

Release Date 9/23/2025

Updates to CERL hosted sites will be scheduled with individual customer leads. Self-hosted customers and licensing partners can receive installers on or after the release date.

BUILDER 3.6.8.2 Update, 09/23/2025

BUG FIXES:

- Issues with exporting scenarios while using the Export to Excel button on the Scenario Analysis page have been resolved.

NEW FEATURE:

- BUILDER instances now have the capability to turn off standard reports.

BUILDER 3.6.8.1 Update, 02/28/2025

BUG FIXES:

- Updated the import process to account for Section “Year Installed” date changes within BRED.
- Updated a configuration value misspelling for the word “False” in the InventorySearchBar script.

NEW FEATURE:

- Users can employ API calls to allow the importer to initiate Stored Procedures.

NEW FUNCTION:

- The Inventory Search bar can now be configured for use by all, regardless of user permissions.

DELETED FEATURE:

- The @updateDate parameter is no longer available for Stored Procedures.

BUILDER 3.6.8 Update, 04/16/2024

BUG FIXES:

- Users can employ API calls to initiate Scenario Starts.
- Folder contents for Complexes are listed in alphanumeric order.
- Multiple file types are compatible with BRED Package exports, including JFIF, FPE, and Excel. Previously, failures would occur when unexpected file types appeared in the exported data.

NEW FEATURE:

- When configured, users can add up to 3 decimal place values for Section and Facility-level quantities.

NEW FUNCTION:

- Users can view Category Codes in the Facility Summary section if they do not appear in the Building General info pane.

BUILDER 3.6.7.3 Update, 08/18/2023

BUG FIXES:

- The Bureau of Overseas Building Operations (OBO) users who could not log into BUILDER using the OKTA sign-in system can now access BUILDER using this process. This option provides current and future users without having to create or monitor additional passwords or other login credentials.

BUILDER 3.6.7.2 Update, 06/15/2023

BUG FIXES:

- Users can edit and update all Building-level comments as needed.
- Users can now review Component section status ID data in the BUILDER API, regardless of a section's status.
- Users can now update component sections in BRED even if the Component section status ID is left blank.
- Facility updates made through BRED will now apply when the "Unable to Inspect" dropdown does not have a value selected.
- Users will no longer experience PRV values being overwritten in BRED imports when the "PRV Overwrite" box is checked.

BUILDER 3.6.7 Update, 02/2023

BUG FIXES:

- Users can now change a site's Cost Book and find an updated value at all levels. Users will no longer see complexes with cost book references that are different from the overall site's value when changing a site's cost book.
- Users can now make and save changes in the General Multipliers tab in the Component-Section view of the Cost Book without a screen lock-up. Users can also save added text descriptions in the cost book without locking up.
- Users can now complete and close out a Work Item with the 'Replace' work activity without an error. Users will find that the Work Item update saves and creates a new initial inspection record.
- Users can now navigate to a building, make a change to the zip code field, and save these changes. In previous versions, making changes to a building's zip code resulted in no changes after saving.
- Users will no longer experience BUILDER application crashes when attempting to create a new project. The application no longer fails prior to the screen for adding a project definition.
- Users will no longer experience BUILDER installer failures. Users can now run the installer without errors.

NEW FEATURES:

- Updates have been made to the Create Inspection API function, which was only partially implemented in previous versions. Users can no longer add partial Inspection Data through the API.
- Updates have been made to the Category Codes in BUILDER. Users can now type in a Category Code, and a correct description of that Category Code will be available.
- Updates have been made to BUILDER so that if a Component-Section has a unit of measure that is set to allow decimal values, that Component-Section can now display those decimal values on the Inventory screen. Users can now input and save decimal values.
- Updates have been made to read-only restrictions. The read-only restriction no longer overrides the custom report permissions that allow users to run reports at organization levels above a user's site access.
- Updates have been made to the "Help" link, which is now titled "BUILDER User Guide." The BUILDER home page has also been updated to provide users with a link for a new user request, the SMS Learning Management System, SMS support content, and the link to subscribe to the news feed. The contact link has also been updated, as the previous link took users to an error page.
- Updates have been made to the login screen of OKTA-enabled BUILDER instances. Users will find that the OKTA login button appears prominently upon access. Users can also show the normal Username/Password/CAC login functionality by clicking the link text below the OKTA button.
- Updates have been made to implementing OKTA configuration values, which prevent future OKTA authentication functionality errors as a result of missing configuration values.

BUILDER 3.6.6 Update, 09/2022

BUG FIXES:

- Users can now access BUILDER Scenarios and find an accurate representation of the current progress of the scenario running. Users will not have to refresh their page to show the accurate current progress.
- Users will now receive error messages that provide information necessary for corrective actions.
- Users requesting facilities by a site will find the BUILDER API returning one building, opposed to duplicate buildings.
- Users will find all features presented by the Configuration tool and Impact Configuration tool are functional.

NEW FEATURES:

- The Bureau of Overseas Building Operations (OBO) users can now access BUILDER through the OKTA single sign-on (SSO) service. This provides access under OBO's existing security without need to create/monitor additional passwords or other login requirements.
- Certain building-level field values have been locked for particular users. Restricting the editing of certain building level fields, will benefit the Real Property data integrity and systems connection integrity.
- Users performing configuration on a BUILDER system are able to generate configuration files from the configuration utility for BUILDER or the Impact Service.

BUILDER 3.6.5 Update, 03/2022

BUG FIXES:

- Users can now use USAF BUILDER, version 3.6.1.3, and navigate to 'Tools - Administration - Application Settings' without BUILDER throwing an error or crashing the webpage.
- Users will find that the BUILDER Export template has the Work Item Description character limit set to 250. The BUILDER SQL database character limit is now in sync to have the same character limit to minimize failed BRED Export actions.
- Users can now have cost modifiers entered in UI to have four decimal points stored in the database without modifiers being rounded to two decimals.
- Users with master planner access only at a child Organization level are no longer able to change the name of the top Organization.

- Users can now save new information to a Site. Users are able to save Site data even if none of the Reference Settings are established.
- Users can now use BUILDER funding restrictions and find restrictions tied to a tree node level where funding was created (Organization/Site).
- Users can now access the BUILDER34Preview, in the Add Building popup, and find that the Does Not Contain dropdown lists Fire Suppression. In previous versions, this was miss spelled.
- Users can now create or modify a prioritization scheme without BUILDER creating/allowing duplicate prioritization scheme measures.
- Users can now send a request to the 3 Specific API Calls GetVersionBuilder(), GetVersionService(), GetVersions(), without any exceptions thrown.
- Users will find that all features presented by each configuration tool are functional. Users can now determine if features are no longer necessary or applicable and can remove/disable them from the tools.

