MicroStation – Updating Data to Current Standards
Expanded Levels Resource Environment

Overview

As the WSDOT CAE environment is refined and optimized, changes to the resources may result in renamed levels or changes to level attributes. When a level name is changed, all the data that is on the level with the old name needs to be moved to the corresponding level with the new name. Likewise when there are cells on the old levels, they need to be replaced with cells that have the same name as the new level.

As the entire CAE environment is based on a consistent element scheme, it is important to ensure that the current standards are met in all disciplines in order to provide an efficient, consistent, and useable product.

This process consists of basically two steps: 1) update the level list and move data to current levels; and 2) synchronize the level attributes with current standards.

Afterwards, a review of the data to verify that the results are consistent and accurate is recommended.

This process <u>does</u> <u>not</u> convert 63 Level data to the Expanded Level environment.

WARNING: MicroStation **Level Overrides** will be removed during this process if not specifically addressed – see the Known Potential Issues section below.

Workflow

To ensure that MicroStation data is synchronized with current WSDOT CAE standards, the following basic steps need to be considered.

- Project data backup
- Updating WSDOT levels
- Synchronizing **Level Manager**
- Known potential issues to watch for

Back up Project Data

It is always recommended to backup project files prior to effecting global changes that may impact production data.

This process only impacts MicroStation related files, so it may be beneficial to backup only the folders that contain your MicroStation files. For WSDOT standard projects, this would be the *Projname\CAD* folder.

Please note that this may be a large amount of data. After the process has been completed and the data reviewed for correctness, the backup should be removed to minimize confusion and free up drive space.

Updating WSDOT Levels

This step compares previous WSDOT standard levels and moves data to the current applicable levels.

1. In the MicroStation **WSDOT Items** toolbar, open the **WSDOT Toolbox**.
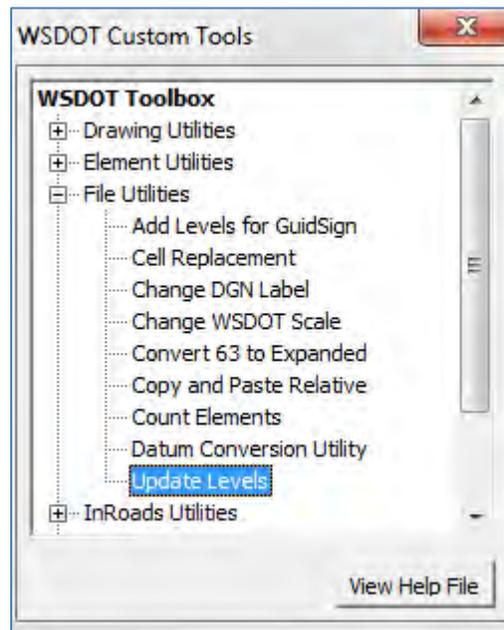
2. Expand the *File Utilities* category.

3. Double-click on **Update Levels**.

4. Click on **Test Levels**.

   If the file is out of date, a report will display indicating the number of elements on non-current levels.

   If the file is current, the **Levels Currently Synched** message will display in the dialog.

5. Click on **Synch Levels**.

   The utility will do the following:

   • Remove and replace outdated cells

   • Move elements from the previous standard level to their current standard level

   • Delete the previous standard levels from the file

   • Generate a report that summarizes the changes

6. Click on **View Report** to see the results.

Synchronizing Level Manager with the WSDOT DGNLIB

Now that the DGN file contains only current standard levels, the attributes of those levels need to be updated.

With DGN files using level overrides, see the **Known Potential Issues – Level Overrides** section of this document before considering this process.

1. In MicroStation, select the *Settings > Levels > Manager* command.

2. Review the level list for levels preceded by an asterisk (*****).

    This indicates that the levels in the DGN file do not comply with the WSDOT DGN Library (DGNLIB) that contains all current standard levels and their attributes.

3. Right-click on any level and chose **Select All**.

4. Right-click again in the level list and chose **Update Levels**.

    The level list in the DGN has been synchronized with the current WSDOT DGNLIB.

Known Potential Issues

Some of the following issues need to be considered with each update. If the update is initiated by a WSDOT CAE resource update, review the details of the update to see if the changes will impact these types of data.

Level Overrides

When synching the level manager, overrides that you have previously set will be cleared. In cases where only simple overrides are in place (few levels set or all levels set the same) it is best to update normally and then to set the overrides again. With a complex system of overrides, resetting the overrides may be impractical. In this case, follow the process outlined below:

Enter the following key-in into your key-in window:

```
dgnlib update levels bylevelsymbology
```

This key-in command synchronizes the level color, style, and weight attributes with the WSDOT DGNLIB. It only affects the ByLevel attributes, not the overrides.

Nᴏᴛᴇ: Levels with overrides are still preceded by an asterisk (*****), as they do not fully comply with the WSDOT DGN Library (DGNLIB).

Manually Scaled Cells and Linestyles

Any cell or linestyle that has been scaled manually for visual 'correctness' will be replaced and may be re-scaled according to the standard resource.

Some cells may have modified dimensions in the current standards. If a cell was placed at a manual scale, the new cell will remain placed at the set scale. Use the *Element Utilities > Global Cell Scale* utility in the **WSDOT Toolbox** to rescale current cells.

Linestyles will be moved to the correct level and ByLevel attributes will be applied. Manually scaled linestyles should be revised to standards by selecting all elements and using the key-in command *Change Linestyle Scale xxx*, where *xxx* is the correct drawing scale.

If this does not provide the correct size for printing, please DO NOT rescale them manually. Contact CAE Support to allow them to address the issue.

Cells with ?? Place Holders and Data Fields

Some cells include question marks ("?") or data fields for text placement. These cells will not be included in the update process. Modifying regardless of the **Text Editor** option used for modifying text within a cell, these cells should be reviewed.

Dropped Cells

Dropped elements will not be recognized as cells, so the individual elements will be moved to the correct level and remain dropped.

Text

Other than level assignment, text attributes are not affected by this process.

For questions or comments on this tech note, contact your regional CAE Support Coordinator or the WSDOT CAE Help Desk at (360) 709-**8013**.