

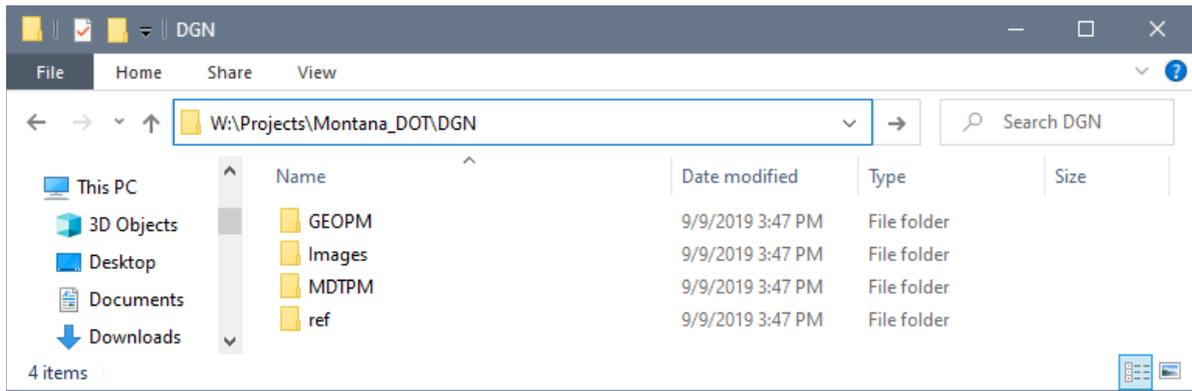
Consultant Workspace

MicroStation/GEOPAK/ Power GEOPAK V8i (SELECTseries 4 or 10)

Design File Management

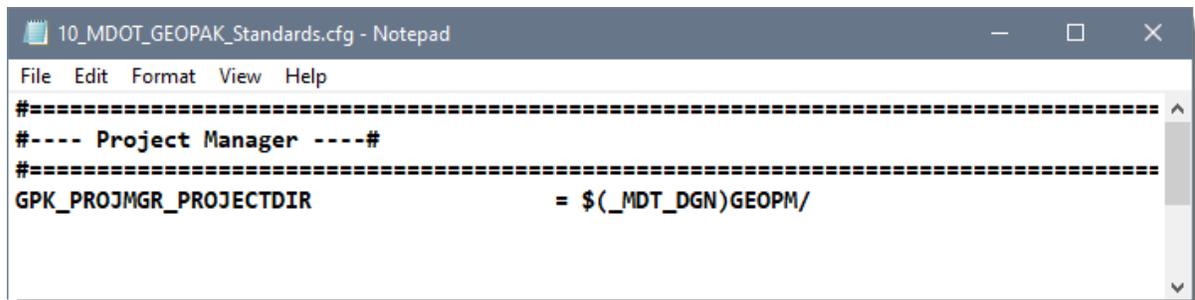
Montana_DOT Delivered DGN Folder

A DGN folder structure is delivered in the Montana_DOT workspace. A detailed breakout for how the folders may be used is as follows.



Montana_DOT\DGN\GEOPM

This folder is desirable to be project specific. One overall GEOPM directory could be used, but that would be a major maintenance task and difficult for the end user. This is defined in ...\\Workspace\Standards-Openroads\ 10_MDOT_GEOPAK_Standards. The files and folders under this directory will include, but are not limited to, .prj, projdbs folder, .rpt, default and specific Geopak User folder, .000, .001, etc. These are not files uploaded to the MDT DMS, although sometimes they would be useful.



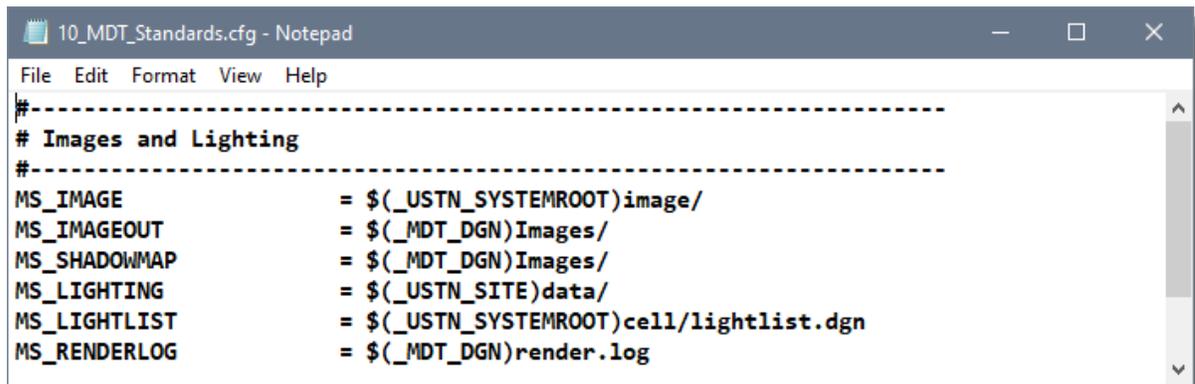
```

10_MDOT_GEOPAK_Standards.cfg - Notepad
File Edit Format View Help
#-----#
#---- Project Manager ----#
#-----#
GPK_PROJMGR_PROJECTDIR          = $_(MDT_DGN)GEOPM/

