Best Practice – Integrity of NEAT Library

Date: Revised January 5, 2017

Subject: Integrity of NEAT Libraries

Problem or Question: How do I keep my libraries consistent? It seems every auditor's library is different. Also, how do I accurately enter in pricings for the setup and supply libraries?

Discussion:

When everyone has access to the libraries, library information begins to morph from one person to another. In time, each auditor's library becomes unique. This results in one auditor getting measures that rank that another auditor cannot. By setting up limited access, this can be avoided.

Only 1 or 2 people should have access to the libraries. These individuals will be given "Administrative" access to NEAT. Everyone else, who needs to access NEAT but should NOT make changes to libraries, should be assigned as a "User." This does not affect an auditor's ability to enter in an assessment, run an audit, or create a work order. This simple tool will help your agency's consistency in producing quality audits.

HOW TO SET "LOG-ON GROUP AND PASSWORD" PROTECTION:

- Open the WA 8.9.
- Open **AGENCY**; make sure Agency information is entered; including address and phone number.

Agency Name Sample Agency		State US	
Agency Information Contacts (2) Cost Centre	rs (0) Surveys (0) Clients (4) Audits (4) Wor	k Orders (4) Libraries	s (2) Status History
Agency Name Tumbleweed CAP	Address	1234 Main St	
State TX 💽	City	Tumbleweed	
Agency Type Local Community Action A	gency 💽 State	TX 🔹	
Federal Grant #	Zip Code	78760	
EIN	Phone Number	512-555-1212	
Other ID Num	Fax Number		
Comment Agency comment	EMai		
	Web Page URL		
	Default age Library, and UNcheck t Agency rei	incy to associate with J Supply records. Che his box for all other A cord can be the Defau	new Client, Work Order, cking this will automatically gency records (ie. Only one it record).

- Go to **CONTACTS** tab and enter the person who will be in control of the libraries.
 - Click the "Change LogOn Group and Password" button. The box on the right bottom side.

Contacts (2) Contacts			abus History
gency information Corvacto (2) [Lost	Centers (0) Surveys (0) Clients (4) A	Audits (4) Work Urders (4) Libraries (2) St	acus History
Contact Name Administrator, Adam	User Name Adam	Active V References	
Name Detail - First Adam	MI Last Administrator	Work Phone (512) 555-1212
Company Tumbleweed	CAP Address	Cell Phone (512) 555-3241
Auditor 🔽 EIN	Unit Number	Pager	
Contractor	City	Fax	
Crew	State	Hama Phone	-
Supplier I	Zip Code	Email Adam@tumblev	veed oo
		Web Page	/
	Commer	<u>e</u>	
by Contact Name	<u> </u>		

 This screen shot will appear. From the top drop down box—select "Admin". Enter in New Password and confirm; then hit the "Apply New Password" button. This person will be able to make changes to the Libraries.

😫 User Group and Password (Administrator, Adam)	×
User Group Admin	
Change Password	
Note: Passwords are case sensitive	
Confirm Old Password	
New Password	
Confirm New Password	
Apply New Password	

- Repeat for another person who is designated library access.
- All others (auditors, contractors, etc) should only be able to data enter into NEAT, audits, and work orders; NOT change library costs.
 - To do this, enter each auditor name and contact information. Click "Auditor" box.
 Then go to "Change LogOn Group and Password" button.

	NCY AGEN	CY AGENCY AGEN	Y AGENCY /	AGENCY A	GENCY AGE	NCY AGENCY	AGENCY
Agenc	y Name Tu	mbleweed CAP				State TX	
Agency	Information	Contacts (3) Cost Centers	(0) Surveys (0) Clie	ents (4) Audit	s (4) Work Orde	ers (4) Libraries (2)	Status History
Cor	ntact Name [Jser, John	User Nam	e John	Active 🔽	References	
	Name Detail	- First John MI	Last User			Work Phone	(512) 555-1212
	Com	pany Tumbleweed CAP	Address			Cell Phone	(512) 555-5678
1	Auditor 🔽	EIN	Unit Number			Pager	
Con	tractor 🗖	Title	City			Fax	
	Crew		State	-		Home Phone	
S	upplier I		Zip Code			Email John@tum	bleweed gov
					We	b Page	Lechecol.gov
				Comment			
AG	IENCY CONT	ACI					
by	Contact Name		<u> </u>				
	by User Name				Change LogOn	Group and Passwo	rd Unassigned
	by Company		· ·				

. .

