



# OHDOTCEv02 Standards Sync Tool

## Description:

---

This OHDOTCEv02 Standards Sync Tool is a standalone resizable c# Windows Presentation Form application that is used to download and keep up to date OhioDOT's Connect Workspace (OHDOTCEv02) inside and outside of ProjectWise.

Please note this tool gets installed with the OHODTCEv02 AdminTools Installer application. So that must be installed in order to user this application.

This document is intended to be a reference document to explain all the options and functionality that exist in this application. It is not a workflow or how to guide. Please see our walkthrough video [here](#).

## Software Requirements:

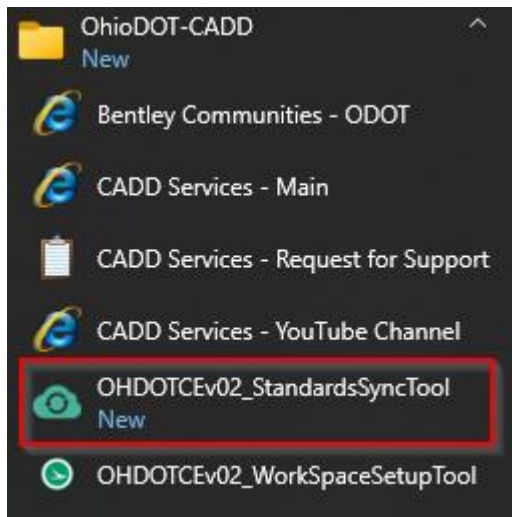
---

This application was developed using .NET Framework 4.6.2 in 64 bit windows 10.

## Loading the Application:

---

This application can be loaded from the OhioDOT-CADD start menu folder.

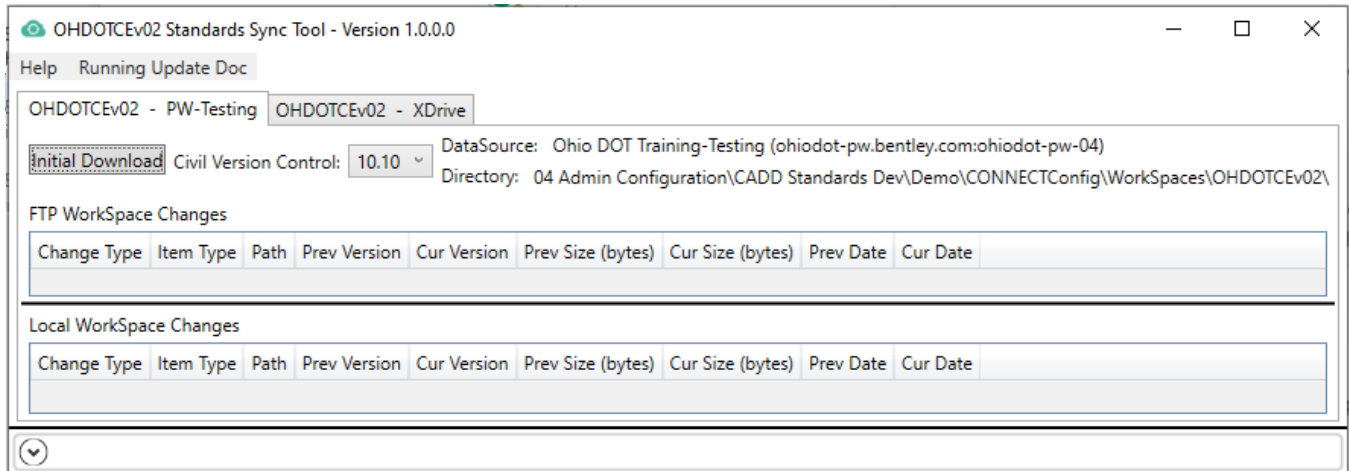


## Application Operation:

---

When this application is loaded it will display all the workspaces that were set up using the OHDOTCEv02\_AdminTools\_Installer application. It does that be reading the following text file to get all the setup workspace's SyncData location. If the location is inside a ProjectWise datasource then the user will be prompted to loginto that datasource.

*C:\ProgramData\OhioDOT\OHDOTCEv02\_AdminTools\WorkSpacesSyncDataLocations.txt*



## Help Menu:

The Help Menu consists for two items [Wiki Page](#), and [About](#).

### Wiki Page

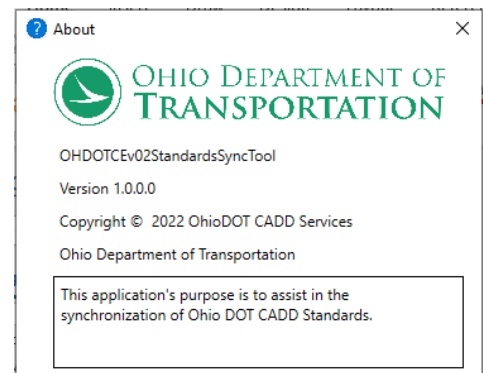
Clicking this item will launch the below link to our wiki page that will contain this document and how to video.

