INDOT CAD Consultant Quick Start Guide
Help Desk, ProjectWise, Project Creator & GovDelivery

8/1/2023
State of Indiana
INDOT CAD Support

Contents

1. Welcome to INDOT CAD

A Message from CAD Support

What you need to know

The purpose of this document is to quickly get you started on the right road at INDOT in terms of your firm doing business with INDOT. This document is what we call a quick start guide and will contain how-to's on everything from ITAP (creating an account and requesting access to a new application) to creating a Consultant Folder in ProjectWise. Anyone wishing to use/access INDOT's ProjectWise datasource must enroll via ITAP. This document will also discuss what ProjectWise is and how to navigate within it and also the IN.gov site (related to CAD) and GovDelivery subscriptions (important notifications about CAD software).

Thanks,

Jason Kuhn
Phil Smock

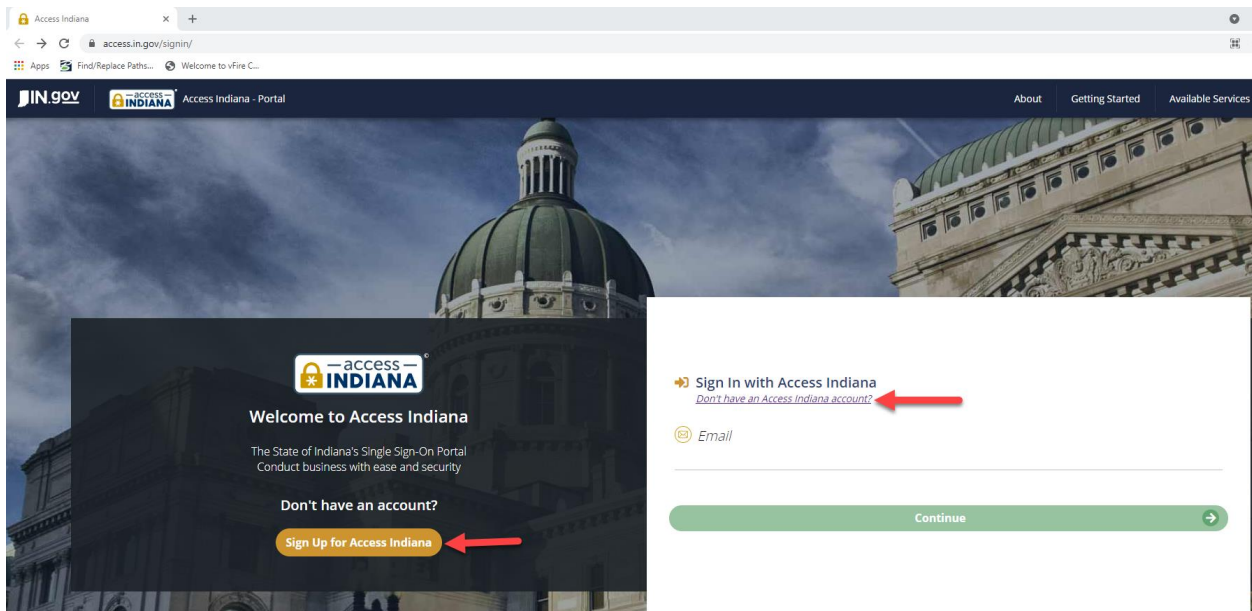## 2.   Requesting ProjectWise Access and the DOTWise Project Creator

To request access to ProjectWise and the DOTWise Project Creator, you must first enroll for an Access Indiana account with the State of Indiana. Then, once Access Indiana accounts are created, businesses and users can be registered for ProjectWise access via our ITAP system. These processes are explained in this section.

2.1   Enrolling in Access Indiana and ITAP Accounts

In order to request access to a number of INDOT systems including ProjectWise, and the ProjectWise Project Creator, all firms and required users will need to be enrolled in both Access Indiana accounts and INDOT ITAP accounts. This section covers the process to be followed.

PLEASE NOTE: Should you require assistance with enrolling these accounts, please contact their respective support staffs. We at INDOT CAD Support do not support Access Indiana or ITAP applications.

1. To enroll for an Access Indiana account, go to the Access Indiana web site at https://access.in.gov/signin/. On the site, click on the "Don't have an Access Indiana account?" link or the "Sign Up for Access Indiana" button to proceed to create your Access Indiana account.

Enrolling in Access Indiana Account

2. With the Access Indiana account created, users can then access the INDOT ITAP system to register businesses and users:
    a. To register a business, users can go to this web site for a step-by-step guide: https://itap.indot.in.gov/Help/ViewPdf/1.
    b. To register a new user account, users can go to this web site for a step-by-step guide: https://itap.indot.in.gov/Help/ViewPdf/2.

Each particular workflow can also be found via the Help icon at the top of the ITAP home page:

ITAP Help Resources

Should you require assistance working with ITAP, you can submit a help desk ticket directly to the support staff via the Contact icon at the top of the ITAP home page.
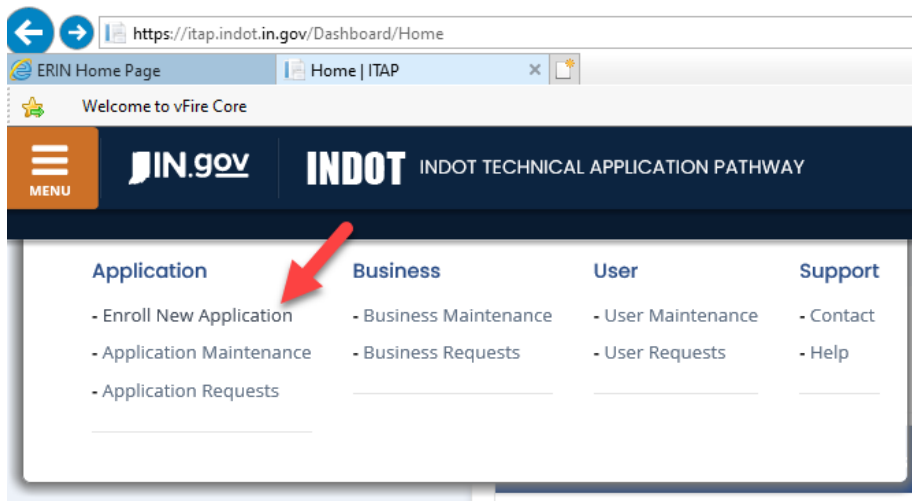

Contact ITAP Support

2.2   Requesting Access to New Applications

This section explains how to request access to a new application.

