BUILDER™ SUMMIT

Functionality Assessments

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Functionality Index Updates

New for BUILDER 3.6 –

- No more Silverlight requirements – (Use modern browsers)

Agenda

- What is the FI Score
- How to modify / create FI Assessments
- How to Generate FI Work Items

Follow Along

- https://my.buildersoftware.net/
- Username: <your email>
- Password: Summit2021

Save | Comment | Reports | 123 - Test Site ▸ 333 - Hangar

Building No: 333 Building Name: Hangar

General Info | Additional Info | Assess. History | Work Item History | Systems at a Glance | Cost Modifiers | Attachments (0) | Building Attributes

Building Use: 13125 - MARS STATION

Building Type: MB04 - Steel Braced Frame

Current Status: Active

Unable to Inspect:

Building Does Not Contain:

Construction Type: Permanent

Area: 8,000 SF

Year Constructed: 1985

Year Renovated:

Number of Floors: 1

Alternate ID: TT_333

Mission Dependency Index

MDI:

Check box to override automated updates and manually enter MDI: ☐

Status

- ☐ Historic
- ☐ Child-Occupied Facility
- ☐ High Security
- ☐ Additional Access

Replacement Cost: $3,710,566

Check box to override automated updates and manually enter replacement cost: ☐

ISR Rating:

Applied FCI Goal: 70

Check box to override automated updates and manually enter FCI Goal: ☐

Condition

Metric	Value
BCI	60
BFI	100
BPI	72
FCI	100

Functionality

Issue	Rating
Location	N/A
Cultural Resources	N/A
Text Wrap Mockup	N/A
Building Size and Configuration	N/A
Structural Adequacy	N/A

Functionality Index Score (FI)

Definition: The functionality state relates to the Building's suitability to function as intended and required for mission. The functionality state is distinct from, and determined independently from, the physical condition state.

Although the functionality assessment is *not* a detailed engineering assessment, it does satisfy the requirements necessary for routine Building facility management activities, including long range budgeting and modernization planning. It also helps to quickly identify problem areas that need more detailed assessments. There may be times when detailed engineering assessments may be required to diagnose specific problems.

BUILDER Functionality Index (FI)

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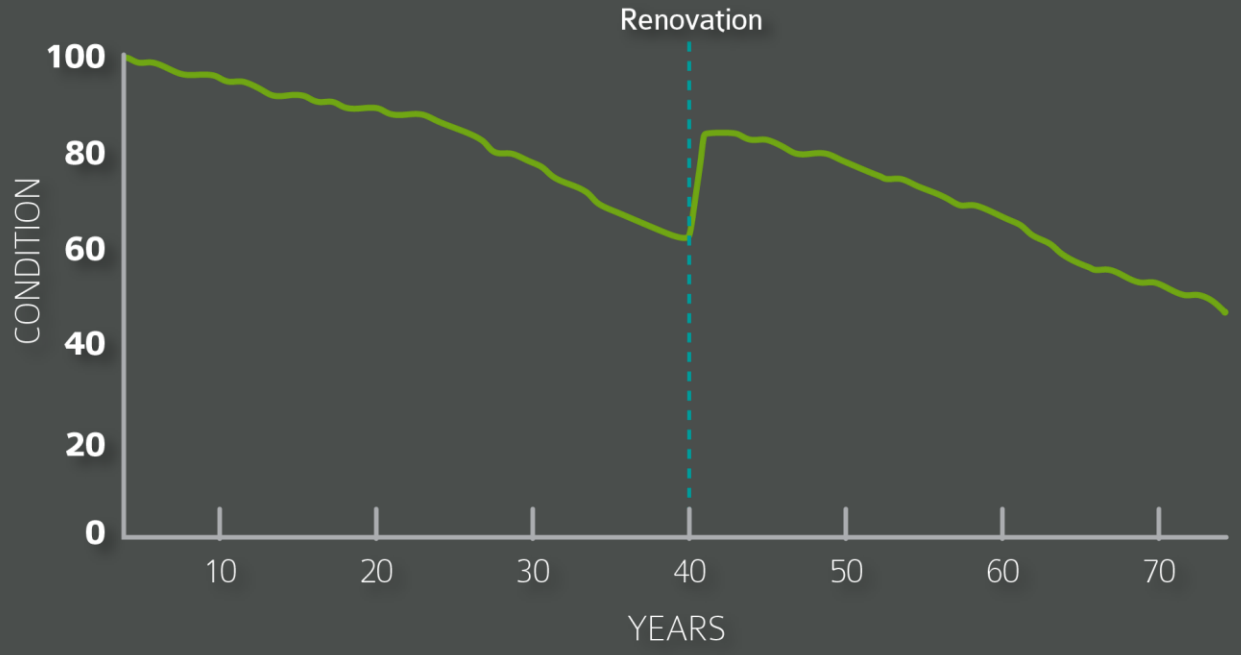
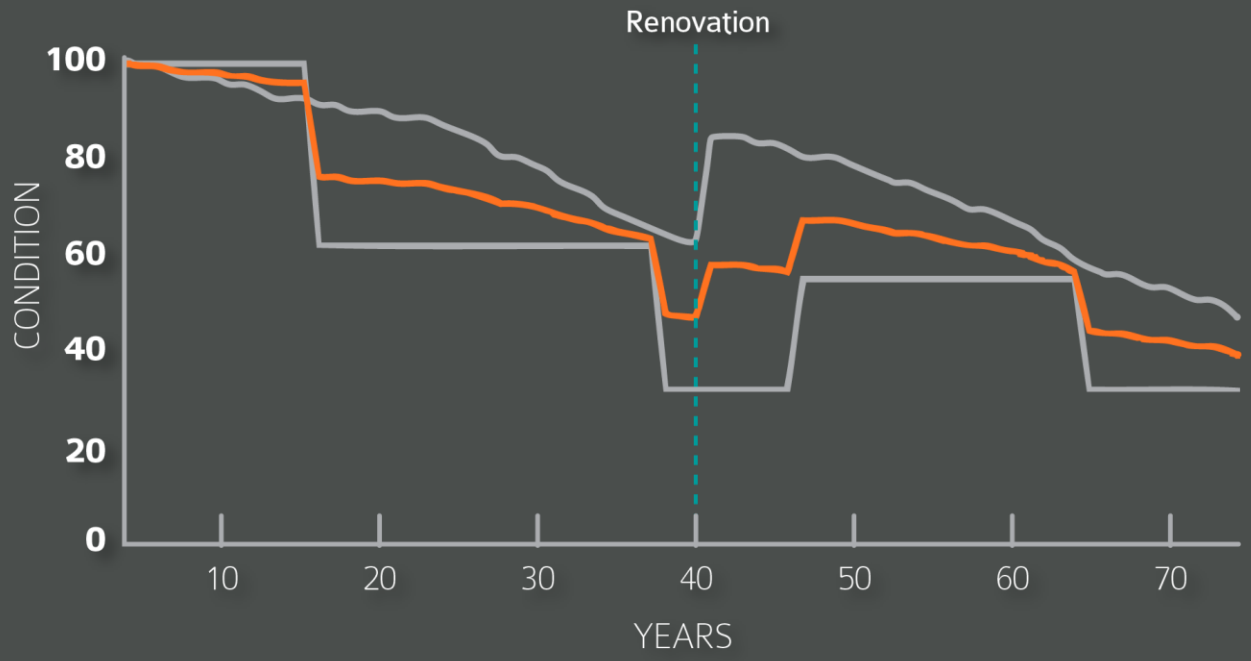
BUILDER Condition Index (BCI)