[https://communities.bentley.com/communities/user\\_communities/ohio\\_dot\\_consultants/w/ohiodot---wikis/61413/ohdotcev02-standards-sync-tool](https://communities.bentley.com/communities/user_communities/ohio_dot_consultants/w/ohiodot---wikis/61413/ohdotcev02-standards-sync-tool)

### About

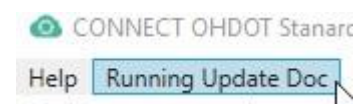
Clicking this item will open another dialog, pictured to the right. This dialog displays the following information.

- Application Name
- Application version
- Copyright
- Company
- Description



## Running Update Doc Menu Item:

This Menu item is just a button then when clicked will launch the latest Running Update pdf file.



[ftp://ftp.dot.state.oh.us/pub/CADD/CADDSync/OHDOTCEv02/Standards/OHDOTCEv02\\_RunningUpdates.pdf](ftp://ftp.dot.state.oh.us/pub/CADD/CADDSync/OHDOTCEv02/Standards/OHDOTCEv02_RunningUpdates.pdf)



## WorkSpace Tabs

OHDOTCEv02 - PW-Testing

OHDOTCEv02 - XDrive

Each workspace that was setup with the OHDOTCEv02\_AdminTools\_Installer will get its own [WorkSpace Tab](#). There are two types of WorkSpace Tabs depending on the location of the workspace.

### 1. Local/Network Workspace Tab

OHDOTCEv02 - PW-Testing OHDOTCEv02 - XDrive

Initial Download Civil Version Control: 10.10 Directory: X:\CADDServices\Demo\CONNECTConfig\WorkSpaces\OHDOTCEv02\

FTP WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date

Local WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date

### 2. ProjectWise Workspace Tab

OHDOTCEv02 - PW-Testing OHDOTCEv02 - XDrive

Initial Download Civil Version Control: 10.10 DataSource: Ohio DOT Training-Testing (ohiodot-pw.bentley.com:ohiodot-pw-04) Directory: 04 Admin Configuration\CADD Standards Dev\Demo\CONNECTConfig\WorkSpaces\OHDOTCEv02\

FTP WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date

Local WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date

Both tabs are nearly identical with the exception that the ProjectWise Workspace tab will also display the DataSource.

Each tab will be named with the workspace name – description. The description was set when setting up the workspace via the OHDOTCEv02\_AdminTools\_Installer and can be modified via that application.

## WorkSpace Tab

### Tab Name

OHDOTCEv02 - XDrive

Each Workspace tab will be named in the following format,

WorkSpace Name – Workspace Description, where Workspace name is the folder name of the workspace and workspace description is the description that was defined when setting up the workspace via the OHDOTCEv02\_AdminTools\_Installer app.

### Initial Download Button

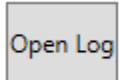
Initial Download

The initial download will only show if an initial download has not been performed yet. When this button is selected it will download the Standards that match up with the selected Version



Control. Depending on the version control selected the standards that get downloaded might not contain our most current standards. This is because some of the files might not be compatible with the version control you have selected. See [Version Control](#) for more information. A log file located in the specified sync files directory will be updated after this process completes. Use the Open Log Button to open the sync log. After the download is completed the status bar will say Process Complete and the initial download button will disappear and the Preview Changes Button and Sync Button will now be shown. If workspace is inside ProjectWise then dependency associations are added to the application within the applications folder (This makes it so when the application is opened it will also know to copy out the needed dll files).

### Open Log Button



This button will open the log text file. This log file will contain everything the application has done.

### Preview Button



The preview button can be used to see all the changes but not actually apply/change any of the files. See [Sync Button](#) section for details on how the changes are found.

### Sync Button



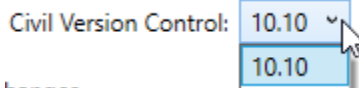
This button will synchronize the standards with the latest version of the standards while taking into account the selected [Version Control](#). After the sync is completed the [FTP Workspace changes Data Table](#) and [Local Workspace Changes Data Table](#) sections will be filled out the files/folders that have changed. Below details how the program finds and updates workspace files/folders.