1. A User may request access to a new INDOT application from either the ITAP home page or from the ITAP menu. From the ITAP home page, click on the Enroll New Application link. From the ITAP menu, click on the Menu button and then select the Enroll New Application link under Application.

Enroll New Application

2. Selecting Enroll New Application from either the ITAP home page or the ITAP Menu will display the Application Enrollment page.

Application Enrollment

3. On the Application Enrollment page, select the ProjectWise entry, followed by the DOTWise listing underneath it. With DOTWise selected, click Next.

DOTWise Application Enrollment Panel

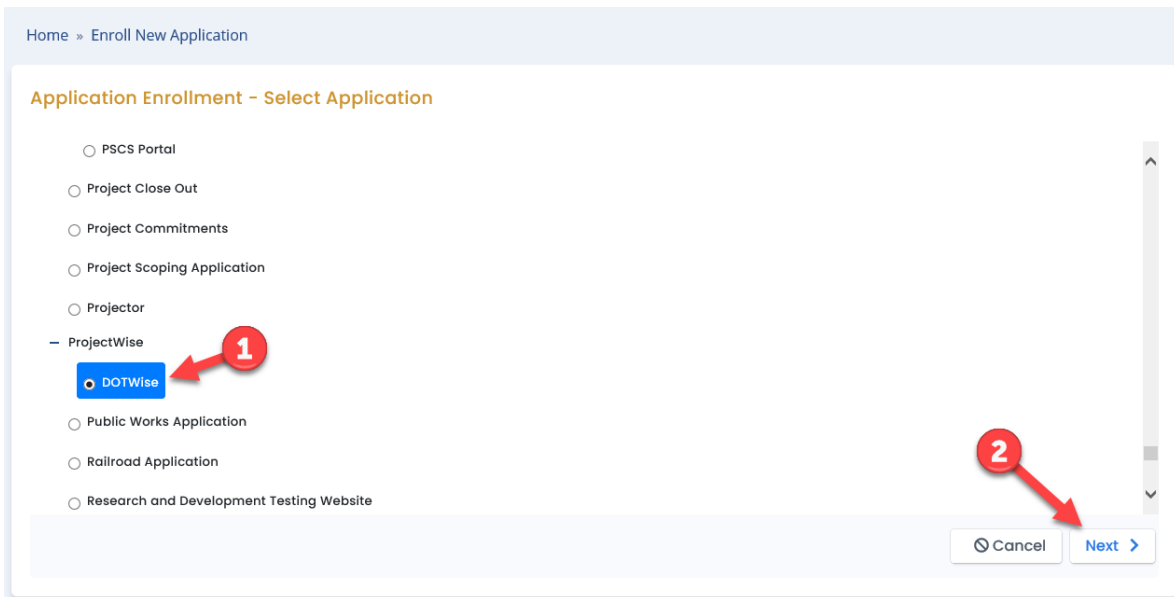4. On the Select Roles page that follows, *DO NOT select any roles. These roles are for internal use only and will have no affect when selected by external users. External users will have their roles configured specific to their firm.* With no roles selected, click Next.

Application

DOTWise

Select	Role	▼
☐	_Document Delete Privileges	
☐	Archeology_Privileged_Environmental Group	
☐	Audit	
☐	Construction	
☐	Consultant Review_Group	
☐	Consultant Selection	
☐	Contracts and Letting	
☐	Corridor_Development_Planning Group	
☐	Corridor_Development_Priv_Planning Group	
☐	Design Group	

|◄ ◄ Page 1 of 3 ► ►| 10 ▼ items per page 1 - 10 of 28 items

Select Roles Page

5. On the Review Before Submit page, with DOTWise selected with no roles, click Submit.

Review Before Submit

6. If the submit was successful, you will be taken to the Track Request Status page, where you will see your request with a status of Received.

Successful Request

7. If your account already has a pending request for the application, you'll receive the following message. Select OK to continue, this indicates that a request is currently outstanding and awaiting additional input.
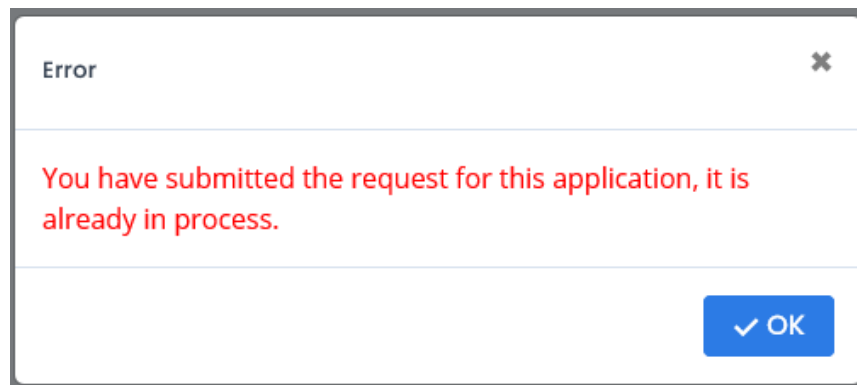

Pending Request

Once the request has been completed, you will receive an email with an acknowledgement of the request. In addition to this information, it will also contain the name of the primary contact/business administrator responsible for approving the next step in the process.

P82372.257733 - Application Enrollment Acknowledgement

itapweb@indot.in.gov
To

Reply   Reply All   Forward   ...
Mon 4/26/2021 8:19 AM

PLEASE DO NOT REPLY TO THIS E-MAIL. This is an automated email notification.

Your request for DOTWise and/or roles (if applicable) has been received. An email has been sent to either the Primary Contact of your business (Non INDOT Users) or your Supervisor (INDOT users) requesting approval.

Note: If you are the Primary Contact of your business, an email has been sent to the application administrator (if applicable).

An email will be sent to you once the processing of your request has been completed.

Supervisor Information (INDOT Users)

Primary Contact Information (Non-INDOT Users)

Thank you,
ITAP Customer Support

If you have questions or concerns with your request please contact ITAP support https://itap.indot.in.gov/help.

Request Acknowledgement

Note: INDOT CAD Support acts on account requests in the order we receive them, normally in 1 business day. For internal users, your request will first need approved by your immediate supervisor. If you do not receive a timely response to your account request, please contact indotcadsupport@indot.in.gov and we can provide the name of the person who received your request. Please keep in mind however, we cannot circumvent the approval process.

Upon approval of the application enrollment, two emails will be received. First will be an automated email from the ITAP system stating that approval has been granted to the application. The second email in most cases will be a confirmation from the INDOT CAD Support staff with relevant information including information on getting the software installed for the INDOT ProjectWise system.

