

## Introduction to the NCDOT Workspaces

The North Carolina Department of Transportation (NCDOT) has developed a set of Workspaces to be used with MicroStation version 7.xx and version 8.xx. These workspaces consist of folders containing resource files, dgn files, applications, etc. that facilitate creating and maintaining design files.

The workspace can be set up for “full time” or “on demand” operation. This document describes both installation methods.

**Disclaimer: NCDOT recommends using the standard workspace setup. This document is provided only as a sample of alternative workspace setups. NCDOT will not be held responsible for any consequences resulting from its use. Use at your own discretion.**

*These instructions were developed using Windows 2000 as the computer operating system. The procedures used in windows XP should be very similar.*

## Obtaining the NCDOT Workspaces

Before using the NCDOT workspaces, you must download them to your computer. NCDOT makes the workspaces available to download from an FTP server through a custom application named UpdateWs.exe. This application can be downloaded from the NCDOT web site at

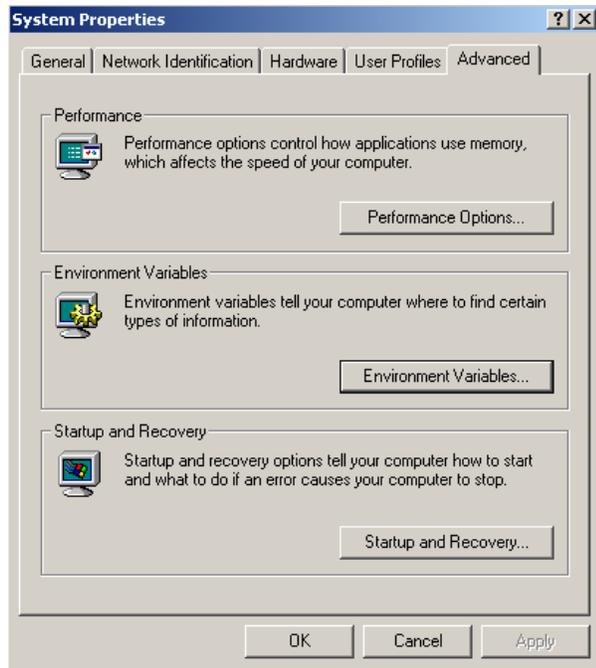
[http://www.ncdot.org/IT/engineering\\_transportation\\_systems/CADD/workspaces/](http://www.ncdot.org/IT/engineering_transportation_systems/CADD/workspaces/)

Before running the updatews.exe application, you must create some system environment variables. These variables are used by the updatews application to define the location where the workspaces will be installed, and are also (optionally) used to inform MicroStation of the location of the NCDOT workspaces.

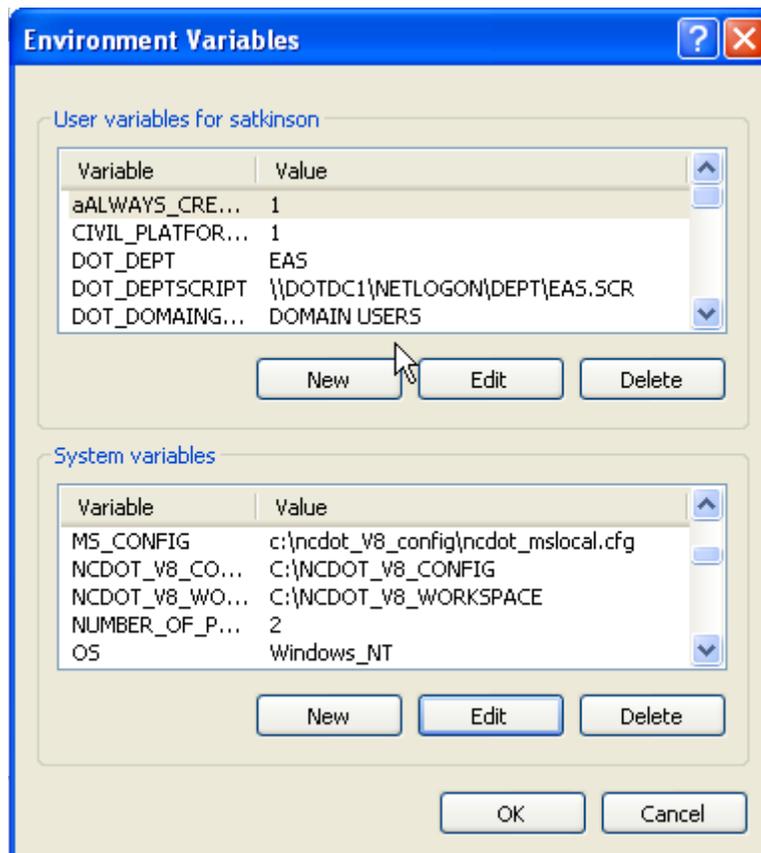
### ***Setting the system environment variables.***

