Homeland Security

ACRT USER GUIDE

Version 2.0 | June 2020

DHS Accessibility Help Desk

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Contents

Version History

Date	Version
January 2020	1.0
June 2020	2.0

Preface

The purpose of the ACRT User Guide is to provide standardized instructions on using the application to create test results for web and/or software content, leveraging the version-specific processes. Currently, this version uses Trusted Tester v4 and v5. Test results can be modified based on different organizational needs.

Pre-requisites

Use of ACRT does not require access to any government sites or databases.

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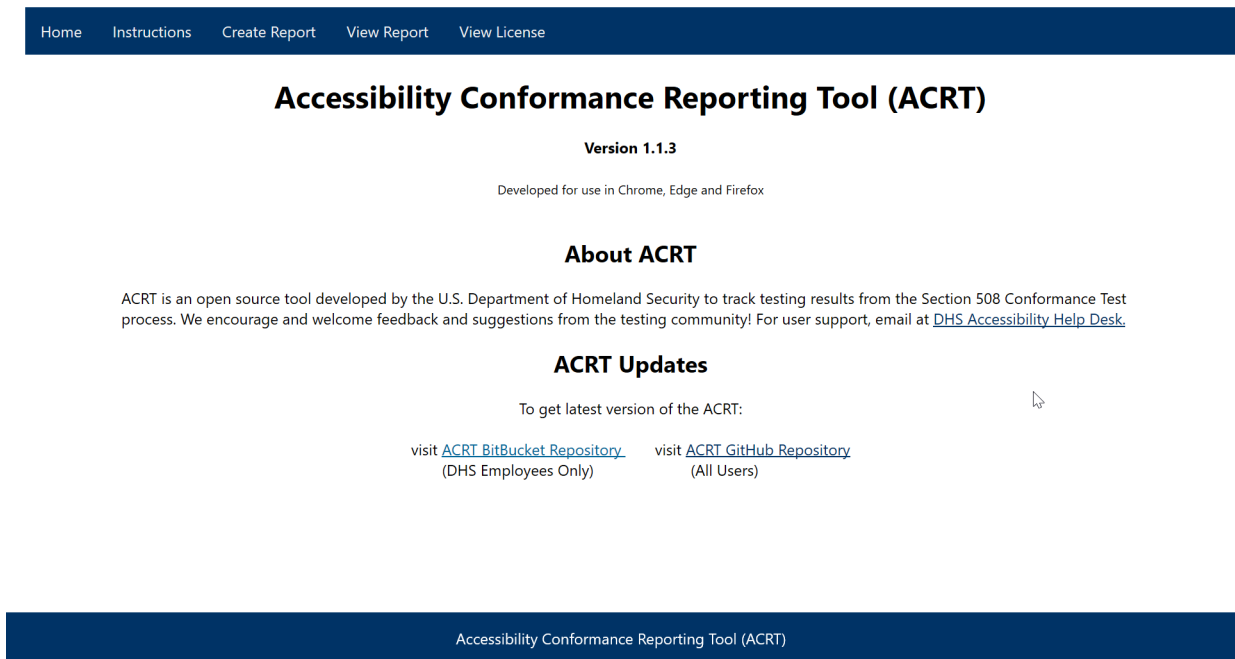
List of Figures – Appendices

Section 1:

Accessibility Compliance Reporting Tool Overview

Tool Tips:

- ✓ Access to government sites or databases is not required to use ACRT.
- ✓ Private email accounts are accepted to use ACRT.
- ✓ Captured data can be stored on a local machine in JSON file format or HTML file format.
- ✓ Trusted Testers with DHS government email accounts **ONLY** can attach the output from ACRT to a ticket in the Accessibility Compliance Management System (ACMS) 2.0 in order to record test results and to obtain a Compliance Determination Form.
- ✓ To store test results in JSON and HTML file format within ACMS, DHS users can email DHS employees with ACMS 2.0 licenses.

1.1 Introduction to ACRT

ACRT is a free opensource (MIT License) and browser-based application compatible to all common operating systems and does not require installation. As a standalone application, it does not directly interact with any resources outside the local working machine. Stored data can be shared using storage devices, email attachments, and/or print HTML reports, as needed.

Home	Instructions	Create Report	View Report	View License

Accessibility Conformance Reporting Tool (ACRT)

Version 1.1.3

Developed for use in Chrome, Edge and Firefox

About ACRT

ACRT is an open source tool developed by the U.S. Department of Homeland Security to track testing results from the Section 508 Conformance Test process. We encourage and welcome feedback and suggestions from the testing community! For user support, email at DHS Accessibility Help Desk.

