



Agile Handover

Digital Transformation of FM Knowledge



Who we are

- Hong Gao : Founder : Systems Architect
- Jeff Nolan : Co-Founder : Solutions Executive
- Steve Sims : Director of Business Development (Global)
- Fran Rabuck: Chief Strategy Officer



Outcomes

Adopt a scalable Digital Handover Management solution that:

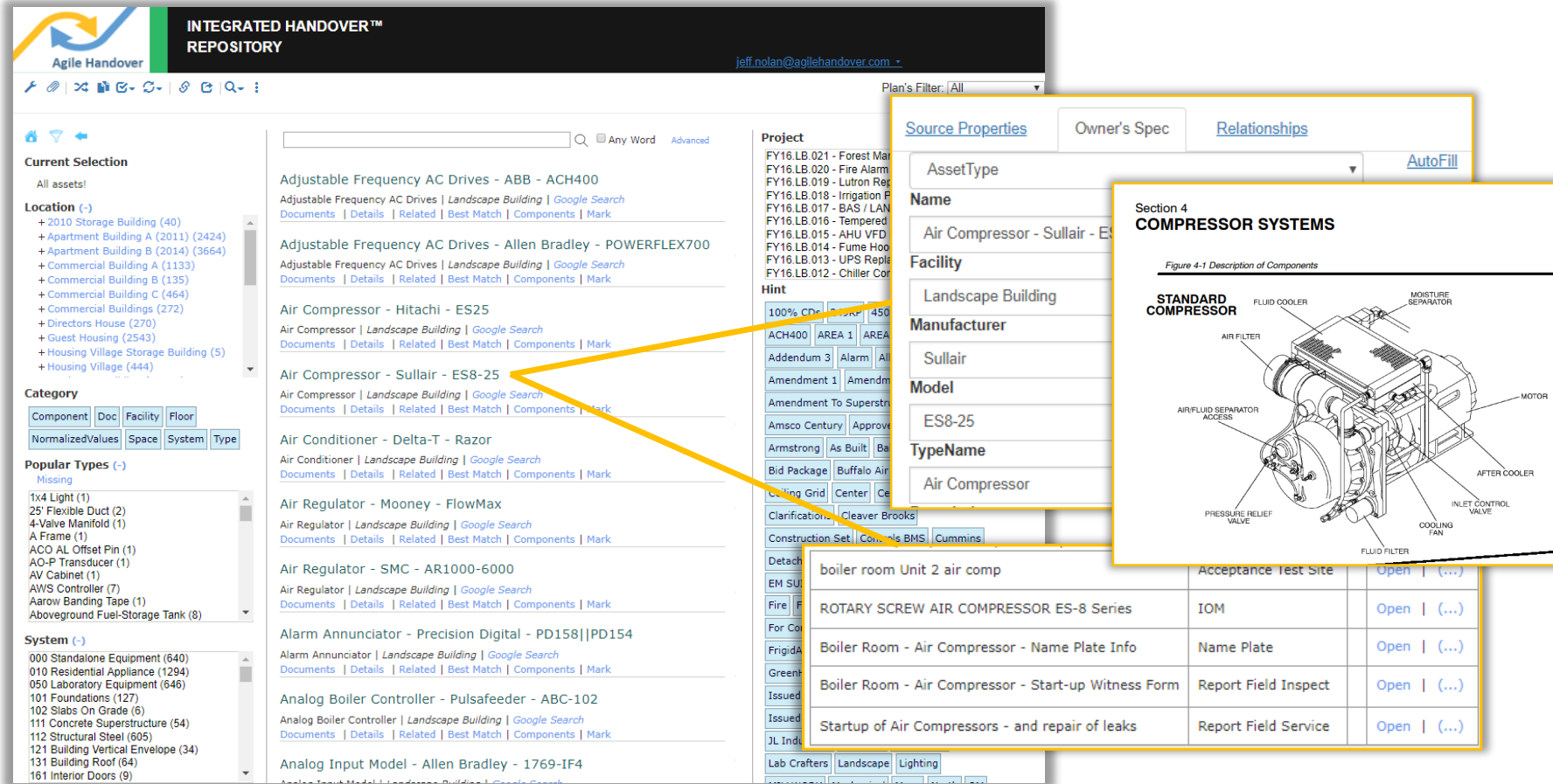
- Provides trusted data and docs across the enterprise to enable initiative of Digital Transformation of FM Knowledge
- Ensures FM Knowledge is complete, indexed, associated and searchable across enterprise
- Provides a best practice workflow to reduce time/cost of and increase quality of Digital Transformation of FM Knowledge
- Provides CDE connections enforcing management of change of data and docs for O&M silos
- Provides Impact Analysis of Mechanical and Electrical systems for awareness of criticality and risk reduction

Find trusted enterprise FM Knowledge

- Search and find accurate docs/data – 90% faster
- Indexed and associated across FM systems
- Search Knowledge portal and/or FM systems tab view
- Google like and Synonym Search
 - Find by: Facility, Location, System, Asset, and Equipment type