BUILDER Performance Index (PI)



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Performance Index Score (PI)

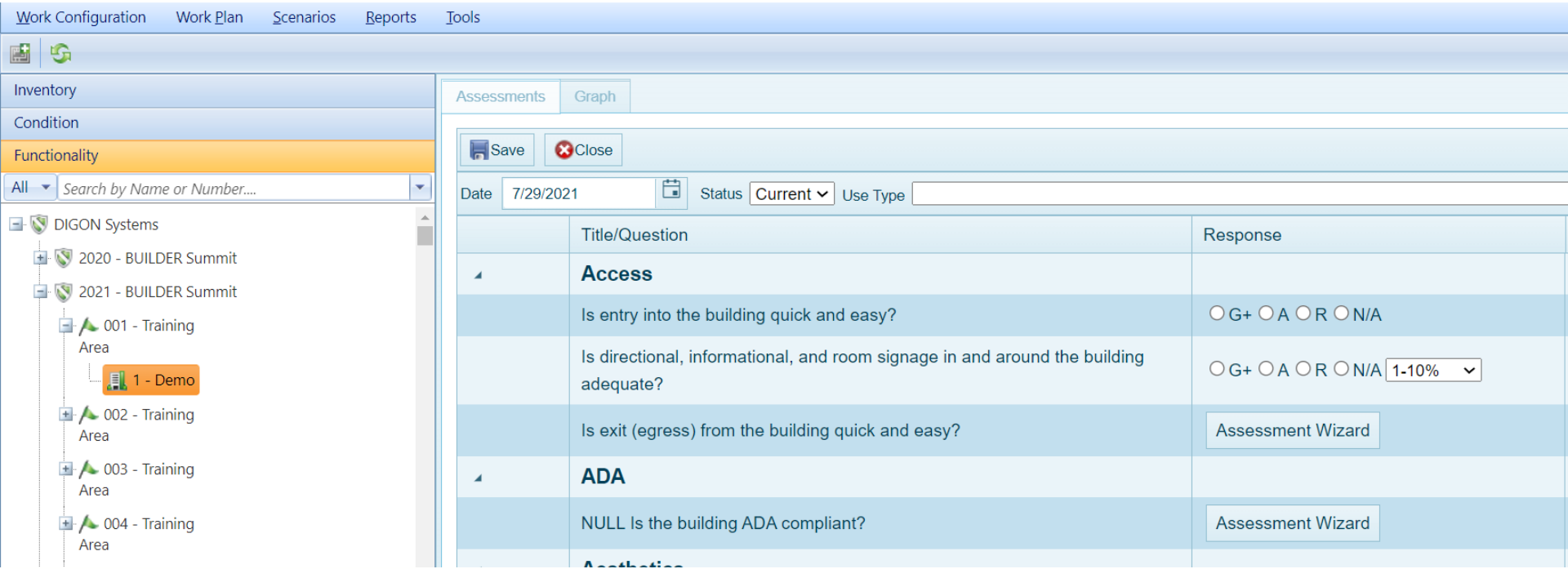
The PI a combination of BCI and FI with greater weight to the lower score

The performance index is a useful metric that gives planners an idea of a building's overall performance by assigning a point value to both the condition and function of a building.

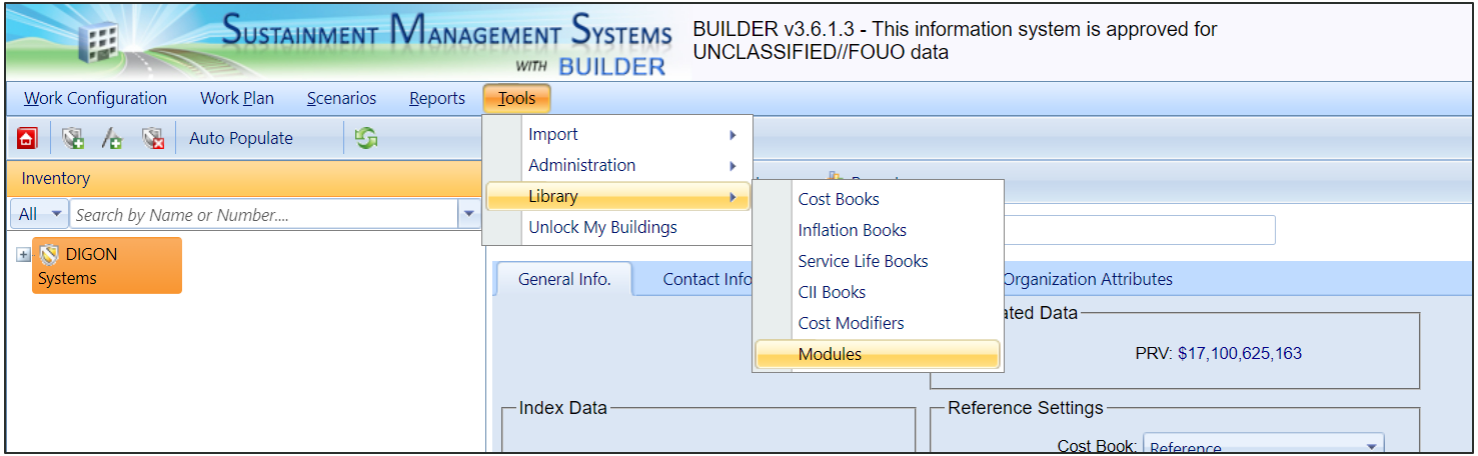
If CI is lower than FI
PI = (CI*0.71)+(FI*0.29)