ACRT Updates

To get latest version of the ACRT:

visit ACRT BitBucket Repository   visit ACRT GitHub Repository
(DHS Employees Only)   (All Users)
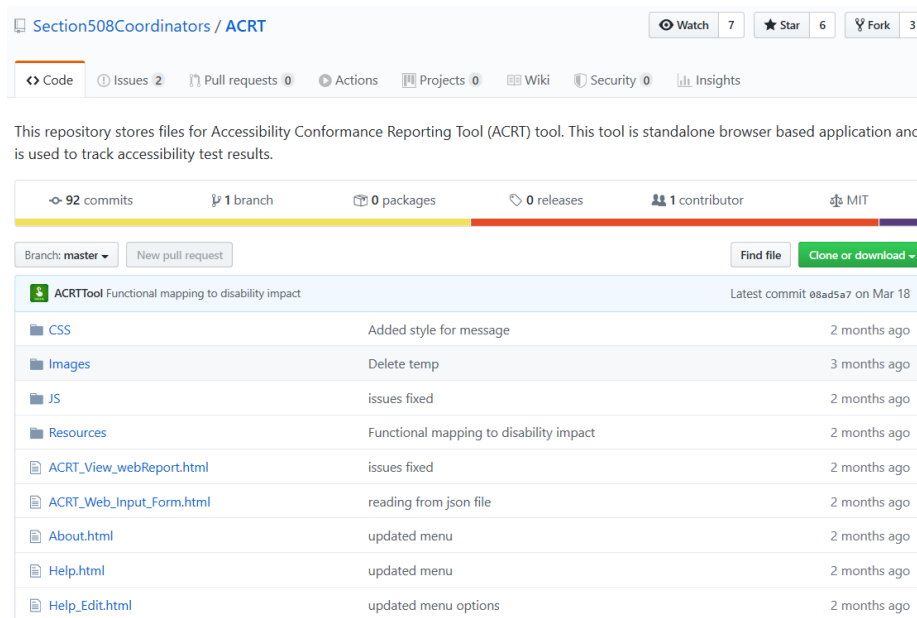
Accessibility Conformance Reporting Tool (ACRT)

Figure 1: ACRT Home Page
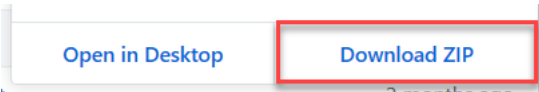
Section 2:

Download ACRT

Tool Tips:

- ✓ ACRT works best in Google Chrome, Microsoft Edge, Safari, and Firefox. **It is not compatible with Internet Explorer (IE).**
- ✓ If the messages "Allow Blocked Content" or "Internet Explorer restricted this webpage from running scripts or ActiveX controls" display, close the IE browser and re-open the file using one of the browsers the tool is designed to work with.
- ✓ The latest ACRT and support files can be found on the Home page.
- ✓ The ACRT Repository is accessible to the public and does not require a GitHub account.
- ✓ Always extract all ACRT files **first** before opening Index.html

2.1 Download ACRT From Github

For instructions on how to download the ACRT repository from GitHub, visit: https://www.wikihow.com/Download-a-GitHub-Folder.

Figure 2: ACRT GitHub Home Page

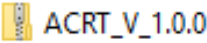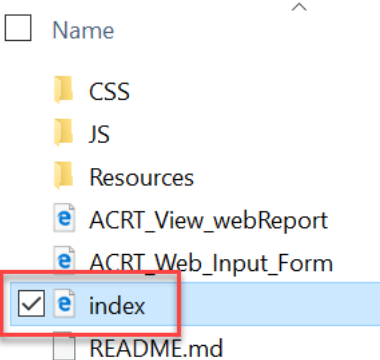| Step #	Instructional Details
Step 1:	**Download the Latest Version of the ACRT Repository** Find the latest version and all support files from the ACRT repository located at: https://github.com/Section508Coordinators/ACRT.
Step 2:	**Open ACRT in the Section 508 Coordinators GitHub Folder.** Navigate to the Clone or download button.
Step 3: Clone or download ▾ *Figure 3: GitHub Download icon*	**Select the Clone or Download Button for the Latest ACRT Version.** There are two options to Open in Desktop or Download Zip.
Step 4: Open in Desktop Download ZIP *Figure 4: Download ZIP highlighted*	**Select Download Zip to Extract ACRT Zip Files.** Extract the contents of the zipped file. (The application will not properly execute from within the zipped folder.)
Step 5: ACRT_V_1.0.0 *Figure 5: Standard ACRT_V_1.0.0*	**Copy ACRT Zip Files to Computer.** Once downloaded, go to your "Downloads" folder for your PC and copy the zipped ACRT files to your selected computer location.
Step 6: ☐ Name 　CSS 　JS 　Resources 　ACRT_View_webReport 　ACRT_Web_Input_Form ☑ index 　README.md *Figure 6: Index file highlighted in ACRT Support Files*	**Open ACRT in Web Browser.** Open the Index.html file in a compatible browser. ACRT works best in Google Chrome, Microsoft Edge, Safari, and Firefox. **It is not compatible with Internet Explorer (IE).**