```

Montana_DOT\DGN\Images

This file structure is not used internally. One overall Images directory could be used but may not be as useful as a project specific Images folder. This is defined in ...\\Workspace\Standards\10_MDT_Standards.cfg. The folder may be used as desired. If image files are referenced into the sheet files, they would need to follow MDT DMS naming convention and be provided for the MDT DMS. Any files that need to remain referenced into project files are recommended to be named and stored with the project files for a particular workgroup. Logical prefixes also apply to raster image attachments.



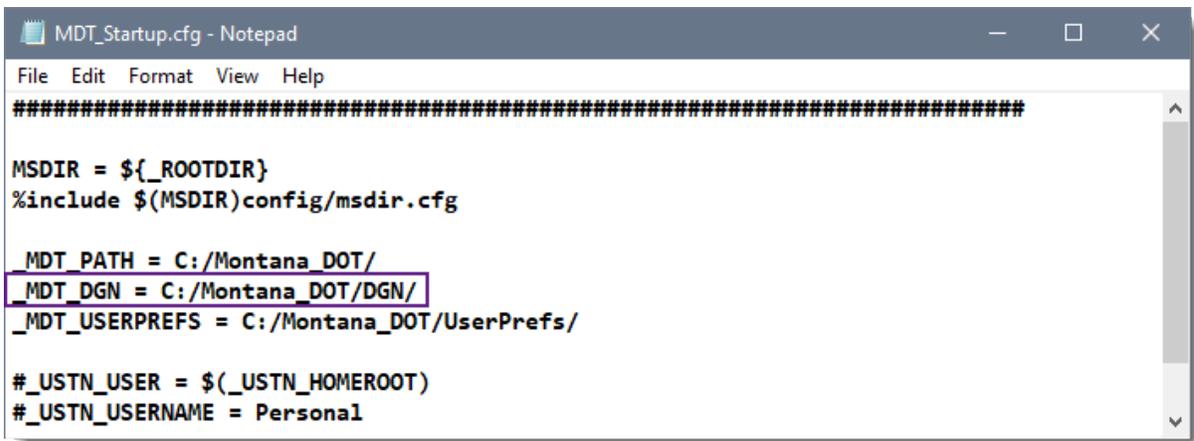
```

10_MDT_Standards.cfg - Notepad
File Edit Format View Help
#-----#
# Images and Lighting
#-----#
MS_IMAGE          = $_(USTN_SYSTEMROOT)image/
MS_IMAGEOUT       = $_(MDT_DGN)Images/
MS_SHADOWMAP      = $_(MDT_DGN)Images/
MS_LIGHTING       = $_(USTN_SITE)data/
MS_LIGHTLIST      = $_(USTN_SYSTEMROOT)cell/lightlist.dgn
MS_RENDERLOG      = $_(MDT_DGN)render.log