If FI is lower than CI
PI = (FI*0.71)+(CI*0.29)

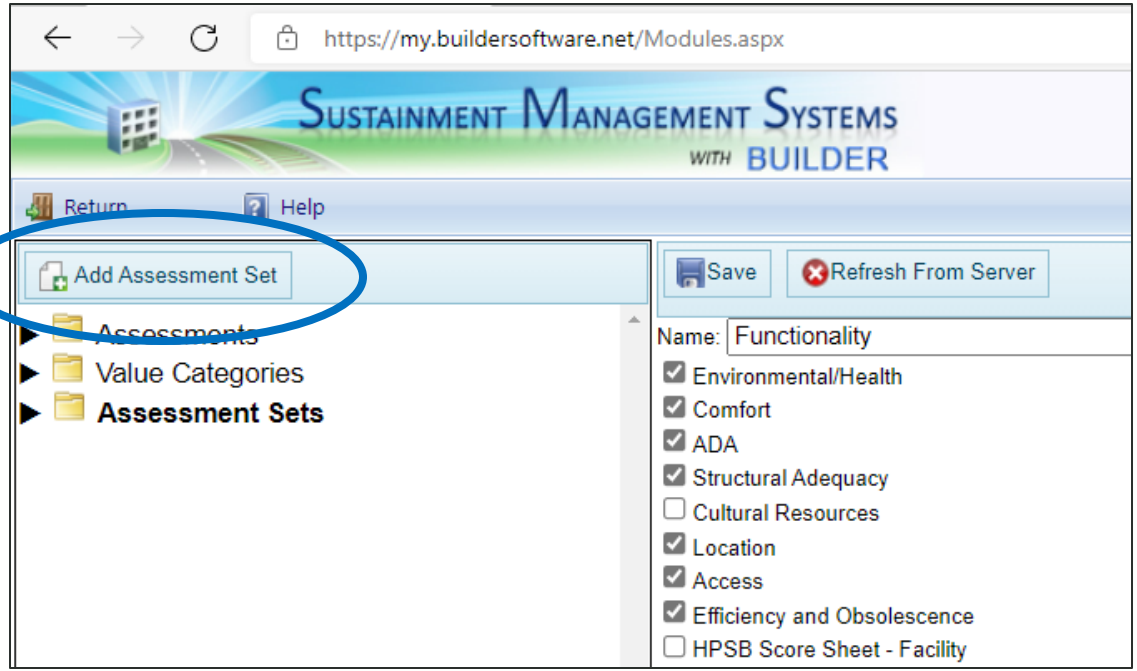
Demo



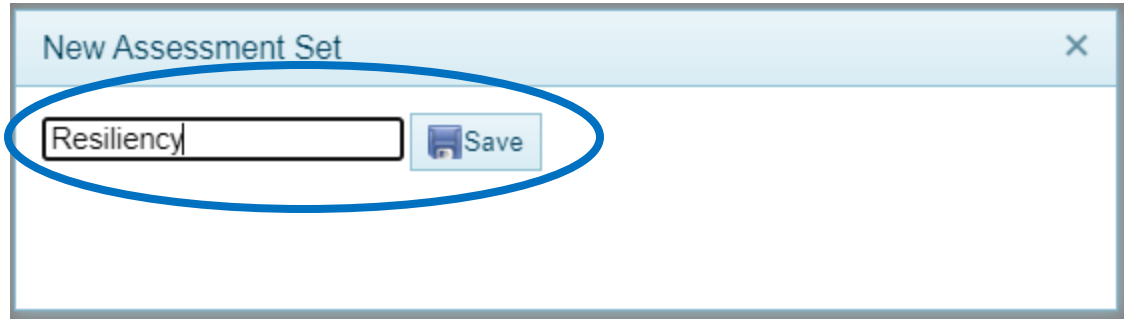
Intended for Customization



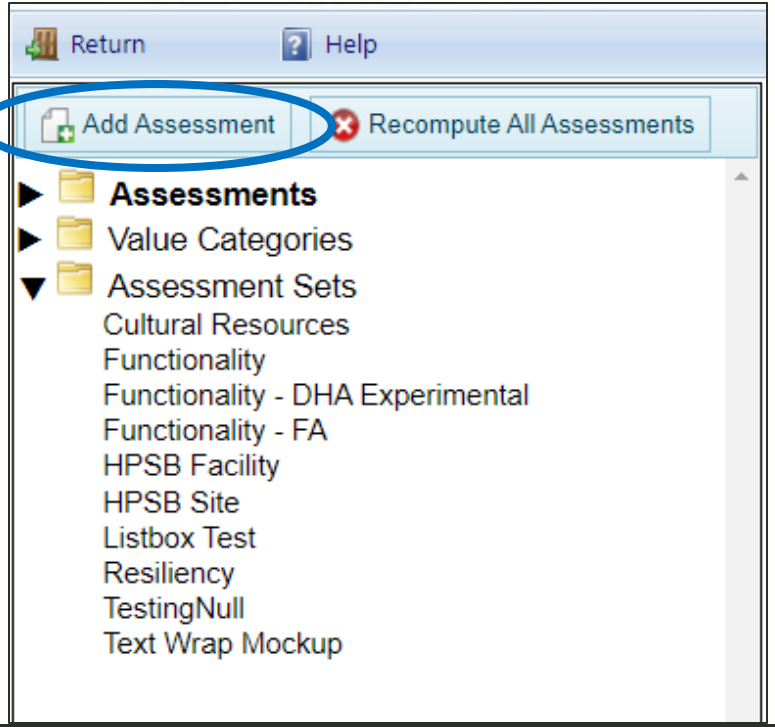
Create a new “Assessment Set”



