



CSU.1.0a – Validate all links (Site Quality)

Checkpoint Update – Explained

Overview

The custom CSU ATI Accessibility Requirements checkpoint, CSU.1.0, verifies if hyperlinks on a page load correctly. If not, then these are reported as errors in the scan results.

Requests have been submitted from various campuses to allow for this checkpoint to accommodate logging different results for specific errors. This document outlines how the original CSU.1.0 checkpoint evaluates these links and then outlines how the updated CSU.1.0a checkpoint evaluates these links.

CSU.1.0 Checkpoint Pre-Modification

The original CSU.1.0 checkpoint logic verifies if the hyperlink loads successfully. If not it would then check to see if the URL was part of the Google Analytics script used on many of the CSU web sites and then mark this as a pass. Next, any remaining links that fail to load would be marked as a failure along with the error code returned by the web server. If no links were found on the page N/A would be entered into the scan results for that page.

Groups	Checkpoints	Checkpoint: Custom CSU.1.0	
<p>Save Save as new Cancel</p>			
Module:	Number:	Priority:	Short Description:
Custom	CSU.1.0	1	Validate all links (Site quality)
Url for further information:		Long Description:	
http://www.w3.org/QA/Tools/		Check anchors (hyperlinks and bookmarks) in web sites to find broken links. Checkpoint filters out the Google Analytics script. Additional resource: W3C Evaluation Tools	
Rule:			
For each link			
If link is valid Then			
Mark 'Passed', with text No broken links found			
Else			
If URL equals any of https://ssl/,http://www/ (<input type="checkbox"/> case sensitive) Then			
Mark 'Passed', with text Google Analytic Script Var ignored.			
Else			
Mark 'Failed', with text One or more broken links found: %error%			
Mark 'N/A', with text No links found			

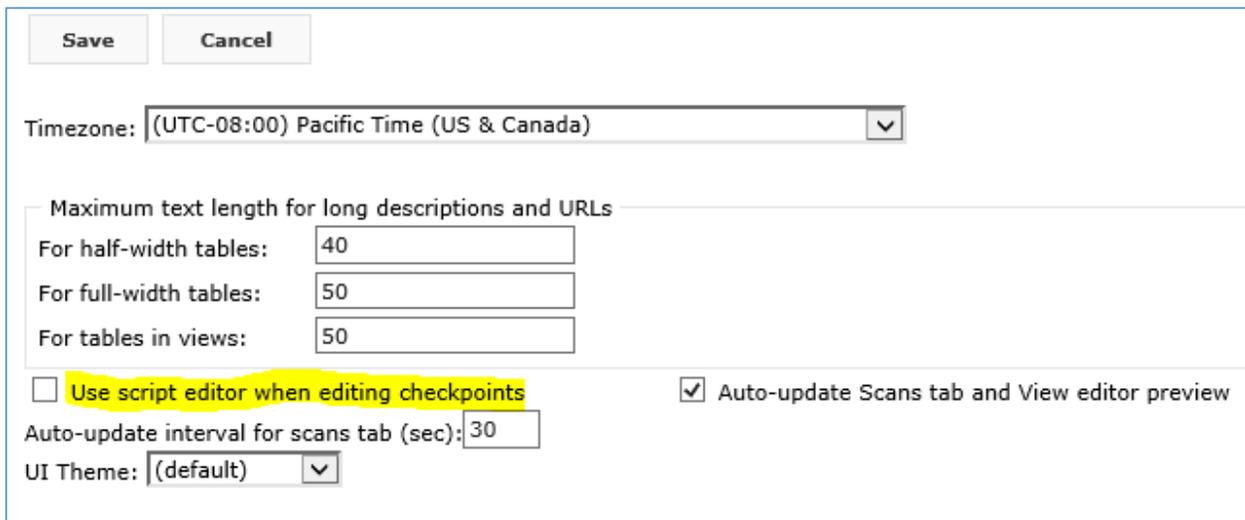
CSU.1.0a Checkpoint Post-Modification

To accommodate the ability to specify individual scan results based on the error returned it is necessary to update the existing CSU.1.0 checkpoint. In order to reflect that the checkpoint logic now deviates from that of the out of the box checkpoint in Compliance Sheriff this checkpoint has been renamed to CSU.1.0a.

Web servers can return any number of custom errors messages and because of this it is not possible to catch every error that might be returned from every web server. To provide a checkpoint that will report on the majority of known errors returned from CSU web servers the updated checkpoint logic looks for hyperlink errors that have been documented within previous CSU scans. All other error messages will be logged as “Visual” in the scan results. Each CSU campus has the ability to update/modify this checkpoint to add/remove any error messages as they deem appropriate.

To have the CSU.1.0a checkpoint flag individual errors with different results it is necessary to use the “IfAttributeValue Contains” command within the checkpoint. This command is not available via the default simplified edit view for checkpoints.