```

Montana_DOT\DGN\MDTPM

This folder is created by the Road Tools > Project Manager in the location defined as *MDT_DGN* which may be defined by *MDT_Startup.cfg* or a project specific .pcf template copied/created from ...*Workspace\Projects\PCF_Templates\Template*.pcf*. If this is not managed in the configurations, many MDTPM folders may be created making it difficult to keep track of.



```

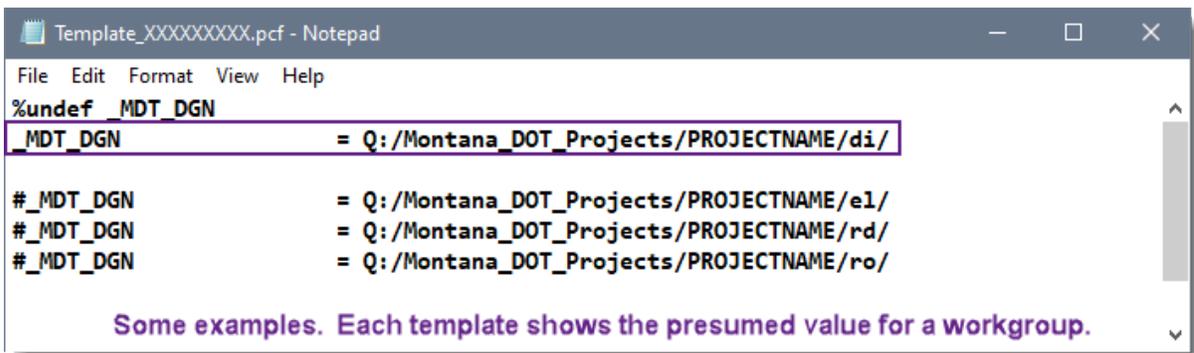
MDT_Startup.cfg - Notepad
File Edit Format View Help
#####

MSDIR = ${_ROOTDIR}
%include $(MSDIR)config/msdir.cfg

_MDT_PATH = C:/Montana_DOT/
_MDT_DGN = C:/Montana_DOT/DGN/
_MDT_USERPREFS = C:/Montana_DOT/UserPrefs/

#_USTN_USER = $(_USTN_HOMEROOT)
#_USTN_USERNAME = Personal
  
```

The PCF below undefines the *_MDT_DGN* information above and replaces it.



```

Template_XXXXXXXXX.pcf - Notepad
File Edit Format View Help
%undef _MDT_DGN
_MDT_DGN = Q:/Montana_DOT_Projects/PROJECTNAME/di/

#_MDT_DGN = Q:/Montana_DOT_Projects/PROJECTNAME/e1/
#_MDT_DGN = Q:/Montana_DOT_Projects/PROJECTNAME/rd/
#_MDT_DGN = Q:/Montana_DOT_Projects/PROJECTNAME/ro/

Some examples. Each template shows the presumed value for a workgroup.
  
```

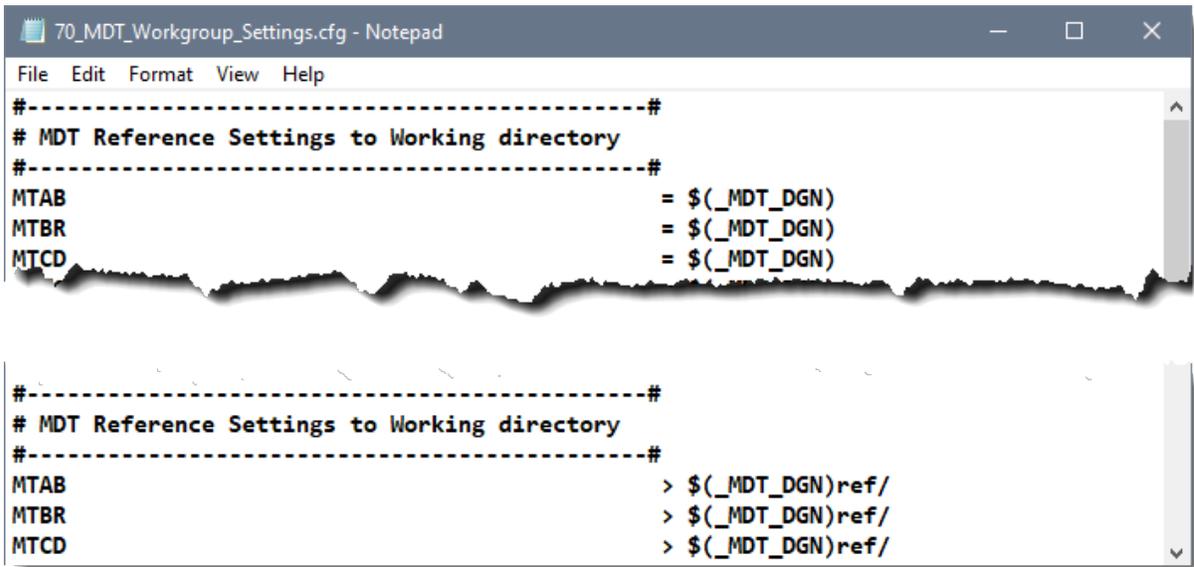


Montana_DOT\DGN\ref

Internally when a user wants to work on a file, the file must be “viewed” from the MDT DMS. Potentially, the single file being viewed has attachments which will be required for the file to be shown correctly. The file “viewed” or “checked out” from the MDT DMS is copied into the primary DGN folder as a working directory. The reference files are copied to the “ref” subdirectory and do not get sent back to the DMS because the directory is purely sacrificial. File management is likely much different in each consultant office and could require a different approach. If managed correctly, this folder could be eliminated for consultants.

