

Region of Peel CADD Standards Checker

Ezekiel Inocencio

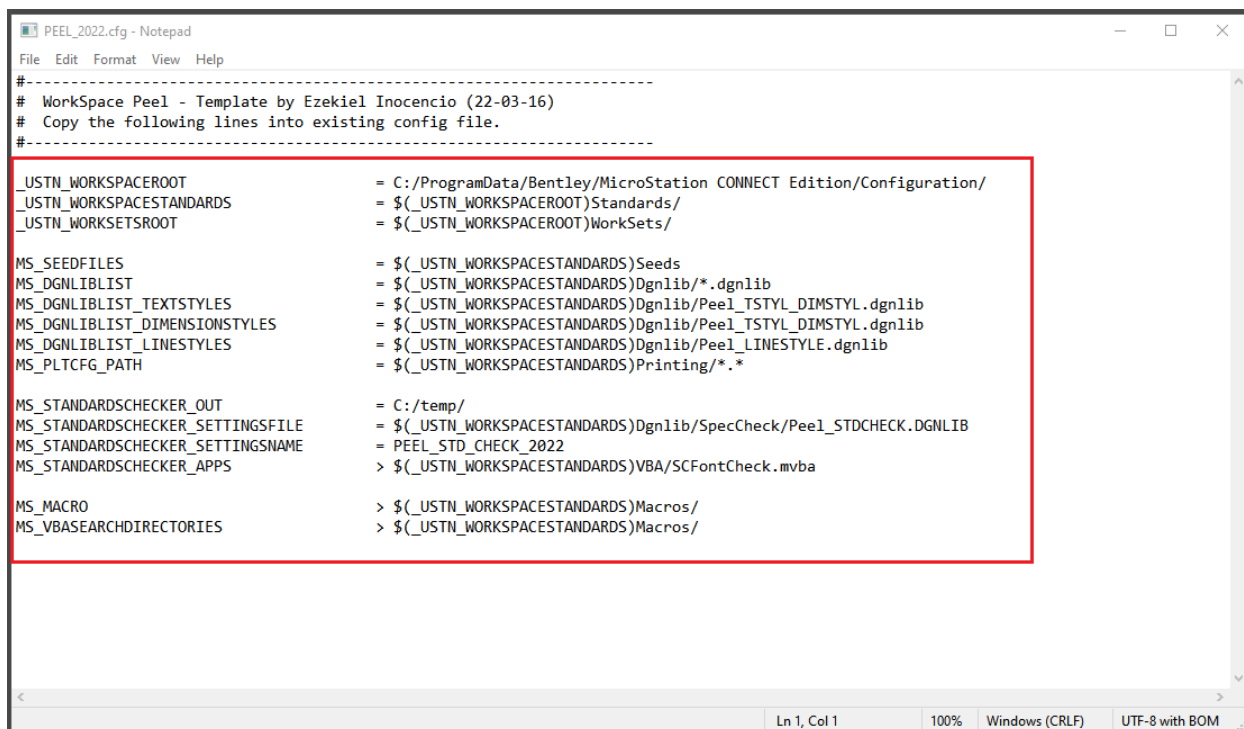
March 2022 Release

Peel Standards Checker Documentation

Updating the Workspace Configuration File

In order for the new Peel Standards Checker to work, the new standard drawing libraries (.dgnlib) need to be copied into the appropriate folder for DGNLIBS. The Workspace configuration file also needs to be updated to read the new standard libraries and the Peel_STDCheck.dgnlib file.

