Department of Health & Human Services



Centers for Medicare & Medicaid Services (CMS)

7500 Security Boulevard

Baltimore, Maryland 21244-1850

Office of Information Technology (OIT)

IT Capital Planning Group (ICPG)

Division of Investment Oversight and Governance (DIOG)

Section 508 Test Plan Template

Service Request #:

DATE:

# Purpose

The CMS Section 508 Program will ensure all newly developed or acquired Information Communications Technology (ICT) has been tested and appropriately deemed compliant with Section 508. This CMS Section 508 Test plan template must be completed for any application and/or software that is to undergo CMS Section 508 Validation Testing.

# Complete The Form

Please complete **all fields in this form**. For additional information regarding testing, please refer to Section 2 of this document following the form. It is recommended that this Test Plan is completed by a member of the IT project team that is responsible for developing the technical solution.

**CMS Contracting Officer Representative (COR)/Business Owner/Government Task Leader (GTL):**

| **Name:** |  |
| --- | --- |
| **Email Address:** |  |
| **Phone Number:** |  |

**CMS Component 508 Clearance Officer\*:**

| **Name:** |  |
| --- | --- |
| **Email Address:** |  |
| **Phone Number:** |  |

\*Listing can be found via [Clearance Officer Hub](https://share.cms.gov/Office/OIT/CIOCorner/Section508CO/SitePages/Home.aspx), then select **My Clearance Officer**.

**Contractor/Vendor:**

| **Company Name:** |  |
| --- | --- |
| **Point of Contact Name:** |  |
| **Email Address:** |  |
| **Phone Number:** |  |

**Application Specific Information:**

| **Name of Application/Software:** |  |
| --- | --- |
| **Version:** |  |
| **Brief description of the Application/Software: (not marketing information)** |  |
| **What is the Application URL or is it Client based software (Manual Install):** |  |
| **Number of licenses (if applicable):** |  |
| **Number of Users (approximately using the application):** |  |
| **Type of Software: (i.e. design software, communication software, survey software, etc.)** |  |

| **Has the Application/Software been 508 tested by the CMS Section 508 Validation team within the last 12 months:** | Yes  No |
| --- | --- |
| **If yes, enter the date (MM/DD/YYYY):** |  |
| **What was the score?** |  |

**Type of Testing:**

Select the type of testing being requested. Please note all applications undergoing 508 validation testing will undergo initial CMS functional testing, please refer to Section 2 for further information.  Functionality/Compatibility

Section 508 Validation

☐ Section 508 Remediation

| **What is the current Anticipated Implementation Date:** |  |
| --- | --- |

**Installation Instructions:**

| **For application installs, include any instructions from the vendor/developer. Provide any necessary configuration information required for the application to work.** |  |
| --- | --- |

**Select if instructions are attached separately.**

Please provide the user information required to access the application/software:

**Test** **Account(s) User Information:**

| **Account Username:** | **Account Password:** |
| --- | --- |
|  |  |
|  |  |
|  |  |

**Browser Compatibility**

The CMS *Production* Environment includes Windows 10 with multiple browser options.

Select which browser(s) the application fully supports:

Google Chrome

Mozilla Firefox

Internet Explorer 11

**Test Case Form**

Please complete the Test Case Form (Table 1). Fill in the provided columns of the table for each process to be tested, additional rows can be added as needed.

The test cases should include:

1. An overall business process that illustrates usage of the application.
2. Each step needed to perform functions within the application (most representative of basic user functions).
   1. This can include functions such as accessing the application, creating records, printing reports, assigning tasks to others, etc.
3. List what steps should be taken, what test data is to be used, and what results are expected.

An example test case form is located in Section 2. Please note that CMS’ testing activity is not end-to-end, but merely a validation exercise.

If this is a 508 Remediation Test (Re-test), the test cases should reflect specifically what is to be re-tested based on the defects noted in the 508 Remediation Plan.

**Technical Point of Contact/Developer who can provide guidance, if needed:**

| **Name:** |  |
| --- | --- |
| **Email Address:** |  |
| **Phone Number:** |  |

*Table 1 – Test Case Form*

| Test Case No. | Item/Requirement to be Tested | Procedure Steps | Expected Results  (Pass/Fail Criteria) |
| --- | --- | --- | --- |
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**Test Plan Submission Process and Schedule**