2.2 Download ACRT from Bitbucket

For instructions on how to download the ACRT Repository from Bitbucket, visit:
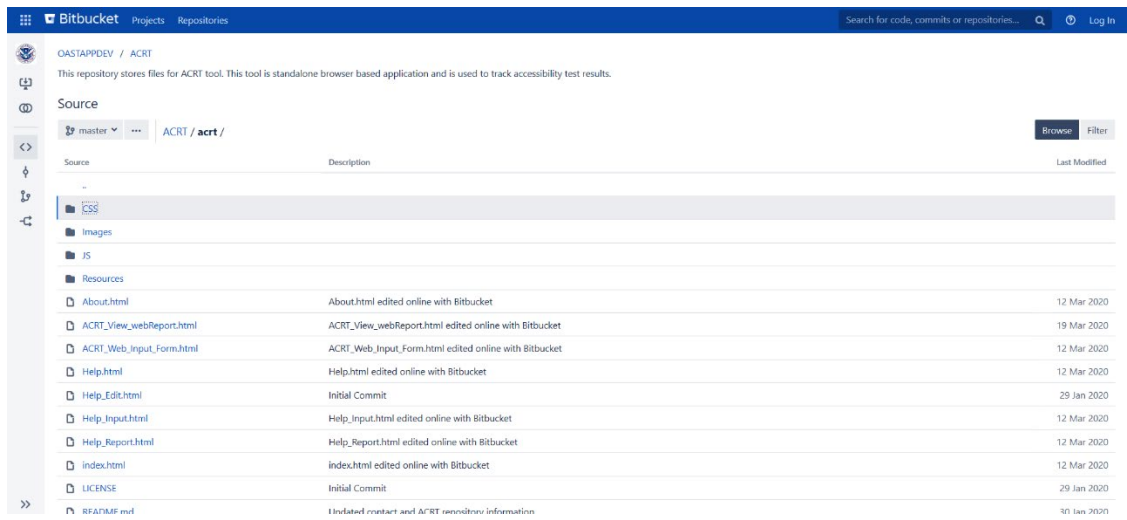https://confluence.atlassian.com/bitbucketserver/download-an-archive-from-bitbucket-server-913477030.html.

Figure 7: ACRT Bitbucket Home Page

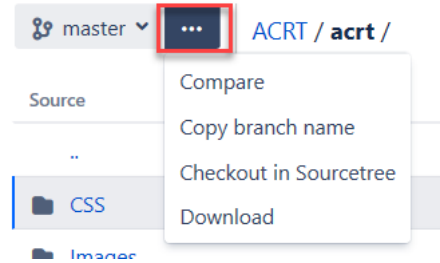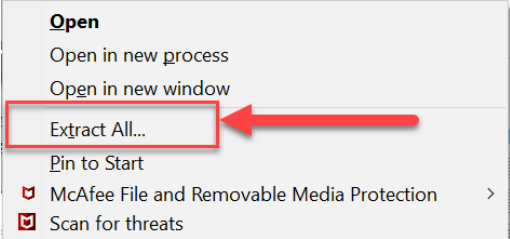| Step #	Instructional Details
Step 1:	**Download the Latest Version of the ACRT Repository** Find the latest version and all support files from the ACRT repository located at: https://maestro.dhs.gov/stash/projects/APPDEV/repos/acrt/browse/acrt.
Step 2:	**Open the ACRT Bitbucket Folder.** Navigate to the Branch Actions dropdown menu to download the latest ACRT version.
Step 3: *Figure 8: Expand Dropdown Menu for Download*	**Select the Branch Actions Dropdown Menu.** There are four options to include Compare, Copy branch name, Checkout in Sourcetree, and Download. **Note:** This option is only available to DHS employees who cannot access Github.

Step 4:	**Select Download to Extract ACRT Zip Files.**
	Extract the contents of the zipped file. (The application will not properly execute from within the zipped folder.)
Step 5:	**Copy ACRT Zip Folder to Computer.**
	Once downloaded, go to your "Downloads" folder for your PC and copy the zipped ACRT files to your selected computer location.
Step 6: *Figure 9: Zipped ACRT folder Extract All option highlighted*	**Unzip ACRT Zip Folder to Computer.** If Mouse User: • Right-Click folder • Select Extract All • Choose computer location If Keyboard User: • Navigate to folder • Select CTRL+SHIFT+F10 to open menu options • Next, select Extract All • Choose computer location **Note:** ACRT requires all files extracted to function.
Step 7:	**Open ACRT in Web Browser.** Open the Index.html file in a compatible browser. ACRT works best in Google Chrome, Microsoft Edge, Safari, and Firefox. **It is not compatible with Internet Explorer (IE).**