• From top drop down box, select **"User".** Enter New Password and confirm; then apply.

e	👪 User Group and Password (User, John)	×	
ıt C	User Group User 🗾		
:e	Change Password		
5	Note: Passwords are case sensitive		
	Confirm Old Password		
	New Password ****		
	Confirm New Password ****		
l	Apply New Password		
I			
h	analy any and a new original		

- Repeat for process for any contractors--Checking the "Contractor" box.
- To implement this protection you now must go to the Main page and select the Preferences button.

📰 WA 8.5.0.4		×
* .	Agency	
	Clients	
	Energy Audits	
O R O	Site Built (NEAT)	
	Mobile Home (MHEA)	
Weatherization Assistance Program	Work Orders	
<database>: C:\Documents and S Description: Default Backend Da Setup Library Supply Library</database>	Settings\lsaintey\Desktop\NEtr\wa8 tabase File Preferences	6sample (Maste Data Link

• Go to the **"Features**" tab:

🛢 PREFERENCES PREFERENCES PREFERENCES PREFER	PREFERENCES PREFERENCES
General Range Check and Default Values Report Sections Features	
Installation ID A short descriptior (10 char max) that uniquely Run Control Automatically open the output summary report after each audit analysis View the run messages from the audit analysis after each Run Audit analysis engine debugging Main Menu/Report Header Logos and Labels	identifies this installation of WA (optional) Restart if you make a Change on this Form

• Click on **feature #4**:

Disco shock marks work to the factories that	
User Interface then press the Restart button to er	hable the changes.
Digital Photo Options for Client, Audit, an	d Work Orders
1) Use photo browser tab for attaching ind	lividual image file pathnames to records
2) Use third party photo browser for attach	ing a single directory of images files to records
Other Optional Features	
Y 🗂 3) Enable geographic information system (i	mapping). Requires additional support files for ea
4) Enable user logons with user names and	d passwords from the Agency/Contacts tab
☑ 5) Enable short codes for the definition and	d selection of measures, materials, etc
6) Enable display of internal Access long in	nteger record IDs
7) Enable the logging of program errors	Show History of Program Errors
8) Enable bookmarks (automatically return	to the last record edited) Clear Bookmarks
9) Use only the latest bookmarked Agency	in the find record drop down boxes
	· · · ·
10) Enable the check-in / check-out feature	are for client records

You will receive this prompt. **BE SURE YOU HAVE SET UP LOGINS AND ALL KNOW THEIR PASSWORD BEFORE DOING THIS.**

WIIF IF	Turning on the logon feature will require you to select a user name and enter a password using records entered on the Agency/Contacts tab the next time the program starts. Be sure you have a record entered on that tab with your user name and an assigned password before turning on this feature.	
	 Yes, I have a username and password ready. Turn on this feature. Cancel so I can enter a user name/password record first 	
	OK	

Select "Yes" and hit OK. Now your libraries are protected and you are ready to create your libraries!

CHECKING YOU SETUP LIBRARY:

Library Information Key Parameters Fuel Costr (4) Fuel Price	e Indices 🛛 Libr	ary Measures User De
onomics Set Points Insulation Equipment Windows		_/
Name	Value	Units
Window A/C replacement SEER	11	Ru/wh
Central A/C replacement SEER	13	Btu/wh
Heat pump replacement SEER (Cooling)	13	Btu/wh
SEER used to impute cooling savings	13	na
Low flow shower head flow rate	2.5	gal/min
Refrigerator defrost cycle energy	0.08	kW/b

