



AGC
THE CONSTRUCTION
ASSOCIATION

Project Operations from Soup-to-Nuts

**How Yates Construction integrates PM, VDC, and ERP systems
to manage projects from Estimating to Turnover**

Benjamin Crosby, Greg Smith



Agenda

- ▶ A little about Yates Construction
- ▶ Common Data Environments (CDE's)
- ▶ ERP/PM software (Vista/ProjectSight)
- ▶ Procore to ProjectSight (1-way, 2-way)
- ▶ ACC to ProjectSight (1-way, 2-way)

Who We Are



- Core Values: Safety, Integrity, Passion, Commitment
- \$5B+ revenue and 5,500+ employees.
- Over 60 years of providing a wide range of construction and building services.
- Top 50 construction service providers in all delivery methods (Construction Management, Program Management, General Contracting, and Design-Build)
- Commercial and industrial projects ranging from civil, hospitality, healthcare, and technology to manufacturing and industrial process.



ENR
TOP 400

29

Top 400
Contractors

21

New Contracts

12

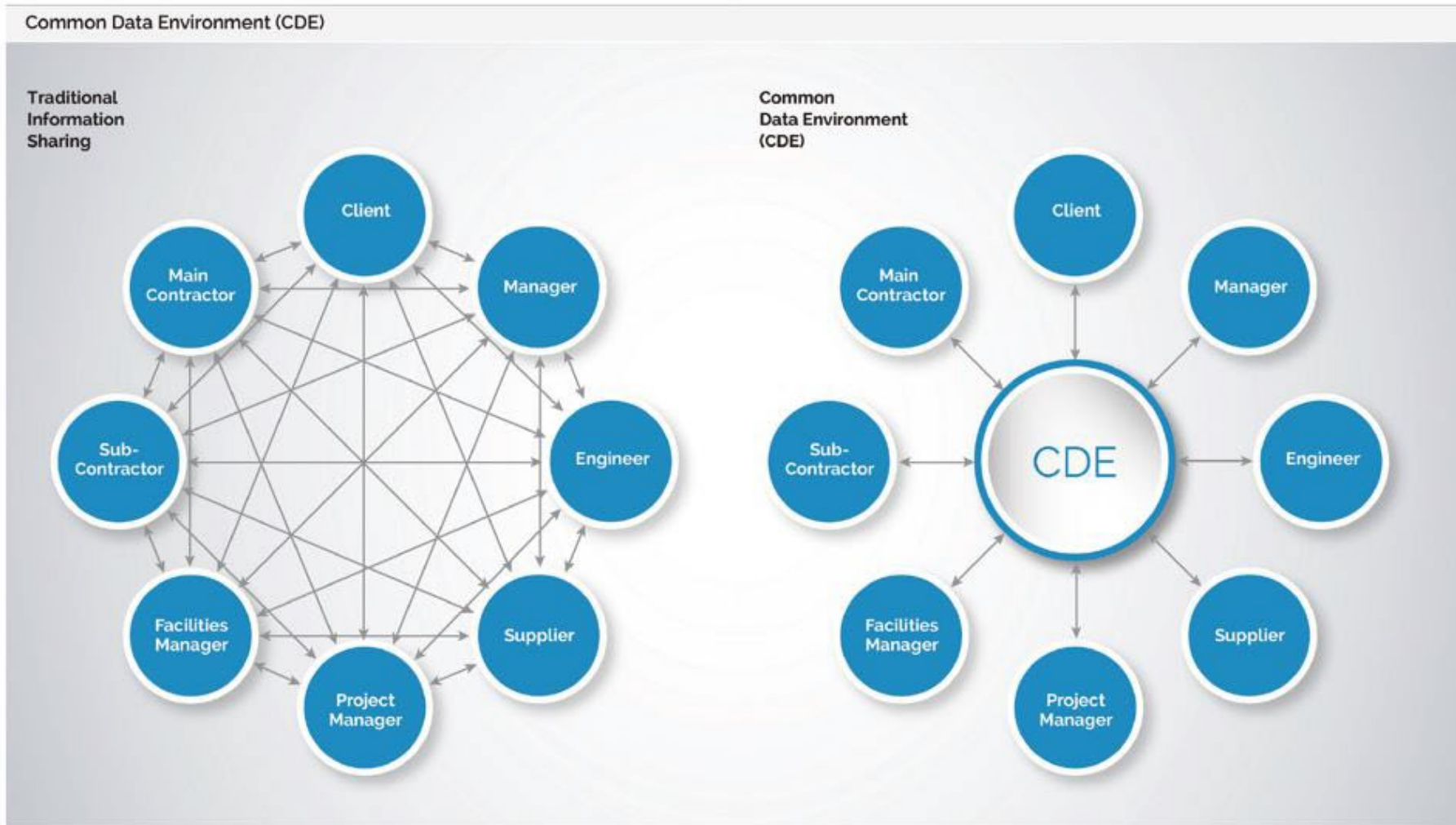
Domestic
Building

18

Top 50 in
Industrial
Process

Source: Engineering News-Record (ENR), The Top 400 Contractors Sourcebook 2024

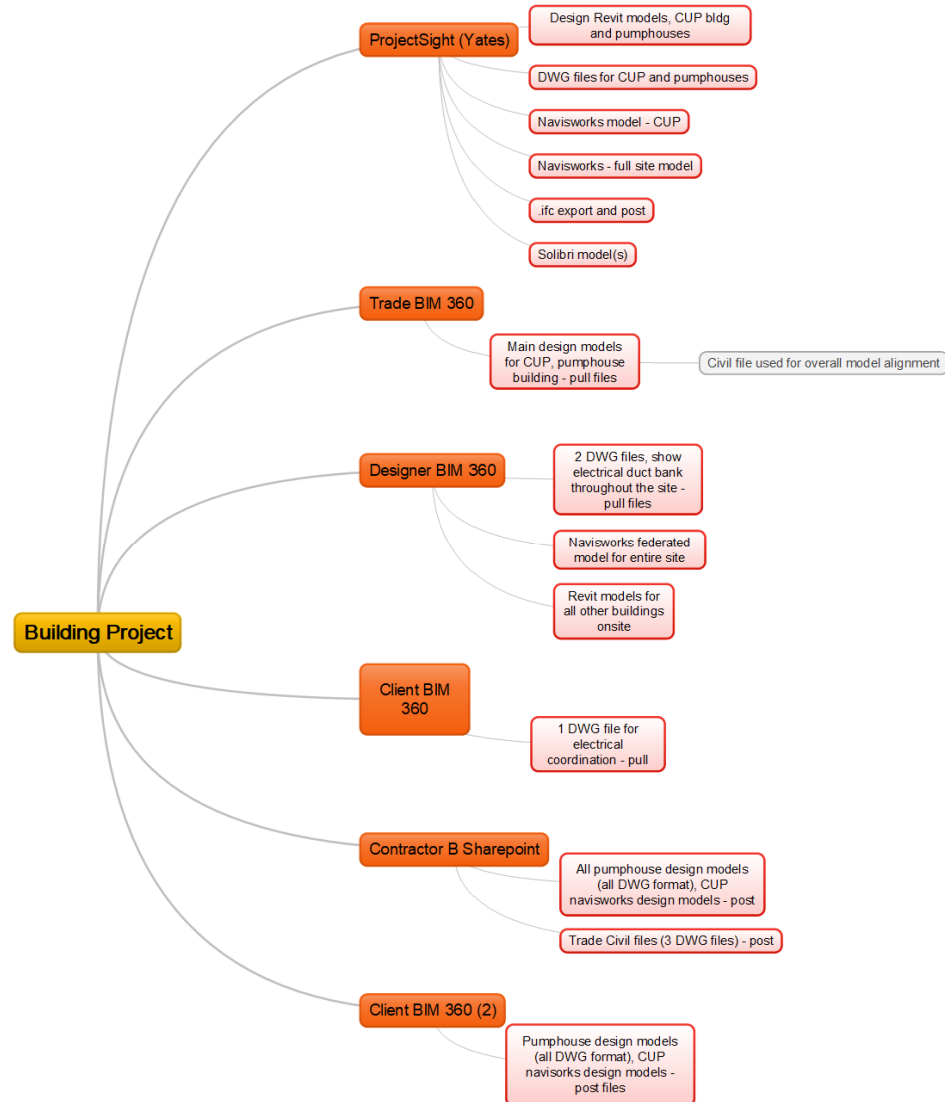
Common Data Environments (CDE)