Section 3:

Create/Edit Report

Tool Tips:

- ✓ Expand collapsed sections to reveal data fields for Product, Test Environment, and Test Information in to input information.
- ✓ Complete all required form fields in Product, Tester, and Test Results sections.
- ✓ Edit the report later to continue entering testing information including add Remediation Details by repeatedly saving partially completed testing information during the current session.
- ✓ If all tests are completed in the **Create Report** page, you can view your report in the **View Report** page.
- ✓ By default, the tool uses Product Name and Product Version to construct the filename of the saved JSON file
- ✓ You can customize the JSON file with your information to pre-populate required details.
- ✓ Recommended image types for ACRT to attach screenshots include PNG, JPEG, and GIF.

3.1 Load JSON File

The default JSON files for Trusted Tester v.4 and Trusted Tester v.5 (TT4 & TT5) are located inside the ACRT Resources folder.
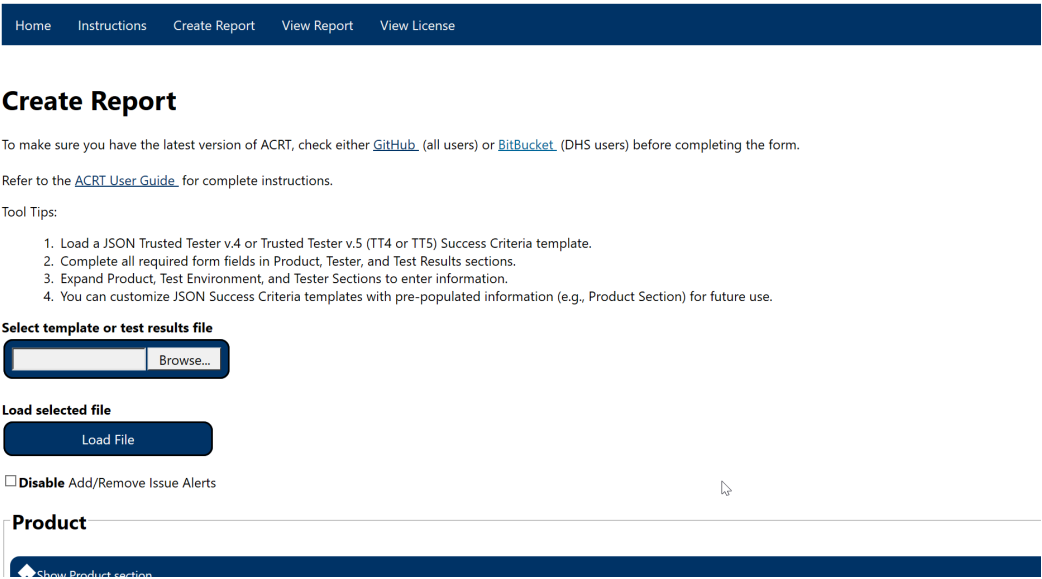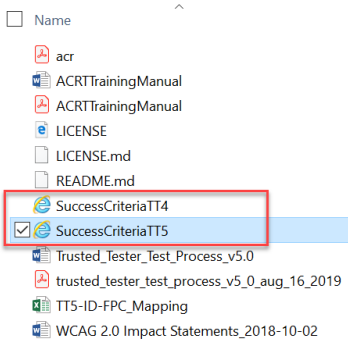

Figure 10: Create Report Page

Step #	Instructional Details
Step 1:	**Open ACRT in Web Browser.** Open the Index.html file from the ACRT folder created in your file location.
Step 2:	**Select the Create Report Link.** The Create Report page will open.
Step 3:	**Select the Browse Button.** Navigate to the extracted ACRT folder to select template or test results file.
Step 4:	**Choose the ACRT Folder.** File location is in your Draft folder or within your custom location.

Step 5:
 	
☐ Name
  acr
  ACRTTrainingManual
  ACRTTrainingManual
  LICENSE
  LICENSE.md
  README.md
  SuccessCriteriaTT4
☑ SuccessCriteriaTT5
  Trusted_Tester_Test_Process_v5.0
  trusted_tester_test_process_v5_0_aug_16_2019
  TT5-ID-FPC_Mapping
  WCAG 2.0 Impact Statements_2018-10-02
 	
Figure 11: SuccessCriteria.json template file
	Select the Resources Folder.
	
	Navigate to the SuccessCriteriaTT4.json or SuccessCriteriaTT5.json file located in ACRT folder > Resources folder or within your custom location.

Step 6:	**Open SuccessCriteria.json Template File.**

	File window will close once loaded.
Step 7:	**Select Load File Button.** The selected JSON file loaded will display notification of test method, version, and generate new test results form to input data.
Step 8:	**Select Disable Add/Remove Issue Alerts Checkbox (Optional).** The types of alerts that can be disabled are adding/removing issues within the test results form.

