AUTODESK **UNIVERSITY** 2015

PL11802

Power Me Up With Vault

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Autodesk

Learning Objectives

- Discover how Vault can help solve unique data management challenges faced by Utility companies
- Better understand industry data management best practices
- Discover utility-specific configurations for Vault
- Learn how to configure optimized workflows in Vault

Description

This class will cover the optimization and configuration of Vault software for Electric and Gas Utility design data management. We will examine workflow and lifecycle configuration methodologies, how best to capture and define your workflow processes, and how to turn those definitions into optimized automated workflows in Vault software. We will also focus on some industry best practices and the unique challenges faced by Utility companies in the management of their data and processes. We will look at how Vault software can, when optimally configured, be a tremendous asset in streamlining Utility data management practices and can help drive standards, procedures, and processes across a Utility company, with examples from Utility industry-specific projects.

Your AU Experts

Arius Dodd is a business consultant for Autodesk, Inc., specializing in data management consulting services for the Vault software products. Arius has over 25 years of experience in architecting Data Management Solutions spanning multiple industries and design disciplines. Her current focus has been centered on architecting Data Management Solutions using the Vault software products for companies in the architecture, engineering, utility, and construction / engineering, natural resources, and infrastructure industries.

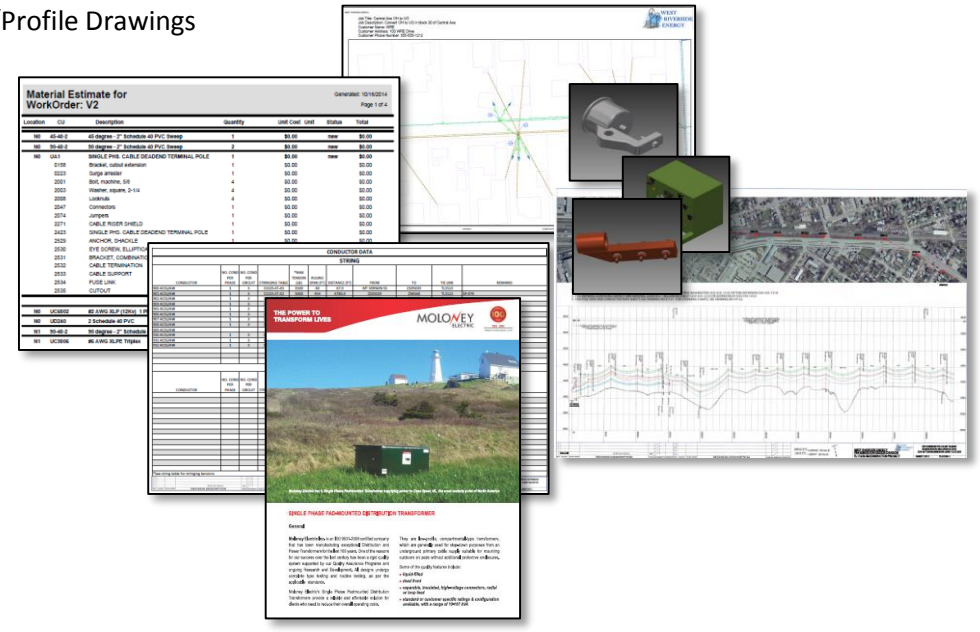
Unique Data Management Challenges in Utilities and How Can Vault Help

Utility Challenges

Many industries are challenged by managing their project and engineering data efficiently and effectively, below are especially critical focus areas for large Utility Companies:

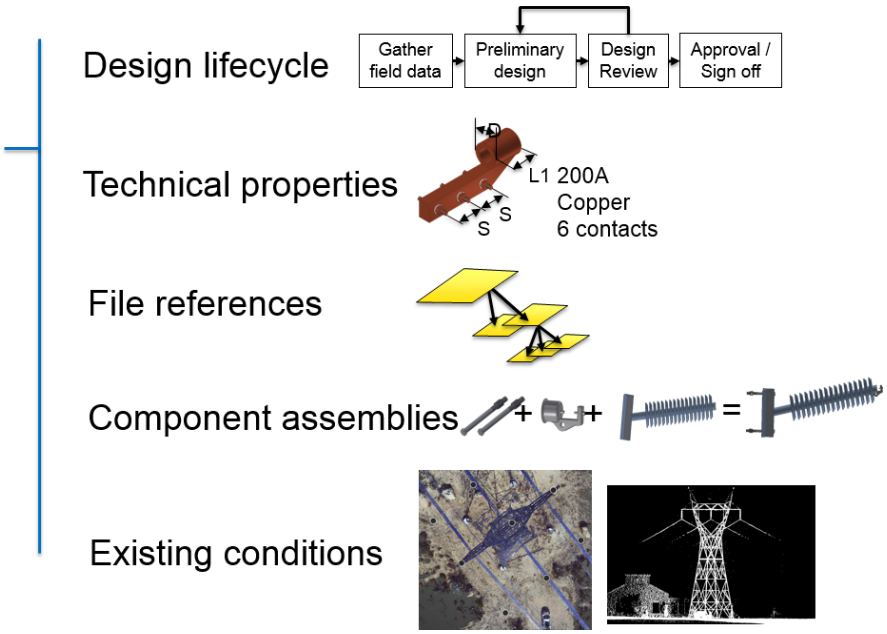
Diverse Data
In the management of Utility data, there are many diverse types of data involved:

- CAD Designs
- Material Lists
- 2D and 3D Standards
- Manufacturer Specifications
- Analysis Reports
- Plan/Profile Drawings



Engineering Focus
One of the larger issues in Utility data management is a lack of engineering focus in the way the data is managed and/or utilized. Often time's data is internally housed on a network drive or in a corporate **document** management system making it difficult to:

- Search and locate data (no meta-data search capabilities)
- Loss of "Parent/Child" relationships (xrefs, ipts, etc.)
- Manage revision control effectively
- Avoid duplication of data residing in multiple locations
- An assurance of data integrity and traceability (knowing you have the "latest and greatest")



Geographic Scope

In Utilities the data being managed represents overall geography as well as the very detailed design of the objects that exist within that geography. The need to manage the different aspects of the data this represents can be a particular challenge, especially as changes to the larger and/or very detailed design happen and the need for one to always represent the other accurately.

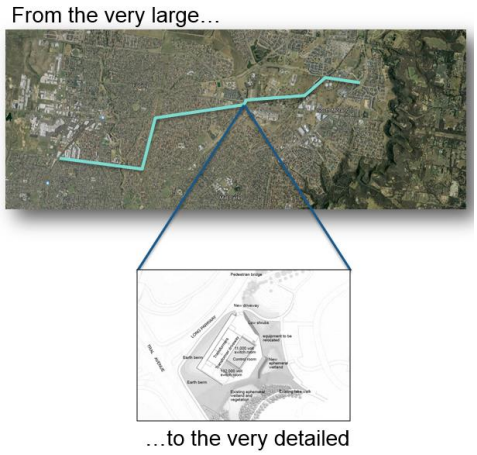
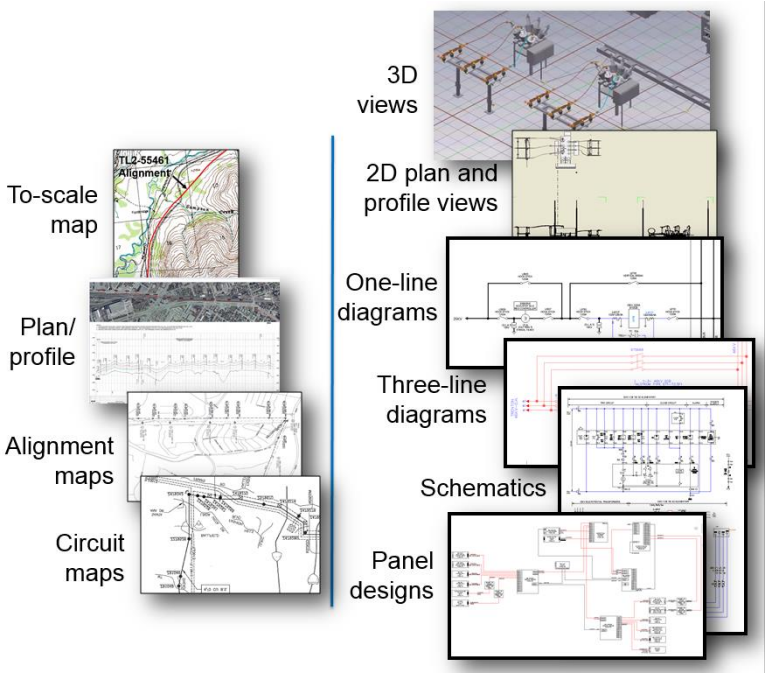


Figure 3: Geographic Scope

Views of Data

There are many different views of the same data and subsets of that data required when managing Utility data, as a result the relationships between these views of data also needs to be managed. Without a true **data** management system that is storing all of the data and understands both the authoring applications, their resulting data formats, and the relationships between the data/views this becomes incredibly challenging.

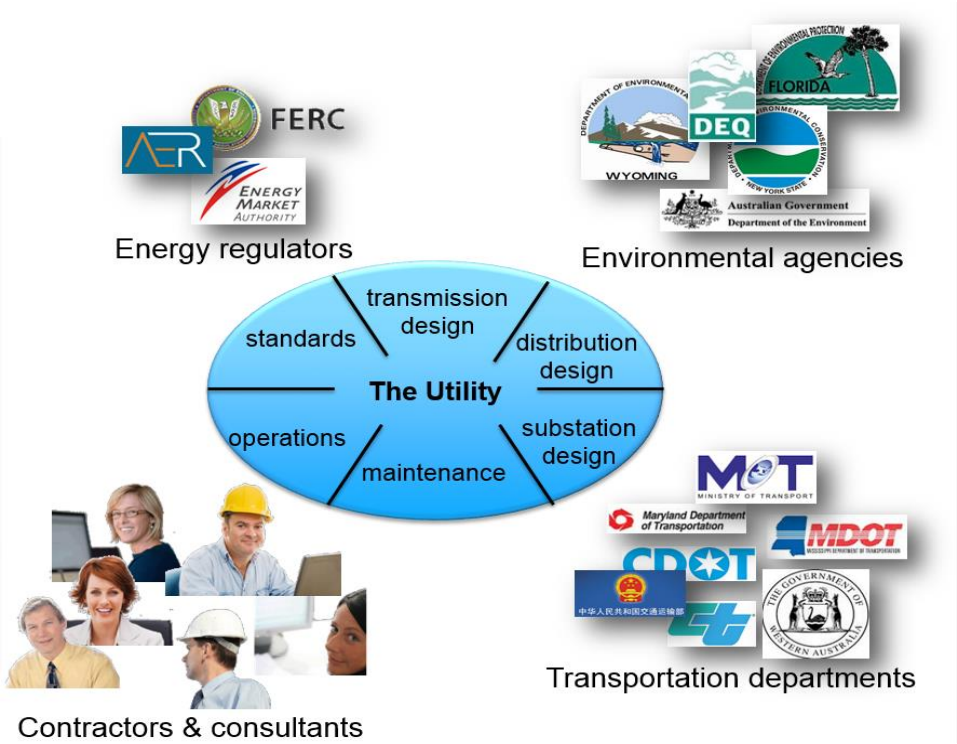


Many Players

The data managed by Utility companies is utilized by many different people and organizations both internally and externally. Without a true **data** management system it is a significant challenge for a company to keep up with and manage this complexity and securely managing it, is an even greater challenge.

