



## Technical Release Notes

### ProjectDox Core 9

### ProjectFlow 2

Module	Installer	Versions
Core	ProjectDox	9.1.1.6
ProjectFlow	ProjectDox.Web.UI	2.1.1.6
Overall API	ProjectDox.Web.API	2.3.1.5

	Date	Content
Created	5/15/18	Original

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# 1 Development

## 1.1 ProjectDox Core

### Users

1. User interface given an updated look, improved user experience with familiar functionality
  - a. Set the home page desired tab, Workflows or Projects
  - b. Allow for searching, hiding, and sorting of columns on the task list grid
  - c. Added the ability to show a desired number of records in the main grid
  - d. File View History tab now places the more frequently used History information in front of the Main tab
  - e. Folders view, Tool bar placement is maintained while scrolling
  - f. Site-Wide Tasks enlarged to better display tasks for Standard Workflow and ProjectFlow
  - g. Edit Project, Groups screen, Invite tab, now places the more frequently used All Users tab in the first position of the 3 tabs
2. Discussion Board feedback applied to final release improving functionality and user experience
3. Bluebeam improvements including uploading of very large files. Requires that previous ProjectDox Bluebeam Integration be uninstalled. The next time a file is checked out for Bluebeam, you will be prompted for the latest installer. Jurisdictions will most likely require administrators to uninstall and reinstall the integration piece.
4. Binder option set by the SA allows a user to select multiple thumbnails from the folder view and open the selected files in a single HTML Brava viewer window. This feature functions in the ActiveX viewer and HTML viewer. One example of its purpose is to allow an intake user to estimate the time it takes for the review. It is not recommended for markups at this time.

### Administrators

1. Admin page, version notation displays the ProjectDox Web UI and API versions when ProjectFlow is not yet implemented
2. Admin, Configuration, DefaultAllProjects setting to allow - Recent Projects or All Projects displayed by default
3. Translations added:
  - Projects grid
    - All Projects
    - Recent Projects
    - Archived Projects
  - File upload formlet
    - Select destination folder for files
    - Select your files to upload to this folder
    - Project
  - Checklist instances viewer
    - Selected Checklist Items
    - Selected Checklist Items for All Review Cycles
    - Selected Checklist Items for Review Cycle
    - Available Checklist Items for Review Cycle
    - Available Checklist Items
    - Add Checklist Items
  - Changemark instances viewer
    - View/Edit Checklist Items
  - Checklist instances viewer
    - Workflow Review Checklist Item Viewer
    - Choose a comment type
    - Comment Type
  - Review complete formlet
    - Edit/View
    - Edit
  - Group management formlet

- o Add Group Members
- o Remove Group Members
- 4. Index improvements for better performance
- 5. Security
  - a. Admin, Core, Configuration, Security, Google Recaptcha option added to the ProjectDox login
  - b. Set the SecurityProtocolType for all places in PD suite of applications that make http calls
  - c. The Workflow Definition Manager and New Workflow Definition screens are password protected
- 6. The Custom File Manager allows an SA to display/edit email templates located in the default and Custom folder of the install and allow uploads of graphic files
- 5. Improved logging
  - a. Produce a list of all ProjectFlow and ProjectDox actions related to ProjectFlow that are recorded in the LogReports table
  - b. Write to log when process starts as opposed to when it ends
- 6. ProjectDox REST Web API Documentation can be accessed with the following link when you have SA access to your ProjectDox site:
  - a. <https://<fullURL>/ProjectDoxWebAPI/Help/APIMethods>

## Reports

All reports now use Report Viewer 2016 to include support of Microsoft SQL Server 2016. Unlike previous ProjectDox versions, the report viewer is included in the install and no extra steps are required using Enterprise Manager.

Reports Relationship of Views, reports and upgrades. They must be renamed because the defaults will be overwritten if there is an update.

1. ProjectDox and ProjectFlow ERD and Data Dictionaries PDF files are delivered with the installed product
  - a. The PDF files are available in the ProjectDox 9, Product Docs folder on Egnyte
2. If there is only one workflow instance for a project, Query for the Report data from the database will now populate the instance selection immediately
3. Department added to the ProjectFlow - Checklist Items report
4. New Reports
  - a. **Sitewide – ProjectDox Configuration report on all settings in Admin, Configuration**

Category Name	Application Key ID	Application Key Name	Description	Application Key Value	Date Updated	Last Updated By
App Features	8	BatchStampEnabled	boolean to define whether batch stamping is enabled	True	9/11/2017 1:37:36 PM	Avolve Support
App Features	101	ProjectFlowEnabled	Whether to allow project export, also requires this feature to be licensed	True	9/22/2017 11:00:22 AM	Lora Benedict
App Features	154	GStreamIntegrationEnabled	Determines if GStream Integration is enabled for this ProjectDox instance.	0	9/7/2017 10:08:21 AM	Avolve Support
App Features	169	PortalEnabled	Specifies if portal is enabled with this installation of ProjectDox. This could be ProjectDox portal or a customer implementation of portal.	True	5/9/2018 11:08:10 AM	Nikki Thorne
App Features	171	ProjectFlowEnabled	Determines if ProjectFlow will be enabled for workflows.	True	9/11/2017 1:37:33 PM	Avolve Support
Brava	167	BravaThumbnailsEnabled	Determines if Brava thumbnails will be generated. HTML5 viewer only.	True	9/7/2017 10:08:26 AM	Avolve Support
Brava	189	EnableBinder	If set to true then the Brava binder feature will be enabled on the ProjectDox list of files. The binder feature only works with Brava 16.2+.	True	11/16/2017 10:57:10 AM	Lora Benedict
Core	3	AppName	User-friendly name - for display	ProjectDox 9 Training3	3/23/2018 5:19:49 PM	Lora Benedict
Core	26	DebugEmail	If DebugMode is enabled then ALL email going out from system will go to this email	Benedict@avolvesoftware.com	9/22/2017 11:01:11 AM	Lora Benedict
Core	27	DebugMode	Debug mode will enable many features in the application helpful for debugging ProjectDox. Refer to documentation for the full list of available debug options.	False	9/22/2017 11:01:11 AM	Lora Benedict
Core	38	FileLoadRecordCount	The count of files that will be loaded via the lazy load feature of the file pane. This is the count of files that will be returned initially and each time the user scrolls down to get more.	1000	9/22/2017 11:01:21 AM	Lora Benedict

- b. Project level - Report by Event, date range, or All Events for a current project
- c. ProjectFlow – Review Details Report, Lists the review comments, checklist and changemark details for a workflow instance review cycles.
- d. Management
  - i. Management – Average Turnaround Time Report
  - ii. Management – Overdue Task Detail Report
  - iii. Management - Task Statistics Report
  - iv. Management - Task Status Report Dashboard
  - v. Management - Workload Report

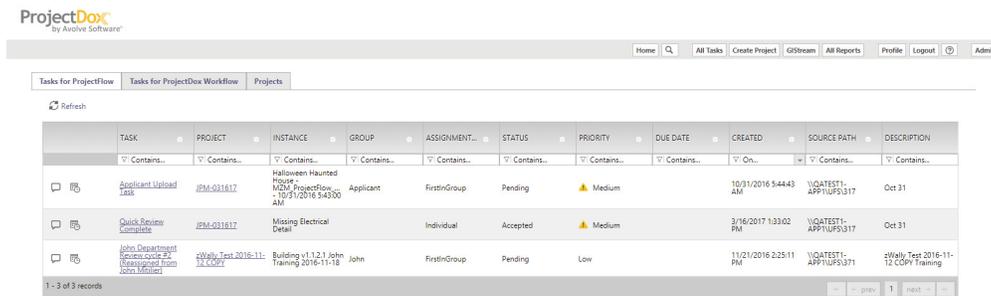
## 1.2 ProjectFlow

### View Project Page Design

The ViewProjects.aspx page has been updated to include tabs for the three grids on the page. The order and the names of the tabs are listed as:

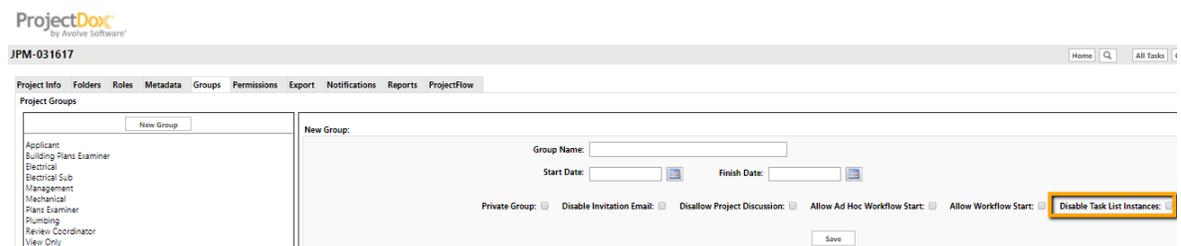
- **Tasks (PF)**
- **Tasks (PD)**
- **Projects**

The tab titles can be changed by the customer through the Translation feature.



### Hiding the Instance Grid

The instances grid can be hidden on the ProjectFlow task list for specific groups. This can be done by selecting the Disable Task List Instances checkbox on the group admin page for projects and project templates. If the user is an SA or PA then the user will always see the instances list regardless of group membership. The option will only show if ProjectFlow is enabled.



### Task List Filters

Users can save task list filters on the homepage and inside the project. A new feature has been added to indicate to the user that a filter has been applied. Once a filter is applied and the Save Settings icon is clicked, the Reset Setting icon will display. The user now has the option to refresh the current setting, save new setting, or reset to the default setting.

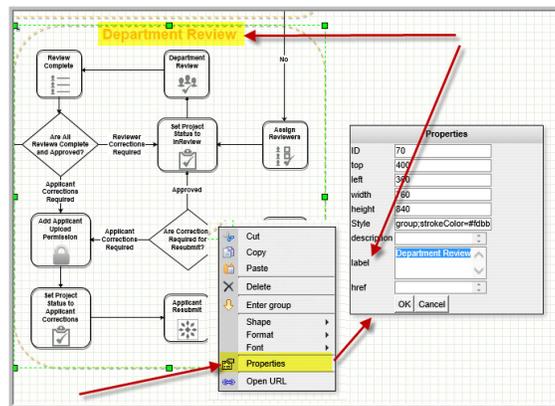
PROJECT	INSTANCE	GROUP	ASSIGNMENT TYPE
JPM-031617	Missing Electrical Detail		Individual
Miller Business Park Phase 2	Miller Business Park Phase 2 - ProjectFlow_Building_Template - 11/7/2017 3:34:11 PM	Review Coordinator	FirstinGroup
Miller Business Park Phase 3	Miller Business Park Phase 3 - Building Jul 2017_Template - 11/7/2017 3:21:39 PM	Review Coordinator	FirstinGroup
zWally Test 2016-11-12 COPY	Building v1.1.2.1 John Training 2016-11-18	John	FirstinGroup

### Activity Groupings

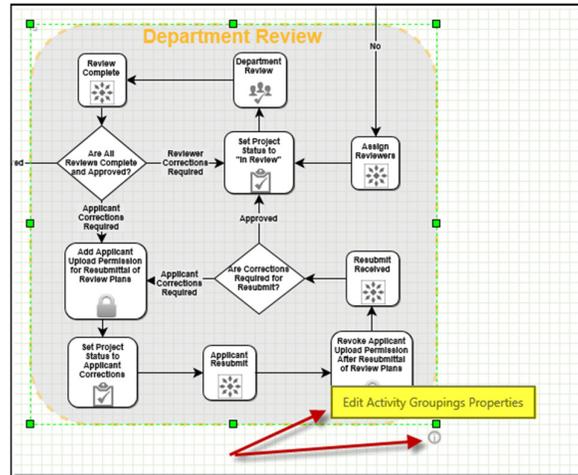
Parallel Building Review (PBR) workflows support nested groups of activities. Activity groups are implemented using the Group/Ungroup tool in the designer. Groups allow for easy, visual way to categorize tasks within the workflow for more robust reporting and better organization of steps. This allows for activities and tasks to be categorized more easily for reporting and allow for users to visually organize the processes in the workflow to make the whole workflow more readable. Each activity grouping (group of activities) used in the designer allows any number of groupings.

To create an activity grouping, select one or more activities on the designer and click the Group/Ungroup tool. To ungroup a group of activities, select the group and choose the Group/Ungroup tool again.

The end user can enter a label for the activity grouping by double-clicking inside the group. The label of the activity grouping can be set using the properties of the group element on the designer by right-clicking the selected group. Or you can double-click inside the group and start typing the Activity Grouping Name.



There will be a button that appears at the bottom of the activity grouping when the group is selected, the same way a toolbar shows when selecting an activity on the designer. This will open the Activity Groupings Properties screen.



The Edit Activity Grouping Properties button will appear on every activity grouping element on the designer not just the first level groups, all groups, even nested groups, but only one of the groups should be fully configured as a review process. Groups can be used without review processes to organize the workflow design, but if a group contains a review process, only one of the groups is the entire nesting of groups should be configured to run a review process.

This Activity Grouping Properties screen contain four properties:

1. The “**Is Sub-Workflow**” property which tells the system the activity grouping is treated as a sub-workflow in a larger Parallel Building Review design. IsSubWorkflow will determine if the group is a considered to be a sub-workflow and therefore show up in the Monitor Sub-Workflow step and Assign Sub-Workflow step. The Activity Grouping Name will be the name which shows up in the user interface such as reports and the Assign Sub-Workflows step. There can be only one sub-workflow per nest of groups. The system looks up the chain of activity groupings to verify that no “IsSubWorkflow” property is checked. If there is one checked then it will not enable the checkbox to set it on a different nested activity grouping. The user will be able to set “IsSubWorkflow = True” unless there are no other sub-workflows in the nest of groups. Only one activity grouping can be marked as a sub-workflow at any one time in a nested group. When a nested activity grouping “IsSubWorkflow” property is set to TRUE, all other “IsSubWorkflow” properties in the nest of groupings will be disabled. The “IsSubWorkflow” property that is set to TRUE, must be set to FALSE before another in the group can be set to TRUE.
2. The “**Activity Grouping Name**” is the label shown on the designer for the sub-workflow. This property is optional for any group that does not contain a review process. If the group contains a review process, the activity name is required.
3. The “**Review Configuration**” allows the user to specify the review configuration that will be used if the activity grouping contains a Department Review activity. This drop down will be disabled if no Department Review activity is found inside the group. This property is only set for groups that contain a department review process. This property is only available if there is a Department Review activity in the group.
4. The “**Task Prefix**” is a prefix that will be pre-pended to all task names that are created for activities that are contained within the activity grouping. This property is optional for any activity grouping, but if it is set, all tasks within the activity grouping will be named with the prefix.

The Assign Reviewers, Review Complete, Department Review, and Resubmit Received activity elements on the designer must be grouped in an Activity Grouping if they are used together to ensure a review configuration can be assigned to the. Those activities all require a review configuration to be configured, but only if they are used together. The Department Review activity does not need a review configuration to work properly, but if it is used in conjunction with the Assign Reviewers, Review Complete, and Resubmit Received activities then it must be in the same Activity Grouping.

If the Activity Grouping is a sub-workflow, it must have a label/title to identify it in the ProjectFlow screens such as Monitor Sub-Workflow Dashboard or Assign Sub-Workflows.

The Assign Reviewers and Resubmit Received activities cannot be used without a Department Review activity.

Only one Department Review activity element can be contained in a single Activity Grouping.

## Review Configurations

A review configuration is consumed by the Assign Reviewers, Review Complete, Department Review, and Resubmit Received activities.

