InspectTech Collector 7.4
Bentley

Bentley®
Sustaining Infrastructure

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Preface

Introduction to InspectTech Software

Bentley's InspectTech software is a solution focused on the inspection and management of bridges and other assets. Bentley is a software provider, delivering comprehensive solutions for the infrastructure lifecycle. The InspectTech software system can be effectively used in the field to collect data and sync to the web server for approving reports, inspection management, performance management, maintenance need management, and MAP-21 compliance.

InspectTech Software consists of four different modules:

Collector Module

Inspectors and read-only users access this module. From here, users can create, edit, and submit inspection reports, create maintenance items, and peruse the inspection schedule.

Maintenance Module

Users create and manage work orders and maintenance items via the maintenance module. The maintenance module is typically accessed by managers and maintenance users.

Manager Module

The manager module contains tools specifically for asset managers and owners. Users can create, edit, delete, and archive assets, construct report queries, and run system reports.

Administration Module

The administration module contains tools for managing users, assets, and site parameters. Authorized users control permissions, alerts, manual uploads, logos, user accounts, assets, permission levels to other modules, report frequency, filters, and profile properties. Also available to administrative users are the new Deterioration Model and its settings.

Mobile Application

Like the laptop application, the mobile application enables users to completely create, edit, and upload reports for their working set of assets, all while in the field and without any network connection. Versions 1 and 2 of the mobile application are only compatible with iOS mobile devices, and can be installed directly from the App

Store. The mobile application emphasizes ease of use, accessibility, and clear graphics for the absolute best on-site reporting experience available.

InspectTech Software's Users

We created InspectTech software primarily for agencies and State DOTs involved with asset inspection and management. The software is easy to use, intuitive, and configurable, morphing to each user's specific requirements and blanketing all levels of authority.

InspectTech Software's Purpose

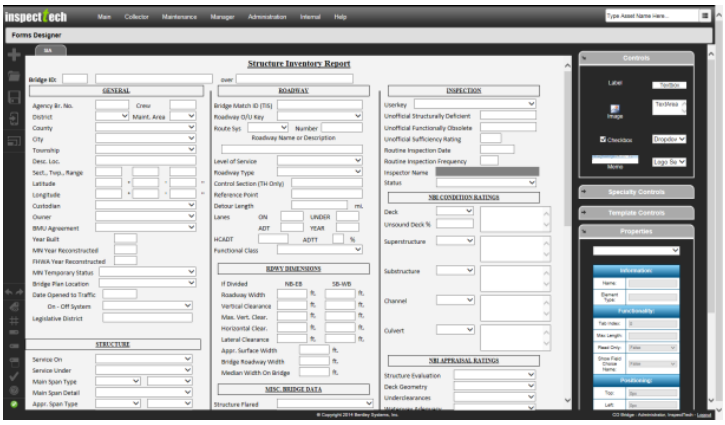
The purpose for InspectTech Software, since its founding, is to make the mammoth task of managing, inspecting, and maintaining bridges, roadways, and railways easier, more efficient, and more productive.

What's New in InspectTech Version 7.4

- ## Site Configuration Tool Suite Added for Administrators

Through the web interface there is now the ability to create and configure:

- Asset Statuses
- Asset Types
- File Types and File Categories
- Forms
- Inspection Types
- Maintenance Types
- Repeating Field Groups
- Report Fields
- Report Sections
- Report Types
- Templates



- ## Bulk Import Functionality

New Bulk Import tools have been added to perform bulk inserts and updates of

- Asset and Report Values
- Asset Inventory
- Field Definitions
- User Accounts

- ## AASHTO National Bridge Element Query Page

Provides the ability to perform queries based on National Bridge Element data similar to existing Report Query functionality.

- ## National Bridge Inventory Values Check Form

New Inspection Report form shows view of entered and federally formatted NBI values to allow easy comparison and validation.

- ## Core Tasks Have Been Added and Updated

New core tasks for role security have been added for the new features and several core tasks have been enhanced to allow for easier management of user access to non-administrative menu items.

- ## Workflow, Stages, and Workflow Actions can now be deleted

The Workflow Configuration screens now allow for the deletion of workflows, workflow stages and workflow actions.

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- Updates to Collector and Maintenance Filters

The edit filter criteria tool now includes intelligent criteria choices to assist the user.

- Updates to Web Site Interface
  - "Pontis" text references on product forms updated to "BrM"
  - Usability improvements made to Manage User screen
  - Performance and usability improvements made to Manage Profile screen
  - Multiple File Uploader now using HTML5 version for non-IE9 browsers so users are no longer required to install ActiveX
  - Edit Asset Values and Open Report Form View links no longer open a new window

- IE8 Support Removed

The web interface now supports Internet Explorer 9*, 10 and 11 and recent versions of Firefox and Chrome.

*Some administrative tools are not compatible with IE9

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Requirements for InspectTech 7.4

Browser	Minimum Requirements: Internet Explorer 9 and later Firefox 25 and later Chrome 32 and later For best performance it is recommended to use the following versions: Internet Explorer 11 Firefox – Latest available (34 at time of 7.4 release) Chrome – Latest available (40 at time of 7.4 release)
Processor	32-bit systems: 1 GHz or faster processor (2 GHz or faster recommended). Multi-core processor recommended. 64-bit systems: 1.4 GHz or faster processor. Multi-core processor recommended.
Memory	Prior to install, there should be a minimum of 4GB free. More memory almost always improves performance, particularly when working with large amounts of data.

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Core Tasks

Collector

Add and Remove Bridge Elements

By selecting this option, administrators give users the authority to add and remove bridge elements from the National Bridge Elements form.

Add and Remove Protective Systems and Defects from Physical Elements

By selecting this option, administrators give users the authority to add and remove protective systems and defects attached to bridge elements from the National Bridge Elements form.

Add Files from Historic and Current Reports to Work Management Groups and Instances

When this option is selected, users can select attachments from previous reports when linking files to asset tasks like maintenance items.

Approve Reports

If this option is selected, users within the role can approve an inspection report and make it uneditable.

Create Projects

This permission works hand-in-hand with Access Project Tasks. If selected, users will be able to manage existing project tasks, only if the Access Project Tasks option is selected.

Create Maintenance Items

Administrators can grant users permission to create maintenance items by selecting this option.

Delete Laptop Reports from the Server

With this option, users are able to delete reports created or currently saved on a laptop from the main server. Deselecting this option keeps the laptop reports safe from unwarranted deletes.

Edit Asset Condition Values

If using the deterioration functionality, users of this role will have the ability to update the current condition value within the deterioration module.

Edit Asset Detail History on the Asset Detail Screen

When this option is selected, users can edit the asset detail history via the asset's detail page.

Edit Asset Values

Selecting this option allows a user to edit an asset's asset values.

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Edit Maintenance Items

If this option is selected, users within the role will be able to edit existing maintenance items.

Manage Asset Schedules

This permission allows module users to manage an asset's schedule on its asset detail page. They can schedule inspections, set recurring dates for inspections, and assign users to the inspection.

Manage Components

With this permission, users can manage the components, or sub-assets, that exist within an asset. If an inspector cannot manage a full asset, this permission allows him to instead edit individual sub-assets.

Manage their Own Working Set

When this option is selected, users can decide which assets will be included in their working set.

Merge In Progress Reports for the Same Asset

This allows users to access the merge reports page to merge in progress reports for the same asset into a single report.

Modify Bridge Element Total Quantities

Users granted this permission can revise the number originally set for a bridge element's total quantity on the National Bridge Elements form.

Share Saved Asset Task Filters with Other Users

Users with this permission can edit public filters and assign them to other users.

Unapprove Reports

When a report is approved, users can no longer edit the report content. However, if necessary, and if users are authorized to perform this action, approved reports can be "unapproved" and brought back for revision.

Upload Files on the Asset Detail Screen

Checking this option allows role users to upload images, sketches, PDFs, and other relevant files to any assets via the assets' detail pages, including those within their working set.

Upload Signature Images

Users are able to upload an image of their signature to their user account page. This signature can then be used in various forms throughout the system (i.e.: in inspection reports).

Upload Their Own Certificates

All users can access their own user account. If a user possesses a certificate relevant to their work within the agency and desires to make the certificate available to other users within the system, they can upload their certificate to their user profile or account. users can only perform this task if this option is selected.

VIEW ARCHIVED ASSETS

This allows users to access the archived asset page where they have access to assets which have been archived in the system.

VIEW I-MODELS

For users that have i-models integrated into the system, this permission allows the users to view and interact with the i-model.

Maintenance

Add Files from Historic and Current Reports to Work Management Groups and Instances

When this option is selected, users can select attachments from previous reports when linking files to asset tasks like maintenance items.

Create Maintenance Items

Administrators can grant Maintenance users permission to create maintenance items by selecting this option.

Edit Asset Condition Values

If using the deterioration functionality, users of this role will have the ability to update the current condition value within the deterioration module.

Edit Asset Values

Selecting this option allows a user to edit an asset's asset values.

Edit Maintenance Items

If this option is selected, users within the Maintenance role will be able to edit existing maintenance items. If the Create Maintenance Items option is selected, they'll also be able to create new maintenance items.

Manage Own Working Set

When this option is selected, users can decide which assets will be included in their working set.

Manage Work Orders

This allows users to access the manage work order screen where work orders can be created and edited and maintenance items can be attached to the work orders.

Share Saved Asset Task Filters with Other Users

Users with this permission can edit public filters and assign them to other users.

Upload Signature Images

Users are able to upload an image of their signature to their user account page. This signature can then be used in various forms throughout the system (i.e.: in inspection reports).

Upload Their Own Certificates

All users can access their own user account. If a user possesses a certificate relevant to their work within the agency and desires to make the certificate available to other users within the system, they can upload their certificate to their user profile or account. Maintenance users can only perform this task if this option is selected.

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Manager

Add Files from Historic and Current Reports to Work Management Groups and Instances

When this option is selected, users can select attachments from previous reports when linking files to asset tasks like maintenance items.

Create Projects

This permission works hand-in-hand with Access Project Tasks. If selected, users will be able to manage existing project tasks, only if the Access Project Tasks option is selected.

Edit Asset Detail History

When this option is selected, users can edit the asset detail history via the asset's detail page.

Edit Asset Values

Selecting this option allows a user to edit an asset's asset values.

Edit Query Results Directly in the Returned Results

When a manager runs a query within the system, the system offers the opportunity to edit the query results directly from the Report Query results screen. When this option is deselected, managers are unable to make a direct edit to the results.

Edit Work Order Records on the Asset Detail Page

Users with this permission can edit work orders from the asset detail page.

Manage Own Working Set

When this option is selected, users can decide which assets will be included in their working set.

Move and Save GIS Page Markers

Enabling this will allow users to move the map marker to an asset's location.

Run Elements Query

This allows users to access the Element Query page to be able to create queries to return bridge element data.

Run Pictures Query

This allows users to access the Picture Query page to be able to create queries to return pictures uploaded to assets and reports.

Run Reports Query

This allows users to access the Report Query page to be able to create queries to return asset and report values.

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Share Saved Asset Task Filters with Other Users

Users with this permission can edit public filters and assign them to other users.

Update Field Values Based on Query Results

Users with this option will have permission to bulk update a single field's value to a new value based on the result of queries executed on the Report Query page.

Upload Files on the Asset Detail Screen

Checking this option allows role users to upload images, sketches, PDFs, and other relevant files to a user's assets. The files will then be accessible via the assets' detail page.

Upload Signature Images

Users are able to upload an image of their signature to their user account page. This signature can then be used in various forms throughout the system: in inspection reports

Upload Their Own Certificates

All users can access their own user account. If a user possesses a certificate relevant to their work within the agency and desires to make the certificate available to other users within the system, they can upload their certificate to their user profile or account. Managers can only perform this task if this option is selected.

View i-models

For users that have i-models integrated into the system, this permission allows the users to view and interact with the i-model.

View Main Map

This allows users to access the Main Map to be able to view the location of all assets in the system on the included GIS Map.

View Management Reports

This allows users to access the Management Reports screen and be able to generate management reports from the system.

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Administration

Access Audit Reports Pertaining to Asset Details

Selecting this task will allow administrative users to access the audit reports on the asset detail page containing asset values and other information.

Access the Asset Detail Fields and Administration Screen

This option gives administrators the authority to access the Manage Asset Details page so they can create, edit, or remove fields displayed on the asset detail page.

Assign Task Security

Now contained within the Manage Roles screen, task security assignment determines which roles can perform which tasks within the system. When this option is selected, administrators have the authority to decide task permissions and securities.

Bulk Import

This allows users to access the bulk import tools to be able to perform bulk imports of asset and report values, field definitions, assets, and user accounts.

Create and Assign User Messages

Administrators have the ability to send users messages. These messages can be formatted to a default template. When this option is deselected, administrative users will not be able to create or assign user messages.

Create and Edit Assets

When this option is selected, administrators can create and edit assets

Create and Edit Roles

Users granted this permission can not only create new roles (to be added to the Manage Roles page), but can also edit existing roles.

Create and Edit Users

Administrative users can easily create user accounts and assign them to roles, profiles, and user groups.

Create Profiles on the Profile Creation Page

Profiles play a significant role in the hierarchy of roles and the security of individual agency information within the system. When this option is selected, administrators have the authority to create new profiles via the Manage Profiles page.

Create Schedules

With this permission, system administrators can create new schedule definitions for inspection types via the Manage Schedule Definitions page.

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Delete Assets

Selecting this option will allow administrative users to delete assets from the inventory. This completely removes the asset, all of the asset's data, and all its files from the system.

Edit Asset Values

Selecting this option allows a user to edit an asset's asset values.

Edit Manual Pages

When this option is selected, administrators can upload manual pages to the system, link manual pages to fields within inspection reports, and update linked manual pages when necessary.

Generate the Federal NBI Tape

Users with this permission can generate the US DOT Federal NBI data on the NBI Tape Generation page.

Impersonate Other Users

Selecting this option allows administrators to impersonate other users within the system via the Manage Users page. This permission helps administrators view and address an issue from the user's perspective.

Import i-Models

When this option is selected, administrative users can import i-Model design files..

Manage All User Certificates

Administrators can add or edit users' certificates on the Mange Certificates page. This option is helpful in case Collector, Maintenance, and Manager roles are not authorized to upload or edit their own certificates.

Manage Asset and Report Settings

This grants users access to the Asset and Report Settings configuration tools suite. This allows users to configure settings for Asset Statuses, Asset Types, File Types and Categories, Forms, Inspection Types, Maintenance Types, Repeating Field Groups, Report Fields, Report Sections, Report Types, and Templates. This task should only be granted to very high level administrators who are very familiar with the site's configuration and have the authority to make changes.