NEW FEATURES:

- Updates to the Refractor BUILDER API code have been made to address vulnerability when users create Organizations. A better implementation of the IF or Select Case statement for permissions and data validation will reduce the chance of unwanted data entering the database.
- Updates to existing help documentation deployed to BUILDER instances have been made. Users who utilize the online help documentation within BUILDER can expect a more accurate representation of the current software state.

BUILDER 3.6.4 Update, 02/2022

BUG FIXES:

- A BUILDER issue with saving changes in Functionality Assessment responses has been corrected. Previously, users were unable to change all or multiple sections and then 'Save'.
- A BUILDER Scenario module reference settings editing issue has been fixed. Reference settings for cost book, inflation book, service book, policy sequence and prioritization scheme change were not properly saving.
- When creating/editing a Scenario and selecting the option to 'Copy First Year work items from BUILDER the scenario will no longer fail if there were no current fiscal year work items to pull from.
- In BUILDER New Management, users will now receive a request for confirmation prior to deletion when attempting to delete a Scenario.

- When creating a Scenario in BUILDER New Management the reference settings (library settings) will now populate to the default settings of that site. This previously caused issues when users tried to copy work items from the scenario into work planning. Since the reference settings did not line up with the site settings, the application could not copy those work items over.
- A duplication issue was fixed with the BUILDER Functionality screen that occurred when answering a question or changing an answer on an assessment. Questions and/or section headers will no longer be duplicated and the new or changed answer is now correctly reflected.
- When creating a BUILDER Scenario in New Management the funding streams did not appear initially even if a 'constrained' scenario was selected. The "Funding" choices now initially appear in the Scenario area.
- When creating a 'constrained' Scenario in the BUILDER New Management Scenario Module the funding streams were not saved correctly. The application no longer defaults to having all funding streams available at that location selected and allows the saving of specific ones.
- The BUILDER New Management was causing the Scenario Module to skip 'completing' current Fiscal Year work items. Now, work generation will start at the current Fiscal Year and current FY work items will be marked as 'completed'.
- In the BUILDER inventory tree, a display issue has been fixed where "Attributes" was misspelled as "Attibutes" in the heading.
- BUILDER-KBI not generating current year inspections - The BUILDER application was "skipping" the current year (FY22) and started generating from FY23 due to a miscalculation for inspections generated by the scheduler in Q1 of any given FY.

NEW FEATURES:

- Scenarios will now default to all systems selected instead of no systems selected. Scenarios created in New Management previously defaulted to having no systems selected. For users who typically leave the default settings in place this could potentially cause issues when running scenarios and copying over work items.

BUILDER 3.6.3 Update, 10/2021

BUG FIXES:

- Users can now delete an organization that has a cost book assigned as anything other than "Reference" without errors or rendering the organization hidden in navigation tree.

- Users can now run custom reports on a higher-level organization without returning the results of lower-level facilities that they may not have permissions to view.
- Users can now export buildings with work items that have long descriptions and concatenated comments without errors.
- Users can now create image file names without an error being generated.
- Users can now open BUILDER Scenarios in all permission levels at sites and facilities and properly load scenario lists without error in a reasonable timeframe dependent upon network connectivity bandwidth.
- Users can now open and reopen an existing scenario in Builder Scenarios Management View without changes to the references unless user edits the references.
- Users can now create a new scenario in the Scenarios Management View and the new scenario value matches either the default reference settings if selected in the inventory screen or is the 1st value in the dropdown if no default is selected.
- Users can open an existing Functionality assessment (in the redesigned Functionality module) or create a new one and save it and answer or change answers to questions in the assessment and the answers or changes are displayed properly in the Functionality View.
- Users can now create scenario and configure multiple funding sources and select “Constrained” on a funding source within the Funding Tab and save the change. The user can now see the “Constrained” funding source within the funding source of the scenario on the Funding Tab.
- Multiple bugs were included in this release from the SC-B debugging effort contracted for FY21.

NEW FEATURES:

- Removal of the feature (2942) that locked the Fields from Real Property (PRV, Category Code, SF, Year Built, facility name, facility number, building status, construction status, MDI (mission dependency index), RPUID) clearly indicating to the user as not editable. This will be re-implemented in an upcoming version after additional changes to make it more flexible in its configuration from one organization to another.

BUILDER 3.6.2 Update, 09/2021

BUG FIXES:

- Functionality assessments wizard capability restored without the application force quitting.
- CAC login now works in Google Chrome - functionality has been restored.
- Work Item generation no longer fails when run at the Building level.

- Cost Modifiers are included in Section Cost calculations. Cost Modifiers were previously excluded in a Section Cost calculation kicked off by saving the section, requiring a roll-up to correctly recalculate the value.
- BUILDER Scenarios module screen load speed improved.
- User can now load section results without an application error.
- BRED Export errors remediated.
- Functionality Assessment creation speed improvements.
- Component Section "Add" error resolution.
- Users can now use the same browser tab to log in to BUILDER after logging out.
- Comprehensive nightly rollup process update calculation optimization and more efficient usage of the database resources to expedite the recalculation of all metrics from the Section to the Organization levels.

ADDITIONAL NOTES:

- Internet Explorer is no longer supported by BUILDER SMS. The only browsers that are currently supported for Builder application utilization are Microsoft Edge, Chrome, and Firefox.

BUILDER 3.6.1 Update, 01/2021

BUG FIXES:

- **Update Facility Issue (API)**
 - There was an issue with the UpdateFacility() function. The function would accept Guids for Sites and Organizations when it should only accept Guids for complexes.
 - This has been fixed so that the function only accepts Guids for Complexes.
- **GetFacilitiesByAlternateId() Issue (API)**
 - Previously when an API user searched for a facility by alternate ID (RPUID) and there were multiple results that matched and the user had permission to at least one and also did not have permission to at least one of the results, the application would give the user a permission error.
 - This has been corrected so that the user now gets a list of all the results to which they have permissions.
- **Section Status Field Updating Issue (API)**
 - There was an issue preventing API users from being able to update the "Current status" field of component sections.
 - This issue has been corrected.
- **Facility Usetype UOM Property Issue (API)**