3. ProjectWise at INDOT

ProjectWise is a suite of software provided by Bentley Systems aimed at helping to manage, find, and share active project data; including CAD and geospatial content, as well as Office documents.

Standard Key Benefits

- Save time finding, validating and accessing project information
- Reduce project risk with a single source of truth for all project information
- Improve quality and consistency of all project deliverables
- Meet deadlines
- Share work across multiple offices and locations
- Access to INDOT's Managed Workspace

Key Benefits for Consultants working on INDOT Projects

The sharing of Data with INDOT staff:

- No more using of FTP sites to transfer data
- No more burning of data to CD's
- No need to mail CD's or physically carry CD's of data to INDOT
- No more attempting to attach large files to emails and hoping they get there when you send them
- Quick visual confirmation that the data is in the folder (audit trail)
- Work on projects in different Districts and see them in one screen using ProjectWise

INDOT has positioned ProjectWise as the active project storage system for CAD and other associated project data. However it is not a replacement for ERMS and any data upload requirements that are otherwise specified for the agency. For INDOT Users, ProjectWise is the primary location where active project data is stored, edited, and shared. Please note that it is now required to sign into the Bentley CONNECTION Client to Access the ProjectWise system.

3.1 Creating ProjectWise Folders Using the Project Creator

To maintain a consistent folder structure and security model for each project and prevent unnecessary loss of data; all top level folder structures (discipline level, consultant folders) are created using our on-demand folder creation tool. As part of the initial user access request via ITAP that was discussed in the previous section, access to this tool is also granted.

Note for Construction Users: It is not necessary to create a folder for your firm under the Des Number directly. You will coordinate through your INDOT District Final Records Officer contact on where you should be placing your files. Proceed directly to section 3.2 to continue setting up your software client.
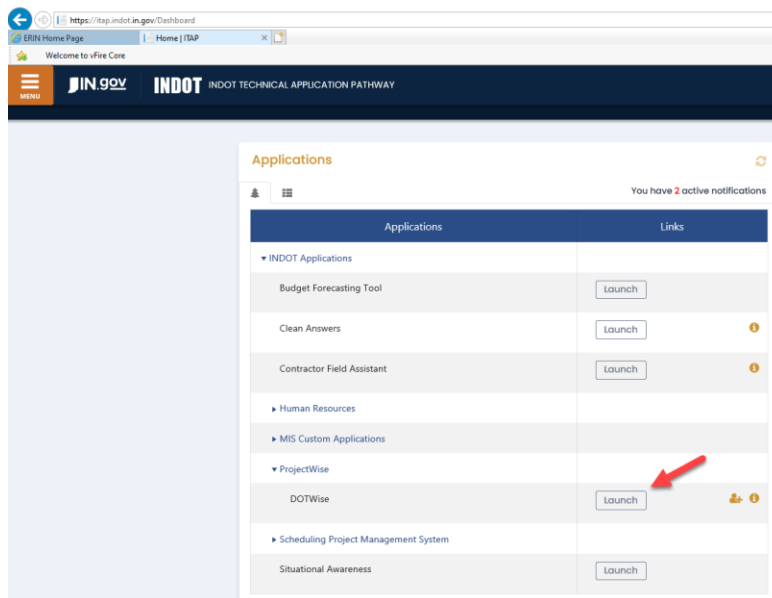
Note that only top-level folders are created using this tool such as those folders for the designation number, discipline folders (ex. Design, Environmental Services), and consultant folders (ex. Design Firm A Inc., Survey Firm B LLC). Subfolders may be created underneath these folders as long as a user has the appropriate permissions for these folders.

3.1-1   Creating a Project/Folder for a Des Number

Most currently active INDOT projects should already have a ProjectWise folder structure. Depending on the state that the project is at it could have as few as one discipline, or several different discipline folders. Being on demand, folders are only created when necessary, eliminating additional project clutter where possible. Please keep in mind that it is entirely possible that the Designation Number may not exist, but as part of the project creation tool, will be created.

To create your consultant project folder:

1. Log in to ITAP (*https://itap.indot.in.gov*) and locate the ProjectWise entry under Applications. Expand this entry and then click the Launch button for DOTWise.

Accessing the DOTWise Project Creator

2. Once in the Project Creator you will be prompted to enter the information for your project. The first piece of required information is the Designation Number. Enter the number for your project and select "Click her to validate the entered Des Number" field.
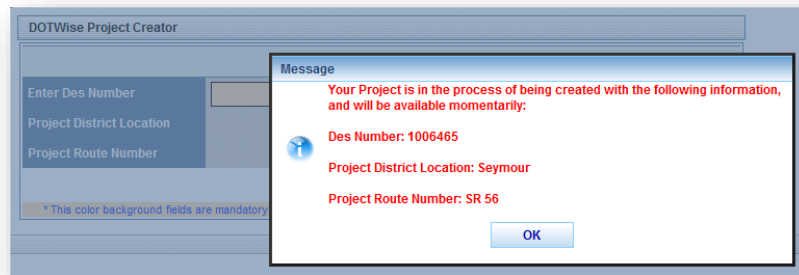
Des Number Entry and Validation

3. Depending on the information entered for the Des Number, you will receive either an error that the Des Number is not valid requiring the entry to be rechecked, or that it's valid and the project creator can continue.

Note that the Project Creator validates on data from other INDOT systems. Due to the method used to sync this data across these systems there may be a 24-to-48-hour lag between when a Des Number is created and when it can be created in ProjectWise. If a project is needed immediately, please contact indotcadsupport@indot.in.gov

4. With a validated Des Number, the project creator will activate the "Create Project" button with a brief overview of the Des Number, District Location, and Route Number. Create the project to proceed.

Create Project

5. Upon selecting the "Create Project" button, your project will be queued in the project creator to be placed into ProjectWise. In most cases this is instantaneous, should your project not be created after 15-20 minutes, please contact the CAD Support staff so we can investigate. You will receive a heads-up notification with the information on your project.

Project Created

With your project created you may either proceed to create additional project structures or exit the tool and proceed to working in ProjectWise through one of the two methods described in the following sections.