Find trusted enterprise FM Knowledge

- Search and find accurate docs/data – 90% faster



The screenshot displays the Agile Handover Integrated Handover Repository interface. The main search results list includes:

- Adjustable Frequency AC Drives - ABB - ACH400
- Adjustable Frequency AC Drives - Allen Bradley - POWERFLEX700
- Air Compressor - Hitachi - ES25
- Air Compressor - Sullair - ES-25** (highlighted with a yellow arrow)
- Air Conditioner - Delta-T - Razor
- Air Regulator - Mooney - FlowMax
- Air Regulator - SMC - AR1000-6000
- Alarm Annunciator - Precision Digital - PD158||PD154
- Analog Boiler Controller - Pulsafeeder - ABC-102
- Analog Input Model - Allen Bradley - 1769-IF4

The detailed view for the selected asset, 'Air Compressor - Sullair - ES-25', shows the following information:

- AssetType:** Air Compressor - Sullair - ES-25
- Facility:** Landscape Building
- Manufacturer:** Sullair
- Model:** ES8-25
- TypeName:** Air Compressor

Below the asset details, a table lists related documents:



Document Title	Document Type	Action
boiler room Unit 2 air comp	Acceptance Test Site	Open (...)
ROTARY SCREW AIR COMPRESSOR ES-8 Series	IOM	Open (...)
Boiler Room - Air Compressor - Name Plate Info	Name Plate	Open (...)
Boiler Room - Air Compressor - Start-up Witness Form	Report Field Inspect	Open (...)
Startup of Air Compressors - and repair of leaks	Report Field Service	Open (...)

On the right side of the interface, a technical diagram titled 'Section 4 COMPRESSOR SYSTEMS' is shown, labeled 'Figure 4-1 Description of Components'. The diagram illustrates the components of a standard compressor, including:

- FLUID COOLER
- MOISTURE SEPARATOR
- AIR FILTER
- AIRFLUID SEPARATOR ACCESS
- PRESSURE RELIEF VALVE
- MOTOR
- AFTER COOLER
- INLET CONTROL VALVE
- COOLING FAN
- FLUID FILTER

