Remapping Files

When saving a file as a different name or format in MicroStation, there is an option to remapping element and text attributes such as level names, text size, etc. In the file 'Save As' dialog box, go to the 'Save as type' drop down menu to choose the desired file format to be converted to:

File name:	drawing.dwg
Save as type:	Autodesk(R) DWG Files (*.dwg)
	MicroStation V8 DGN Files (*.dgn) MicroStation V7 DGN Files (*.dgn)
	Autodesk(R) DWG Files (*.dwg)
	Autodesk(R) DXF Files (*.dxf)

Select 'Options'.

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Save as type: Autodesk(R) DWG Files (*.dwg)		~
Directory 🔻		
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Remapping templates to remap levels, attributes, and text styles available here: <u>https://pw.lacounty.gov/nas/gis/cad/carlson/Survey_DWG-to-DGN.zip</u> https://pw.lacounty.gov/nas/gis/cad/data/DGN-to-DWG-Edison.zip

Templates available at time of this manual update are shown below:

- DWG-to-DGN-Survey.csv This is used for converting DWG files created from the Carlson Survey software into a DGN format with the standard MicroStation levels used at Public Works.
- DGN-to-DWG-Edison.csv This is used by Waterworks when saving a DGN file to DWG format and remapping Public Works levels to Southern California Edison levels.

Example 1: Remapping Levels from DWG to DGN (Survey Projects)

In this example, we will work with a DWG file for a typical survey job created from Carlson survey software. In order to use this file for road and drainage design, some levels will need to be remapped from AutoCAD to MicroStation format to match our CADD standards. You will use the same remapping file used by survey personnel.

- 1. Open the file **.dwg** file containing the survey in MicroStation.
- 2. To remap levels and save a DWG survey file as a DGN.

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File name: 16_Remap_Survey_Levels Save as type: MicroStation V8 DGN File Directory	-)	~
A Hide Folders	2	Options Save C	Cancel

3. Select CSV remapping file named Survey_DWG-to-DGN.csv

DWG-to-DGN-Survey.csv

If the file is not available above, it is also located in the workspaces training folder: C:\ProgramData\Bentley\LACOPW_CONNECT\Configuration\WorkSpaces\Traini ng\WorkSets\MicroStation Fundamentals\dgn\Data

Complete workspace above downloadable here if desired: <u>https://pw.lacounty.gov/nas/gis/cad/standards/LACOPW_CONNECT.zip</u> How to setup workspace (optional):

https://pw.lacounty.gov/nas/gis/cad/standards/CONNECT_Workspace_Setup_Public.pdf

4. Use these options.



- 5. Save file and name it **Survey_Draft.dgn**.
- 6. Here is a comparison of before and after performing the remapping process: Levels Before:

Name	Description	6	12
Drain_CatchBasin_Ex	Drainage - Existing Catch Basin	3	CONTINUOUS
Drain_FL_Ex	Drainage - Existing Concrete Flowline	4	CONTINUOUS
Drain_WeepHoles_Ex	Drainage - Existing Weep Holes	1	CONTINUOUS
Fenc_CLF_Ex	Fences - Existing Chain Link Fence	6	CONTINUOUS
PNTDESC		3	CONTINUOUS
PNTELEV		5	CONTINUOUS
PNTNO		7	CONTINUOUS
Road_EG_Ex	Road - Existing Edge of Gutter	2	CONTINUOUS
Road_FL_Ex	Road - Existing Asphalt Flowline	5	CONTINUOUS
Road_Pvmt_AC_Ex	Road - Existing Asphalt-Concrete Pav	5	CONTINUOUS
Road_Pvmt_PCC_Ex	Road - Existing Portland Cement Con	3	CONTINUOUS
Road_TC_Ex	Road - Existing Top of Curb	6	CONTINUOUS
Road_Walk_Back_Ex	Road - Existing Back of Walkway	1	CONTINUOUS
Surv_Control_Ex	Survey - Control Point	1	CONTINUOUS
Surv_Topo_Misc_Feature_Ex	Survey - Existing Topographic Miscell	7	CONTINUOUS
Terr_Dirt_Ex	Terrain - Existing Dirt Area	6	CONTINUOUS
Traf_Pole_Concrete_Ex	Traffic - Existing Concrete Street Lig	6	CONTINUOUS
Util_Manhole_Ex	Utility - Existing Manhole	4	CONTINUOUS
Util_Pipe_STP_Ex	Utility - Existing Steel Pipe	1	CONTINUOUS
Util_PullBox_Ex	Utility - Existing Pull Box	6	CONTINUOUS
Wall_Retaining_Conc_Ex	Walls - Existing Concrete Retaining Wal	5	CONTINUOUS

Levels After:

