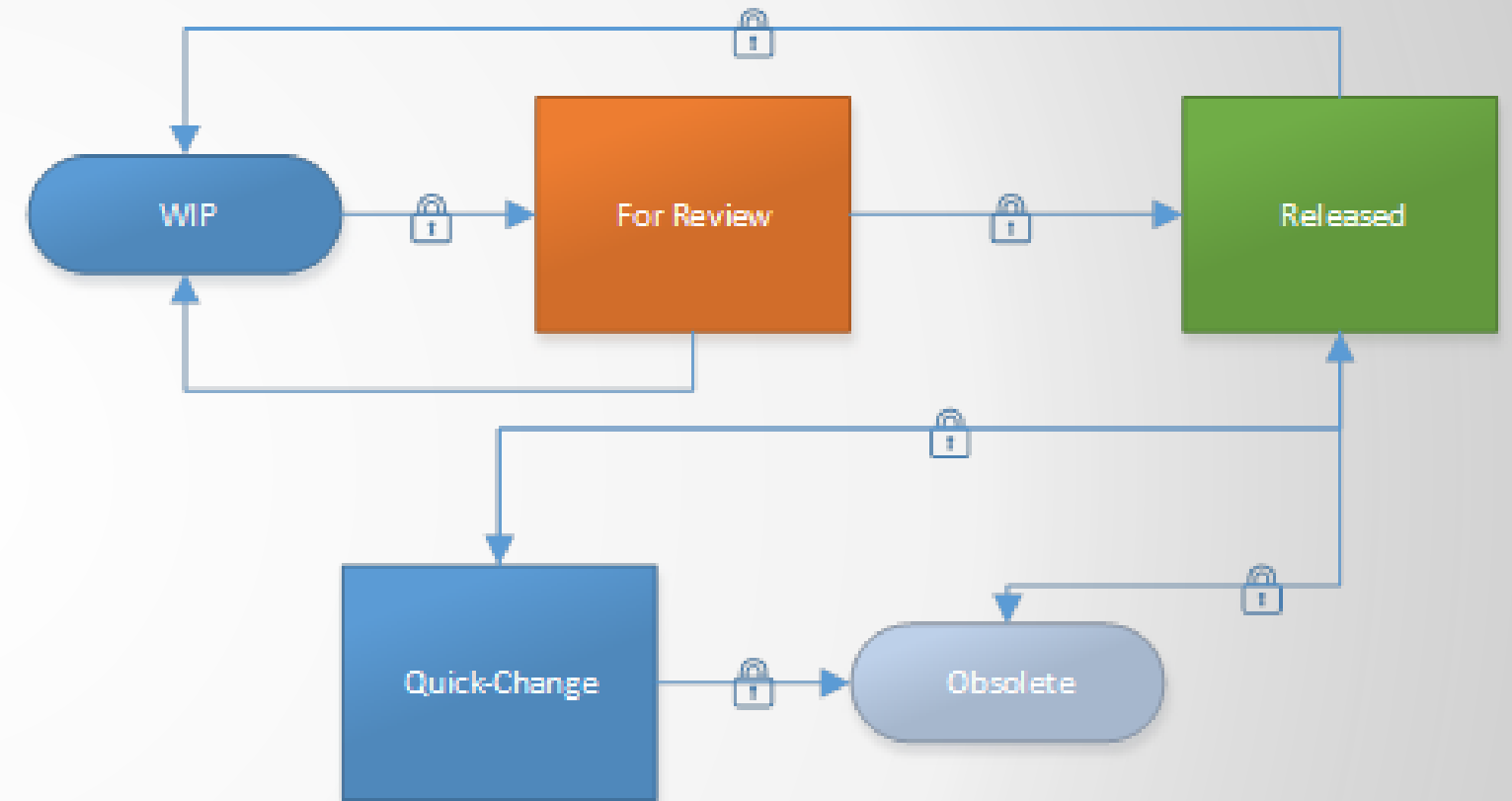
- Security based on State
- State can be different
- What can you do

Permission	Access
Read	<ul style="list-style-type: none">• Allow - States can be viewed.• Deny - States cannot be viewed. If a member is denied read access then they are not allowed Modify or Delete access either.• None - State cannot be viewed.
Modify	<ul style="list-style-type: none">• Allow - States can be modified.• Deny - State cannot be modified.• None - State cannot be modified.
Delete	<ul style="list-style-type: none">• Allow - State can be deleted• Deny - State cannot be deleted.• None - State cannot be deleted.

State-transition Security

State-transition Security

- Security for the transition
- Permission
 - Allow - User or group is allowed to make the transition.
 - Deny - User or group is not allowed to make the transition.



Demo

Vault Family and Security

- Basic – Users/groups and roles.
- Workgroup - Users/groups, roles, ACLs, and state security
- Professional – Users/groups, roles, ACLs, state security, Item and Change Order security.



Join The Discussion!