Therefore trying to manage the data that is shared, developed or reviewed by persons external to the company becomes even more difficult, usually relying on emailing of the data back and forth, which

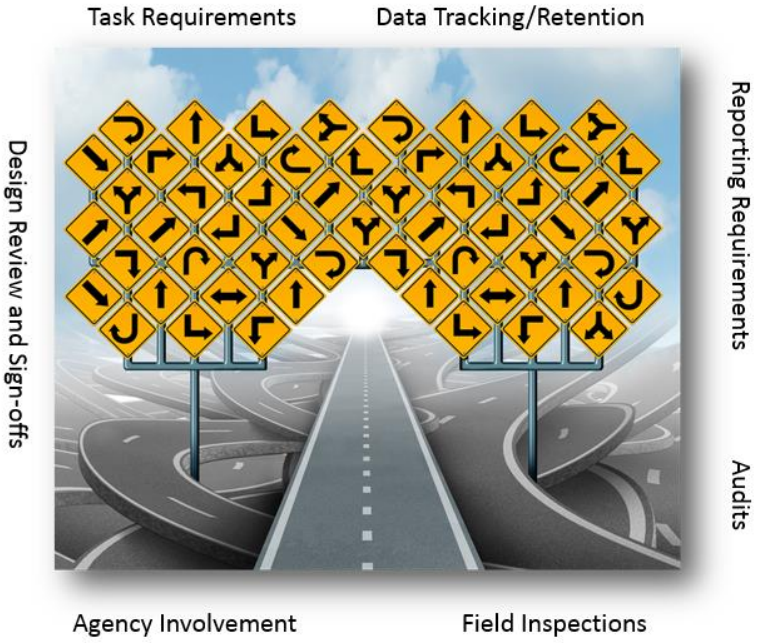
then relies on someone returning this data to the correct place, and ensuring no modifications have been made to the data during these internal and external exchanges is equally challenging at best.



Regulation

Utility companies and their data often fall under many different types of regulations, some of these being Federal (NERC, FERC, CIP) which carry strict compliancy's and are subject to auditing. Without a true **data** management system, it is near impossible to truly ensure compliance to these regulations is happening. Many of the Utility companies I have worked with thought they were adhering to these compliances and regulations and were quite surprised to see that with their current management of their design documents, they were actually violating them regularly.

There are many other regulations that Utility companies define or are to follow when it comes to their data and processes. Design reviews and sign-offs both internally and externally, Field inspections and data retention policies to name a few.



What Makes Autodesk Vault Uniquely Suited To The Challenges Faced by Utilities?

The Top 15!

1. Configuration NOT customization
2. Autodesk Vault Professional manages content natively in authoring tools like AutoCAD, Microsoft Office, Inventor, Outlook, SolidWorks, etc.
3. Secure, revision controlled, and centralized data storage facilitates easy searching and design reuse
4. Autodesk Vault Professional provides a direct integration within AutoCAD's Sheet Set Manager interface enabling multi-site workflows for sheet sets
5. In-depth meta-data mapping and search capabilities (AutoCAD Attributes, Outlook and MS Office document fields, Full Context, etc.)
6. Autodesk Vault Professional efficiently manages BOMs and ECOs via company standard workflows and lifecycles throughout conceptual, preliminary, and detailed design
7. Extend and collaborate with internal resources and external suppliers and contractors natively, via the web, or via integrations with platforms such as Microsoft SharePoint
8. Autodesk Vault Professional has integration with enterprise systems such as SAP, Maximo, and ESRI GIS
9. Autodesk Vault Professional provides bulk data loading utilities for bringing data into the Vault
10. Automated E-Mail notification and PDF publishing when changing a lifecycle state
11. Drawing Compare - easily lets you compare two drawings or two versions or revisions of a drawing from within Vault

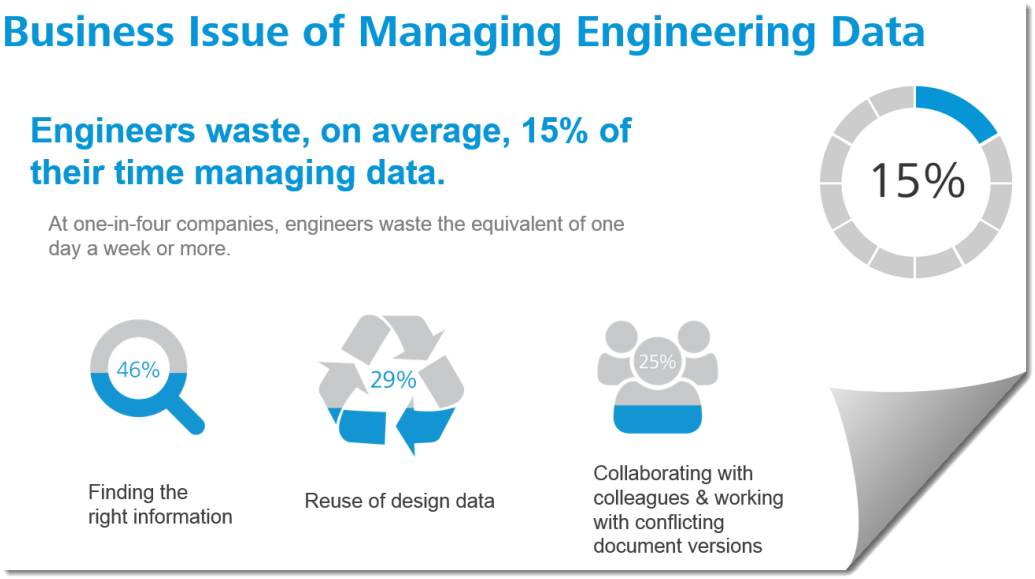
12. Data stored in Vault project folders is accessible directly from with AutoCAD and other Add-in authoring tools, meaning users do not have to leave their authoring tool to access and collaborate on vaulted data
13. Autodesk Vault Professional understands references and relationships and manages your design data accordingly
14. Civil 3D 'data shortcuts' are managed within Autodesk Vault Professional – the only solution currently providing this value
15. Autodesk Vault Professional's 'Copy Design' functionality jumpstarts design re-use – create a new design with all the referenced data you need from previous work with just a few mouse clicks

IF YOU CURRENTLY USE ANY AUTODESK AUTHORING APPLICATIONS, NO OTHER DATA MANAGEMENT SOLUTION CAN PROVIDE THE TIGHT INTEGRATION WITH, AND IMPLICIT UNDERSTANDING OF, AUTODESK DESIGN TOOLS AND FORMATS THEN AUTODESK VAULT PROFESSIONAL!!

Utility Data Management Best Practices

There has been a growing theme of Utility Companies balancing the challenges of replacing aging facilities, accommodating localized load growth, integrating renewables and smart grid elements into existing and new facilities, and managing a changing workforce. Many Utilities are looking for open, standards-based tools to use in improving the design process efficiency and quality, and improving integration to work management, materials ordering, estimation, and enterprise GIS systems.

At one-in-four companies, engineers waste the equivalent of one day a week or more trying to manage their data. That waste comes from trying to find the right information, reuse of design data (or lack of), collaborating with colleagues and working with conflicting document versions.



This has brought an identification of the need to implement an Enterprise Data Management Solution to facilitate and support this ever growing need. Utilities have identified the potential benefits for design productivity improvement, quality improvement and cost avoidance in doing this to be significant. In addition, the realization that an Enterprise Data Management solution will enable their design, engineering and construction workforces to be more effective, accurate, and efficient in their work processes.

Utilities have identified that they need an Enterprise Data Management solution that will address areas like their:

- Inefficient workflows and manual paper-based processes negatively affecting project performance
- Lack of collaboration, coordination and communication
- Lack of efficient/or no processes to facilitate and track decision making throughout the project

It is also common among Utilities that current design and engineering activities are primarily based on traditional 2D CAD-based drafting and design workflows with limited use of 3D model-based design. This use of 2D drafting limits the ability to leverage intelligent modeling technology and visualize in 3D. This approach also limits the ability to design parametrically using rules-based design and "generate" more accurate detailed drawings as a by-product of using more intelligent 3D/2D design methods and tools.

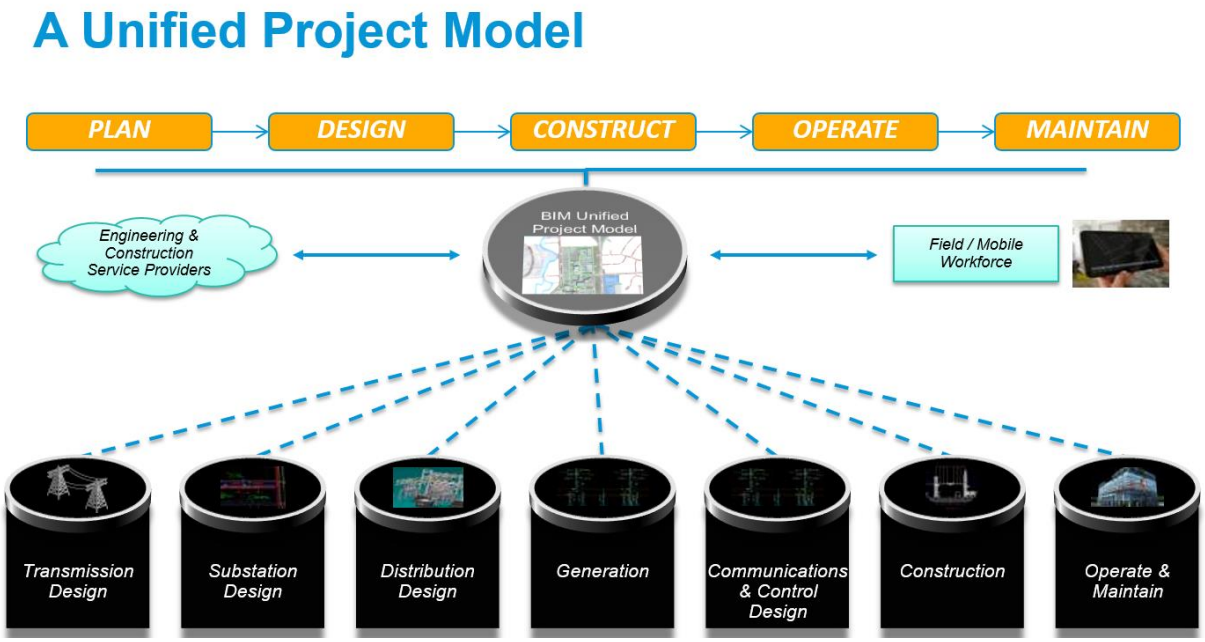
Utilities are looking to leverage technologies that are purpose-built to execute a business function and to minimize customization of technology.

Increasing the Value of Information

At Autodesk, we've made it our business to understand the Utility business. Over the years we've helped our Utility customers work faster, smarter, and better by improving productivity in the engineering office, the field, and the construction site. Autodesk can dramatically increase the value of your information by keeping it digital and by using Internet and intranet connectivity to deliver it when and where it's needed. Extending the value of data, out from the desktop, over the network, and to the point of work.