- Previously the UOM_ID property was missing from the Facility UseType.
 - This has been changed and the UOM_ID property has been added.
- **API Error Messages**
 - Previously when a user would try to create an inventory item when the parent inventory item was locked (ex. creating a new section in a locked building), an incorrect error message would be sent to the user.
 - This has been corrected and now the user receives the correct error message.
- **Library Pages Permission Issue**
 - Previously the permissions to the Library pages were not restrictive enough.
 - This has been changed so that only Work Planners and Master Planners can access the library pages.
- **Cost Modifier Assignment Issue**
 - There was an issue in the web application that prevented some users from assigning or seeing cost modifiers in the inventory pages.
 - This issue has been corrected.
- **Workplan Project Results Display Issue**
 - There was a bug that affected number of items displayed on "Projects" pages in the work planning tool. This has been fixed so that the results show as pages that the user can navigate through.
- **Complex Naming issue**
 - Previously users would name a complex "Unassigned", it would cause the complex to disappear from the web UI. This is because "unassigned" is a reserved keyword in the Builder application.
 - Changes have been made so that users can no longer name complexes "Unassigned."
- **Complex Facility Management Multi-Select issue**
 - Previously users could not select multiple facilities in the "Facilities Management" tab on the Complex Inventory pages.
 - This has been fixed so users can select multiple buildings at once.
- **Inflation Rate Calculation**
 - Previously there was an error in the application that caused any inflation rate calculations for years after 2030 to be incorrect.
 - This has been addressed and any future inflation rate calculations should all be correct.
- **Organization-Level Project Creation Issue (Work Plan)**
 - There was an issue that prevented users from creating new projects at the Organization level in the Work Planning Modules.
 - This has been fixed so that users can again create new projects at the Organization level.
- **Costbook Nesting Issue (Cost Book Management)**

- There was an issue that allowed users to create new Costbooks hierarchically nested under other Costbooks (Costbooks should only fall hierarchically under Sites and Organizations).
- This issue has been fixed so that Cost books can only be created under Organizations or Sites

FEATURE IMPROVEMENTS:

- **Work Plan Loading Times**
 - We had received reports from several customers that the loading times for the Work Plan pages needed improvement.
 - A number of database optimizations have been implemented in 3.6.1 to address this. Loading times for the Work Plan pages have been significantly improved.
- **Rollup Optimizations**
 - Database optimizations which improve the rollup times have also been implemented in 3.6.0.
- **Facility Summary Sort/Search by RPUID (Alternate ID)**
 - The ability to filter results by RPUID (Alternate ID) has been added to the Facility Summary pages.
- **Global Rollup Confirmation Dialog**
 - Previously there was no confirmation dialogue when a user would select the "Global Rollup" option. Because global rollups can take a long time, a confirmation dialogue has been added.
 - This helps prevent having to wait for a Rollup when the user mis-clicks.
- **Lookup Table Updates (BRED)**
 - Updates have been made to the BRED lookup tables.
- **Section Display Names (WEB UI)**
 - Changes have been made so that now the entire section name displays in the navigator pane in the Web UI.

BUILDER 3.6.0 Update, 08/2020

BUILDER Web Application

- **Microsoft Silverlight Replacement**
 - Microsoft Silverlight has been completely removed from the BUILDER Web Application. Details listed below.
- **Functionality**
 - The Functionality Assessment area of the BUILDER web application has had Microsoft Silverlight removed. This update provides broader

compatibility across browsers and no longer requires the use of Internet Explorer for interacting with Functionality Assessments.

- The Functionality Configuration Tool (Modules) has also been converted away from Microsoft Silverlight, allowing Functionality Assessments to be edited using browsers other than Internet Explorer. A link to the Modules page has also been added under Tools - Administration - Library - Modules, for ease of access for Master Planner accounts.
- **Scenarios**
 - The Scenario Management screen has had Microsoft Silverlight removed and all features of "New Management" and "Management" have been consolidated into a single updated "Management" screen. This update provides broader compatibility across browsers and no longer requires the use of Internet Explorer for interacting with Scenarios.

NEW FEATURES:

- **Scenario Results**
 - A Scenario Results visualization capability has been added to the Scenarios management page. This offers an easy way to see the results of a Scenario at a glance. With this tool, users can get find details about the configuration settings used to generate the Scenario, and a summary of the Scenario results, list of all of the work items generated, as well as a detailed output display of FCI targeted Scenarios. Both the Work Item list and FCI Scenario results can be exported to Excel. - *This feature has been postponed for a future release for optimized performance on medium to large datasets.*
- **Component Section Display Units**
 - On the Component Section inventory page, quantities can now be displayed as rounded or un-rounded units (e.g. square feet, linear meters, etc...). Previously they were only displayed as rounded units.
- **Component Section Alternate ID**
 - A Component Section's Alternate ID can now be viewed and changed under the "General Information" tab on the Component Section inventory page.

BUILDER 3.5.5 Update, 05/2020

NEW FEATURES:

- **Inventory Attributes:**
 - Add Custom Attributes to BUILDER inventory. This feature can be used for one-off custom attributes for a single Facility or Component-Section or an attribute created by a BUILDER administrator to be applied across the site. To view/edit the Attributes of a particular inventory item, select

the desired item in the Navigation Tree and then select the Attributes tab on the right-hand portion of the screen. Site-wide Attributes can be managed by users with appropriate permissions from this screen as well in the current iteration. Future iterations of BUILDER will allow this to be managed by selecting Attributes under the Tools-Library menu in the top toolbar.

BUG FIXES:

- **Application Programming Interface (API):**
 - (3310) **Site fetch returns Null Parent ID** - There was an issue with the API "GetSite" and "GetChildSites" method calls where the returned sites did not have their "ParentID" properties set correctly. This has been corrected so the returned sites now return the correct ParentID property.
 - (3306) **Multiple inspections on the same date** - Previously Builder had the assumption built in that there could only be one inspection for each date. This did not allow for use cases when multiple different inspectors complete an inspection on the same date. This has been fixed so that now API and web users can multiple inspections for a section with the same dates, as long as the inspections are from different inspectors.
 - (3312) **Facility Status field not being copied** - Previously there was a bug which blocked API users from updating facility status. This has been corrected so that now facilities created/modified through the API now reflect the correct Status. The Datamember, StatusId, for the API methods CreateFacility and UpdateFacility can be used to change a facility's status.
 - (3313) **API missing conversion factor in Units of Measure (UoM)** - Previously the API was missing a way to get the conversion factor for units of measure. The API now has an access to this. The API call GetUnitOfMeasure(int) now returns an object with the Datamember "ConversionFactor", a multiplier for converting US units to Metric units.