The review configuration is created at design-time using the Workflow Definition Review Configuration Manager and at runtime for a workflow instance using the Workflow Instance Review Configuration Manager.

The Workflow Definition Review Configuration Manager allows users to create a review configuration that can be consumed by any number of workflows designs.

When adding a new review configuration, the user must choose a project template which contains the groups needed to build the review configuration. The project template is used to initially add the available groups, but the review configuration can also be used with other workflows using other project templates. There is no direct connection or link that forces the review configuration to only be used with workflows that consume the selected project template. If the review configuration is used in a workflow for a different project template, it is up to the user who is designing the workflow to ensure

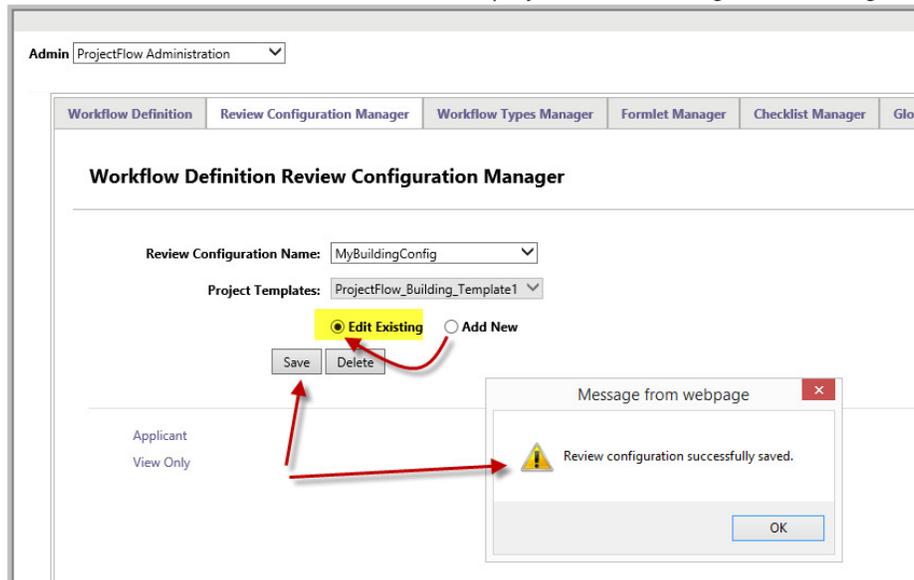
the groups used to build the review configuration exist in the project template that is used to start the workflow.

There is a validation tool on the designer toolbar used to help ensure groups are correctly configured. This tool allows a user to validate that a specific project template will run successfully with a workflow design. An error will be produced if the validation tool is not used. This validation tool will be discussed in a different section of the help file. See [Changes to the Designer Validation](#) below for more information on the validation tool.

To put the screen in Add Mode, the user must choose the “Add New” radio button. When the user clicks the radio button the Review Configuration Name will be displayed as a Text Box allowing the user to enter a name for the new Review Configuration.

The Project Template will be displayed as a drop down. The drop down will display all active Project Templates in the system allowing the user to choose one. When the user chooses a Project Template from the drop down the groups for that project template will be loaded on the left side of the screen. The group tree view on the left will display all the groups in the Project Template that are not already added to the current Review Configuration on the right. The group tree view on the right will display all the groups in the Project Template that have already been added and are currently in the Review Configuration.

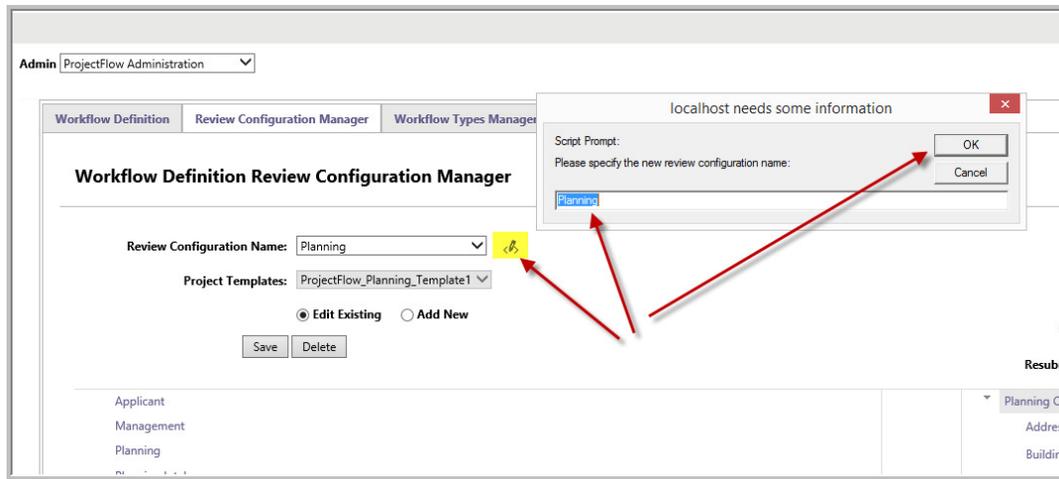
After the Save button is clicked, the screen will be displayed as an existing review configuration.



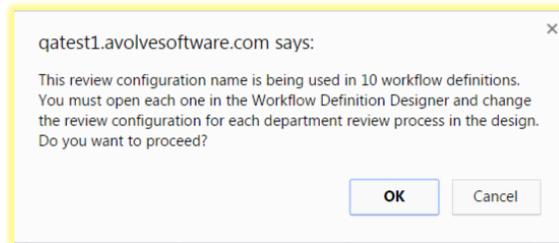
Review Configurations are only connected to Project Templates in to configure an initial set of review groups. After that, the Review Configurations can be used in any workflow definition regardless of whether that workflow definition will be used with the original Project Template or not.

To put the screen in Edit Mode, the user must choose the “Edit Existing” radio button. When the user clicks this radio button the Review Configuration Name will be displayed as a drop down. The Project Template drop down can still be used to choose a review configuration that was created with a different project template. The user can choose which Review Configuration they want to view/edit and the Project Template label will then load the Project Template originally associated with the Review Configuration.

To change the name of the Review Configuration, the user can choose the Edit button to the right of the Review Configuration drop down. This will pop up a dialog box allowing the user to change the name.

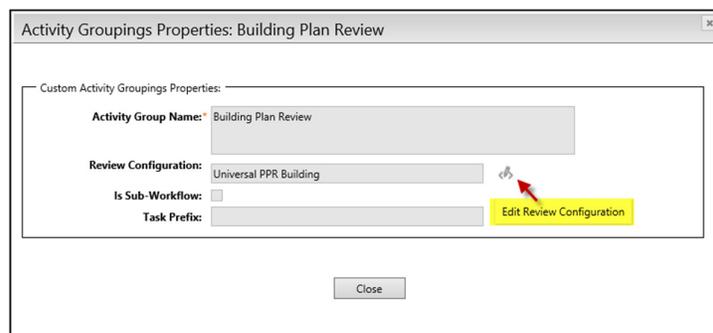


If the user clicks “OK”, the name will be changed and a confirmation message will appear. If the user clicks “Cancel”, the prompt will disappear. If the review configuration name is being used by any active workflows, a warning message will be displayed to inform the user that existing workflow definitions are using the review configuration and they will need to be manually changed to use the new name of the review configuration.

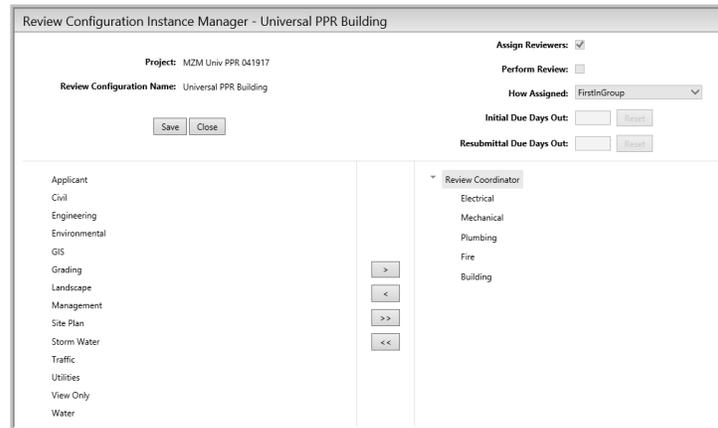


*The Delete button is only shown when in Edit Mode.*

The “**Edit Review Configuration**” button on the Activity Groupings Properties screen will show the Review Configuration Instance Manager. This screen allows users to modify the existing review configuration groups for the department review process or sub-workflow.



When showing the Workflow Instance Designer for a specific running instance, all the properties in the Activity Groupings screen will be disabled and cannot be changed except the ability to change the review configuration groups. This will not affect any other running instances or the workflow definition.

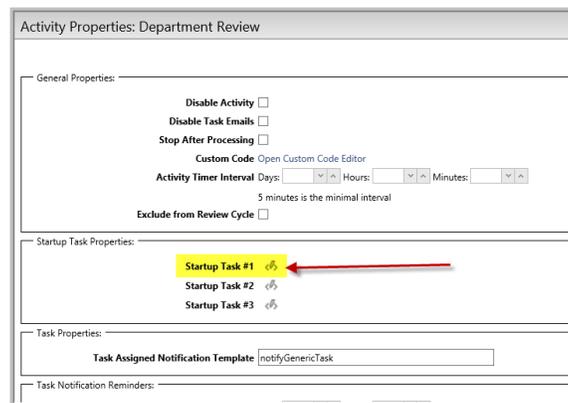
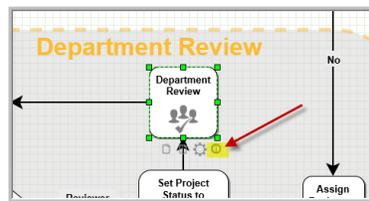


In the Review Configuration Instance Manager, the user can view the review configuration name and the project linked to the workflow instance, but those values cannot be changed. The user can add or remove groups from the review configuration and change properties for the review groups.

If the Department Review activity element is **NOT** contained in a single Activity Grouping, there will be no way of setting the Review Configuration because it is shown in the Activity Grouping properties screen. A Department Review activity must be included in an Activity Grouping if the activity needs to consume a review configuration. Quick Review does not consume a review configuration.

### Department Review Activity

Startup Tasks are now exposed in the Department Review activity properties. In previous versions, they were hidden and not used because reviews were always assigned using the Assign Reviewers activity. In ProjectFlow v2.0 and higher, the Department Review activity can opt out of using the Assign Reviewers activity and choose to assign the reviews ahead of time using startup tasks.



When the Department Review activity is initialized, the system will first check to see if there are startup tasks configured, if so, it will assign the reviews and assign the tasks for those reviews at that time, if no startup tasks are used, the assumption is that the Assign Reviewers activity is being used to assign reviews in a previous step or reviews are being assigned programmatically using custom formlets or custom code.

### Asynchronous Review Cycles

There is no longer a Review Cycle = 0. In previous versions, the Prescreen process used a review cycle of 0, but review cycles will always start at 1 and only for the Department Review process when the first review is assigned.

The “Use Separate Review Cycles” configuration is part of the Workflow Definition Manager. This flag will tell the system that all department review processes and sub-workflows will use their own individual set of review cycles and not share one set of review cycles as it was in previous versions (v1.1 and earlier) of ProjectFlow.

When the “Use Separate Review Cycles” flag = FALSE, the system will apply the same set of review cycles in sequence to all department review processes and sub-workflows.

When the “Use Separate Review Cycles” flag = TRUE, the system will create and use a different set of review cycles for all department review processes and sub-workflows.

The BIC Building and Planning workflows will have this flag set to FALSE. Legacy BIC Building and Planning workflows and new BIC Building and Planning workflows will all have this flag set to FALSE.

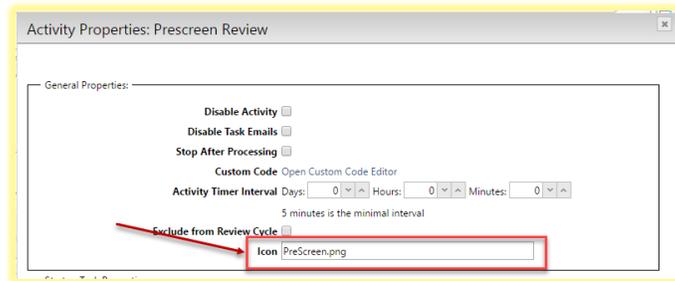
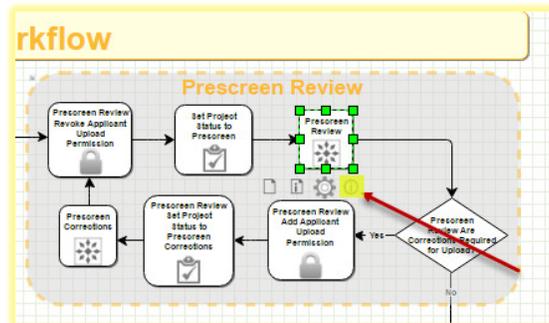
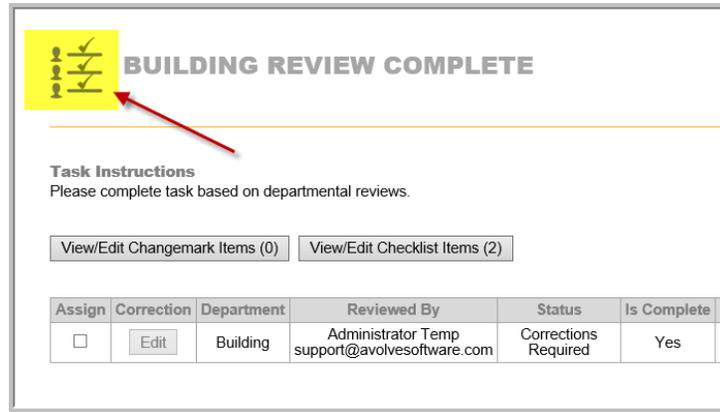
BIC Planning has two department review processes, Staff Review and Additional Oversight Review. This workflow design can choose to set this flag to TRUE or FALSE. It will always default to FALSE, which means both department review processes will use the same set of review cycle from 1 to x. But the customer can choose to have each department review process use separate and difference sets of review cycles so that Staff Review uses a review cycle from 1 to x and Additional Oversight Review uses a different review cycle from 1 to x.

It is important to include all the necessary activities inside an Activity Grouping to ensure that all the tasks created during the department review process are linked to the proper review cycle. If any of the activities need to be excluded from being linked to a review cycle, they must check the “Exclude from review cycle” checkbox in the activity properties screen of the activity.

If the customer wants specific activities to be part of the department review process and include a review cycle in the reports for task time analysis, the activity will have to be included in the same Activity Grouping as the Department Review activity.

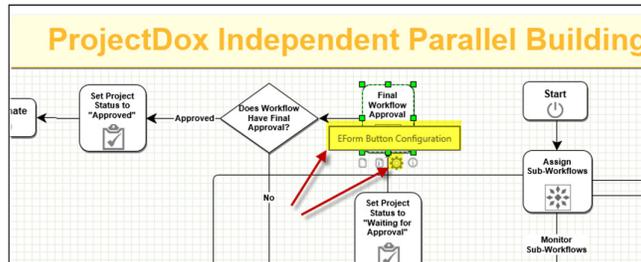
## eForm Icons

We have exposed the eForm icon that shows in the top left corner of the eForm.