BIM for Utilities

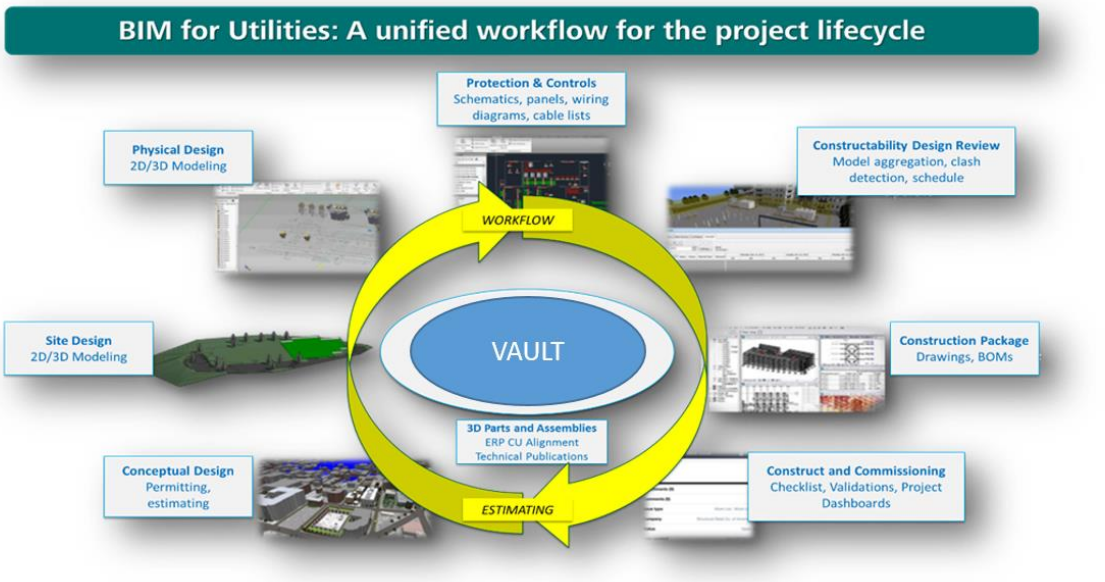
Building Information Modeling - BIM - is an intelligent model–based process that helps project owners and their service providers achieve business results by enabling more accurate, accessible, and actionable insight throughout the project and asset lifecycle. BIM is widely recognized as a mature design methodology in the building, infrastructure, construction, and manufacturing industries, with increasing adoption rates by utilities, engineers, and contractors.



Using the BIM process, the design model is available earlier to better inform preconstruction planning for activities such as:

- Staging
- Sequencing
- Scheduling
- Quantity take-off
- Estimating

The application of BIM improves engineering design and execution from planning and design through construction and operations. Autodesk Vault Professional is at the core of this solution model.



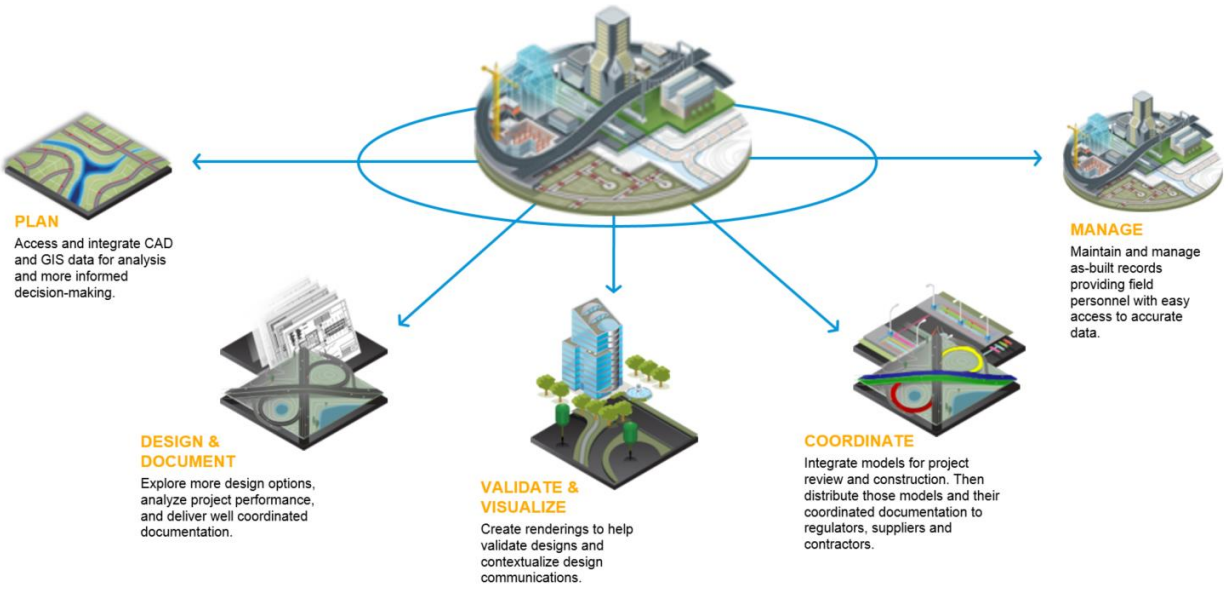
Some of the fundamental best practices around Utility Data Management are:

- Define and Drive Standards
- Invest in streamlining current processes and defining new processes
- Get off paper
- Single repository for all engineering and project related data
- Relational design leads to relational data management
- Focus on Data Governance
- Asset lifecycle management
- Enable collaboration and dissemination

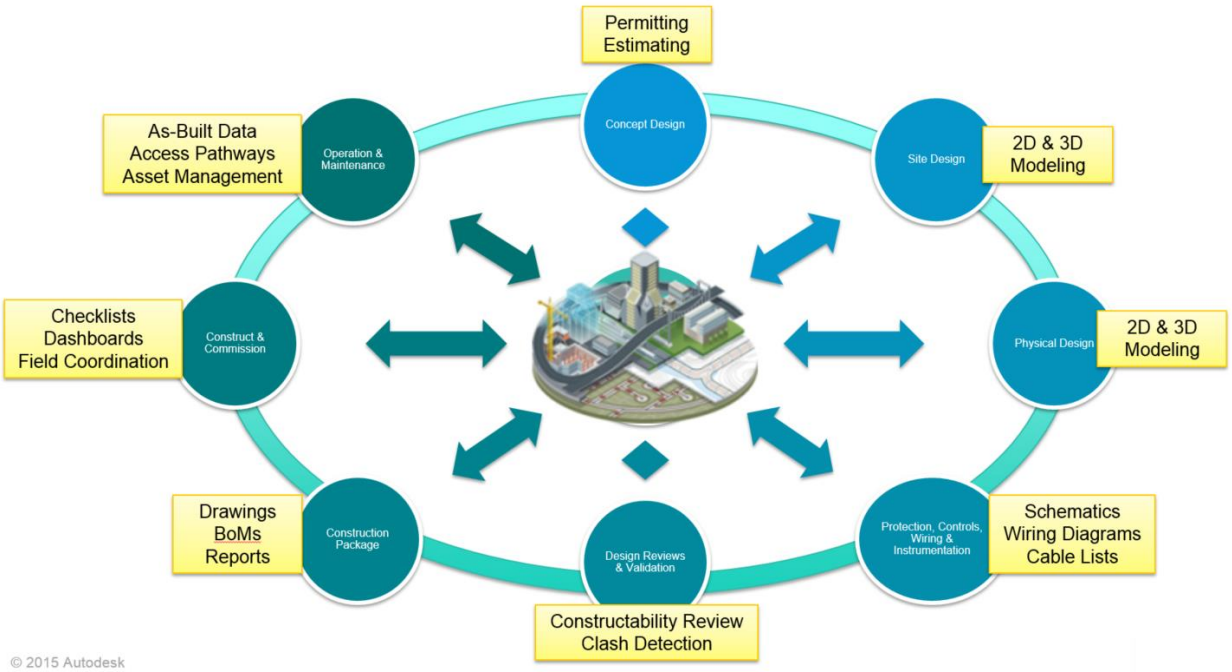
Autodesk Utility Solutions

The Autodesk product portfolio offers comprehensive software solutions for planning, designing, building, and managing civil and utility infrastructure and related data. Our focus is on helping utilities better manage their design, engineering, and as-built processes and data flows.

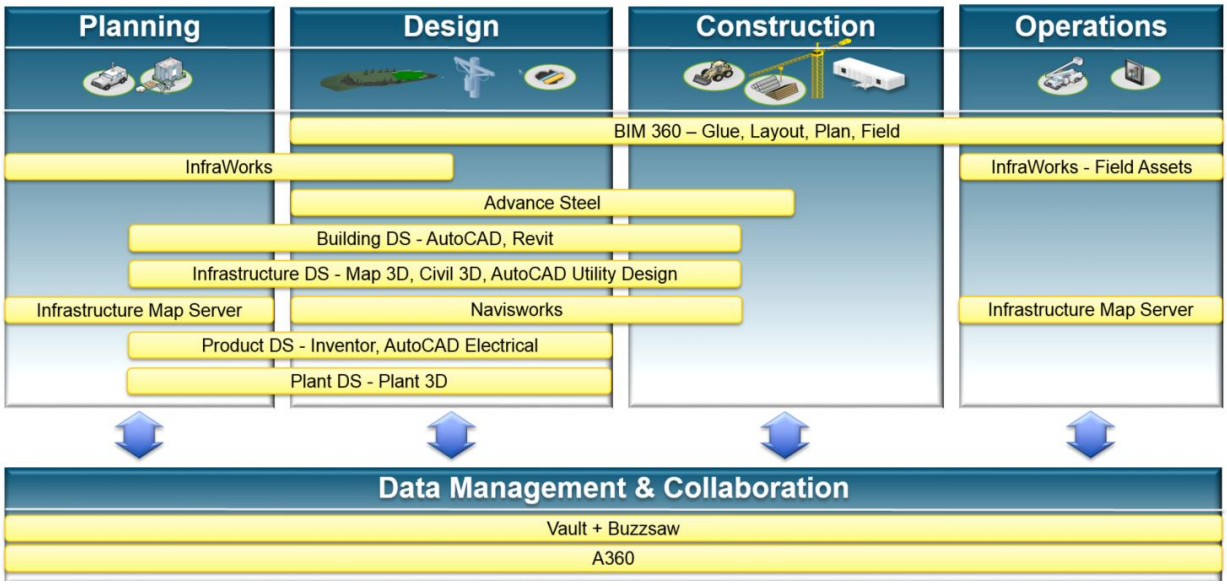
What Happens



How It Happens



Tools That Make It Possible



Autodesk's Utility Industry Commitment

Autodesk over the last decade has focused on delivering engineering design, geospatial, and data management solutions for the Utility and Telecommunications industries. To meet the needs of our customers, Autodesk has established a Global Services division that provides business consulting, solution development, solution delivery and ongoing support. Autodesk also has product engineering, development, marketing and QA teams led by employees with years of experience within utilities and developing solutions for utilities. We are diligent about maintaining and expanding our industry expertise to better serve our customers.

Some of the programs we leverage to do this include Autodesk-sponsored Utility Forums held at Autodesk University and at customer sites, Utility Customer Council events where our customers provide guidance to our solution roadmap, and other industry events and conferences. Also the Substation Design Solution Industry Consortium, which is an independent group managed by members consisting of some of the largest utilities in North America. The SDS Consortium provides peer networking, and discussions on Substation Design standards and tools, providing a united electric industry voice in future developments.

Utility Specific Configurations for Vault

Autodesk is a global leader in 2D and 3D model-based design solutions across many leading infrastructure industries, ranging from building to transportation to utilities.

Our unique engineering-centric approach is to provide our Utility customers with an open, standards-based solution for design and as-built network model and data management. Autodesk believes that maintaining the accuracy and completeness of the asset data initially established in the design process throughout the asset lifecycle is critically important to the success of utilities. Autodesk products are designed to seamlessly integrate with a variety of operational systems including leading Enterprise Asset Management (EAM) systems, enabling enhanced business processes and improved data quality across the enterprise.