GENERAL:

- (3292) **Component Section Inventory Fields Overlap** - Fixed a cosmetic issue where fields on the Builder Component Section Inventory page Overlap.
- (3294) **Made Titles in Tables Less Ambiguous** - There were several tables throughout the BUILDER application where the column titles were simply "Name". These column titles have been changed to more accurately describe the objects they represent.
- (3299) **Work Plan Filtering** - There was a bug in the Work Plan pages that prevented users from filtering Work Plans by Facility name. This has been corrected so the results are filtered properly.

- (3300) **Removed Disabled Menu Options** - Previously in the "Create New Work Item" page, if a selection option was disabled it still appeared to be enabled. Now, options that are not available to users are removed from the option list.

BUILDER RED:

- No BRED changes in this release.
-

BUILDER 3.5.4 Update, 01/2020

BUG FIXES:

- **Application Programming Interface (API)**
 - (3174) **Config issues for API** - There were 2 issues corrected. One was affecting API users from accessing the catalog manager service, which is an endpoint for users to get lists/descriptions of API calls and API structures. The second issue corrected was one preventing API users from uploading photos to inspections.
 - (3160) **Change API Error Messages for Clarity** - Previously when API users would attempt to update systems/components/sections that were locked in BRED, they would receive the error message "User does not have permission to make these changes" Now the error messages have been updated to specify if the item is locked for clarity.
 - (3003) **Added Component Section Status** - Previously the API did not have calls for Component Sections to get or set the "Status" field. This has been corrected so that now Component_Section API objects have access to this field.
 - (3309) **WorkItem Completion Date Error** - There was an error with the BuilderAPI where WorkItems with no specified completion date automatically had their completion dates set to the current date. This has been corrected so API WorkItem inputs have no "Completion Date" value by default and only set a value if a date is provided.
 - (3307) **Get Section Cost Modifiers** - There was an issue where Cost Modifiers would appear null for component sections accessed by the API, even when the section had Cost Modifiers assigned. This has been fixed so component section cost modifiers are represented correctly when accessing component sections through the API.

WORK PLANNING:

- (3233) **Scenario Cost Modifier Issues** - There was a bug preventing users from un-assigning a cost modifier in scenarios once it was assigned. This has been fixed cost modifier assignment works correctly.

- (3291) **Inventory Events Functionality** - In older versions of Builder, users had the ability to add "Inventory Events" to their scenario. This gave users the ability to add new buildings to sites/complexes at given years in the scenario (New Inventory Events), as well schedule buildings to change their status at a later date (i.e. set a building to be demolished at a future date). These features have been reintroduced to the "new Scenario Management" page in the "Edit Scenario Options window."

GENERAL:

- (3280) **Added Building Status for Building Policies** - Building status is a field for buildings that has recently been added to Builder. Users can now set building status as a criteria when defining policies.
- (3286) **Implement ReCaptcha on Forgot Password Screen** - Previously ReCaptcha was only implemented on the main login page. Now, ReCaptcha is also implemented on the "Forgot Password" page, adding more security against automated cyber security threats.
- (3219) **KBI and Rapid Inspection improvements** - Previously after generating inspections schedules with the KBI tool, the page was not automatically refreshed. To users this would make it appear as though no inspections were scheduled until they closed and reopened the window. This has been corrected so that the page is automatically refreshed after inspection schedules are generated.
- *Previously when using the RapidInspection tool, the window would close after every transaction, causing users to have to re-select the set of buildings they were inspecting for each transaction. This has been improved so that now the window stays open, maintaining the set of buildings the users have selected.
- (3293) **UI cleanup** - Previously in the "Cost Analysis" tab for WorkItems in the WorkPlanning menu, there were buttons with no functionality. These buttons have been removed.
- (3334) **CostModifier Assignment in Builder Inventory** - There was a bug preventing users from assigning CostModifiers at all levels through the Builder Inventory menus. This has been corrected so users can assign cost modifiers through the Inventor menus.

BUILDER RED:

- (3221) **Multiple BRED Export Issue** - Previously, when a building fell under a complex, a user could export the building, but the building would not be locked for export at the site or complex levels. This has been corrected so a building cannot be exported multiple times.
-

BUILDER 3.5.3 Update, 010/2019

NEW FEATURES:

RECAPTCHA for WEB LOGIN:

- ReCAPTCHA verification has been added to the web login page. ReCAPTCHA is a verification tool used to determine if an agent attempting to access a system is a robot. This feature significantly hampers unauthorized users from gaining access to the site through automated login attempts.
- This feature is disabled by default to accommodate for customers who do not have internet access, as ReCAPTCHA verification requires an internet connection. For site administrators on non ERDC-CERL instances of BUILDER, consult the updated Installation Guide for ReCAPTCHA configuration if this capability is desired.

BUG FIXES:

APPLICATION PROGRAMMING INTERFACE (API):

- (3041) When users access the API or perform batch processing with the API, their activity is now logged, and their "Last Login" is updated. This prevents users from having their account erroneously locked from account inactivity.
- (3099) WorkItems completed through the API now automatically generate an inspection in the same way as the UI.
- (3180) WorkItems with the activity "Replace" and status "Complete" now automatically propagate changes to the replaced sections.
- (3186) Added a field named "NewType" for WorkItems created and edited through the API. This field allows API users to specify a new type of component for "Replace Component" WorkItems.
- (3187) Estimated WorkItem costs can now be updated through the API
- (3188) When API users would load a facility, not all of the facility metrics were loading. This has been corrected so all the facility metrics now load.
- (3206) Inspections created through the API were having their Source set as "incomplete". This has been corrected so that the inspection sources accurately reflect the API input.
- (3240) Changes to Facility "Status" made in the API were not properly being propagated through the system. Now API changes to "Status" propagate correctly.
- (3241) Changes to Facility MDIOverwrite through the API were not being propagated through the system. This has been corrected so changes made in the API affect the system correctly.
- (3242) Inspections created through the API were not populating the inspection rating radio-buttons in the UI. This has been corrected so

inspections created/competed in the API affect the system the same as UI entered/completed inspections.

WORK GENERATION/SCENARIOS:

- (3161) There was an issue that prevented users from running scenarios with funding constraints in some situations. This has been corrected so users can run scenarios with funding constraints.
- (3183) Inflation was not being applied to the cost of WorkItems generated through scenarios in the same way as manually generated WorkItems. This has been corrected so Inflation is applied the same for all WorkItems across the application.
- (3198) There was an issue where running scenarios with overlapping Inventory scope concurrently yielded inconsistent results. This has been corrected to allow for running multiple scenarios with overlapping selected inventory scope concurrently.