Find trusted enterprise FM Knowledge

Technology Integration – CMMS



1

Technology Integration BIM for FM

Agile Handover

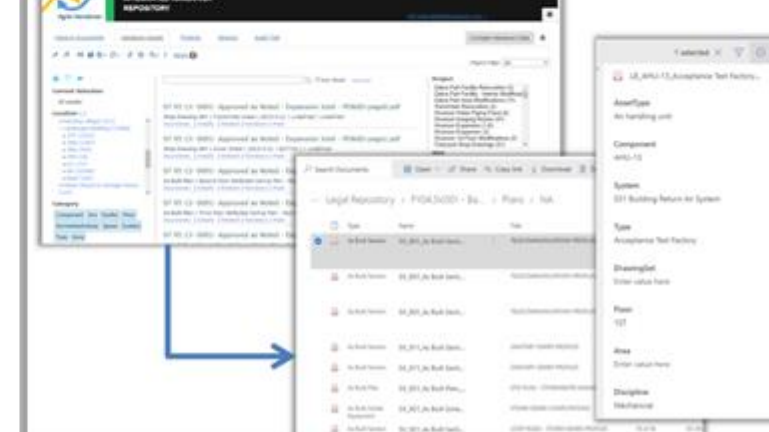


Technology Integration – BAS

1

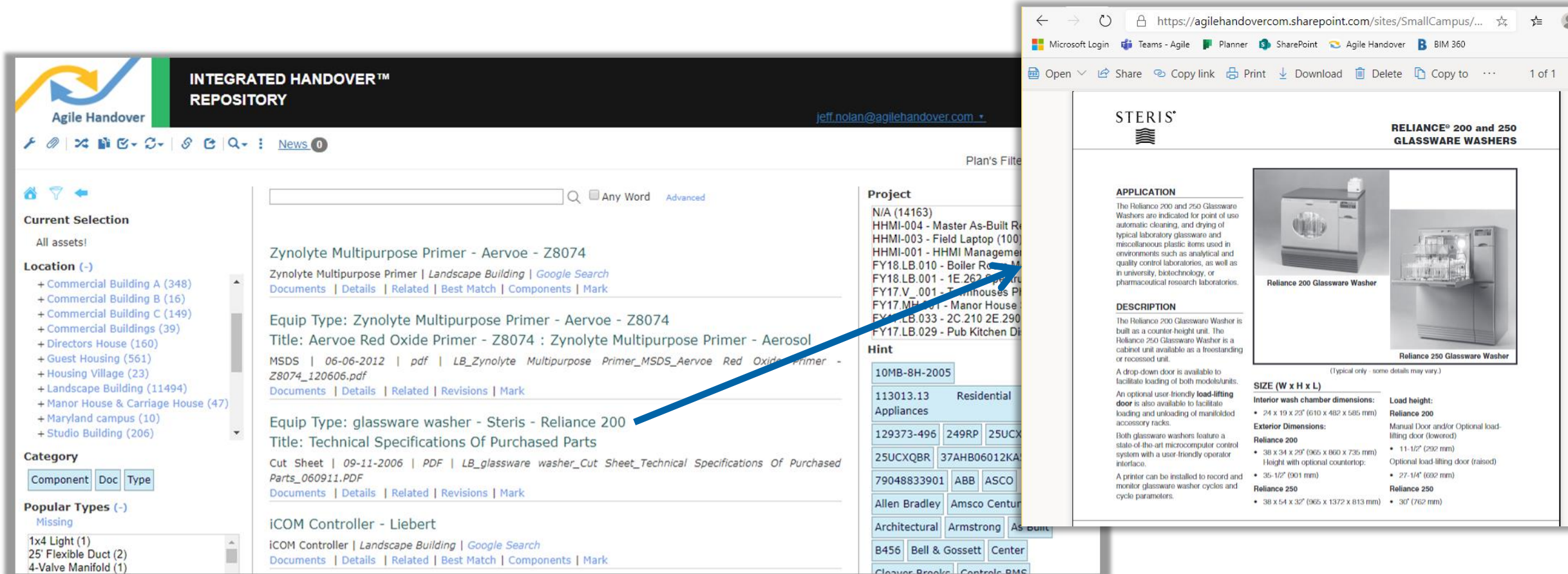
Technology Integration – Document Management



Indexed and associated across FM systems

Find trusted enterprise FM Knowledge

- Search Knowledge portal and/or FM systems tab view



The screenshot displays the Agile Handover Integrated Handover Repository interface. The left sidebar shows navigation options like 'Current Selection', 'Location', 'Category', and 'Popular Types'. The main content area shows search results for 'Zynolyte Multipurpose Primer - Aerove - Z8074' and 'Equip Type: glassware washer - Steris - Reliance 200'. A blue arrow points from the 'Equip Type: glassware washer - Steris - Reliance 200' result to a detailed view of the 'STERIS RELIANCE® 200 and 250 GLASSWARE WASHERS' product page on the right. The product page includes application, description, and size information.

Agile Handover INTEGRATED HANDOVER™ REPOSITORY

jeff.nolan@agilehandover.com

Current Selection
All assets!

Location (-)

- + Commercial Building A (348)
- + Commercial Building B (16)
- + Commercial Building C (149)
- + Commercial Buildings (39)
- + Directors House (160)
- + Guest Housing (561)
- + Housing Village (23)
- + Landscape Building (11494)
- + Manor House & Carriage House (47)
- + Maryland campus (10)
- + Studio Building (206)

Category

Component Doc Type

Popular Types (-)
Missing

- 1x4 Light (1)
- 25' Flexible Duct (2)
- 4-Valve Manifold (1)

Search Results:

Zynolyte Multipurpose Primer - Aerove - Z8074
Zynolyte Multipurpose Primer | Landscape Building | Google Search
Documents | Details | Related | Best Match | Components | Mark

Equip Type: Zynolyte Multipurpose Primer - Aerove - Z8074
Title: Aerove Red Oxide Primer - Z8074 : Zynolyte Multipurpose Primer - Aerosol
MSDS | 06-06-2012 | pdf | LB_Zynolyte Multipurpose Primer_MSDS_Aerove Red Oxide Primer - Z8074_120606.pdf
Documents | Details | Related | Revisions | Mark

Equip Type: glassware washer - Steris - Reliance 200
Title: Technical Specifications Of Purchased Parts
Cut Sheet | 09-11-2006 | PDF | LB_glassware washer_Cut Sheet_Technical Specifications Of Purchased Parts_060911.PDF
Documents | Details | Related | Revisions | Mark

Project
N/A (14163)
HHMI-004 - Master As-Built R
HHMI-003 - Field Laptop (100
HHMI-001 - HHMI Managemen
FY18.LB.010 - Boiler Room
FY18.LB.001 - 1E.262 Spectru
FY17.V_001 - Townhouses Pl
FY17.MH.001 - Manor House
FY18.LB.033 - 2C.210 2E.290
FY17.LB.029 - Pub Kitchen Di

Hint

10MB-8H-2005	
113013.13	Residential
Appliances	
129373-496	249RP 25UCX
25UCXQBR	37AHB06012KA
79048833901	ABB ASCO
Allen Bradley	Amsco Centur
Architectural	Armstrong As-Built
B456	Bell & Gossett Center
Cleaver-Brooks	Controls RMS

STERIS®

RELIANCE® 200 and 250 GLASSWARE WASHERS

APPLICATION
The Reliance 200 and 250 Glassware Washers are indicated for point of use automatic cleaning, and drying of typical laboratory glassware and miscellaneous plastic items used in environments such as analytical and quality control laboratories, as well as in university, biotechnology, or pharmaceutical research laboratories.