- From "Main page" select "Setup Library."
 - 1. Click on "Key Parameters."
 - 2. Click on "Equipment" (If no 'equipment button, you are in MHEA, change to NEAT)
 - 3. Change the Window A/C replacement SEER, the Central A/C replacement SEER, Heat pump replacement SEER, and SEER used to impute cooling savings to actual replacement SEER values of "ENERGY STAR" equipment. (Example- from 13 SEER to 14.5 SEER). The higher the SEER value you are using, the better the chances are that it will rank.
 - 4. Verify the **gal/min** rate of your replacement **Low flow shower heads**. Many are using 1.5 gal/min shower heads. Using what you actually install may help your total SIR.
- Next, click on "Windows"
 - Verify the actual **"U-Values and Solar Heat Gain Coefficients"** of the windows you are using for replacement. These need to be "Energy Star" products.
 - You can obtain this information off the label on the window, or
 - From the window vendor's technical literature.

The default values are too high for current energy star rated windows.

🗃 SETUP LIBRARY SETUP LIBRARY SETUP LIBRARY S	ETUP LIBRARY	SETUP LIV RAP
Library Name Sample Setup Library		References
Setup Library Information Key Parameters Fuel Costs (4) Fuel Price	Indices Library Mea	surer User Defi
Economics Set Points Insulation Equipment Windows		/
Name	Value	Units
Replacement Window U-Value	0.46 Bru/F-s	qft-hr
Replacement Window Solar Heat Gain Coefficient	0.62 ja	
Replacement LowE Window U-Value	0.32 Btu/F-s	qft-hr
Replacement LowE Window Solar Heat Gain Coefficient	0.30 na	
Retrofit Storm Window Emittance	0.82 na	
Retrofit Storm Window Solar Heat Gain Coefficient	0.895 na	
Retrofit Window Film Surface Emittance	0.84 na	
Retrofit Window Film Solar Heat Gain Coefficient (incl frame)	0.49 na	

- Next, click on the "Fuel Costs" tab.
 - DO NOT use the default pricings. Use the actual pricings for your providers.
 - If agency has multiple pricings, use the copy button to add each pricing OR combination pricings. Try to associate electricity and gas for each area together and remember to change Unit Cost for each. This will allow 'dual price' choices for the auditor to select when performing an audit. Then use copy button for each new one.
 NOTE: Natural Gas pricings, for NEAT, are in Mcf. Most bills are in Ccf.

🔀 SETUP LI	BRA	RY SETUP	LIBRARY SETU	IP LIBRATLY	SETUP LIBRARY SETU
Library Na	ame	Sample Se	etup Library		B
Setup Librar	y Inf	ormation Key F	arameters Fuel Co	sts (5) Fuel Pric	e Indices Library Measures
Fuel Cost T	able	Name .16 ELE	CTRIC + 16.50 NAT	GAS	Refe
	Co	mment			
		Evel Turne	In Linite of	L Unit Court	Hart Cambook (MMDba)
		Fuel Type	In Units of	Unit Cost	Heat Content (MMBtu)
		Fuel Type Natural Gas	In Units of Mcf	Unit Cost 16.500	Heat Content (MMBtu) 1.000000
		Fuel Type Natural Gas Oil	In Units of Mcf Gallon	Unit Cost 16.500 3.710	Heat Content (MMBtu) 1.000000 0.140000
	J	Fuel Type Natural Gas Oil Electricity	In Units of Mcf Gallon kWh	Unit Cost 16.500 3.710 0.160	Heat Content (MMBtu) 1.000000 0.140000 0.003418 0.000000
		Fuel Type Natural Gas Oil Electricity Propane	In Units of Mcf Gallon kWh Gallon	Unit Cost 16.500 3.710 0.160 2.600	Heat Content (MMBtu) 1.000000 0.140000 0.034118 0.090000 20.200000
		Fuel Type Natural Gas Oil Electricity Propane Wood	In Units of Mcf Gallon kWh Gallon Cord	Unit Cost 16.500 3.710 0.160 2.600 133.000	Heat Content (MMBtu) 1.000000 0.140000 0.03418 0.090000 20.200000 21.000000
	.0	Fuel Type Natural Gas Oil Electricity Propane Wood Coal	In Units of Mcf Gallon kWh Gallon Cord Ton	Unit Cost 16.500 3.710 0.160 2.600 133.000 160.000	Heat Content (MMBtu) 1.000000 0.140000 0.090000 20.200000 21.000000 0.1200000 0.1200000
		Fuel Type Natural Gas Oil Electricity Propane Wood Coal Kerosene	In Units of Mcf Gallon kWh Gallon Cord Ton Gallon	Unit Cost 16.500 3.710 0.160 2.600 133.000 160.000 3.710	Heat Content (MMBtu) 1.000000 0.140000 0.032118 0.090000 20.200000 21.000000 0.130000 1.000000