Right click on the desktop icon “My Computer”.

Click on “Properties”, then click the “Advanced” tab.



Click the “Environment Variables” button.



NOTE: You must have 'Administrator' rights to create or edit System Variables. A workstation user can create these variables in the upper User Variables section, but they will only be available when that user is logged onto the computer. If set at the System level, all users of that computer will access the variables.

Create the following variables, with the associated values:

<u>Variable</u>	<u>Value</u>
MS_CONFIG	C:\NCDOT_V8_CONFIG\NCDOT_MSLOCAL.CFG
NCDOT_V8_CONFIG_DIR	C:\NCDOT_V8_CONFIG
NCDOT_V8_WORKSPACE_DIR	C:\NCDOT_V8_WORKSPACE

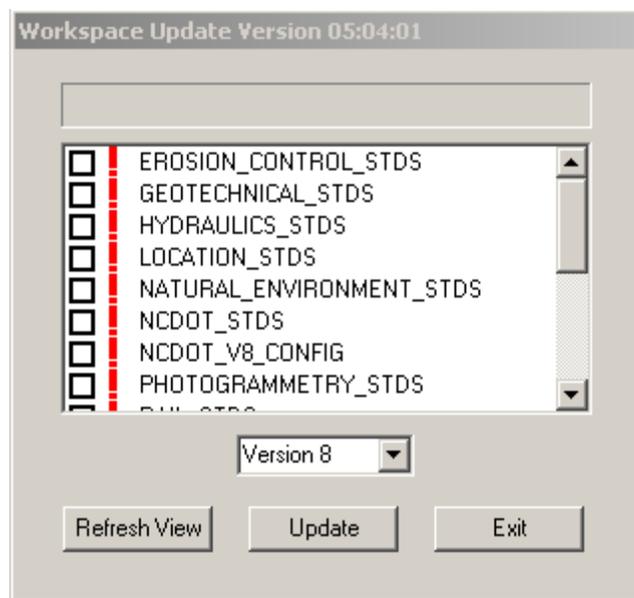
Note: Only set the MS\_CONFIG variable if planning to use the NCDOT workspace "full time".

### **Using WsUpdate**

After setting up the above environment variables, you may run the updatews.exe program, which can be obtained from the NCDOT web site (see the link on the first page of this document).

NOTE: MicroStation must not be running when trying to use updatews.

After copying the updatews.exe to your desktop, double click it to run. The following dialog should open.



A green checkmark indicates the workspace is up to date. A red vertical line indicates the workspace on your computer differs from the one on the NCDOT ftp server, and should be updated. Click on each workspace that you wish to download.

Click the "update" button. A status bar across the top of the dialog will indicate progress.