DESCRIPTION
The Reliance 200 Glassware Washer is built as a counter-height unit. The Reliance 250 Glassware Washer is a cabinet unit available as a freestanding or recessed unit.
A drop-down door is available to facilitate loading of both models/units.
An optional user friendly load-lifting door is also available to facilitate loading and unloading of manifolded accessory racks.
Both glassware washers feature a state-of-the-art microcomputer control system with a user-friendly operator interface.
A printer can be installed to record and monitor glassware washer cycles and cycle parameters.

Reliance 200 Glassware Washer

Reliance 250 Glassware Washer

(Typical only - some details may vary.)

SIZE (W x H x L)

Interior wash chamber dimensions:
• 24 x 19 x 23" (610 x 482 x 585 mm)

Exterior Dimensions:
Reliance 200
• 38 x 34 x 29" (965 x 860 x 735 mm)
Height with optional countertop:
• 35-1/2" (901 mm)

Reliance 250
• 38 x 54 x 32" (965 x 1372 x 813 mm)

Load height:
Reliance 200
Manual Door and/or Optional load-lifting door (lowered)
• 11-1/2" (292 mm)
Optional load-lifting door (raised)
• 27-1/4" (692 mm)

Reliance 250
• 30" (762 mm)

Find trusted enterprise FM Knowledge

- Google like and Synonym Search
 - Find by: Facility, Location, System, Asset, and Equipment type

Location

- Simple Bldg (177)
- 1 (73)
 - + 100 (7)
 - + 101 (8)
 - + 102 (6)
 - + 103 (6)
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 - + 177 (6)

Asset Type

- Missing
- Air Handling Unit (7)
- Automatic Transfer Switch (2)
- Boiler (6)
- CISTERN (2)
- Centrifugal Pump (4)
- Chiller (5)
- Circulating Coil Pump (15)
- Component (6)
- Control Panel (5)

System

Electrical Exits Facility Lighting

Mechanical Personal

First Floor

Advanced

PNL-105-01
Panel|Electrical
[Hide Documents](#) [Details](#)

EF-100 Record Sheet	Record	EF-100.pdf	(...)
EF-100 Source Sheet	Source	EF-100.dwg	(...)
EF-101 Record Sheet	Record	EF-101.pdf	(...)
EF-101 Source Sheet	Source	EF-101.dwg	(...)
PNL-105-01 Record Panel	Record	PNL-105-01.pdf	(...)
PNL-105-01 Source Panel	Source	PNL-105-01.xls	(...)
PNL-219-01 Picture	Image	ElectricPanel.jpg	(...)
SpecificationsDoc	Specification	panelboard-specification-chart.pdf	(...)
WarrantyDoc	Warranty	Panel Warranty.pdf	(...)

