AUTODESK. UNIVERSITY

Seven Steps to Building the Ideal Lifecycle

Mike Thomas

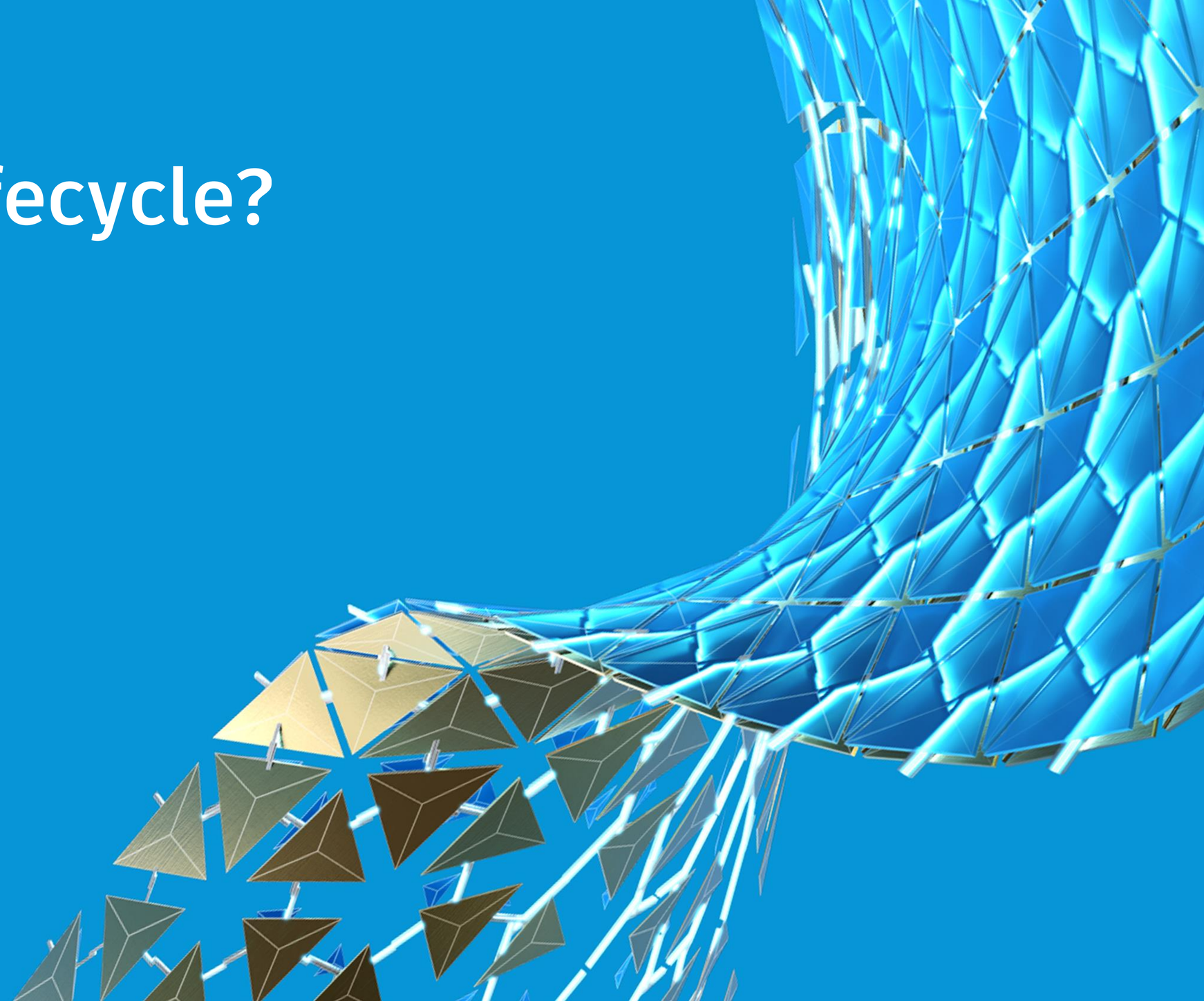
Technical Services Manager | @aurbis

About the speaker

Mike Thomas

I have been using AutoCAD since r13, I cut my solid modeling teeth on Mechanical Desktop, and have been using Inventor since inception. Data Management has always been a big part of my professional life, for the most part with Autodesk Vault.

What is a lifecycle?



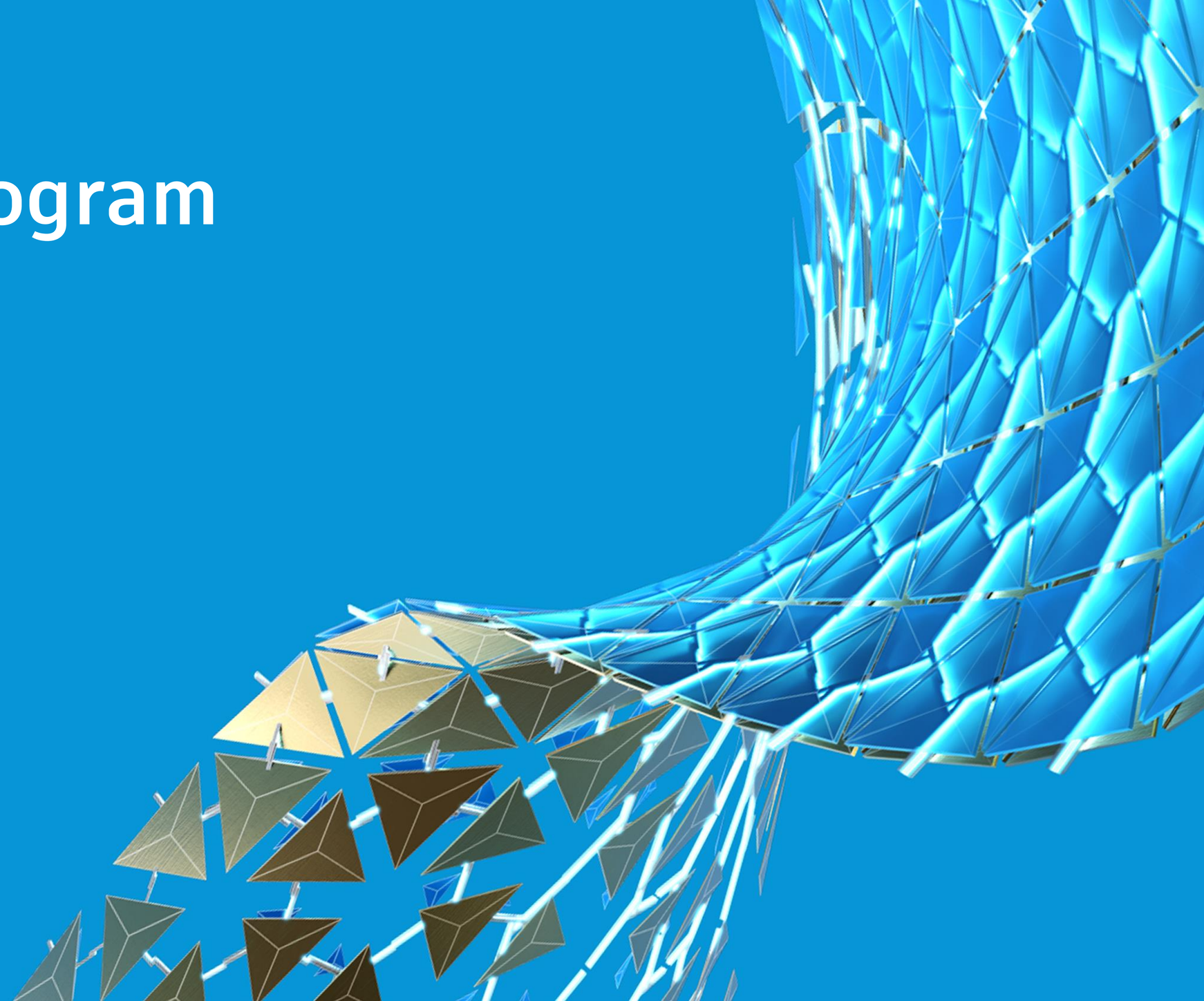
A **lifecycle definition** is an engine that can be configured to automatically assign security, behaviors, and properties to Vault objects based on where the object is in the life of the design process.

- Vault Help

What’s in the Vault?

- **Autodesk Vault Basic** only provides Version control, no tools to manage the change
- **Vault Workgroup** and **Vault Professional** provide the tools for managing file and item change

A 7-Step Program



7-Steps

1. Build Your Properties
2. Add a Category
3. Define the Rules
4. Define the Revision Schemes
5. Build the Transitions
6. Make it Secure
7. Track the Change

Property Management 101

Property Administration

WHAT ARE PROPERTIES?