WORK PLANNING:

- (3054) The ability to define how funding is applied in Work Generation and Scenario Work Items via Funding Restrictions has been restored.
- (3211) With the addition of POM Scenarios and FCI Policies, users would experience issues funding work items in Work Plan. When users would try to fund WorkItems, funding was not properly applied if there was no FCI Policy specified for the subject Site/Organization. This has been corrected so funding is properly applied with or without specifying an FCI policy.
- (3231) Corrected an issue where attempting to generate WorkItems from an Organization level would cause an error if the Organization had any Sites with no facilities.
- (3235) Previously, when generating WorkItems, if there was a component with no sections in the organization, this caused WorkItem generation to fail. This has been corrected so that WorkItem generation does not fail.
- (3236) Previously, scenarios were failing if a component was missing an initial inspection. This has been corrected so lacking an initial inspection does not cause scenarios to crash.

GENERAL:

- (3154) The visual container border around Reference Settings on the General Info. tab has been corrected to properly encompass all drop-down options.
- (3155) Previously, the Condition Trend graphs were rendered in blue and green. This has been adjusted so that blue-green color combinations are not used when rendering graphs to provide color-blind

friendly schemes allowing for easier distinction between the chart elements.

- (3204) An issue existed where buildings in the organizational hierarchy tree were not all sorted correctly. This has been corrected so that buildings are now ordered as expected.

BUILDER RED

BUG FIXES:

Image Attachments

- (2788) Image imports through BRED were classified incorrectly, making images not visible following import to BUILDER. Similar behavior occurred when these images were exported from BUILDER and attempted to be viewed in BRED. This has been fixed so attaching images with BRED works as intended.

Aesthetic Improvements

- (3190) Fixed the layout of the text boxes in the Facility-related menus. Previously, some elements were overlapping on the page.

BUILDER 3.5 Update, 04/2019

NEW FEATURES:

Inventory Improvement Package

- Component-Section Status Tracking – Allows BUILDER users to track the status of individual Component Sections. This release only allows for marking sections to have a different status. The business rules of the application (work generation, rollups, inclusion in the navigation tree, etc.) are unaffected at this time. The implemented design allows for expanding this capability to alter business processes at a later date.
- Custom Configuration of Building Templates – Allow site administrators the ability to configure the allowable percent difference in square footage between a building template and the building it is to be applied to. Previously this was a hard-coded setting at 10%, so only facilities within 10% square footage of a building template could utilize that template.
- Building Summary Screen Additions and Alterations – Users will notice new additions to the building summary screen: 1) Building renovation year (last year renovated) 2) A series of check-boxes to indicate that a building does not contain each of the following systems: Plumbing, Fire Suppression, HVAC, and Electrical 3) A checklist to indicate that the building cannot be inspected

for the following reasons: not accessible, locked, secure building (escort required), under renovation. 4) Building status drop down allows multiple item checklist (so you can select more than one).

- Local / Selective Inventory Unlock – Allows users to select which facilities or systems to be unlocked to improve the current “all or nothing” approach. This granular “u-locking” ability is located under Tools > Administration > (“Unlock My Buildings”).

POM Scenarios

- Scenarios Work Generation in Support of POM– This feature allows BUILDER users to set FCI targets for their facilities as a part of their Scenario configuration to allow the funding required to meet those targets to be an output of the Scenario in addition to the recommended work actions. To do this, FCI targets can be established similar to other Work Configuration Policies, BUILDER Scenarios generate the recommended work candidates based on the user's Work Configuration settings (Policy Sequences / Prioritization) and then begins “funding” work items for each facility in priority order until the FCI target is achieved. The output is a list of work items that need to be accomplished in order to meet the target FCI.

Multi-Year Scenario Work Item Tracking

- As BUILDER Customers begin to incorporate Scenarios and Work Plans into their standard practices, there are year to year overlaps in planning and execution that require additional functionality in the application. The process and construction time that can be associated with a BUILDER Work Item often drags a work item execution year out from the generation year. The Scenarios module now provides the option to not re-generate Work Items with statuses indicating that funds have been allocated. This will simplify the work and budget projections as Scenarios will no longer be counting work items that have been addressed via previous funding streams.

Catalog Improvement Package

- Service Life Book Improvements – Data fields have been added to the BUILDER database for tracking BUILDER component section service life performance; average, max, min, standard deviation, etc. This will allow easier tracking of performance trends and ultimately refined life-cycle models.
- Revised Data Structure for Cost Storage – Data fields have been added to the BUILDER database to allow for seamless integration with third party cost data sources. This includes the ability to name the source of a given cost book as well as link the cost record entries to a third-party reference identification number.

- Reference Book Import/Export capability – This addition allows BUILDER users to export custom cost books to an excel sheet that can then be edited and re-imported to BUILDER for more rapid cost record updating.
- Editable Component Importance Indexes (CII) Values – The data storage method utilized by BUILDER's cost and service life books has been applied to the Component Importance Indexes, allowing users to create custom CII Books in the same way as cost and service life books.

BUILDER Auditing Expansion

BUILDER's auditing capability has been expanded to include the following areas of the application. This will allow for database administrators to track critical additions, edits or deletions in these areas of the application.

1. Work Planning – Work Items and Projects

- a. Auditing Records for Creation of Work Items and Projects
- b. Auditing Records for Editing of Work Items and Projects
- c. Auditing Records for Deletion of Work Items and Projects

2. Work Configuration

- a. Standards
- b. Policy
- c. Policy Sequences
- d. Prioritization

3. Library

- a. Cost Book
- b. Inflation Book

BUILDER API Expansion

- Electronic Acceptance of Cost Data – The BUILDER web-service API has been expanded to allow privileged users to modify BUILDER cost book information and records via web-based API calls. This allows for more seamless integration with third-party cost sources as updates can be configured to be an automated back-end process.
- Scenario API Additions – The BUILDER web-service API has been expanded to allow privileged users to create, configure, edit, and delete Scenarios through web-based API calls.

Cost Modifiers

- BUILDER Users now have the ability to create custom cost modifiers (adders and multipliers) that can be specified for a given BUILDER hierarchy level (site/building/component-section/etc.) and users can apply those modifiers to the specific instances that they apply to. This gives increased granularity to apply cost modifiers where they are required without over-applying them.