Manage Asset Security

This option allows administrators to manage their system's inventory security on the User Group Security and Supplemental Security pages. This includes user group security, individual user security,

Manage E-Mail Alerts

Users with this permission can set and manage email alerts and determine who will receive them.

Manage Elements

This grants users access to the Manage Elements screen where they have the ability to create new Agency Developed Elements and edit the edit the element definitions in the system.

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Manage Field Groups

Selecting this option will allow administrators to create new field groups and edit current field groups that are used on the query pages.

Manage Pontis Administration Values

This option allows access to the AASHTOWare BrM administration pages. When granted this permission, administrative users will be able to edit the values and securities within their integrated BrM screens. This only applies to agencies with this function.

Manage Pontis to InspectTech Field Mappings

When this option is selected, administrative users can map new fields between AASHTOWare BrM and InspectTech or update existing mappings. This only applies to agencies with this function.

Manage ProjectWise Administration

With this permission, administrators are able to manage the ProjectWise screens. This only applies to agencies with this function.

Manage ProjectWise Mapping

When this option is selected, administrators can map documents and other relevant files from the ProjectWise database to the InspectTech system. This only applies to agencies with this function.

Manage Own Working Set

When this option is selected, users can decide which assets will be included in their working set.

Manage User Groups

When this option is selected, administrators have access to the Manage User Groups page allowing htem full control over the assignment of users to user groups and user groups to asset groups and views.

Manage Workflows

If this option is selected, administrators will have access to the Manage Workflows page so they can create new workflows and workflow stages, as well as edit existing workflows and workflow stages.

Share Saved Asset Task Filters with Other Users

Users with this permission can edit public filters and assign them to other users.

Upload and Edit Logos

If selected, administrators can upload and add agency logos to the inspection report. Administrators can also edit the logos already uploaded to the report.

Upload Signature Images

Users are able to upload an image of their signature to their user account page. This signature can then be used in various forms throughout the system: in inspection reports

Upload Their Own Certificates

All users can access their own user account. If a user possesses a certificate relevant to their work within the agency and desires to make the certificate available to other users within the system, they can upload their certificate to their user profile or account. Administrative users can only perform this task if this option is selected.

View Audit Reports

This option gives administrative users the authority to view audit information on the Audit Reports page.

View In Progress Mobile Reports

Selecting this option grants administrators the authority to view in progress reports currently open and being modified or completed on a mobile device. Mobile device reports would still be protected from modification from outside the device

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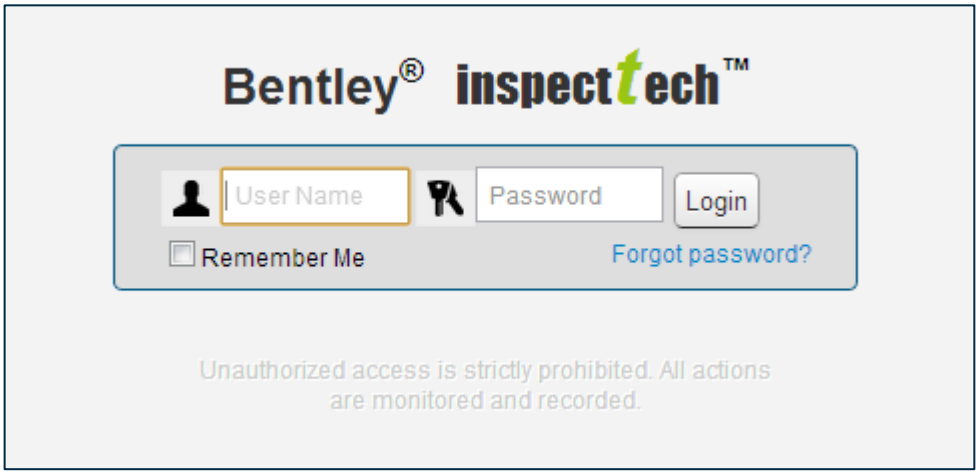
Basic Features

How to Log into the InspectTech Website

1. Type your software URL into the web address bar.



2. Type your Username and Password into the appropriate boxes
3. Set the Remember Me checkbox to save your credentials.
4. Click Login.

Note: Contact your system administrator if you need to have a password reset.

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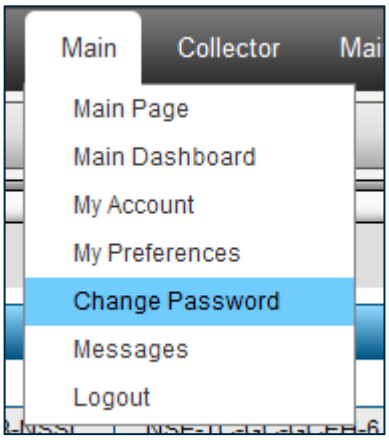
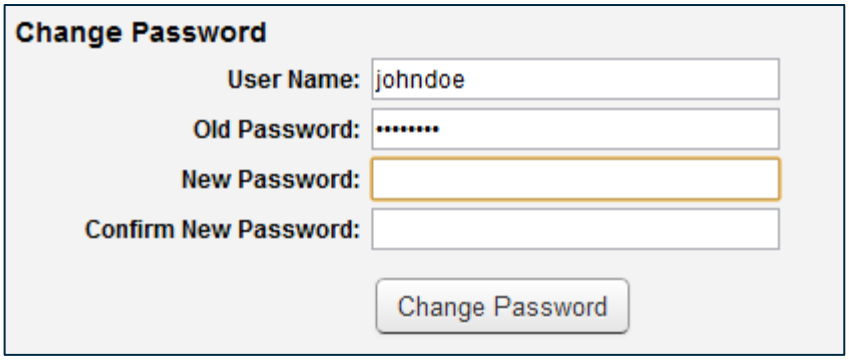
Account Settings

How to Change Your Password

1. Select Main > Change Password.



2. Type the old password into the appropriate box and then type the new password and confirm it.



3. Select Change Password.

The next time you log in, use the new password to enter the website.

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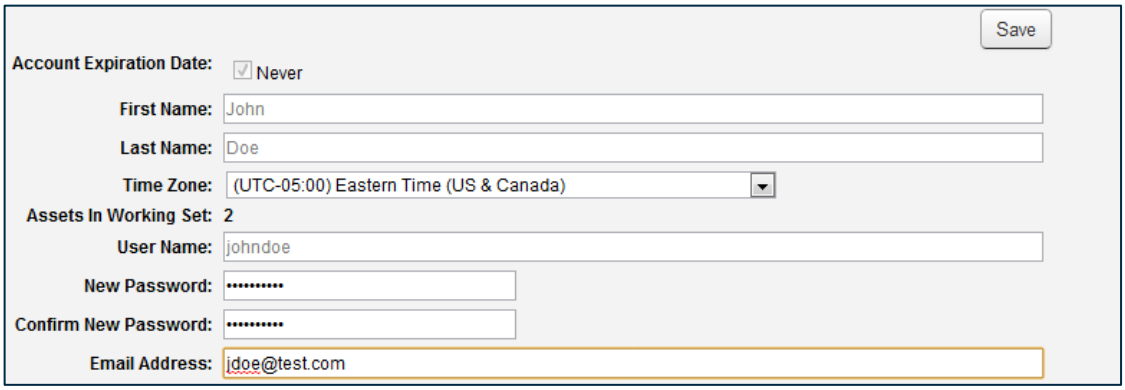
Managing “My Account”

1. Select Main > My Account.

2. Enter the desired information.

3. Make sure the Account Expiration Date: Never checkbox is set.

4. Click Save.



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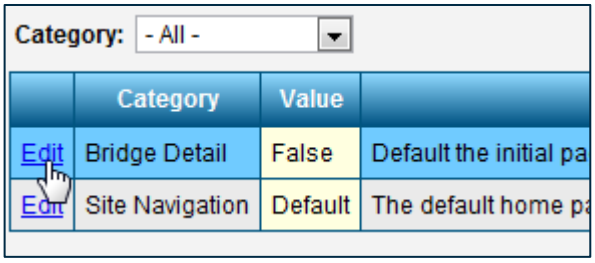
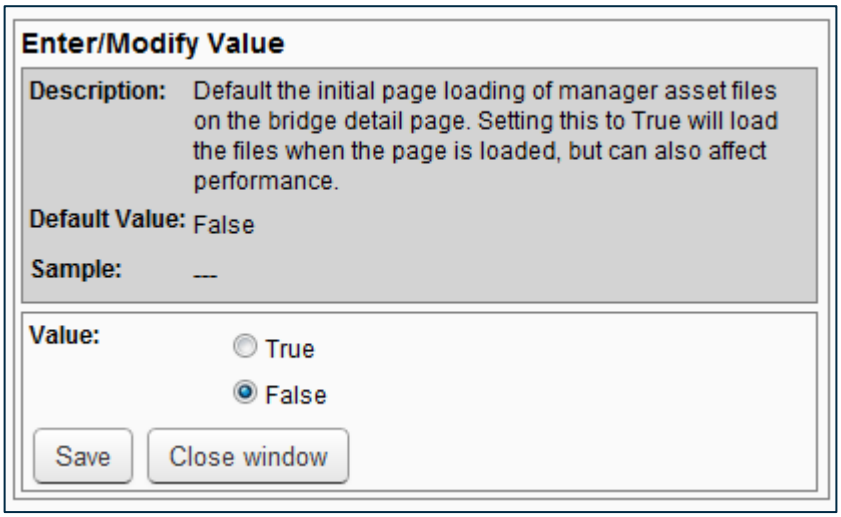
Managing “My Preferences”

The My Preferences option allows users to define a number of settings, from the default home page upon login to the files loaded on an asset detail page.

1. Select Main > My Preferences.

2. Click Edit to change your preferences.





3. Click Save.

4. Log out and log back in to view changes.

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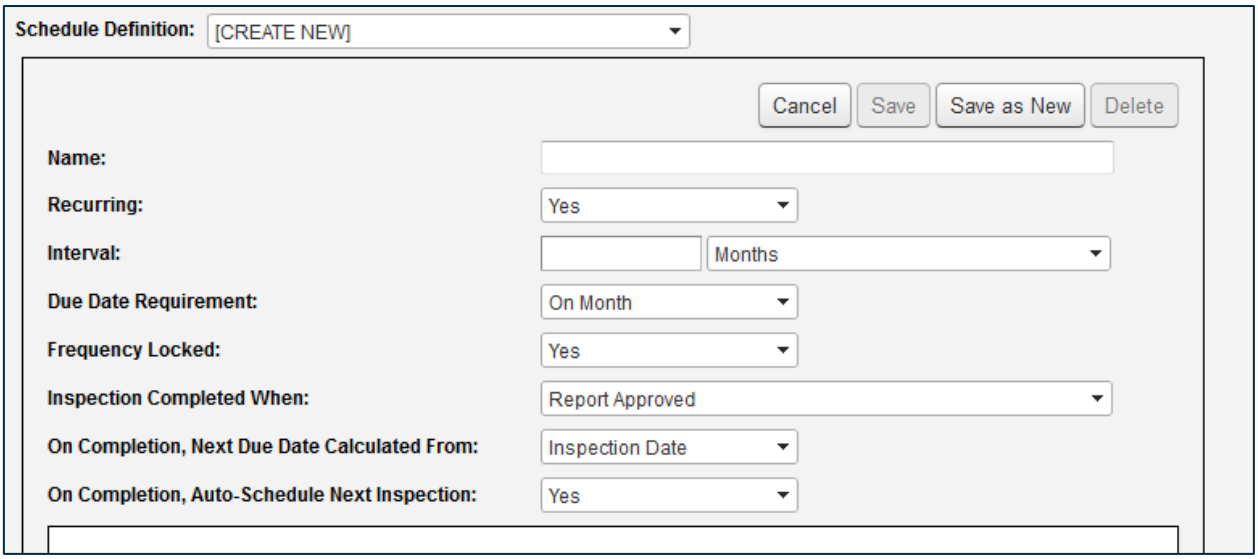
For more information concerning working sets, see the corresponding Inspection Scheduling

Managers can schedule future inspections within the software and assign these anticipated inspections to individual users within the system. Scheduled inspections are easy to track within the system, providing users with information concerning their assigned inspections and whether they are overdue.

Note: Inspection Types, not Report Types, are being scheduled, meaning a single inspection report could have multiple inspection types and therefore could populate multiple inspection schedules.



Administrators can determine the schedule definitions for each recurring inspection type in the system. The schedule definition includes settings to indicate the default frequency, whether the frequency can be changed for specific assets, completion criteria, etc.

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Next, managers indicate which recurring inspection types are required for each asset in the system. This will signal the system to automatically update based on the frequency when a report of that inspection type is completed. Managers can schedule both recurring and non-recurring inspections to a user to be completed on a future date.

Recurring	Set whether the defined schedule will be the default.
Interval	Determine the time interval between inspections.
Due Date Requirement	Select whether the due date will be specific (to the day) or general (within a month).
Frequency Locked	Lock the frequency (the due date and the interval) to keep it secure from unauthorized edits.
Inspection Completed When	Decide what will define "complete" in your system.
On Completion, Next Due Date Calculated From	Determine when the next due date will be completed if you plan on scheduling inspections automatically.
On Completion, Auto-Schedule Next Inspection	Selecting "Yes" will automatically schedule the next inspection based on the previously set standards.

Once an inspection has been scheduled it will have a due date, a scheduled date, and an assigned user. These scheduled inspections appear on the Inspection Schedule filter page where users can see ongoing, upcoming, and overdue inspections.

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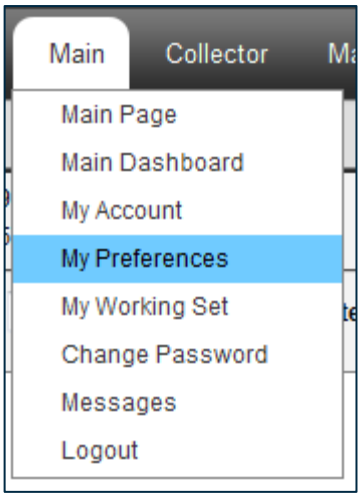
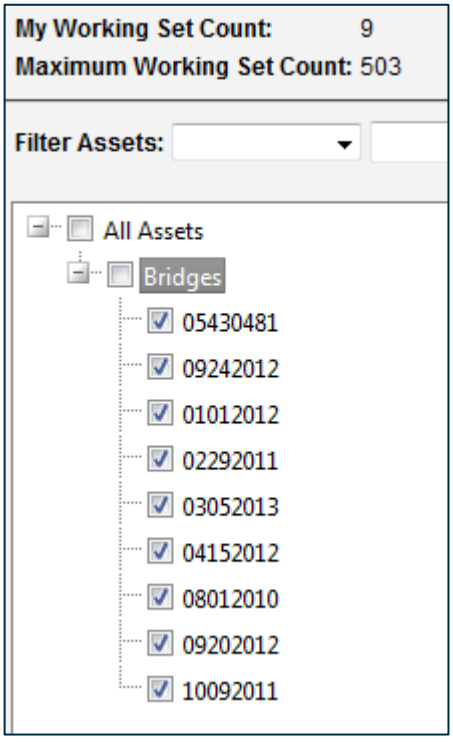
My Working Set section.