Common Data Environments

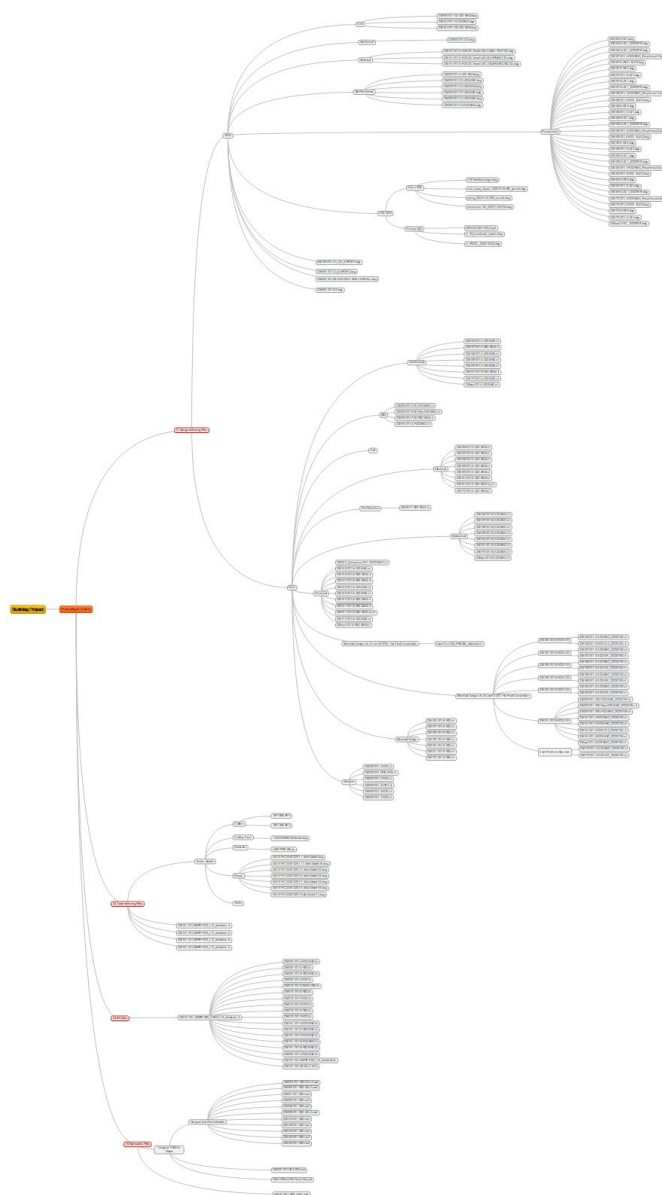


CDE - Example



- Multiple CDEs (Designer, Owner, Contractor, Trade Partner)