1. Test Plan should be submitted via email to CMS 508 Accessibility Validation Testing [508AccessibilityValidationTesting@cms.hhs.gov](mailto:508AccessibilityValidationTesting@cms.hhs.gov) and/or uploaded to the CMS Connect testing request ticket.
2. **Test Case(s) must be completed and acceptable before the test plan can be approved.**
3. Modifications to submitted/approved test plans must be received no later than **three business days prior to the scheduled 508 tests**. Modifications received later than this timeframe may require the test to be **re-scheduled**.
4. **Before** a testing date can be determined and scheduled**, all testing deliverables (i.e., test plan, Voluntary Product Accessabily Template (VPAT), access to the application) must be approved** to proceed.
5. Ensure that either the **CMS Business Owner/COR/GTL** **and/or 508 Clearance Officer** is present for the scheduled live testing.
6. While the scheduled live test sessions are recorded, development/technical teams are encouraged to **take notes**.
7. The Test Summary Report will be provided no later than **six** business days after testing is completed. Remediation Plans, if applicable, are due back no later than **30** calendar days from receipt of the Test Summary Report or prior to scheduled implementation (whichever occurs first).
8. Vendors/development teams have one year from the test date to remediate all defects found, **however**, remediation is encouraged to occur as soon as possible. When the application is remediated, please reach back out to the CMS 508 test team for re-evaluation.

If you have any questions or concerns related to completing this Test plan template, please contact the CMS Section 508 Clearance Officer or the CMS Section 508 Validation Team via email at [508AccessibilityValidationTesting@cms.hhs.gov](mailto:508AccessibilityValidationTesting@cms.hhs.gov).

**END OF FORM**

# Overview of Testing

## Objectives

* Demonstrate that the installation procedure results in a working system.
* Demonstrate application’s compatibility/usability with CMS’ core software.
* Demonstrate that a user is able to fully function with the application utilizing an assistive technology.
* Validate application is section 508 compliant against Level A and AA of the Web Content Accessibility Guidelines (WCAG) 2.0

## Approach

* Test the basic functions most representative of the application.
* Test compatibility with CMS’ core software.
* Validate section 508 compliance of the application using assistive technology.

## Scope

The testing will cover the following areas:

* Functionality/Compatibility - Testing conducted on the application to verify that products will function as expected on a wide variety of hardware, software, and network configurations. Tester will evaluate if the application is compatible with the computing environment. Compatibility testing may be done for various elements like hardware platform, web browsers, operating systems, network.
* Section 508 Validation - Testing which considers user needs, requirements and business processes, and is conducted to determine whether a system satisfies the acceptance criteria.
* Section 508 Remediation – Testing is conducted to re-determine whether a system satisfies the acceptance criteria where test cases had failed a previous validation test.

## Test Scheduling

The Testing Coordinator is responsible for the scheduling and/or cancellation of tests (live and internal). In the event that a live test is scheduled on the Test Calendar and the 508 Tester, vendor/technical POC, CMS Business Owner/COR/GTL and/or 508 Clearance Officer are unable to keep the appointment; the Testing Coordinator will cancel and/or reschedule the test. The rescheduling of tests is dependent upon previously scheduled tests and/or available Test Lab resources. Dates for testing are first come/first serve and thus are not something that can be requested directly, however, will be accommodated whenever possible.

## Test Environment

Below is the standard system core configuration that is inclusive of what is currently in the CMS environment. CMS conducts independent validation testing using manual and automated tools to assess the Section 508 compliance of applications/software. Manual testing includes visual inspection, as well as the use of screen reading technology. Automation tools used include ANDI, Color Contrast Analyzer, and WAVE.

Please note the following manual testing variables:

* + JAWS for Windows (most current version and build)
  + Windows 10
  + Google Chrome
  + Zoom conferencing solution

Description: **Windows 10 Master Core Software Image**

Hardware: Dell Latitude E7490

Image Build: Microsoft Windows 10 Enterprise Edition

*Table 2 - CMS Core Image Software*

| **Software** | **Versions** |
| --- | --- |
| Windows 10 | 1803 |
| Bitlocker Drive Encryption | 2.0 |
| ActivID ActivClient x64 | 7.1 |
| Adobe Acrobat DC 2017 | 17.011 |
| Aternity Agent | 11.0 |
| Cisco AnyConnect Diagnostics and Reporting Tool | 4.2 |
| Cisco AnyConnect ISE Compliance Module | 3.6 |
| Cisco AnyConnect ISE Posture Module | 4.2 |
| Cisco AnyConnect Secure Mobility Client | 4.2 |
| Cisco AnyConnect Start Before Login Module | 4.2 |
| Cisco WebEx productivity tools | 2.82 |
| Cisco WebEx recording player (Network Recording player) | 39.5 |
| Druva inSync | 6.7 |
| Google Chrome | 88.0 |
| IBM BigFix Client | 9.5 |
| Internet Explorer (as of April 12, 2021 CMS will no longer support) | 11.1246.17134.0 |
| Java 8 Update 271 | 8.0 |
| McAfee Agent | 5.7 |
| McAfee Endpoint Security Firewall | 10.7 |
| McAfee Endpoint Security Platform | 10.7 |
| McAfee Endpoint Security Threat Prevention | 10.7 |
| McAfee Endpoint Security Web Control | 10.7 |
| Microsoft Edge | 89.0 |
| Microsoft ODBC Driver 17 | 17.5 |
| Microsoft OneDrive | 17.3 |
| Microsoft Office Professional 2016 | 16.0 |
| Microsoft Project Professional 2016 | 16.0 |
| Microsoft Silverlight | 5.1 |
| Microsoft Skype for Business 2016 | 16.2 |
| Microsoft Teams | 1.3 |
| Mozilla Firefox | 78.8 |
| Oracle JInitiator | 1.3 |
| VLC media player | 3.0 |
| WebEx Productivity Tools | 2.82 |
| Zoom | 5.4 |
| Zoom Outlook Plugin | 5.4 |