Meta Data is a set of data that describes and gives information about other data (Oxford Dictionary). **Properties** are meta data describing your data in Vault.

VAULT PROPERTIES

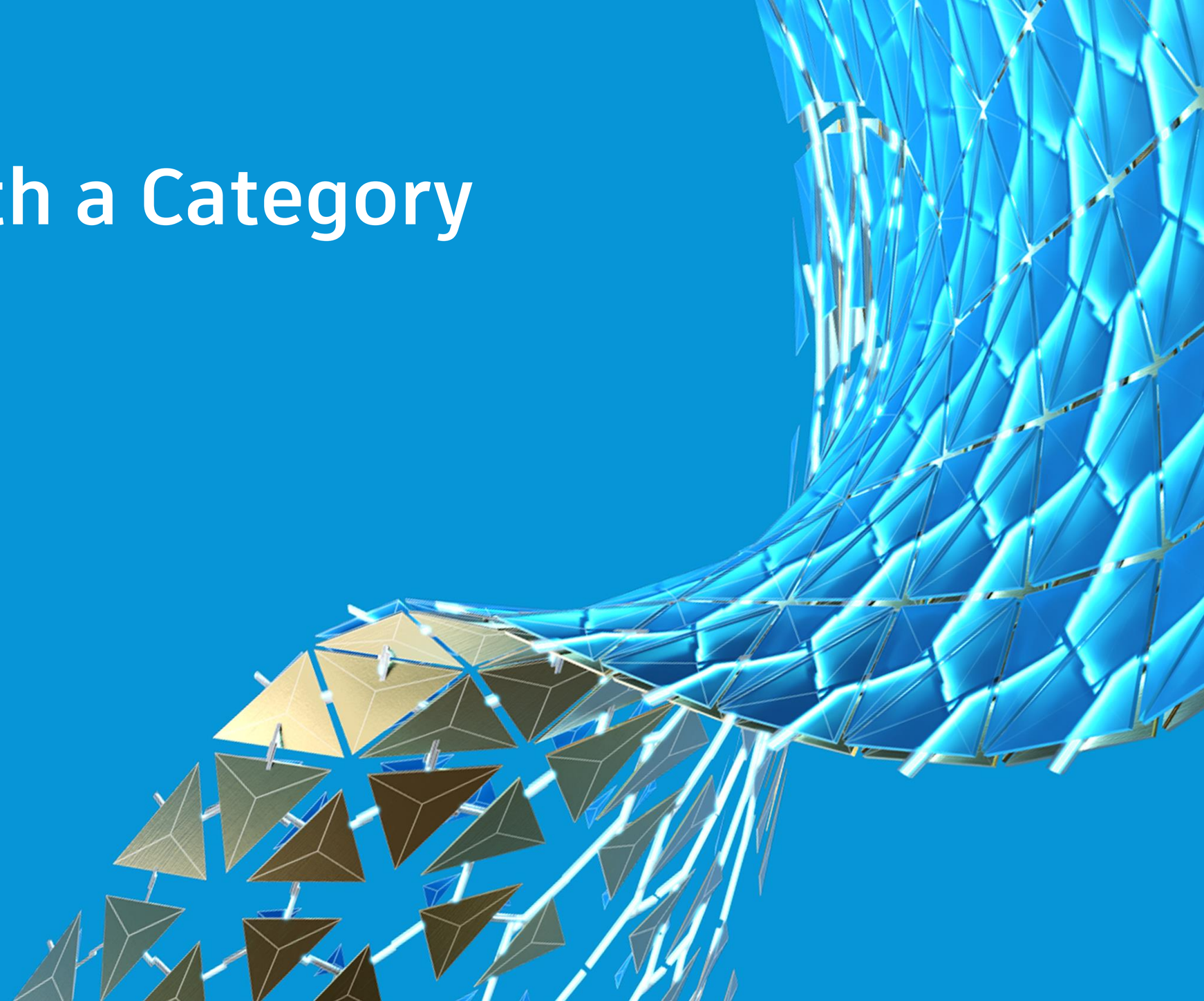
Two types:

- **System-defined –** preset derived from Vault (aka out-of-the-box)
- **User-defined (UDP)** – you build properties

ASSOCIATIONS

Properties are available for files, folders, items (Vault Pro), and custom objects (Vault Pro). You **associate** with **entity classes** the property is available. **Mapping** determines where the property gets its information from.