1. Select Main > My Working Set.



2. Set the checkboxes next to assets to include them in your working set.



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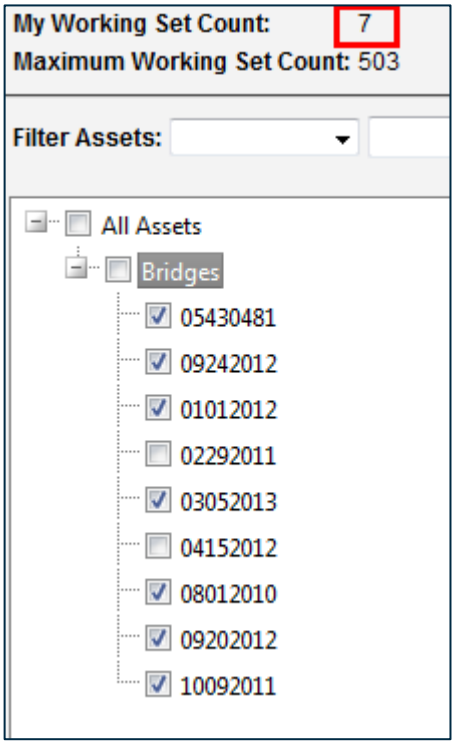
3. Clear the checkboxes to exclude them from your working set.



The My Working Set Count will change accordingly.

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Dashboards

InspectTech contains 4 dashboards, one Main dashboard and one for each of the 3 modules Collector, Manager and Maintenance. All users have access to the Main dashboard and will have access to the dashboard for each module they have access to.

Each dashboard is made up of widgets that can be added to the dashboard to display information to the user. Each widget can display information in a grid, chart or graph form. Each widget in the system will be assigned to one or more of the four dashboards. This limits which widgets are available on each dashboard. The module dashboards can only have widgets added which have been mapped to the module however the main dashboard can have any widget available in the system added. This allows individual widgets to be shared across the dashboards.

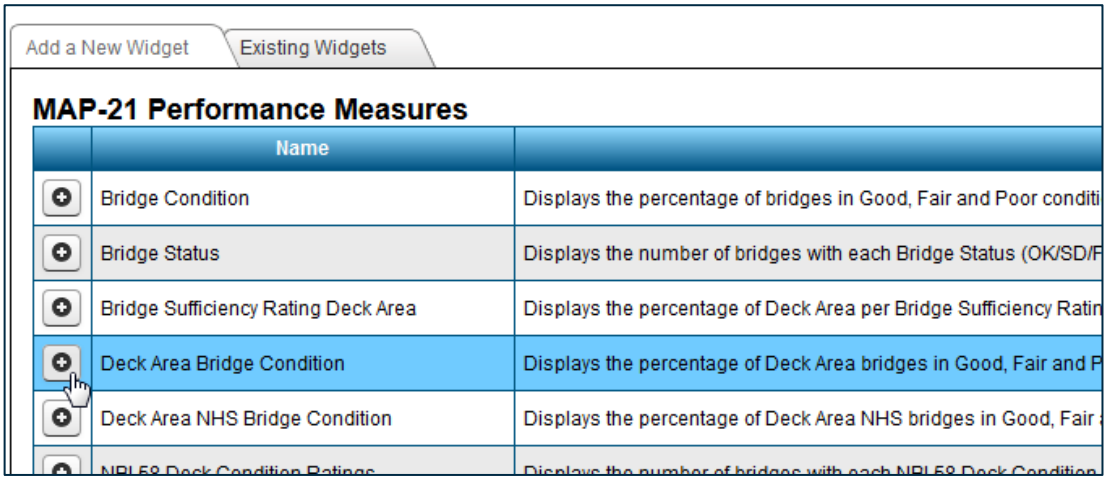
Each user can rearrange the widgets on their dashboard as well as add and remove them to meet their specific needs.

How to Add Widgets to the Dashboard

Users can rearrange their dashboard to show the information they want.

1. Click the Add Widget button.

2. Select the plus sign next to the widgets you want to add within the Add a New Widget tab.



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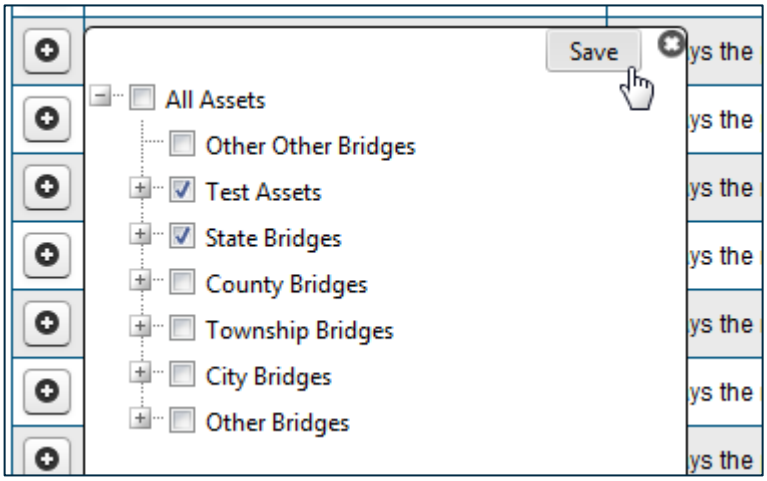
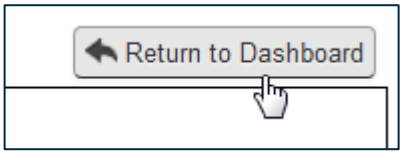
3. For widgets pertaining to MAP-21 Performance Measures and NBIS Compliance Metrics, select which assets are displayed on the dashboard.



4. Click Save if adding MAP-21 or NBIS widgets.
    - Standard widgets will be added automatically.

5. Click the Return to Dashboard button.



6. Click the little x in the top right corner of the widget to remove a widget.

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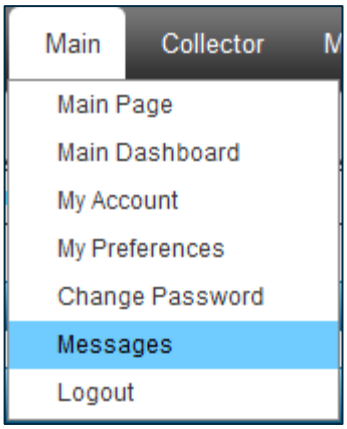
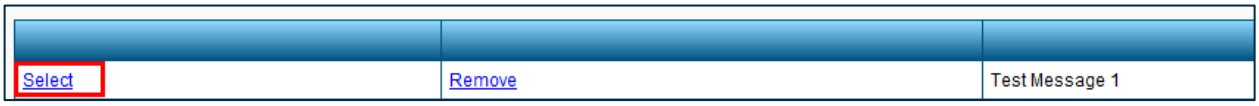
How to Manage Your Messages

1. Preview the message in the My Messages widget on the dashboard.

2. For more detailed messaging tools, select Main > Messages.



3. Click Select to open the message's details.



4. Edit the title and the contents of the message and click Save.

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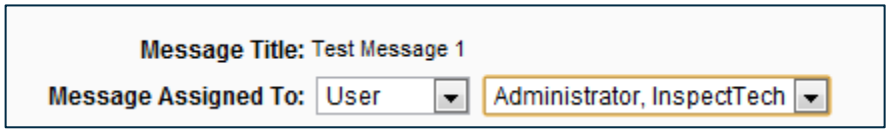
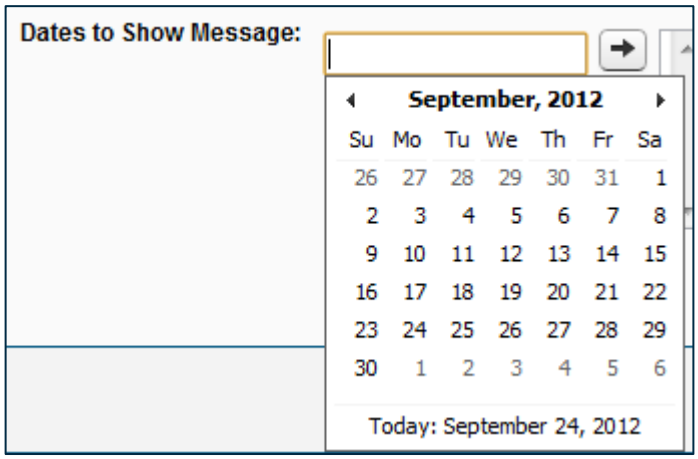
5. Assign the message to a user, group, or to everyone in the system.



6. Set a timer on the message to determine when it will be sent and shown to the recipient.



7. Click the arrow to submit the message's timer.

8. Delete a timer by selecting it in the drop down and clicking the trash can icon.

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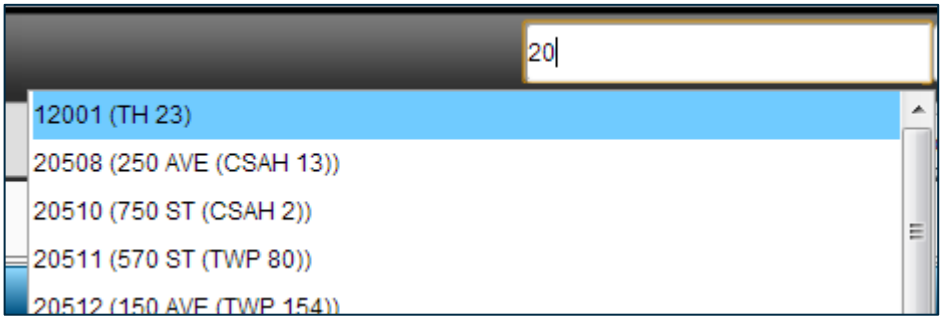
How to Use the Quick Select Search

The Quick Select box is designed to promptly find any asset in the software.

1. Type a portion of the asset's name.



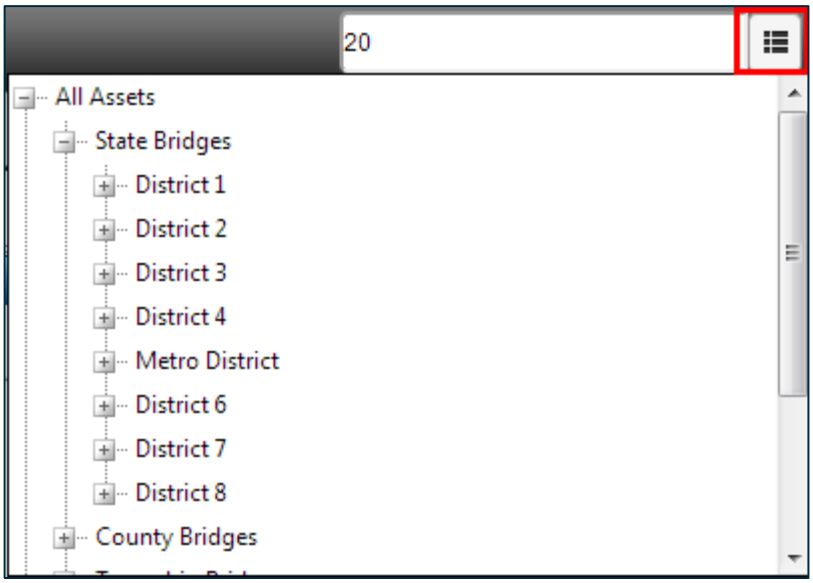
2. Scroll through the results to locate the correct asset.

3. Click on the asset in the list.

How to Use the Asset Tree Search

View and locate any/all assets within a specific parent asset.

1. Select the menu button to the right of the Quick Select.



2. Click the plus sign next to the parent asset to expand the list of children assets.

3. Navigate through the list to locate the desired asset.

4. Select the asset to view its detail page.

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Collector Module

Overview

The Collector Module is focused on the inspection process and managing the inspection activities of users in the system. This includes everything from the scheduling of future inspections to report creation, data entry and the review and final approval of the reports in the system. It is typical that most InspectTech users will spend the majority of their time in the Collector Module.

Inspection data is used as a basis to make critical safety, maintenance, and capital planning decisions. Ensuring that the information collected is error-free, accurate, and in a usable format is of critical importance. InspectTech Collector is designed to make the collection of this data efficient and error free. Collection forms throughout the module incorporate tools to prevent and catch erroneous data entry. These include:

- Drop down selection menus
- Integrated FHWA coding guide manuals
- Ability to have reference pictures and diagrams associated with condition states
- Error checks and warnings for questionable values

To encourage a richness of data collected, the software supports:

- Integration of digital pictures and sketches
- Narrative data for fields
- Any electronic file can be to be attached to reports

The Collector Module also includes automatic report generation functionality to reduce clerical work to a minimum. Utilizing PDF report templates an inspector can instantly generate a PDF document based on the inspection data that has been entered which includes picture references and automatic formatting which can then be shared and printed by the inspector as necessary. The report template can include a Cover Page, Table of Contents, Pictures, Sketches, Location Maps and all field notes captured during the inspection.

Inspection scheduling tools make it easy for managers to assign upcoming inspections to inspectors or inspection teams. Inspectors can easily see the work that has been assigned to them and the intuitive interface allows them to efficiently and accurately complete their required inspections.

The electronic workflow process that is built in to the Collector module helps ensure the accuracy of the data in the system. Each inspection report that is completed must pass through a configurable workflow process where approving managers can utilize the web-interface to review the data and pictures that have been collected for the report, leave comments and choose to accept or reject the inspection results.

Integrated inspector tools allow inspection manuals to be uploaded to the system and referenced directly from the inspection input forms. This allows inspectors to have all needed reference material at their fingertips.

In addition to the web-based Collector module users may also have the ability to use the InspectTech Collector Mobile app for field inspections.

The InspectTech Collector Mobile app enables quick and effective collection of transportation infrastructure asset information and completion of inspections in the field. A streamlined interface delivers valid fields and drop-downs as the inspector works through a logical and thorough collection of data.

Support for rich data such as photos, video, and audio can be easily captured using the mobile device and add to the overall quality of asset inventory information and reports. The app can utilize GPS positioning to identify assets near an inspector in the field and allows inspectors to capture location data for assets in the field. These powerful capabilities, combined with the in-field availability of historical condition data, help inspectors work with improved efficiency.