1. Extract the zipped file Peel_2022.zip
2. Copy the contents of "Peel_2022" folder into the following directory on your computer:
<C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration>
3. Check that the new ".dgnlib" files to the DGNLIB standards folder. This will include all drawing level libraries, text styles, dimension style, and linestyle libraries as well as the standards checker library.
<C:\ProgramData\Bentley\MicroStation CONNECT Edition\Configuration\Standards\Dgnlib>
4. For existing workspaces: Open the existing Workspace Configuration File and copy the following lines as indicated here ([Peel_2022.cfg](#)). This will ensure that the Workspace is pointing to the right .dgnlibs and the new standards checker.



```
PEEL_2022.cfg - Notepad
File Edit Format View Help
#-----
# Workspace Peel - Template by Ezekiel Inocencio (22-03-16)
# Copy the following lines into existing config file.
#-----
_USTN_WORKSPACEROOT           = C:/ProgramData/Bentley/MicroStation CONNECT Edition/Configuration/
_USTN_WORKSPACESTANDARDS      = ${_USTN_WORKSPACEROOT}Standards/
_USTN_WORKSETSR00T            = ${_USTN_WORKSPACEROOT}WorkSets/

MS_SEEDFILES                  = ${_USTN_WORKSPACESTANDARDS}Seeds
MS_DGNLIBLIST                 = ${_USTN_WORKSPACESTANDARDS}Dgnlib/*.dgnlib
MS_DGNLIBLIST_TEXTSTYLES      = ${_USTN_WORKSPACESTANDARDS}Dgnlib/Peel_TSTYL_DIMSTYL.dgnlib
MS_DGNLIBLIST_DIMENSIONSTYLES = ${_USTN_WORKSPACESTANDARDS}Dgnlib/Peel_TSTYL_DIMSTYL.dgnlib
MS_DGNLIBLIST_LINESTYLES      = ${_USTN_WORKSPACESTANDARDS}Dgnlib/Peel_LINESTYLE.dgnlib
MS_PLTCFG_PATH                = ${_USTN_WORKSPACESTANDARDS}Printing/*.*

MS_STANDARDSCHECKER_OUT       = C:/temp/
MS_STANDARDSCHECKER_SETTINGSFILE = ${_USTN_WORKSPACESTANDARDS}Dgnlib/SpecCheck/Peel_STDCheck.DGNLIB
MS_STANDARDSCHECKER_SETTINGSNAME = PEEL_STD_CHECK_2022
MS_STANDARDSCHECKER_APPS      > ${_USTN_WORKSPACESTANDARDS}VBA/SCFontCheck.mvba

MS_MACRO                      > ${_USTN_WORKSPACESTANDARDS}Macros/
MS_VBASEARCHDIRECTORIES       > ${_USTN_WORKSPACESTANDARDS}Macros/
```

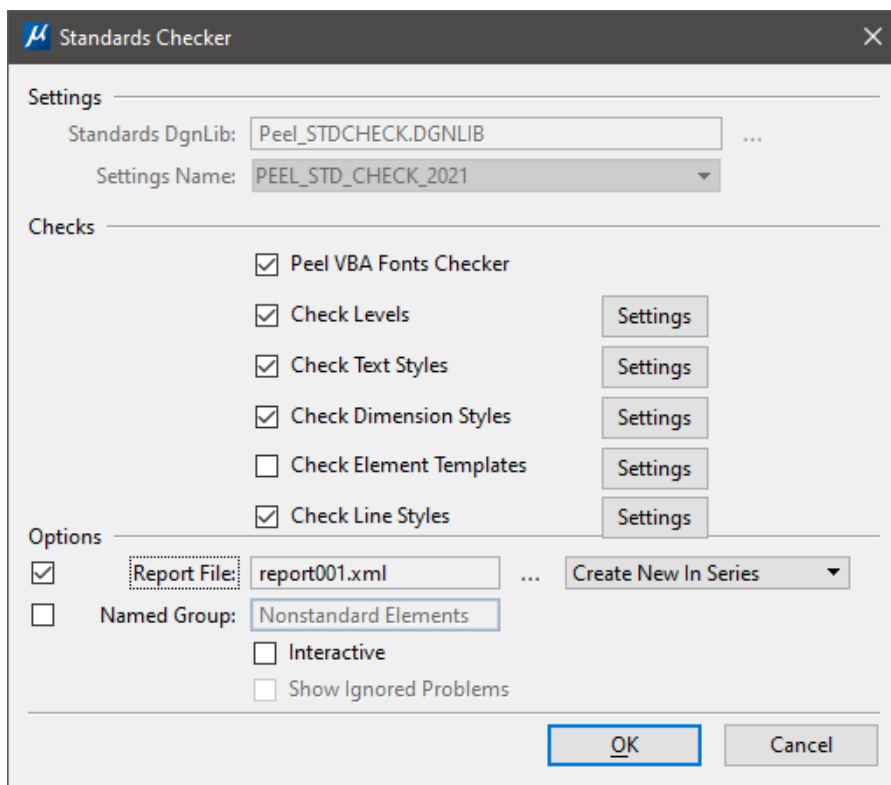
5. Save and close the updated .cfg file.