It starts with a Category

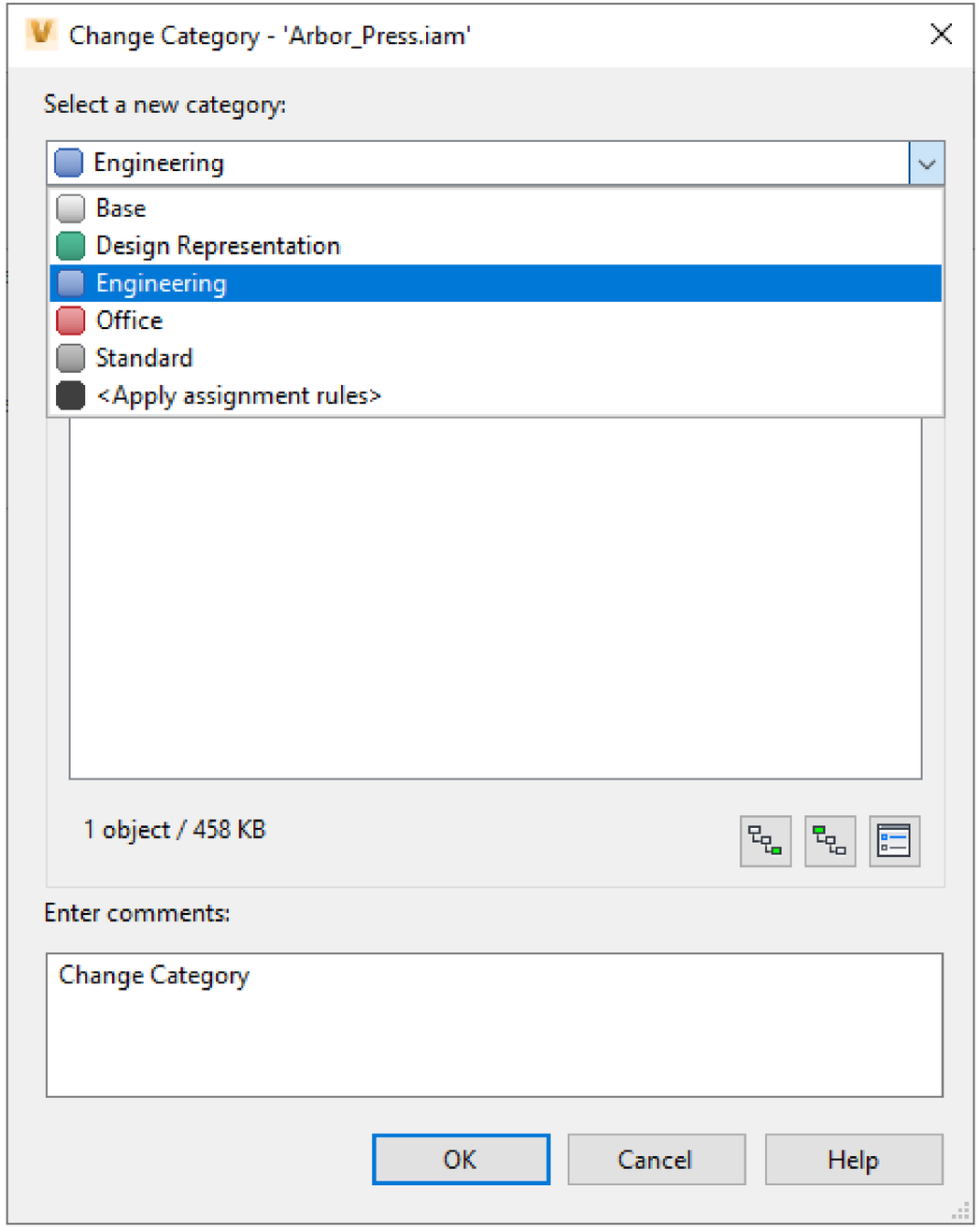


Categories

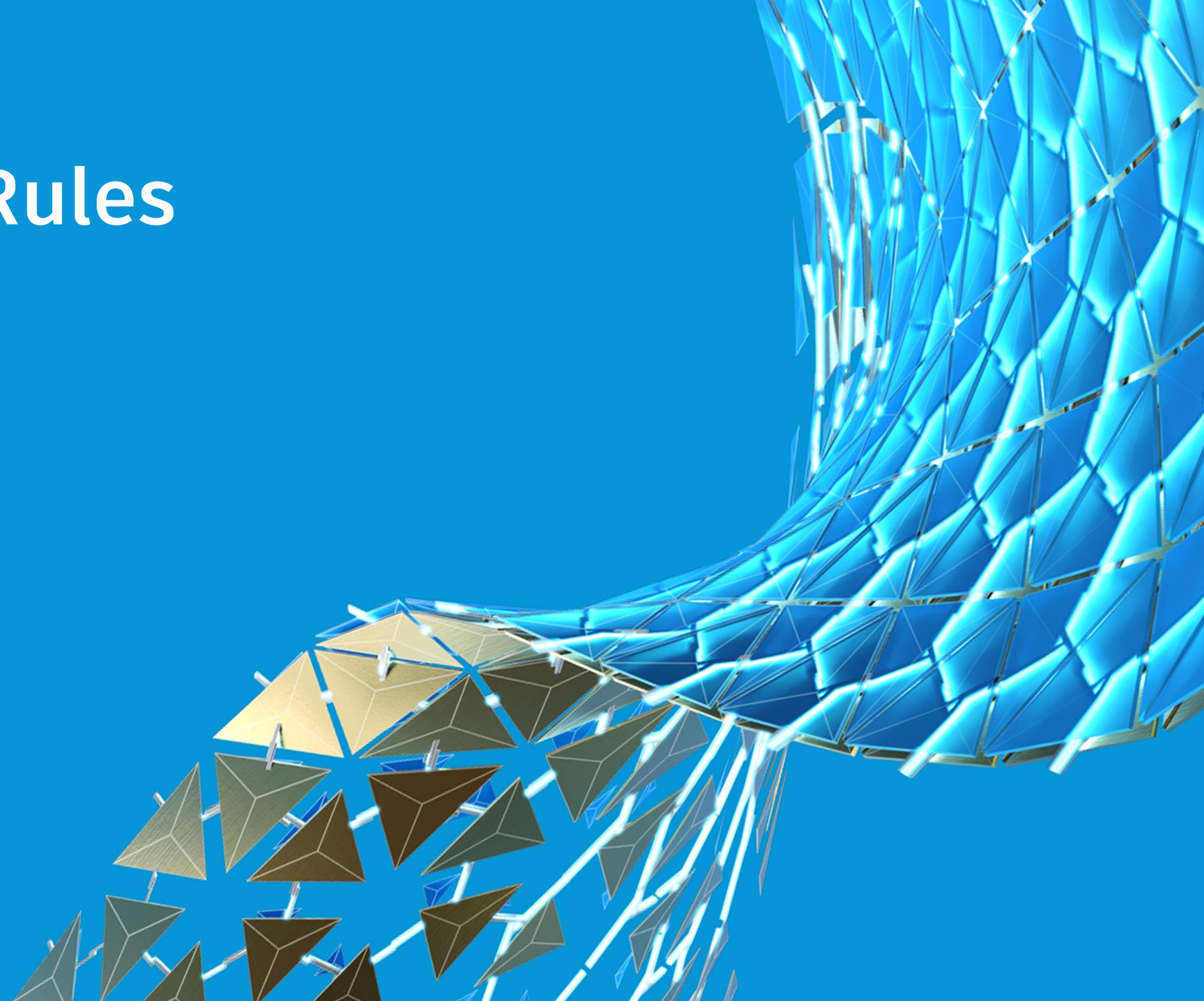
Categories are *labels* that provide a way to group objects logically. Each *category* assigns a defined set of behaviors and rules to objects

So What?

- They group objects
- They assign User-defined Properties
- They assign the lifecycle definitions (and available states)
- They make available the desired revisions schemes