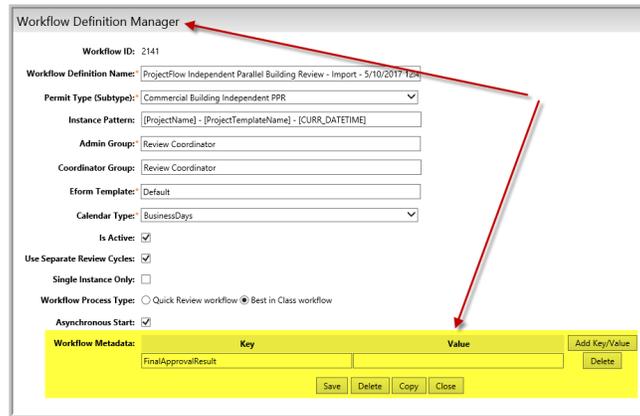
The user can now change the image icon exposed in the Activity Properties of each activity on the designer. The images can be copied to the ProjectDox.Web.UI\WorkflowForms\images folder and the name added to the Icon property in the Activity Properties screen. By default, all the BIC workflow templates will contain a default icon, but customers can change this icon if desired.

### Button Configuration Screen

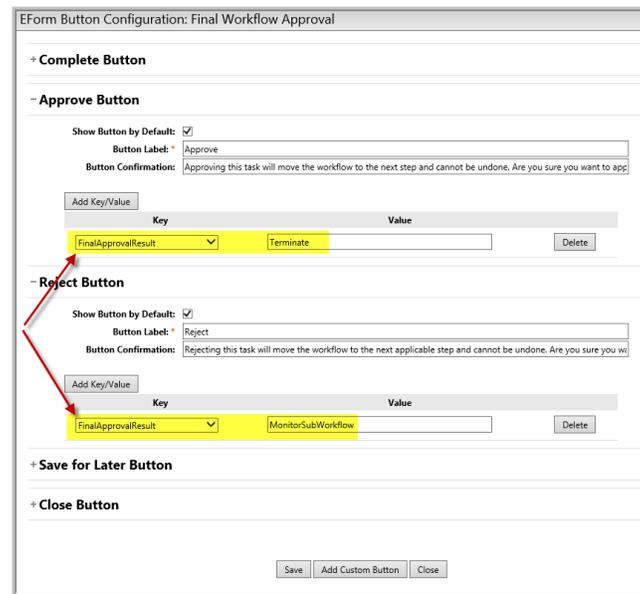


The eForm Button Configuration screen allows users to set metadata key variable values when buttons are clicked on the eForm.

The metadata key variables are created in the Workflow Definition Manager.



The values for the metadata key variables are configured in the eForm Button Configuration screen.



**Show Button by Default:**

If this checkbox is checked [= TRUE], the button will be displayed and visible by default. The button can be hidden programmatically if desired using custom formlets. The visibility of some of the buttons are controlled by the Standard formlets used in the Standard activities.

**Button Label:**

This value is the name shown on the button in the eForm.

**Button Confirmation:**

This value is the confirmation message shown when the button is clicked on the eForm.

**Add Key/Value Button:**

This button allows the user to add additional metadata key value pairs.

**Metadata Key:**

This drop down contains a list of metadata key variables configured in the Workflow Definition Manager at design time. This can be changed at runtime for an instance by changing the value in the Workflow Instance Manager.

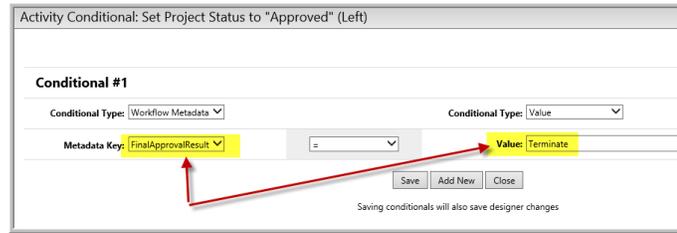
**Metadata Value:**

This is the value that will be set for the metadata key variable when the button is clicked. This value can contain spaces.

**Delete:**

This button will delete the metadata key value item. If this item is deleted the value will not be populated for the metadata key variable.

The metadata key values are then consumed by the conditionals in the workflow to make appropriate decisions in the workflow process.



## Holiday Configuration

### What it Does?

Since holidays may vary from jurisdiction to jurisdiction and the United States to Canada, the feature allows customization of the listing. The *Holidays* table is populated by the customer and Avolve professional services.

### What it affects?

ProjectFlow Workflow definition includes a *Calendar Type* selection to calculate due dates and reminders by calendar days or business days. Holidays are included in the following calculations:

Task Notification Reminders:

**Time to Start Notifying Before Task Due** Days:  Hours:

**Task Before Due Notification Interval** Days:  Hours:

**Task Before Due Email Notification Template**

**Task Past Due Notification Interval** Days:  Hours:

**Task Past Due Notification Limit**  (number of times to notify)

**Task Past Due Email Notification Template**

The new Holidays configuration screen will be added to ProjectDox in the Admin drop down as a new Admin Config screen. The grid will always be sorted ascending by date. By default, the oldest date will display at the top of the page. The user will always be able to use a calendar control by clicking in the date field to select a date or type in the date with a placeholder format of MM/DD/YYYY.

The user can remove a holiday by using the delete icon located in each holiday row. There is also a section at the bottom of the page that allows users to add new holidays. The user can ONLY add new holidays or delete existing holidays.

**ProjectDox**  
by Avolve Software®

Admin Holidays

Holiday	Date	Remove
Martin Luther King Day	01/19/2015	
Presidents' Day	02/16/2015	
Memorial Day	05/25/2015	
Independence Day	07/04/2015	
Labor Day	09/07/2015	
Colombus Day	10/12/2015	
Thanksgiving Day	11/26/2015	
Christmas	12/25/2015	
New Year's Day	01/01/2016	
Martin Luther King Day	01/18/2016	
Presidents' Day	02/15/2016	
Memorial Day	05/30/2016	
Independence Day	07/04/2016	
Labor Day	09/07/2016	
Colombus Day	10/10/2016	
Thanksgiving Day	11/24/2016	
Christmas	12/25/2016	

**Holiday Name**  **Date**

## Translations

The translations feature allows administrators to update the user interface to an alternate language or make changes to the text, field labels, button names, etc. within the application.

Translations are more commonly used for labeling fields to meet the language needs of the client. For instance, a customer in Canada might prefer to use "Postal Code" instead of "Zip Code" as the appropriate term for the area.

Simply look for the first letter of the field label to locate the label, and then type in the desired label. It is worth noting that “Pager” for instance, can be used as “Permit” but the word “Pager” would still be the dynamic stamp token name. If the field must be used for dynamic stamps, carefully plan the label swap so all required functionality is maintained.

To see eForm translations in the Translation Listing user interface in ProjectDox, you must first display the area in the eForm once. Then return to Translations and it will become available for you to edit.

Below is an example of how the translation area can be used.

1. Navigate to *Admin* → *Translations*.
2. Select the letter **P** to be taken to all objects starting with this letter.
3. In the *Phrase* column, locate the *Projects* field.
4. In the *Translations* column to the right, enter “Assignments”

5. Click the **Save** button to get the results shown below in the *Project Information* screen.

TASK	PROJECT	INSTANCE
Prescreen Review Task	Mitlier Business Park	Test - Training - Building Template - 10/13/2017 2:42:14 PM
Applicant Upload Task	Mitlier Business Park Phase 2	Mitlier Business Park Phase 2 - ProjectFlow Building LA... - 11/7/2017 3:28:46 PM



To see a field in the Translation user interface for ProjectFlow eForm, you must first display the area in the eForm at least once. Return to Translations and it will become available for you to edit. Once the edit is complete, an IISReset is required because the ProjectDox.Web.UI is a separate IIS node.

The following is a list of all the ProjectFlow Translations that have been recently added:

- File upload formlet
  - Select destination folder for files
  - Select your files to upload to this folder
  - Project
- Checklist instances viewer
  - Selected Checklist Items
  - Selected Checklist Items for All Review Cycles
  - Selected Checklist Items for Review Cycle
  - Available Checklist Items for Review Cycle
  - Available Checklist Items
  - Add Checklist Items

### Changemark instances viewer

- View/Edit Checklist Items

### Checklist instances viewer

- Workflow Review Checklist Item Viewer
- Choose a comment type
- Comment Type

### Review complete formlet

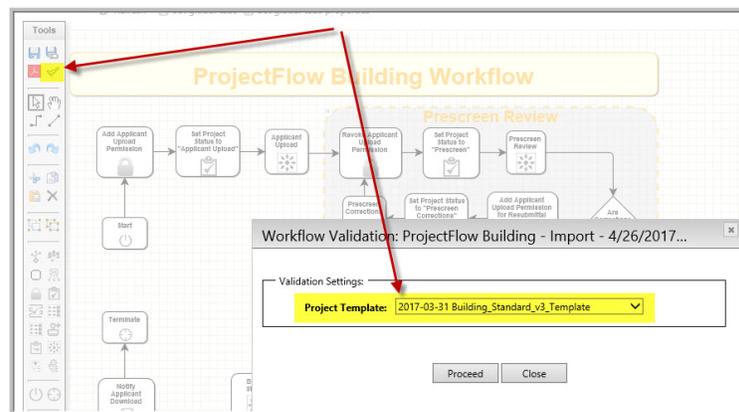
- Edit/View
- Edit

### Group management formlet

- Add Group Members
- Remove Group Members

## Designer Validation

There is a new Validation screen which allows users to choose the project template they plan to use for the workflow template they are designing. This will ensure that the configuration settings they use in the design will work as expected when running the actual workflow.



The Project Template drop down is populated with all the Project Templates in the system. The user can choose to validate the workflow design against a specific project template or validate against no template at all. Validating without using a project template will not run every rule. It will only the rules that are not dependent on specific groups configured in the design.

1. **Information:** There should be only one "Start" activity in the workflow design.
2. **Information:** There should be at least one "Terminate" activity in the workflow design. Multiple "Terminate" activities are allowed.
3. For navigation arrows:
  - a. **Warning:** An arrow cannot lead back into the "Start" activity. Only arrows leading out are allowed.
  - b. **Information:** The "Start" activity should be the only possible starting activity.
  - c. **Information:** The "Terminate" activity should be the last end-point activity in the workflow design. No legs (arrows) can be coming out of a "Terminate" activity.
  - d. **Error:** An arrow cannot lead back to the same activity is started from.
  - e. **Information:** Only one arrow can be connected between two activities.
4. For activities:
  - a. **Error:** Ensure all required properties are set
  - b. **Error:** Ensure the specified property value has correct type (int, double, date etc.)
  - c. **Error:** Ensure the specified email notification template exists (the validation occurs if task emails are enabled)
  - d. **Warning:** If one of these values is set, all three must be set. You can't have one without setting the other two.
    - "Task Before Due Email Notification Template"
    - "Time to Start Notifying Before Task Due"
    - "Task Before Due Notification Interval"

- **Error:** If “Task Before Due Email Notification Template” is set, it must exist in the email templates location.

The screenshot shows a configuration panel with three rows of controls:

- Row 1: "Time to Start Notifying Before Task Due" with "Days" and "Hours" spinners, both set to 0.
- Row 2: "Task Before Due Notification Interval" with "Days" and "Hours" spinners, both set to 0.
- Row 3: "Task Before Due Email Notification Template" with a text input field.

- e. **Warning:** If one of these values is set, both must be set. You can't have one without setting the other one.
- “Task Past Due Notification Interval”
  - “Task Past Due Email Notification Template”
  - **Error:** If “Task Past Due Email Notification Template” is set, it must exist in the email templates location.
- f. **Warning:** This one is optional. The user can leave this blank, but it means the user will continue to get notified forever or until the task is completed.  
“Task Past Due Notification Limit”

The screenshot shows a configuration panel with three rows of controls:

- Row 1: "Task Past Due Notification Interval" with "Days" and "Hours" spinners, both set to 0.
- Row 2: "Task Past Due Notification Limit" with a spinner set to 1 and the text "(number of times to notify)".
- Row 3: "Task Past Due Email Notification Template" with a text input field.

- g. **Warning:** Each activity should have unique name
- For activity tasks
    - At design time:**
      - **Error:** If the activity contains startup tasks, it should also contain at least 1 formlet
      - **Error:** The group specified in startup task exists in database
  - For activity formlets
    - Error:** The physical file for formlet should exist in the file system. This will only validate the system that is being accessed at the time. The files must be on both systems but will only check the one being accessed, not both.
    - Warning:** The "Discussion Board" formlet can only be assigned to an activity one time as a global formlet or as eForm formlet. If "Discussion Board" formlet is assigned as global formlet, it can't be assigned as eForm formlet. If "Discussion Board" formlet is assigned as eForm formlet, it can't be assigned as global formlet. This is to avoid seeing two discussion boards.
  - For Department Review activities:
    - All startup task groups are defined in activity grouping review configuration and are first level group.
      - **Warning:** The Department Review activity startup task groups must exist in the workflow review configuration that immediately surrounds the Department Review activity.
      - **Error:** The Department Review activity startup task groups must be in the first level group in workflow review configuration.
  - Activities that are enclosed in grouping and contain formlets: "Assign Reviewers", "Resubmit Received", "Review Complete"
    - Error:** The activity grouping must have a review configuration assigned. If activity that contain formlet: "Assign Reviewers", "Resubmit Received", "Review Complete" is outside grouping - validation 8.a. is skipped.
  - For Activity Groupings:
    - Error:** The Assign Reviewers, Department Review, and Resubmit Received activities should be enclosed within a grouping.
    - Error:** If review configuration for activity grouping is specified, there should be review configuration with that name in the system.
    - Error:** If the Activity Grouping contains an Assign Reviewers or Resubmit Received, there must be a Department Review activity in the Activity Grouping as well.
    - Error:** The Activity Grouping can contain only one Department Review activity.
    - Error:** The Activity Grouping must have a label/title to identify it in the UI.

10. **Warning:** The project template must contain all the groups specified in the startup tasks for all activity in the workflow.
11. **Warning:** For checklist items, use the following logic to determine checklist validity:
  - a. Use the permit type associated with the workflow definition to find all the checklist items for that permit type.
  - b. Take all the groups for those checklist items and make sure each group is in the project template selected to validate against.  
If the group does not exist in the project template, add it to the validation list to show to the user.
12. **Warning:** The project template must contain all the groups specified in review configuration configured in the Activity Grouping.

### Applicant Upload Enhancement

Once an applicant clicks the “Upload Complete” button they will receive a pop-up dialog box confirming the completion of the task. The text in this dialog box is customizable as part of the workflow definition and is labeled as "Action Complete Message". It only applies to the Complete, Approve, and Reject buttons because that is when a task is completed. If the button is pressed, after the task has completed and right before the eForm closes, it should prompt the message to the user. If they close the message, it will close the eForm (similar to how an error works).

Once the Applicant Upload Task is complete, an email is sent to the Applicant to confirm their Upload was successful and list the files they uploaded. The email content will come from the template that is specified in a regular textbox with the label of "Task Completion Email Template". If this is populated, then it will send the email template to the user who completed the task. If the email template is not specified, then no email will be sent.

If the TaskFilesUploaded token is specified in the email template, all the files that have been uploaded between the WFlowTasks.DateAccepted and WFlowTasks.DateCompleted dates will be sent to the recipient.

