Weatherization Assistant on the Web (WAweb) FREQUENTLY ASKED QUESTIONS

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Getting Started

Q. What is WAweb and who is required to use it?

A. Weatherization Assistant web based (WAweb) is the latest version of Weatherization Assistant (WA), an energy modeling software produced by Oak Ridge National Laboratory (ORNL) under contract with the Department of Energy (COE) Weatherization Assistance Program (WAP). A publicly available testing version of the latest iteration of this software can be found online at: (https://wa-new.ornl.gov/). This web-based version of the software replaces the older desktop version (v8) for all WAP Grantees who use the software tool for energy audits. Grantees that are currently using WAv8 are required to transition to WAweb or another approved energy auditing software. This transition must occur by the beginning of Program Year 2024 (PY 24).

Q. How does a Grantee start the conversion process?

A. Grantees should begin this process by notifying their DOE Technical Project Officer (TPO) of their intent to make the transition including the timeline and associated documentation as outlined in <u>WAP Memo 113</u> Once their TPO has been notified, Grantees should immediately contact the ORNL WA Helpdesk Team (<u>https://weatherization.ornl.gov/contact-us/</u>) to discuss the technical portions of the transition process and to get access to their state-specific WA site. A sample conversion timeline is provided <u>here</u> for Grantee's planning purposes.

Q. What is the difference between a WAP Grantee-specific Weatherization Assistant site (<u>https://wa-al.ornl.gov/</u>) and the current Public Testing site (<u>https://wa-new.ornl.gov/</u>)?

A. Both sites use the latest user interface, database schema and calculation engine (WA Engine). However, the Public Testing site is not allowed for WAP production, does not allow full State Administrator privileges for testers, does not include enhanced data security and maintenance, and users are requested to avoid inputting personal information. Meanwhile, WAP Granteespecific sites receive enhanced security (data protected on dedicated "moderate protection zone" server), provide full program-wide "State Administrator" functionality, and may be submitted for WAP audit tool approval.

Q. When should we convert our WAv8.9 data?

A. ORNL recommends converting WAv8.9 data only after all production units (audits and work orders) are completed and finalized. (NOTE: converted data is "view only", no edits allowed). ORNL anticipates that most conversions would occur within a 2-6 month window AFTER the production switch to WAweb.

Q. How do I reset a user login?

A. Through the User Form on WAweb, State and Agency "administrators" can reset user logins for their respective groups (i.e., Agency Administrators can reset the login of any user in their Agency through the User Form).



Libraries, Key parameters, Indices, etc.

Q. Is there a way for a Grantee to create/push an unmodifiable statewide library (Key Parameters, Fuel Costs, etc.) out to all agencies within their state/program?

A. Yes, State Administrators can push specific statewide Economic Parameters and Fuel Cost libraries ("Shared" = unmodifiable) out to ALL agencies within the specific site with the "Admin Tools" added to WAweb (v10.05.008). ORNL can manually push other unmodifiable ("Shared") libraries within a specific site. Contact the WA Helpdesk Team (https://weatherization.ornl.gov/contact-us/) for further information.

Audit Inputs/Results

- Q. Will each audit run be documented in the tool, or are they overwritten without any record of previous runs?
 - **A.** A pop-up warning is delivered to the user whenever they attempt to run an audit for which results already exist. New runs over-write the old data. The number of runs is not tracked nor reported.

Q. Is there a way to lock the results of an audit once it is finalized?

A. Currently (and like WAv8), WAweb does not provide a "lock audit results" function.

Q. Can our current data collection forms be used to import audit data into WAweb?A. WAweb currently does not allow audit data imports from external forms, nor sources.

Application Programming Interface (API) – General Information

Q. What is an API?

A. API stands for application programming interface, which is a set of definitions and protocols for building and integrating application software. In essence, it is the language and structure through which different software can communicate. When we look at Weatherization Assistant Webbased, the User Interface (UI) website that each user sees communicates with a database, which further communicates with the calculations engines (WAv10 for NEAT/MHEA, DOE2 for MuITEA) via APIs to run the calculations and get results.

Q. Is ORNL building an API interface for WAweb?

A. Yes, ORNL is developing WAweb-API which creates a pathway for other software to use the latest version WAv10 engine also used by the standard WAweb user interface.