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Report Filter and Inspection Schedule Filter

There are two different filter pages in the Collector Module, the Report Filter and Inspection Schedule Filter. The goal of each filter is to provide the user with a view of all of the tasks that are currently ongoing within the system. The report filter shows inspection reports inspection reports that have been created and the inspection filter shows inspections that have been scheduled.

The great aspect of the filter pages is that they are very flexible and can be configured to meet the needs of each agency and each individual user. Each filter displays a grid to the user that includes all the items in the system which meets the filter criteria. The columns that are shown on the grid are configurable and can be set to display the exact information that the user wants to display.

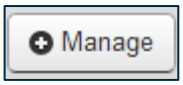
On each filter page saved filters can be accessed to be able to quickly pull up different sets of data based on what the user is looking for. Some examples of saved filters are 'In Progress Reports', 'Reports Awaiting My Review' or 'Approved Reports'. There are 2 types of saved filters; 'Public Filters' and 'My Filters'. Only administrators with sufficient access can create and edit the Public Filters and grant users in the system access to them. But every user in the system has the option to create their own saved filters which are found in their 'My Filters' list.

How to Create a Private Filter

For more information concerning report filters, see the corresponding Report Filter and Inspection Scheduling section.

1. To begin, either:
   - Select Collector > Report Filter to create a new report filter, OR
   - Select Collector > Inspection Schedules to create a new filter displaying scheduled inspections.

2. Click the Manage button at the top right of the page.



3. Select New from the list menu.

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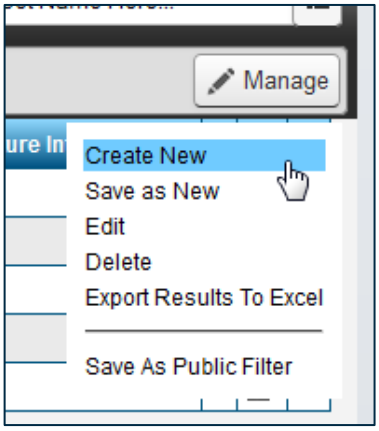
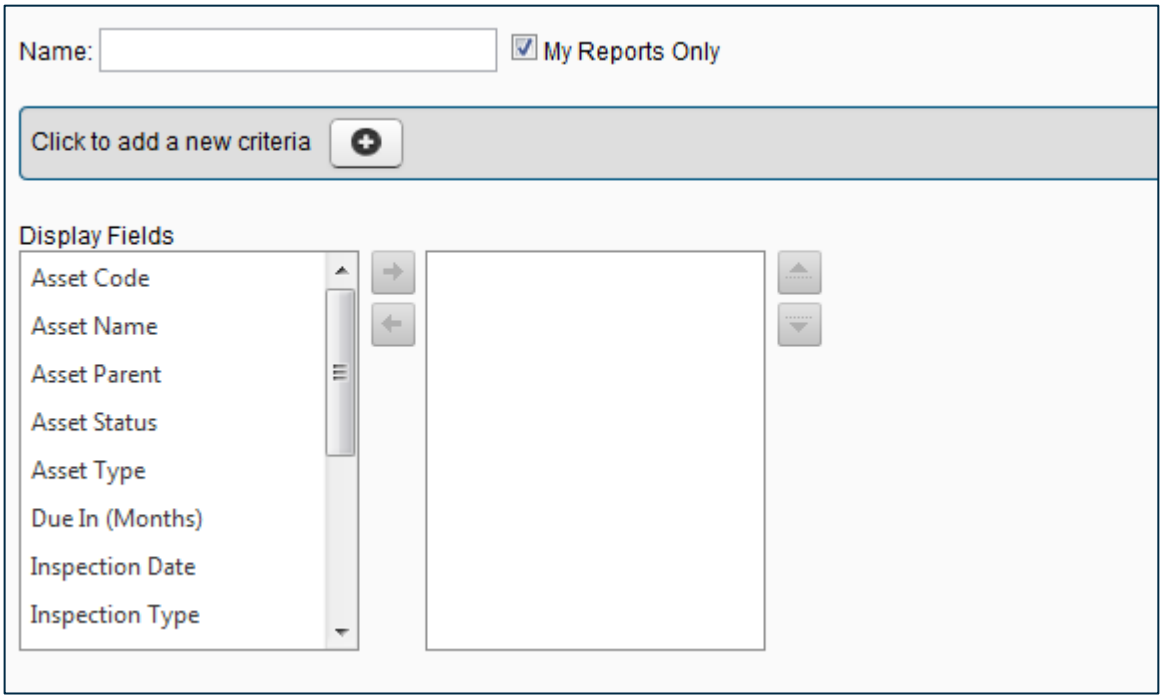


The following dialog box will contain tools for assembling a new report filter.



4. Type a name for your new report filter.

5. Click the plus sign next to Click to add a new criteria to determine the reports shown in the filter.

6. Select one of the following choices from the first menu.

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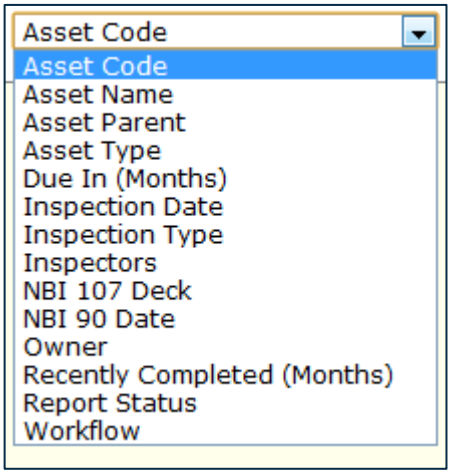
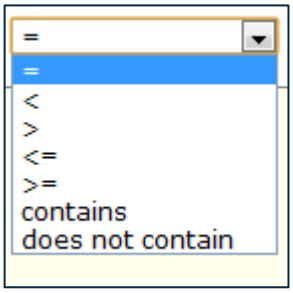
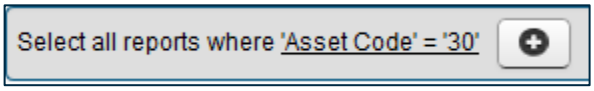


7. Select one of the following parameters from the second menu.



8. Enter criteria into the textbox.

9. Click Add.



10. Repeat steps 5-9 to add more criteria to the filter.

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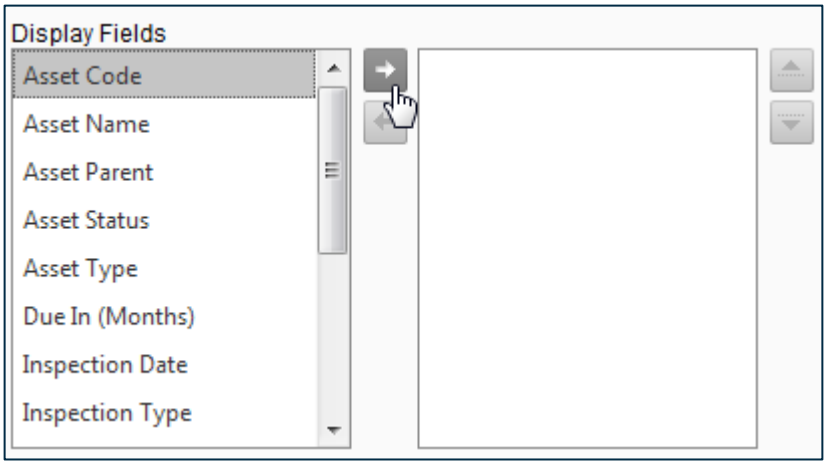
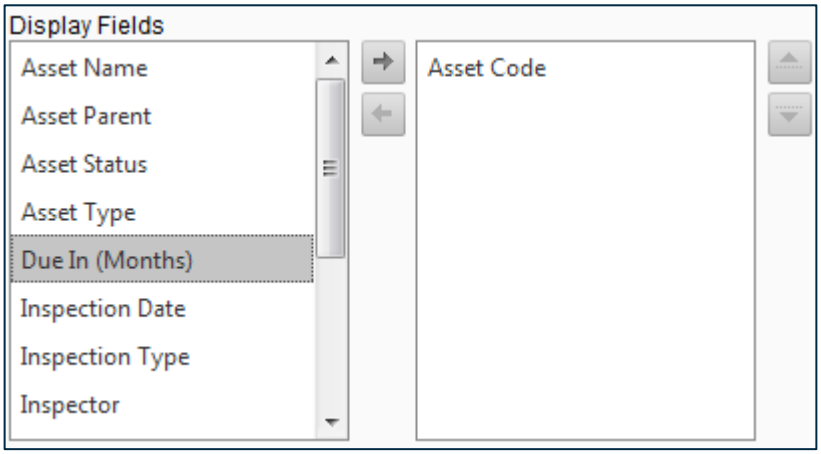
11. To configure how you view the results:
    - Select a column name from the list titled Display Fields.
    - Click the right arrow to add.





12. Click Save. The filter will be saved as a private filter.

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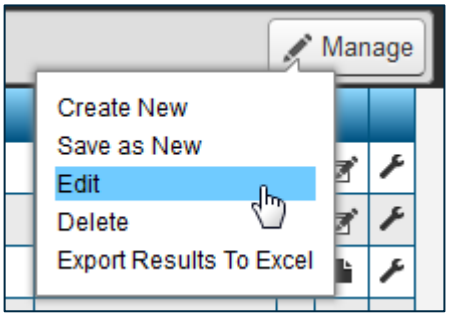
How to Edit a Private Filter

For more information concerning report filters, see the corresponding Report Filter section.

1. Select Collector > Report Filter.
2. Select the desired filter from the Saved Filters menu.
3. Click the Manage button.
4. Select Edit from the menu.
   - Only administrative users are able to edit public filters.

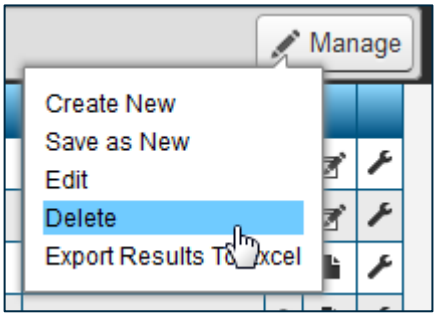


5. Make the desired changes to the filter.
6. Click Save.

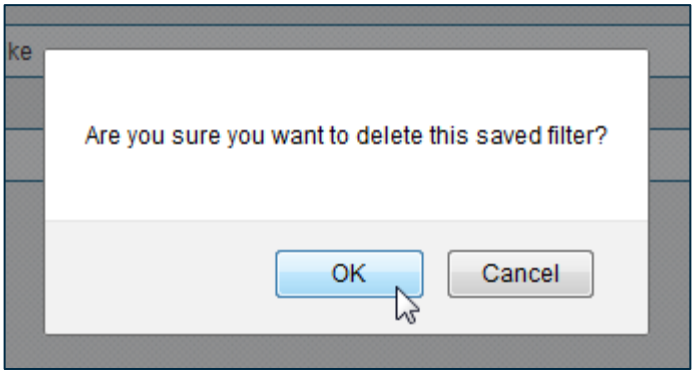
How to Delete a Private Filter

For more information concerning report filters, see the corresponding Report Filter section.

1. Select Collector > Report Filter.
2. Select the desired filter from the Saved Filters menu.
3. Click the Manage button.
4. Select Delete from the menu.
   - Only administrative users are able to edit public filters.



5. Click OK to confirm the action or Cancel to keep the filter.



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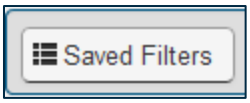
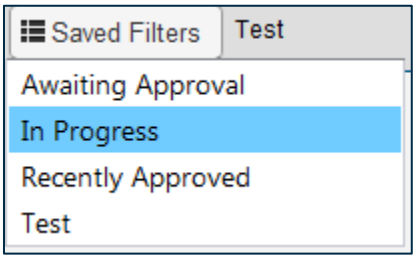
How to Load a Saved Report Filter

For more information concerning report filters, see the corresponding Report Filter section.

1. Select Collector > Report Filter.
2. Click the Saved Filters button in the top left corner.



3. Select the filter from the list.



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Inspection Reports

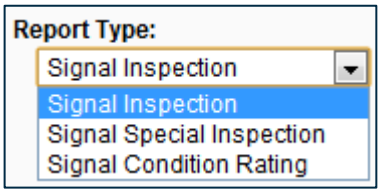
Each time an asset is inspected in the field an Inspection Report will be created in InspectTech to track this event. All of the data and files associated with the inspection event are uploaded to that inspection report within the system so they can be accessed at any time in the future. Each inspection report will be for one asset and will have a Create Date, Inspection Date, Inspection Type, Owner, and Assigned Users as well as a current status. Inspection Reports and the management of them account for the majority of the activity in InspectTech.

How to Create a New Inspection Report

1. Locate an asset's detail page via the Quick Select or the Asset Group Filter.
2. Click the Create Report button on the right side of the screen.

3. Select the radio button for the report settings.

4. Select the report type from the list and the desired inspection type(s).



5. Click Create.

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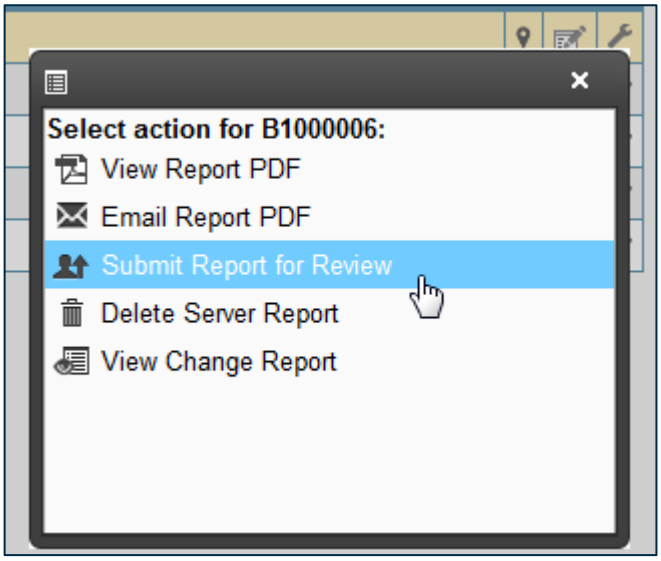
How to Submit Reports

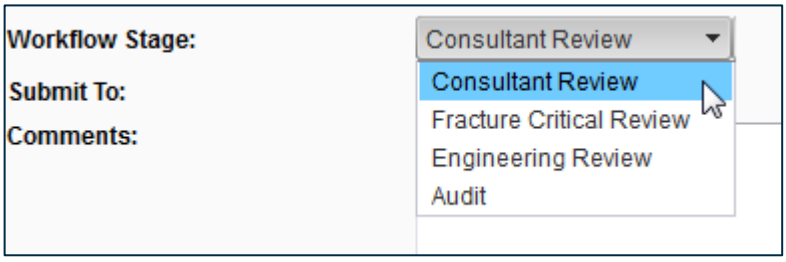
To learn more about report workflows in the system, see the corresponding Workflow section.