Once the previous steps have been completed, Microstation is now set to examine individual CADD files with the new level, text and dimension standards using the built-in standards checker. The following sections will outline how to check both individual and multiple (batch) drawings.

Individual Drawings

The built-in standards checker from Microstation can be used for quick checks on individual drawing files. Note that Microstation's built-in checker does not check reference files and only checks elements that are live in the active drawing. If you wish to check reference files, scans must be run specifically for them either individually or as a batch (see next section).

1. Open the Batch Process Tool. Click *Analyze>Standards Checker*



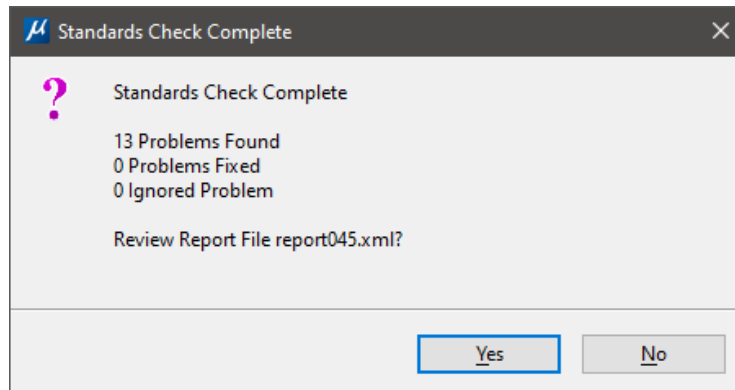
Note that the *Standards Dgnlib* (Peel_STDCHECK.DGNLIB) is already preselected and the *Settings Name* is already in place (PEEL_STD_CHECK_2021). This will appear if the Workspace configuration file was updated correctly.

2. Select what you would like checked (Fonts, Levels, Text Styles, Dimension Styles, etc.) You can also toggle the Report File and Interactive options.
3. Click OK.

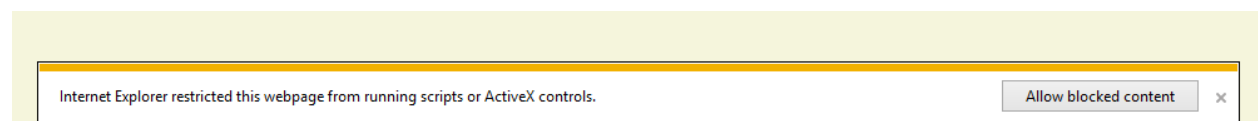
The standards checker will run and check the file against the standard libraries. Individual errors can be fixed in the interactive display or a summary of errors will be presented in the report file.

Report File

The following dialog box will appear indicating the check is complete. Click Yes.



Internet Explorer will open and will display the generated report .xml file. An alert will be prompted at the bottom of the page indicating that certain scripts or ActiveX controls are being blocked. Click "Allow blocked content" to continue.