*Table 3—Test Case Form Example*

| Test Case # | Item/Requirement to be Tested | Procedure Steps | Expected Results  (Pass/Fail Criteria) |
| --- | --- | --- | --- |
|  | *Save/Delete Canned Sample Reports* |  |  |
| *1.0* | *Login as User* | *Open a browser to https://.*  *Keystroke navigate to the ‘Username (case-sensitive)’ text box.* | *Sign In page displays*  *Text box is selected, cursor is present.* |
| *1.0.1* |  | *Type in the username – Tester.508* | *Text box contains Tester.508.* |
| *1.0.2* |  | *Keystroke navigate to the ‘Password’ text box.* | *Text box is selected, cursor is present.* |
| *1.0.3* |  | *Type in the password - P@ssw0rd.* | *Text box contains P@ssw0rd.* |
| *1.0.4* |  | *Keystroke navigate to the "Login" button and select it.* | *Consent to warning message pops up.* |
| *1.0.5* |  | *Keystroke navigate to the "Agree" button and select it.* | *The ‘Welcome to the CMS Application!’ page displays.* |
| *2.0* | *Access Sample Report* | *Keystroke navigate to the "Report" tab and select it.* | *A menu dropdown is displayed with three links displayed – Application Status Report, Sample Report, and Archive Report.* |
| *2.0.1* |  | *Keystroke navigate (tab) to the "Sample Report" menu item and select it.* | *The Sample Report page is displayed.* |
| *3.0* | *Save the Canned Sample Report* | *Keystroke navigate to and select ‘Filter’ button* | *Sample Report data table displayed, ‘Save’ button becomes selectable.* |
| *3.0.1* |  | *Keystroke navigate to and select ‘Save Report’ button.* | *Report Name window pops up for user to enter report name.* |
| *3.0.2* |  | *Navigate to the text box.* | *Text box is selected, cursor is present.* |
| *3.0.3* |  | *Type in the Report name – ‘Test Report’* | *Text box contains ‘Test Report’* |
| *3.0.4* |  | *Keystroke navigate t o and select ‘Save Report’ button under Report Name pop up window.* | *Confirmation message displays – ‘Your save was successful’* |
| *4.0* | *Delete the Canned Sample Report* | *Navigate to ‘Test Report’ link* | *Test Report link selected* |
| *4.0.1* |  | *Navigate (Tab) to ‘X link’ next to ‘Test Report’ link to remove the ‘Test Report’.* | *‘X link’ is highlighted and announced.* |
| *4.0.2* |  | *Select the ‘X link’* | *Popup window – Do you want to delete the report displays.* |
| *4.0.3* |  | *Navigate to and select ‘Delete’ button* | *Confirmation message displays – ‘Report deleted successfully’* |
|  | *Sample Report – PIV Status Updates* |  |  |
| *5.0* | *Set PIV Status filter* | *Navigate to and select ‘Escort Only’ checkbox* | *‘Escort Only’ checkbox is selected.* |
| *5.0.1* |  | *Navigate to and select ‘PIV’ checkbox.* | *‘PIV’ checkbox is selected* |
| *6.0* | *Add PIV Status column in the data table* | *Keystroke navigate to the Select Columns (0) button* | *Button is highlighted.* |
| *6.0.1* |  | *Click the Select Columns (0) button* | *The Select Columns UI (modal) opens.* |
| *6.0.2* |  | *Keystroke navigate to the ‘Access’ section header* | *The link “Access” is selected* |
| *6.0.3* |  | *Expand the section by hitting enter* | *The section is expanded.* |
| *6.0.4* |  | *Keystroke navigate to the ‘PIV Status’ check box* | *The box is highlighted and unselected* |
| *6.0.5* |  | *Check the box – ‘PIV Status’ by pressing space* | *The checkbox - ‘PIV Status’ is selected.* |
| *6.0.6* |  | *Keystroke navigate to the Close button at the bottom of the page* | *The button is selected.* |
| *6.0.7* |  | *Select the Close button* | *The UI closes and the Ad Hoc search page is displayed. The ‘Select Columns’ button displays the number (1).* |
| *7.0* | *Logoff* | *Navigate to and select ‘Logout’ button* | *User Tester.508 is logged out.* |