• Remember to click on "**Make the changes**" Otherwise, all your work will not take.



- Now you are ready to make changes to the "Library Measures:"
 - However, before you do, click on the "**NEAT Insulation Types"** button.
 - Verify the types of insulation you are using for each area.
 - If you are using other products, enter them in here, under each category.

Dialy no	me Sample Setup Lib	rary		Refere	nces		1
tup Librar	vInformation Key Parameters	Fuel Costs (5)	Fuel Price Indices Libra	ary Measures Usi	er Defined Measures (0) N	EAT Insulation	Types
	Attic		Knee Wall		Wall		1
	Name	Rs/Inch	Name	R-Value	Name	Value	Units
Type 1	Blown Cellulose	3.75	Fiberglass Batts	13	Blown Cellulose		R/n ▪
Type 2	Blown Fiberglass	3.09			Blown Fiberglass	3.09	R/in 💌
Type 3							R 💌
Type 4							-
Type 5							-
Type 6							-
	Floor		Sill		Foundation Wall	l	
	Name	Rs/Inch	Name	R-Value	Name	R-Value	
2220 Gr.	Ethoralana Datta	2.22	Eiharalass Batte	19	Rigid Foam Roard	12	

This will allow you to enter pricings for each in the "Library Measures."

• Now go to the "Library Measures" tab. It is recommended that you go to the "Setup Library Information" tab and print out the "Library Measure Costs" from the REPORT section, before

starting this task. You can write your actual pricing for each item on the print out. This will simplify and expedite this section.

REPORT	\sim
Select Report Library Measure Costs	
Preview Print Snapshot File	

• Example of print out:

				Libı	ary I	Measur	e Cost:	5		
Lib	rary Name	Sai	mple Setup Library			Descrip	tion			
Age	элсу	Tur	nbleweed CAP	State	ТΧ	Comme	at			
Suj	oply Library	Sar	mple Supply Library							
NEAT	MHEA #	Me	easure Type	Meas	ure Nam	Active	Default Contra	icto E	efault Cost Center	Life
V	□ 1	Bu	ilding Insulation	Attici	nsulation F	R11 🗹				20
		#	Description			Туре	Units	Unit\$	Comment	
		1	Attic Insulation - Blown	n Cellulos	xe - R-11	Insulation	SqFt	\$0.11		
		2	Attic Insulation - Blown	n Cellulos	e - R-11	Labor	SqFt	\$0.22		
		3	Attic Insulation - Blowr	n Cellulos	æ - R-11	Other	Each At	ti \$0.00		
		1	Attic Insulation - Blown) Fibergla	iss - R-11	Insulation	SqFt	\$0.14		
		2	Attic Insulation - Blown	n Fibergla	iss - R-11	Labor	SqFt	\$0.22		
		3	Attic Insulation - Blown	h Fibergla	iss - R-11	Other	Each At	ti \$0.00		
		1	Attic Insulation			Insulation	SqFt	9,999.00	Not considered u specified	nless cost is
		2	Attic Insulation			Labor	SqFt	\$0.00		
		3	Attic Insulation			Other	Each At	ti \$0.00		
		1	Attic Insulation			Insulation	SqFt	9,999.00	Not considered u specified	nless cost is
		2	Attic Insulation			Labor	SqFt	\$0.00		
		3	Attic Insulation			Other	Each At	ti \$0.00		
		1	Attic Insulation			Insulation	SqFt	9,999.00	Not considered u specified	nless cost is
		2	Attic Insulation			Labor	SqFt	\$0.00		
		3	Attic Insulation			Other	Each At	ti \$0.00		
		1	Attic Insulation			Insulation	SqFt	9,999.00	Not considered u specified	nlesscostis
		2	Attic Insulation			Labor	SqFt	\$0.00		
		3	Attic Insulation			Other	Each At	t \$0.00		