3.2 Using the ProjectWise Explorer Client

The connectivity method for ProjectWise is the ProjectWise Explorer "Thick" client which can be acquired and installed on end user PCs. For more information on the ProjectWise client software, please refer to the Bentley Product Page. Advantages of using the ProjectWise Explorer desktop client are as follows:

- Windows Explorer-like functionality
- Drag and Drop within the system and from the Desktop PC
- Direct MicroStation integration and access to the INDOT managed workspace for direct delivery of CAD resources
- Office Application Integration for Open/Save/Save As functionality

Currently INDOT is operating on ProjectWise CONNECT Servers, which work with a variety of ProjectWise Explorer CONNECT Edition client versions. As such, it will be able to accommodate those consultants who may be on other CONNECT versions of the client software. Also note that we at INDOT will keep compatible versions published on our website.
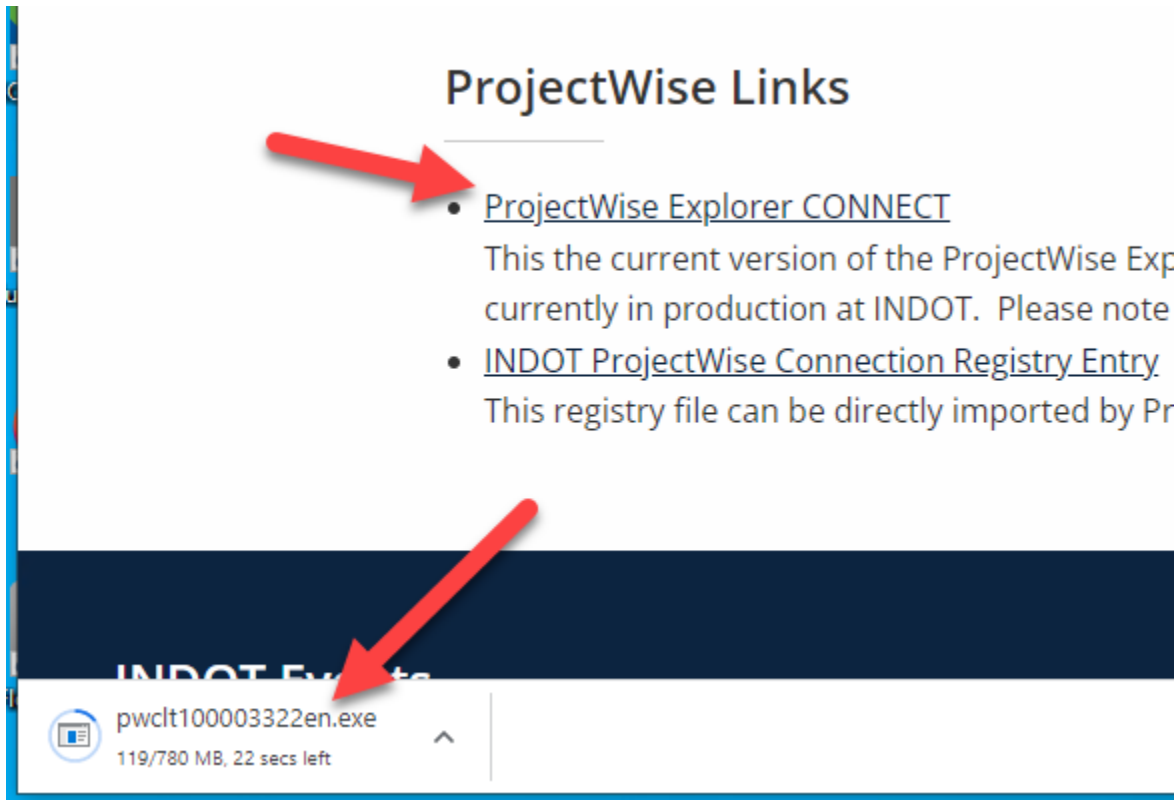
3.2-1 ProjectWise Licensing and Version Compatibility

Currently INDOT provides ProjectWise Explorer licensing through our ProjectWise server. Due to changes in how Bentley handles licensing with newer ProjectWise client versions, it is possible your firm may be using a version that cannot leverage our licensing. Any version 10.00.04.xxx and higher will not be compatible with our licensing and the user will have to coordinate their own application licensing. The version currently available on the INDOT CAD website is compatible with, and will use INDOT licensing for ProjectWise. Further information on this can be found at the following Bentley website.

3.2-2   Installing the ProjectWise Explorer Client Application

This section will cover how to install the Project Explorer application from our website and then perform any necessary follow-up steps after the installation.

1. From our website, click on the ProjectWise Explorer CONNECT link to begin the download of the application installer to your computer.
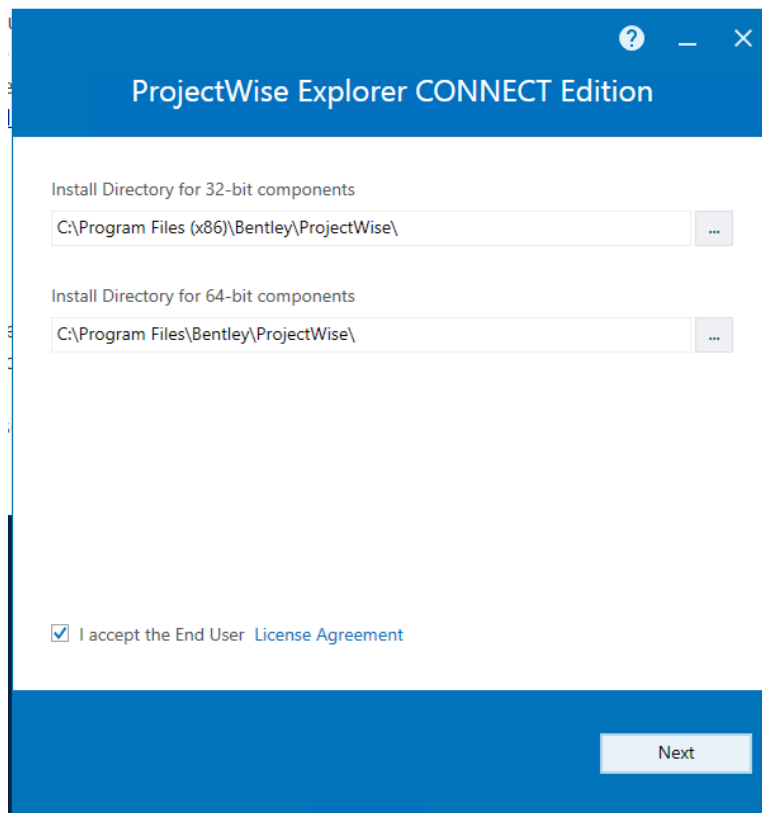