In Progress Reports

1. Locate the desired report.
2. Click the wrench icon to access the report actions menu.



3. Select Submit Report for Review.
4. Select the new workflow stage. The available workflow stages will be dependent on the sites configurations as well as the logged in user's role.



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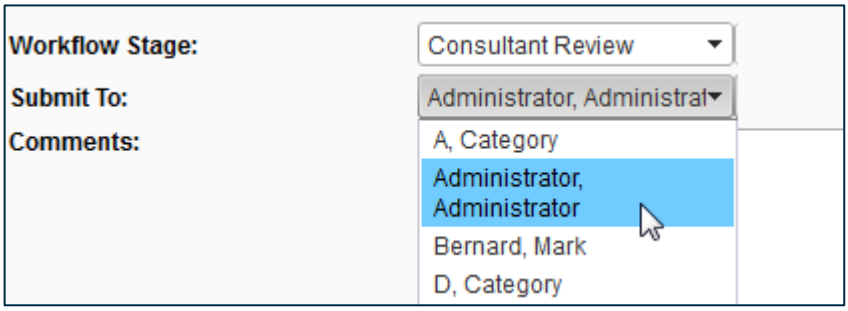
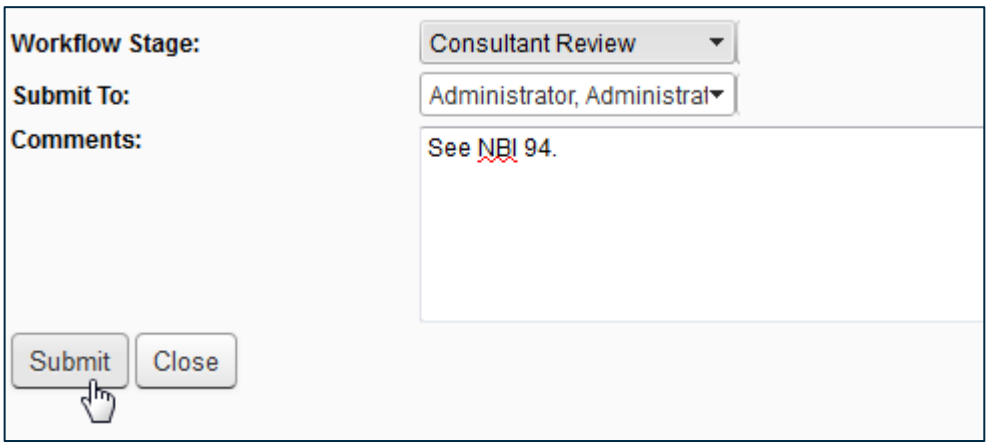
5. Select the user you want to submit the report to.



6. Add any relevant comments.



7. Click Submit.
    - The report will be listed in the Awaiting Approval report filter.

Awaiting Approval

1. Locate the desired report in the Awaiting Approval filter.

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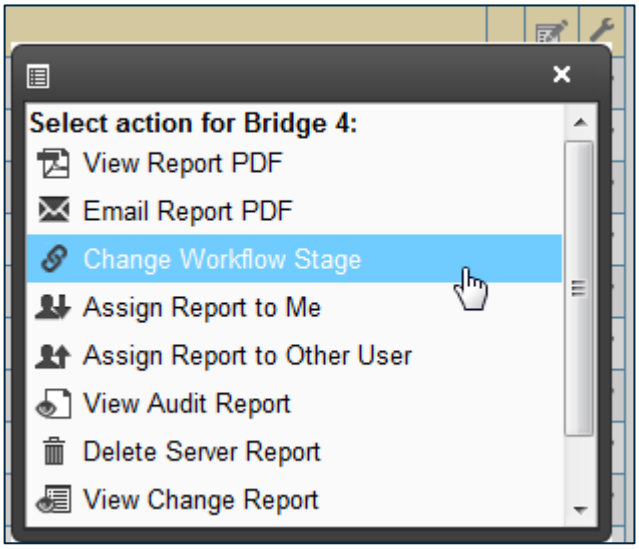
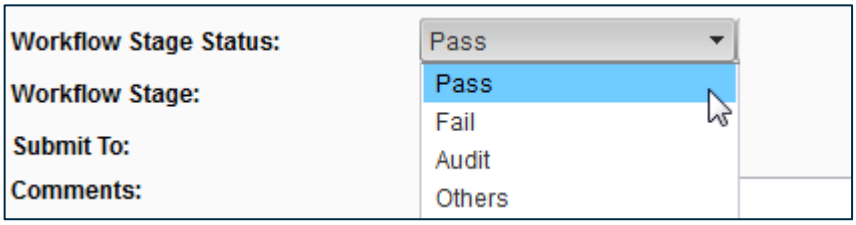
2. Click the wrench icon in the report's row.

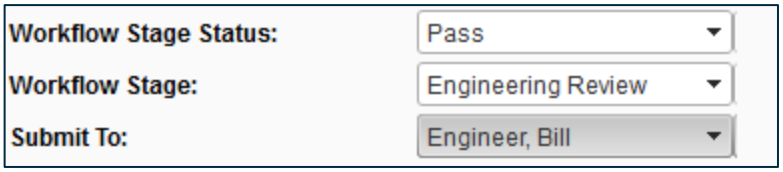


3. Select Change Workflow Stage.

4. Determine whether the report passes or fails its current review stage.



5. Select its next workflow stage and the user that will review it, if applicable.



6. Add any relevant comments.

7. Click Submit.

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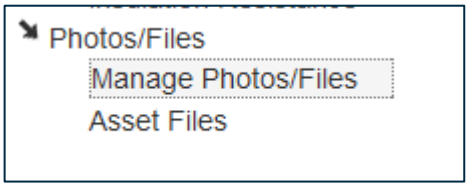
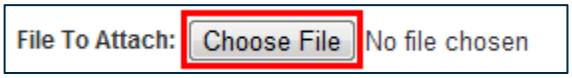
How to Attach a File to a Report

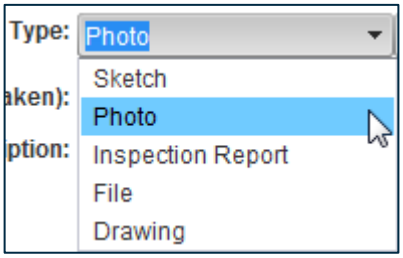
1. Open the inspection report.
2. Navigate to the photo and file manager page via the report toolbar.



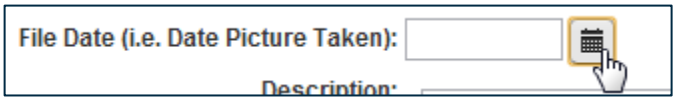
3. Select Choose File to browse your computer's folders.



4. Select the file type from the list menu.



5. Enter the date the file was created or click on the calendar icon to choose a date.



6. Type a description of the file. Click the ABC button to spell check your entry.
7. Click Attach.

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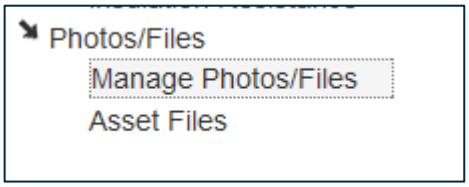
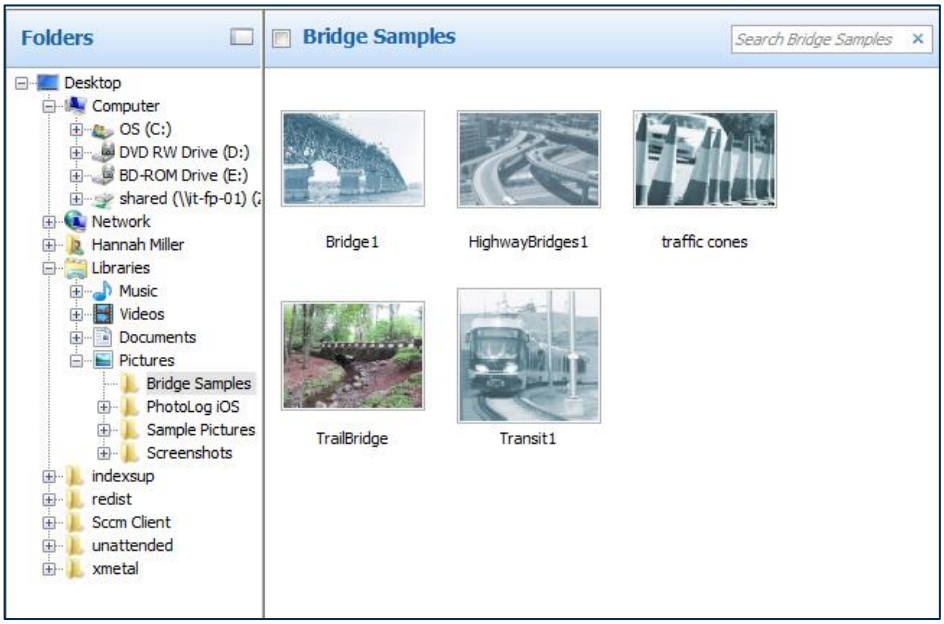
How to Attach Multiple Files to a Report

1. Open the inspection report.

2. Navigate to the photo and file manager page via the report toolbar.



3. Locate the images' folders via the tree filter along the left side of the upload tool.



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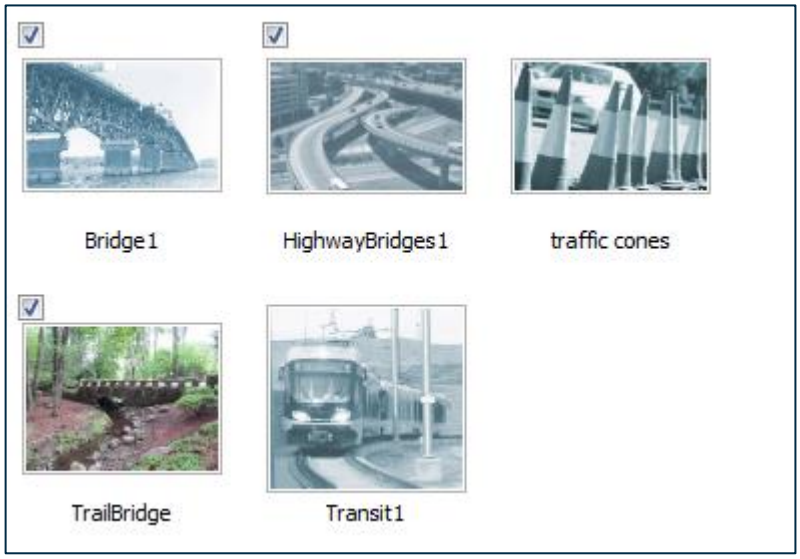
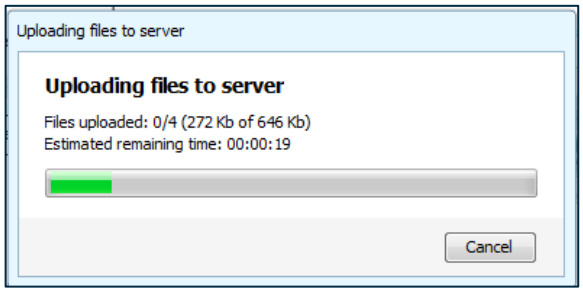
4. Set the checkboxes on the images you want to add.



5. To add files from different folders, simply select another folder from the filter. Your previous selections will be saved.

6. Click Attach.



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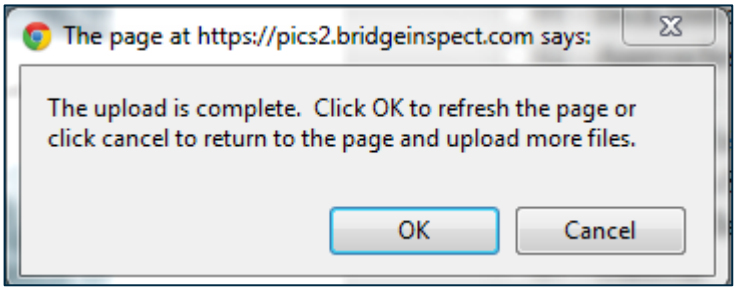
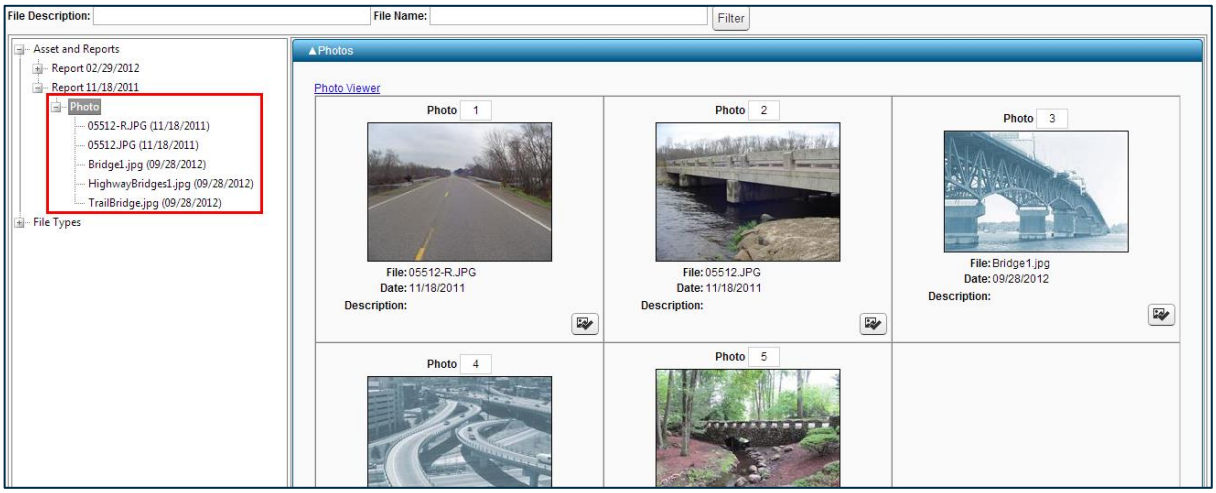
7. Follow the instructions on the following prompt.