The Autodesk Intelligent Model Design solution builds on three key concepts:

1. Intelligent 2D and 3D models to create construction standards are a foundational component for all intelligent model-based design and visualization throughout the enterprise.
2. Model-based design to automate design, analysis and creation of deliverables (drawings, reports, Bill of Materials (BOM), etc.)
3. All engineering data and design versions must be available and managed centrally to enable effective collaboration.

Implementation of Autodesk Vault Professional software will enable the following:

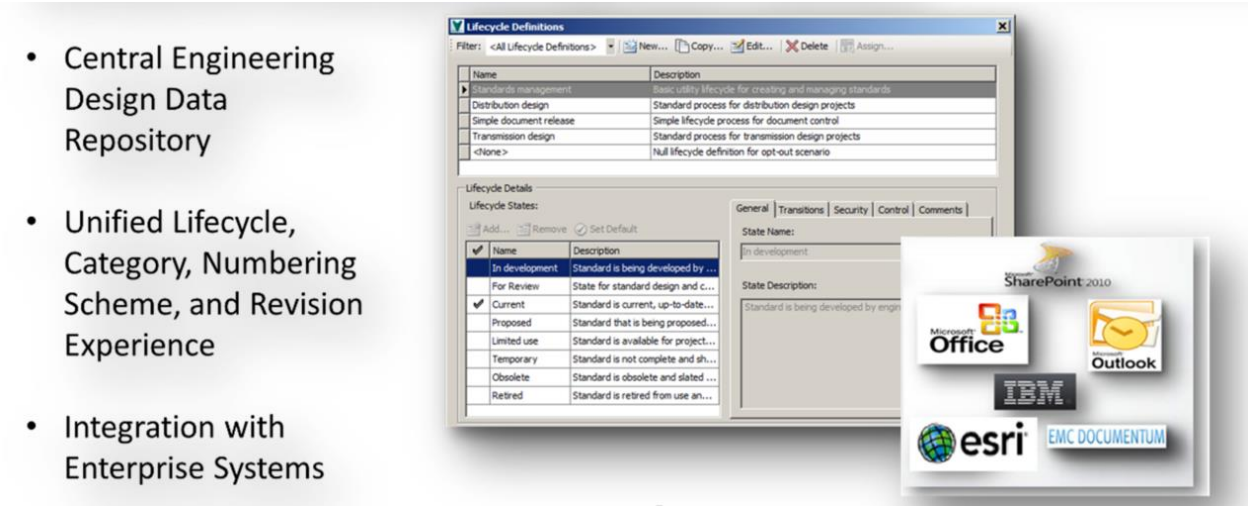
A Vehicle for Business Process Transformation

- Increase clarity of project intent for all stakeholders-better informing decision making and reducing risk.
- Ensure data fidelity and continuity across the lifecycle of projects and assets-improving quality and productivity.
- Provide the foundation for critical business agility.

Transform Enterprise Workflows

- Reduce rework, enhance data quality, and make engineering, design, construction, and operations data available to more users for project planning, design, construction and to support operations and maintenance over the lifecycle of the asset.
- Reduce overall project timeline and project contingency by improving stakeholder, service provider and contractor engagement with better collaboration and appropriate access to project data.
- Optimize business processes and improve the exchange of information with government agencies, other utilities, and contractors by integrating engineering data with business critical workflows.

Autodesk Vault Professional securely stores and manages engineering information, design data, and documents – shortening the design to construction process. It helps design, engineering, and business departments collaborate and share information with multisite tools to connect workgroups across discrete locations. It gives design departments the tools they need to track RFI's and engineering change orders, manage bills of materials (BOMs) and promote collaboration across the project and asset lifecycle.



Autodesk Vault Professional tightly integrates with design applications such as AutoCAD, AutoCAD Map 3D, AutoCAD Civil 3D, AutoCAD Mechanical, AutoCAD Electrical, Autodesk Inventor, AutoCAD Utility Design, Autodesk Substation Design Solution, and AutoCAD Plant 3D. This deep integration makes it easier to manage data associated with designs from engineering through construction—saving time and helping to preserve data accuracy. Autodesk Vault also supports 3rd party design tools, including Bentley MicroStation, Dassault Solidworks, and PTC Wildfire. Also Vault Professional's exposed Graphic User Interface allows easy integration with tools like Microsoft SharePoint.

As Utilities continue to deploy and adopt Autodesk solutions, customers are seeking to combine Autodesk's design power with data and process management. Autodesk Vault Professional is our product that enables projects, processes, and data to be managed and accessed for collaboration between project participants. This overall process needs to consider how projects get initiated, the various roles played by different team members, what information needs to be tracked, and the many design related documents and data to be managed.

Autodesk Vault Professional addresses the complete project lifecycle, extending design data to construction and field operations as well as contractors. As many Utilities and their contractors have standardized their design engineering based on AutoCAD, implementing Vault Professional in this environment is an increasingly common next step.

In broad terms, there are three potential areas for process and data management:

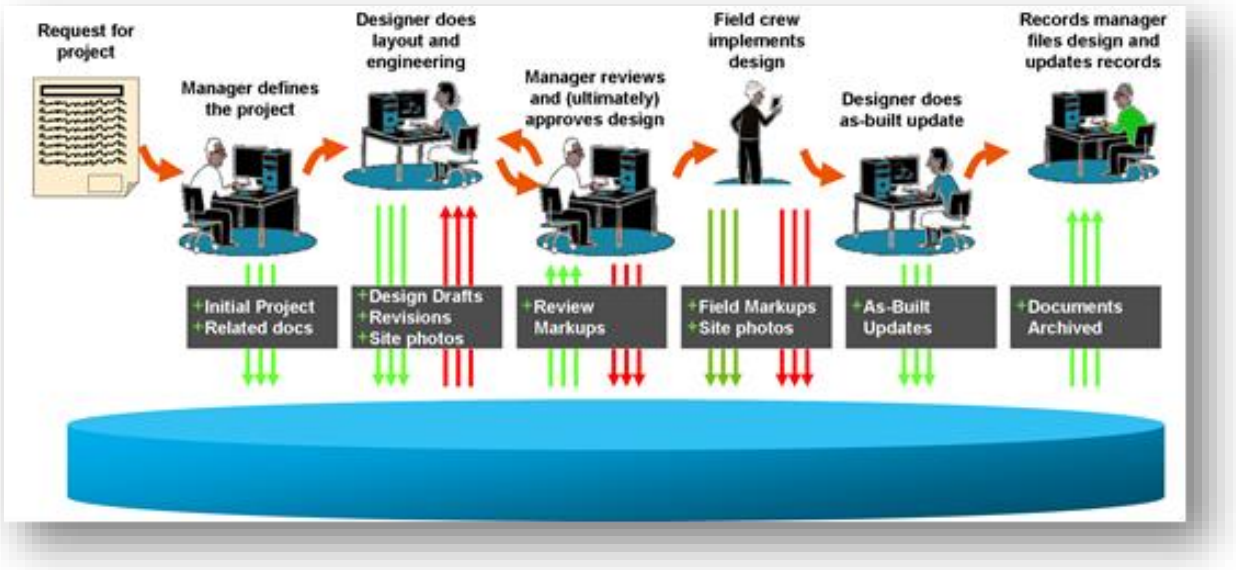
- "Classic" document management: This includes the typical document management functions such as check in and check out, revision control, and management of redlines.

- Project metadata management: Metadata includes data about any given project, for example the job title, location, and data on staffing. Such information can be stored in Vault and design systems with synchronization with enterprise systems such as Maximo and GIS.
- Process workflow management: Vault's "lifecycle" concept can be leveraged to help manage the design through the initiation / layout / review / as-built process. This can also extend, for example, to automatic e-mail notifications to alert users of status changes.

In the figure below, ideas for data management workflows are shown. The green arrows represent "checking a document into Vault", and the red arrows represent "checking a document out of Vault".

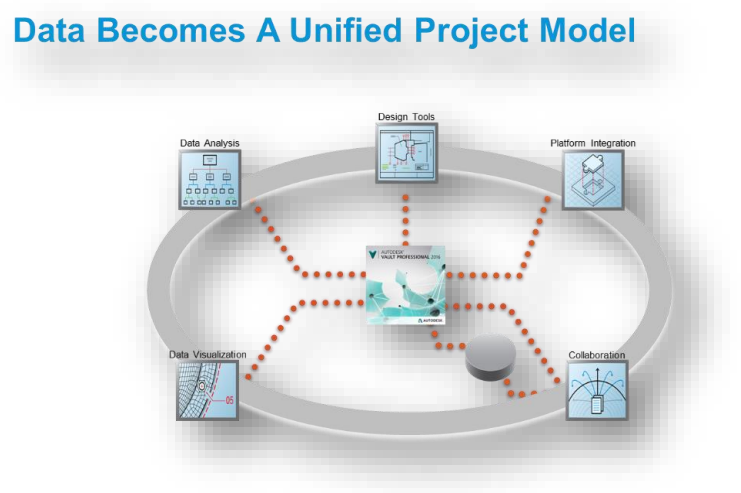
Note that Vault-based document management is not limited to the design document. By using Vault, related project documents such as material lists, photographs, redlines, and revisions can all be included and associated with each other in the context of the project.

Proper drawing and project-related data management should be managed in a project context, ensuring that all the documents associated with a project are managed and stored in a single location accessible to all project participants.

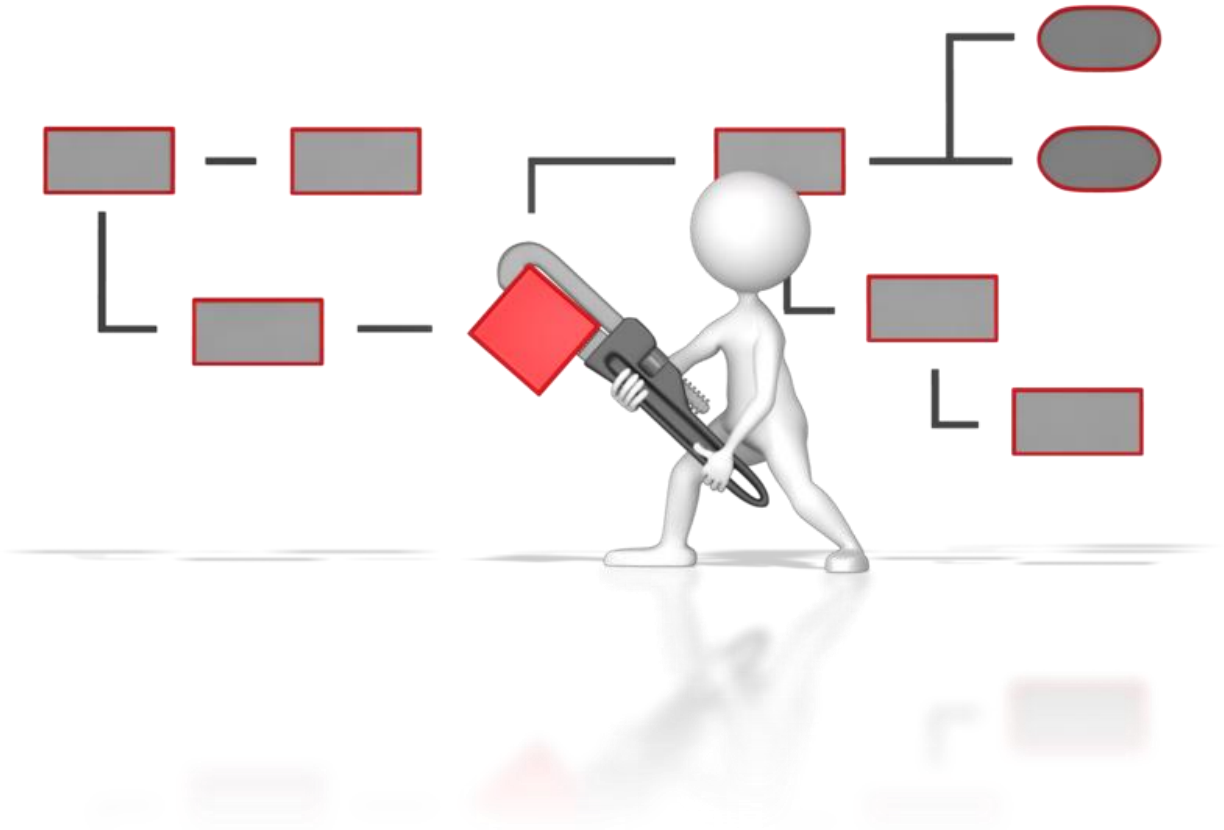


Autodesk® Vault Professional data management software helps organize, manage, and track data creation and documentation processes for design, engineering, construction, and operations workgroups. Get more control over design data with revision management capabilities and quickly find and reuse design data, for easier management of your design and engineering information.