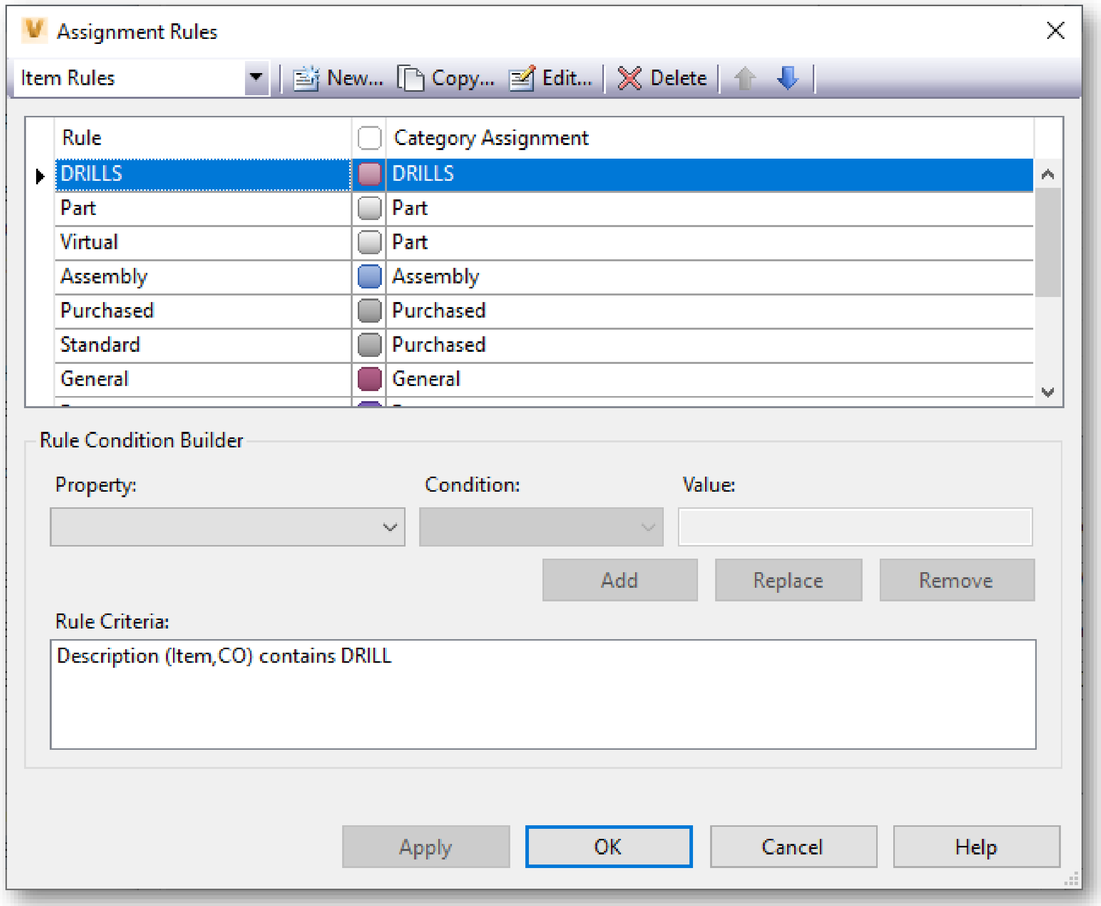


Define the Rules

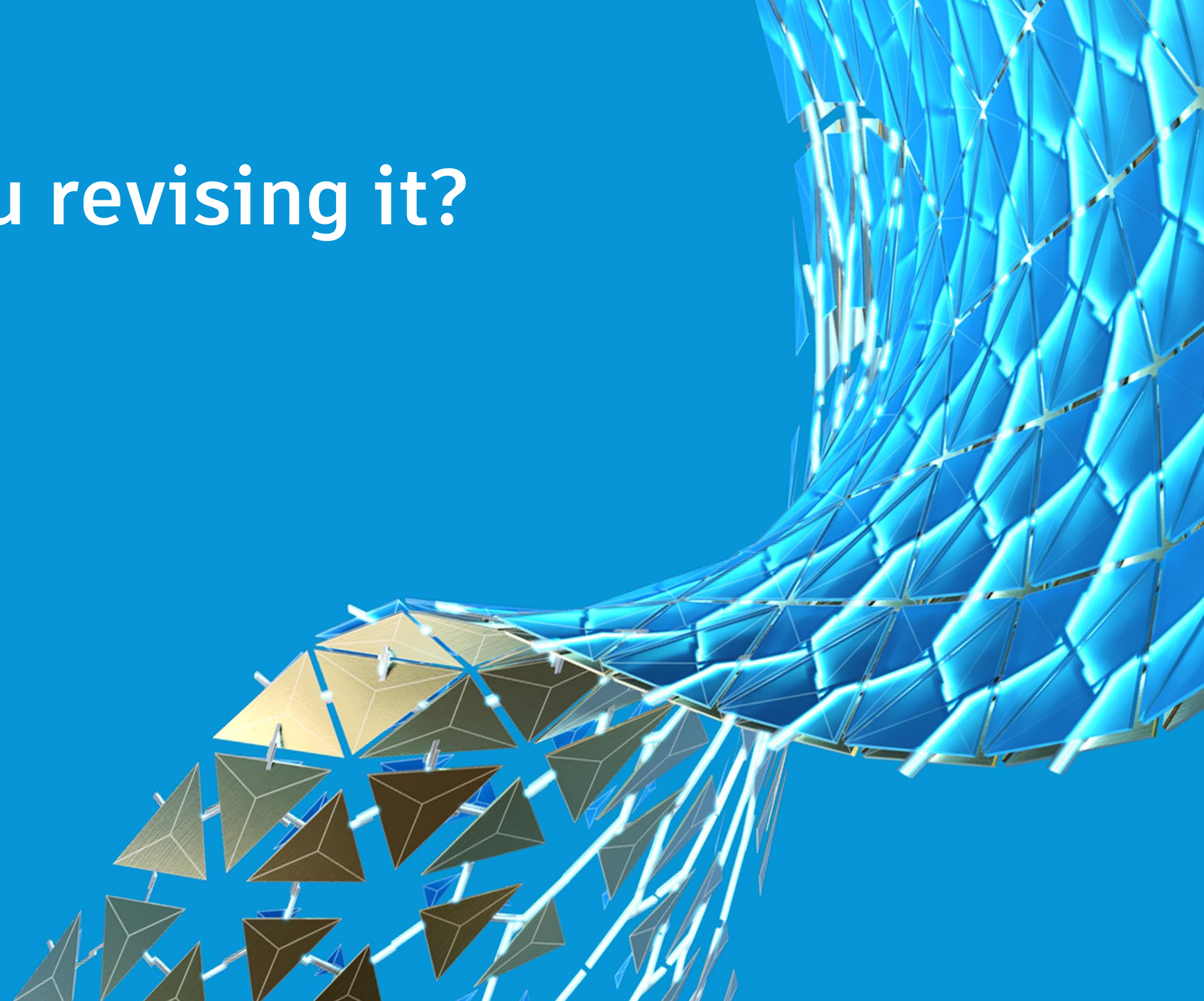


Assignment Rules

Use **Rules** to define conditions where objects automatically assign to a category based on the object's properties



How are you revising it?



Revision Management

What is a Revision?

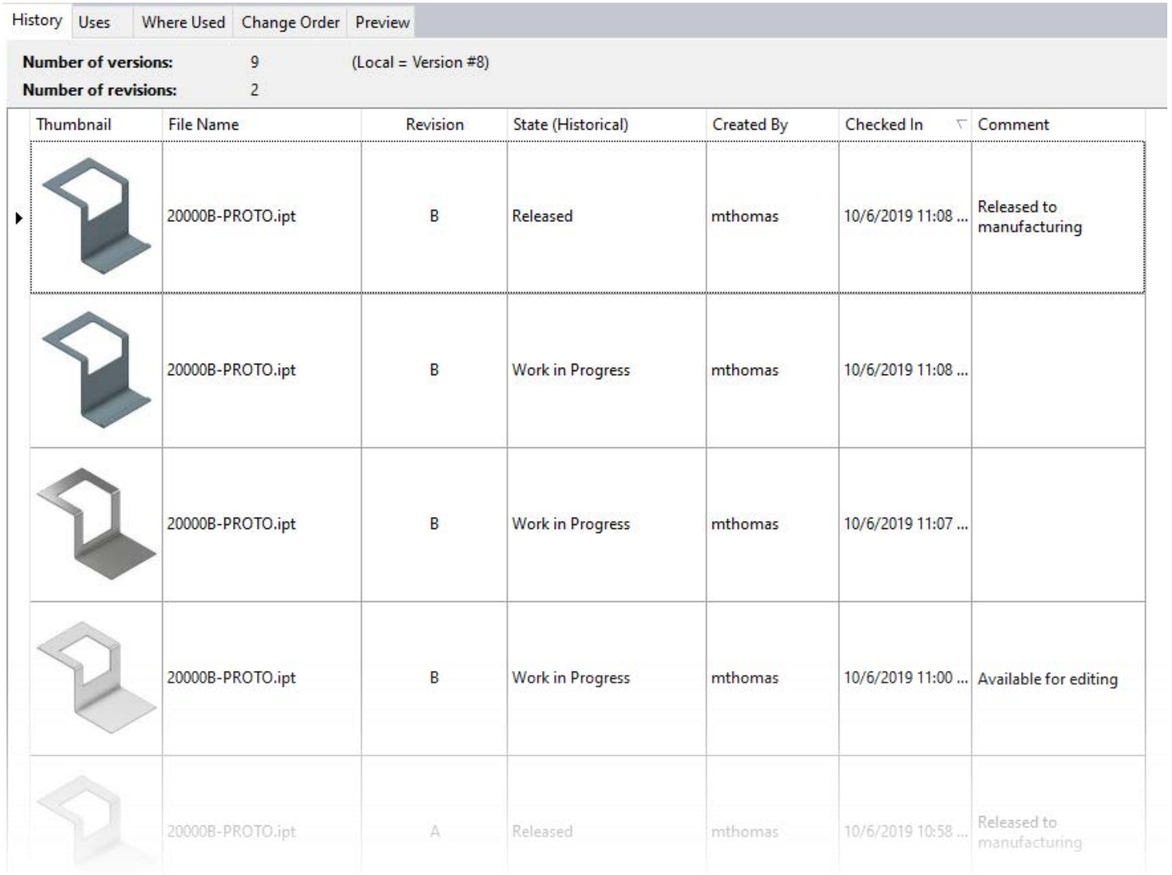
- The act of revising, which is to make new, amended, improved, or up-to-date version
- A milestone
- Revisions are permanent versions

Revisions in Vault

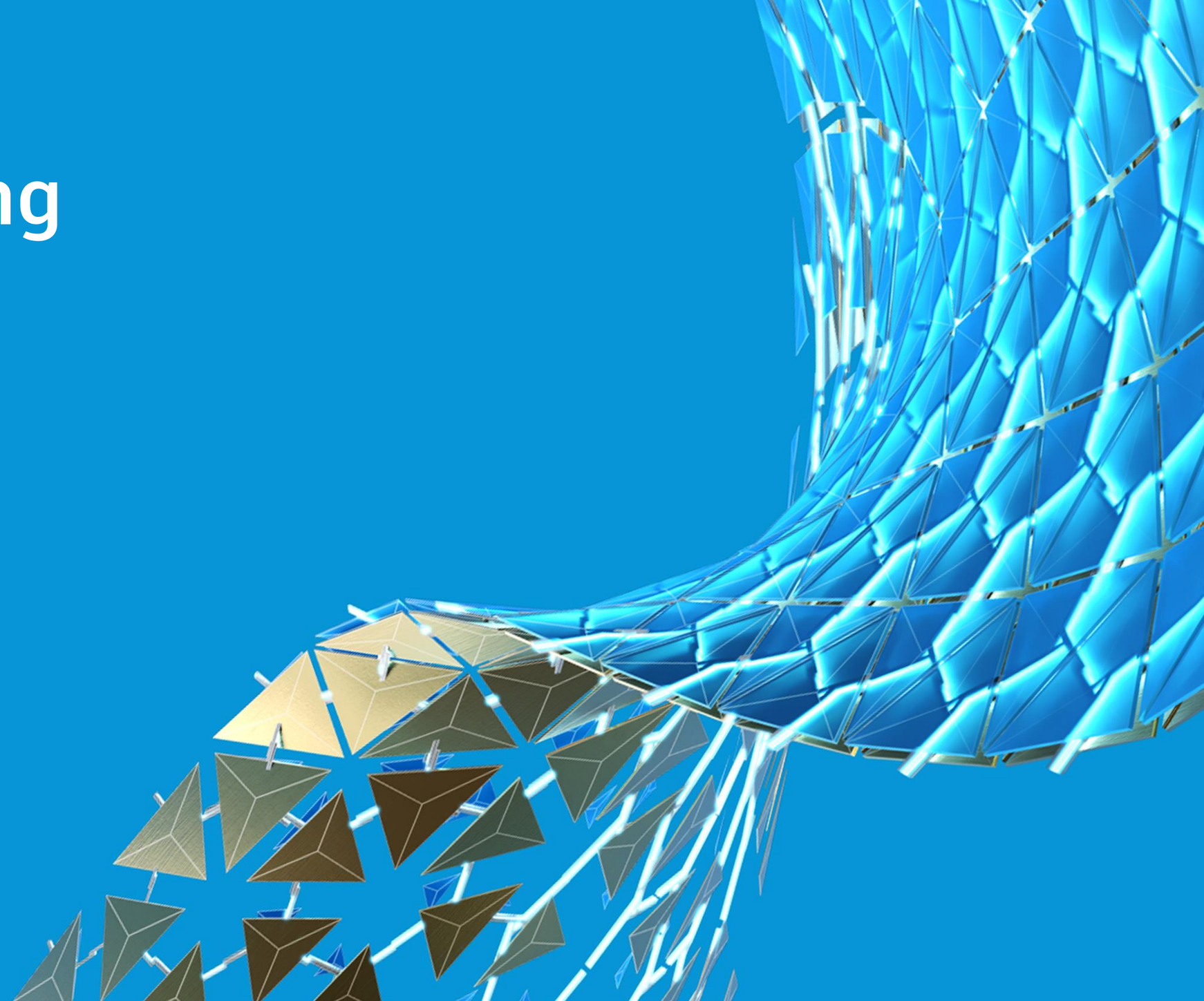
- Revise your files by BUMPING the revision