Manufacturer

Schneider

Serial Number

0016-SIMP-0077

Model Number

PANL55XDX

AssetType

Panelboard

System

Electrical

ID

PNL-105-01

Space

105

Floor

1

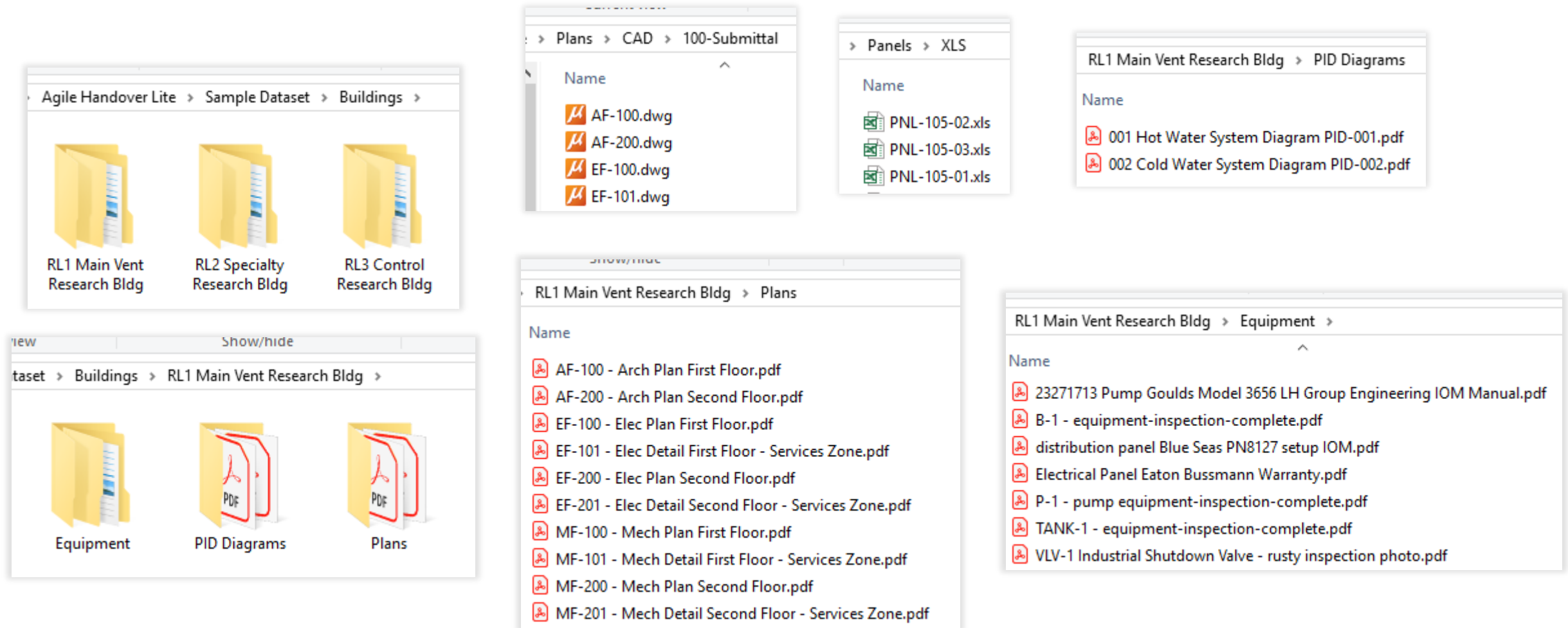
AGILEHANDOVER.COM 8

Digitally transform and normalize FM Knowledge

- Transform and normalize docs/data - 60-90% faster
- Extract, transform and normalize all doc/data sources
- Data stitching of indexed/associated doc/data
- Migrate/Load doc/data across FM systems

Digitally transform and normalize FM Knowledge

- Transform and normalize docs/data - 60-90% faster



- | 001 NBS Lakeside Restaurant.xlsx - Microsoft Excel | | | | | | | | | | |
|---|--|--------------------------|------------|---|---------------------------------------|---------|--------------------------|-------------|---|-------------|
| <div> <div> <div>File</div> <div>Home</div> <div>Insert</div> <div>Page Layout</div> <div>Formulas</div> <div>Data</div> <div>Review</div> <div>View</div> <div>Developer</div> <div>PDF Architect & Creator</div> </div> <div> <div>A230</div> <div>Tree grilles</div> </div> </div> | | | | | | | | | | |
| | A | B | C | D | E | F | G | H | I | J |
| 1 | Name | CreatedBy | CreatedOn | Category | Description | EstType | Manufacturer | ModelNumber | | |
| 227 | Pre-plant vegetation blanket | info@ABCArchitecture.com | 2017-04-05 | Pr_45.57.81.65: Pre-plant vegetation | Pre-plant vegetation blankets | | greenleafsfrees.co.uk | SAXONDA | | |
| 228 | Roofball securing assembly | info@ABCArchitecture.com | 2017-04-05 | Pr_45.63.64.72: Roofball securing frame | Roofball securing assembly | | jacksonsfencing.co.uk | | | |
| 229 | Stakes | info@ABCArchitecture.com | 2017-04-05 | Pr_45.63.64.84: Stakes | Stakes | | mfssales@marshalls.co.uk | | | Tree Stakes |
| 230 | Tree grilles | info@ABCArchitecture.com | 2017-04-05 | Pr_45.63.64.87: Tree grilles | Tree grilles | | mfssales@marshalls.co.uk | OLTG204 | | |
| 231 | Tree guards | info@ABCArchitecture.com | 2017-04-05 | Pr_45.63.64.88: Tree guards | Tree guards | | mfssales@marshalls.co.uk | OLTG301 | | |
| 232 | Corrosion inhibitor chemicals for oil | info@ABCArchitecture.com | 2017-04-05 | Pr_60.56.36.35: Corrosion inhibitor chemical | Corrosion inhibitor chemicals | | | | | |
| 233 | Scale inhibitor chemicals for oil | info@ABCArchitecture.com | 2017-04-05 | Pr_60.56.36.37: Scale inhibitor chemicals | Scale inhibitor chemicals | | | | | |
| 234 | Dosing pots | info@ABCArchitecture.com | 2017-04-05 | Pr_60.55.37.07: Bioside dosing pots | Dosing pots | | | | | |
| 235 | Gas fired condensing boilers | info@ABCArchitecture.com | 2017-04-05 | Pr_60.60.60.34: Gas fired condensing boiler | Gas fired condensing boiler | | | | | |
| 236 | Storage water heaters, gas fired | info@ABCArchitecture.com | 2017-04-05 | Pr_60.60.60.36: Gas-fired storage water | Storage water heaters | | | | | |
| 237 | Immersion heaters | info@ABCArchitecture.com | 2017-04-05 | Pr_60.60.60.42: Immersion heaters | Immersion heaters | | | | | |
| 238 | Low temperature hot water heaters | info@ABCArchitecture.com | 2017-04-05 | Pr_60.65.37.47: Low temperature hot water | Low temperature hot water heaters | | | | | |
| 239 | PVC-U solid wall below ground | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.07.88: Uncladified polyvinyl | PVC-U solid wall below ground | | | | | |
| 240 | Covers and gratings for floor gullies | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.38.30: Floor gully covers and gratings | Covers and gratings for floor gullies | | | | | |
| 241 | Floor gullies | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.38.31: Floor gullies | Floor gullies | | | | | |
| 242 | Freestanding grease traps and interceptors | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.35.32: Free-standing grease traps | Freestanding grease traps | | | | | |
| 243 | Pressure gauges | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.34.66: Pressure gauges | Pressure gauges | | | | | |
| 244 | Temperature gauges | info@ABCArchitecture.com | 2017-04-05 | Pr_65.32.34.98: Temperature gauges | Temperature gauges | | | | | |