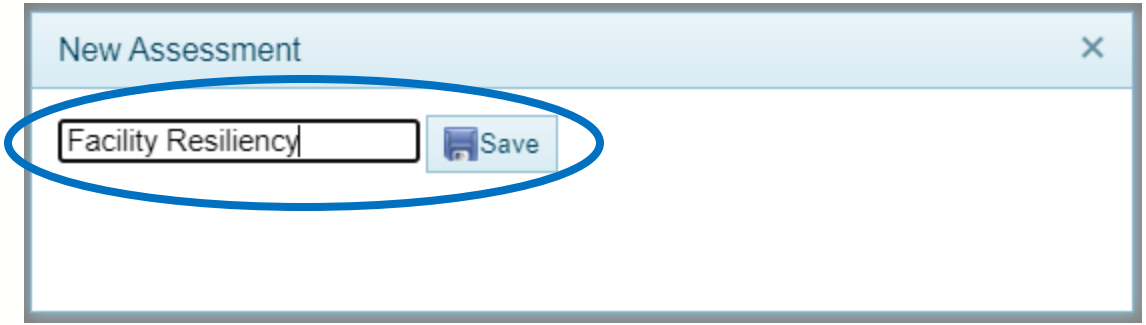
Name the “Assessment Set”



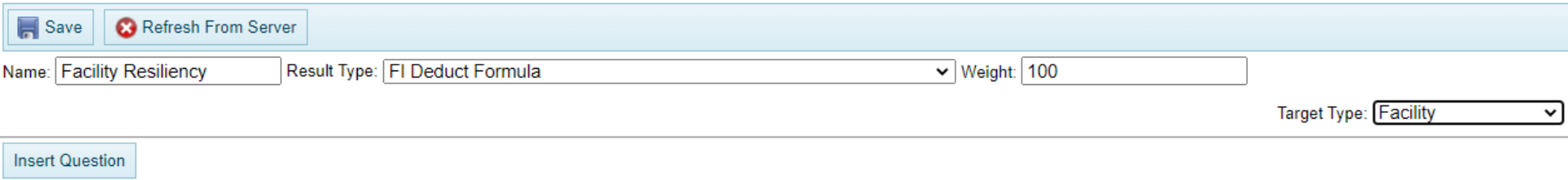
Create A New Assessment



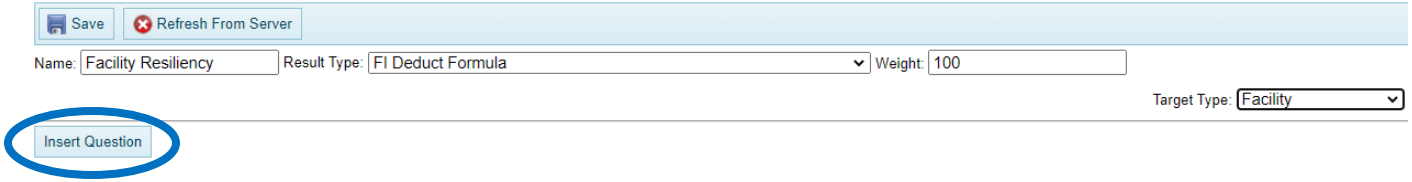
Create A New Assessment



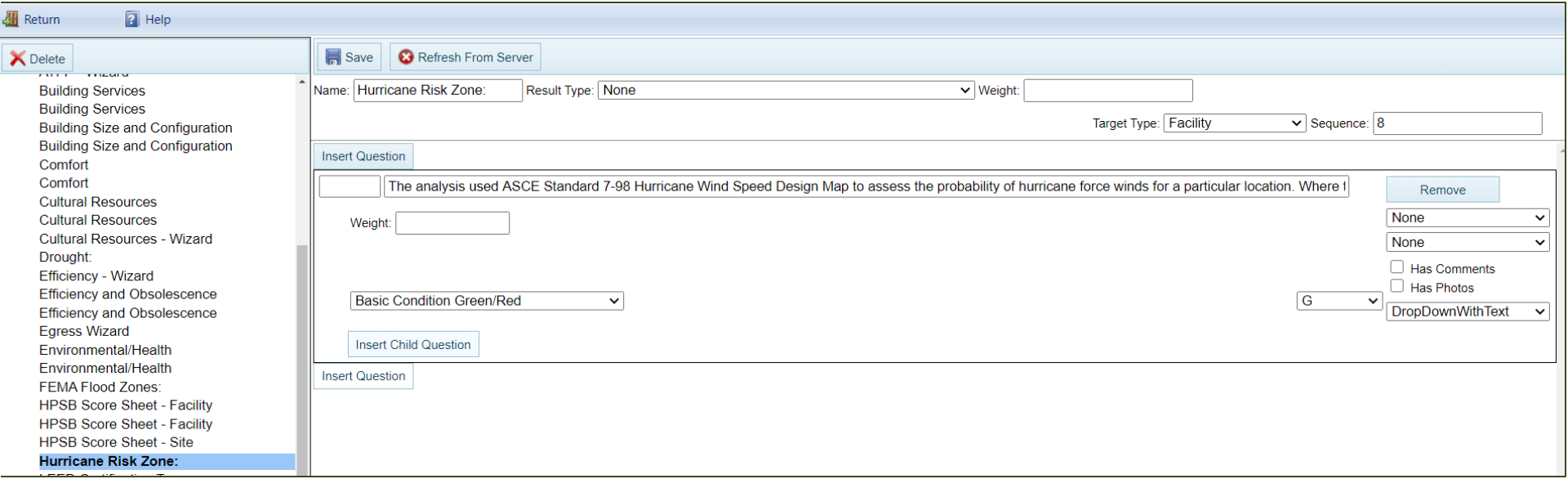
Assessment Type



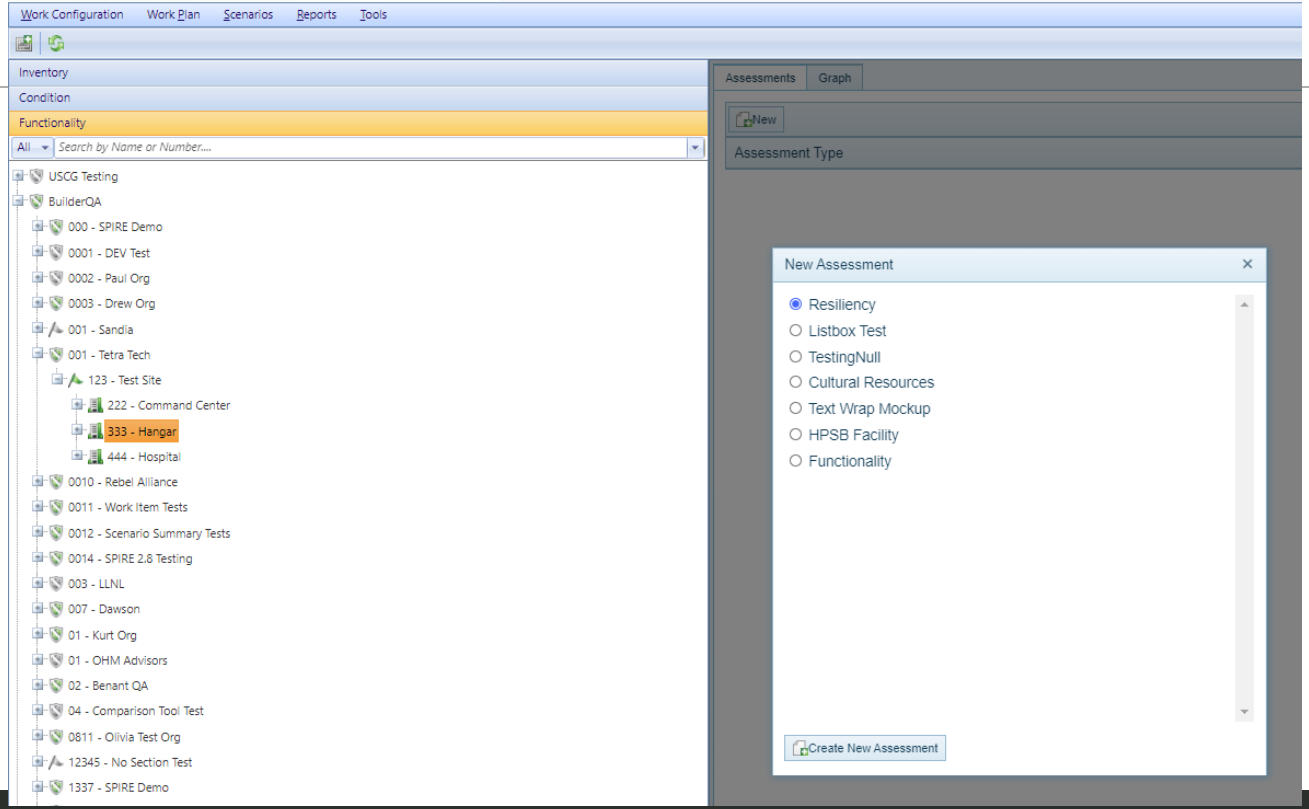
Adding Questions

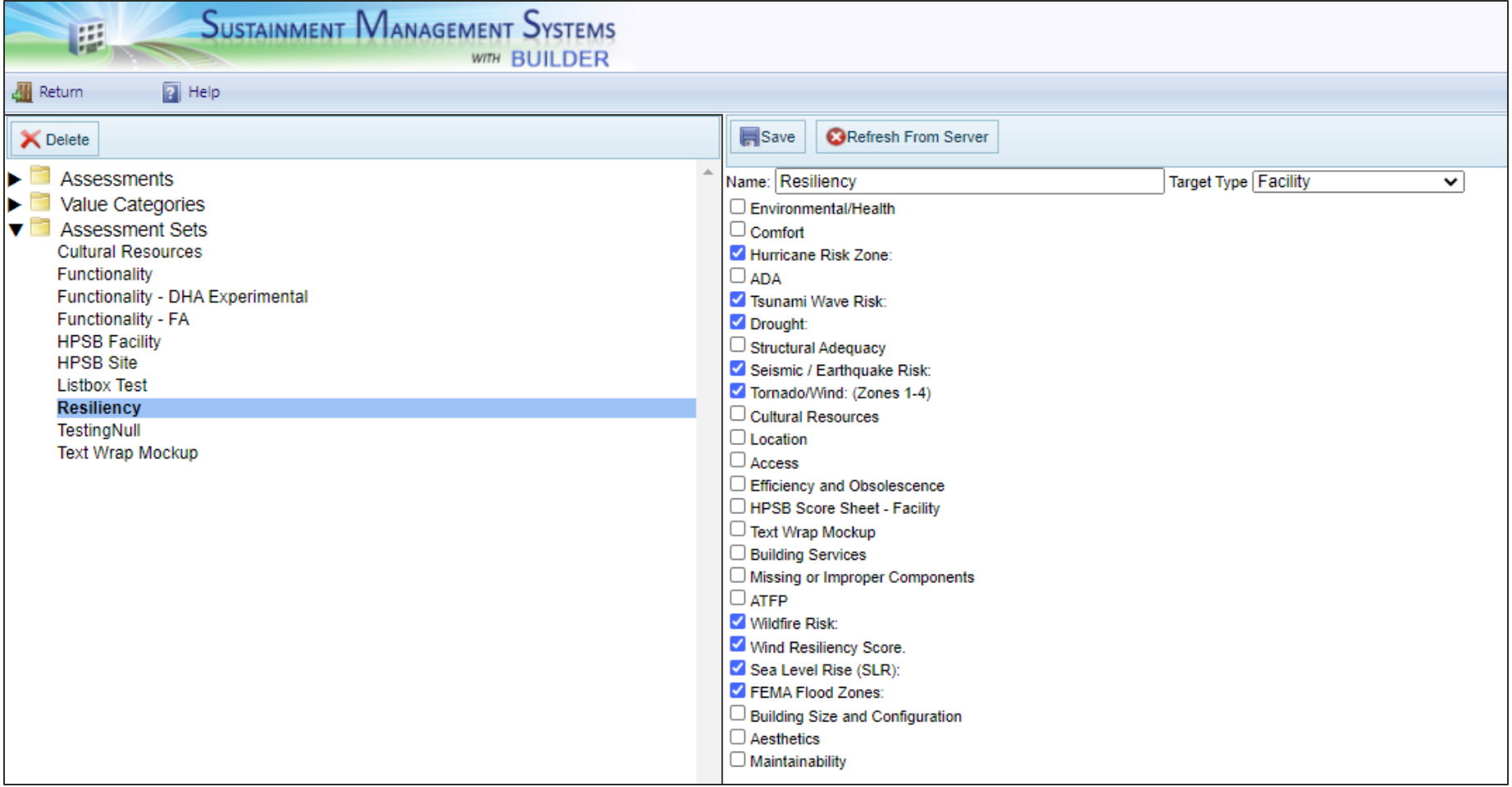


Add Questions

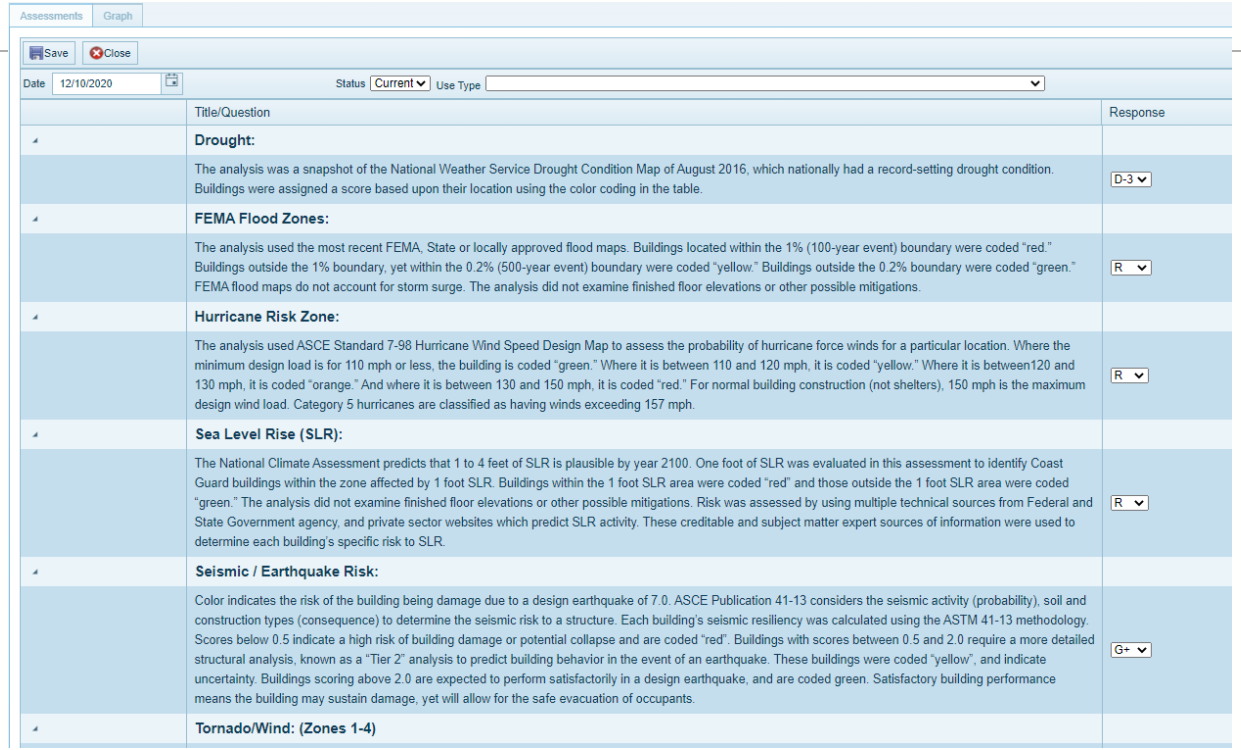


Now Availble





FI Score For Your Organization



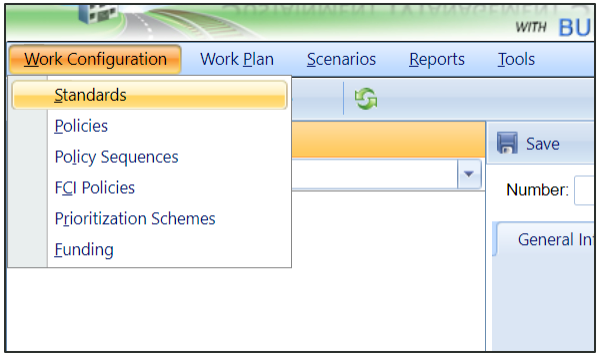
Assessments | Graph

Save | Close

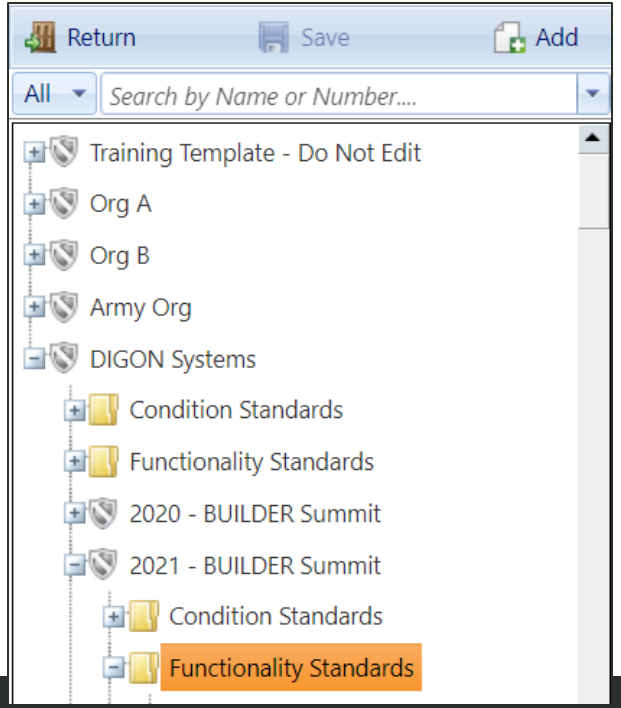
Date 12/10/2020 Status Current Use Type

	Title/Question	Response
	Drought:	
	The analysis was a snapshot of the National Weather Service Drought Condition Map of August 2016, which nationally had a record-setting drought condition. Buildings were assigned a score based upon their location using the color coding in the table.	D-3
	FEMA Flood Zones:	
	The analysis used the most recent FEMA, State or locally approved flood maps. Buildings located within the 1% (100-year event) boundary were coded "red." Buildings outside the 1% boundary, yet within the 0.2% (500-year event) boundary were coded "yellow." Buildings outside the 0.2% boundary were coded "green." FEMA flood maps do not account for storm surge. The analysis did not examine finished floor elevations or other possible mitigations.	R