The next screen shot, shows how this information will translate into each measure type cost. Here is where you will enter actual costs for material, labor, and other. Start with measure #1 and work your way down to measure #43.

Library Name Sample	e Setup Library		Refere	nces		
Setup Library Information	Key Parameters Fuel Costs (5)	Fuel Price Indices Libr	ary Measures Use	er Defined Measures (0)	NEAT Insulation Typ	bes
# Measure Type	Measure Name	Active Defau	It Contractor Defa	ault Cost Center Life	: (yr)	-
1 Building Insulation	Attic insulation R11	5		- 20	Costs	
2 Building Insulation	Attic insulation R19	T	*	• 20	Costs	
3 Building Insulation	Attic insulation R30	v	*	• 20	Costs	
4 Building Insulation	/ 🔠 Unit Costs for Meas	ure: 3) Attic insulatio	n R30			
5 Building Insulation		Description		Туре	Units	Unit\$
6 Building Insulation	Attic Insulation -Blown (Cellulose - R-30		Insulation	SqFt	0.60
o building insuidoon				Other	Fach Attic	0.00
7 Building Insulation	Attic Insulation -Blown	Fiberglass - R-30		Insulation	SaFt	0.33
8 Building Insulation				Labor	SqFt	0.60
9 Building Insulation				Other	Each Attic	0.00
10 Building Insulation						
11 Building Insulation						
12 Building Insulation						
13 Building Insulation	- N					
Record: II I						
NEAT - NEAT - NEAT	N					
VIEW Site Built (NEAT) I	Meas Depart It /					
	Record: 14 4	1 P P P OF 6				

- Measures to pay attention to:
 - # 21-22 on Solar Screens. If your agency is installing solar screens that block out 80% of heat gain or more, then you should click off the sun screen fabric box and click on sun screen louvered. You must have documentation in the files that the solar screen fabric is rated such.
 - If you are using a fabric below 80%, then click off sun screen louvered and click on sun screen fabric.
 - #35: A/C replacements. The Btu descriptions are SET units—only enter the units that your agency installs that have the closet Btu to the values given. NEAT will adjust pricing and sizing to what is appropriate. Same goes for ton pricings.
 - Measure #'s 30, 31, 32, 37, 39, and 43; must be entered into your "Supply Library." (How is further below)
- Next, you will build your "User Defined Measures." As before, it is recommended that you go to the "Setup Library Information" tab and print out the "User Defined Costs" from the REPORT section, before starting this task. You can write your actual pricing for each item on the print out.

BEPORT	
Select Report User Defined Measure Costs	
Preview Print Snapshot File	

"User Defined Measures" are for 2 categories: Health & Safety and Repairs. These items have "No Energy Savings."

• Remember to NOT click "Include in SIR" for **H&S** items

🖀 SETUP LIBRARY SETUP LIBRARY SETUP LIBRARY SETUP LIBRARYSETUP LIBRARYSETUP LIB	LARY							
Library Name Sample Setup Library Reference								
Setup Library Information Key Parameters Fuel Costs (5) Fuel Price Indices Library Measures User Defined Measures (1)	NEAT Insulatio							
Measure # 117 Active 🔽 Include In SIR 🗖 Energy Savings No EnergySavings	v							
MeasureType Health and Safety								
Measure Name Smoke Detector								
Default Contractor/Crew								
Default Cost Center								
Materials/Labor Details Available for Use In Site Built 🔽 Mobile Home								
# Type^ Copy Supply^ Description Qty Units+ \$/Unit <	Comment>							
IE- Health and Safety Iten Smoke Detector 1.00 Each 10.00 material								
1.00 Each 5.00 labor								
* 1.00 0.00								