BUILDER Scenarios Screen Refresh

- BUILDER's Scenario module was refreshed a number of years ago using Microsoft's Silverlight library. This technology has since been deprecated and is no longer supported by multiple browsers. In order to ensure continued support and access to BUILDER Scenarios, Silverlight has been replaced using Angular technology allowing for cross-browser functionality. Since additions were made to Scenarios were made in parallel, the original Scenarios screens will remain in parallel with the updated version until the updates can be added to the updated screens.

BUILDER Scenarios Screen Refresh

- BUILDER's Scenario module was refreshed a number of years ago using Microsoft's Silverlight library. This technology has since been deprecated and is no longer supported by multiple browsers. In order to ensure continued support and access to BUILDER Scenarios, Silverlight has been replaced using Angular technology allowing for cross-browser functionality. Since additions were made to Scenarios were made in parallel, the original Scenarios screens will remain in parallel with the updated version until the updates can be added to the updated screens.

BUG FIXES:

INVENTORY

- (2871) An "Error on Error" message was being encountered when the 'Number' column of a Facility contained a lone letter 'E' in the middle of the name. This has been corrected and users should no longer experience this error.
- (3156) When adding an organization, the hierarchy tree now immediately displays the addition without the need for the user to log out, and log back in.
- (3434) The user can now uncheck the "Paint N/A" box in a Distress Survey, and it will remain unchecked after clicking "Save". In previous versions, this box would default back to being checked.
- (3170) Users will now see a Dialog Box after creating a Site or Complex that already exists in the target Organization.
- (2949) Previously, if there was a NULL value in the database for Construction Type field, it would default to "Leased". This has been changed so no value is

defaulted when DB is NULL, providing a more accurate representation of information to the user.

- (3332) In previous versions of BUILDER, users could not delete a facility if Efficiency Assessments existed. This issue has now been resolved.
- (1673) BUILDER Permissions have been updated to no longer allow Site-Level Master Planners to create organizations.
- (3074) Display of a Component-Section's applied standard has been restored on the Component-Section general information tab.
- (3340) Users are again able to delete facilities in the BUILDER web application without special support from SMS Support.
- (3438) When facilities were removed from a site or complex, BUILDER was skipping these entities in the rollup process since there was no child data to rollup. As a result, stale PRV values and metrics would be retained. This has been corrected to clear out PRV data for empty sites/complexes.
- (3350) The calculations used for the Coating Condition Index and Remaining Paint Life were disrupted by a previous code update. These calculations have been properly restored for correct calculations.

CONDITION ASSESSMENT

- (1731) Users can no longer enter an invalid blank Distress survey.
- (819) Rather than only selecting a Distress Survey "Density" from the drop-down menu, this field is now computed based on the sub-component quantity and the distress quantity.
- (878) Links to the BUILDER Help content for Distress Survey information has been restored to proper functionality.
- (3445) Distress Survey responses no longer reset the severity to low when entering the "edit" mode on a given entry.

FUNCTIONALITY ASSESSMENT

- (746) The capability of generating Functionality related work items was previously lost when the Functional Assessment design was altered to allow for more robust Functionality Assessment customization. These options of generating Functionality Work Items based on Functionality Standards has been restored to proper functionality.

WORK GENERATION/SCENARIOS

- (3446) The Component Section's Section Name tied to a BUILDER Work Item has now been added to the Work Item Details page.
- (3024) In the past, completing an "Inspection" work item would delete the older, original inspection, but others would remain, as well as creating a blank

- inspection with no rating. This has been corrected to now simply change the work item status and take no further action to add inspections or alter CI.
- (3444) The Fiscal Year drop-down would exhibit erratic behavior after Prioritization of work plans was executed. This has been restored to proper functionality.
 - (3440) Errors in exporting Scenarios to Excel have been eliminated and proper functionality restored.
 - (2789) Scenarios Analysis Graph has been improved for new margins to provide improved graph display.
 - (3346) Policies now properly save user entered data while moving through multiple pages of entries.
 - (3423) Work Plan Generation has been adjusted to function properly with facilities that also have projects associated with them.
 - (3448) When a Work Item is generated for an item that has a warranty in effect (per the Section Detail records), a notification will be provided to the user in the Work Item Details screen to indicate that this work could be accomplished through exercising a warranty.
 - (3183) The Work Generation process was revised to properly evaluate the Building Performance Index to determine if a facility replacement is warranted
 - (2152) The "Copy Work Items to BUILDER" option in Scenarios will now appear immediately after a Scenario completes running. Navigating away and returning is no longer required to access this functionality.
 - (3443) In previous version of BUILDER when a user encounters an error while running Scenarios, the error message did not provide useful information for diagnosing the issue. The error messages have been revised to provide users and support staff better transparency in the issues that need to be resolved for faster issue resolution.
 - (3441) In an earlier version of BUILDER, Scenarios scope definitions were expanded to include Organizations. This update provides the ability to review an entire Organization's Work Items as opposed to only at the Site level and below.
 - (3357) Paint Work Items were previously generated under improper conditions. This has been corrected so that these work candidates are evaluated based on the Policies and Standards.

APPLICATION PROGRAMMING INTERFACE

- (3023) KBI API calls have been configured for expected use.
- (2771) Spelling of "SeismicZone" within the DTOOrganization class has been corrected.
- (3426) Rollups were occasionally generating errors, even if the user had proper permissions. This is no longer occurring, and errors are only generated if the user attempts to roll up without proper permissions.
- (2789) The BUILDER web-service API was corrected to get/set the organization/site point of contact information.

- (3067) Updates to Work Items through BUILDER's web-service was causing these Work Items to be flagged in a way that they were no longer able to be located through API calls. This has been corrected so that repeated contact with Work Items is functional. If users encounter issues, these can be resolved through contacting SMS Support to clear any lingering issues.

TOOLS/GENERAL FIXES

- (3435) During Component-Section Cost Book edits, top header items (i.e. Name, Min Cost, etc.) were not being saved. This has been fixed and these fields now save properly.
- (3442) Errors were being produced under some conditions when uploading, removing, or viewing a PDF or image in BUILDER. This has been corrected and attachments should no longer generate errors.
- (2527) Nightly rollups now properly update the FCI metric, which also occurs after the generation of work items or each time a PRV is changed.
- (821) When a user selects a BRED file for Import, the Import no longer starts automatically but requires the user to select "Proceed" as the user interface was designed to function.
- (1759) Navigation tree search functionality has been updated to reflect the user permissions model.
- (3449) When viewing a Cost Book within BUILDER, the costs displayed on the screen are inflated to current year values. Previously, these values were based on the current calendar year. This has been updated to calculate inflation based on the current fiscal year for consistency across the application.
- (3296) Export of BRED packages of images has been restored to the correct functionality.