3.2 Product Section (Required Fields)

Complete required form fields as indicated by a red asterisk to include: Name of Product, Product Version, and Product Description. Other fields are completed as desired.

Figure 12: Create Report Page – Product Section

Step #	Instructional Details
Step 1:	**Select the Show/Hide Product Section Button.** Expand the form fields to reveal all or collapse to hide.
Step 2:	**Input the Product Name.** Complete the required form field.
Step 3:	**Input the Product Version.** Complete the required form field.
Step 4:	**Input Product Owner/Vendor.** The form field is optional.
Step 5:	**Select the Dropdown Menu to Choose the Product Type.** The form field is optional. The Product Types include: • Custom developed web page • COTS • Customization of COTS product • GOTS application • Software • Other
Step 6:	**Input the Location.** The form field is optional.
Step 7:	**Input the Product Description.** Complete the required form field.
Step 8:	**Input Notes for the Product.** Example: Summary of defects identified as global issues, questions about the application defects, embedded non-accessible documents (e.g., .PDF, MS Word), etc.

3.3 Test Environment Section

Test Environment details are not mandatory. However, Trusted Testers are encouraged to the complete this section, as desired.

Figure 13: Create Report Page – Test Environment Section

Step #	Instructional Details
Step 1:	**Select the Show/Hide Test Environment Section Button** Expand the form fields to reveal all or collapse to hide.
Step 2:	**Select the Dropdown Menu to Choose Browser Compatibility View** The options allow users to Turn On and Turn Off the Compatibility View.
Step 3:	**Choose the Browser Type and Version** Complete the form fields to describe the default browser and version.
Step 4:	**Choose the Operating System and Version** Complete the form fields to describe the operating system.

3.4 Tester Information Section (Required Fields)

Complete the required form fields as indicated by a red asterisk to include: Tester's First Names, Tester's Last Name and Tester's Email. Other fields are completed as desired.
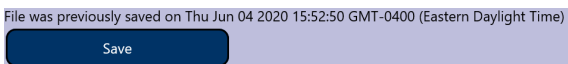
Figure 14: Create Report Page – Test Information Section

Step #	Instructional Details
Step 1:	**Select the Show Tester Information Section Button** Expand the form fields to reveal all or collapse to hide.
Step 2:	**Input the Tester's First Name** Complete the required form field.
Step 3:	**Input Tester's Last Name** Complete the required form field.
Step 4:	**Input Trusted Tester ID** Trusted Testers are encouraged to provide their certification number.
Step 5:	**Input Tester's Email Address**

Step #	Instructional Details
	You have the option to use a government or a private email address.
Step 6:	**Input Testing Scope** This form field is optional. Test scope is only a description or list of what was tested, e.g. list of pages, or what functions, etc. were tested.
Step 7:	**Verify Testing Method and Version** Once the JSON file is load, the testing method and version is read-only.

3.5 Save Template File

Once all required fields are completed, you have the option to save the file with entered data as a custom template for later use or use existing test results by continuing to the Test Results form to enter data and create a report.

Step #	Instructional Details
Step 1: File was previously saved on Thu Jun 04 2020 15:52:50 GMT-0400 (Eastern Daylight Time) Save *Figure 15: Save Button – Test Results Form*	**Save Template and/or Test Results** Upon saving, the file will include the date saved or previously saved date if existing file. Files are located in the system's Downloads folder by default.

Section 4:

Enter Test Results

Tool Tips:

- ✓ Required fields must be completed before saving the form.
- ✓ Each results row has a **1000 character limit** for **Tester's Comments** for failed test conditions. Once you reach the character limit, no more characters can be entered.
- ✓ Each time you save results, a new JSON file is created.
- ✓ Unsaved data will be lost if you refresh your screen or close the form without saving it.
- ✓ Each time files are saved, you have the option to save to computer's Downloads folder or specified location of choice.

4.1 Test Results Form – Add Data
Upload the JSON file **first** to access the test results table.

Test Results Form

Tool Tips:

1. Upload a JSON template file first to access the test results table.

2. If needed, open a copy of the Trusted Tester Test Process.

3. Report will be marked as Draft until results are entered for each test.
4. Trusted Testers should coordinate with their IT Project Manager regarding remediation details. Check user manual section 5.1 for details.

Report will be marked as Draft until results are entered for each test

Test Name	Test ID	Test Condition	Issue Number	Test Result	Browser	Location/Screen	Tester Comments	Sc
Alt-version-conformant	1.A	An alternate version passes all applicable Test Conditions in this test process.	1 [Add Issue]		☐ Change Browser for this test result.			
Alt-version-equivalent	1.B	The accessible version is up to date with the same information and functionality	2 [Add Issue]		☐ Change Browser for this test result.			