• Remember to click **"Include in SIR**" for **repairs**:

								_		
Li	orary	Name Samp	le Setu	ıp Library				Pererence	5	
Set	up Lib	rary Information	Key Par	ameters Fuel C	Costs (5) Fuel Pric	e Indices 🛛 Lit	ary Measu	ires User D	efined Me	sures (1) NEAT Insulation Types
		Measure #	1	Active 🔽 I	nclude In SIR 🔽		E	nergy Saving	s No Ener	gySavings 👻
	MeasureType General Repairs 🗾									
	м	easure Name	Roof Rep	vair						
De	fault (Contractor/Crew			•					
	Def	ault Cost Center			*					
,	later	ials/Labor De	tails			Availab	le for Use I	n Site Bu	iit 🔽 Mot	bile Home 🔽
Γ	#	Type	^	Copy Supp	lý^ De	escription	Qty	Units+	\$/Unit	<comment></comment>
	1	Construction M	laterials		Roof Repai	ſ	1.00	SqFt	3.00	
	0						1.00	Hour	20.00	
7	¥						1.00		0.00	

• Lastly, go back to the "Main" page and click on the "Supply Library". You must enter appliances into the following tabs. These are needed so that the auditor's can select replacement appliances.

• Enter the following information for water heaters:

3 DES. 1 - A.	
SUPPLY SUPPLY SUPPLY SUPPLY SUPPLY	SUPPLY SUPPLY
Supply Name Sample Supply Library	
General Information Cooling Equipment (0) Construction Mail Hot Water Equipment (1) Insulation (0) Labor (0) Light	terials/Hardware (0) D ting (0) Miscellaneous
Description 40 GAL GAS WATER HEATER	
Manufacturer BRADFORD WHITE Model D4403	S6FBN S
Units+ Each 🗾 \$/Unit \$498.0	0
Comment LABOR & MATERIALS	
EnergyDetails >>	
Fuel Type Natural Gas Energy Factor	0.67
Capacity 40 Recovery Efficiency	72
Input Units kBTU Life (yr)	15
Input	

Be sure to click on the **Energy Details** button and enter in the fields. Use the "New" button to add the other replacement appliances.

88	SUPPLY SUPPLY -	- SUPPLY	SUPPLY SL	JPPLY SUPPLY	/ SUPPLY	SUPPLY	SUPPLY SUPPL
S	upply Name Sampl	e Supply Li	brary			Reference	s
	General Information 0	Cooling Equipme	nt (0) Consi	truction Materials/H	ardware (0)	Doors (0) H	ealth and Safety Item
	Hot Water Equipment (0)	Insulation (0) Labor (0) Lighting (0)	Miscellane	ous Supplies (0)	Refrigerators (0)
	Description 18 CF	REFIGERATOR	}		Source		
	Manufacturer FRIGI	DAIRE	Mod	el FRT181L6JW	_	Supplier	
	Units+ Each		• \$/U	nit \$700.00			
	Comment DELIV	ERY, DISPOSA	L, LABOR & UN	IT COSTS			
	EnergyDetails >>			2			1
	Capacity (cuft)	18	Height (in)	67	Style	Top Freezer	×
	kWhPerYear:	383	Width (in)	30	Defrost		
	Life (yr)	15	Depth (in)	33	Model Year	2010	

• You should also, enter pricings for **cooling equipment** and **heating equipment**. Remember to enter the "energy details." • If you enter all items into your "Supply Library" tabs, your auditors can pull pricings from here for their work orders.

Recommendation Summary: Before starting, print out the "Library Measure Costs" and "User Defined Measure Costs" from the Report section, and write in all your agency pricings for each. Use the above step by step guide to build or check your libraries. When setting up "password protection" be careful NOT to set feature number 4 in preferences until you have setup logins and passwords. Assign one of the "Admin" persons to check and update libraries. Make sure your the library is updated after each procurement process to ensure that the prices

for the measures installed remains as accurate as possible.