RELEASE NOTES FOR BRED 3.5

NEW FEATURES:

Inventory

- Component-Section Status Tracking – Allows BUILDER assessors to mark the status of new individual Component Sections for tracking updates in the BUILDER web application.
- Building Summary Screen Additions and Alterations – Assessors will notice new additions to BRED's building summary screen: 1) Building renovation year (last year renovated) 2) A series of check-boxes to indicate that a building does not contain each of the following systems: Plumbing, Fire Suppression, HVAC, and Electrical 3) A checklist to indicate that the building

cannot be inspected for the following reasons: not accessible, locked, secure building (escort required), under renovation.

Functionality Assessment

- This highly desired feature allows assessor the option to select the image button for a question, take picture with the tablet camera, and immediately attach a photo to the question. Users now have the ability to crop and cancel picture.

BUG FIXES:

Inventory

- The scrollbars in the inventory tree have been widened to account for finger scrolling.
- When adding section details in inventory, using the scroll option will update only the field where the scroll bar is pointed. The field and the date are no longer updated simultaneously.

Functionality Assessment

- Users are able to add comments to Functionality assessments.
- Assessment progress is now visible in the assessment summary window. Percent complete is shown for each assessment.
- Previously, users could not save assessment after editing "comments". Now, the "Save" button is enabled when comments are edited.
- The contents of the assessment window now expand with the window "frame". Users can drag the corners to expand and contract (with fixed minimum) window to their needs.
- When performing a Functionality Assessment at the building level, BRED will no longer crash when opening the Efficiency Wizard.
- Finger scroll is now turned on for users completing functionality assessments. User can now select either the scroll bar or assessment space window to scroll through questions.
- Users now have two options to assessment progress in the functionality module. The save and close button allows users to save progress and exit the assessment. The new "Save" button allows users to save progress and continue assessing without having to reopen the assessment from the assessment summary window.
- The new data type "Checklist" is turned on for the web application and assessment questions using the data type that are now visible in BRED too.
- (3867) Users can now attach and view PDFs in BRED Functionality Assessments. Importing the BRED file and BRED package file will create the Functionality Assessment PDF attachments as expected.

General Improvements

- General performance improvements have been made for better responsiveness interacting with the application.
 - The BRED Lookup database update process has been updated to function properly with required server configuration updates.
 - (3085) Tables in the BRED file template that were no longer utilized have been removed from exported BRED files.
 - (3437) Images imported through BRED must now have a name and cannot have a blank title eliminating errors associated with this situation.
-

BUILDER 3.4.3 Update, 04/2019

- FIXED – Functionality assessments are now properly displaying the percent completion field for assessments where applicable.
- FIXED – The “Historic” checkbox on the building inventory screen is now functioning as expected.
- FIXED – Changes to a Component Section that would affect the Component Section Condition Index was not being reflected in a Facility’s rollup.
- FIXED – In Cost Books, the general multiplier text box for the Building level costs now saves correctly.
- FIXED – An update to Internet Explorer caused BRED Exports and Rollups to appear as if they froze mid-process. A fix has been applied to BUILDER to accommodate IE’s new behavior.
- FIXED – Component Section’s with long descriptions were previously wrapping incorrectly in the Inventory tree, causing the description to start on a new line. This has been corrected to display more naturally.
- FIXED – Inspection work items were incorrectly creating new inspections when their status was set to “Completed”.
- FIXED – An update to BUILDER required by a recent security protocol scan added requirements for checking for user inactivity that would enact user locks if outside the acceptable time window. BUILDER 3.4 required an upgraded version of SQL Server and a database configuration was not properly migrated. This combination put users outside of the acceptable time window in a limbo state of not being able to log in, but not actually being locked out.
- FIXED – An upgrade to the inventory tree caused the new page element to think there was a cross site scripting issue with data with which BUILDER was populating the inventory tree. A correction was made to allow BUILDER to display the required data while still protecting against cross site scripting vulnerabilities.
- FIXED – BUILDER Component Subtype descriptions corrected.

- **FIXED** – Users can now save changes to the Site pages.
 - **FIXED** – Users utilizing the BUILDER API Web service can now save Section Alternate ID information.
 - **FIXED** – A network security related setting had previously disabled images from displaying in Custom Reports.
 - **FIXED** – Users with less than Master Planner permission level can now view inspections that are outside the inspection window.
-

BUILDER 3.4 Update, 03/2019

NEW FEATURES:

Custom Configuration of Building Templates

In previous BUILDER versions, a Building template could be used to create a target Building only if the area of the target Building was within 10% (either more or less) of the area of the template. Starting with Version 3.4, that percentage range can be configured by a BUILDER Administrator.

New Information and Checkboxes at the Building General Info. Tab

The following additions have been made at the **General Info.** tab on the Building inventory screen:

- **Building "Current Status" Sub-options.** The selection procedure for a Building's "Current Status" has been changed to allow more than one status to be selected at one time. (For example, a Building may be both vacant and scheduled for demolition.) To accomplish this, sub-status options have been provided for some, but not all, of the initial options. If a Current Status option is selected (currently, "Active", "Vacant", or "Transferred") that contains sub-status options, then a field for sub-status options will appear to the right of the "Current Status" field; sub-options are provided in the field's dropdown.
- **Building Not Inspectable ("Unable to Inspect").** A checklist has been added for situations where an inspector has been unable to enter a Building to perform a condition assessment. Selectable reasons are shown in the dropdown list:
- **Excluded Systems Checkboxes ("Building Does Not Contain").** A series of checkboxes allows the user to mark that any one or more of the following Systems are not present in the Building.
- **Building Renovation Year ("Year Renovated").** This field should contain the year of the most recent renovation of the Building, if renovation has been performed.

Component Importance Index Books

BUILDER has long used values of the Component Importance Index (CII) to rank the relative importance of components against one another (used for example, in Work Configuration to hold different Component-Sections to different thresholds, or to prioritize them differently based on relative importance settings).

In BUILDER 3.4, the "Reference Book" design methodology has been applied to the Component Importance Index, allowing users to create custom CII configurations. Individual Organizations or Sites within the same BUILDER tree can have their relative component importance values ranked differently; or "what-if" scenarios can be run with different CII configurations to compare outcomes.

This is in contrast to the original CII design, which forced a single determination of CII across the entire BUILDER Inventory tree.