Revision Schemes

- **Revisions Schemes** define the format and sequence of the revision



Transitioning



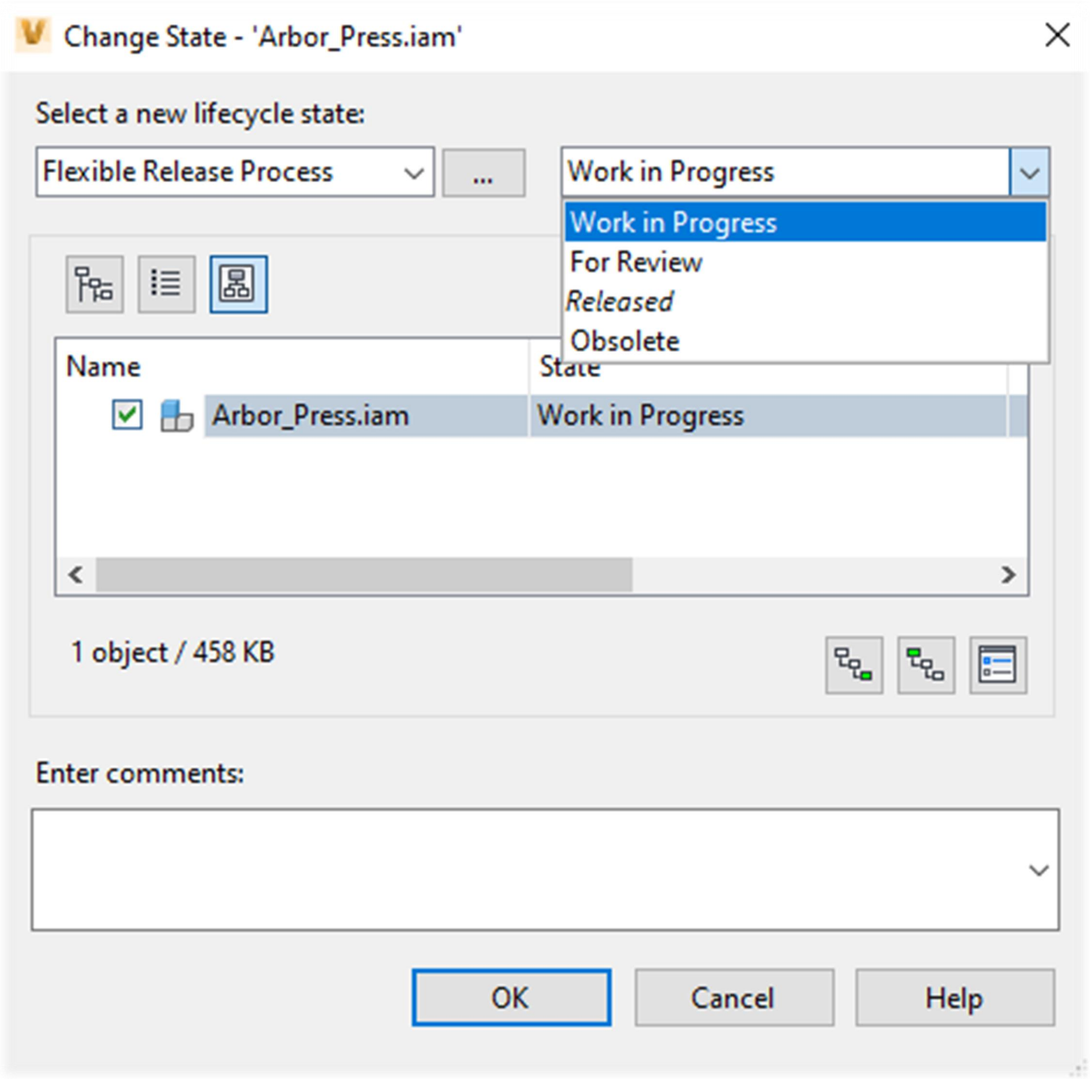
States

States identify the current status within the lifecycle

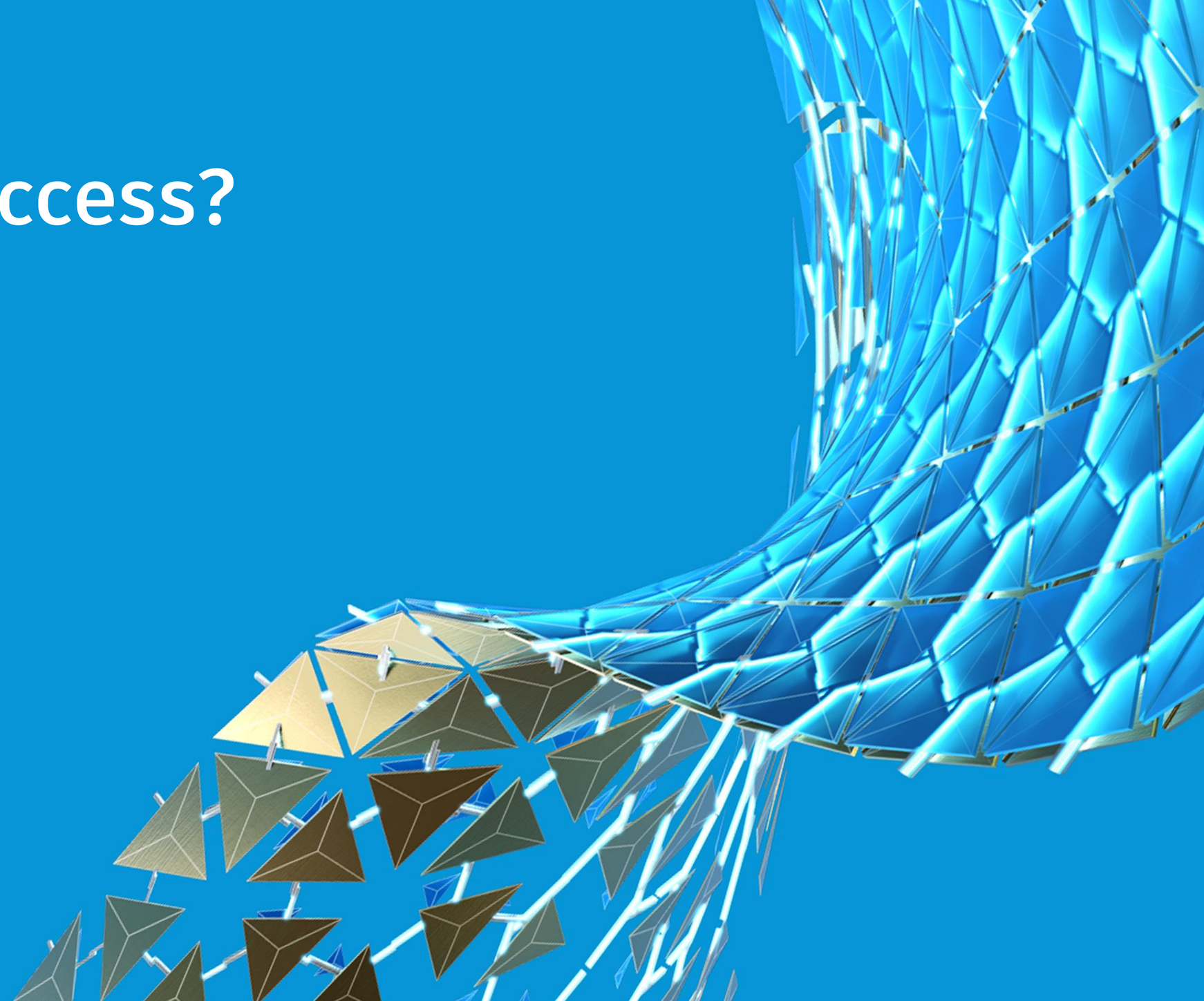
- The **Category** sets the states available