CDE - Example



- Files from just one CDE

PM Side of the Equation



Cost Control & Financial Accountability

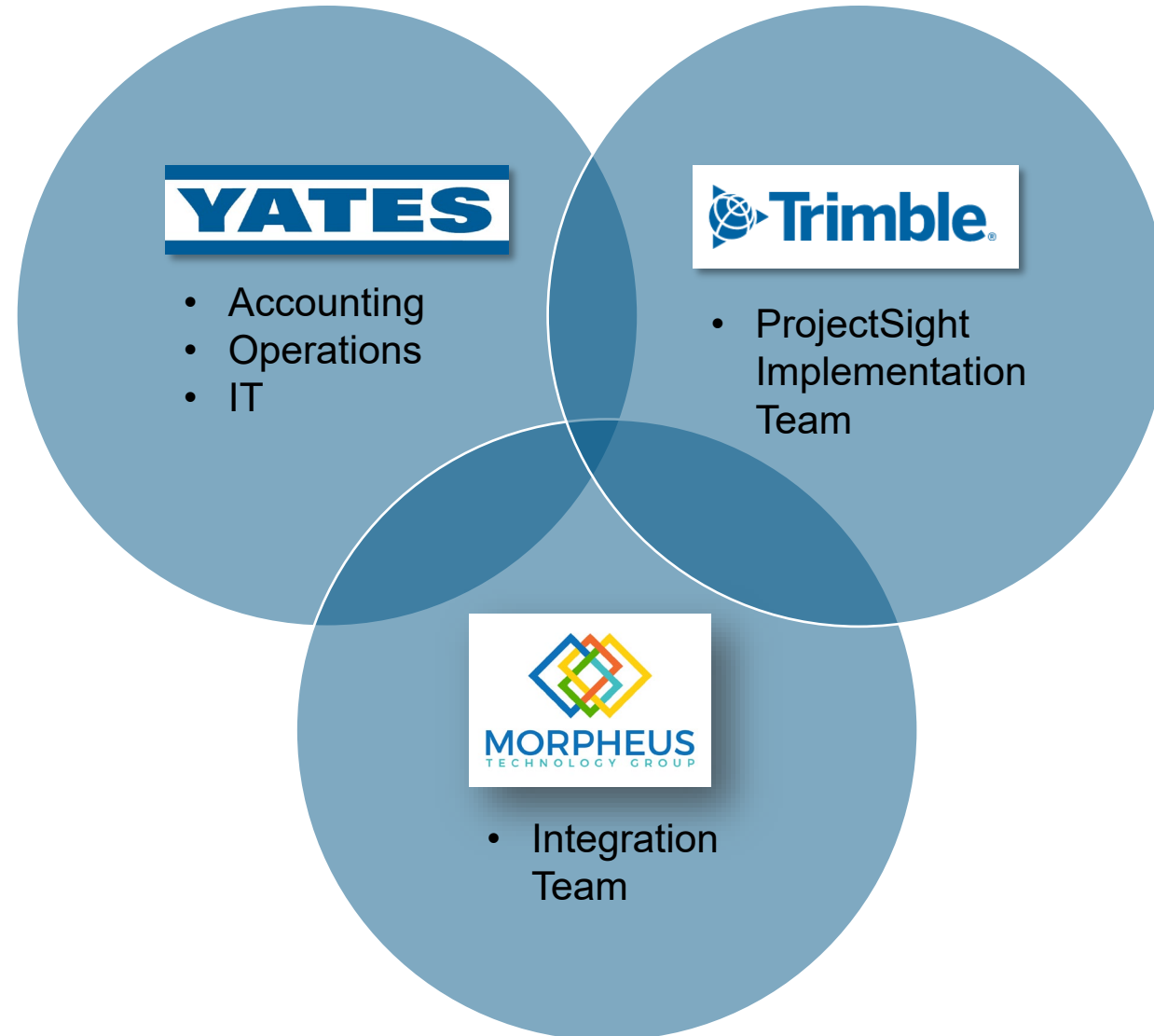


Accurate and
accessible
change
management
logs

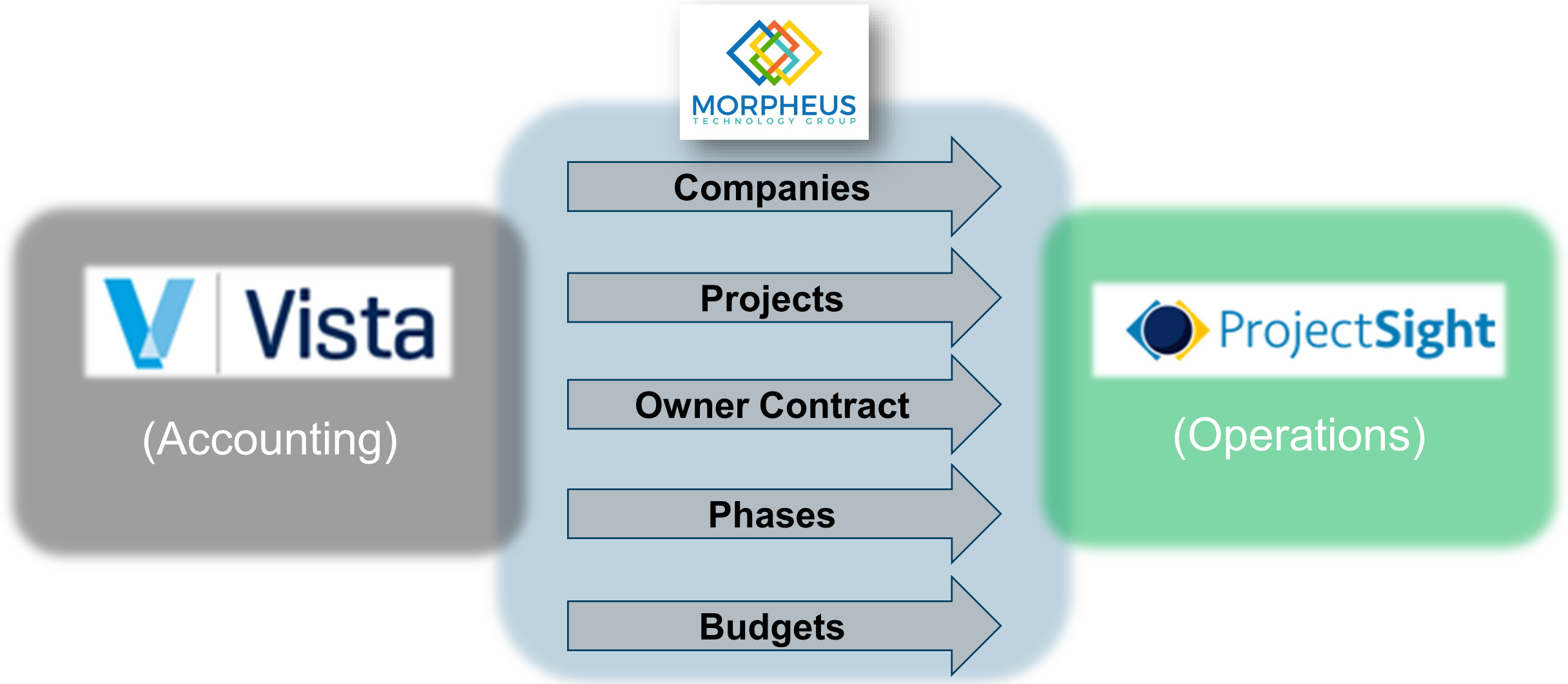
Keep
Accountants in
Vista and Project
Managers in
ProjectSight

Eliminate
Duplicate Data
Entry

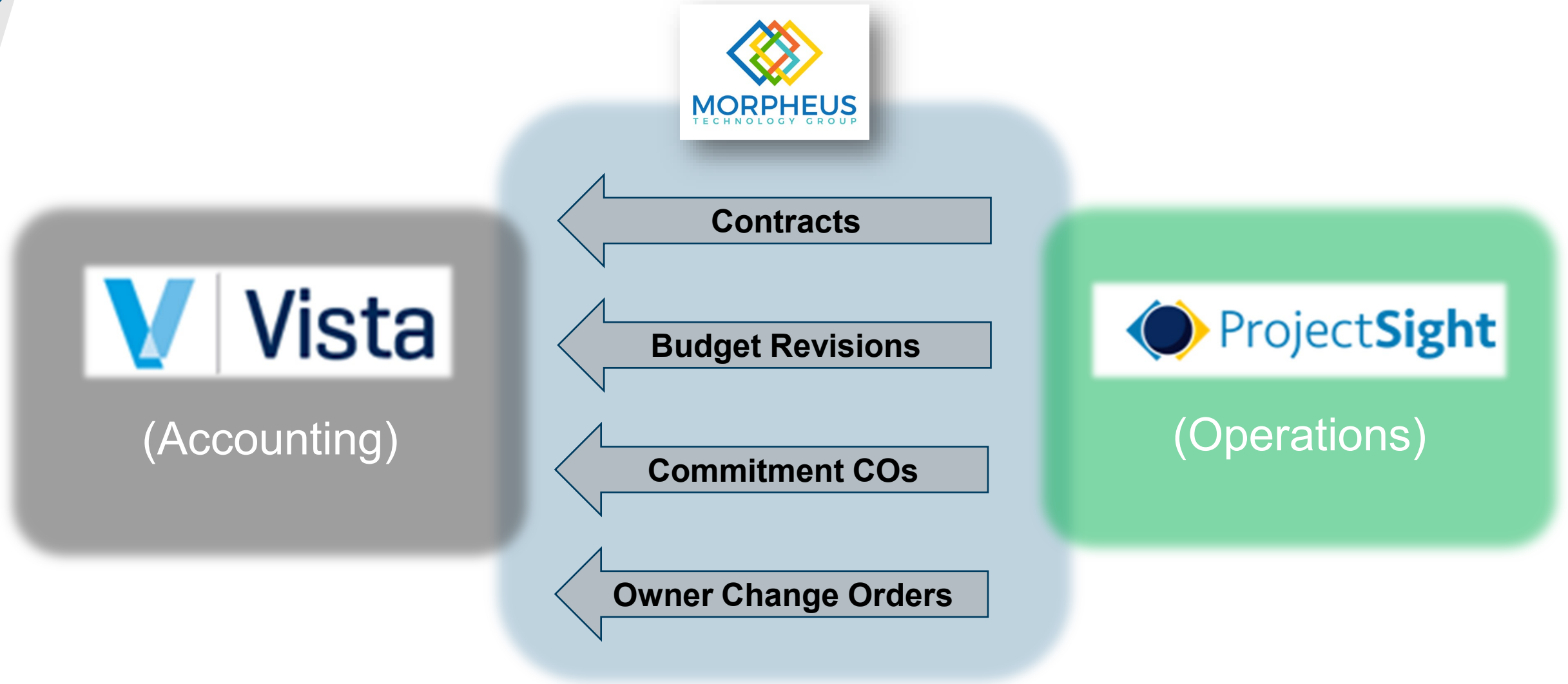
ProjectSight & Morpheus Deployment



Workflows & Business Processes



Workflows & Business Processes



Vendor Integration



25 AP Vendor

File Edit

23975 UNITED RENTALS

Vendor: 23975 Vendor Group: 25

Vendor Compliance Vendor Hold Codes Duplicate Vendors Memos ProjectSight

Info Payment Method

☒ Sync to ProjectSight?