The first time you run updatews, you should download the NCDOT\_STDS and NCDOT\_V8\_CONFIG workspace, plus any other desired unit workspace. The workspace folders will be copied to the location specified by the

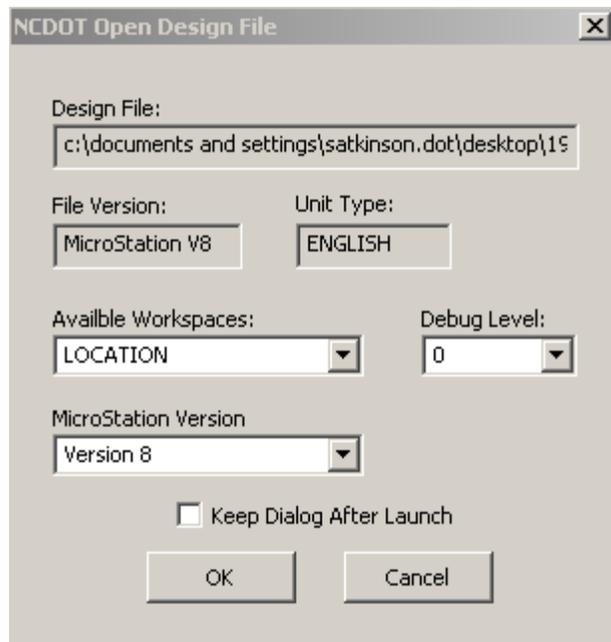
environment variables created in the above steps. Any files that are in your workspace but are not on the ftp server will be deleted. Any files that have been added to the NCDOT workspace but are not on your computer will be added.

## Running the NCDOT Workspace full time

NCDOT computers are set up to run the NCDOT workspace every time MicroStation is started. If you created the environment variables as demonstrated at the beginning of this document, the NCDOT workspace will always be used. To facilitate opening a MicroStation drawing, NCDOT has developed an application named MS\_START.

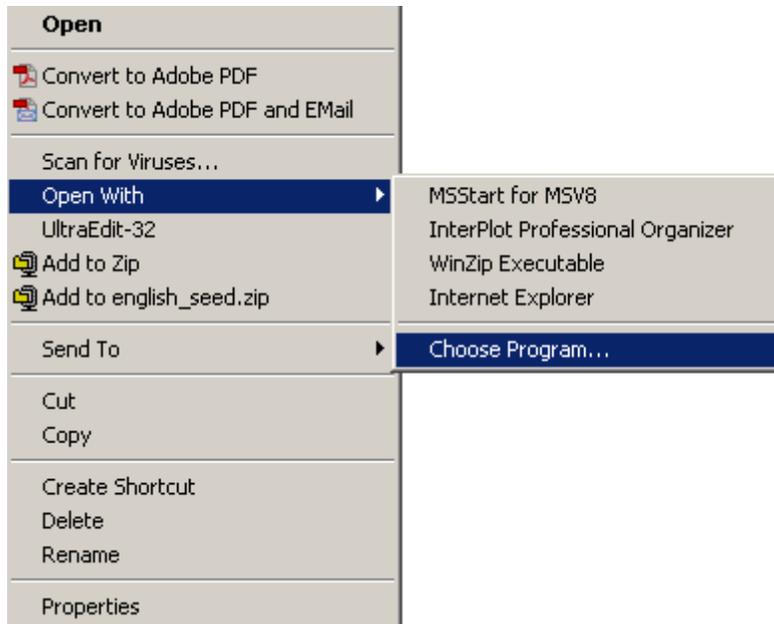
### ***MS\_START***

MS\_Start is an application that opens a MicroStation drawing with the correct english or metric project, and lets you choose the unit workspace to employ. It is associated with the .dgn file extension so when a design file is double clicked in Windows Explorer, MS\_Start presents its opening dialog, allowing the user to set the desired options.



Note: MS\_Start should only be used when the workspace is configured for full time use.

To associate MS\_Start with the dgn extension, right click on any design file with a dgn extension. Choose "Open With..."



Unless MSStart for MSV8 is already listed, select “Choose Program...”. Navigate to `c:\ncdot_v8_workspace\ncdot_stds\standards\appl` and select `Ms_Start.exe`.