The State Transition determines:

- The **Property Criteria** requirements (compliance)
- The **Actions** that occur
- The **Purge Control**

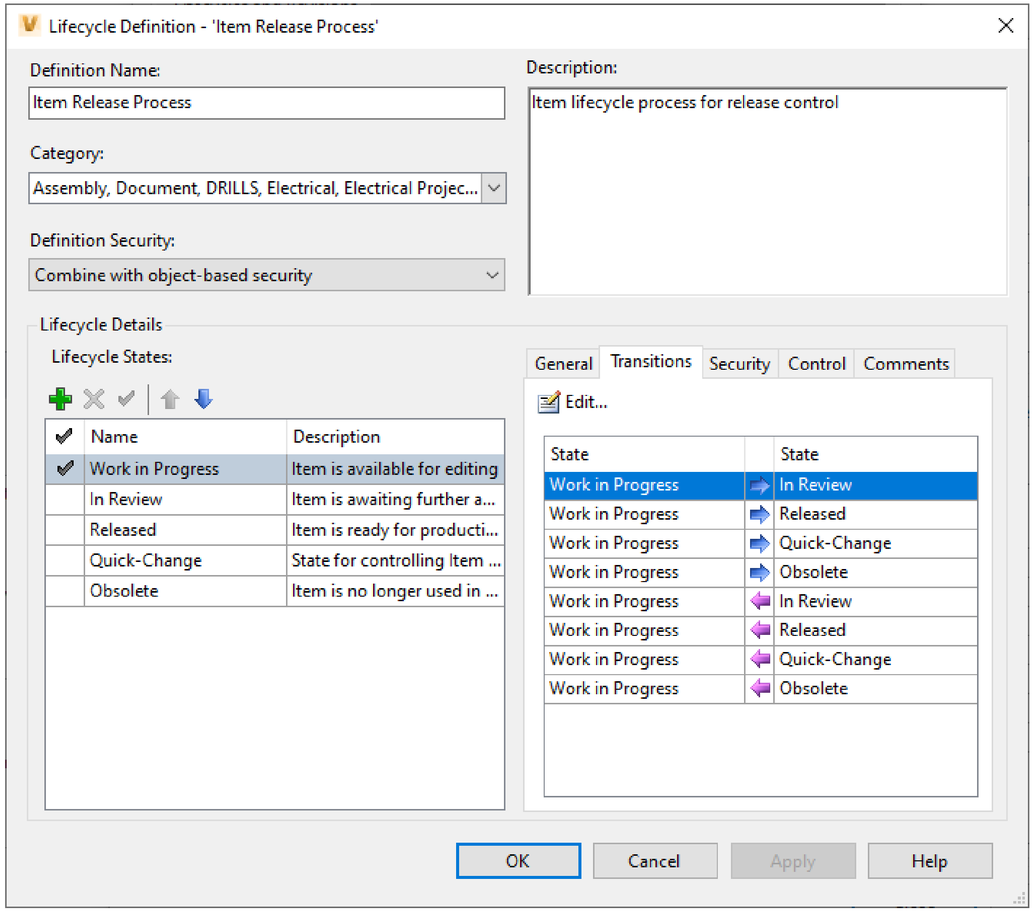


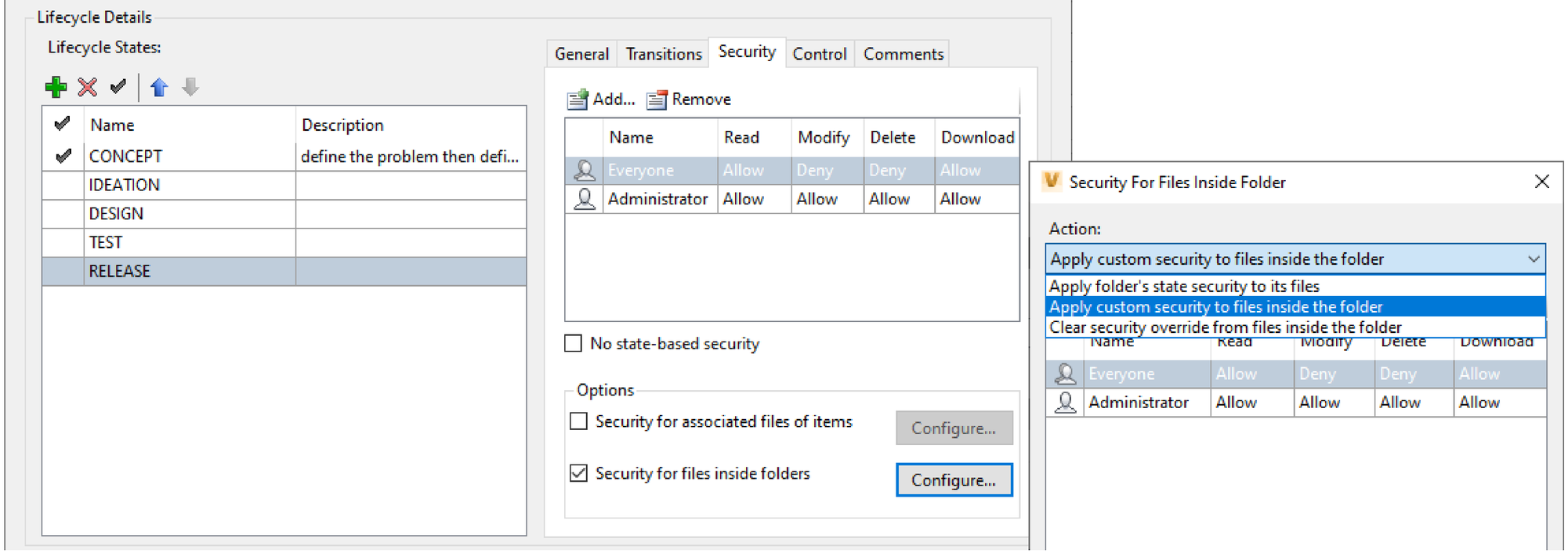
Who’s got access?



Security

The **State Transition** determines the **Security…** who can make the change and what can users do once in that state.





States and Folders

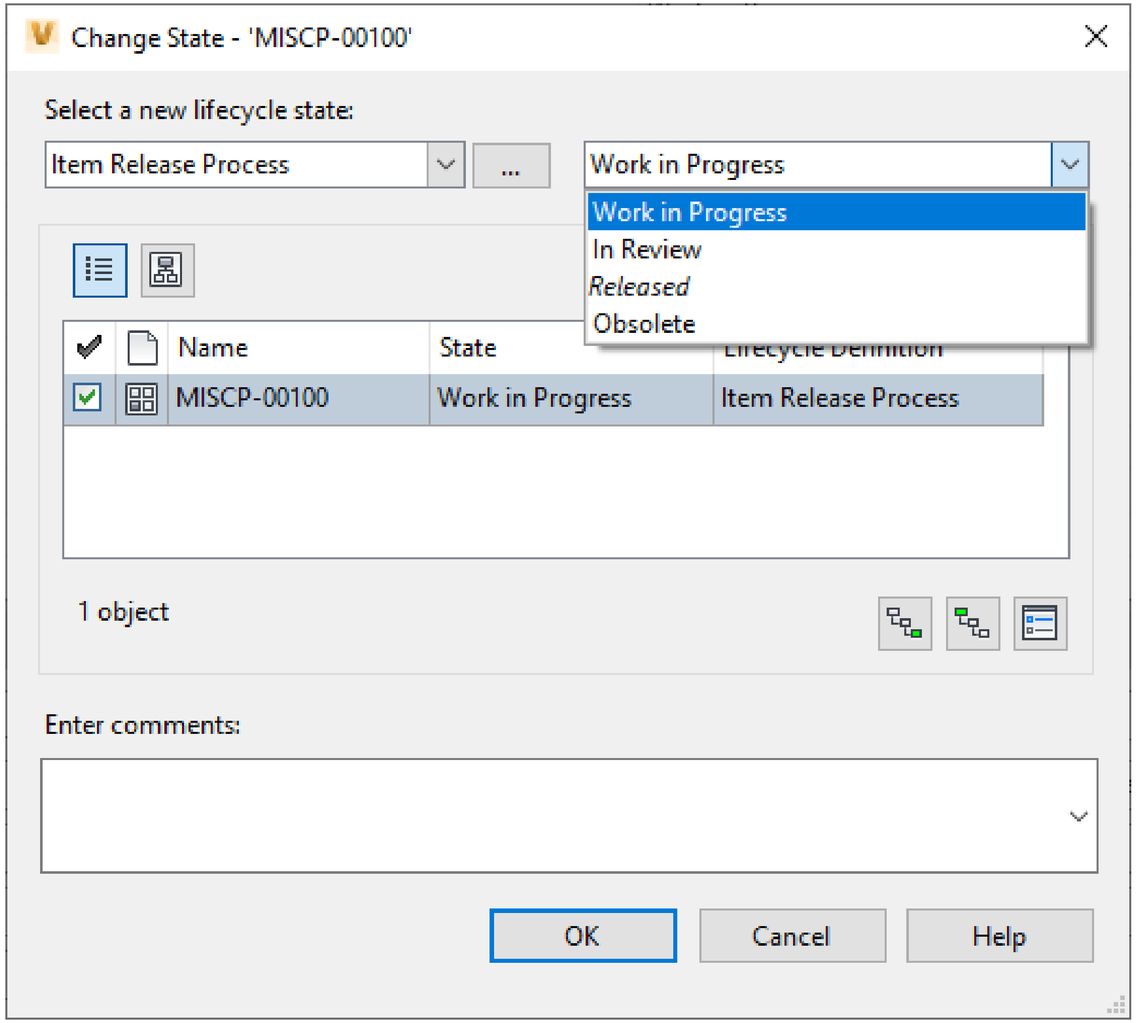
A **Vault Project** is a **Folder** with **Lifecycle** applied. Start by assigning the **Category** to the folder.