Integration Status: Integrated to ProjectSight

Company - Yates Training Project

https://prod.projectsightapp.trimble.com/Web/admin.aspx?orgid=ed9003a5-2314-425a-98...

Company - UNITED RENTALS, INC. CR...

UNITED RENTALS, INC. CREDIT OFFICE # 214

CONTACTS ADDRESSES CREWS INSURANCE DIVISIONS WORK TYPES REGIONS CERTIFICATES LEGA

Addresses

Location *	Main	Type of Address	Display Address	Address 1	Address 2
<input type="checkbox"/> Main Address	<input checked="" type="checkbox"/>	Vista	P.O. BOX 100720 ATLANTA, GA 30384-0720	P.O. BOX 100720	

Type of Company
Supplier

Spec Section

Division

Information Supplied By

Integration

Date 9/15/2020 Title

Alias ID V-25-23975 Alias System VIEWPOINT



Job/Phase/Budget Integration



25 JC Original Estimates for YATES TRAINING COMPANY

File Edit Records View Options Tools Windows Help

Job: 99030- SAMPLE PROJECT FOR PROJECTSIGHT T... Job Total: 4,491,387.50

Phase: 01000- GENERAL CONDITIONS

CostType: 8 OTHER JOB COSTS

Phase	CostType	UM	Hour	Unit Cost	Cost	Bill Flag
01000-	8	LS	0.00	0.00000	400,000.00	C-Only Dollars
01040-	1	WK	3,000.00	0.00000	225,000.00	Y-Units and Dollars
01040-	4	WK	3,000.00	0.00000	46,250.00	C-Only Dollars
01040-	6	WK	3,000.00	0.00000	67,500.00	C-Only Dollars
01040-	7	WK	3,000.00	0.00000	5,000.00	C-Only Dollars
01040-	8	WK	3,000.00	0.00000	2,500.00	C-Only Dollars
01045-	8	LS	0.00	0.00000	5,000.00	Y-Units and Dollars

☒ Sync to ProjectSight?

Integration Status: Integrated to ProjectSight

	Original Phase Code Estimate	Approved Revision	Projected Costs	Projected Over / Under
	400,000.00		9,143.36	9,668,488.86
	225,000.00			
	46,250.00			
	67,500.00			
	5,000.00			
	2,500.00			

	Pending Revisions	Approximate Revisions	Projected Phase Code Estimate	Original Commitments	Approved Commitment Changes
1 000 01000 ____ 8 OTHER GENERAL CO	0.00	196,251.00	596,251.00	1,114,700.00	43,000.00
2 000 01040 ____ 1 LABOR SUPERVISION -	0.00	1,503.50	226,503.50	0.00	1,503.50
3 000 01040 ____ 4 EQUIP SUPERVISION - C	0.00	5,000.00	51,250.00	0.00	0.00
4 000 01040 ____ 6 BURDN SUPERVISION - BUR	0.00	0.00	67,500.00	0.00	0.00
5 000 01040 ____ 7 RENT SUPERVISION - RENTED E	5,000.00	0.00	5,000.00	249,999.00	0.00
6 000 01040 ____ 8 OTHER SUPERVISION - OTHER JOE Appro	2,500.00	0.00	2,500.00	0.00	0.00



ProjectSight

Contract Integration



Done 25 of 44 SAMPLE PROJECT FOR PROJECTSIGHT TESTING
Contract - 0006
The record is locked and cannot be updated.

Engineering

Submit to Vista

Description	Sched Value	Phase Code *	Spec Section	Material Code	Locked	Inv
ELEVATORS - S	150,000.00	000 14200				

ProjectSight



SL Subcontracts by Job - Viewer

Note: When printing or exporting drill down reports, Viewpoint will be unable to set or save your options.

Job: 99030- SAMPLE PROJECT FOR PROJECTSIGHT TESTING

Subcontract	Vendor	Through: 09/22	Use Taxes Not Included	Paid	Retainage	C
99030-124 Engineering	124 UN			0.00	0.00	
150,000.00						
150,000.00						

Vista

Change Order Integration



← Done [Icons] SAMPLE PROJECT FOR PROJECTSIGHT TESTING
Item of Change / Clarification - 00008

Div Con CO Test AW

ITEM OF CHANGE / CLARIFICATION	COMMENTS	ADDITIONAL INFO	HISTORY
Budget		125,000.00	0.00
Cost		112,500.00	0.00
		estimate	proposed
			approved

Submit to Vista

Notes

The Notes area in ProjectSight is where you will describe the cause of change.

Item of Change / Clarification

Applied	Phase Code *
100,000.00	000 02100 SUBS
25,000.00	000 01000 OTHER

SITE PREPARATION - SUBCONTRACTS

GENERAL CONDITIONS - OTHER JOB COSTS



JC Change Order Detail By Contract

Contracts: 99030- - 99030- All Jobs All Phases All Cost Types

Job	Phase	Cost Type	Units	UM	Hours	Cost
Contract: 99030- SAMPLE PROJECT FOR PROJECTSIGHT TESTING						
Change Order: 006 Div Con Test PCCO AW						
Change Order Item #: 1 Div Con CO Test						
99030-	01000	OTHER	0.000	LS		25,000.00
99030-	02000	SUBS	0.000	LS		100,000.00
Change Order Item #: 1						125,000.00
Change Order #: 006						125,000.00

Vista

Under the Hood



Job Queue

Show Filters... Clear Filters Re-Submit Purge...