- Compare current state of the local standards to the state of the local standards after the last sync. This will obtain all changes made to the standards locally that should not have happened and populate the [Local Workspace Changes Data Table](#) section.
- If a file was deleted, it will download the file again taking into account the [version control](#). Results of if the file was re-downloaded or failed to download will be added to the log file.
- If a folder was deleted, it will be created again. Results on if the folder was created successfully will be added to the log file.
- If a file was modified, it will download the file again taking into account the [version control](#). Results of if the file was re-downloaded or failed to download will be added to the log file.
- If a file or folder was added it will be deleted. Results on if the folder/file was deleted successfully will be added to the log file.
- Next the current state of the OhioDOT standards (located on an FTP site) is compared to the state of the FTP at the time of the last sync. This will obtain all changes made to the standards by OhioDOT since the last time a sync was performed and populate the [FTP Workspace changes Data Table](#) section.
- If a file was updated, then an attempt to download the file and replace the old file will be made. [version control](#) can prevent the download. Results on if the file downloaded or failed to download are added to the log file.
- If a folder was added, then the folder will be created. Results on if the folder was created successfully will be added to the log file.



- If a file was added, then an attempt to download the file will be made. [version control](#) can prevent the download. Results on if the file downloaded or failed to download are added to the log file.
- If a file was deleted, then the file will be deleted. Results on if the file was deleted successfully will be added to the log file.
- If a folder was deleted, then the folder will be deleted. Results on if the folder was deleted successfully will be added to the log file.
- If workspace is inside ProjectWise then dependency associations are added to the application within the applications folder (This makes is so when the application is opened it will also know to copy out the needed dll files).

### Civil Version Control Dropdown



Since OpenRoads Designer (ORD) has compatibility issues between versions care must be taken to make sure the files within the standards are compatibility with the version of ORD you are using. This is exactly what the version control does. When performing a Sync the standards will only update files that are compatible with the version you have set. This means if OhioDOT updates, for example a dgnlib in a newer version then set in the version control then the sync tool will not update that file. This is good in that your standards will be compatible with the ORD version specified but the downfall to that is that your standards do not have our latest updates.

Note on Initial Download. When the initial download is performed and a version control is selected that is not the newest version available then that initial download contain the standards in the state it was in at that time. Meaning any updates that happened after moving to a newer version will NOT be in the initial download (even if that update was compatible with the selected version). For that reason after performing an initial download you must also do a sync to get the standards as up to date as possible.

### Datasource

DataSource: Ohio DOT Training-Testing (ohiodot-pw.bentley.com:ohiodot-pw-04)

This will only be listed if the tab is a ProjectWise Workspace Tab. It will show the datasource display name and then the actual datasource name in parentheses.

### Directory

Directory: 04 Admin Configuration\CADD Standards Dev\Demo\CONNECTConfig\WorkSpaces\OHDOTCEv02\

Directory: X:\CADDServices\Demo\CONNECTConfig\WorkSpaces\OHDOTCEv02\

This will show the location of the OHDOTCEv02 workspace folder. For Local/Network locations the full path is listed. For ProjectWise the path be the relative path within the given datasource.

### FTP Workspace Changes Data Table:

This section gets filled out when the [Preview Button](#) or [Sync Button](#) are selected. This section gets filled out with any files that have been updated by OhioDOT since the last time the sync for performed.



#### FTP WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date

### Change Type

Can be Removed, Added, or Changed

#### Removed

File/Folder was removed since last sync, will be removed locally

#### Added

File/Folder was added since last sync, will be added unless version control prevents it.

#### Changed

File/Folder was changed since last sync, will apply change unless version control prevents it.

### Item Type

Can be File or Folder.

### Path

Relative path to file/folder (path starts with the Standards folder)

### Prev Version

Displays the Version control applied that that file when the last sync was performed (Folders don't have version control, files that don't pertain to ORD don't have version control, added files weren't there to have a previous version)

### Cur Version

Displays The current version of that file. (Folders don't have version control, files that don't pertain to ORD don't have version control, deleted files aren't there to have a version)

### Prev Size (bytes)

Displays the size of the file when the last sync was performed (Folder Item Types don't have a size, added items don't have a date)

### Cur Size (bytes)

Displays the current size of the file if applicable (Folder Item Types don't have a size, deleted items don't have a size)

### Prev Date

Displays the revision date of the file/folder when the last sync was performed (added Items don't have a date)

### Cur Date

Displays the current revision date of the file/folder (Deleted Items don't have a date)



## Local WorkSpace Changes Data Table:

This section gets filled out when the [Preview button](#) or [Sync Button](#) are selected. Any files inside Standards folder (which is inside the WorkSpace Directory) should not be modified or deleted. For this reason, this application will find any files that were modified/added/deleted and revert the files back in order to stay in sync with the latest set of standards. A lot of times files are accidentally changed, and this provides an easy way to keep the standards correct. Any found changes will be listed in the section. This section will list the following details about the files/folders that have changed.