The uploaded files will be stored in the Files tab on the asset's detail page and in the Manage Photos/Files section of the inspection report.



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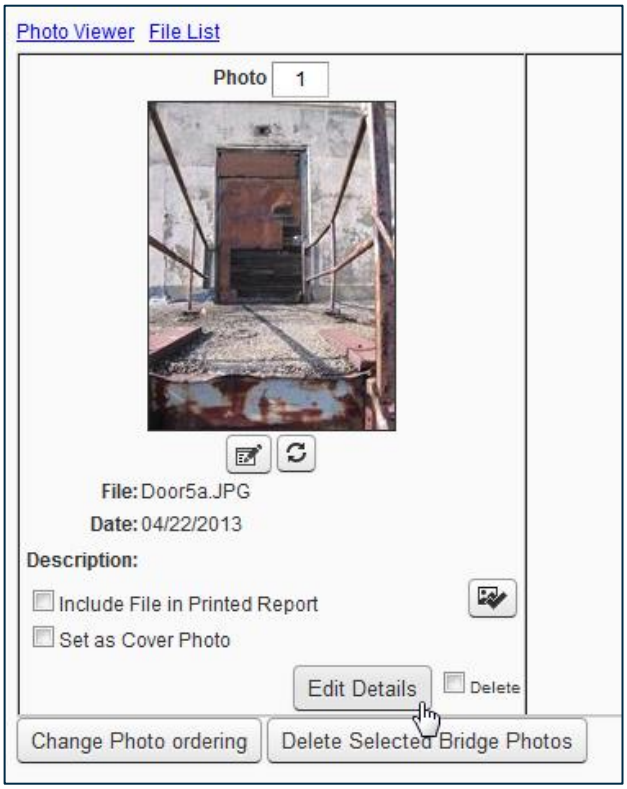
How to Edit an Uploaded File

1. Open the inspection report.
2. Navigate to the photo and file manager page via the report toolbar.
3. Scroll to the file uploads.
4. Click the Edit Details button associated with the file you wish to edit.



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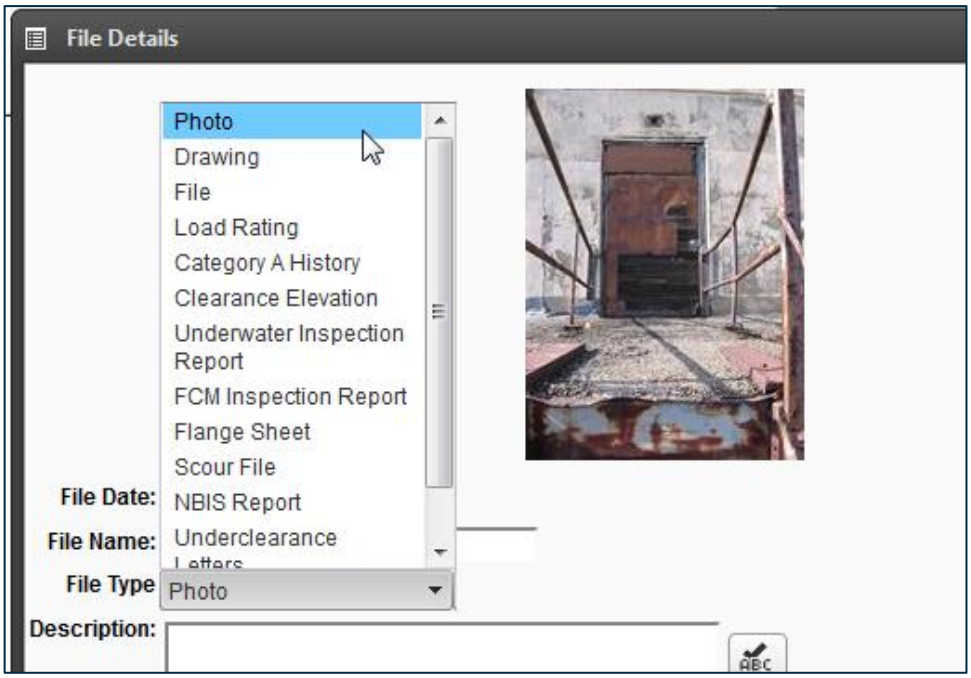
5. Select the menu labeled File Type.



6. Choose the new file type from the available options.

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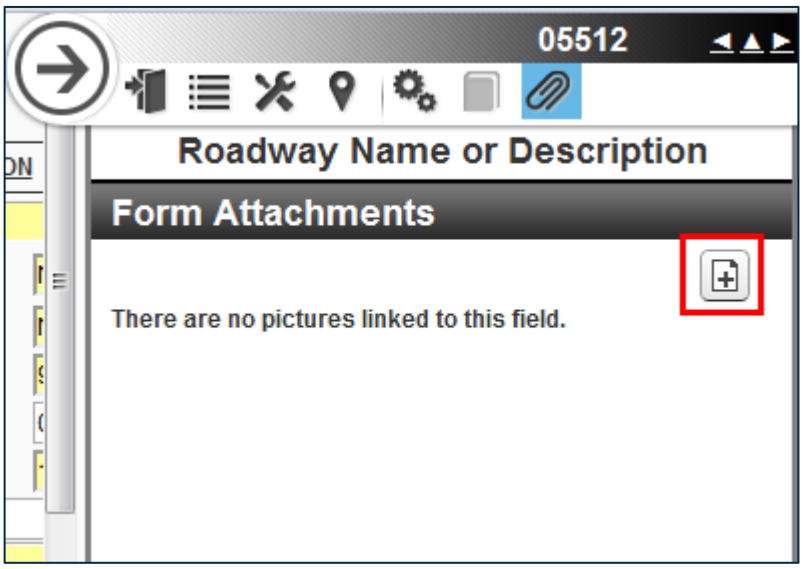
How to Link a File to a Field

You can only link photos to a field within the report after attaching the photo to the report. Linking photos to individual fields elaborates on the data you entered.

1. Open the inspection report.

2. Select the field you want to link with the photo.
    - The report toolbar will activate with that field's information.

3. Select the paperclip icon titled Form Attachments.



4. Click the plus sign icon.

5. Filter through the files already attached to the report.

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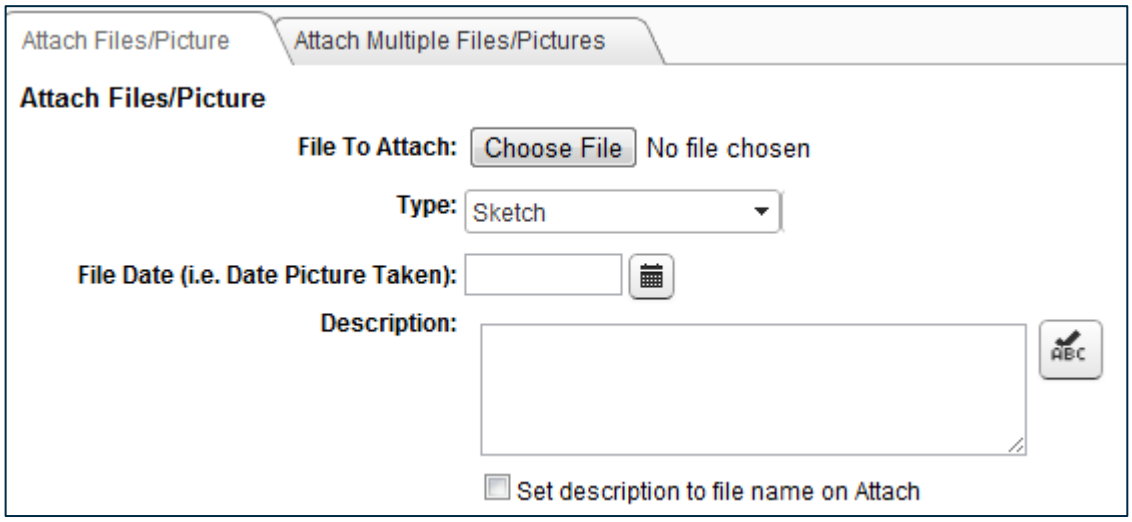
6. Upload a new file if the desired photo is not attached.

A dialog box will open with the same tool used to attach photos and files to the report.



7. Select Attach Files.

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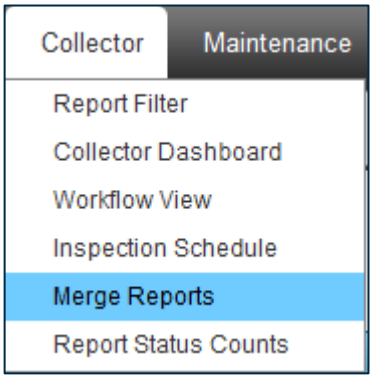
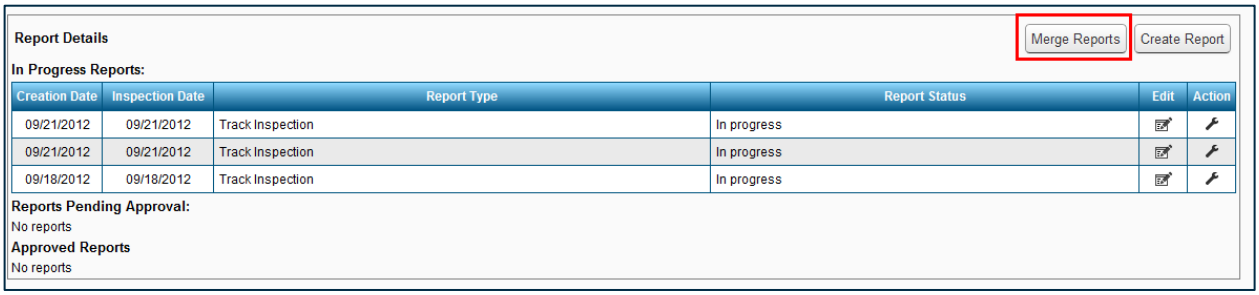
How to Merge Reports

Report merging enables multiple inspection reports for the same asset to be combined into a single report. This is typically used where multiple users are completing the same inspection on mobile devices. Since the mobile devices don't allow the same report to exist on multiple devices multiple reports must be created. The merge report feature allows these reports to be recombined after they are uploaded to the server.

1. Select Collector > Merge Reports page.

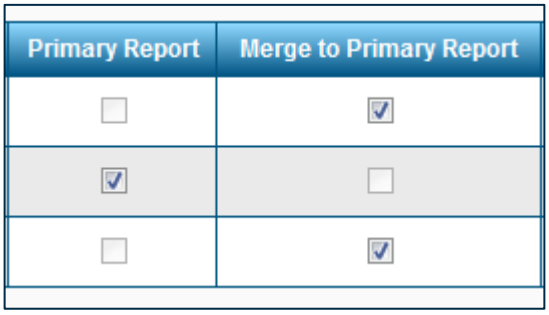


2. Select an asset from the list of assets containing reports available to merge.



3. Click Merge Reports.

4. Determine which report will be the primary report.



5. Set the checkboxes for the reports you wish to merge.

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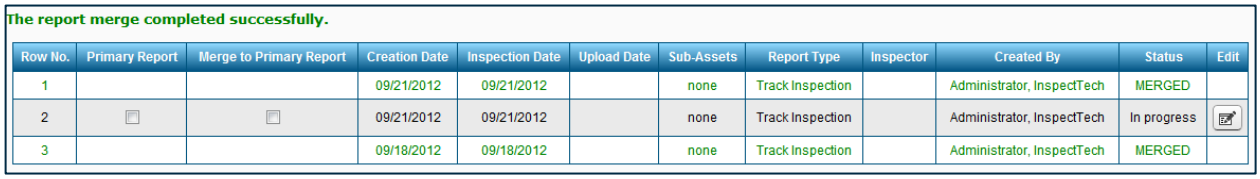
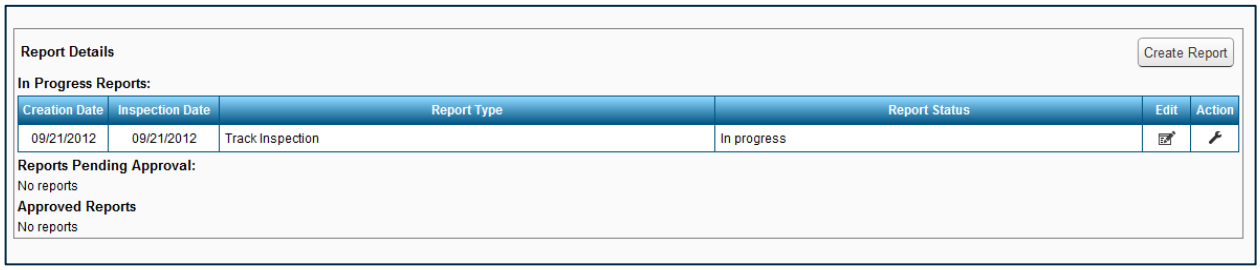
6. **Click** Merge Reports.