Integration Name	Time Submitted ↓	Time Completed
✓ List Projects (Commitme...	09/02/2022 10:39:31 AM	09/02/2022 10:55:10
✓ Change Order (SL)	09/02/2022 10:39:31 AM	09/02/2022 10:55:10
✓ Change Order (PO)	09/02/2022 10:39:31 AM	09/02/2022 10:55:12
✓ Commitment Change Or...	09/02/2022 10:39:31 AM	09/02/2022 10:55:12
✓ List Projects (Commitme...	09/02/2022 10:38:31 AM	09/02/2022 10:54:41
✓ Commitment SL Header	09/02/2022 10:38:31 AM	09/02/2022 10:54:41
✓ Commitment PO Header	09/02/2022 10:38:31 AM	09/02/2022 10:54:42
✓ Commitment Results	09/02/2022 10:38:31 AM	09/02/2022 10:54:43
✓ List Projects (Owner Cha...	09/02/2022 10:37:31 AM	09/02/2022 10:54:04
✓ Owner Change Order	09/02/2022 10:37:31 AM	09/02/2022 10:54:05
✓ Owner Change Order (IO...	09/02/2022 10:37:31 AM	09/02/2022 10:54:06
✓ Budget Change Results	09/02/2022 10:37:31 AM	09/02/2022 10:54:07
✓ Owner Change Order Re...	09/02/2022 10:37:31 AM	09/02/2022 10:54:08
✓ List Projects (Budget Rev...	09/02/2022 10:36:31 AM	09/02/2022 10:53:30
✓ Internal Adjustment - (He...	09/02/2022 10:36:31 AM	09/02/2022 10:53:31
✓ Item of Change - Internal ...	09/02/2022 10:36:31 AM	09/02/2022 10:53:32
✓ Budget Revision Results	09/02/2022 10:36:31 AM	09/02/2022 10:53:33

Page 1 of 1251 | Displaying records 1 - 50 of 6251

Logs

Time Run ↓	Time Completed	S...	Records	Success	Errors
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Details

Show Only Errors

Integration	Time Logged	Message	Error
Vendor Setup	09/02/2022 10:55:14 AM	AIC - ACRONIS INTERNATIONAL GMBH Completed with no errors	
Vendor Setup	09/02/2022 10:55:23 AM	AIC - ADIRONDACK SAND & GRAVEL Completed with no errors	

Source Data

Column	Value
CompanyType	R
Name	ACRC INTEF GMBH
DBA	DBA ACRC INC.

Target Data

ColumnName	Value
TypeOfCompany	Supplier
temp_DBA	DBA ACRONIS, INC
temp_Name	ACRONIS INTERNATIO... GMBH
AliasID	V-32-50179

Results

Result
1

Benefits & Advantages



We now have
standard, easily
accessible Change
Logs – No more
spreadsheets!

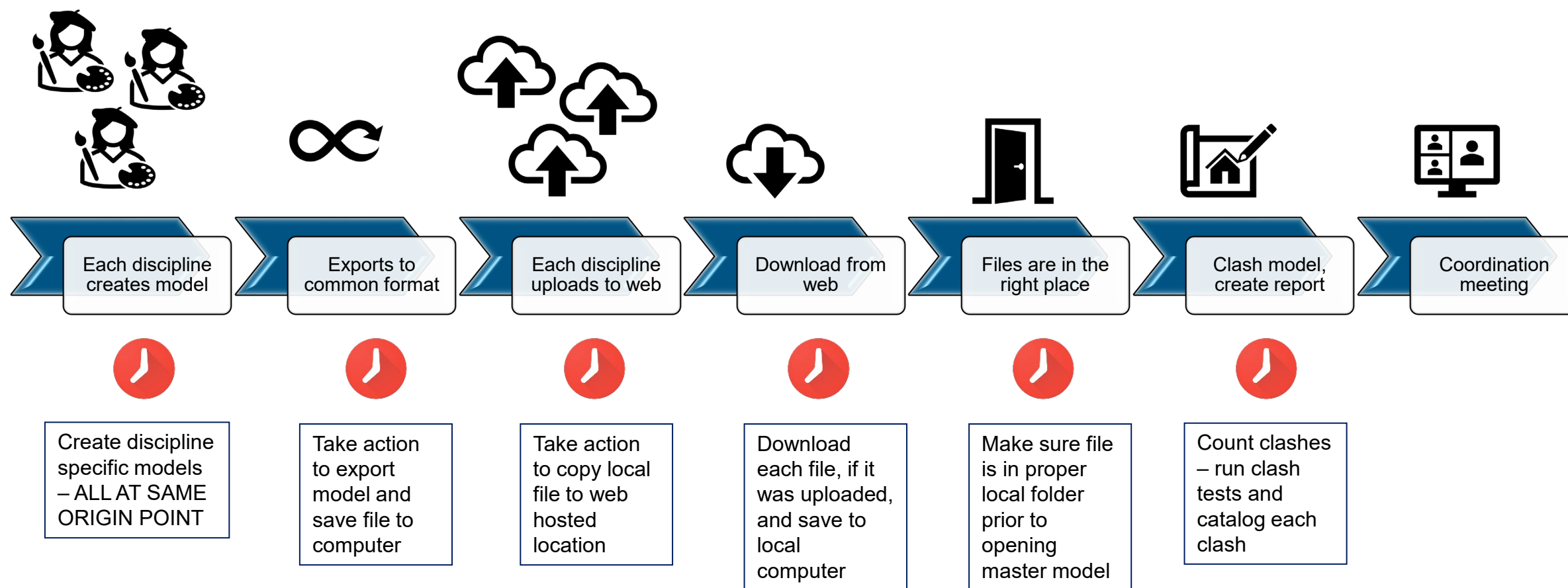
Duplicate Data
entry has been
eliminated