P 305707
S 305706-18.596
S 305706-28.124
P 13-101852
P 305126

A	11-400027-015	SIDE ASS
T	12-400048-015	
T	12-400064-005	
P	13-102990	
A	11-400028-015	SIDE ASS
T	12-400049-015	
T	12-400064-005	
P	13-102990	

BOM / PICK LIST / SHEAR

Ready

Integrated Extractor

Project Documents Attributes Search Macros View Help

Page 1 | Rotate From Current Page | 0 90 180 270

FLOOR PLAN
SCALE - 1/8" = 1'-0"

GRAPHIC SCALES

TEXT METERS

NAPOLÉONVILLE
ASSUMPTION PARISH, LOUISIANA

HISTORIC AMERICAN BUILDINGS SURVEY
L.A.-20
FEB. 9, 1935
SHEET 1 OF 20 SHEETS

Package

Research Facility

Facility
Research Facility

Handover Category
Document

Extract Form

Document

Name SD-05 Layout1 (1), 10.5.2017_

Category As Built Section

Stage As Built

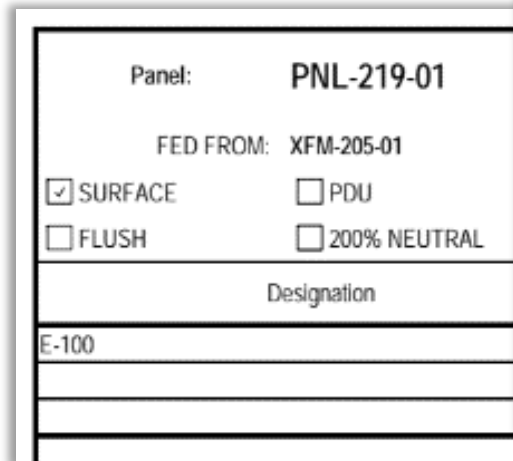
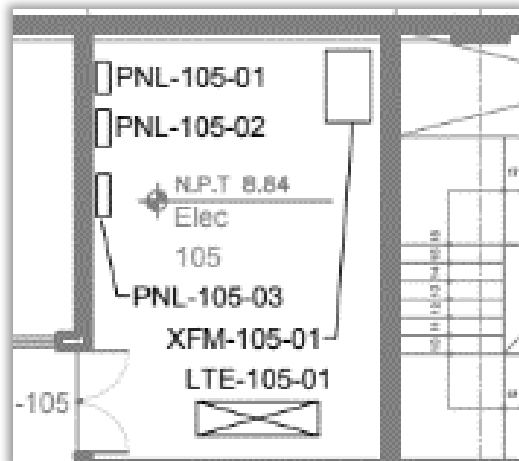
Description

Other

Name	Value	Major	Values Used Before:
SubTitle		<input type="checkbox"/>	FLOOR 1
Date	06-15-05	<input type="checkbox"/>	FLOOR 2
SheetNo	SD-05	<input type="checkbox"/>	FLOOR 3
ProjectName	WALL PROJECT	<input type="checkbox"/>	
ProjectNo	0002	<input type="checkbox"/>	
DrawingSet	RECORD SET	<input type="checkbox"/>	
Floor	FLOOR 2	<input checked="" type="checkbox"/>	