The **State Transition** manages what happens to the files in the folder

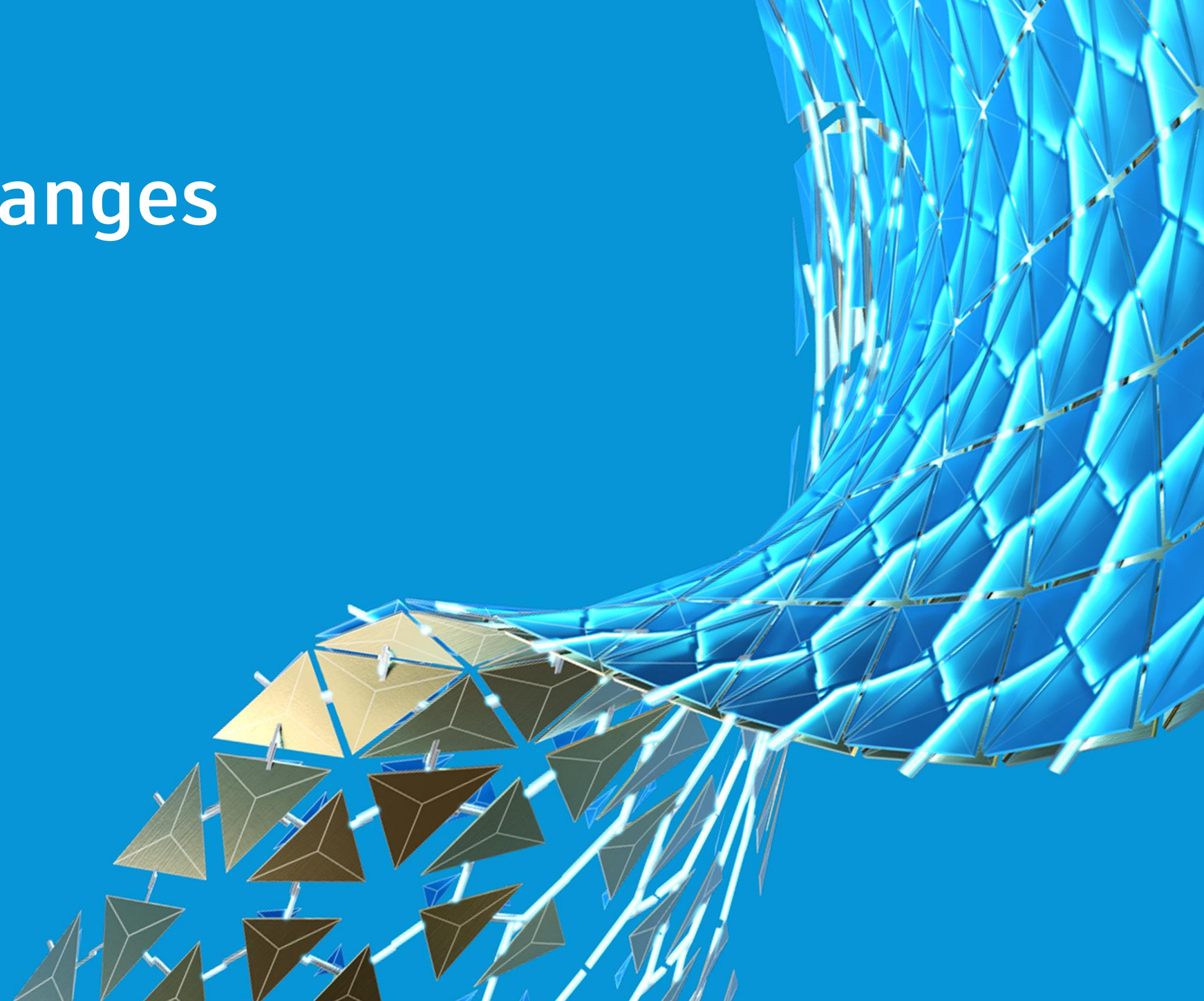
Item State File Control

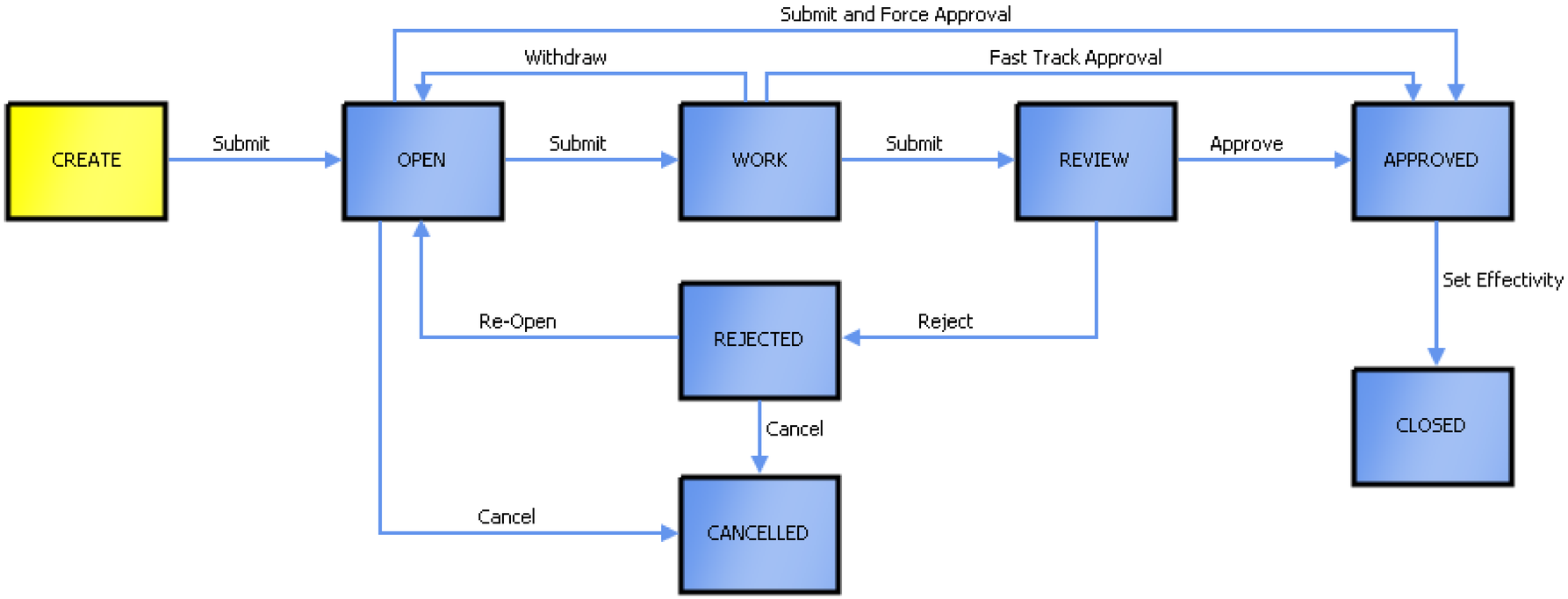
Item Security

- By default when an Item is released the files associated with the item are locked.
- By adjusting the security specific users can be granted the ability to modify files and / or delete them even when the item is released / locked