Figure 16: Test Results Form

Step #	Instructional Details
Step 1:	**The Test Results Form Displays.** The form is visible only after a **valid** JSON file is loaded.
Step 2:	**Input the Test Results Into the Form.** The form fields correspond to the Test Name, Test ID, and Test Condition and include: • Issue Number • Test Result • Browser • Location/Screen • Tester Comments • Global Issue? • Remediation Details • Date (MM/DD/YYYY) **Note:** The Report will be marked as Draft after save until results are entered for each test. After the first issue is added for a Test ID, the **Add Issue** button appears, allowing you to add a new row for the same issue at the bottom of the page (e.g., Issue #17.1, #17.2, etc.).
Step 3:	**Select Test Result dropdown for Test ID.** The results for the DHS Trusted Tester Section 508 Conformance Test Process can be **Does Not Apply**, **PASS**, **FAIL**, and **NOT TESTED**.
Step 4:	**Select Change browser used checkbox, if applicable.** Once opened, select the browser and version number if the browser used for this test result is different than the one selected in the Test Environment section.
Step 5:	**Add the Location/Screen.** Include all details needed to locate defect on the web page. Examples: 1. [Conforming Reporting Good Examples](#) 2. https://www.dhs.gov/ 3. Lesson 1: Keyboard Access > How to Test > Bullet 1

Step 6:	**Add Tester Comments.**
	The tester comments should be clear and concise.
Step 7:	**Add Screenshot.**
	Select the Browser button to load a screenshot of the defect.
	Note: The Browser Image button is visible **only** after selecting the corresponding test result.
Step 8:	**Select Global Issue? Dropdown Menu.**
	Choose the dropdown menu and select Yes or No to determine if this is a global issue .
Step 9:	**Determine If Remediation Details Are Needed.**
	See Section 5: Remediation Details for more information.
Step 10:	**Save Template and/or Continue to View Report Page.**
	Upon saving, the file will be located in the system's Downloads folder by default.

Section 5:

Remediation Details

Tool Tips:

- ✓ ACMS will auto-generate notification with ticket number regarding request requiring remediation.
- ✓ Report remediation details for all test results that fail.
- ✓ Trusted Testers should coordinate with their IT Project Manager regarding remediation details.

5.1 Add Remediation

Any accessibility issues that are not addressed before production release should be tracked within the test results generated using the ACRT and prioritized within the product backlog.

Step #	Instructional Details
Step 1:	**From Create Report Page Browse to Test Results File** Select the JSON file associated with the desired application test results and load file.
Step 2: ☐ **Show Remediation Detail** *Figure 17: Show Remediation Details Checkbox*	Select the **Show Remediation Detail** Checkbox Determine if remediation details are needed for test results
Step 3:	**Two Columns are Added to the JSON Report, Remediation Details and Date.** • Remediation details should include the process taken to remedy the accessibility issues identified for the test result. • Remediation Date provides the calendar date the accessibility issues were remedied and finalized.
Step 4:	**Navigate to the Remediation Details Column and Select the Add Remediation Details Check Box for Each Failed Test Condition to Document the Planned or Remediated Fix** • The ticket numbers and expected release number should be included in the remediation details.

	• If you are relying upon Commercial off-the-shelf (COTS) products, please coordinate with the commercial vendor and create issue tickets for remediation purposes.
Step 5:	**Indicate the Planned or Fix Release Date in the Remediation Date Column** Provide an estimated or final release date.
Step 6:	**Select "Submit 508 Test Results" on the OAST Homepage in ACMS 2.0** Generate an updated JSON and HTML test report and re-attach the test results to the original ICT Review. **Note:** Refer to ACMS 2.0 instructions on how to upload test results. This option is only available to Trusted Testers with DHS government email accounts.

Section 6:

View Final Report

Tool Tips:

- ✓ Input all required test results to view a final report in HTML format.
- ✓ A draft report in HTML format is generated if not all test results have been entered.
- ✓ Please keep both JSON & HTML files for future reference.
- ✓ Test Results denoted as 'Undefined' are form fields where no selections have been made.
- ✓ View Report page is 'Read-Only'.
- ✓ Final Report not only includes each defect detail, but also the Disability Impact and Other Test Results for Hardware Test and Document Test, as applicable.