Enable the “Always use this program...” check box.

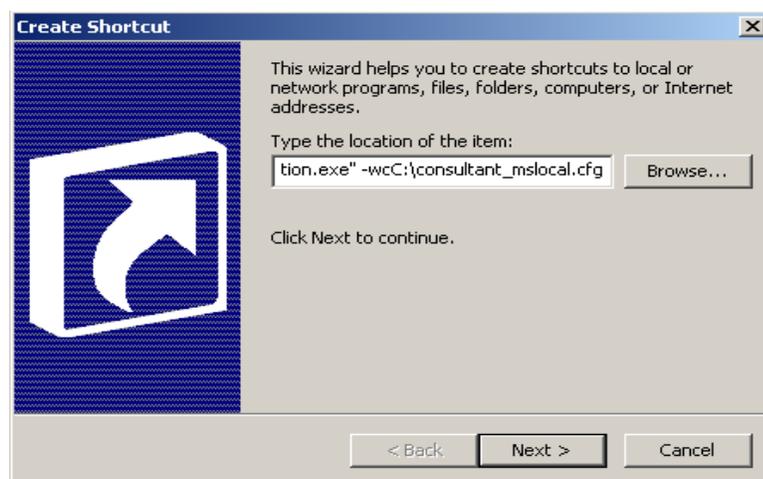
## Setting up the NCDOT workspace for on demand use

This section will demonstrate how to set up the NCDOT workspace for use by consultants that do not wish full time deployment . Many consultants have other clients, each with their own unique workspace requirements. This set up will allow using the NCDOT workspace only when required.

Note: You must still be able to download the NCDOT workspace for periodic updates. We recommend that at least one computer be set up with the variables as described in the above section, to enable workspace downloads. If you wish to enable on demand workspace use, and also download the workspace, the key is to NOT include the environment variable MS\_CONFIG.

To launch MicroStation with the NCDOT workspace, you can use a desktop shortcut. This shortcut will specify a command line argument to call a startup configuration file, which will include the use of the NCDOT workspace. This argument is `-wc<path>consultant_mslocal.cfg`.

`"C:\Program Files\Bentley\Program\MicroStation\ustation.exe" -wcC:\consultant_mslocal.cfg`



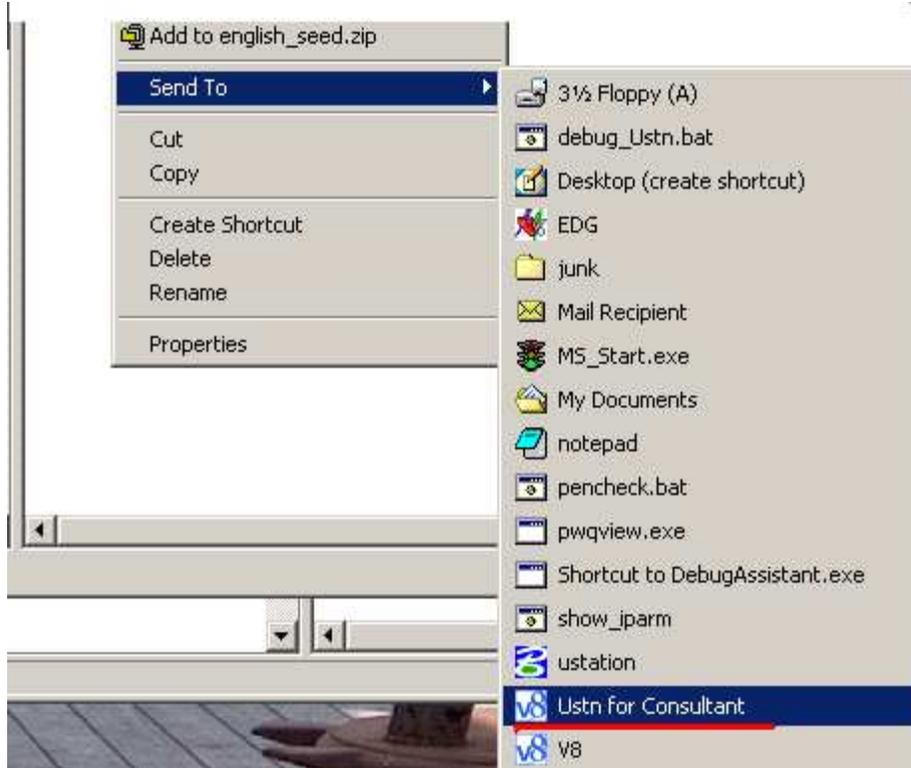
This instructs MicroStation to look in the specified path for a file named `consultant_mslocal.cfg`. This file sets the environment variables and initializes MicroStation's start up. This file can also be edited to enable network storage of the workspace, or for any custom setup deemed necessary by the client. Therefore, this file should Not be stored in any of the workspace folders, as it would be overwritten upon the next workspace update.