7. **Click** Close **to view the asset's report details.**



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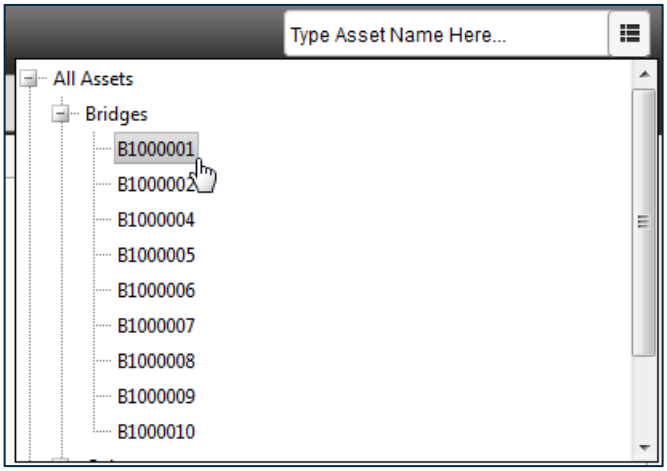
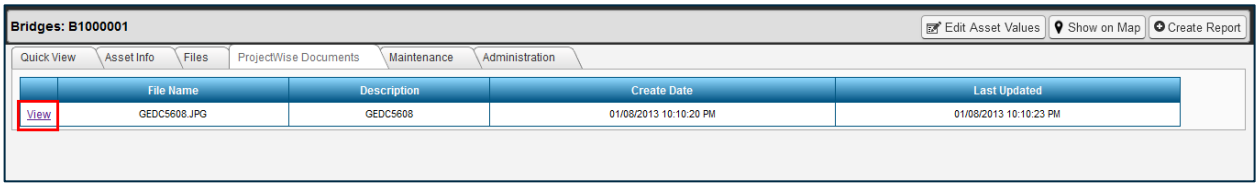
How to View ProjectWise Documents

1. Locate the desired asset via the Quick Select or the Asset List.



2. Select the ProjectWise Documents tab to display all ProjectWise files linked to the asset.



3. Click View to open individual files in a new browser tab.

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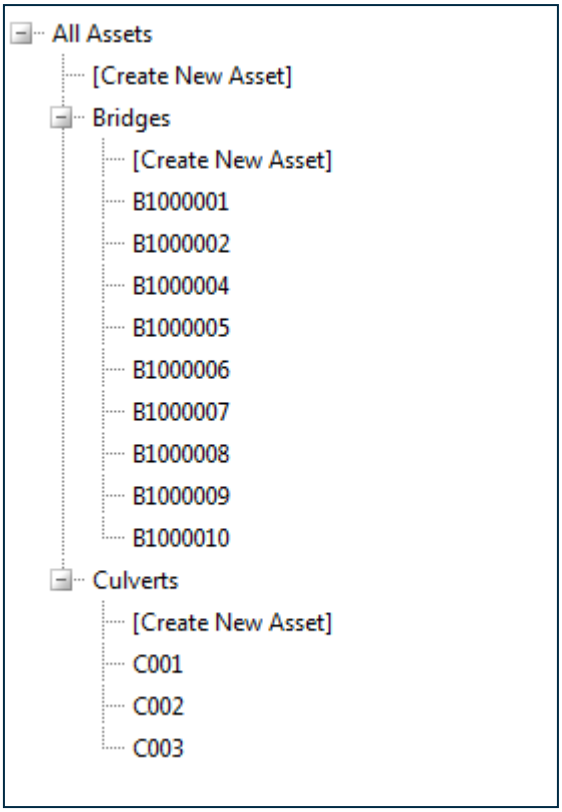
Reference Guide

The Asset Tree

The asset tree structure defines the semi-permanent location of the asset in the system, based off of every asset's physical location. Once an asset is added to the inventory, it fits into its appropriate level in the hierarchy. Most assets inhabit a permanent location (until completely deteriorated). Thus, the asset tree organization should not require frequent changes.



Upon implementation, the hierarchy of the asset tree is organized by administrators creating assets and placing them within their parent assets on the tree for each agency and based on each agency's specifications. The asset tree is the primary driver for user-asset security in the system.

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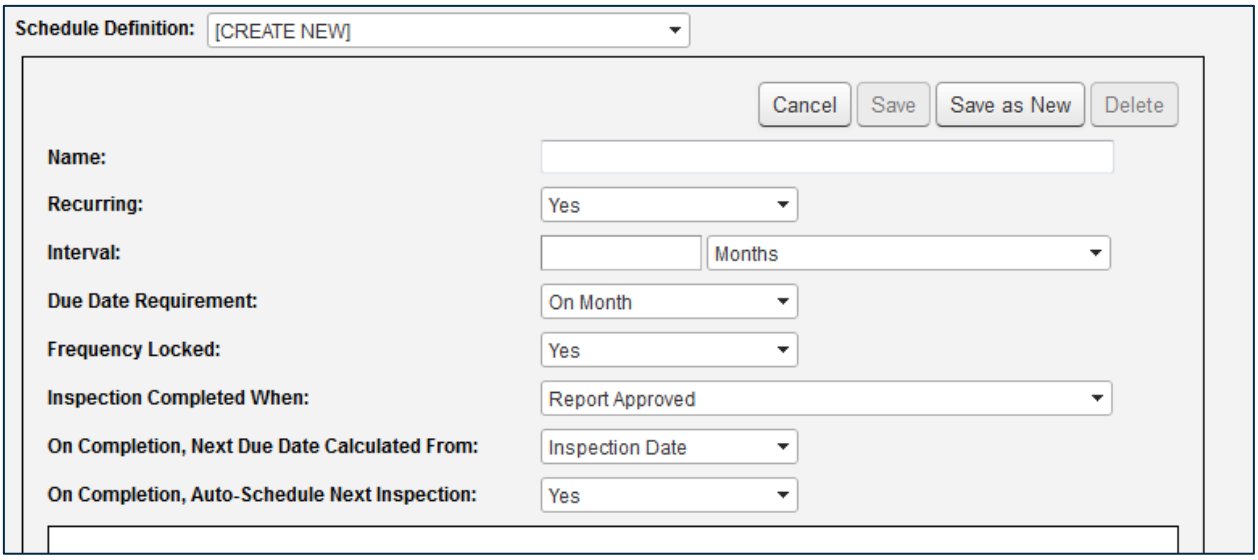
Inspection Scheduling

Managers can schedule future inspections within the software and assign these anticipated inspections to individual users within the system. Scheduled inspections are easy to track within the system, providing users with information concerning their assigned inspections and whether they are overdue.

Note: Inspection Types, not Report Types, are being scheduled, meaning a single inspection report could have multiple inspection types and therefore could populate multiple inspection schedules.



Administrators can determine the schedule definitions for each recurring inspection type in the system. The schedule definition includes settings to indicate the default frequency, whether the frequency can be changed for specific assets, completion criteria, etc.

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Next, managers indicate which recurring inspection types are required for each asset in the system. This will signal the system to automatically update based on the frequency when a report of that inspection type is completed. Managers can schedule both recurring and non-recurring inspections to a user to be completed on a future date.

Recurring	Set whether the defined schedule will be the default.
Interval	Determine the time interval between inspections.
Due Date Requirement	Select whether the due date will be specific (to the day) or general (within a month).
Frequency Locked	Lock the frequency (the due date and the interval) to keep it secure from unauthorized edits.
Inspection Completed When	Decide what will define "complete" in your system.
On Completion, Next Due Date Calculated From	Determine when the next due date will be completed if you plan on scheduling inspections automatically.
On Completion, Auto-Schedule Next Inspection	Selecting "Yes" will automatically schedule the next inspection based on the previously set standards.

Once an inspection has been scheduled it will have a due date, a scheduled date, and an assigned user. These scheduled inspections appear on the Inspection Schedule filter page where users can see ongoing, upcoming, and overdue inspections.

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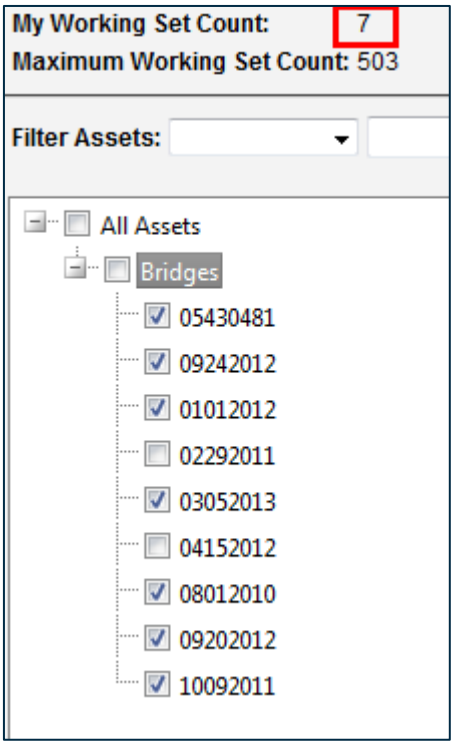
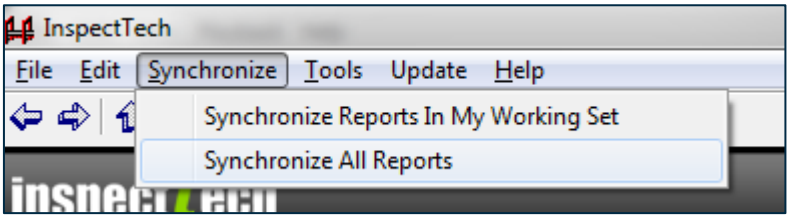
My Working Set

Working sets streamline the synchronization of assets from the server to the laptop (and vice versa). The working set feature limits the amount of assets accessible by a user or role. Working sets can be assembled by system administrators or by the users themselves, depending on their agency's permission levels. This feature is specifically used on a laptop or iPad in the field.



Not only do working sets unclutter a user's dashboard, but working sets shorten the amount of download and upload time during laptop synchronization. Previously, users in the field synchronized their laptops and ended up with the entire asset inventory piling onto their laptop. This slow, tedious method took several minutes to complete due to the overwhelming amount of data.



Now, users simply synchronize their laptop with their own working set, cutting download and upload time significantly. Instead of waiting on their laptop to digest all of the data coming down from the server, users can move on to entering inspection values more quickly.

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Projects

The Purpose for the Project Module

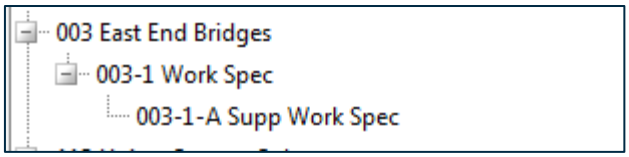
Projects organize inspection reports and assist users in accurate scheduling and asset tracking.

For example, Asset 330 is included in both Project 1 and Project 2. Project 1 users are only interested in Asset 330's underwater inspections, while Project 2 users are only interested in Asset 330's routine inspections. When an inspector creates and submits a routine inspection report to the workflow, the software will only notify Project 2 users. Meanwhile, when an inspector creates and submits an underwater inspection, only Project 1 users will receive notifications.

The Project Module's Hierarchy

The project feature has its own specific hierarchy. Projects consist of three levels: the project, its work specifications, and the supplemental work specifications. When an administrator creates a new project, they create them at the parent level. To launch work on the project, administrators create "children" to the project, called work specifications. These work specifications are characteristic of the project to which they are assigned.

As project tasks increase, administrators often latch supplemental work specifications to the already existing work specifications. These act on the "children" level to the original work specifications, and can have no "children" of their own. In short, the descending hierarchy for projects is Projects > Work Specifications > Supplemental Work Specifications.



Project Security

To maintain a secure environment for each project's contract information and work specifications, administrators can assign a specific set of assets, users, and roles to each work specification within a project. User-to- asset security can be managed directly from the profiles module, as well.

First, administrators create a work specification and assign either individual assets or entire counties to it. Only the selected assets will be connected with the work specification. Administrators then browse the list of roles and individual users to assign the work specification. Users assigned to the work specification can access the assets associated with their project upon login and begin viewing or updating data.

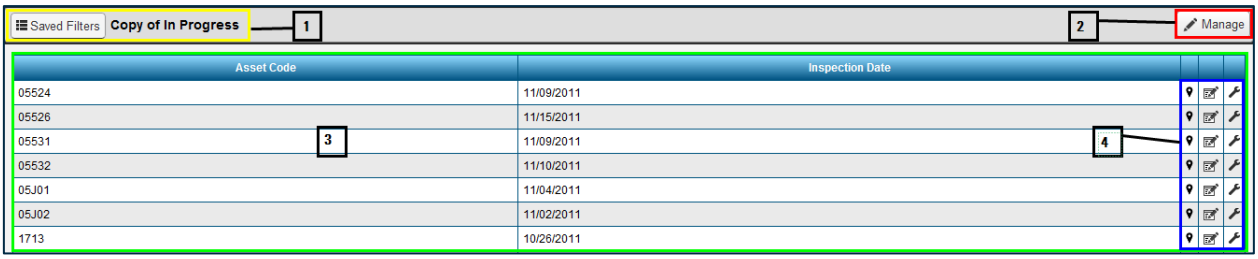
Finally, administrators adjust the permission levels for each user concerning their access to the assets. With this final step, administrators decide whether users have full control of the asset or if they simply have read-only access.

Setting the project security limits user access to a certain set of assets within a specific project, keeping the data intake method organized and locked.

Report Filter

The report filter displays inspection reports based on criteria entered upon filter creation. These criteria can include the report's workflow status (open or closed), the report type, the report's owner or author, and other categories.

The software includes both public and private filters. Private filters can be created, managed, and exported by any user within the system. Public filters can only be created, managed, and exported by administrators and other authorized users.



1. Yellow Highlight	Existing filter menu and the name of the visible filter.
2. Red Highlight	Menu for tasks available to the inspector. Includes creating a new filter, editing an existing filter, and exporting the filter to Excel.
3. Green Highlight	List of reports contained in that filter.
4. Blue Highlight	Tools to perform on individual reports. For example, you can view the asset on a map, edit the report, or submit the report for review.

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Report Toolbar

Previous versions of InspectTech Software had a “Right-Hand Sidebar” nested within the inspection report. Via this sidebar, the user could perform numerous tasks to better the quality of their report.

Version 7.x presents the new Report Toolbar, an updated and cleaner version of the Right-Hand Sidebar.

Toolbar Docks

You can drag and drop the toolbar to dock it along any of the four sides of the screen.

Figure 1

Figure 2

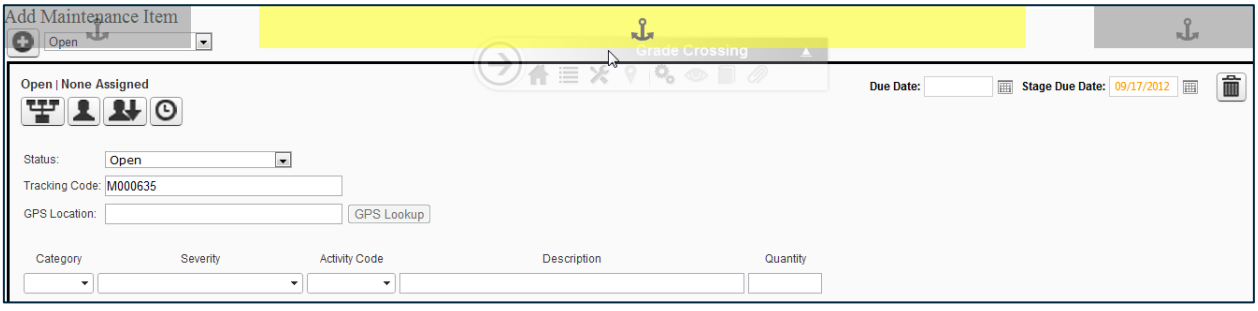

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Figure 3

Icons Overview

- Collapse
  Hide the toolbar via the arrow icon.

- Asset Detail Page
  Revert back to the parent asset.

- Home
  Returns the user to the predefined home page.

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- Forms
  Displays the forms within the inspection report. Substitutes the previous “tabs/sub-tabs” layout.

- Report Action Selector
  Provides helpful tools pertinent to the report’s workflow stage.

- Show on Map
  If GIS coordinates have been entered for the asset, you can view the map here.

- Field Information
  Lists the name, the contents, and other information concerning a selected field.

- View Template
  Changes the template of the inspection report based on predetermined customization.