6.1 Finalize and View Report

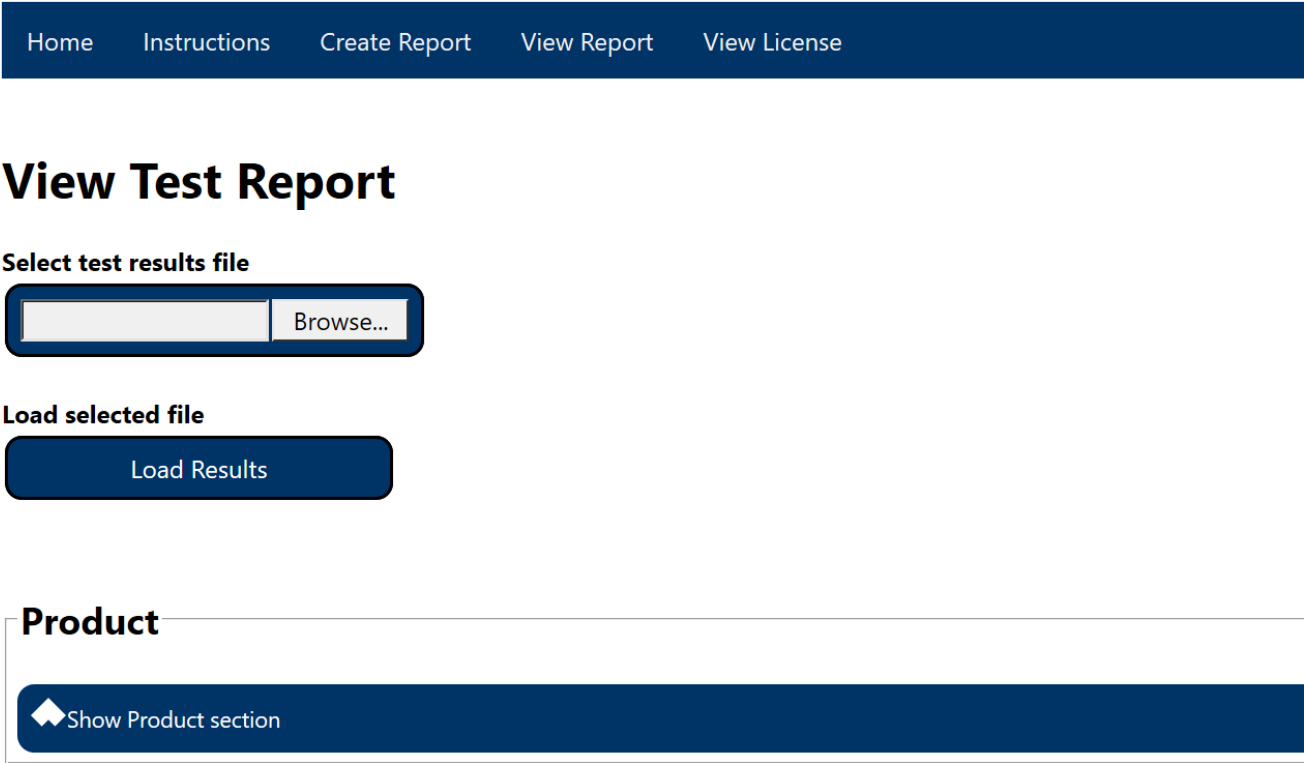Once all test results are confirmed, generate a final application report.

Home	Instructions	Create Report	View Report	View License

View Test Report

Select test results file

	Browse...

Load selected file

Load Results

Product

◆ Show Product section

Figure 18: View Test Report

Step #	Instructional Details
Step 1:	**Select View Report from the ACRT Home Page** View Report page will open.
Step 2:	**Select the Browse Button to Locate Test Results File** Open the JSON file stored on your computer, then load selected file.
Step 3:	**Select the "View All Test Results" Checkbox** The test results will load at the bottom of the page. To hide, unchecked the test results checkbox.
Step 5:	**Select Other Results Section, As Applicable** Expand the other results for hardware and document test results, as applicable.
Step 6:	**Select the "Save as HTML" button to generate a printer-friendly HTML version of the report** The ACRT Test Report is saved in the system's Downloads folder by default.
Step 7:	**Open a Final Version of the ACRT Test Report** Select the "Print this page" button to print the final version of the Test Report or convert the HTML report to PDF, if needed. If you have the option, you may also save the HTML report a PDF file. (See Printer Options for more information.)

Section 7:

References

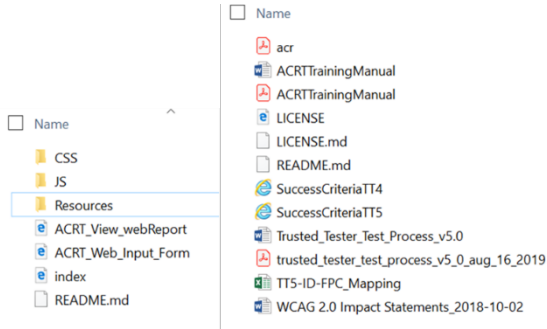## Appendix A – File Types for ACRT Source Files