Activity Properties: Applicant Upload

General Properties:

- Disable Activity
- Stop After Processing
- Custom Code
- Activity Timer Interval Days: [0] Hours: [0] Minutes: [0]
- 5 minutes is the minimal interval
- Icon

Startup Task Properties:

- Startup Task #1  Applicant Upload Task
- Startup Task #2
- Startup Task #3

Task Properties:

- Exclude Task from Review Cycle
- Disable Task Assignment Emails
- Task Assignment Email Notification Template
- Task Completion Email Notification Template

Task Notification Reminders:

- Time to Start Notifying Before Task Due Days: [0] Hours: [0]
- Task Before Due Notification Interval Days: [0] Hours: [0]
- Task Before Due Email Notification Template
- Task Past Due Notification Interval Days: [0] Hours: [0]
- Task Past Due Notification Limit [0] (number of times to notify)
- Task Past Due Email Notification Template

Save Close

## ChangemarkChecklistInfoFormlet

### ChangemarkChecklistInfoFormlet Custom Properties

The Checklists and Changemarks buttons used throughout the workflows are now separated out into a new formlet called the ChangemarkChecklistInfoFormlet. This formlet property exposes many new properties that were not available in previous versions of ProjectFlow.

The ChangemarkChecklistInfoFormlet will now be used throughout the BIC workflow designs. Previous workflow designs and new workflow designs will all use this new formlet. With previous workflows created using ProjectFlow v1.1 and earlier, the definitions and running instances will be upgraded to use this new formlet. Any new workflow definitions generated using ProjectFlow v2.0 and later will automatically use this new formlet.

We will be replacing the Checklist and Changemark buttons in the Department Review, Applicant Resubmit, Review Complete steps as well as the Prescreen Review and Prescreen Corrections.

### Master Activity:

The Master Activity drop down displays a list of other activities on the designer. The value that is configured for this property is the main activity that any other ChangemarkChecklistInfoFormlet's are communicating with and linked to.

Changemarks and Checklists contain comments and discussions between two or more types of users who are completing two or more different steps in the workflow, sometimes a reviewer and applicant or coordinator and applicant, etc. The activity chosen in the Master Activity drop down is a filter to ensure only items created and linked to this master activity will be displayed in the Checklist Viewer and Changemark Viewer. If Master Activity is not selected, i.e. has value "Select One", the viewer will show items created for all activities with respect to other filters like group, review cycle.

### ChangemarkChecklistInfoFormlet Workflow Review Changemark Viewer Properties

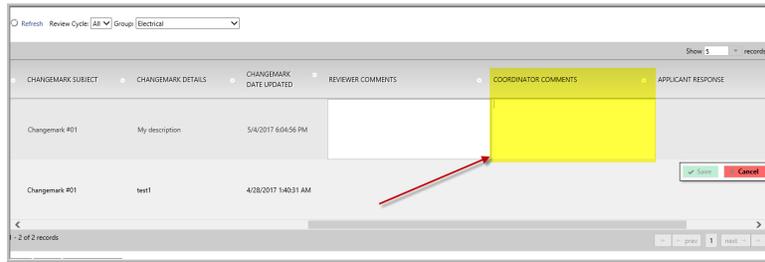
#### Show Items for Current Group by Default:

If "Show Items for Current Group by Default" is checked [= TRUE], the Changemark Viewer will set default Group filter to the current group for the current task when the Changemark Viewer is opened.

This is typically set to TRUE when ChangemarkChecklistInfoFormlet is added to the Department Review activity. This will allow the Changemark Viewer to automatically filter the Changemarks so the user will see only those Changemarks in the current reviewer group. The user can still change Group filter to another group or "All" groups.

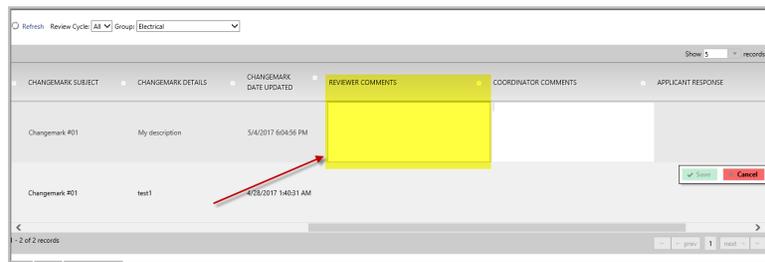
**Can Edit Changemark Item Coordinator Comments:**

If this configuration is checked [= TRUE], the user will be able to edit the “Coordinator Comments” on the Changemark Viewer, otherwise it will be disabled.



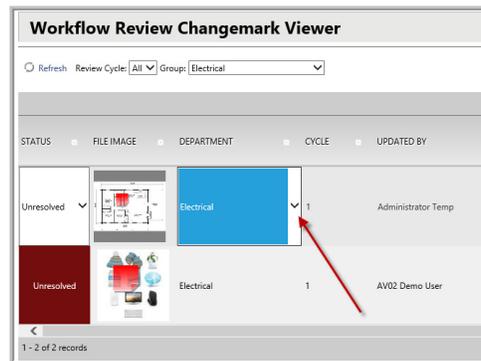
**Can Edit Changemark Item Reviewer Comments:**

If this configuration is checked [= TRUE], the user will be able to edit the “Reviewer Comments” on the Changemark Viewer, otherwise it will be disabled.



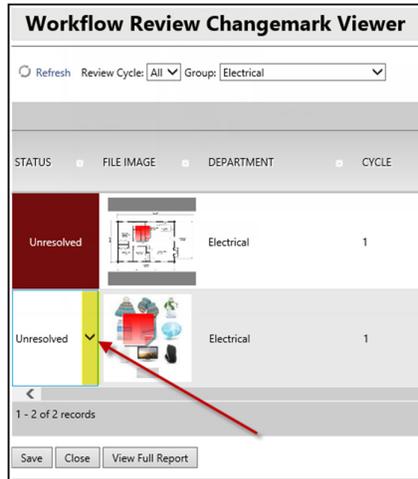
**Can Edit Changemark Item Groups:**

If this configuration is checked [= TRUE], the user will be able to change the “Department” groups on the Changemark Viewer, otherwise it will be disabled. The Department group can only be changed if the Changemark is owned by the current user. The groups can only be changed to a different group if the current user is in the other group and the other group has a Changemark in the review cycle for the Changemark that is being edited.



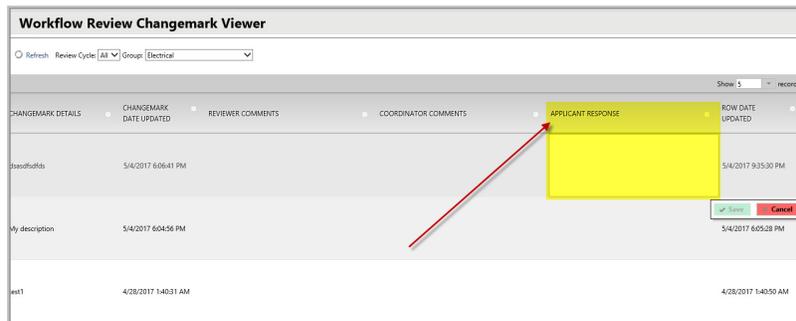
**Can Edit Changemark Item Status:**

If this configuration is checked [= TRUE], the user will be able to edit the “Status” on the Changemark Viewer, otherwise it will be disabled.



**Can Edit Changemark Item Applicant Response:**

If this configuration is checked [= TRUE], the user will be able to edit the “Applicant Response” on the Changemark Viewer, otherwise it will be disabled.

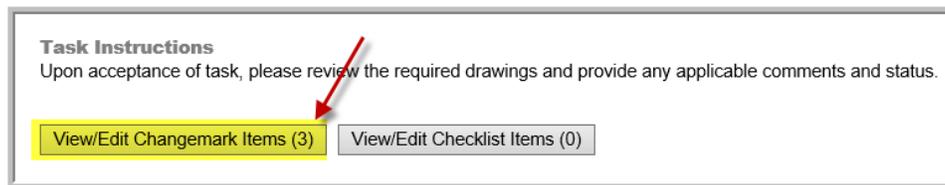


**Show All Changemark Items:**

If this configuration is checked [= TRUE], the user will be able to see all Changemarks from all users and all groups in all sub-workflows and review processes in the workflow. If this is checked, it cancels the effect of selected Master Activity and does not filter the Changemark Viewer

**Show Changemark Item Button:**

If this configuration is checked [= TRUE], the “View/Edit Changemark Items” will be displayed, otherwise it will be hidden.



**ChangemarkChecklistInfoFormlet Workflow Review Checklist Item Viewer Properties**

**Checklist Categories Type:**

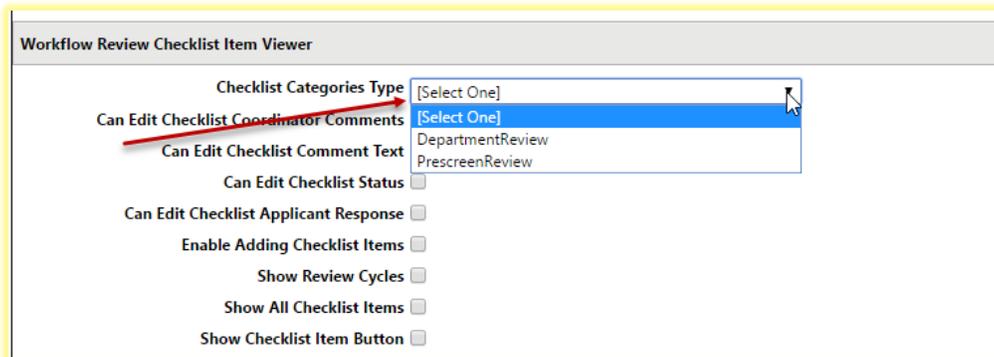
The ChangemarkChecklistInfoFormlet will contain this new formlet property. This formlet property is an additional category filter that will be used in the Checklist Viewer to ensure that only specific checklist items show up when the user needs to add checklist items to a checklist items conversation.

This property will be a drop down populated with the new Checklist Categories Type that will be used in the checklist item conversation allowing the user to more easily view a smaller subset of items to add. This will allow the user to quickly add the checklist items needed for the workflow so they can more quickly finish the task of communicating the checklist items to the applicant.

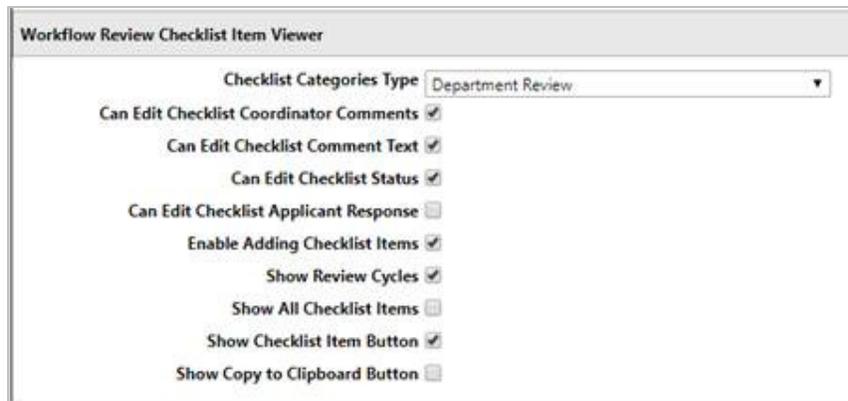
By default, there will be two Checklist Category Types for most workflows, PrescreenReview and DepartmentReview. This Checklist Category Type is required and must be set, or the Checklist Item Viewer will not populate the Comment Type and therefore not display any available checklist items in the top list on the page.

If "Enable Adding Checklist Items" is checked then the "Checklist Categories Type" also should be selected. Otherwise user will see error message, when opening the viewer. If "Enable Adding Checklist Items" is not checked, "Checklist Categories Type" may have [Select One] value.

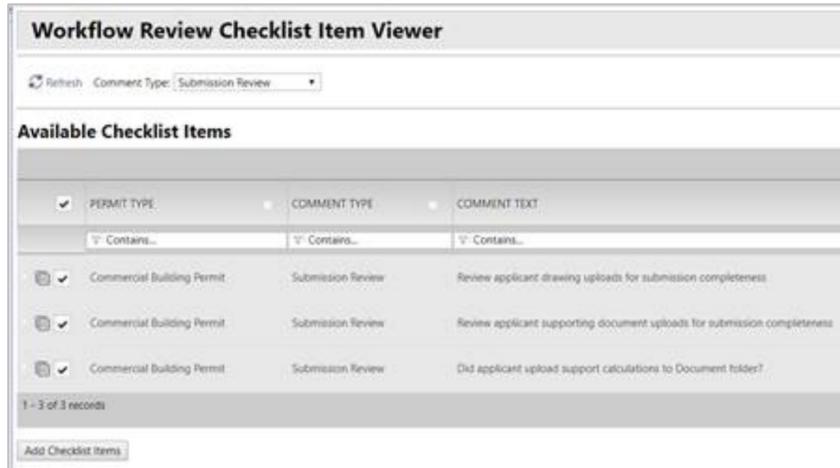
Typically, the ChangemarkChecklistInfoFormlet used in the Prescreen Review and Prescreen Corrections step will be configured to use the PrescreenReview category and the ChangemarkChecklistInfoFormlet formlet property used in the DepartmentReview step will be configured to use the DepartmentReview category. This is to ensure that when the Checklists Viewer is opened from the Department Review step that the user will only see checklist items that pertain to the Department Review step. This is configured by default but can be changed.



A "Show Copy to Clipboard Button" property has been added for ChangemarkChecklistInfo formlet, false by default when added with the upgrade and migration script.

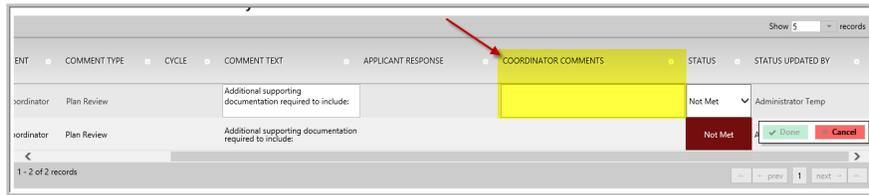


Formlet property is part of the ChangemarkChecklistInfo formlet, which is added to the Department Review, Prescreen, and Review Complete formlets. This button will copy the checklist item comment text to the clipboard allowing the user to paste it into the changemark comment more easily.



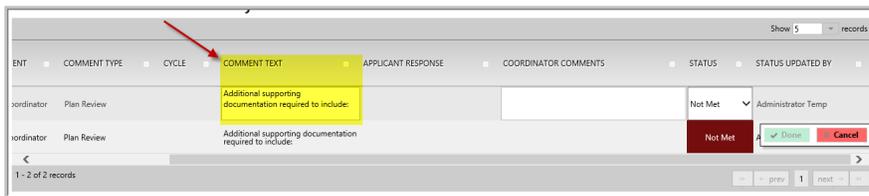
**Can Edit Checklist Coordinator Comments:**

If this configuration is checked [= TRUE], the user will be able to change “Coordinator Comments” on the Checklist Viewer. The user must click the “Done” button to save the change. The user must also be a member of the Coordinator Group to add or modify Coordinator Comments.



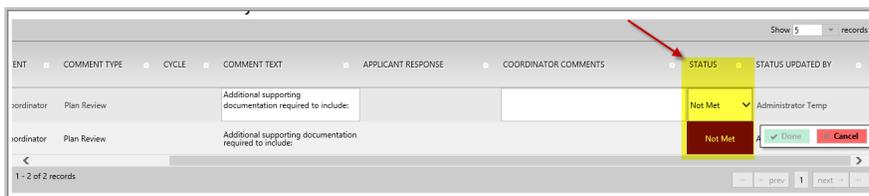
**Can Edit Checklist Comment Text:**

If this configuration is checked [= TRUE], if checked then user will be able to change “Comments Text” on the Checklist Viewer. The user must click the “Done” button to save the change.