Downloading ProjectWise Explorer CONNECT

2. Once the download is complete, you can click on the .exe heads-up in the web browser to begin the installation process.
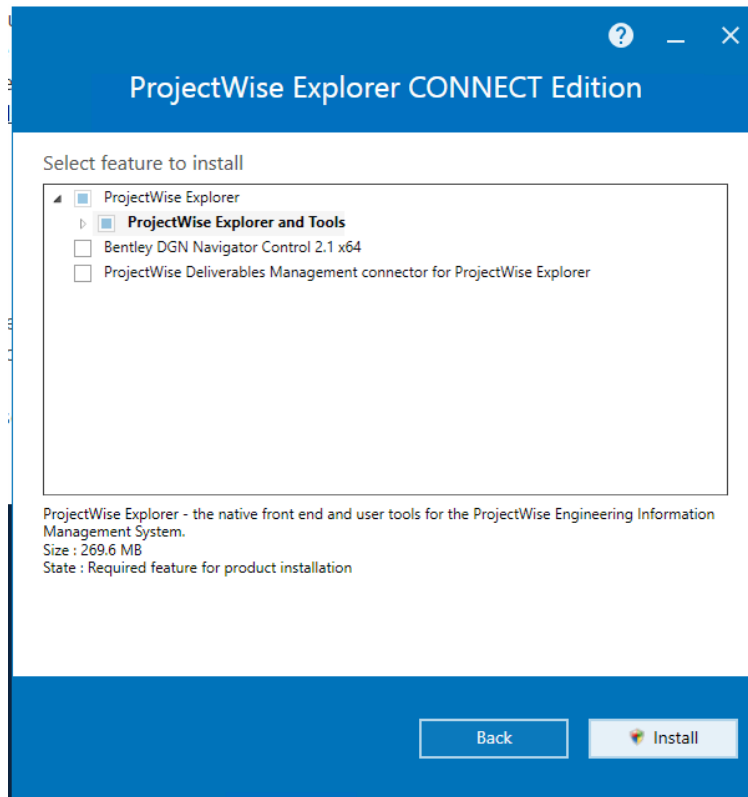

Completed Download

3. A ProjectWise Explorer CONNECTION window will appear. Accept the default install directory settings and then click the checkbox to accept the End User License Agreement. Then click Next to proceed.

ProjectWise Explorer Installer

4. The next screen asks for you to select features to install, leave the default settings as they are. *DO NOT select the ProjectWise Deliverables Management feature, as this functionality is not used in the INDOT ProjectWise system.* Click Install to proceed with the installation.
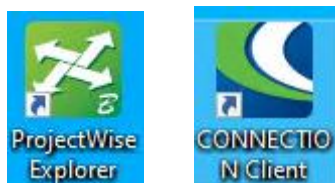
ProjectWise Features to Install

5. If prompted, you may be asked to provide Windows credentials to proceed with the installation. If you have privileges to perform the installation yourself, proceed to do so. Otherwise, contact your IT Department.

ProjectWise Installation Cleanup Steps

Upon the completion of the ProjectWise installation, you will notice two new icons on your desktop. One for ProjectWise Explorer, and the other for a companion app called CONNECTION Client.
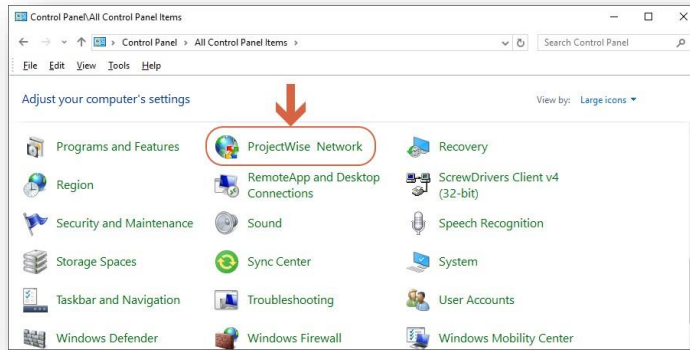

ProjectWise Explorer and CONNECTION Client Apps

In most cases, the CONNECTION Client app is not necessary to have—and can thus be uninstalled from your computer to avoid any potential complications with ProjectWise. However, if your company already does utilize Bentley apps, you will likely need to use it to log into ProjectWise with your company's licensing. Please contact your IT Department if this is the case.
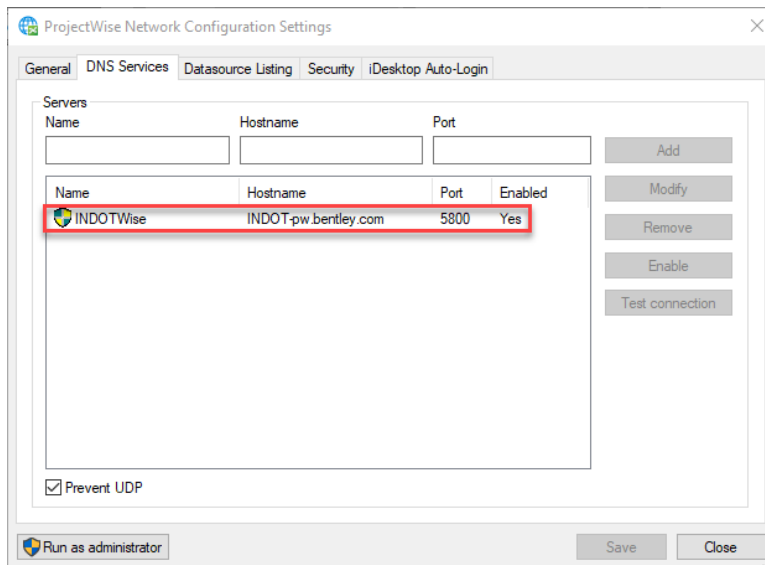
3.2-3 ProjectWise Explorer Client Connection Settings.

To configure your ProjectWise client to connect to INDOT's ProjectWise system please enter the following settings in your ProjectWise Network Control Panel applet. It is highly recommended that these settings be configured by a user with administrative rights or the appropriate IT staff.
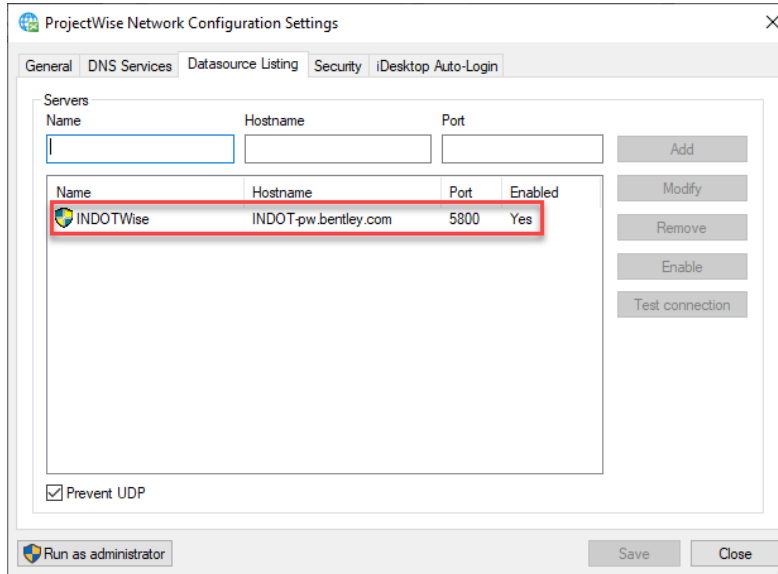

Control Panel/ProjectWise Network

Under the DNS Services tab, provide a server name of INDOTWise as shown below. *The hostname and port settings should be set to INDOT-pw.bentley.com and 5800 respectively.*

DNS Services Settings

On the Datasource Listing tab, again enter INDOTWise for the server name and the *hostname and port to INDOT-pw.bentley.com and 5800.* When ready, click on Save to save your settings.