### Local WorkSpace Changes

Change Type	Item Type	Path	Prev Version	Cur Version	Prev Size (bytes)	Cur Size (bytes)	Prev Date	Cur Date
-------------	-----------	------	--------------	-------------	-------------------	------------------	-----------	----------

### Change Type

Can be Removed, Added, or Changed

#### Removed

File/Folder was removed since last sync, Will be added back unless version control prevents it.

#### Added

File/Folder was added since last sync, Will be remove.

#### Changed

File/Folder was changed since last sync, Will be reverted back unless version control prevents it.

### Item Type

Can be File or Folder.

### Path

Relative path to file/folder (path starts with the Standards folder)

### Prev Version

Displays the Version control applied that that file when the last sync was performed (Folders don't have version control, files that don't pertain to ORD don't have version control, added files weren't there to have a previous version)

### Cur Version

Since the file was changed locally the sync data does not know what version is applied to that file.

### Prev Size (bytes)

Displays the size of the file when the last sync was performed (Folder Item Types don't have a size, added items don't have a date)

### Cur Size (bytes)

Displays the current size of the file if applicable (Folder Item Types don't have a size, deleted items don't have a size)

### Prev Date

Displays the revision date of the file/folder when the last sync was performed (added Items don't have a date)



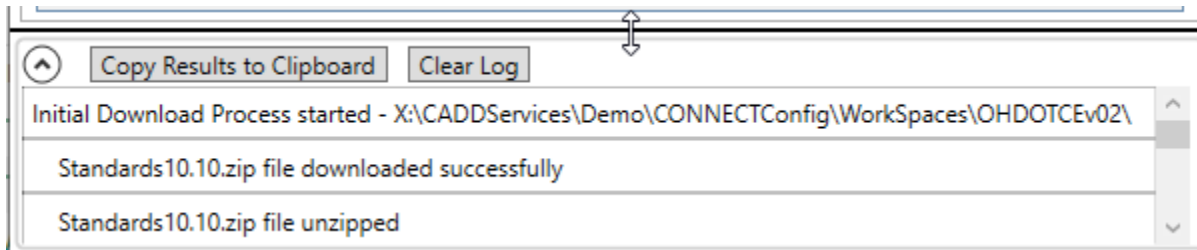


## Cur Date

Displays the current revision date of the file/folder (Deleted Items don't have a date)

## Results Section

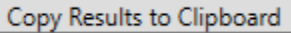
---



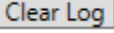
This section will list the results of all the actions the application takes. If an action failed that line will be in red.

This section can be collapsed/expanded. When expanded the section can be resized with the use of the thick black horizontal bar.

### Copy Results to Clipboard Button

 This button is only shown when the results section is expanded. When selected it will copy all the results to the windows clipboard.

### Clear Log Button

 This button is only shown when the results section is expanded. When selected it will clear the results section.

## Updates

---

Version 1.0.0.0: Initial Release

Version 1.0.0.1:

- Updated Wiki page Help Menu Button to launch the correct link to the Wiki page.
- Updated so when Initial Download, Preview, or Sync buttons are selected that the tabs become un-enabled in order to prevent starting another Initial Download, Preview, or Sync Process from starting while one is currently/already running.

Version 1.0.0.2:

- Fixed problem with Sync process not saving log file to ProjectWise.
- Updated Initial Download and Sync process for WorkSpaces within ProjectWise to also add required dependency associations to applications within the Applications folder. This makes it so when the apps are opened from ProjectWise, it knows to also copy out the needed dll files.

Version 1.0.0.3: Updated to switch metadata to use | character rather than ~ as a data separator.

Version 1.0.0.4: Various updates

Version 1.0.0.5-1.0.0.6:





- Updated to no longer use FTP protocol to download cadd files from OHDOTs FTP server.

Version 1.0.0.7:

- Updated to add missing results to the log when syncing to PW locations (the adding/updating files was not being shown in the log in previous versions even though the files were successfully being updated/added.)

Version 1.0.0.8:

- Updated to fix error when syncing to a newer version control for a workspace located within a ProjectWise Datasource.

Version 1.0.0.9:

- Updated to account for new registry key names.

Version 1.0.0.10:

- Updated to fix bug preventing initial download from finishing if standards location is in ProjectWise. Bug was caused by Thumbs.db files being present in the standards.zip file.

## Contacts

---

For any questions, suggestions, or problems with this document please contact the ODOT Office of CADD and Mapping Services by use of the following form on the ODOT website:

[https://odot.formstack.com/forms/cadd\\_servicerequest](https://odot.formstack.com/forms/cadd_servicerequest)

---