Project View | 0 files to process

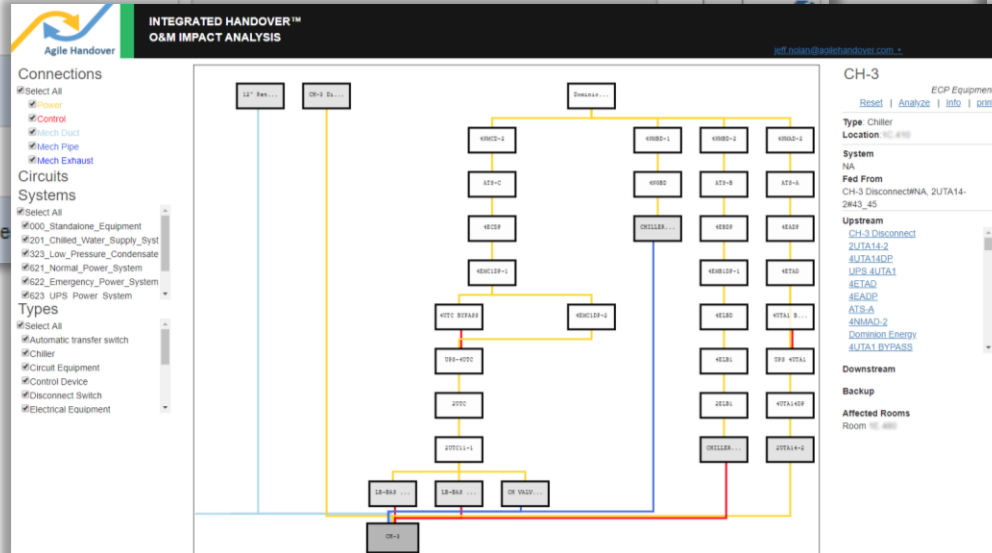
Category	Title	Date	DrawingSet	Floor
As Built Flow Diagram	AHU CONTROL DIAGRAMS & SEQUENCES	10-15-05	AS BUILTS	
As Built Controls	HYDRONIC SYSTEMS AND EQUIPMENT CONTROL SEQUENCES	10-15-05	AS BUILTS	
As Built Detail	FITNESS SPACE - REFLECTED SOFFIT WORKPOINT PLAN - FLOOR 1	06-15-05	RECORD SET	FLOOR 1
As Built Section	SERPENTINE WALL - MILLION DESIGN DETAILS	06-15-05	RECORD SET	
As Built Section	END WALL - BACK OF MULLION VIEWS	06-15-05	RECORD SET	
As Built General Notes	COVER SHEET	06-15-05	RECORD SET	
As Built Section	FITNESS AREA - DOOR HEADER HORIZONTAL VIEW	06-15-05	RECORD SET	
As Built Section	SOCIAL SPACE - SKILL DETAIL TRANSITION - FLOOR 2	06-15-05	RECORD SET	FLOOR 2



Digitally transform and normalize FM Knowledge`

- Data stitching of indexed/associated doc/data

Name(imodel) @ Page 0 ▾	Name(CFIHOS_tagclass) <input type="checkbox"/> Matched Only	Auto Fill
AIR COMPRESSOR	compressor	...
BUFFER TANK CHILLED WATER PUMP	centrifugal pump	...
CATCH BASIN 3'x3' SQ VARIABLE HEIGHT	basin	...
CHILLED WATER PUMP TO CONTINUOUS USERS	centrifugal pump	...
CHILLED WATER PUMP TO RUBBER RX	centrifugal pump	...




Hand-in Documents	Handover Assets	Projects	Reports	Audit Trail
News 0 Notes 0				
<input type="text"/> <input type="checkbox"/> Any Word Advanced				
Current Selection Remove Selections (x) Handover:Component (x) Type:"centrifugal pump"				
Location (-) - Production Refinery (16) - Treatment Area (16) + Sulfur Removal Plant (16)				
Category <input type="button" value="Component"/>				
Type (-) Missing centrifugal pump (16)				
CP-3501A centrifugal pump Asset Goulds 53BF1J9A0, Centrifugal Pump, Series 3656 LH Hide Documents Details Note Related Type System Location Mark				
MC_Cert.pdf	Country Certificate	Regulation	Compliance	1/20/2020 Open Copy Link
RFC_Cert.pdf	Country Certificate	Regulation	Compliance	1/20/2020 Open Copy Link
RFSU_Cert.pdf	Country Certificate	Regulation	Compliance	1/20/2020 Open Copy Link
SA_Cert.pdf	Country Certificate	Regulation	Compliance	1/20/2020 Open Copy Link
SAT data	acceptance test procedure			01/23/2020 Download Copy Info

Name(imodel) @ Page 0 ▾	Name(Master_EQPM) <input type="checkbox"/> Matched Only	Auto Fill
AHU.001	BLDG001.RM103.AHU.001	...
AHU.002	BLDG001.RM103.AHU.002	...
FAN.001	BLDG001.RM105.FAN.001	...
FAN.002	BLDG001.RM105.FAN.002	...