Project Managers
can work in
ProjectSight,
Accounting can
work in Vista

VDC Side of the Equation

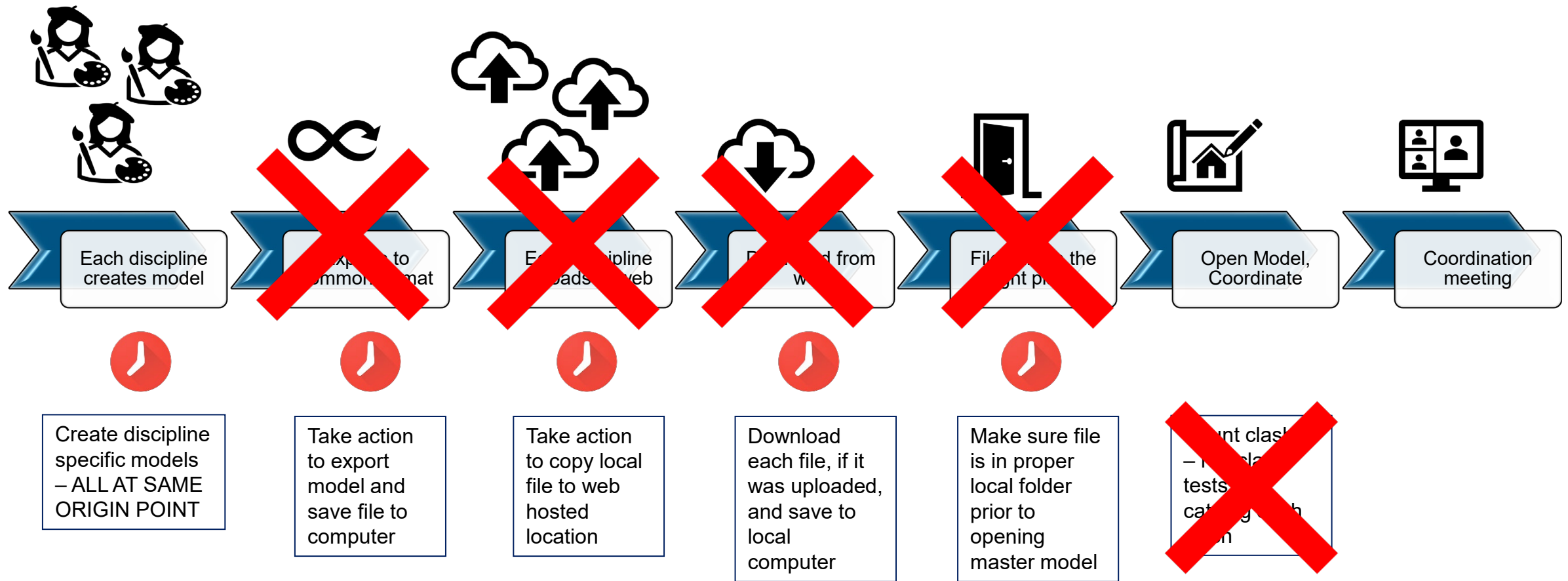


VDC for Coordination: Current Process

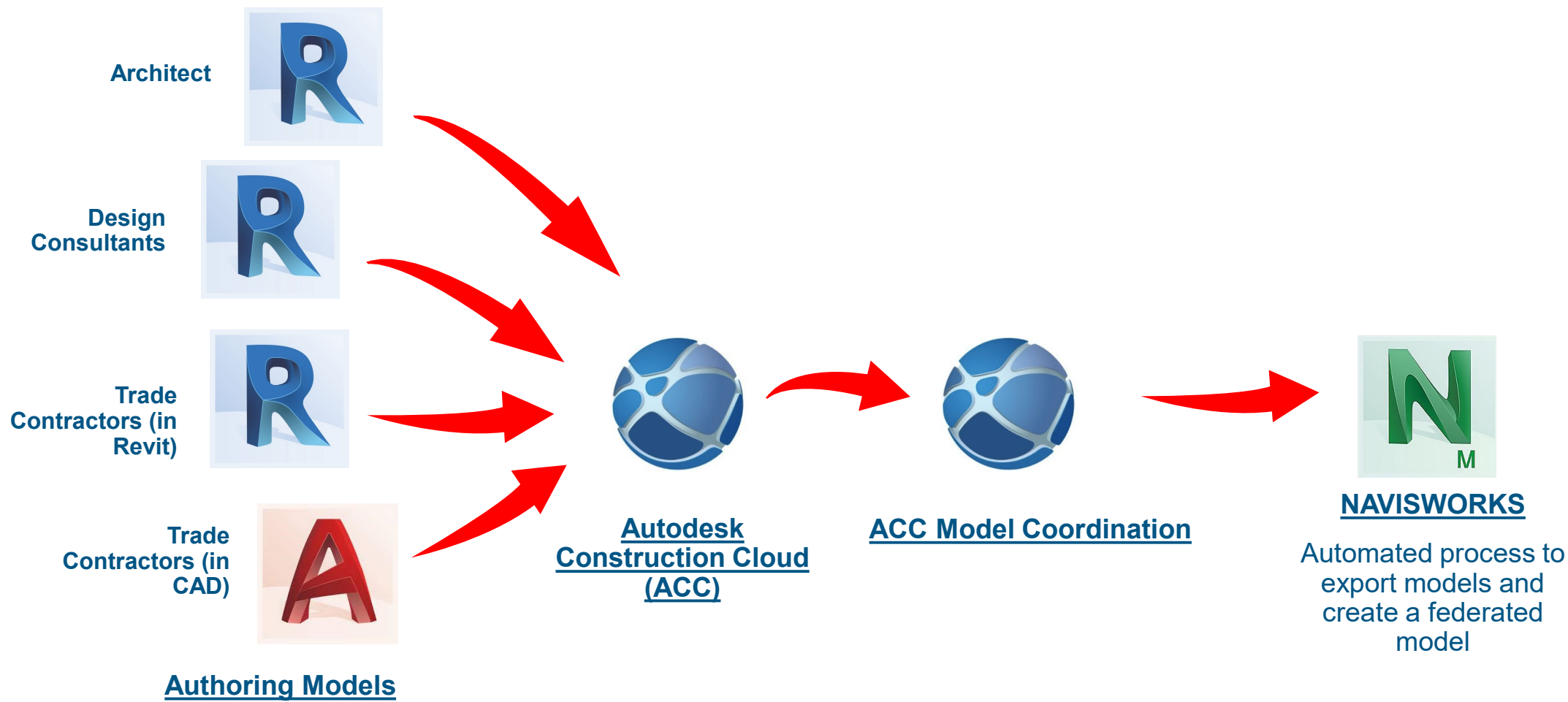




VDC for Coordination: Better Process



VDC Digital Workflow



Autodesk Construction Cloud



ACC “Coordination Space” finds models here...

“Bridged” from Design ACC hub

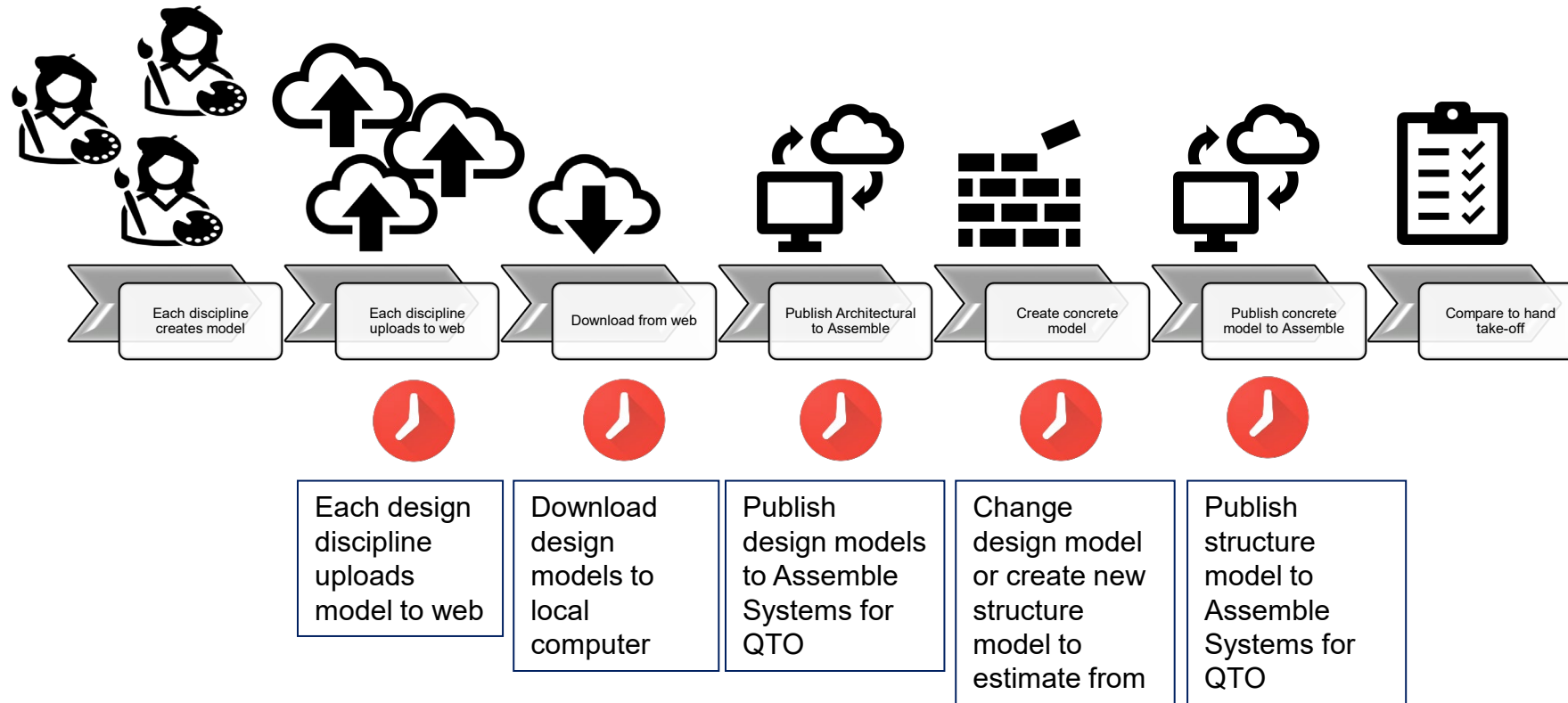
Permissions set by folder (view, download, upload)