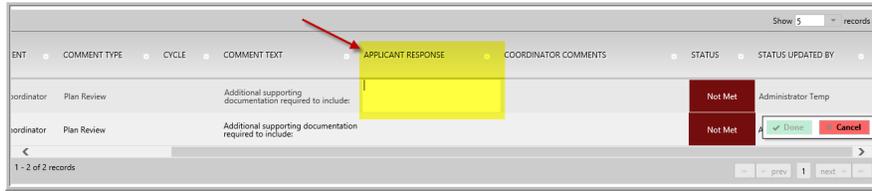
**Can Edit Checklist Status:**

If this configuration is checked [= TRUE], if checked then user will be able to change “Status” on a Checklist viewer page. The user must click the “Done” button to save the change.



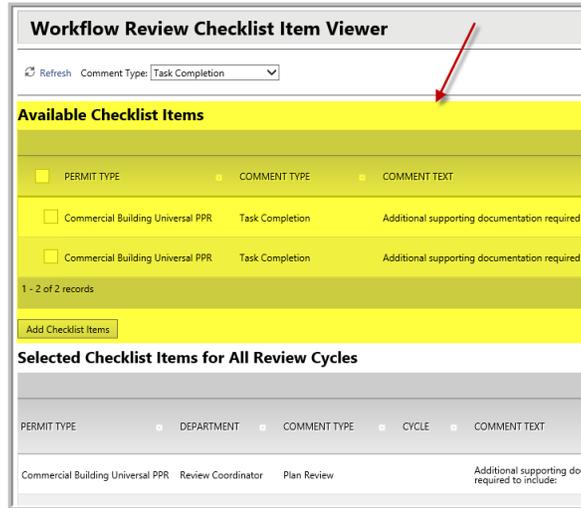
**Can Edit Checklist Applicant Response:**

If this configuration is checked [= TRUE], the user will be able to change “Applicant Response” on a Checklist viewer page. The user must click the “Done” button to save the change.



**Enable Adding Checklist Items:**

If this configuration is checked [= TRUE], the user will see the list of available checklist items and will be able to add items to the Selected Checklist Items list. If this configuration is set to FALSE, user will not be able to add checklist items. The property “Checklist Category Type” should also be selected, otherwise user will see an error message.

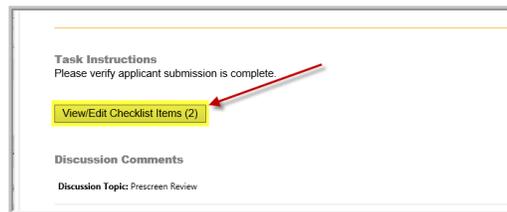


**Show All Checklist Items:**

If this configuration is checked [= TRUE], the Selected Checklist Items list will show all checklist items essentially cancelling the effects of Master Activity value. The Selected Checklist Items list will show checklist items created in all steps of the workflow, regardless of the Master Activity value.

**Show Checklist Item Button:**

If this configuration is checked [= TRUE], the “View/Edit Checklist Items” will be visible, otherwise it will be hidden.



**Show Review Cycle Button:**

If this configuration is checked [= TRUE], the button will be visible, otherwise it will be hidden. If the Review Cycle button is hidden, the Selected Checklist Items list will show all checklist items available in the entire workflow instance regardless of review cycle. If the Review Cycle drop down is visible and there is active review cycle, the Review Cycle drop down value will be set to that active review cycle.

**Checklist Category Types**

Checklist Category types are created in the Workflow Types Manager as seen below.

The screenshot shows the 'ProjectFlow Administration' interface. At the top, there is a navigation bar with 'Admin' and a dropdown menu set to 'ProjectFlow Administration'. Below this, the interface is divided into three main sections:

- Workflow Subtypes (Permit Types):** This section has a 'Name' dropdown menu currently set to 'Commercial Building Permit'. Below the dropdown is a text input field containing 'Commercial Building Permit'. At the bottom of this section are three buttons: 'Save', 'Add New', and 'Delete'.
- Workflow Checklist Comments Status Types:** This section has a 'Name' dropdown menu with the placeholder text '[Choose a workflow review checklist comment status]'. Below it is an empty text input field. There are three checkboxes: 'Is Default Status Type' (unchecked), 'Is Complete Type' (unchecked), and 'Is Active' (checked). At the bottom are three buttons: 'Save', 'Add New', and 'Delete'.
- Workflow Checklist Categories Types:** This section has a 'Name' dropdown menu with the placeholder text '[Choose a checklist category type]'. The dropdown is open, showing three options: 'DepartmentReview', 'PrescreenReview', and an empty option. Below the dropdown is an 'Is Active' checkbox (checked). At the bottom are three buttons: 'Save', 'Add New', and 'Delete'. A red arrow points to the 'Name' dropdown menu.

The user will have to first choose a Permit Type before the Checklist Categories drop down will load. The drop down will be disabled until a Permit Type is chosen. Checklist Category Types can be configured differently for each permit type.

The Checklist Categories Type can only be deleted if it is not being used in any workflow designs or instances. If it is being used, the Is Active checkbox must be unchecked and it will no longer display in the user interface.

The system will be able to report on the conversations that happen during prescreen review or post review using the Checklist Categories Type as a filter to the report.

**New Reference Numbers for Checklists and Changemarks**

Each Changemark and each Checklist item now has a unique reference number for the workflow instance. This reference number will be used by the customer to identify each item when discussing the checklists or changemarks with others. This reference number will be the first column in the Checklists Viewer and Changemarks Viewer and the Checklist and Changemark reports.

**Workflow Review Changemark Viewer**

Refresh Review Cycle: All Group: Electrical

Show 5 records

REF #	STATUS	FILE IMAGE	DEPARTMENT	CYCLE	UPDATED BY	FILE NAME	MARKUP NAME	CHANGEMARK SUBJECT	CHANGEMARK ACTION
1	Unresolved		Electrical	1	Michal Zmijewski	<a href="#">boathouse.rfp.pdf</a>	changemarks	First changemark	Edit few
2	Unresolved		Electrical	1	Michal Zmijewski	<a href="#">boathouse.rfp.pdf</a>	changemarks	Second changemark	That par
3	Unresolved		Electrical	1	Michal Zmijewski	<a href="#">boathouse.rfp.pdf</a>	changemarks	Third changemark	This is on
4	Unresolved		Electrical	1	Michal Zmijewski	<a href="#">boathouse.rfp.pdf</a>	changemarks	Fourth changemark	Skip this

1 - 4 of 4 records

Save Close View Full Report

**Workflow Review Checklist Item Viewer**

Refresh Comment Type: Submission Review

**Available Checklist Items**

Show 5 records

PERMIT TYPE	COMMENT TYPE	COMMENT TEXT
0 - 0 of 0 records		

Add Checklist Items

**Selected Checklist Items for All Review Cycles**

Review Cycle: All

Show 5 records

REF #	PERMIT TYPE	DEPARTMENT	COMMENT TYPE	CYCLE	COMMENT TEXT	APPLICANT RESPONSE	COORDINATOR COMMENTS
1	Commercial Building Permit	Review Coordinator	Submission Review		Review applicant supporting document uploads for submission completeness		
2	Commercial Building Permit	Review Coordinator	Submission Review		Did applicant upload support calculations to Document folder?		
3	Commercial Building Permit	Review Coordinator	Submission Review		Review applicant drawing uploads for submission completeness		

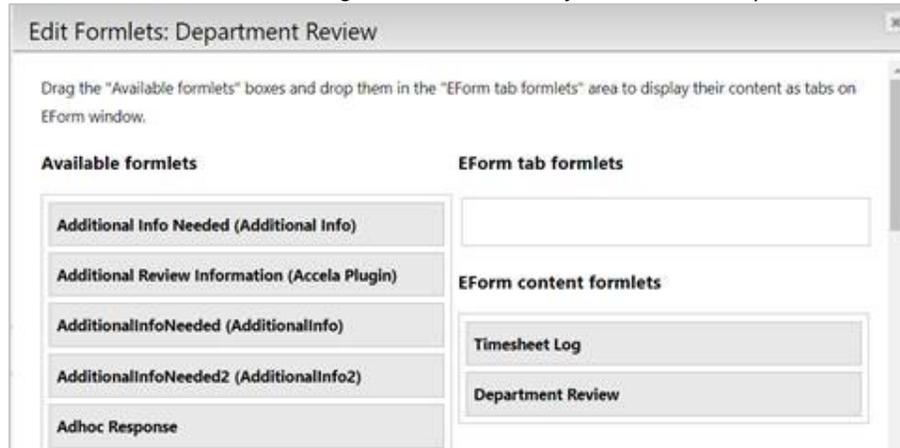
1 - 3 of 3 records

Save Close View Full Report

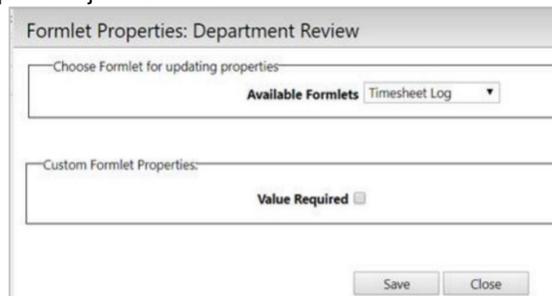
### Timesheet Log Formlet

Formlet that holds the timesheet widget to allow a reviewer/user to track the amount of time that they claim was spent on a task which could be different than the calculated task time. At least one timesheet value must be entered before completing the task. A validation message will display if the timesheet entry value is left blank.

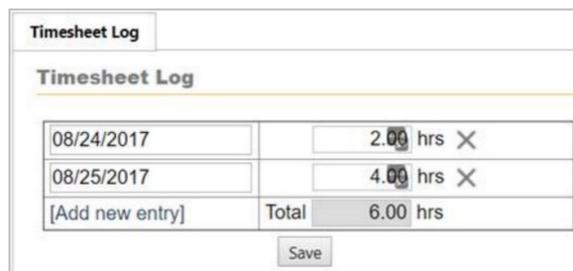
- a. When used, the Timesheet Log will most commonly be added to Department Review.



- b. Once added, it can be configured to be require timesheet log entry for the task or not depending upon the jurisdiction.



- c. The eForm will display the fields allowing the reviewer to add as many entries as needed, and automatically sum the total. Click "Add new entry", choose the date, add the hours, click Save.

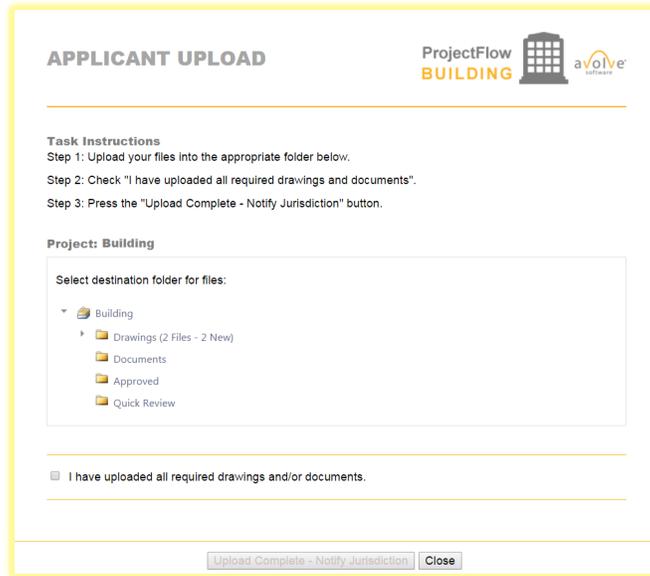


- d. Two new reports are included with this new feature and if used, they must be imported via the ProjectDox Report Wizard.

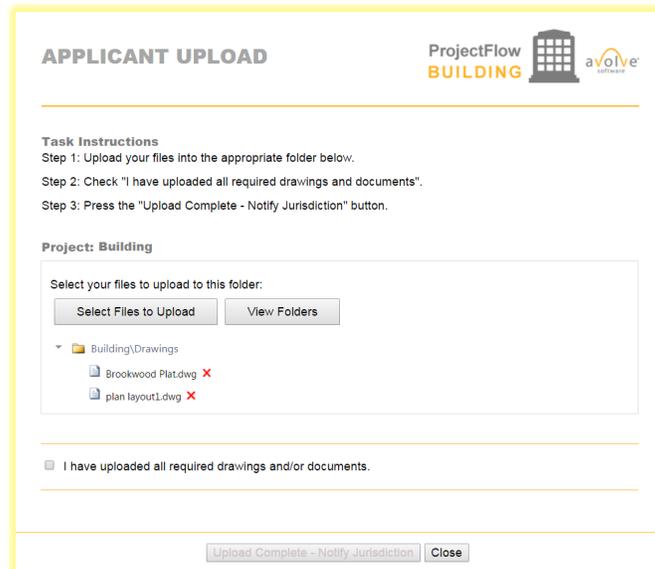
SiteWide - Timesheet Logs		SiteWide	Displays a list of all timesheet values entered across all projects
ProjectFlow - Timesheet Logs		Workflow	Displays a list of all timesheet values entered in a specific project

### **File Upload Formlet**

The Applicant Upload screen now allows Applicants to upload their electronic plans and other documents during the workflow process using the ProjectFlow eForms. This new formlet will be used on any new BIC workflows definitions but legacy workflows will continue to use the Applicant Upload activity without the file upload formlet. If older workflows need to be retrofitted with the "File Upload" formlet it can be added manually in the workflow designer. The permissions will determine what folders the applicant will see in this formlet.



When the user clicks on the folder of choice, the “Select Files to Upload” and “View Folders” buttons are displayed. If the user has the permission, the user can also delete files from the folder by clicking on the X icon beside the file.



**Select Files to Upload:**

Clicking this button will open the ProjectDox Upload screen allowing the user to upload any number of files.



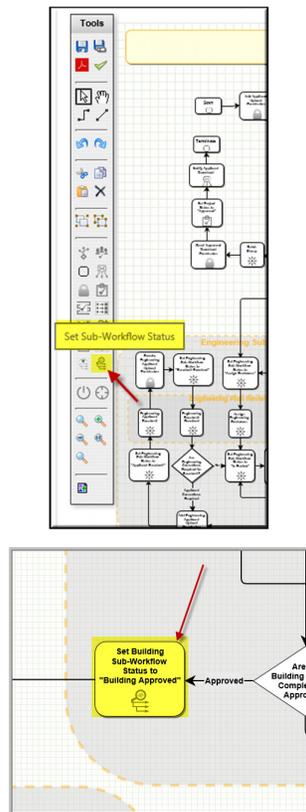
**View Folders:**

Clicking this button will display the main folders view allowing the user to choose a folder to upload to.

**Parallel Building Review Formlets and Activities**

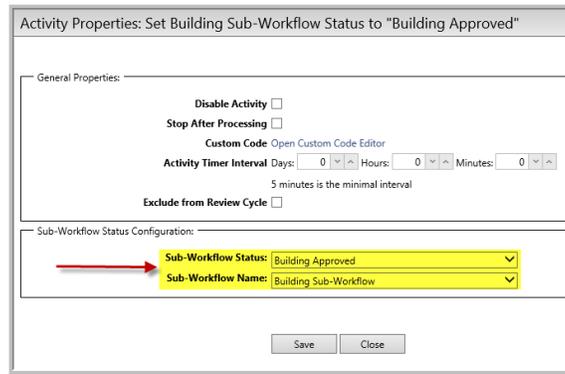
**Set Sub-Workflow Status Activity**

The “Set Sub-Workflow Status” activity allows a workflow designer to add the activity within an Activity Grouping to communicate to consumers of the workflow what the status of the sub-workflow is at any point in the workflow process. The activity can be dragged and dropped from the workflow designer toolbar onto the design.