Name	Description	<u>i</u>	-Q
Drain_CatchBasin_Ex	Drainage - Existing Catch Basin	3	CONTINUOUS
Drain_FL_Ex	Drainage - Existing Concrete Flowline	4	flowline-3
Drain_WeepHoles_Ex	Drainage - Existing Weep Holes	1	<u> </u>
Fenc_CLF_Ex	Fences - Existing Chain Link Fence	6	ex-clfnc
Road_EG_Ex	Road - Existing Edge of Gutter	2	CONTINUOUS
Road_FL_Ex	Road - Existing Asphalt Flowline	5	flowline-3
Road_Pvmt_AC_Ex	Road - Existing Asphalt-Concrete Pav	5	ex-ac
Road_Pvmt_PCC_Ex	Road - Existing Portland Cement Con	3	CONTINUOUS
Road_TC_Ex	Road - Existing Top of Curb	6	<u> </u>
Road_Walk_Back_Ex	Road - Existing Back of Walkway	1	CONTINUOUS
Surv_Control_Ex	Survey - Control Point	1	CONTINUOUS
Surv_Point_Description	Survey - Point Tag Description	3	<u> </u>
Surv_Point_Elevation	Survey - Point Tag Elevation	5	0
Surv_Point_Number	Survey - Point Tag Number	0	0
Surv_Topo_Misc_Feature_Ex	Survey - Existing Topographic Miscell	7 🗌	0
Terr_Dirt_Ex	Terrain - Existing Dirt Area	6	CONTINUOUS
Traf_Pole_Concrete_Ex	Traffic - Existing Concrete Street Lig	6	CONTINUOUS
Util_Manhole_Ex	Utility - Existing Manhole	4	CONTINUOUS
Util_Pipe_STP_Ex	Utility - Existing Steel Pipe	1	CONTINUOUS
Util_PullBox_Ex	Utility - Existing Pull Box	6	CONTINUOUS
Wall Retaining Conc Ex	Walls - Existing Concrete Retaining Wa	II 📃 5	ex-retwall

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- 7. This completes the remapping of levels from a DWG to DGN file. However, there is still a few more steps to ensure quality of the DGN meets our file standards.
- 8. The current Design File Settings for the DGN were based on the DWG file, which needs to be corrected.

Į	🖊 Design File Settings				
	Category Active Angle Active Scale Angle Readout Axis Color	Linear Units <u>F</u> ormat: <u>M</u> aster Unit: <u>S</u> ub Unit: <u>A</u> ccuracy:	MU US Survey Feet US Survey Feet 0.12	Label: Labe <u>l</u> :	
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	Snaps Stream	Working Area:	5.59681E+08 Miles		
	Views	Solids Area:	0.621371 Miles		
	Working Units	Solids Accuracy:	3.28083E-08 US Survey	Feet	

9. You will correct this by creating a new seed file using the following seed file. For example, name it **Survey_Final.dgn**

K Select Seed File			×
← → × ↑ 📙 «	Organization > Seed > \checkmark \eth	Search Seed	م
Organize 🔻 New f	older		• 🔳 🕐
This PC 3D Objects	↑ Name ∭ dpw-model-seed-2d.dgn	Date modified 4/21/2021 7:50 AM	Type A DGN File
- Deckton	dpw-model-seed-3d.dgn	3/2/2021 8:22 AM	DGN File

10. This seed file has the desired Design File Settings resolution:

📈 Design File Settings				
<u>Category</u> Active Angle Active Scale Angle Readout Axis Color	Linear Units <u>F</u> ormat: <u>M</u> aster Unit: <u>S</u> ub Unit: <u>A</u> ccuracy:	MU US Survey Feet Custom 0.1234	Label: Ft Labe <u>l</u> : tn	
Fence Grid			<u>C</u> ustom	
Isometric	Advanced Setting	IS		
Locks	Resolution:	10000 per Distance US S	Survey Foot	
Snaps Stream	Working Area:	1.70591E+08 Miles		
Views	Solids Area:	81.3442 Miles		
Working Units	Solids Accuracy:	4.29497E-06 US Survey	Feet	

- 11. Reference the survey model from **Survey_Draft.dgn** to the current model named **Survey_Final.dgn** using *Coincident World*.
- 12. Next, in Reference Manager, merge the reference into the current model.



13. To check whether you were successful, attach an aerial image to see if the survey lines up with the aerial. It should look like this



- 14. Detach the aerial.
- 15. Save the current file **Survey_Final.dgn**.
- 16. This completes this exercise.

Example 2: Remapping Levels from DGN to DWG (SoCal Edison Projects)

DGN-to-DWG-Edison.csv – This is used when saving a DGN file to DWG format and remapping Public Works levels to Southern California Edison levels.



To save a DGN Waterworks file as a DWG.

Select CSV remapping file.

DGN-to-DWG-Edison.csv

Use these options.

	s DWG/DX	F Options	\times
General	Remap	References Filter	
	CSV File:	DGN-to-DWG-Edison.csv 💥 📮	
		Apply Level Mapping Apply Font Mapping	
		Apply Line Style Mapping	
		Apply Color Mapping	
		Apply Weight Mapping	