	Hurricane Risk Zone:	
	The analysis used ASCE Standard 7-98 Hurricane Wind Speed Design Map to assess the probability of hurricane force winds for a particular location. Where the minimum design load is for 110 mph or less, the building is coded "green." Where it is between 110 and 120 mph, it is coded "yellow." Where it is between120 and 130 mph, it is coded "orange." And where it is between 130 and 150 mph, it is coded "red." For normal building construction (not shelters), 150 mph is the maximum design wind load. Category 5 hurricanes are classified as having winds exceeding 157 mph.	R
	Sea Level Rise (SLR):	
	The National Climate Assessment predicts that 1 to 4 feet of SLR is plausible by year 2100. One foot of SLR was evaluated in this assessment to identify Coast Guard buildings within the zone affected by 1 foot SLR. Buildings within the 1 foot SLR area were coded "red" and those outside the 1 foot SLR area were coded "green." The analysis did not examine finished floor elevations or other possible mitigations. Risk was assessed by using multiple technical sources from Federal and State Government agency, and private sector websites which predict SLR activity. These creditable and subject matter expert sources of information were used to determine each building's specific risk to SLR.	R
	Seismic / Earthquake Risk:	
	Color indicates the risk of the building being damage due to a design earthquake of 7.0. ASCE Publication 41-13 considers the seismic activity (probability), soil and construction types (consequence) to determine the seismic risk to a structure. Each building's seismic resiliency was calculated using the ASTM 41-13 methodology. Scores below 0.5 indicate a high risk of building damage or potential collapse and are coded "red". Buildings with scores between 0.5 and 2.0 require a more detailed structural analysis, known as a "Tier 2" analysis to predict building behavior in the event of an earthquake. These buildings were coded "yellow", and indicate uncertainty. Buildings scoring above 2.0 are expected to perform satisfactorily in a design earthquake, and are coded green. Satisfactory building performance means the building may sustain damage, yet will allow for the safe evacuation of occupants.	G+
	Tornado/Wind: (Zones 1-4)	