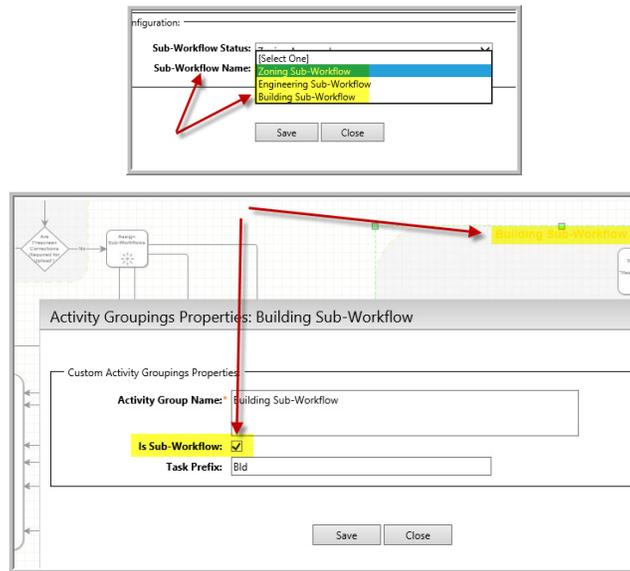


The activity does not necessarily have to be positioned inside of an activity grouping, but for visual purposes and to help understand the process from a visual aspect, the Best in Class Parallel Building Review designs do position the activities inside of the sub-workflows. This helps users better understand what the workflow process state is at any point.

To configure the Set Sub-Workflow Status, choose a status from the Sub-Workflow Status drop down and choose a name from the Sub-Workflow Name drop down.

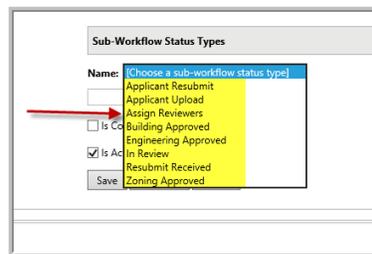


This name is loaded in the Sub-Workflow Name drop down are all the activity groupings marked as sub-workflows and have the "Is Sub-Workflow" checkbox checked [= TRUE].

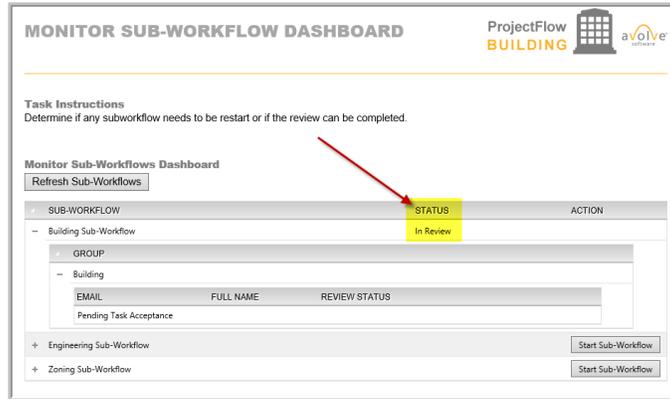


### Sub-Workflow Status Types

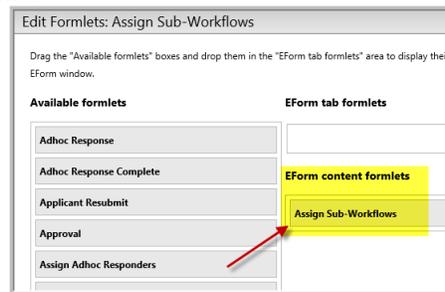
There is a new workflow type called Sub-Workflow Status Type. This status type is configured in the Workflow Types screen. They are customizable and can be used anywhere in the workflow but they are typically used within the Activity Grouping for a specific sub-workflow although they can also be used outside of an Activity Grouping.



This type is used to communicate the status of each sub-workflow in reports and dashboards, such as the Monitor Sub-Workflow Dashboard.



### Assign Sub-Workflows Formlet



The Assign Sub-Workflows formlet can be added to the Generic Activity to allow users to start sub-workflows.



This formlet contains a list of all the sub-workflows configured in the workflow instance. There is a checkbox to the left of each sub-workflow. Each sub-workflow corresponds to an Activity Grouping (sub-workflow) on the workflow design. If the checkbox is checked, the sub-workflow will be started when the user clicks the complete button and finishes this eForm task.

The startup group for this task will be the users who can start the sub-workflows. The user can start one or more of the sub-workflows and then use the Monitor Sub-Workflow Dashboard to start or restart others later. Typically, there is only one startup task for this activity.

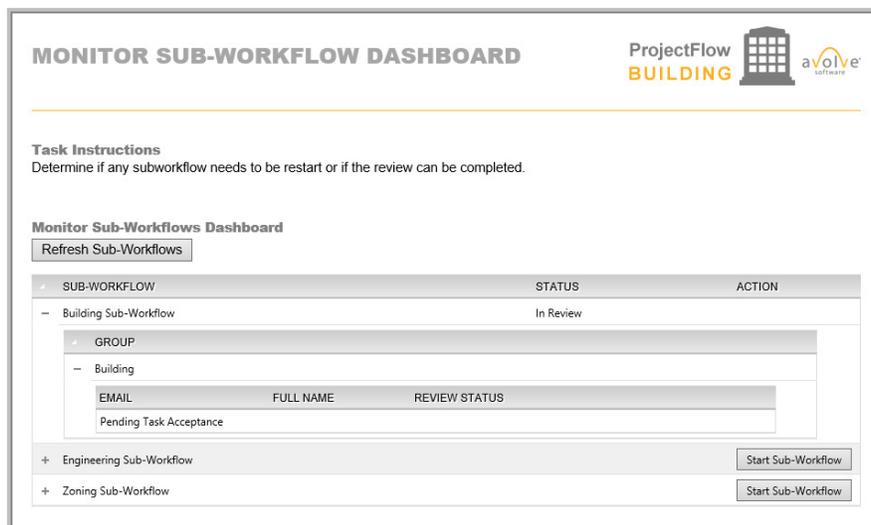
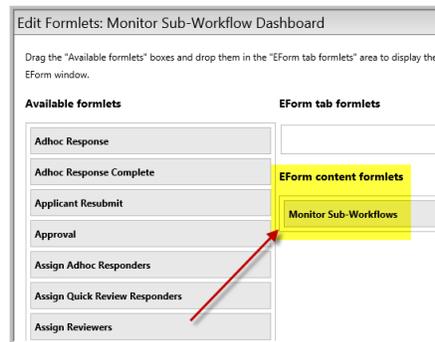
The sub-workflow name that shows up in the Sub-Workflow column are the Activity Groupings on the designer that have the "Is Sub-Workflow" checkbox checked [= TRUE].

### Monitor Sub-Workflows Dashboard Formlet



The Monitor Sub-Workflow activity can be dragged and dropped on the design. The Monitor Sub-Workflow Dashboard formlet must then be added to the activity.

The Monitor Sub-Workflow activity will use a startup group to assign this step in the workflow to a specific group that will have the ability to monitor and manage the sub-workflow processes.



These new components are used to help users in the workflow monitor and manage the sub-workflows during the entire workflow process. They will allow users to start new sub-workflows and monitor them in real-time.

**Refresh Sub-Workflows:**

This button will update the dashboard information currently being displayed for the sub-workflows.

**Start Sub-Workflow:**

These buttons allow the user to start or restart individual sub-workflows. These buttons will be hidden if the sub-workflow has an active activity. If the sub-workflow was never started, the button will display “Start Sub-Workflow”. If the sub-workflow has been started in the past and can be started again, the button will display “Restart Sub-Workflow”. Only when the activities within the sub-workflows are completed will the sub-workflow be able to be restarted.

**Sub-Workflow List:**

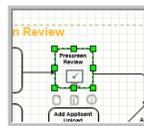
The list will show the sub-workflow name. The sub-workflows that are displayed in the list are the activity groupings on the design that contain the “Is Sub-Workflow” configuration set to TRUE. The actual name in the list is the label of the activity grouping on the design. The status of the sub-workflow comes from the “Set Sub-Workflow Status” activities that are configured for the sub-workflows.

The tasks for the Monitor Sub-Workflow activity will always be automatically completed when all the sub-workflows are completed.

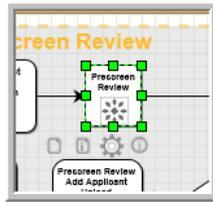
**Prescreen Review Process**

**Changes to Prescreen Review**

In ProjectFlow version 1.1 and earlier, the Prescreen Review step in the workflow used the Prescreen Review activity with the Prescreen Review formlet. That formlet used text boxes on the formlet to capture the conversation between the Coordinator and the Applicant. These older formlets used in existing workflows will continue to run as normal, but any new workflow designs generated by the System Configuration page or new workflow designs created from scratch will use the new Prescreen Review components described below.



In ProjectFlow v2.0 and later, the Prescreen Review step in the workflow uses the new Changemark Checklist Info formlet and the new Discussion Board formlet.



**Edit Formlets: Prescreen Review**

Drag the "Available formlets" boxes and drop them in the "EForm tab formlets" area to display their content in the EForm window.

Available formlets	EForm tab formlets
Additional Info Needed (Additional Info)	
Adhoc Response	
Adhoc Response Complete	
Applicant Resubmit	
Approval	
Assign Adhoc Responders	
Assign Quick Review Responders	
	<b>EForm content formlets</b>
	Changemark Checklist Info
	Discussion Board

**PRESCREEN REVIEW**

ProjectFlow BUILDING  

**Task Instructions**  
Please verify applicant submission is complete.

[View/Edit Checklist Items \(0\)](#)

**Discussion Comments**

**Discussion Topic:** Building1 - ProjectFlow\_Building\_Template1 - 5/10/2017 1:51:16 PM

**Description:** Building1 - ProjectFlow\_Building\_Template1 - 5/10/2017 1:51:16 PM

**Project:** Building1

**Discussion Leader:** Administrator Temp

[Add Comment](#)

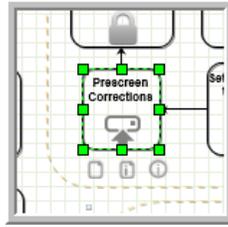
DISCUSSION COMMENT	PARTICIPANT	DATE/TIME
 This is a Coordinator comment.	Administrator Temp	5/12/2017 1:12:38 PM

1 - 1 of 1 records

[Prescreen Approved](#) [Return to Applicant](#) [Save For Later](#)

### Changes to Prescreen Corrections

In ProjectFlow version 1.1 and earlier, the Prescreen Corrections step in the workflow used the Prescreen Corrections activity with the Prescreen Corrections formlet. That formlet used text boxes on the formlet to capture the conversation between the Coordinator and the Applicant. The older Prescreen Corrections formlet used in existing workflows will continue to run as normal, but any new workflow designs generated by the System Configuration page or new workflow designs created from scratch will use the new Prescreen Corrections components described below.



**Edit Formlets: Prescreen Corrections**

Drag the "Available formlets" boxes and drop them in the "EForm tab formlets" area to display their EForm window.

Available formlets	EForm tab formlets
AdditionalInfoNeeded (AdditionalInfo)	
AdditionalInfoNeeded2 (AdditionalInfo2)	
Adhoc Response	
Adhoc Response Complete	
Applicant Resubmit	
Approval	

**EForm content formlets**

- Prescreen Corrections

**PRESCREEN CORRECTIONS**

ProjectFlow BUILDING

[Click Here for Prescreen Checklist \(0\)](#)

**Applicant Comments**

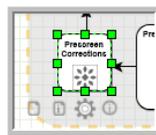
**Reviewer Comments**

This is a comment from the Review Coordinator.

Reviewer Comments Last updated: 5/12/2017 9:56:38 AM

I have uploaded the corrected documents and/or drawings as indicated above.

In ProjectFlow v2.0 and later, the Prescreen Review step in the workflow uses the new Changemark Checklist Info formlet, the new Discussion Board formlet, and the Approval formlet.



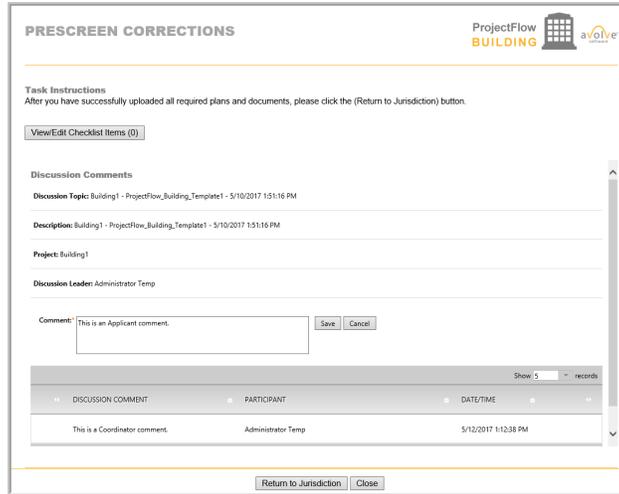
**Edit Formlets: Prescreen Corrections**

Drag the "Available formlets" boxes and drop them in the "EForm tab formlets" area to display their EForm window.

Available formlets	EForm tab formlets
Additional Info Needed (Additional Info)	
Adhoc Response	
Adhoc Response Complete	
Applicant Resubmit	
Approval	
Assign Adhoc Responders	
Assign Quick Review Responders	

**EForm content formlets**

- Changemark Checklist Info
- Discussion Board
- Approval



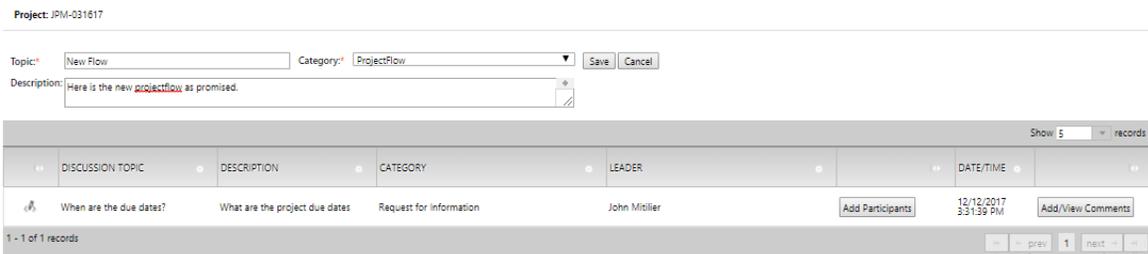
**New Discussion Board Formlet**

The new Discussion Board formlet is an update and replacement of the Topics and Notes screens in previous versions. The Discussion Board is used in ProjectDox and it's used in ProjectFlow. Please see the **What's New in ProjectDox 9.0** for more information on how the Discussion Board is used in ProjectDox. In ProjectFlow, it is used to allow a discussion between two or more groups/users in the workflow in different steps in the workflow.

**Discussion Topics**



**Discussion Topics**



The Discussion Board formlet has three properties:

**Topic:**

The Topic title is the subject of the discussion. If no Topic title is entered, an error message will display.

**Category:**

The Category drop down displays a list of other activities on the designer. The value that is configured for this property is the main activity that any other Discussion Board formlets are communicating with and linked to. The Discussion Board contains comments and discussions between multiple groups and users across multiple steps in the workflow and each one of those discussions must use the same master activity value.

**Description:**

A description can be added for the discussion topic but is not required.

There will also be a new Discussion Board report called, "Current Project - ProjectFlow Discussion Board Plan Review Report". This report will show all discussions that happen during the workflow process. It will not show any discussions that are created in ProjectDox.