Weekly coordination models here...

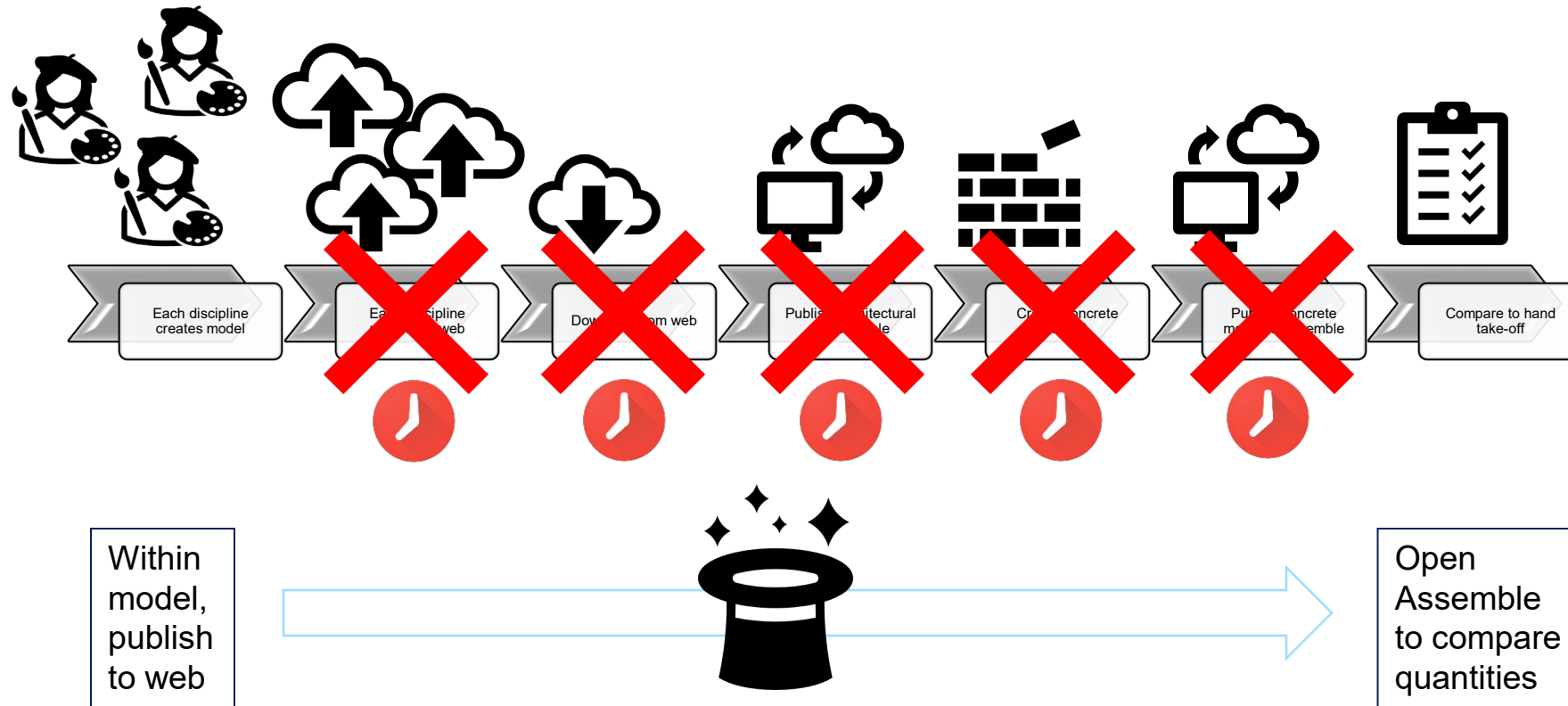
The screenshot shows the Autodesk Construction Cloud Files interface. On the left is a sidebar with navigation options: Specifications, Reviews, Transmittals, Reports, Members, Bridge, and Settings. The main area is titled 'Files' and has tabs for 'Folders' and 'Packages'. Under 'Folders', there is a tree structure of folders. Red arrows point from the text annotations to specific folders: one to '03 Models', one to '01 Design Models', one to '02 Construction Models', and one to '05 Coordination'. On the right, there is an 'Upload files' button and a table with columns 'Name' and 'Description'.

Name	Description
01 VDC Documents	--
02 Design Documents	--
03 Models	--
04 Site Logistics	--
05 Coordination	--
06 Owner Turnover FM	--