Connect Your Team – Enhance team productivity with support for team-based design. The Autodesk Vault product line lets you work closely with others on projects without putting design data at risk. Multi-user functionality lets you control access to design data so your entire workgroup—from managers to engineers and designers—can participate in the design process. You can track and manage all data related to each project in one secure, central location. And because the Vault product family integrates with Autodesk design applications, it's easier and faster than ever to manage accurate data from concept through construction.



Configuring Optimized Lifecycles and Workflows in Vault



Lifecycle vs. Workflow

One of the biggest questions I get asked is to define the difference between a "Lifecycle" and "Workflow" as it pertains to Vault.

A Lifecycle represents the stages an individual document goes through in its lifetime (i.e. *Work In Progress, Review, Issued for Construction, As-Built).*

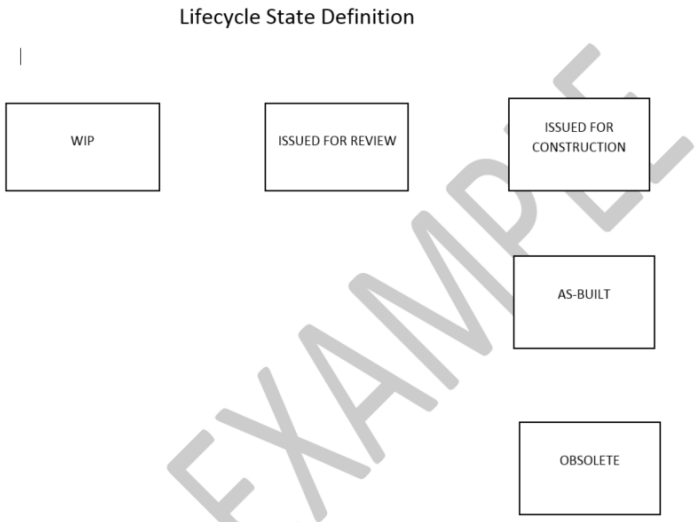
A Workflow represents a defined process flow.

Example: An Engineering Change Order is issued (this is a ***Workflow*** containing approvals and process around the Change Order as a whole), that Change Order may involve 10 different design documents (each design document has a ***lifecycle*** assigned to it that drives approvals, revisions, etc. on the individual document). During the ***Workflow*** of the Change Order these documents could be in different stages of their respective ***lifecycles.*** Four in a "Work In Progress" lifecycle state – three in an "In Review" lifecycle state, etc. The Workflow is driving the Change Order process in its entirety where the lifecycle is driving the change process on each of the individual documents within the Workflow.

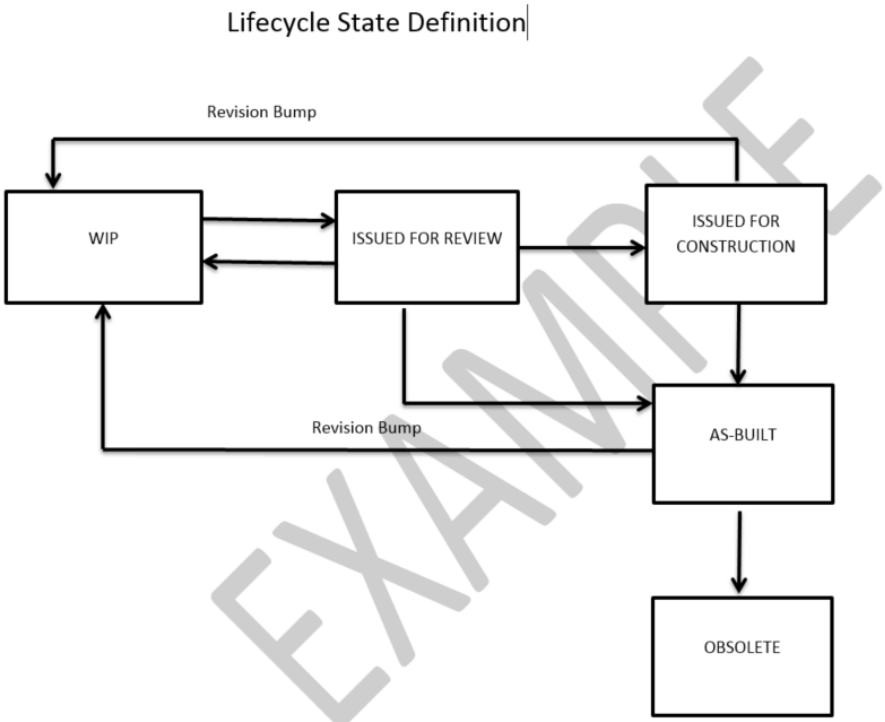
Defining the Lifecycle

There are several steps that have to take place to define an optimized lifecycle before it can be configured. Below is a summary of the steps I have found to produce the most optimal resulting lifecycles. It can be a time commitment on the upfront but the downstream benefits are more than worth it.

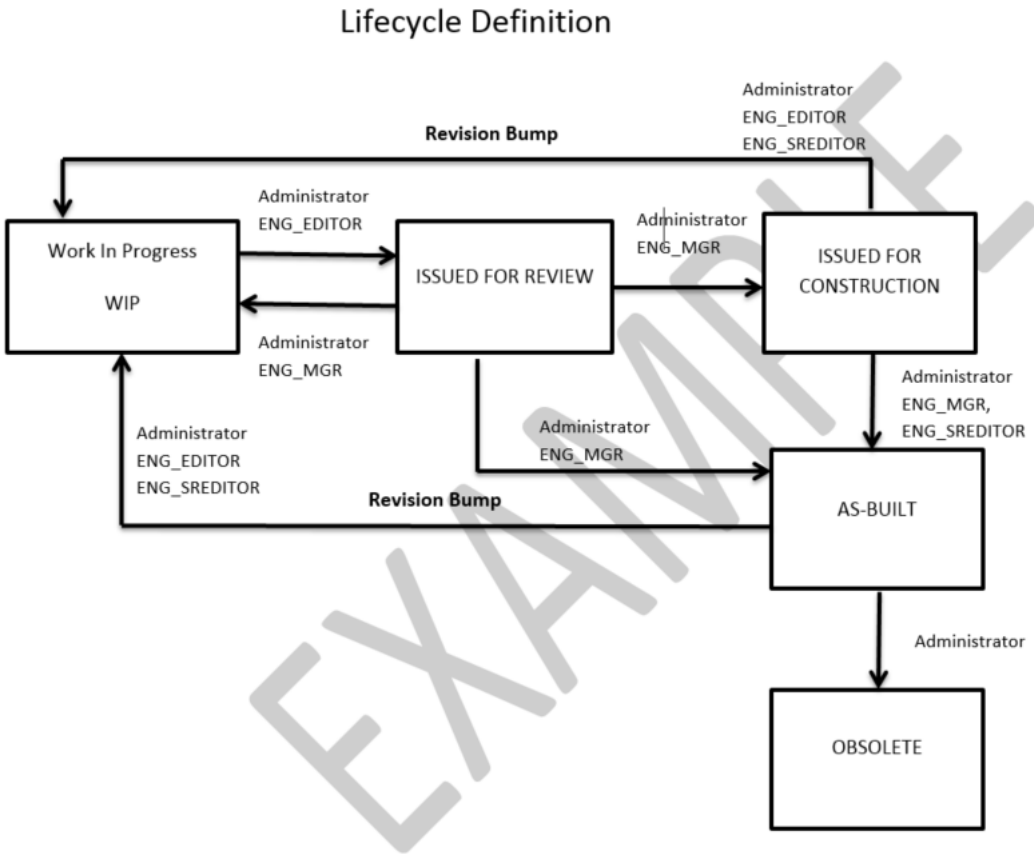
1. Put your Line of Business (LOB) experts in a room with a whiteboard
    - Identify the various document types that require (or desire) revision control and/or secure access
    - If they have differing approvals or security then they are a different lifecycle
2. Define what the various stages the document should go through in its "lifetime"
    - These are the lifecycle states



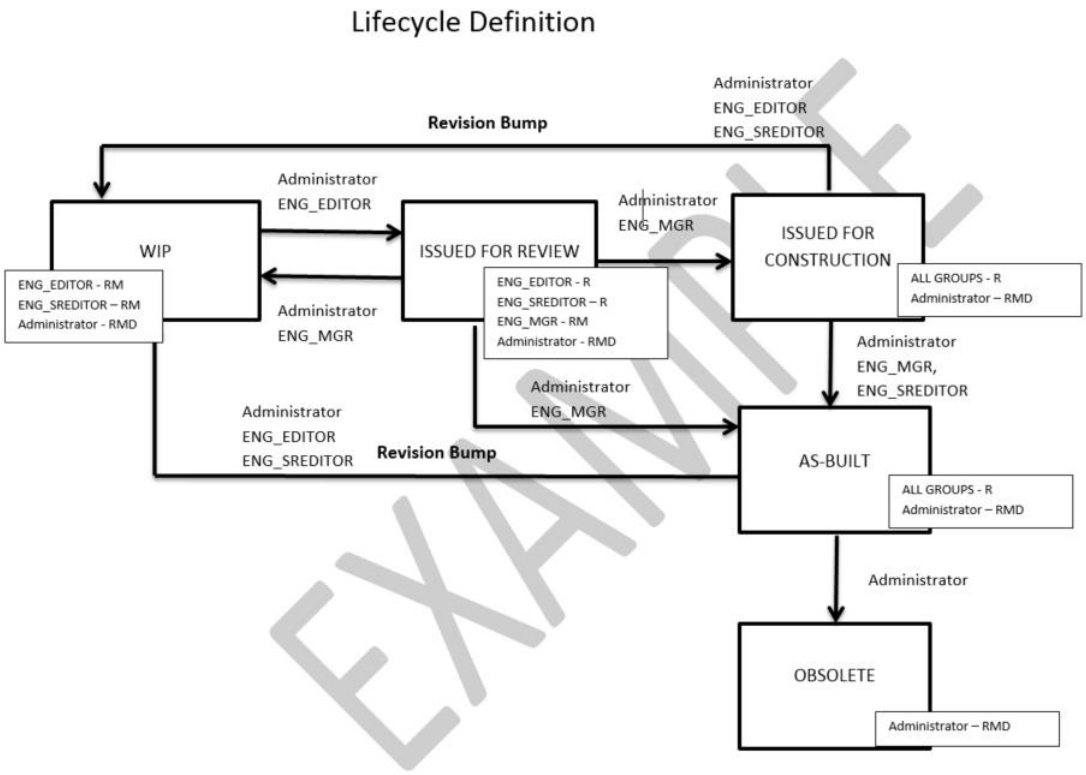
3. Define the direction of flow between the states and where revision bumps should happen



4. Define the group(s) that can make the transition from one state to the next
    - This is where we starting applying security that will drive and enforce a process (i.e. controlling who can transition from Issued For Review to Issued For Construction should be limited to the group(s) that should be reviewing and approving documents to be Issued For Construction. This will also capture the audit trail of approvals and release.