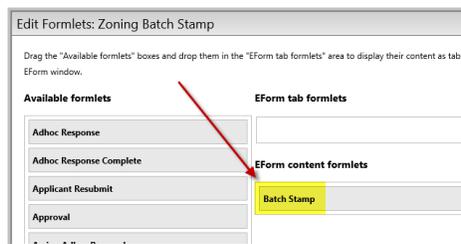
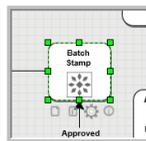
**ProjectFlow - Discussion Board Plan Review Report**  
**MZM BLD PFlow 070617**  
 Generated On 07/06/2017 01:13 AM

DISCUSSION LEADER :	DISCUSSION TOPIC :	DATE UPDATED :
Prescreen Review		
<b>Discussion Leader:</b> Michal Zmijewski		<b>Date Updated:</b> 7/6/2017 1:12:51 AM
PARTICIPANT NAME :	DISCUSSION COMMENT :	DATE UPDATED :
Michal Zmijewski	Re-uploading.	7/6/2017 1:12:51 AM
Michal Zmijewski	No files	7/6/2017 1:12:26 AM

### Scheduled Batch Stamp Activity and Formlet

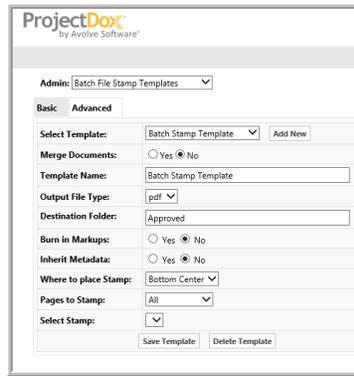
We now have two batch stamp activities and formlets. The legacy "Simple" Batch Stamp activity and the "Scheduled" Batch Stamp activity.

The **Simple Batch Stamp** activity is configured using a Generic Activity with a Batch Stamp formlet. This activity is a simple way to manually verify the batch stamp process was completed using the ProjectDox Batch Stamp screen.



The **Scheduled Batch Stamp** activity is configured using a Scheduled Batch Stamp Activity with a Scheduled Batch Stamp Formlet.





**Folder Names:**

This is a pipe-delimited list of folders to be stamped. Every document in each folder will be stamped.

**Notify Group Name:**

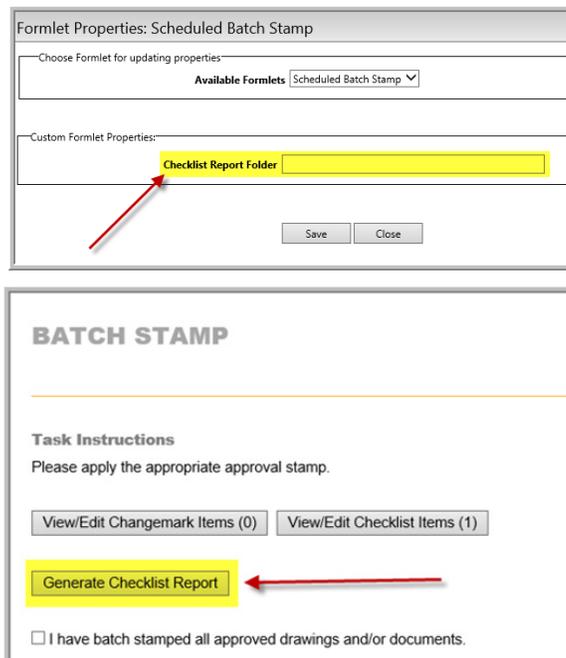
The scheduled task should allow for a group name to notify all the group members when the task completes whether it is successful or has an error.

**Scheduled Task ID:**

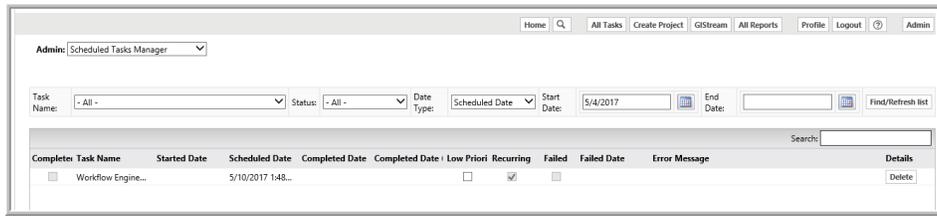
This is used for debugging purposes and for technical support. It is a read-only property and cannot be modified.

**Checklist Report Folder:**

This formlet property configuration allows the user to specify a project folder to output a Checklist Report. When this value is populated, a button called "Generate Checklist Report" will be displayed in the formlet. When the button is clicked, a checklist report will be generated as a PDF and will be uploaded into the project folder specified in the setting. This is used for the Simple Batch Stamp and Scheduled Batch Stamp activities.



The batch stamp scheduled task will allow the user to be notified when the batch stamp process is complete and when the activity is completed. The task can also be monitored using the Scheduled Tasks Manager. The scheduled task should be added as a high priority task so that it will process over other tasks.

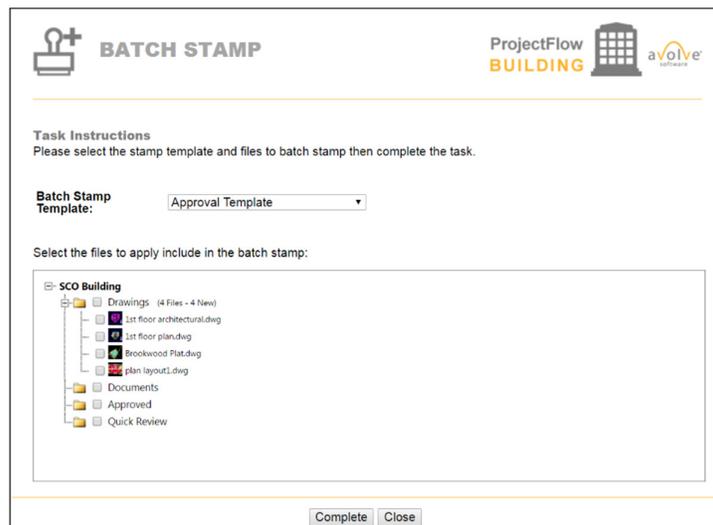


If the batch stamp errors or the scheduled task times out, this will put the ProjectFlow activity into an error state. The workflow recovery process could consist of the following options:

- User will see the error for the batch stamp activity in the designer as the activity will be red and the error will list the files that were published successfully and the ones that failed.
- User can go into the Approved folder in ProjectDox and delete all the files and go back to ProjectFlow and restart the workflow. This will reactivate the batch stamp activity and allow the user to run the batch stamp again.
- User can go into the Approved folder in ProjectDox and manually stamp the files that failed by navigating to the folder view, choosing the files that failed and clicking the batch stamp icon. Once the files have successfully been stamped then the user can go back to ProjectFlow and jump to the activity after the Scheduled Batch Stamp activity to make the workflow progress forward.

The Scheduled Batch Stamp process can be configured to be an automated process or an activity with a manual process with a user task. The manual task is accomplished using the Scheduled Batch Stamp formlet shown in the ProjectDox eForm. If there are no startup tasks for the Scheduled Batch Stamp Activity, then it will be automated. If the process is automated and there is no batch stamp template chosen, then it will halt the workflow and show the error that a template has not been selected.

The Scheduled Batch Stamp activity can be used without the Scheduled Batch Stamp formlet. Using the Scheduled Batch Stamp activity without the Scheduled Batch Stamp formlet is assuming the process is going to be automated. If the Scheduled Batch Stamp formlet is used, it assumes the process will be manual. The automated process assumes the stamping process will stamp all files in the “Folder Names” property.



**Batch File Stamp Template:**

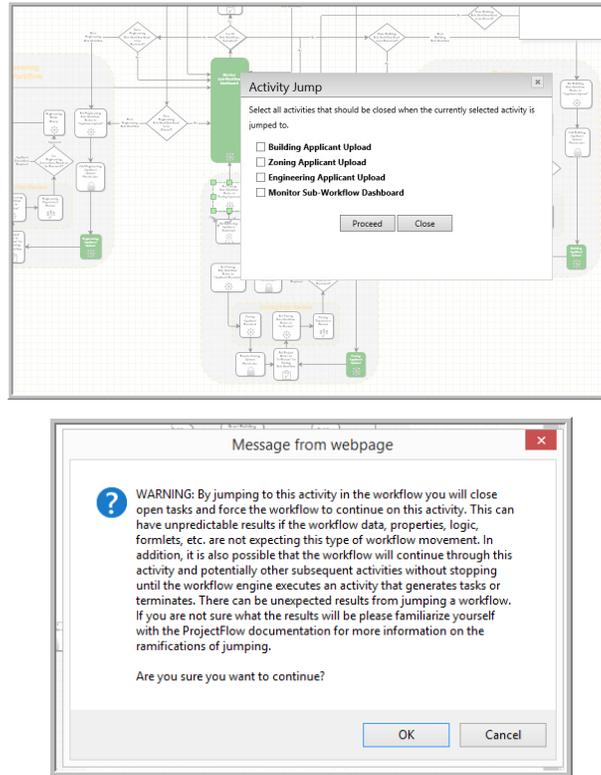
This drop down is a list of all the batch stamp templates configured in the Admin section of ProjectDox.

**Select the files to apply the batch stamp:**

This is a list of folder and files that need to be batch stamped. Select the ones that apply.

## Jumping

There is a new Activity Jump screen in ProjectFlow v2.0 that allows users to choose which activities are closed/completed. The user can select which active activities they would like to complete. If the activity is selected, all the tasks for that activity will be marked as SystemClosed and the activities will be completed.



A warning will be displayed allowing the user to cancel the process before it begins. Once the jumping has started, the process will be committed.

If the user jumps out of a sub-workflow, the status may not get updated appropriately and therefore the sub-workflow status may not show the correct status after that point unless the sub-workflow is restarted.

If performing a jump from an active activity to the same activity and it is not selected to be closed, the jump is ignored.

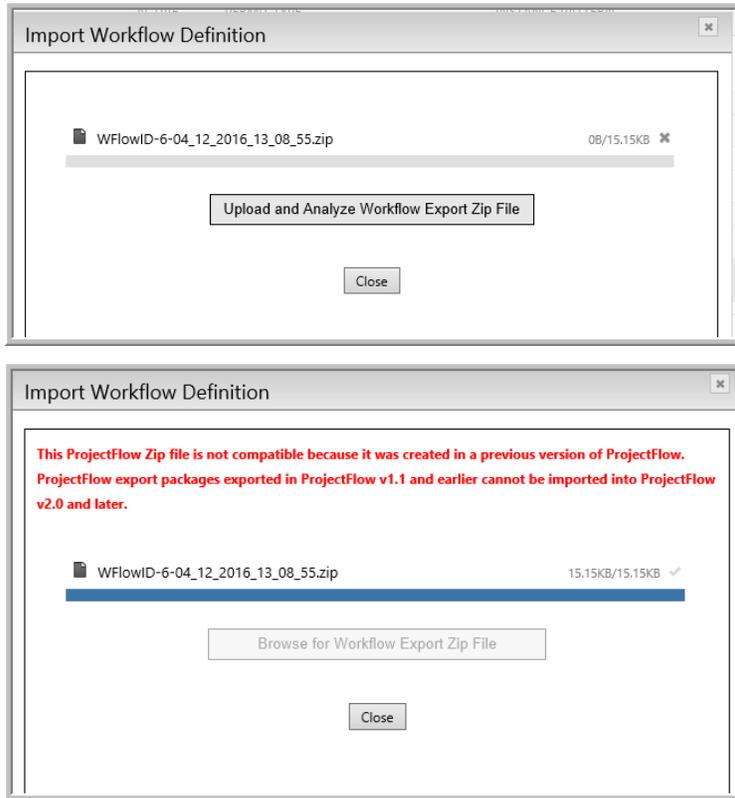
When jumping from Monitor Sub-workflow Dashboard to the same activity but all sub-workflow activities were selected to be closed, a new task will be recreated for the Monitor Sub-workflow. The user will need to select sub-workflows to restart or manually complete the task for it to proceed to the next activity.

When there is only 1 active activity, we automatically preselect the activity in the Jump page.

## Import and Export Process

This import process does not support importing workflow template zip files from ProjectFlow v1.1 and earlier. If an attempt is made to import a zip file from a ProjectFlow v1.1 and earlier zip file, an error message will be displayed.

This will happen after you add the upload zip file to the screen and then click the Analyze button.



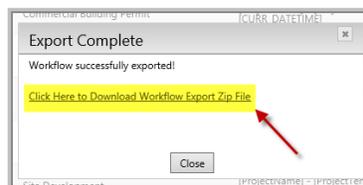
The import/export process has been improved to allow for import of larger workflow zip files and to allow for easier export of workflow zip files. This should comply with the limits set in web.config, Admin Core and IIS.

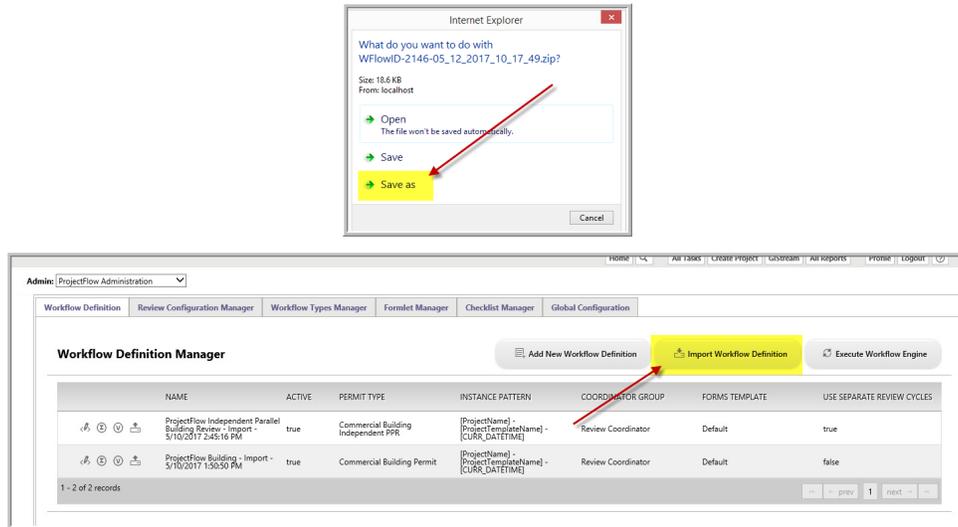
The Import Workflow Definition button allows user to import workflow template zip files. These files are exported using the Export tool in the Workflow Definition Manager.

By clicking the Export button, the workflow definition and any related, dependent data for that workflow will be exported into a zip file.

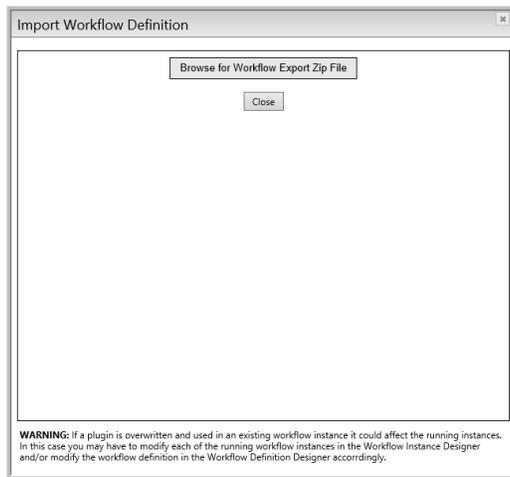


The exported zip file can be saved locally to the hard drive or any network drive by clicking the “Click Here to Download Workflow Export Zip File”.





Click the “Browse for Workflow Export Zip File”.