Design File Structure

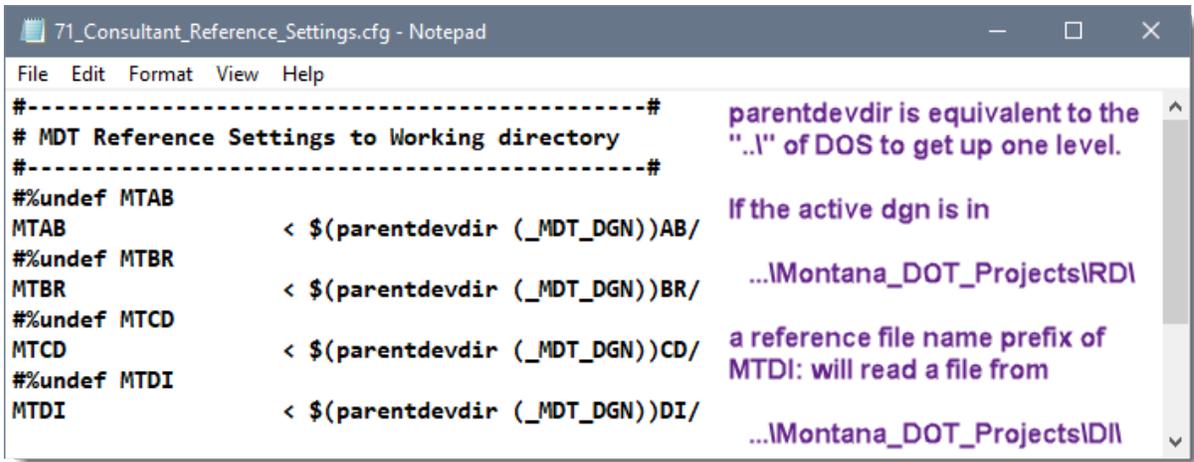
Internally, project files are stored relative to the Uniform Project Number/Unit (9999000), then workgroup (BR, DI, EL, EN, GT, RD, RO, SI, SU, UT, etc.) Prefixes defined in the delivered ...\\Workspace\Standards\70_MDT_Workgroup_Settings.cfg allow for MicroStation / Power GEOPAK to find reference files that are not in the same directory as the opened DGN or as they have been defined in that file.



```
70_MDT_Workgroup_Settings.cfg - Notepad
File Edit Format View Help
#-----#
# MDT Reference Settings to Working directory
#-----#
MTAB           = $_MDT_DGN
MTBR           = $_MDT_DGN
MTCD           = $_MDT_DGN

#-----#
# MDT Reference Settings to Working directory
#-----#
MTAB           > $_MDT_DGN)ref/
MTBR           > $_MDT_DGN)ref/
MTCD           > $_MDT_DGN)ref/
```

A consultant preference to make a supplemental .cfg and place it under ...\\Workspace\Standards\ may be beneficial to your company's workflow. Below is an example, but this may differ depending on how your folder structure lands.



```

71_Consultant_Reference_Settings.cfg - Notepad
File Edit Format View Help
#-----#
# MDT Reference Settings to Working directory
#-----#
#%undef MTAB
MTAB < $(parentdevdir (_MDT_DGN))AB/
#%undef MTBR
MTBR < $(parentdevdir (_MDT_DGN))BR/
#%undef MTCB
MTCB < $(parentdevdir (_MDT_DGN))CB/
#%undef MTDI
MTDI < $(parentdevdir (_MDT_DGN))DI/
  
```

Annotations in the image:

- parentdevdir is equivalent to the "..\" of DOS to get up one level.
- If the active dgn is in ...\\Montana_DOT_Projects\\IRDI
- a reference file name prefix of MTDI: will read a file from ...\\Montana_DOT_Projects\\IDI

Example Design File Structure

A compressed file with a functional full example project directory file structure, including example project files that would be useful for exploring workspace functionality, is available below. A readme.txt file can be found within the compressed file for further information.



ExampleProjectDirectory-CWS.zip