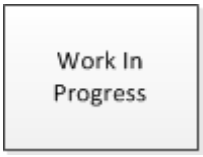
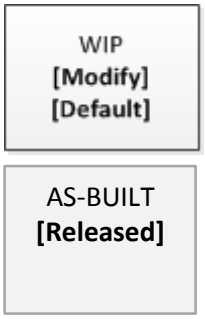
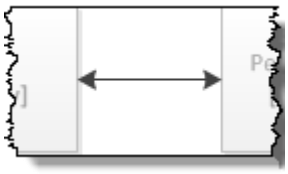
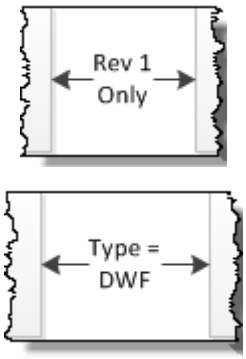
5. Vault allows for yet another layer of security which is defining who can even read, modify or delete at each state. This is the most granular level of security and it will trump role and folder level security. (i.e. A group could have read/modify rights on a folder in which a document assigned to this lifecycle resides, but you could configure the lifecycle so that when a document is in the WIP state that group can't see it all even though they have access to the folder it resides in).

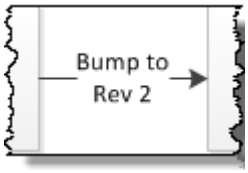


6. You can also specify transition criteria (actions) that happen at state changes like:
    - Ensure Property Compliance is compliant (i.e. enforce a designer to fill out titleblock fields before Vault will allow it to be pushed to a Review state, etc.)
    - Update Visualization (generate new dwf) and Synchronize Properties
    - Automatically publish a PDF
    - Bump the Revision (Primary, secondary, etc.)
    - Email Notification
    - Ensure children are released prior to a parent and vice versa

7. Using the full lifecycle security configuration options detailed above is how I have helped several Utilities configure and ensure NERC, FERC, CIP compliances on their data that falls under those compliances. Previous to implementing Vault they could not ensure their data was meeting these compliances and most were in violation.

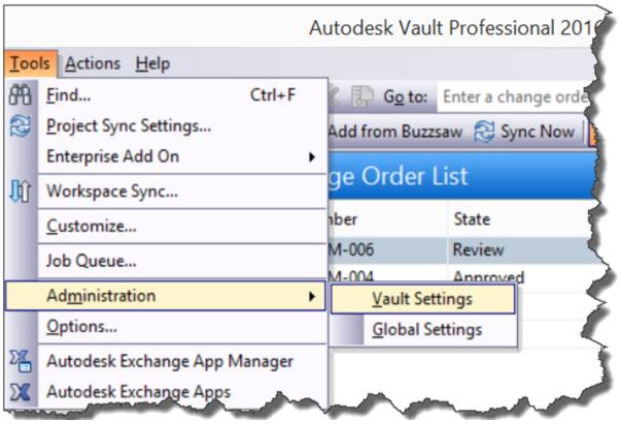
The chart below can be a useful model to follow as you define and document your lifecycles and workflows.

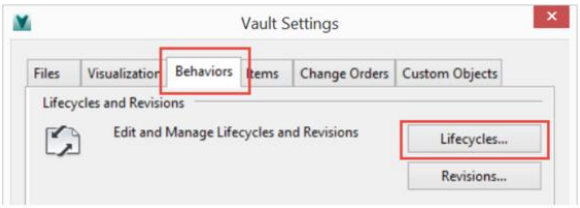
Lifecycle Entity	Diagram Entity Example	Notes
{None}		Used to show an input into the process for visual purposes only. For example adding a drawing to Vault. This does not represent any Lifecycle Definition entity in Vault, but is used to help clarify workflow process.
Lifecycle State		Used to show an actual lifecycle state in the definition. The name of the state will be included in the diagram entity
	[Keywords] 	**[Modify], [Released]**, *etc*. To aid in understanding when a document is in a certain state for a user interaction point of view, keywords are used in [**Bold**]. • **[Modify]** means that the document can be edited by an authorized user • **[Default]** notes the default state for the lifecycle • **[Released]** means that Vault will treat the document version in this stated as a Released document.
Lifecycle State Transition		Lines between Lifecycle States show valid transitions between the states. Arrows show which direction the transition can be made (either uni-direction or bi-directional). A bi-directional actually represents **two** transitions in the Vault lifecycle. For example a transition from “WIP to Review” is one transition, and from “Review to WIP” is a second transition in Vault.
	Conditional Transition(s) 	

Lifecycle Entity	Diagram Entity Example	Notes
	Transition Action(s) 	The conditions under which a transition from one lifecycle state to the next occurs are defined by specifying the transition criteria. Transitions that have special conditions (**criteria**) or perform **actions** as part of the transition may be noted in the diagram. For example: • If a document can only move between two states if it is at Revision 1 or if it is not a DWF file (Conditional Transition) then this can be noted. • If the Revision should be increased as part of the transition (Transition Action) this can be noted.

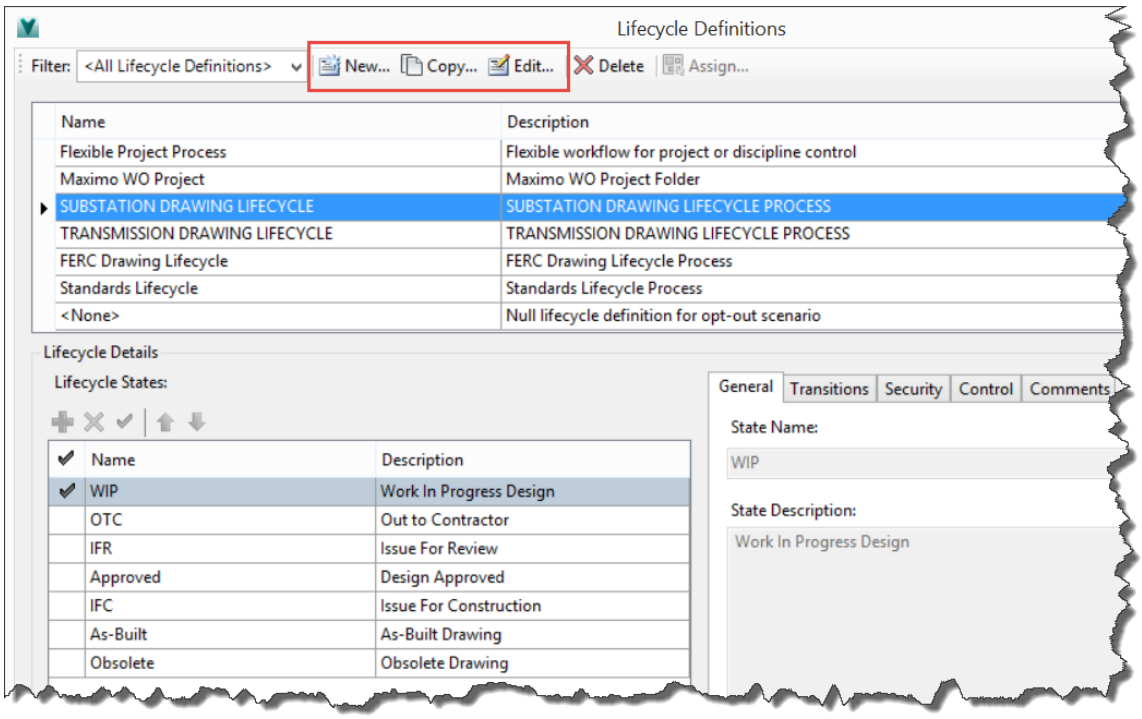
Creating a Lifecycle in Vault

Lifecycles can be created or modified by selecting **Tools>Administration>Vault Settings**. In the Vault settings dialog select the **Behaviors tab** and select the **Lifecycles… button**.

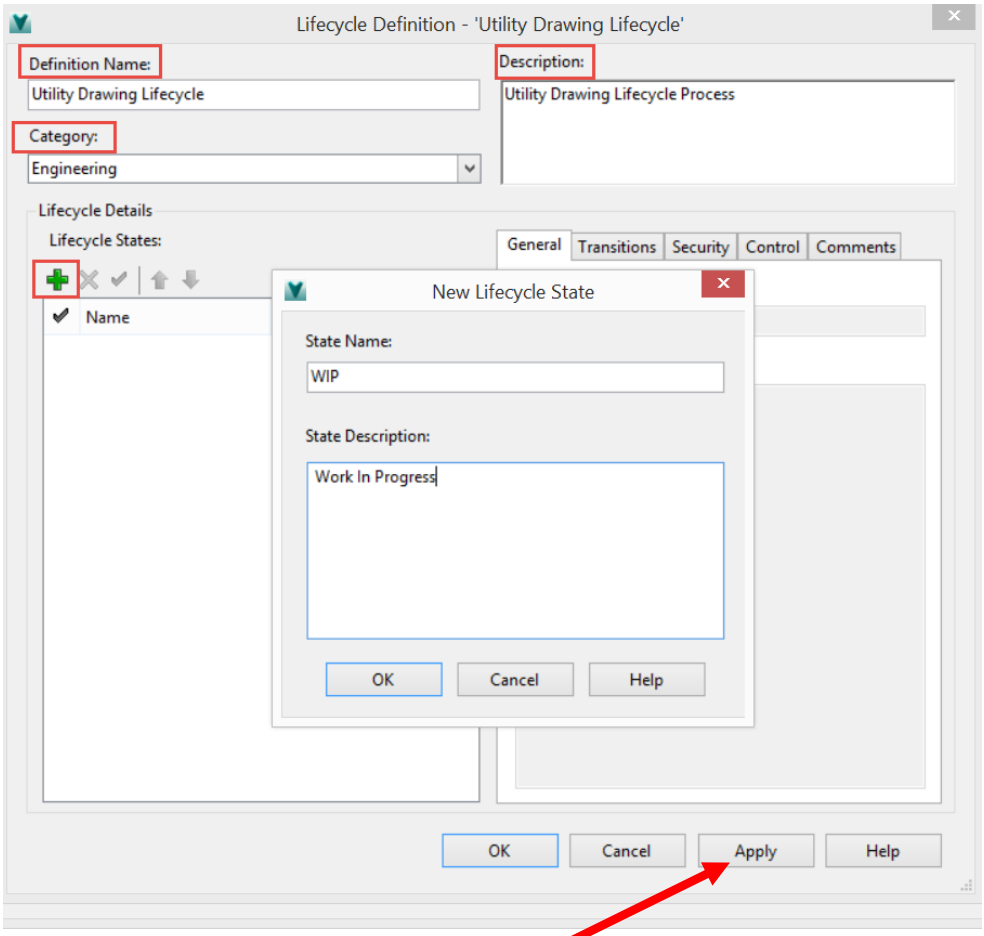




Select **New** to create a new definition, or select a Lifecycle and choose **Edit** to modify an existing one or **Copy** to create a definition based on an existing one.