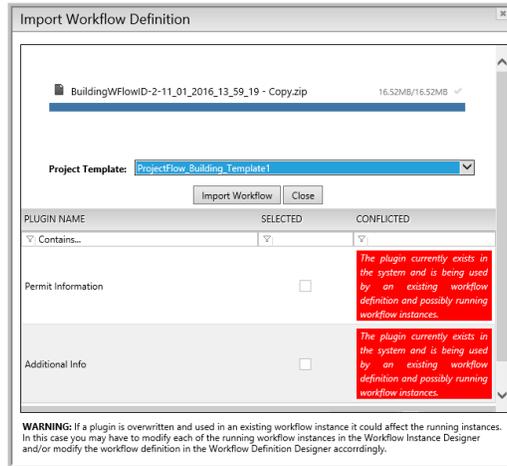


The exported zip file must be analyzed to determine what needs to be imported and validate the zip file integrity.

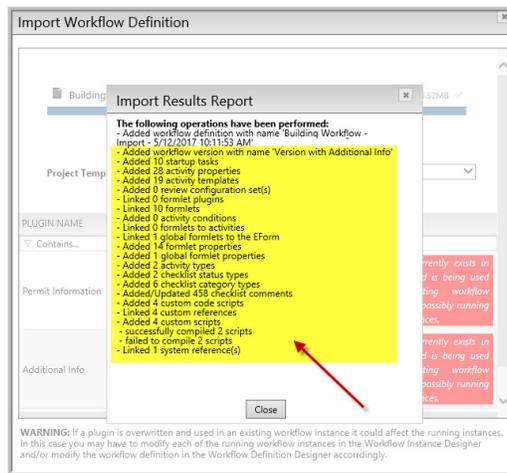


By default, the checkbox in the error below is unchecked for the custom formlets. If the zip file contains plugins, the screen will allow the user to choose whether to import them or not. They will not be imported unless the user performing the import specifically chooses to overwrite the current

custom formlet If they already exist in the system, there will be a warning letting the user know they will be overwriting the existing plugin if they choose to import the plugin. If the user wants to import the plugin, they must select the checkbox before clicking the Import Workflow button.



After the import process is complete, a report will be displayed letting the user know what was imported, what was not imported and if any custom code scripts failed to compile.



## Reports

There are two new Parallel Plan Reports:

- ProjectFlow - PBR Department Review Status
- ProjectFlow - PBR Workflow Routing Slip

There are six new ProjectFlow Reports:

- ProjectFlow – Review Details Report
- Management – Workload Report
- Management – Task Status Report Dashboard
- Management – Task Statistics Report
- Management – Overdue Task Detail Report
- Management – Average Turnaround Time Report

Data in the reports now can be categorized in a hierarchical manner using Activity Groupings on the designer. Data can also be grouped by Review Cycle and other data. By grouping activities, the data can also be aggregated allowing users to rollup calculations and subtotal task times and drill down in

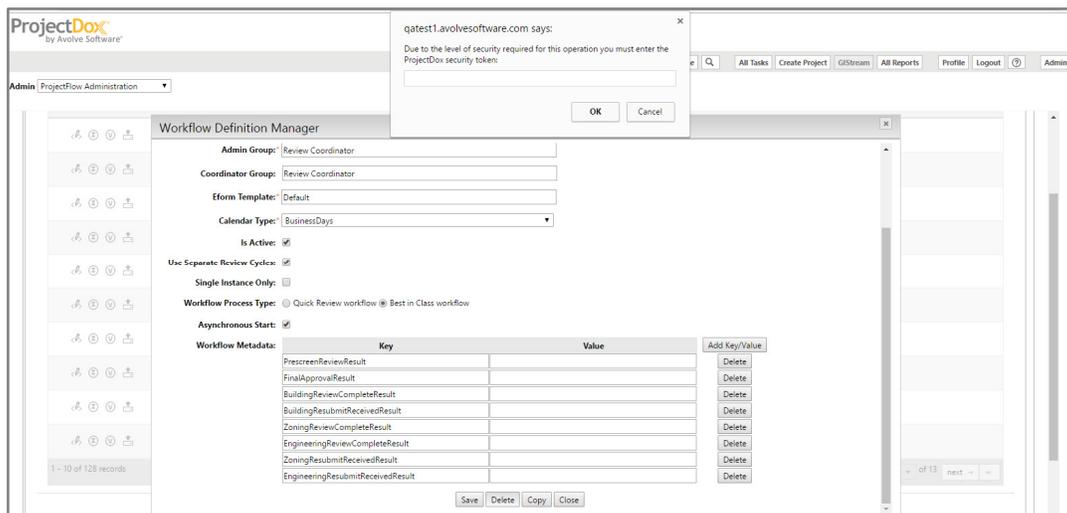
different ways allowing a more detailed view of the data than in previous versions of ProjectFlow. This will allow customers to extract more detailed information about the workflow to improve business processes.

The new Parallel Building Review reports are grouped by sub-workflow and review cycle. Tasks for activities that fall outside of sub-workflows are grouped into a single category called “Main Workflow”.

### Workflow Definition Manager

A valid security token must now be entered by the user before a workflow definition can be deleted. This mechanism is initiated because of the serious ramifications that can occur if a definition is deleted. This function should be performed by a seasoned ProjectDox user who understands the consequences of deleting a definition.

When the delete workflow button is pressed, a JavaScript prompt box displays requiring the user to enter a security token. The security token is then validated on the server side and only allows the delete if the security token is a match.

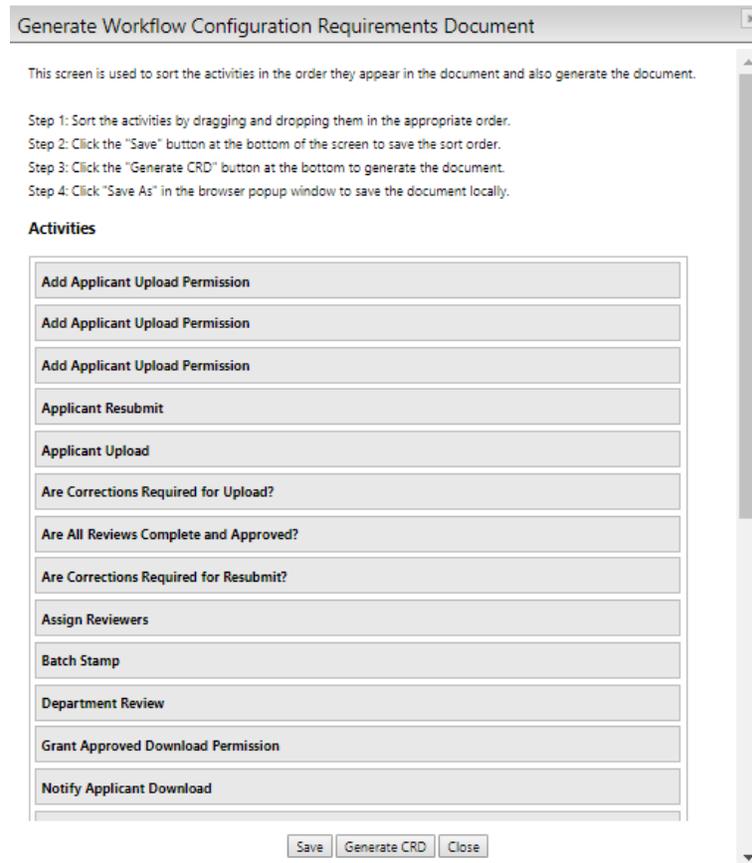


### Restart Workflow Instance

To allow the customer to move more quickly and easily recover from errors in the workflow, a Restart Workflow Instance Button  has been added to the top of the Workflow Instance Designer. The button will only display if the instance is in an error state and the user is a PA or SA.

### Sorting the Configuration Requirements Document (CRD)

The Generate CRD button will show one screen allowing users to sort the activities and generate the CRD from the same screen.



There is a default sort order for all workflow templates that is generated when any new workflows are generated from the System Configuration page.

The workflow activities are sorted alphabetically for existing workflows. It will be up to the user to create the correct sort order, one that makes sense to the consumer, before generating the CRD.

## Bulk Update Results

When the bulk update feature finishes, a grid with the results is populated. This allows the user to quickly navigate to the workflow definitions and instances that fail. The results grid has sorting and filtering turned on to allow the user to more quickly see the issues that need to be addressed without having to scroll and manually search.

The results need to be exported to an Excel file (or equivalent) to allow the user to distribute the results to other team members to analyze. This will provide a paper trail of the integration upgrade. The report will have the data and time listed for auditing and tracking. The exporting of the bulk update results will allow others to perform the bulk update and hand off any failures to pro services. This will allow pro services to focus only on customer upgrades which have issues.

## Appendix

### Results of a Workflow Setup

#### Project Status

- Applicant Upload
- Applicant Corrections
- Prescreen Corrections
- Approved
- In Review
- Prescreen

#### Checklist Status

- Met

- Not Met

**Changemark Status**

- Resolved
- Unresolved

**Building Workflow**

**Project Template**

1. Create Folders
  - Drawings
  - Documents
  - Approved
  - Quick Review
2. Roles
  - ApplicantUpload: View, Upload, View Markups
  - ApplicantView: View
  - ApplicantDownload: View, Download, Print
  - Reviewer: View, View Markups, View Discussion Board, Create Markups, Create/Edit Discussion, Print,
  - ApplicantQuickReview: View, View Markups, Upload, Download, Print
3. Create Groups
  - Applicant
  - Building Plans Examiner: Disable Invitation Email
  - Electrical: Disable Invitation Email
  - Electrical Sub: Disable Invitation Email
  - Management: Disable Invitation Email
  - Mechanical: Disable Invitation Email
  - Plans Examiner: Disable Invitation Email
  - Plumbing: Disable Invitation Email
  - Review Coordinator: Disable Invitation Email, Allow Ad Hoc Workflow Start
  - Allow Workflow Start
  - View Only: Disable Invitation Email

**Modify Permissions**

		View	Upload	Download	View Markups	Create Markups	Print	View Discussions	Create Discussions	No permissions initially
<b>Applicant</b>	Drawings	X	X		X					
	Documents	X	X		X					
	Approved									X
	Quick Review									X
<b>Building Plans Examiner</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Electrical</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X

<b>Electrical Sub</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Management</b>	Drawings	X								
	Documents	X								
	Approved	X								
	Quick Review									X
<b>Mechanical</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Plans Examiner</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Plumbing</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Review Coordinator</b>	Drawings	X			X		X	X	X	
	Documents	X			X		X	X	X	
	Approved	X	X	X			X			
	Quick Review									X
<b>View Only</b>	Drawings	X								
	Documents	X								
	Approved	X								
	Quick Review									X

## Planning Workflow

### Project Template

1. Create Folders
  - Drawings
  - Documents
  - Approved
  - Quick Review
2. Roles
  - ApplicantUpload: View, View Markups, Upload
  - ApplicantView: View
  - ApplicantDownload: View, Download, Print
  - Reviewer: View, View Markups, View Discussion Board, Create Markups, Create/Edit Discussion, Print
  - ApplicantQuickReview: View, View Markups, Upload, Download, Print
3. Create Groups
  - You can Disable Invitation Email for the following groups:

<b>Address</b>	<b>Applicant</b>	<b>Building</b>	<b>City Surveyor</b>
County Surveyor	Engineering	Fire	Management

<b>Planning</b>	<b>Planning Coordinator*</b>	<b>Planning Intake</b>	<b>Planning Manager</b>
<b>Sewer</b>	<b>Storm Water</b>	<b>Traffic</b>	<b>Transportation</b>
<b>Urban Forrester</b>	<b>View Only</b>	<b>Water</b>	

\*Allow workflow start

**Modify Permissions**

		View	Upload	Download	View Markups	Create Markups	Print	View Discussions	Create Discussions	No permissions initially
<b>Addressing</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Applicant</b>	Drawings	X	X		X					
	Documents	X	X		X					
	Approved									X
	Quick Review									X
<b>Building</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>City Surveyor</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>County Surveyor</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Engineering</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Fire</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Management</b>	Drawings	X								
	Documents	X								
	Approved	X								

	Quick Review									X
<b>Planning</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Planning Coordinator</b>	Drawings	X			X		X	X	X	
	Documents	X			X		X	X	X	
	Approved	X	X	X			X			
	Quick Review									X
<b>Planning Intake</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Planning Manager</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Sewer</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Storm Water</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Traffic</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Transportation</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>Urban Forrester</b>	Drawings	X			X	X	X	X	X	
	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X
<b>View Only</b>	Drawings	X								
	Documents	X								
	Approved	X								
	Quick Review									X
	Drawings	X			X	X	X	X	X	

<b>Water</b>	Documents	X			X	X	X	X	X	
	Approved	X								
	Quick Review									X

### ProjectFlow\_Universal\_Parallel\_Building

- Review coordinator for each sub-workflow
  - Individual Review configs for each sub-workflow
  - Multiple Review Groups
  - Individual Assign Reviewers and Review Complete for each sub-workflow
  - Single Batch Stamp for entire workflow
  - Single Applicant Upload for entire workflow
1. Create Folders
    - Engineering Drawings
    - Engineering Documents
    - Zoning Drawings
    - Zoning Documents
    - Building Drawings
    - Building Documents
    - Approved
  2. Roles
  3. Groups
  4. Permissions

### ProjectFlow\_Independent\_Parallel\_Building

- No review coordinator
  - No review config
  - Single Review Group
  - No Assign Reviewers or Review Complete step
  - Individual Batch Stamps for each sub-workflow
  - Individual Applicant Uploads for each sub-workflow
1. Create Folders
    - Engineering Drawings
    - Engineering Documents
    - Zoning Drawings
    - Zoning Documents
    - Building Drawings
    - Building Documents
    - Approved
  2. Roles
  3. Groups
  4. Permissions

## 2 Fixed Issues

All fixed issues for ProjectDox and ProjectFlow are available in Kayako.

## 3 Known Issues

1. TFS15390 Do not rename a group which a review has been assigned to and/or that group is in a review configuration. Currently the application prevents deleting a group, we should prevent the renaming of a group. Normally, the group name is changed in the Project Template, but the same issue remains when changing the group name in a Project Template. You must update the review configuration.

If you do change the name and not the review configuration, it will be indicated in red that the group in review config doesn't exist in the project. You can resolve the problem so that Assign Reviewers task will continue:

- Go to Project Edit, Groups tab
- Return the name of the group to the original name

<input type="checkbox"/>	Department	Assignment	Reviewer	Priority	Due Date
<input type="checkbox"/>	Mechanical	FirstInGroup	[Choose a reviewer]	Low	
<input type="checkbox"/>	Plumbing	FirstInGroup	[Choose a reviewer]	Low	
<input type="checkbox"/>	Electrical group does not exist in the project.	FirstInGroup	[Choose a reviewer]	Low	

2. TFS 16041 When OAS is enabled, Admin, Configuration, Security, ProjectDox PasswordExpireDays key value has no effect on the system.
3. ProjectDox REST Web API Documentation is an ongoing task for Avolve development.

## 4 Deprecated

These API methods were deprecated because they originated in the original version 9.0 UI and/or improved security was applied:

- Metadata/SaveUserMetadata
- Metadata/GetUserMetadata
- Metadata/GetFileMetadata
  
- File/MoveFiles
- File/CopyFiles
- File/FilesArePassThru
- File/GetFileInfo
  
- Folder/GetExpandedFoldersTree
- Folder/CheckFolderPermissions
  
- Project/ProcessUpload
- Project/ProcessUploadURL
  
- Report/GetRoutingSlip
- Report/GetChangemarks
- Report/GetReports
  
- TopicCategory/AddUpdateTopicCategory
  
- User/Login
- User/GetSecurity
- User/IsValidSession