- Autodesk customers and industry partners ask questions and share information about Autodesk products.
- Regularly monitored by Autodesk employees
- Vault discussion forum
 - <http://forums.autodesk.com/t5/Vault-General/bd-p/101>
- Vault customization forum
 - <http://forums.autodesk.com/t5/Vault-Customization/bd-p/301>

Resources – Under the Hood

- Autodesk Vault and Autodesk PLM 360
- Allan O’Leary, Brian Schanen and Michelle Stone
- Great source of tips and tricks for Vault and PLM 360
- <http://underthehood-autodesk.typepad.com/blog/>



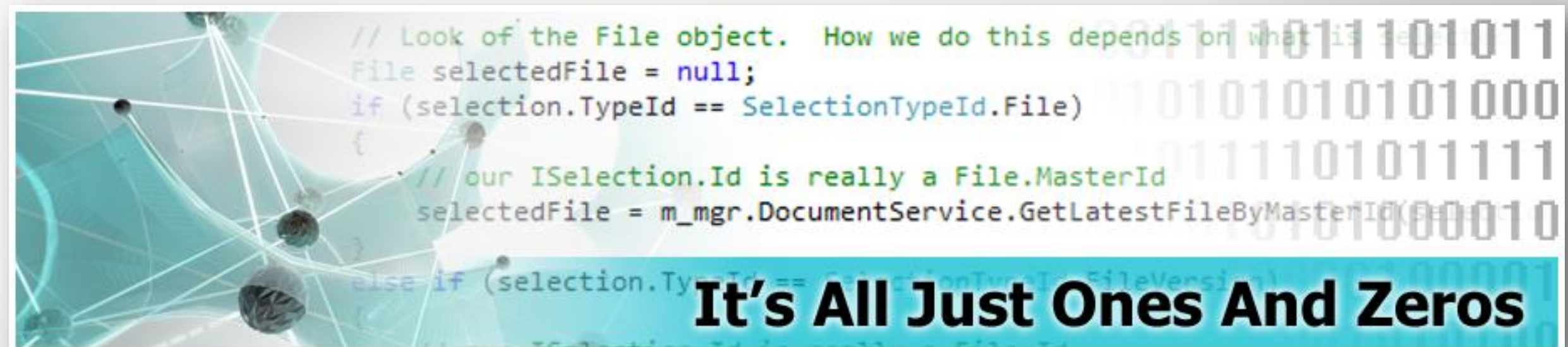
Resources – Cracking The Vault

- Autodesk Vault
- Run by Autodesk Support employees
- Great source for problem solving
- <http://crackingthevault.typepad.com/>



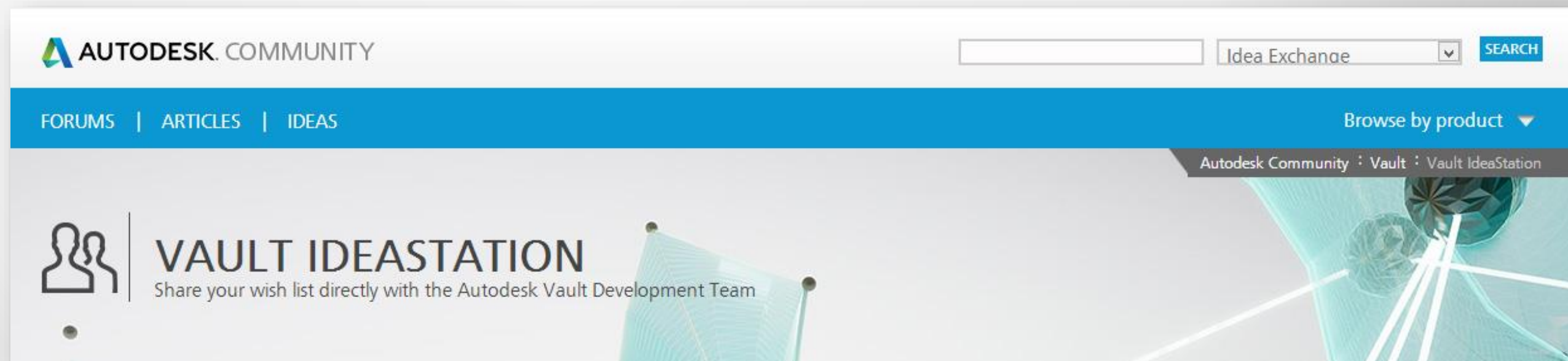
Resources – It's All Just Ones and Zeros

- Blog for Vault API developers
- Doug Redmond – Autodesk developer
- <http://justonesandzeros.typepad.com/>
- <http://www.youtube.com/user/ItsAllJust1sAnd0s>



Got An Idea? Share it!

- Share your idea directly with the Autodesk Vault Development Team
- Community can support ideas to surface the most relevant



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Please take the time to complete your survey for this and every class you attend at Autodesk University.

Autodesk uses this information to know what classes to offer in the future.