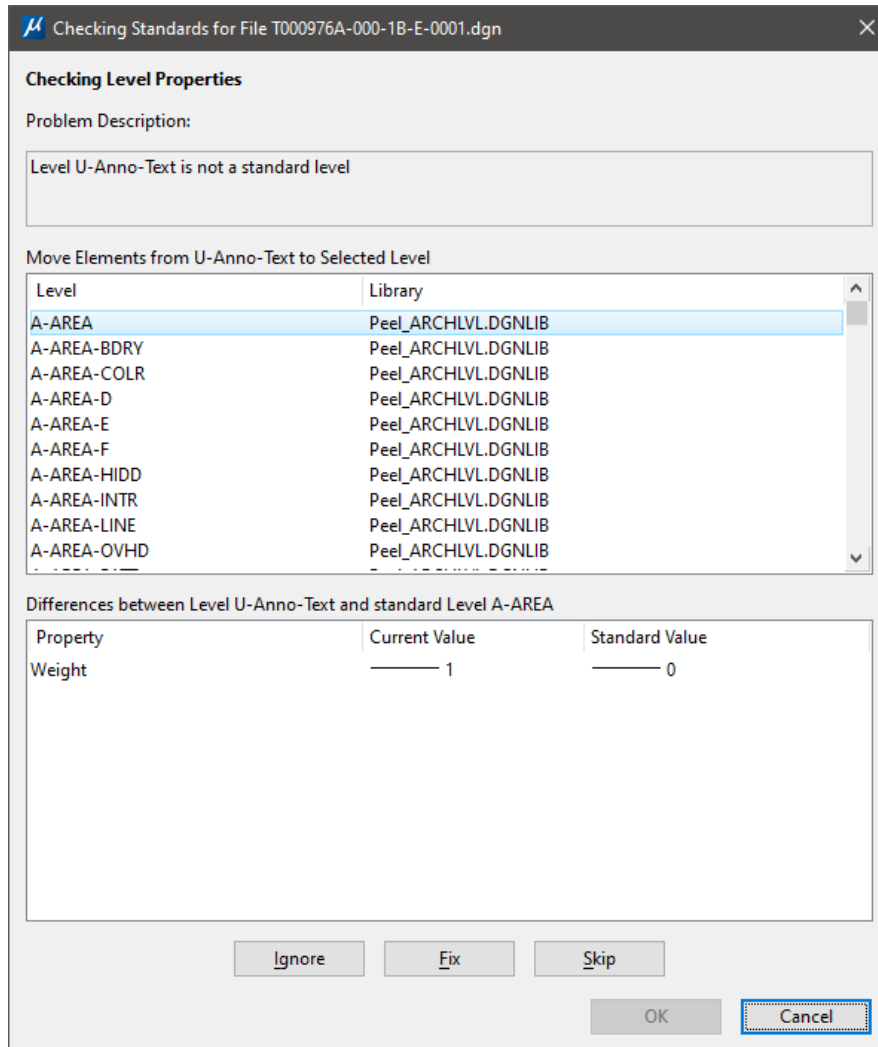
The generated report file will list all non-compliance with the standards. The file will resemble the following:

#	Model	Standard	Property	Expected	Actual	Description
1	Default	Level	U-Anno-Text			Level name does not match any standard level
2	Default	Level	8			Level name does not match any standard level
3	Default	Level	Hydro			Level name does not match any standard level
4	Default	Level	Text			Properties do not match
5	Default	Level	Default			Properties do not match
			Color	38	38	
			Color	0	2	
			Weight	0	2	
6	Default	Level	SYMBOL			Level name does not match any standard level
7	Default	Text Style	Proposed			Text Style name does not match any standard Text Style
8	Default	Text Style	Style-WORKING			Text Style name does not match any standard Text Style
9	Default	Text Style	PEEL-4.0			Properties do not match
			Justification	Left Center	Left Top	
			Node Justification	Left Center	Left Top	
			Color	1	0	
10	Default	Text Style	PEEL-3.0			Properties do not match
			Color Value	0	4	
11	Default	Text Style	PEEL-5.0			Properties do not match
			Color Value	0	4	

Notice how each non-compliance is listed along with the non-standard property, the expected value of the listed property, the actual value of what's currently in the drawing and a description of the CADD issue. From here, CADD staff can begin rectifying the issues in Microstation.

Interactive Display

If the interactive option was selected, the following dialog will appear as the standards checker is performing the check. This allows the user to fix or skip issues as they are detected.



The dialog box is titled "Checking Standards for File T000976A-000-1B-E-0001.dgn". It contains the following sections:

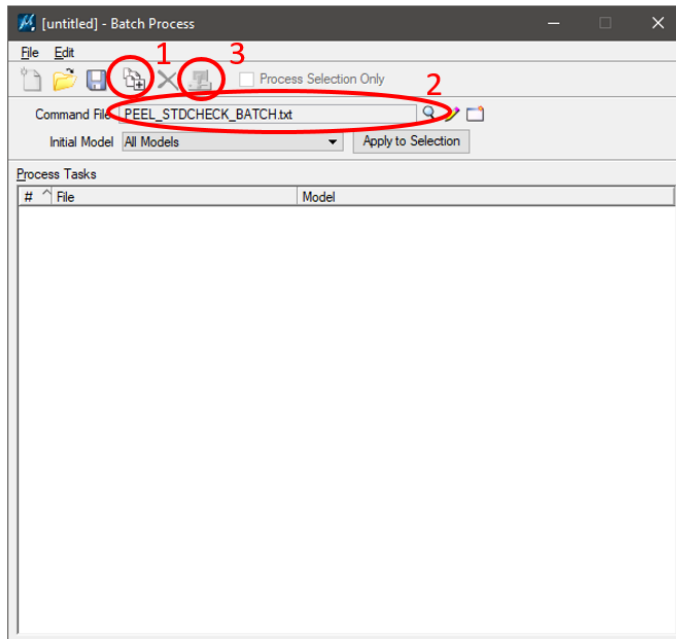
- Checking Level Properties**
 - Problem Description:** A text box containing "Level U-Anno-Text is not a standard level".
- Move Elements from U-Anno-Text to Selected Level**
 - A table with two columns: "Level" and "Library".
 - The "Level" column lists: A-AREA, A-AREA-BDRY, A-AREA-COLR, A-AREA-D, A-AREA-E, A-AREA-F, A-AREA-HIDD, A-AREA-INTR, A-AREA-LINE, and A-AREA-OVHD.
 - The "Library" column lists: Peel_ARCHLVL.DGNLIB for all levels.
 - The "A-AREA" row is highlighted.
- Differences between Level U-Anno-Text and standard Level A-AREA**
 - A table with three columns: "Property", "Current Value", and "Standard Value".
 - The "Property" column lists: Weight.
 - The "Current Value" column shows: 1.
 - The "Standard Value" column shows: 0.
- Buttons:** Ignore, Fix, Skip, OK, and Cancel.

The dialog will give the option for immediate fixes such as remapping elements from non-standard to standard levels, delete non-compliant text or dimension styles or remapping to standard linestyles.

Multiple Drawings – Batch Process

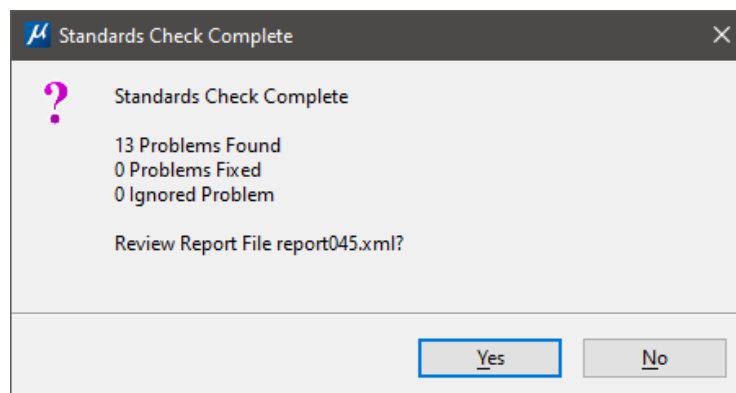
This option allows the checker to be run across multiple drawing files. You will need the batch PEEL_STDCHECK_BATCH.txt file to run the standards checker on the batch process utility.

1. Open the Batch Process Tool. Click *Utilities>Batch Process*
2. Use Batch processor to begin changing drawings according to Region of Peel Standards.



1. Select all dgn files for batch process.
2. Specify the batch .txt file as shown.
3. Process.

The following dialog box will appear indicating the check is complete. Click Yes to open the report. Refer to the Report File section for further detail.



Required Files:

DGNLIBS – the standards checker will compare the drawings across these standard drawing libraries. Any attribute or element that does not match the standard will be flagged. This includes text and dimension elements. The .dgnlibs will also include the standards check drawing library which contains preset settings for the standards check.

Workspace Configuration File (.cfg) – This Workspace configuration file needs to be configured to utilize the specific standards checker drawing library. This will allow access across all Worksets under that specific Workspace configuration.

Batch Process Command File – This command file will allow the Standards Checker to be run across multiple files. Must be specified and selected in the Batch Process utility.