Datasource Listing Settings

As a check to see if the settings are correct and you can acquire a proper connection to our datasource, you can select the datasource listing in either the DNS Services or Datasource Listing tab and click on the Test connection button.

Test Connection Button

A successful connection test will provide you with the host, address, and ProjectWise Server information as shown below:

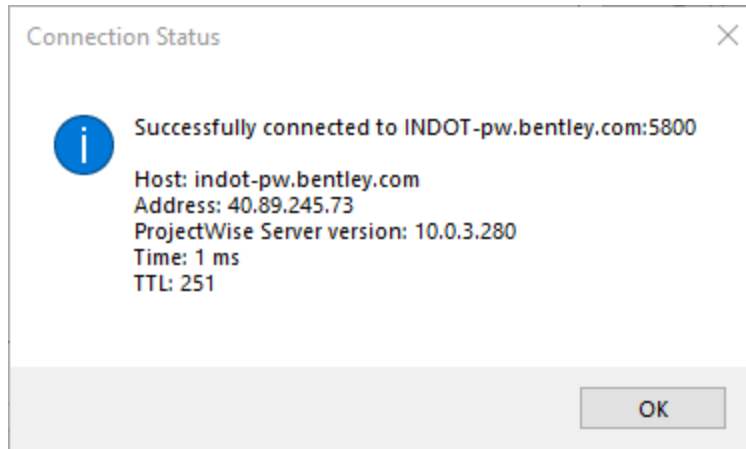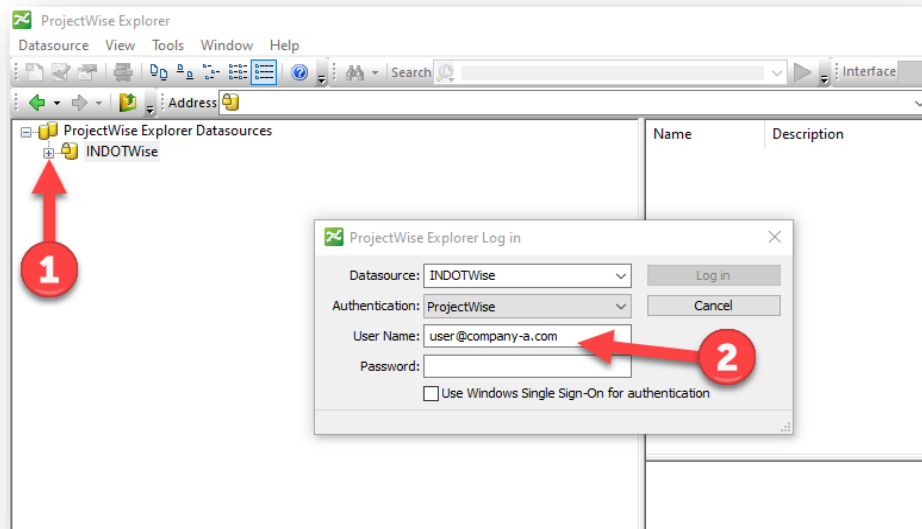Successful Connection Test

Be advised that false positives may occur where the message says it is "successfully connected"—however, there is no information listed for the connection. See the note below if this occurs.

With the correct settings entered and receiving a successful connection test, you can then launch the ProjectWise Explorer software and login to the DOTWise datasource.

NOTE: If you experience issues connecting to our datasource and you have double checked that you have the correct settings entered, please reach out to your IT Department to report it. The root cause of the issue may be due to IT restrictions and policies within your company that result in the INDOT-pw.bentley.com hostname address and/or the 5800 port being blocked by your company network.

3.2-4   ProjectWise First Connection

With ProjectWise now configured, you can enter the software and connect to the INDOTWise datasource. In your datasource tree you'll see a new entry for INDOTWise in the left hand panel. Left click on the plus [+] symbol to initiate the login.
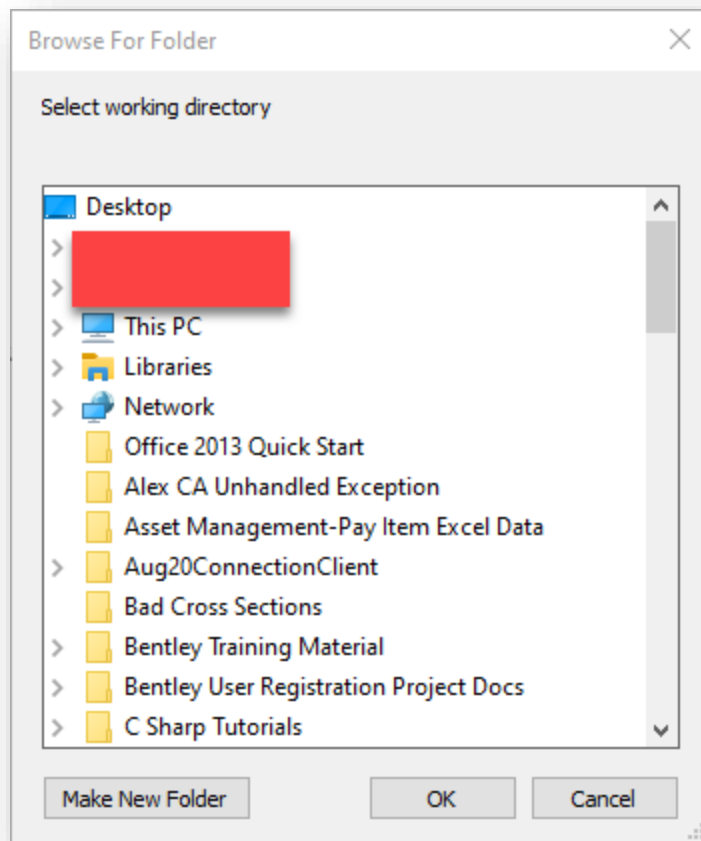
Logging into INDOTWise

Be advised that if you are prompted to log into the CONNECTION Client app in conjunction with ProjectWise, you can disregard it *UNLESS* your company is using other Bentley software and licensing that requires it. If your company is not using any other Bentley software, then you can proceed to uninstall the CONNECTION Client app from your computer, as it is not necessary to have.