Note: The `consultant_mslocal.cfg` file should not be stored inside any workspace folder.

An additional argument can also be appended to the shortcut target line to specify a workspace to enter into.

`"C:\Program Files\Bentley\Program\MicroStation\ustation.exe" -wcC:\consultant_mslocal.cfg -wulocation` will open MicroStation Manager with the Location workspace user chosen.

If a MicroStation design file is dragged and dropped onto the desktop shortcut, MicroStation will open the design. If the icon is double-clicked, MicroStation Manager will open. You can also add the desktop shortcut to the "Send To" folder ( `C:\Documents and Settings\<username>\SendTo` ). With this option, you can right click on a drawing, pick "Send To", then choose the shortcut. MicroStation will open the drawing without going through MicroStation Manager. Be careful that the proper project is being used, English or Metric. An additional argument, `-wpenGLISH` or `-wpmetric` can be appended to the target line to always use a particular project.



## Customized Startup Configuration File

Following are the first few lines of the CONSULTANT\_MSLOCAL.CFG file. This is where changes can be made to direct MicroStation to the proper location for workspace files. This file also detects whether MicroStation J or MicroStation V8 is being used, and locates the J or V8 workspace.

```
## For consultant workspaces. This allows running from a workspace
## or any drive letter without editing the system environment variables.
## Comment out the server line to run from local environment settings.
## Substitute a drive letter (d:) to use a different drive.
```

```
#SERVER = \\server\cadd
SERVER = C:
```

```
%if defined (SERVER)
    NCDOT_V8_CONFIG_DIR=$(SERVER)\NCDOT_V8_CONFIG
    NCDOT_V8_WORKSPACE_DIR=$(SERVER)\NCDOT_V8_WORKSPACE
%endif
```

```
#MS_DELIVERED_WRKSPC = True
```

```
NCDOT_UNIT_WSNAME : ncdot
```

If you have your workspace stored on the local drive, leave the first “server” line commented out, and set the second line to C: (or whatever drive letter you have used for the workspace drive). If your workspace is stored on a server, **with a mapped drive**, you should also use this method and specify the mapped drive letter. If your workspace is on a server, and you want to use a UNC connection, uncomment the first “server” line, change the [\\server](#) to the unc name for your server. If you have placed the workspaces under a single folder, add the folder name also. For example, [\\rdy-rr04\workspace](#) would be for a server with name rdy-rr04 and the workspaces would be located under the folder named “workspace”.

If using a server, with a unc or drive letter, the workspace folders must be shared. If stored on the root of a drive, share each major folder, ie. NCDOT\_V8\_CONFIG, NCDOT\_V8\_WORKSPACE, etc. If they are stored under a single folder, be sure to share this folder.

Thank you for using the NCDOT workspaces. This will help to ensure compatibility among drawings produced by consultants and NCDOT employees.