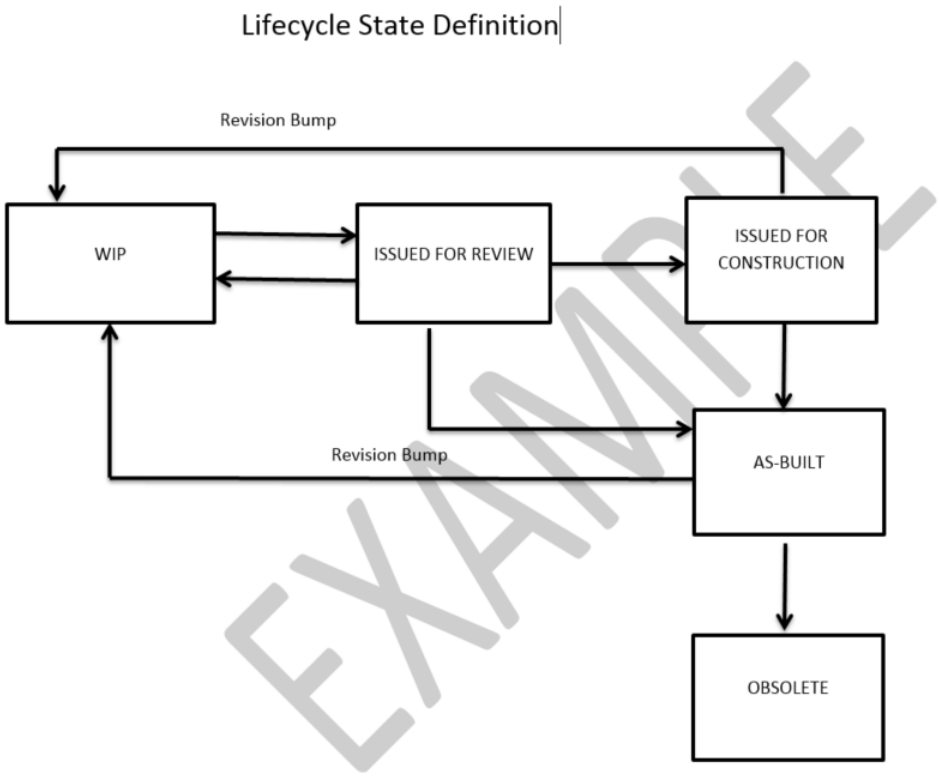
For a New Lifecycle fill out the Definition Name, Description, and Category assignment. Then begin adding each of the lifecycle states you defined for this lifecycle.



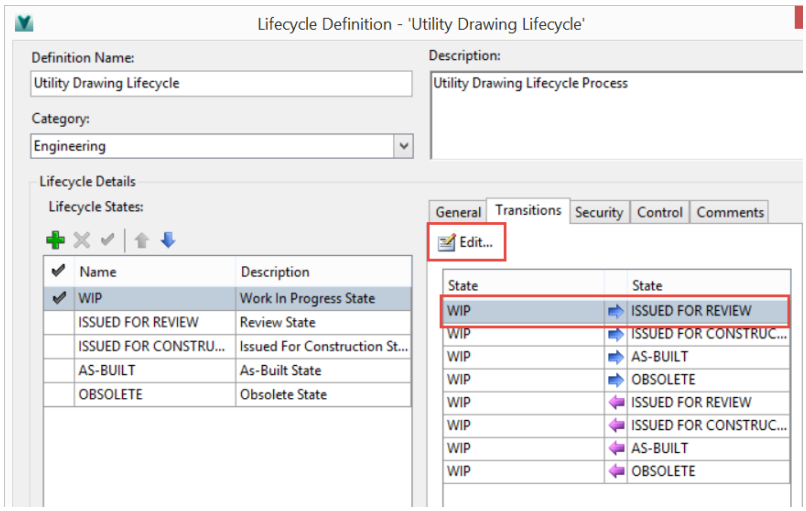
Once all States have been created click Apply.

Configuring a Lifecycle in Vault

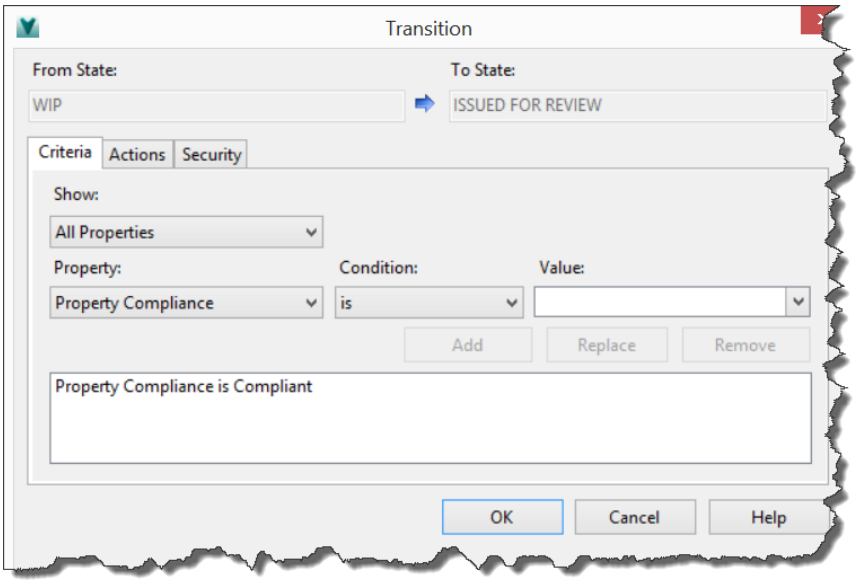
Vault uses a generic approach when creating lifecycle definitions. By default when a state is created in a Vault lifecycle it has no restrictions, which most likely is not what you have defined. As a result we have to configure all valid and invalid State transitions. For all States defined in a lifecycle Vault will list every possible transition between all the States and each of these have to be configured as either valid or invalid.



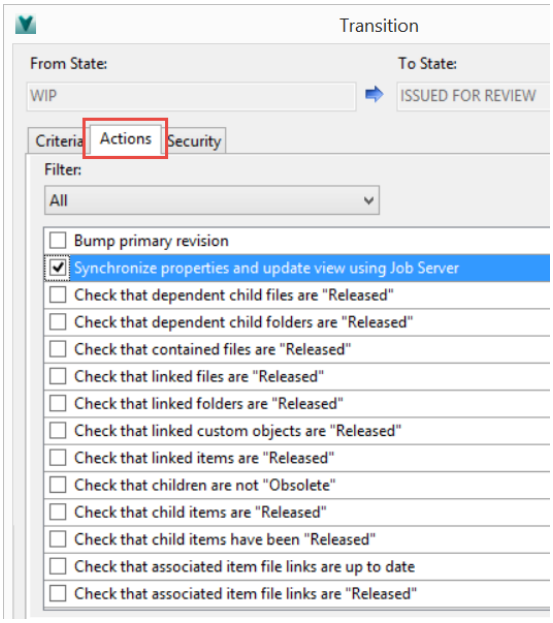
Let's start with a **valid** transition, using the example above WIP to ISSUE FOR REVIEW is a valid/allowed State transition. Click on this transition and then click the Edit button.

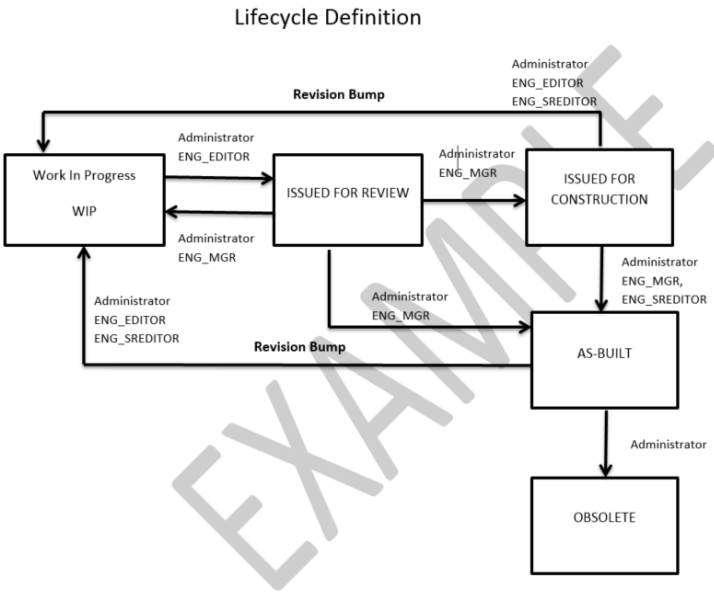


This is where criteria can be defined based on any property or system condition. Though any criteria or condition can be defined, I always recommend as a best practice to configure a criteria of "*Property Compliance is Compliant"* on any State transitions coming out of WIP. This ensures any property/meta-data you have defined as *"Required"* has to be filled in before Vault will allow it to transition in the ISSUED FOR REVIEW State (i.e. ensuring the designers fill in the appropriate information in AutoCAD).

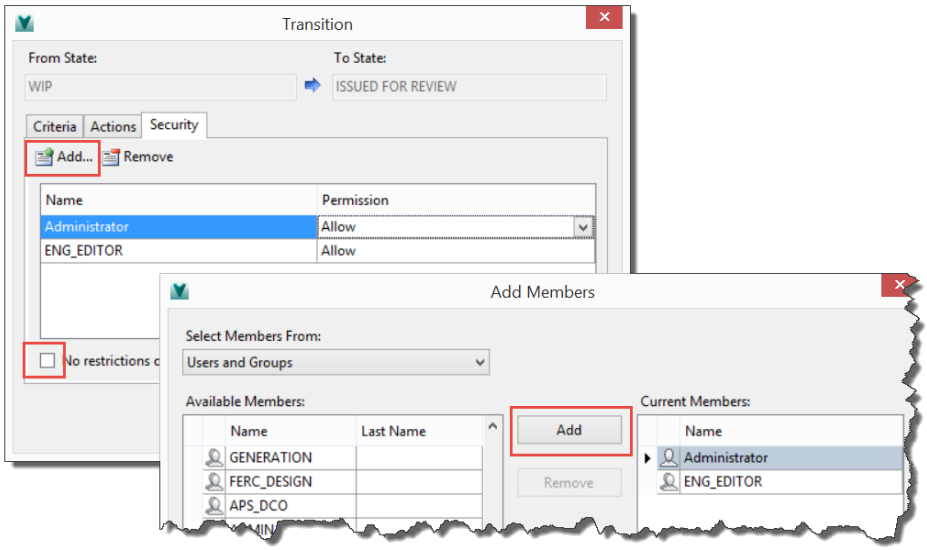


Next any defined actions for the WIP to ISSUED FOR REVIEW State transition can be configured on the Actions tab, below is the list available actions that could be configured.