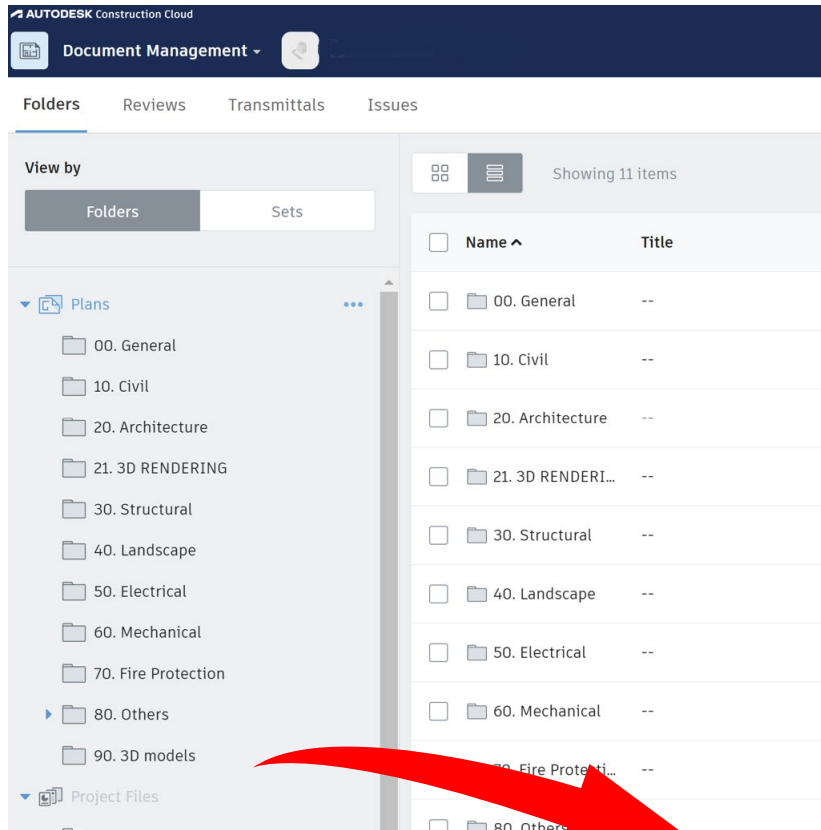
VDC for Preconstruction



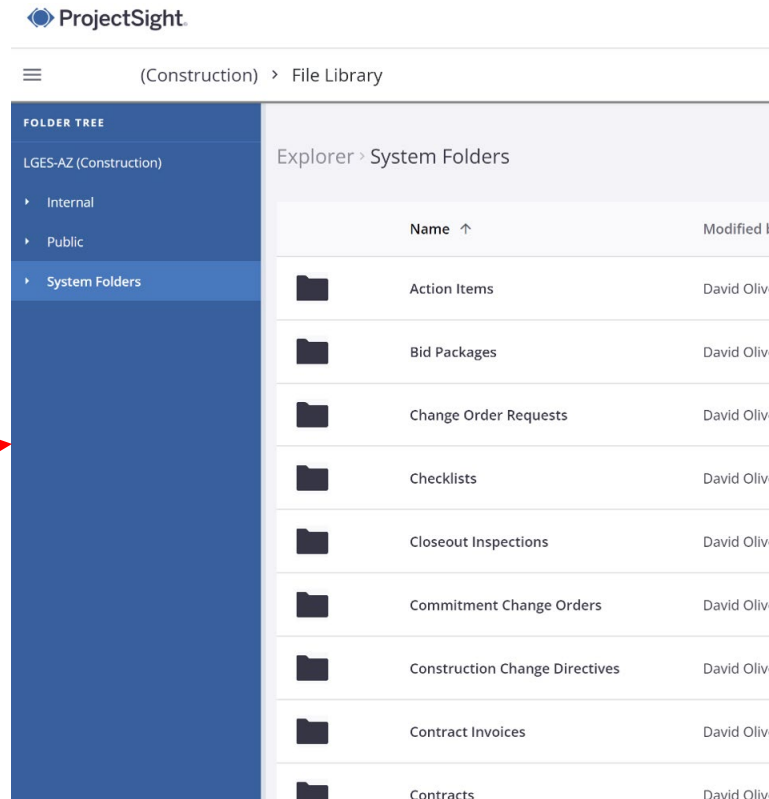
VDC for Preconstruction



Model Storage and Coordination



Models are to reside in BIM 360, utilizing Model Coordination workflow.



Models are to be archived in ProjectSight.



Yates
Document
Control

Document Control: Document Storage



ProjectSight

(Construction)

Drawings and Specifications

Budget and Cost Management

Document Control

Field Management

Photos

File Library

Trimble Connect

External Links

Work Progress

Observations

Due Today Items

Due in Next 7 D

Submittals

Folder Tree

- LGES-AZ (Construction)
- Internal
- Public
- System Folders

Explorer > System Folders

Name	Modified
Action Items	David Olive
Bid Packages	David Olive
Change Order Requests	David Olive
Checklists	David Olive
Closeout Inspections	David Olive
Commitment Change Orders	David Olive
Construction Change Directives	David Olive
Contract Invoices	David Olive
Contracts	David Olive

File Library folders will be downloaded using Trimble Sync.

AUTODESK Construction Cloud

Document Management

Folders

Reviews

Transmittals

Issues

View by

Folders

Sets

Showing 11 items

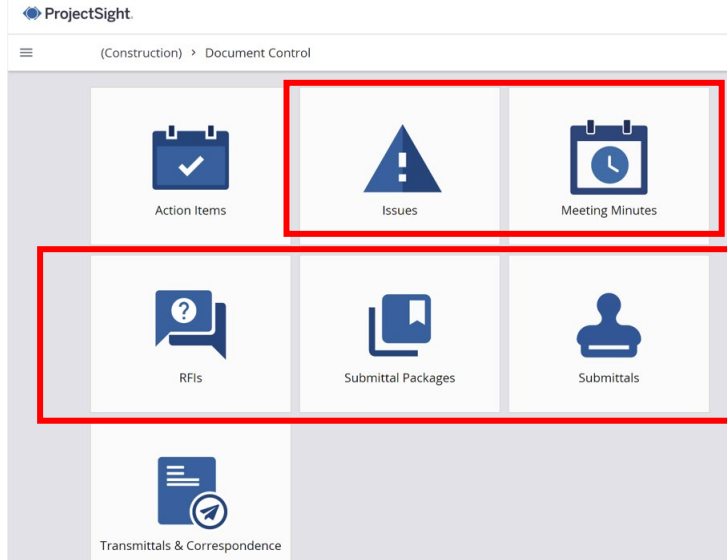
Name	Title
00. General	--
10. Civil	--
20. Architecture	--
21. 3D RENDERING	--
30. Structural	--
40. Landscape	--
50. Electrical	--
60. Mechanical	--
70. Fire Protection	--
80. Others	--
90. 3D models	--



Yates Document Control

Files will be uploaded weekly to BIM360 via Autodesk Desktop Connector.

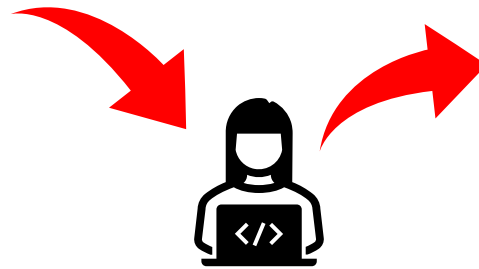
Document Control: Issues, RFIs, & Meeting Minutes



Issues, RFIs, Submittals & Meeting Minutes

All four categories will be initiated in ProjectSight and then be uploaded to their respective BIM360 modules.

Files will be uploaded to BIM 360 weekly manually by Document Control.



Yates
Document
Control

Status	ID	Title	Assigned to	Company	Due date
CLOSED	-	Bridging Document 2.0 - 08 44 23 Curtainwall BOD	Noah Miller	Yates	Sep 8, 202
CLOSED	-	Bridging Document 2.0 - Curtainwall BOD	Noah Miller	Yates	Sep 8, 202
CLOSED	-	Confirm F&G's Request to be removed from the Yates ...	todd Bowman	Yates	Aug 4, 202
OPEN	0163	Electrical Area Classification Information Request	BETHURUM WILLIAM	Volta US	Oct 11, 202
CLOSED	0162	Battery Hazard Analysis Information Request	Vi Ho	Ware Malcomb	Oct 11, 202
CLOSED	0161	HMIA/HMA Information Requested	Vi Ho	Ware Malcomb	Oct 11, 202
ANSWERED	0160	Clarify Erection Aids Cut Lines	Martin Kang	AtkinsRéalis	Oct 6, 202
ANSWERED	0159	Confirming - Anchor Bolt Material Grade	Martin Kang	AtkinsRéalis	Oct 4, 202