As part of your initial request to the ProjectWise/DOTWise application in ITAP, you will have received a username and password to the INDOT ProjectWise system. Enter this information to login for the first time. Please note that the Use Windows Single Sign-On check box should remain blank.

Note that the login information for ProjectWise is not the same as your ITAP credentials and they are not connected. Additionally, INDOT CAD Support has standardized on email address usernames for external clients. Should you receive any login errors prior to creating a working directory, please contact the INDOT CAD Support staff so your account can be adjusted.

During the initial login, ProjectWise will prompt for the creation of a working directory and defining this location is required for ProjectWise connectivity. This location is where ProjectWise stores data locally while you are working with it. Please create/select a location on your PC where this data can be stored while it's being worked on. This prompt will only appear during this initial login, and if the end user receives a new PC or has their operating system reinstalled. Subsequent logins by the same user on the same device will not display this prompt.

Recommended locations would be under C:\temp\INDOTPW, C:\INDOT\PW, etc and would need to be created manually prior to selection. The location should be one that is accessible and able to be written to by your account. If you have any questions on what location could potentially be used, please contact your firm IT support team for specifics on your device configuration.

Locating/Creating a Working Directory

Note: Users should not select a location that is being backed up or synchronized with Microsoft OneDrive. The methods that are used to synchronize files in these locations will cause failures with the Check Out/Copy Out/Export of folders and documents from ProjectWise. Locations to avoid in this situation would be the Desktop and Documents folders as those are often automatically backed up by OneDrive.

It is highly advised that users not directly access the contents of their working directory. When needing to clean the contents of this location, users should use the Local Document Organizer tool within ProjectWise Explorer. This location should only be interacted with under the supervision of a ProjectWise Administrator.
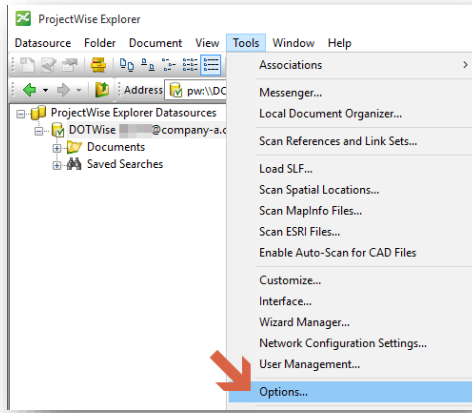
With the initial connection completed, you may now begin working within the INDOT ProjectWise system.

3.2-5   Changing Your Password

As part of the initial email with your account information and password, INDOT CAD Support highly recommends that you change your password after the first login. As always, good and secure passwords:
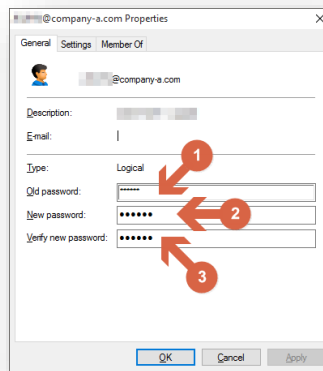
1. Use a unique password for each of your important accounts.
2. Use a mix of letters, numbers, and symbols in your password.
3. Don't use personal information or common words as a password.

To change your ProjectWise password from within the ProjectWise Explorer client, first login to DOTWise. When in the system, go under the Tools menu and select Options.

Tools > Options

On the following panel, you will then need to enter your current password (1) along with your new password (2) and your new password a second time (3) to confirm.
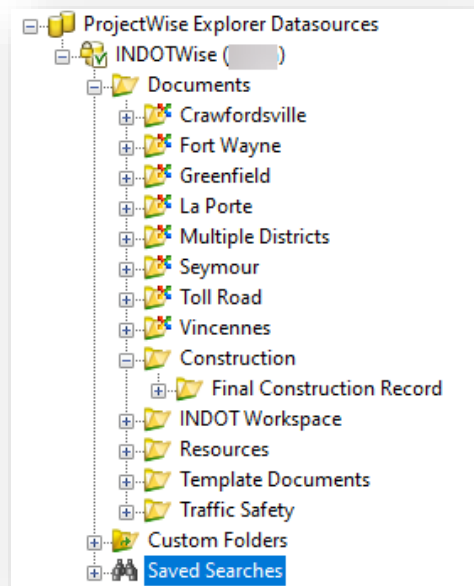

Changing Your Password

3.3 INDOT ProjectWise Basics

INDOT's ProjectWise system can be split into two major usage groups, those who are using it to share data, and those who are using it for CAD workspace delivery. For those in the latter group, please review the DOTWise documentation that can be found on the Downloads & Information page of the INDOT CAD Support Website. This documentation covers most aspects of the CAD workspace and how to interact with our workspace when using ProjectWise along with where to find and how to use data within the system.

The remainder of this section will cover the basics of how ProjectWise is structured and how to work with data you're given access to.

3.3-1 ProjectWise Folder Layout

INDOT's ProjectWise system has been configured for a large amount of flexibility around the District/Regional location of projects and their associated Designation Number. When entering ProjectWise, you'll see the folder tree similar to the following:

Folder Tree

Note that the folder tree shown above is representative of what an external user might see. It's possible that you may see more or less depending on the areas you collaborate with INDOT on.

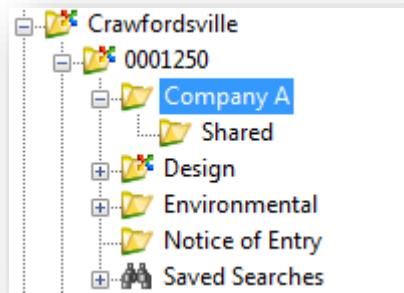For most users, the following folders will be shown:

- District Locations – These are folders for each districts project data to be stored. Underneath each of these folders are a list of Des Numbers that have been created and currently contain data.
- INDOT Workspace – This is where the INDOT CAD Managed Workspace resides.

- Resources – Plotting Files for ProjectWise Plot Organizer and Documentation can be found here.
- Template Documents – Seed files for various CAD products and other template documents can be found here.

Unless otherwise directed, all project data and work is done under a district location\Des Number folder. When participating as a consultant you will have your own folder structure under the Des Number which is discussed in the next section.