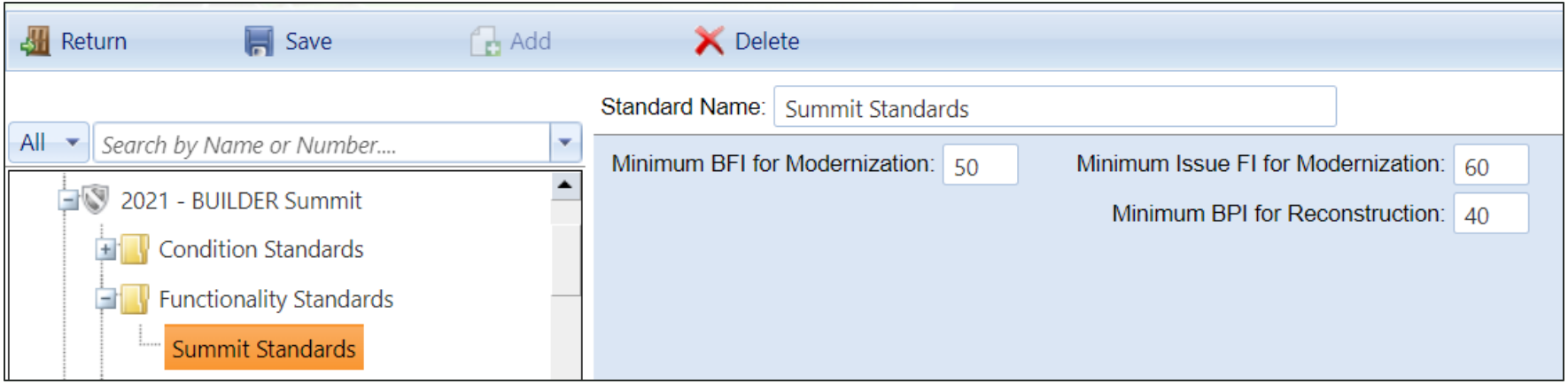
Work Item Management



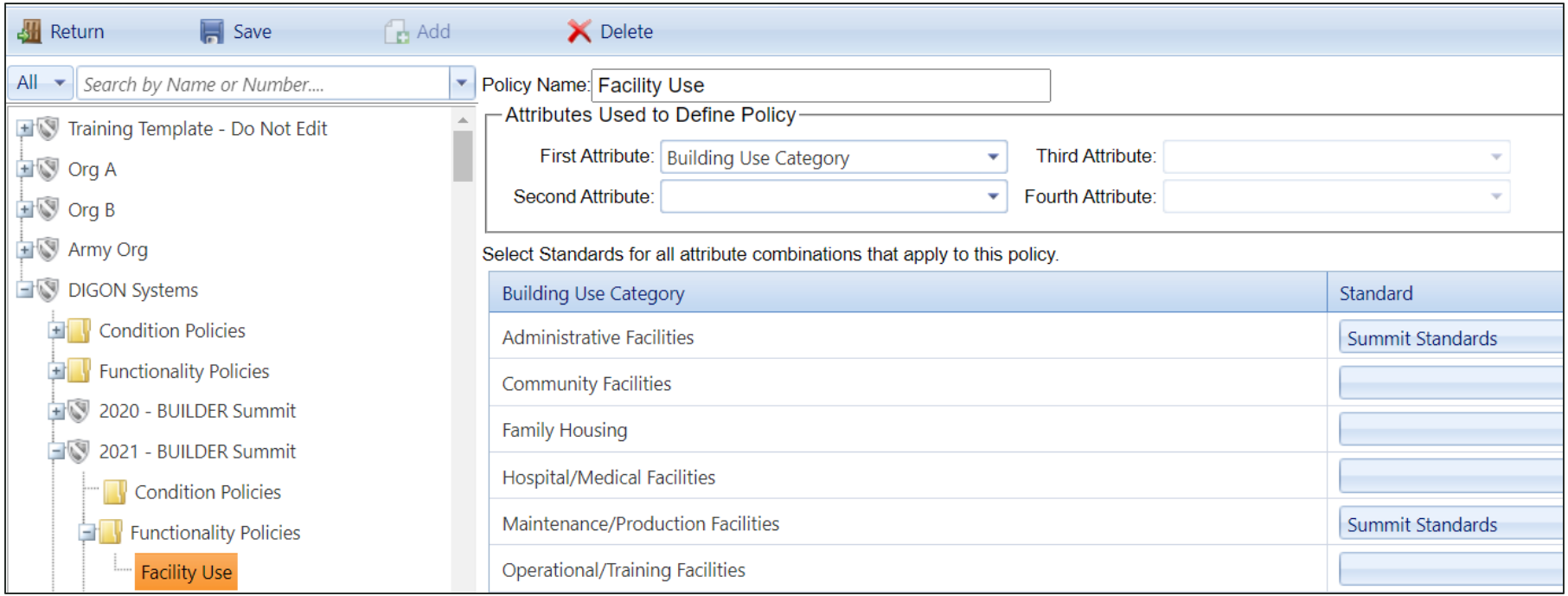
FI Standards



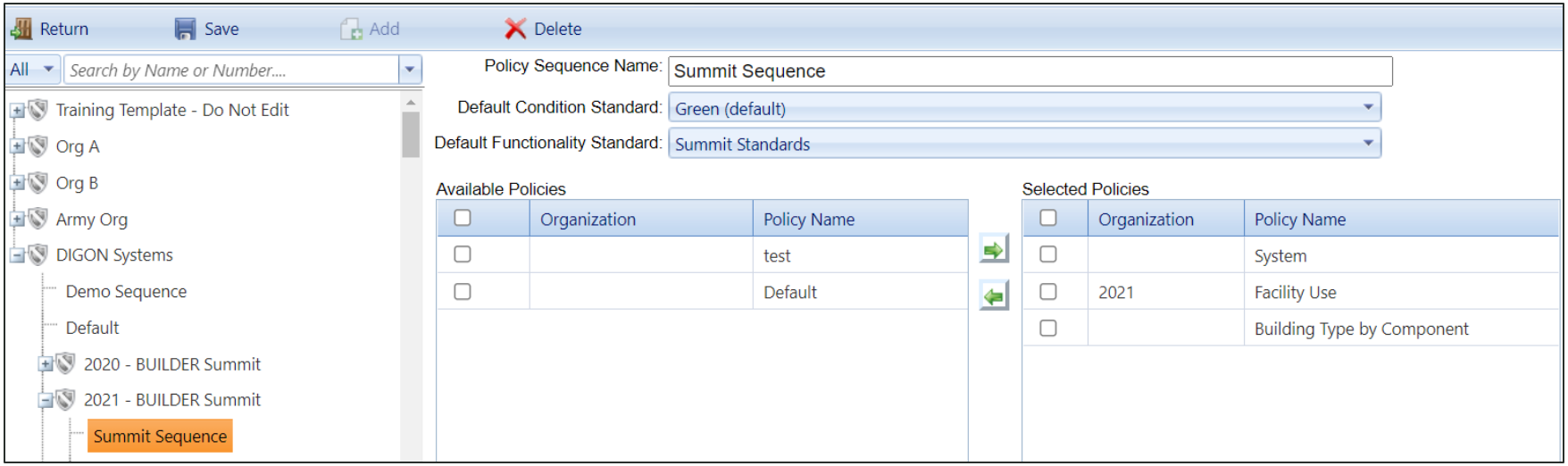
FI Standards