To view or modify the checkpoint logic for the CSU.1.0a checkpoint the User Preferences must be changed to use the checkpoint Script Editor view. This is done per user via the ‘Settings’ tab, ‘User preferences’ link. The user would then enable the Script Editor by checking the ‘Use script editor when editing checkpoints’ checkbox. It is not recommend that this advanced script editor be used unless the user is knowledgeable with scripting languages.



The screenshot shows a 'User Preferences' dialog box with the following elements:

- Buttons: Save, Cancel
- Timezone: (UTC-08:00) Pacific Time (US & Canada)
- Section: Maximum text length for long descriptions and URLs
 - For half-width tables: 40
 - For full-width tables: 50
 - For tables in views: 50
- Checkboxes:
 - Use script editor when editing checkpoints (highlighted in yellow)
 - Auto-update Scans tab and View editor preview
- Auto-update interval for scans tab (sec): 30
- UI Theme: (default)

Note: If a user chooses to access the CSU.1.0a checkpoint without the script editor enabled the checkpoint logic will not be displayed properly and a cryptic warning dialog message of “A00110” will be displayed when the checkpoint is opened in edit mode.

Module: Custom Number: CSU.1.0a Priority: 1 Short Description: Valid

Url for further information: <http://www.w3.org/QA/Tools/>

Rule:

```

For each link
  If link is valid Then
    Mark 'Passed', with text No broken links found
  Else
    If URL equals any of https://ssl/,http://www/ (  case sensitive) Then
      Mark 'Passed', with text Google Analytic Script Var ignored.
    Else
      Mark 'Passed', with text (404)
  Mark 'Failed', with text
  
```

Message from webp...

 A00110

OK

Once the user has enabled the script editor the CSU.1.0a checkpoint rule can be viewed and updated as needed.

Module: Custom Number: CSU.1.0a Priority: 1 Short Description: Validate all links (Site quality)

Url for further information: <http://www.w3.org/QA/Tools/>

Long Description: Check anchors (hyperlinks and bookmarks) in web sites to find broken links. Checkpoint filters out the Google Analytics script. Additional resources: 1. W3C Evaluation Tools 2. Web Accessibility Criteria - Broken Links

Rule:

```

ForEachLink -
  IfLinkValid
    Pass No broken links found
  else
    IfURL EqualsAnyOf https://ssl/,http://www/
      Pass Google Analytic Script Var ignored.
    else
      IfAttributeValue Contains (404)
        Fail %error%
      else
        IfAttributeValue Contains (B01)
          Fail %error%
        else
          IfAttributeValue Contains (410)
            Fail %error%
          else
            IfAttributeValue Contains (403)
              Warn %error%
            else
              IfAttributeValue Contains (401)
                Warn %error%
              else
                IfAttributeValue Contains (E01)
                  Fail %error%
                else
                  IfAttributeValue Contains (E02)
                    Fail %error%
                  else
                    IfAttributeValue Contains (C15)
                      Fail %error%
                    else
                      IfAttributeValue Contains (E04)
                        Warn %error%
                      else
                        Visual %error%
  NA No links found
  
```

Following is the updated script for the CSU.1.0a checkpoint:

```

ForEachLink -
  IfLinkValid
    Pass No broken links found
  else
    IfURL EqualsAnyOf https://ssl/,http://www/
      Pass Google Analytic Script Var ignored.
    else
      IfAttributeValue Contains (404)
        Fail %error%
      else
        IfAttributeValue Contains (B01)
          Fail %error%
        else
          IfAttributeValue Contains (410)
            Fail %error%
          else
            IfAttributeValue Contains (403)
              Warn %error%
            else
              IfAttributeValue Contains (401)
                Warn %error%
              else
                IfAttributeValue Contains (E01)
                  Fail %error%
                else
                  IfAttributeValue Contains (E02)
                    Fail %error%
                  else
                    IfAttributeValue Contains (C15)
                      Fail %error%
                    else
                      IfAttributeValue Contains (E04)
                        Warn %error%
                      else
                        Visual %error%
  NA No links found

```

The CSU.1.0a checkpoint is looking for the following error codes and marking the error as indicated:

1. (404) Not Found – mark as Fail.
2. (B01) Bookmark not found – mark as Fail.
3. (410) Gone (the folder path does not exists) – mark as Fail.
4. (403) Forbidden – mark as Warn.
5. (401) Unauthorized –mark as Warn.
6. (E01) The remote name could not be resolved – mark as Fail.
7. (E02) Unable to connect to the remote server – mark as Fail.
8. (C15) Certificate name mismatch – mark as Fail.
9. (E04) An unexpected error occurred on a send – mark as Warn.
10. %error% (Catch and report all other errors) – mark as Visual.

As mentioned previously this checkpoint is design so CSU campuses can modify the checkpoint to remove/add errors of interest. Should your campus choose to modify this checkpoint further please share your modifications with the CSUN ATI group so the CSU ATI Accessibility Requirements can be updated in order for all campuses to benefit.