3.3-2   Consultant Folder Structure

Once created in ProjectWise, consultant project structures look similar to the following.

Consultant Project Structure

In the above example the only change that will exist is that "Company A" will be replaced by the name of the creating firm. For security purposes, consultants will be unable to see other consultant folders and internal INDOT data. However please be advised that INDOT personnel can read (not edit) the contents of all consultant folders.

Also, shown in the previous example is the "Shared" folder. This folder is intended for INDOT personnel to use when sharing documents with consultant users. Please be advised that as a consultant you cannot edit the contents of this folder or place documents within it, but can read and copy them to your standard folder structure.

3.3-3   ProjectWise Security

Logged in and with a folder of your own, you're now in a position to start working with ProjectWise. This section will give a brief overview of the security model and the rights/restrictions that have been enabled on the ProjectWise Datasource.

The INDOTWise ProjectWise Datasource adheres to a strict security model, providing inner discipline security as well as external security, while providing all INDOT users the ability to review other data as necessary. In addition to these security features, there are additional settings that are used administratively in order to provide rapid support and file restorations, should the need arise. These settings are as follows:

1. Although you can create projects with the Project Creator you cannot delete one. Please contact indotcadsupport@indot.in.gov if you do not have access to the Help Desk.

2. You can create sub-folders under your project you cannot delete one- Contact CAD support for deletion request.

3. Users will not have folder delete privileges; this will aid in CAD Support's ability to process restore requests (no guarantees).

4. Document delete privileges will be granted (you are responsible for your own data) if you need something restored that was deleted, we will make an attempt (no guarantees).

3.3-4   A Note on Exporting Documents

With increasing use of Microsoft OneDrive for data backup on devices, it's highly recommended that users exercise caution when exporting documents from ProjectWise. The backup and synchronization methods that OneDrive uses can cause issues and failures when exporting documents to locations that are being managed by OneDrive. This would include locations such as the Desktop and Documents folders. Users should consider use of the C:\temp folder, or the Downloads folders as those locations are not automatically managed by OneDrive and would provide seamless operation.

4. CAD Support and Documentation Resources

As has been mentioned at various points in this document, there are a number of resources available to make working with INDOT CAD and ProjectWise successful. This section will cover a number of these resources and where to access them.

4.1 INDOT CAD Website

INDOT CAD currently maintains our own external website as part of the IN.gov web portal. To get to our site in particular, navigate to http://www.in.gov/indot/3084.htm in the browser of your choice. Alternatively, our site can be reached by going to http://www.in.gov/indot and navigating to Doing Business with INDOT > Other Business > CAD Support.

On our webpage, you can find a number of resources including:

- News and Information on our workspace and releases, along with system maintenance notifications such as ProjectWise outages, etc.
- Downloads and Information where you can find our workspace releases and their associated documentation.
- Current Version information on the Bentley software versions and other assorted applications in use at INDOT.
- Links to other CAD resources such as the Indiana Design Manual, sample style sheets, and other resources.

4.2 DOTWise

For those users who are using the INDOT CAD Workspace either externally or connected to our ProjectWise managed workspace, INDOT CAD Support publishes our DOTWise manual twice yearly (March and September). These releases coincide with our typical workspace release schedule and allow for us to publish a variety of changes and documentation updates on a regular schedule.

The DOTWise manual is our major CAD workflow and usage document and covers a number of topics including:

- ProjectWise and MicroStation tools
- Working with InRoads and OpenRoads in ProjectWise
- Survey deliverable production
- Design plan production
- Workspace change logs
- Many other items!

Please keep in mind that INDOT is a ProjectWise integrated shop, and that the resources and procedures called out in this document are all written with ProjectWise usage in mind. Most of the procedures should be easily adjusted for non-ProjectWise usage, but if there are any questions about the content of this document, please don't hesitate to ask.

4.3   ProjectWise Documents Folder

In addition to our website resources, we also publish our documentation to our ProjectWise server for access through those means. Our documentation folder is available both internally and externally and can be found in ProjectWise under the Documents\Resources\Documentation folder location, or at the following ProjectWise link if you're using the ProjectWise Explorer Client: Documentation

4.4   Bentley User Community

Newly created during the Fall of 2016, INDOT has partnered with Bentley to have a hosted Bentley Communities site. To use this site, you must have an active Bentley Communities account, and request access to our community. Instructions for doing so can be found at:
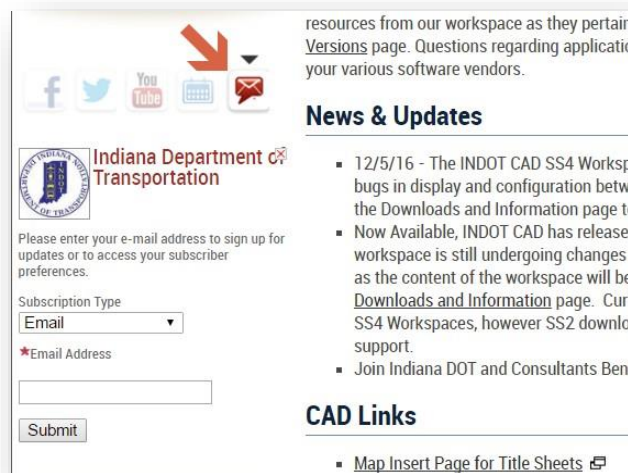http://www.in.gov/indot/files/INDOT_Communities.pdf.

The purpose of the communities' site is to share ideas, have discussions, make suggestions, and network amongst likeminded individuals. Please join our community to contribute to the discussion!

4.5   Signing up for Gov Delivery and CAD Emails

In order to keep our customers informed of upcoming workspace releases, scheduled maintenance, and outages; CAD Support operates a listserv to provide this information in a timely fashion to all our users. In order to sign up for the listserv:

- If you are an INDOT employee and user of CAD software and or a ProjectWise user, you will automatically be enrolled to receive our updates at the time of getting a new user account.
- External users should enroll through the Subscribe for Email Updates link on the left side of the CAD Website (http://www.in.gov/indot/3084.htm) under the Other Business link.

Sign Up for the CAD Listserv

4.6   Contacting INDOT CAD Support

The easiest way to contact INDOT CAD Support is normally through the Helpdesk Assistant. Tickets normally make their way to us relatively quickly and a response should be received shortly after submission. Should you feel that your ticket has not been responded to in a timely fashion, please contact the members of the CAD Support team by forwarding your ticket to indotcadsupport@indot.in.gov so we can see if it's been assigned incorrectly. Please keep in mind however, that our SLA is 1 business day and not all issues can be addressed immediately.