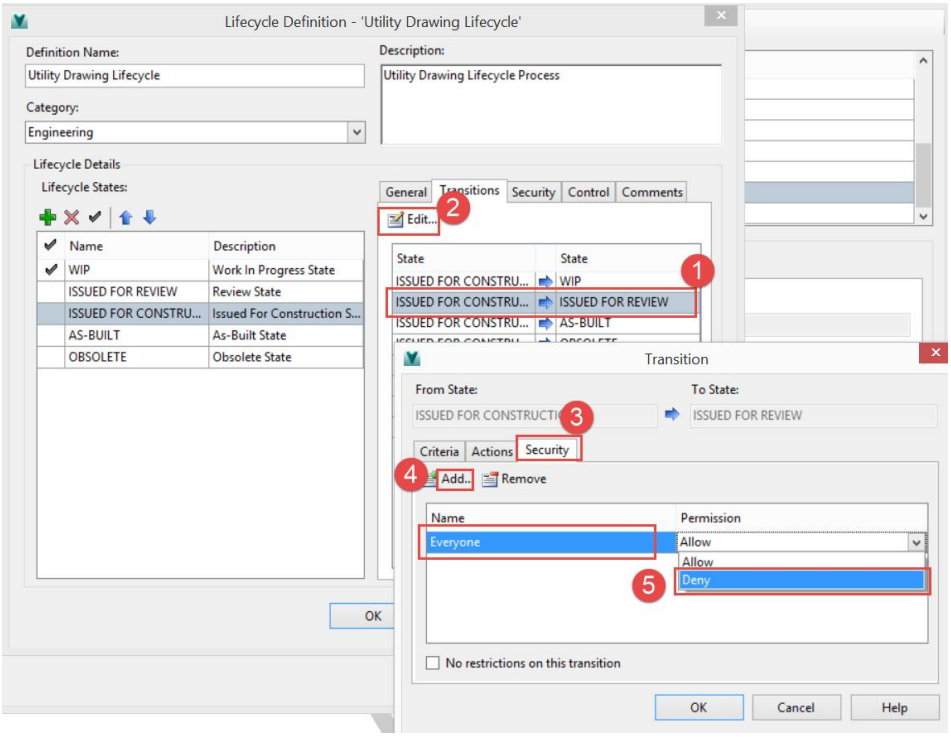


Next is to configure the State transition security *"who can initiate the State transition"*. In the example workflow above, ENG_EDITOR and Administrator are the only authorized to make the State transition from WIP to ISSUED FOR REVIEW. Click on the Security tab – uncheck the No restrictions box – click on Add and add the group(s)/user(s) you have defined as allowed to make the State change you are configuring.

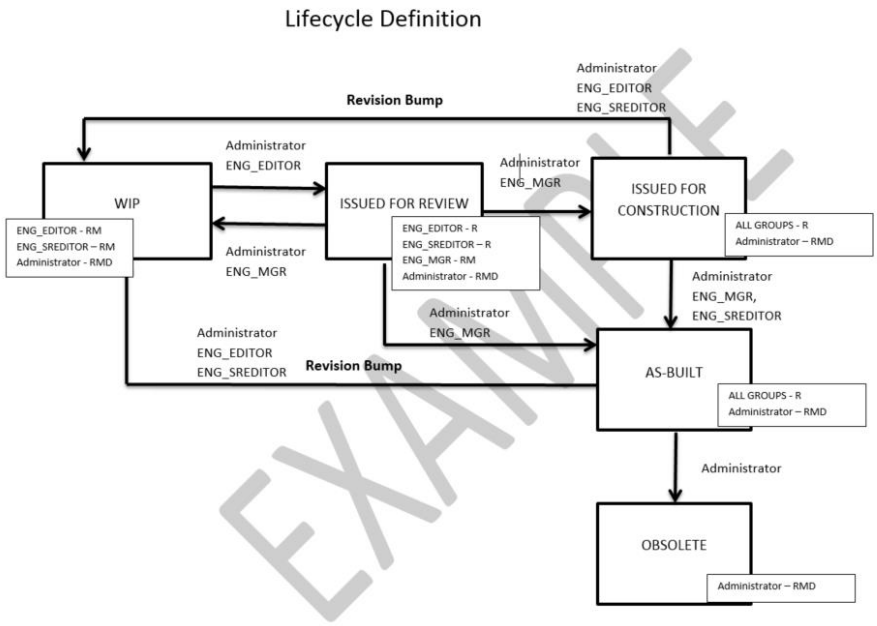


Now let's configure an **invalid** State transition. For Example: moving from **ISSUED FOR REVIEW** to **ISSUED FOR CONSTRUCTION** in the above lifecycle is valid, but moving from **ISSUED FOR CONSTRUCTION** *back to* **ISSUED FOR REVIEW** is *not valid*. To prevent this in Vault, a condition must be setup on the "**ISSUED FOR CONSTRUCTION** to **ISSUED FOR REVIEW"** State transition.

To prevent lifecycle transitions that are not valid - a lifecycle security for the invalid transition must be created. This is done by editing the transition and creating a transition security for the group **Everyone** set to **Deny.**

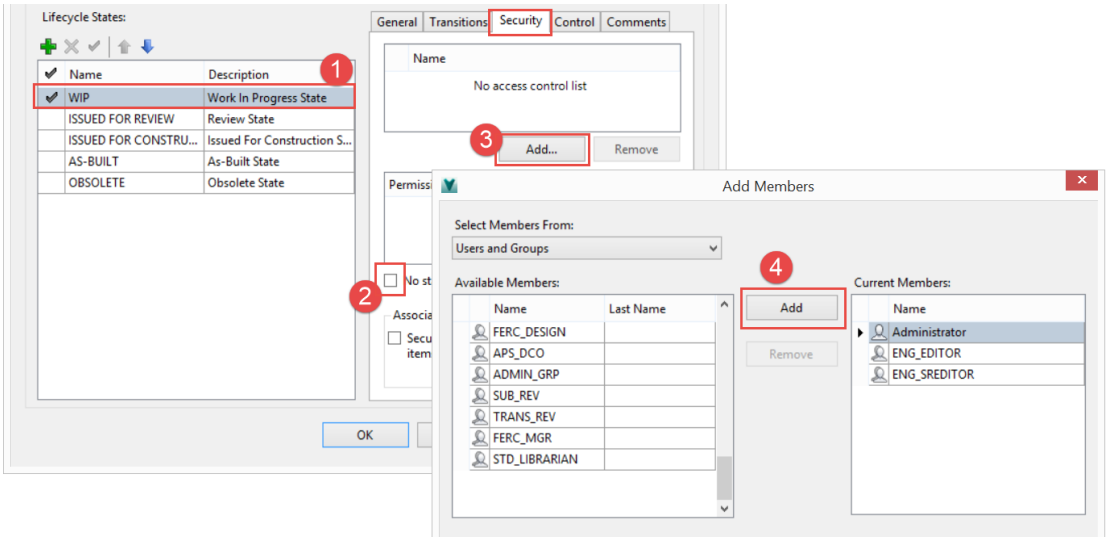


Continue to follow those same steps and configure all of your possible State transitions as either valid or invalid based on the lifecycle you have defined. On the valid State transitions configure your defined Criteria, Actions, and Security, on invalid State transitions they will always be configured Everyone Deny. On valid State transitions, any group(s) and/or user(s) not added are assumed denied. It is not necessary to add every group/user allowed and every group/user denied to your configuration (This would be a nightmare ☺).

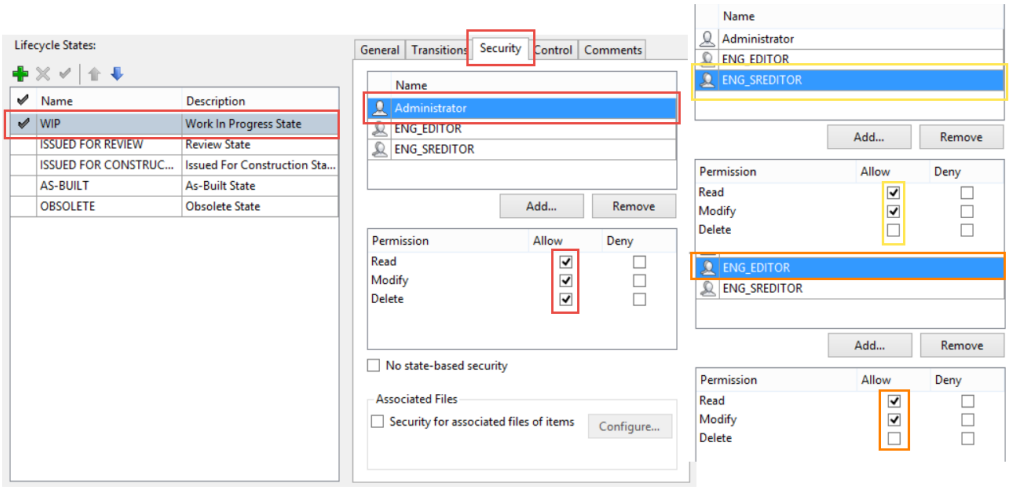


Next is to configure the State Security. In the example above ENG_EDITOR and ENG_SREDITOR have read, modify permissions on the WIP State and the Administrator has read, modify and delete. When configuring State security just like the State transition security and group(s) or user(s) not added are assumed denied. It is not necessary to add every group/user allow and every group/user deny to your configuration.

Select the State you are going to configure (i.e. WIP) – Click on the Security tab – uncheck the box next to No state based security – click on Add… and select the group(s) and/or user(s) that will have permissions on the State.

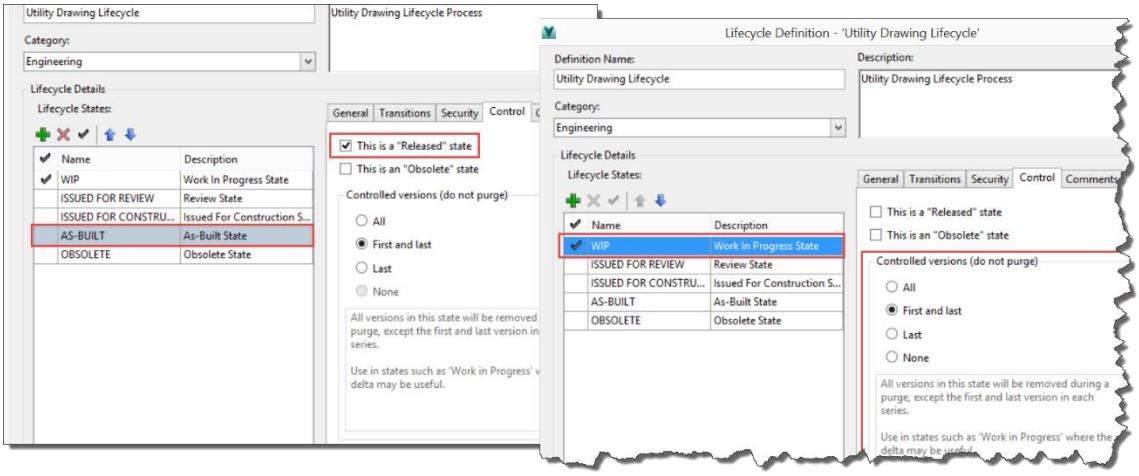


Next assign read, modify, delete permissions to each one of the group(s)/user(s) based on the configuration you have defined for that State. Repeat this on each State in your lifecycle based on the State security you have defined.



The last State configuration option is under the Control tab. For States in your lifecycle that are considered a “Released” state (typically a Released state is a state that would require a revision bump before it could be modified again i.e. moving from AS-BUILT to WIP forces a revision bump according to the lifecycle defined in the example and this would have been configured under the Actions tab on that State transition), or an Obsolete state you would select the appropriate check box. Often times in a Vault implementation the Thin Client will be configured to only show Released files, this setting is defines if a file is Released or not.

The other configuration option under the Control tab is defining a “do not purge” criteria on a State. This is primarily used in States like WIP where change is occurring and therefore many versions may be created and Vault will be purging the versions based on “the number of versions to retain” that is set on the Vault Server. In a WIP State where a lot of change may be occurring, you may want Vault to retain the first version and last version no matter what on the WIP State (i.e. keep the versions that represent “design when WIP started” and “design when WIP ended”. By default Vault will assign the First and Last setting to all states in the lifecycle, so you will want to configure those selection based on your preferences for each State.



By this point hopefully the benefits are clear in taking the time to define efficient, optimized work processes and configure them with lifecycles in Vault, to drive your own company standards and enforce data management best practices.