- Q. If we experience difficulties with our third-party software communicating with WAweb-API, can ORNL provide guidance as to how these issues(s) can be addressed?
 - **A.** ORNL will be responsible to ensure that connectivity to the WAweb-API is made available to registered users. However, ORNL does not provide troubleshooting for failed submissions that do not meet the published specifications.
- Q. Is there, or will there be, a list of third-party software companies that are known to be compatible with WAweb-API?
 - **A.** ORNL will maintain a list of registered WAweb-API users and their respective organizations. However, ORNL cannot assess, nor verify, third-party software "compatibility".

Q. What verification will be required for API interactions with WAweb?

- A. Per <u>WAP Memo 113</u> Grantees seeking to use the WAweb-API either directly or through a thirdparty software vendor, rather than interfacing with WAweb, must meet additional requirements prior to DOE approval including demonstrating consistent and reliable generation of WAweb-API input files from audit data, and consistent and reliable translation of WAweb-API output files into energy audit recommendation(s) and work scope(s) that align with the measure priority determined by WAweb. Grantees seeking to use the WAweb-API are encouraged to coordinate with their third-party software vendor and ORNL, and actively communicate development status and timeline to their respective DOE WAP Technical Project Officer.
- Q. If private parties develop energy audit tools utilizing Weatherization Assistant's source code but are not directly connected to WAweb, what is required for DOE Energy Audit approval?
 - A. ORNL made the source code for the WA NEAT/MHEA calculation engine available to the public (November 2021) to provide transparency in the development of the audit tool. While this source code is available, it's use in the development of private party energy modeling software does not qualify as WAweb since the source code will not reflect the latest updates, improvements, and future developments nor is simply using the source code any guarantee that the tool is functioning as originally designed. Any Grantee using a version of WA for energy modeling other than the live version hosted by ORNL will need to follow the guidance in Weatherization Program Notice 23-6: Revised Energy Audit Approval Procedures, Related Audit and Material Approvals Including Fuel-Switching and Solar PV (Attachment 1) for "standard" energy audit tool submittal.

WAweb-API – Developer-Specific Information

- Q. Are all measure_costs required with a NEAT WAweb-API call?A. Yes.
- Q. Are all measures reporting in a NEAT WAweb-API output, or only those that were 'recommended' based on the energy model?

A. Only the recommended measures are reported in the output.

- Q. What is the purpose of the energy_delta_counter in the WAweb-API output?A. This value is used for internal analysis and debugging only.
- Q. Is there other basic descriptive information available about the WAweb-API calls and responses and the relationship of one to the other?
 - **A.** Currently there is no additional basic descriptive information. The WAweb-API team has noted this for near-term creation and sharing.

Q. Where in the WAweb UI are the results shown for a particular audit?

A. Following a "Run", another tab opens with the Recommended Measures report for the user and displays the results (SIR, energy savings, etc.). Available for review via <u>https://wa-new.ornl.gov/</u>.

Q. Can developers get access to the WAweb UI?

A. Yes, the WAweb Public Testing Site (<u>https://wa-new.ornl.gov/</u>) is open for review, testing, and practice. For access to a specific WAP Grantee's practice agency, please contact the WAP Grantee. Separate agency/login creation is available upon request. NOTE: the WAweb Public Testing site is not approved for production of live WAP audits, and we request that all users avoid inputting actual client data.

Q. How will outside vendors/developers learn about and/or track pending changes to the WAweb-API?

A. General Process: Lister page links to the current schemas shown for dev (development) and master (production). JSON schemas are tagged with the associated version number (e.g. "build_version": "10.05.006"). What is currently missing, and for creation during testing, is tracking of planned devàmaster push. This will be covered and addressed during future calls and discussions.

Q. What is the protocol outside vendors/developers to communicate with ORNL?

A. ORNL will continue conducting periodic stakeholder meetings to apprise the group of progress and discuss specific items (e.g. devàmaster planned push notification process, planned maintenance periods, etc.). Between periodic meetings, stakeholders may contact ORNL directly (Program Lead: <u>eckmanwe@ornl.gov</u>). When contacting ORNL please copy all related DOE and State/Grantee contacts to ensure all parties are part of the conversation.

Weatherization Assistance Program Weatherization Assistant Web FAQs

Q. What is the planned timeline for WAweb-API testing and launch?

A. Developer Testing Round 1 (showstoppers) – Summer/Fall 2023 (July-September) Developer Testing Round 2 (resolution confirmation) – Fall/Winter 2023 (October-December)