FI Policy



Policy Sequence



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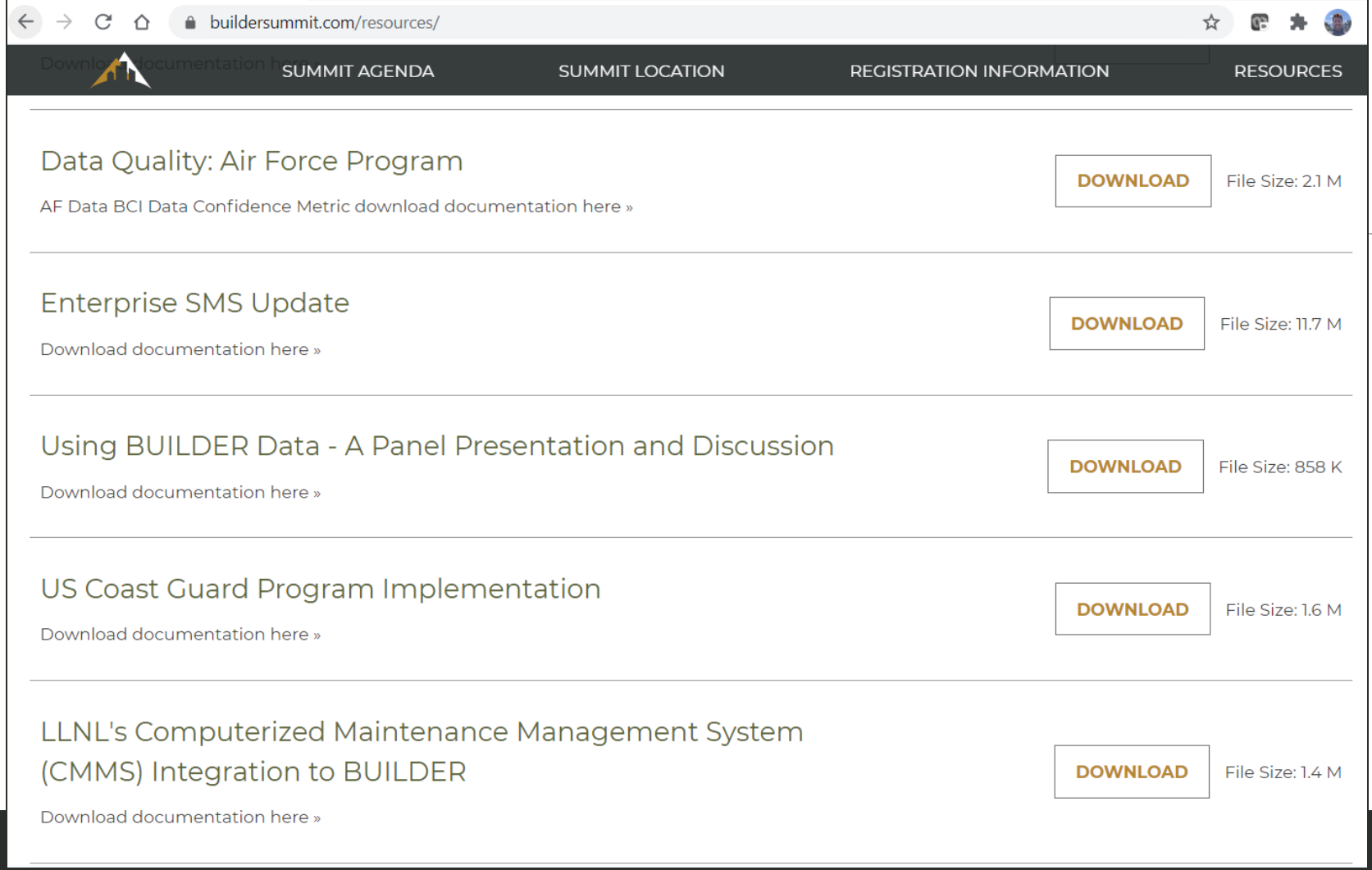
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