Tracking Changes

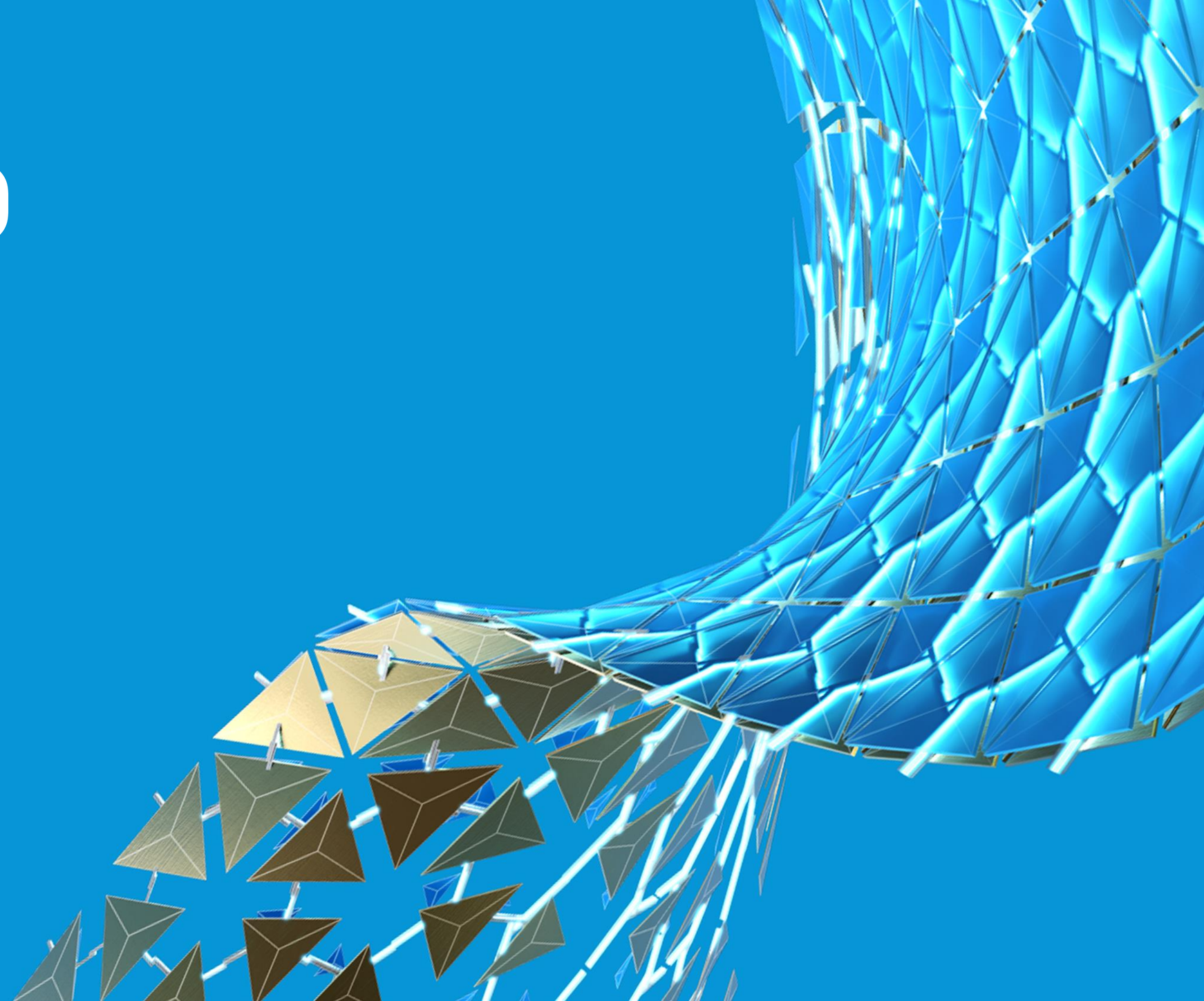




Change Orders

Vault provides **Change Orders** to capture the changes and manage the change as the modifications are completed, reviewed, and released to be manufactured. The change order is the historical "*paper trail*" of the why, how, when, who, and what of the design modifications

7-Steps (+1)



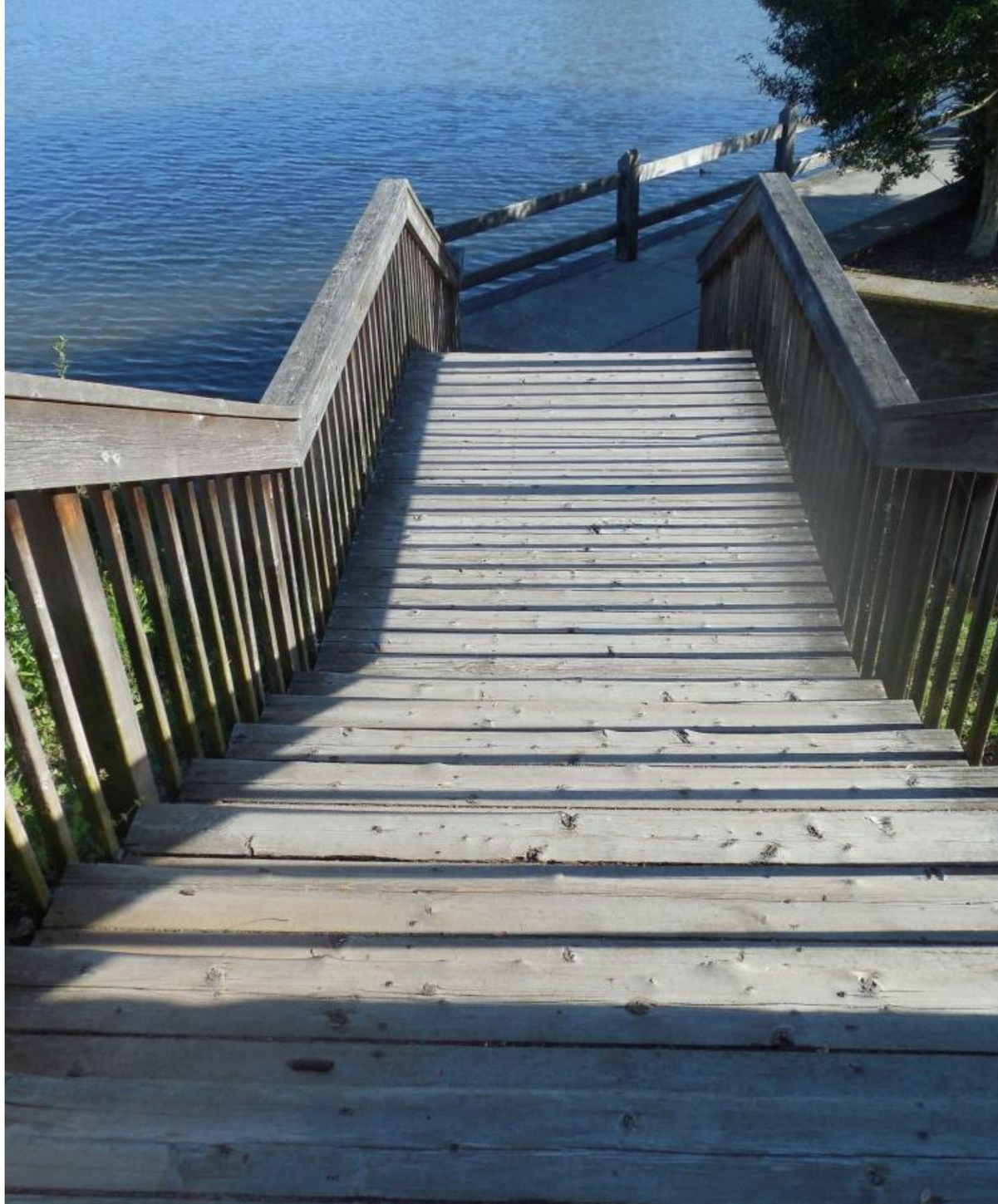
This Photo by Unknown Author is licensed under CC BY-SA

Test, Test, and Test It Again!

There’s a lot of integrated components, meaning you’ll need to build it, test it, tweak it, rinse & repeat.

7-Steps

1. Build Your Properties
2. Add a Category
3. Define the Rules
4. Define the Revision Schemes
5. Build the Transitions
6. Make it Secure
7. Track the Change



“By changing nothing, nothing changes.”

– Tony Robbins

Thank You

Autodesk and the Autodesk logo are registered trademarks or trademarks of Autodesk, Inc., and/or its subsidiaries and/or affiliates in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product and services offerings, and specifications and pricing at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

© 2020 Autodesk. All rights reserved.