- Manuals
  Peruse manual pages and help files that have been linked to a selected field.

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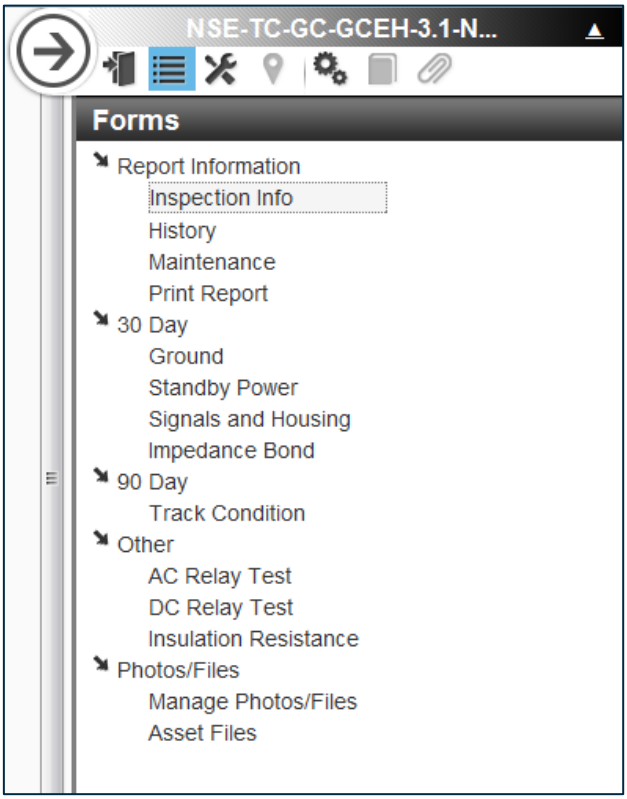
- Link Photos and Files
  Browse previously attached photos and link one or more to a field.

Forms Icon

Clicking the Forms icon opens a panel listing specific forms within the inspection report. In previous versions of InspectTech software, users navigated to the forms via tabs and sub-tabs.

The sample is shot from a rail and transit agency's report.



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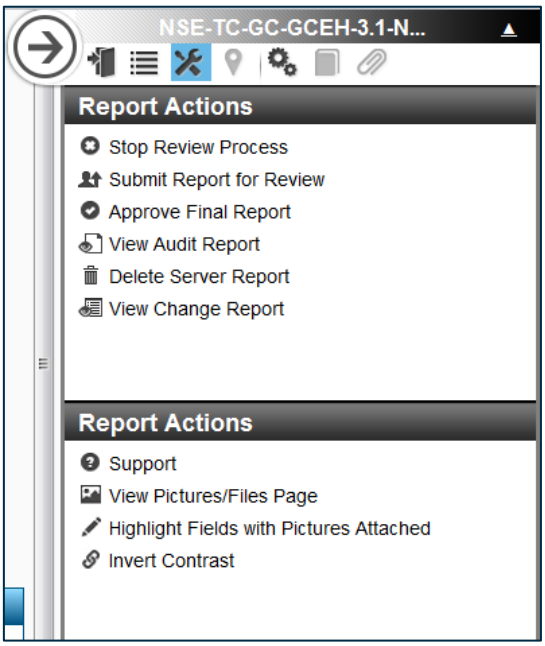
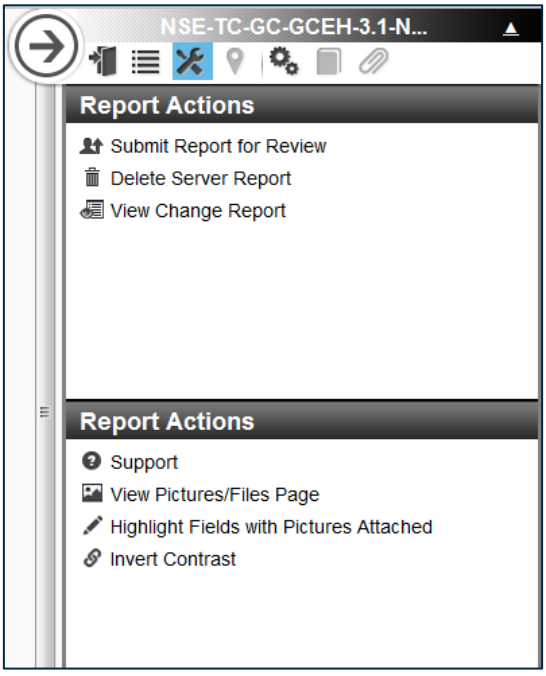
Report Actions

Previously, the Report Actions tool appeared as a green day planner icon in the top left corner of the inspection report. To make it more accessible, version 7.x includes it in the report toolbar. The actions listed under this icon vary depending on the status of the report.

Submitted for Review



In Progress



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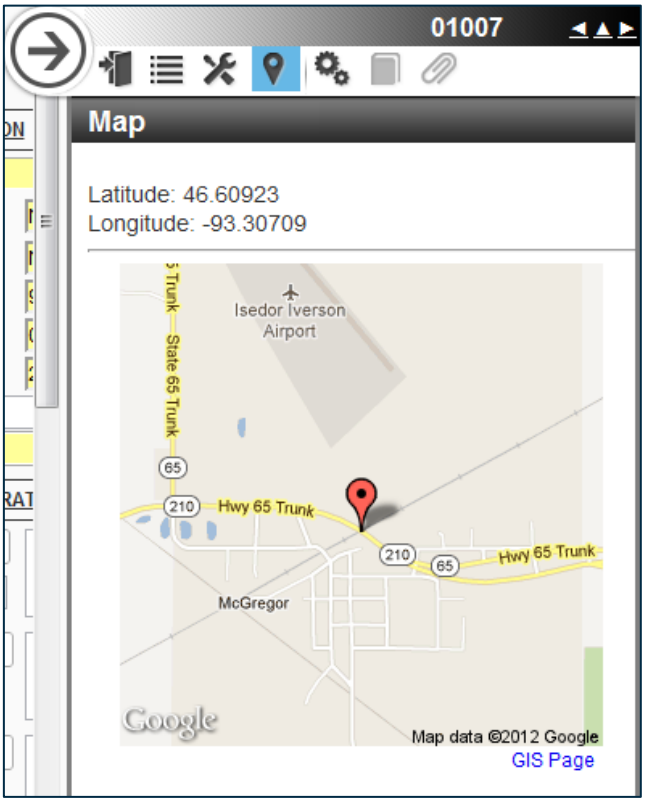
Show on Map

The location tab icon generates a miniature map of the asset and its latitude/longitude.



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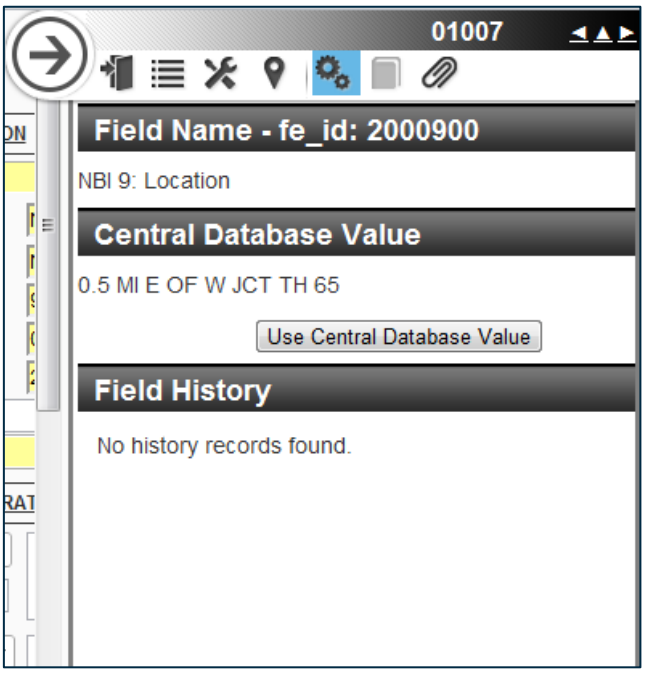
Field Information

Clicking this icon retrieves the information about the field selected. Users can review the field name, its contents, field history, and other similar details. A hyperlink titled Use Central Database Value reverts the field content to the latest approved value.

The example was shot from a DOT inspection report.

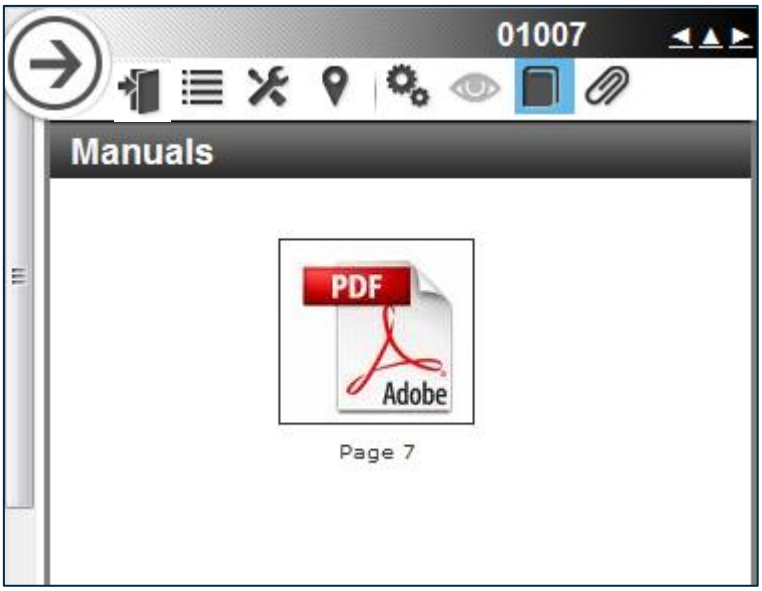


View Template

Users configure the software to include this icon. If an agency prefers different templates per inspection report type, clicking this icon will provide available options. The template will change accordingly.

Manuals

Manuals uploaded into the software via the Manage Manuals function in the Administration module can be linked to specific fields. When the field is selected, the manual pages are available in PDF version via this icon.



Link Photos and Files

If you have attached photos or files to the inspection report, you can then link one or more photos or files to a selected field. For instance, if the bridge deck condition rating field needs explanation, link one of the attached photos of the bridge deck to the field.

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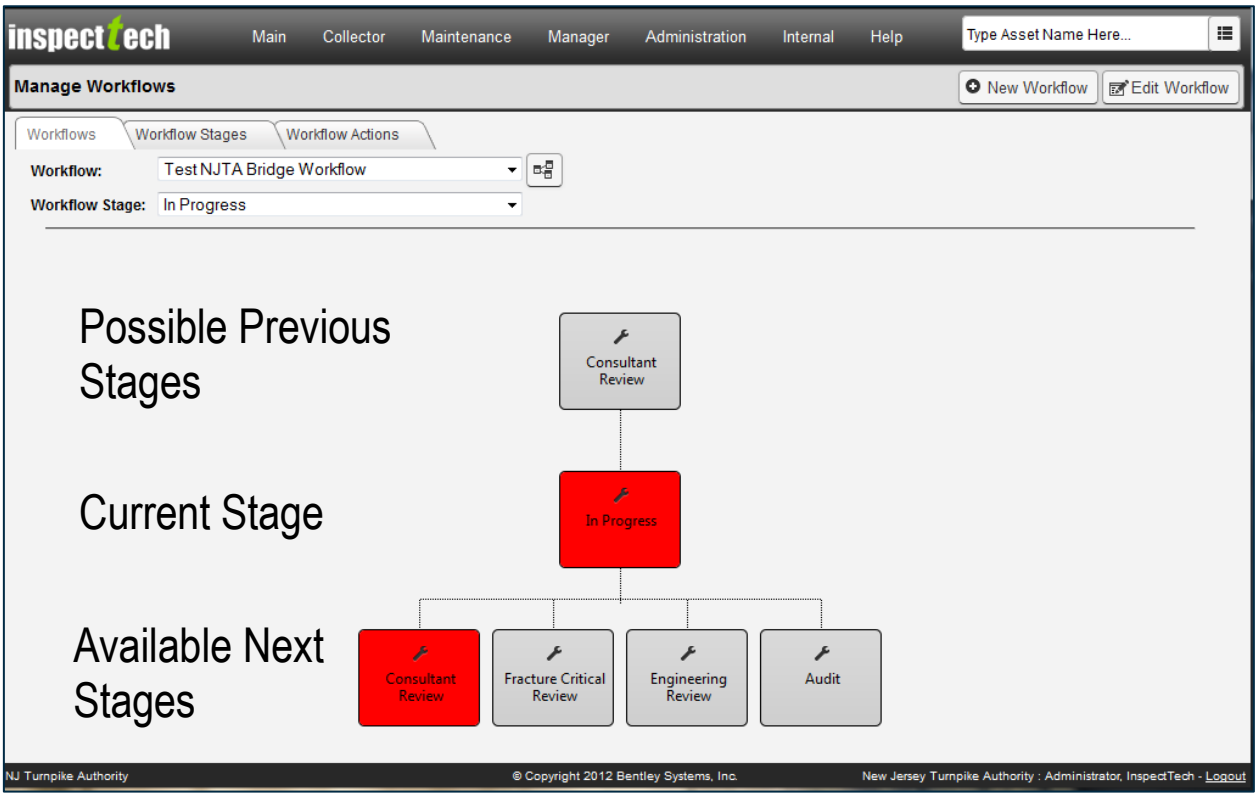
Workflow

Workflow plays a significant role in the efficiency of InspectTech Software's report system. Beginning with report creation, workflow guides a report through each agency's unique review process, ending only upon report approval and finalization. Users rely on workflow to prevent reports from getting lost between creation and approval.

InspectTech improved their already existing workflow, allowing agencies to configure their own workflow with the tools provided in the software. The workflow is now also considered "stateless" – the report is unaffected by its previous workflow stages, despite its current stage.

For example, a user creates a report and submits it for Review 1. The report passes and graduates all the way to Review 3; however, it fails Review 3 and needs to be sent back to the report creation stage. Previously in the software, the only option available was to send the report "back". Since "back" was defined by the report's previous workflow stage (in this case, Review 2), sending the report back to the desired workflow stage proved to be a hassle.



The new workflow process allows users to define the meaning of "back" themselves. Now, the user is presented with the option to send the report to any workflow stage necessary.

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Contact Information

Bentley takes great pride in their customer support.

Email	tsginspecttechamericas@bentley.com
Phone	412.681.1521

When sending an email for support please include a detailed description of what you are experiencing along with the asset and or report, URL and steps to reproduce.

For further help and support discussion, visit InspectTech's Be Community site and interact with InspectTech developers and fellow users.

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