Impact Analysis of FM Systems

- Dynamically visualize dependencies of electrical and mechanical systems
 - 90% faster and reduced risk
- Verify efficiencies, redundancies, and reliability of systems
- Categorize and report on systems needed for decision making
 - Shut Down Requests
 - Reliability Assessments
 - System Upgrade planning

- 

Agile Handover

INTEGRATED HANDOVER™
O&M IMPACT ANALYSIS

jeff.nolan@agilehandover.com

Connections

☒ Select All

 - ☒ Power
 - ☒ Control
 - ☒ Mech Duct
 - ☒ Mech Pipe
 - ☒ Mech Exhaust

Circuits

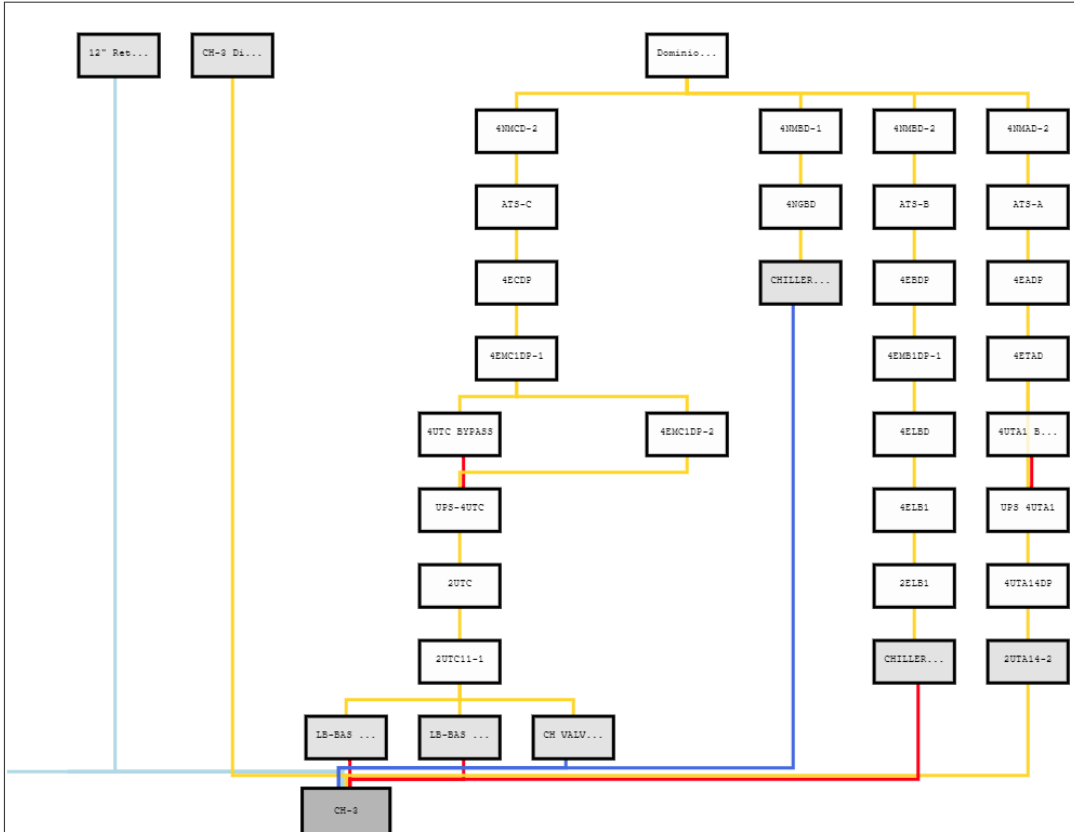
☒ Select All

 - ☒ 000_Standalone_Equipment
 - ☒ 201_Chilled_Water_Supply_Syst
 - ☒ 323_Low_Pressure_Condensate
 - ☒ 621_Normal_Power_System
 - ☒ 622_Emergency_Power_System
 - ☒ 623_UPS_Power_System

Systems

☒ Select All

 - ☒ Automatic transfer switch
 - ☒ Chiller
 - ☒ Circuit Equipment
 - ☒ Control Device
 - ☒ Disconnect Switch
 - ☒ Electrical Equipment



The diagram illustrates the CH-3 Disconnect system, showing its upstream and downstream components and their interconnections. The system is powered by a 12" Ret... and a CH-3 Dis... source. The upstream section includes a 4NMCD-2 generator, a 4NMCD-1 generator, and a 4NMCD-2 generator. The downstream section includes a 4NMCD-2 generator, a 4NMCD-1 generator, and a 4NMCD-2 generator. The system also includes a 4NMCD-2 generator, a 4NMCD-1 generator, and a 4NMCD-2 generator. The diagram shows the flow of power, control, and mechanical connections between these components.

CH-3

ECP Equipment

[Reset](#) | [Analyze](#) | [Info](#) | [Print](#)

Type: Chiller

Location: NC 410

System

NA

Fed From

CH-3 Disconnect#NA, 2UTA14-2#43_45

Upstream

 - [CH-3 Disconnect](#)
 - [2UTA14-2](#)
 - [4UTA14DP](#)
 - [UPS 4UTA1](#)
 - [4ETAD](#)
 - [4EADP](#)
 - [4ELBD](#)
 - [4UTAI B...](#)
 - [4NMAD-2](#)
 - [Dominion Energy](#)
 - [4UTA1 BYPASS](#)

Downstream

Backup

Affected Rooms

Room 410

[illegible]

Printable Report

Digitally transform and normalize FM Knowledge

- Migrate/Load doc/data across FM systems