Figure A. 1: File Types for ACRT

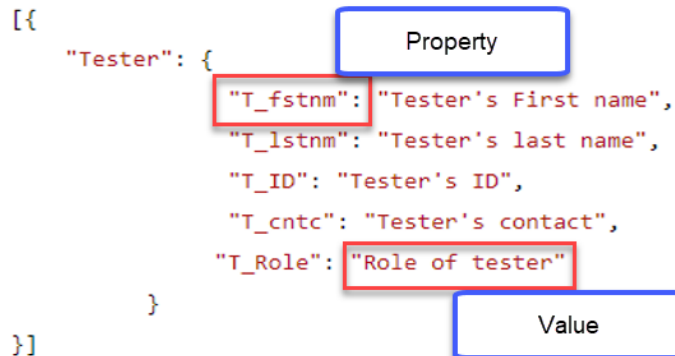| File Name Type	File Purpose
About.html	Describes ACRT overview
ACRTTrainingManual.docx	Detailed instructions on how to use this tool
ACRTTrainingManual.pdf	Detailed instructions on how to use this tool
ACRT_View_webReport.html	Used to view test results
ACRT_Web_Input_Form.html	Used to create test results
CSS	
Help.html	Provides all instructions on how to use ACRT
Index.html	Landing page for this tool
JS	
LICENSE.html	ACRT license in html format
LICENSE.md	ACRT license in text format
README.md	Provides overview on how to use this tool
SuccessCriteriaTT4	JSON file needed for users to enter test results.
SuccessCriteriaTT5	JSON file needed for users to enter test results.
Trusted_Tester_Test_Process_v5.0.docx	Details of Section 508 test process
trusted_tester_test_process_v5_0_aug_16_2019.pdf	Details of Section 508 test process
TT5-ID-FPC_Mapping.xlsx	Disability mapping reference document
WCAG 2.0 Impact Statements.docx	Describes type of disabilities and groups impacted
Acr.pdf	Accessibility Conformance Report

Table A. 2: File Types for ACRT Descriptions

Appendix B – Advanced User Support

Introduction to JSON

Text data can be used to exchange data between browser-based applications. JavaScript Object Notation (JSON) is a standard text-based format representing structured data based on JavaScript object syntax. ACRT uses the JSON file to populate Baseline elements. Although the tool is available to anyone, it is recommended that Trusted Testers ensure test results captured are valid. Users can modify the JSON files to create their own test results template. Most commonly it is used to transmit data in web applications (e.g., sending data from ACRT to display Application Test Results in HTML format on a web page).
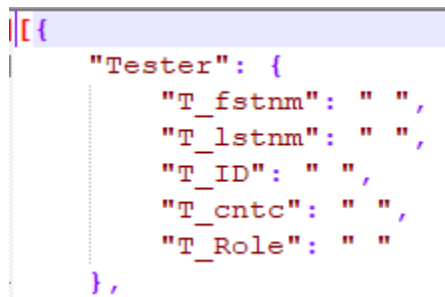
JSON File Structure

Figure B. 1: Sample JSON file with property and value attribute highlighted

Test conditions can be modified in the local JSON file based on different user's needs. Overall, the content in the tool is dynamically generated based on information fed from the JSON file.

How to Manipulate the JSON File

1. Open a 'SuccessCriteria.JSON' file.
2. Go to the section of JSON file you want to modify.

Figure B. 2: Sample of Tester section of JSON file

3. Only update the values (" ") for different properties. **DO NOT** modify the property name.
4. Copy and modify or delete sections as needed.

How to Update Test Conditions

If you follow test processes other than Trusted Tester, you can change test conditions in the 'successcriteria.json' file as needed by updating the values for properties.

```
{
    "CrtID": "2.2.2",
    "CrtIDGrp": "Different",
    "Test": "2 Autoplay/update",
    "TestName": "2.2.2-Blinking-moving-scrolling",
    "TestID": "2.B",
    "TestCondition": "The user can pause, stop, or hide moving, blinking, or scrolling content.",
    "GrpID": "",
    "OptMenu1": "menu2",
    "DisabilityImpact": "Without Vision, With Limited Vision, With Limited Manipulation, With Limited Reach and Strength, With Limited Language, Cognitive, and Learning Abilities "
},
```

REPLACE

Figure B. 3: Sample JSON file highlighting Criteria ID property to replace 2.2.2 test condition value

In the above example, the test condition can be replaced by a test condition or process you are using for the Criteria ID property.

Updating Dropdown Menu Option

Different test conditions have different dropdown menu options. Please use this reference to update "OptMenu1" property accordingly.

menu1: 'Does Not Apply' & 'Not Tested'.

menu2: 'Pass', 'Fail' & 'Does Not Apply'.

menu3: 'Pass' & 'Does Not Apply'.

menu4: 'Does Not Apply'.

menu5: 'Pass' & 'Fail'.