New "Current Status" Field for Component-Sections

At the Component-Section screen in Inventory, an optional status field has been added where the user can assign a status to the Component. Current options are shown in the dropdown list.

Technical Note:

The Component-Section "Current

Status" value is not set (is null) unless a user selects one of the listed values for it

.

New Condition Assessment Option: Preventative Maintenance Inspections

Both the **BUILDER** and **BuilderRED** interfaces have been updated to accommodate a new condition assessment option alongside direct ratings and distress surveys. Preventative Maintenance (PM) inspections function in a similar way to direct ratings, using a nine-point scale. However, a PM inspection is performed at the subcomponent level, rather than at the Component-Section level.

BUG FIXES AND ENHANCEMENTS

Display Work Items at Organization Level

Previously, the top inventory level at which work items could be viewed was at the Site level. Work items can now also be viewed at the Organization level.

Note: Although work items can be viewed at the Organization level, they may not be generated above the Site level.

Work Plan Prioritization

1. Work Plans Prioritized for all Scenario Years. Previously, work prioritization was enabled only for the current fiscal year and next fiscal year. In contrast, a work plan generated from the Scenarios module can contain up to ten years of work items. Work Prioritization is now enabled for all years of a scenario.

2. Prioritize Work Items at Organization Level. Work item prioritization can now be performed at the Organization level.

Export Entire Site Work Plan

Work plan export will now export the entire Site work plan rather than just the currently visible page of work items.

Work Item Details Enhancements

1. Section Name. The Section name is now displayed immediately above the "Description" field in the work item "Details" popup window.

2. Warranty in Effect Indicator. If an item is under warranty (and only if it is under warranty), an indicator to that effect will be displayed in the work item "Details" popup window.

Select Multiple Work Items for Deletion

Users can select multiple or all work items in a BUILDER work plan for deletion, instead of having to delete them one at a time. For details, see "Delete a Work Item" in the online Help documentation.

Inventory: Component-Section Cost Book Edits

In Cost Books, the bug that caused changes to the Component Section Replacement Cost to be dropped during the Save process has been fixed. The Component Section Replacement Cost can be edited.

Condition Assessment: Distress Severity

Previously, whenever an existing distress was edited, the Distress Severity field would be reset to "Low" regardless of the previous value. This behavior has been changed, to avoid inadvertent modification of a higher Distress Severity to "Low" while editing another distress parameter. All previously entered values should now persist, to ensure that data is not lost during the editing process.

Database Optimization

A modified database schema speeds up data acquisition by about 15% in most cases.

BUILDER 3.3.12 Update, 03/2019

BUILDER 3.3.12:

- Fix: Changes to user accounts are now saved in audit records.
- Fix: Changes to user accounts now trigger e-mail notifications to administrators.
- Fix: Multiple inspections on the same day are now all used to compute condition indices.

ROOFER 3.3.12:

- Fix: Images again appear in Roof Section Inspection Worksheet History report.
-

BUILDER 3.3.11 Update, 03/2019

BUILDER 3.3.11:

- Fix: Inventory with associated functionality assessments can again be deleted.
- Fix: Functionality calculations now ignore non-numeric values.
- Fix: Only non-null functionality question weights factor into overall assessment scores for certain assessment types.

ROOFER 3.3.11:

- Feature: Added checkbox to indicate leaks on Roof Section screen.
 - Feature: Added textbox to list Deck Deficiencies in Section Inspection screen.
 - Feature: Added Site and Complex level Roof Section Corrective Action reports.
 - Feature: Added Annual Re-Inspection report.
-

BUILDER 3.3.10 Update, 03/2019

- Fix: Estimated CSCI on new Green+ inspections now match inspection CSCI.
 - Fix: Cost books can again be viewed at the component section level.
 - Fix: Master Planners can now delete Organizations and Sites.
 - Fix: Multiple Standard reports will now run without first closing and reloading the "Standard Reports" selector.
 - Fix: Deleting a node on the navigation tree no longer collapses the tree.
 - Fix: Buildings with Efficiency Assessment data can now be deleted.
 - Fix: Exports of image archive to BRED no longer contain non-image file types.
-

BUILDER 3.3.9 Update, 03/2019

- Fix: Standards screen again populating with data.
 - Fix: Sections can again be added to building templates.
 - Fix: Replacement costs are again updated by next rollup after update to cost book.
 - Change: Increased maximum size of assessment value name.
 - Change: Increased priority of nightly rollup to avoid deadlocks.
 - Change: SQL Impact database has been deprecated and can safely be deleted.
 - Change: Standardized start date for scenarios and work generation so results for current fiscal year are now identical.
 - Enhancement: Increased speed of rollups.
-

BUILDER 3.3.8 Update, 03/2019

BUILDER 3.3.8:

- Fix: Cost books can no longer be renamed to match another cost book.
- Fix: Visual inspections can be deleted.
- Change: When a section is deleted, any corresponding work items are also deleted.
- Change: Delete building permission removed from Inspector and Inventorier roles.
- Change: Moving a building now triggers a rollup ROOFER.

ROOFER 3.3.8:

- Fix: Key and section images again appear on Work Plan History report.

- Fix: Remaining service life for membrane roof sections now displaying correctly.
-

BUILDER 3.3.7 Update, 03/2019

BUILDER 3.3.7:

- Enhancement: BUILDER now supports session-state mode.
- Enhancement: Converted nvarchar36 data to GUID.
- Security: Fixed vulnerability to cross-site scripting on smart card login page.
- Security: Updated query used by login page.
- Change: Inspection Supervisors no longer have permissions to delete facilities.
- Change: Future dates are no longer permitted when entering inspections.
- Change: Work items treated as completed by Impact are now marked as "Budgeted" instead of "Awaiting Funds".
- Fix: CI color coding is now correct throughout BUILDER.
- Fix: Removed dead links in Help > About.
- Fix: Facility summary page now filters properly on numeric columns.
- Fix: Building use field can now be changed without first removing existing use.
- Fix: Deleting an image now immediately refreshes the display.

BRED 3.3.7:

- Enhancement: Buildings are now sorted alphabetically when copying inventory.
 - Change: Made data format changes to match updated BUILDER format.
 - Change: Section name field is now 50 characters, which matches BUILDER.
-

BUILDER 3.3.6 Update, 03/2019

BUILDER 3.3.6:

- Fix: Inspections no longer save an "empty inspection" if a rating is not selected before saving.
- Fix: After rolling up Site, Complex, etc. a deleted section is no longer represented at the component level.

- Fix: The username for the password reset function is no longer case-sensitive.
 - Fix: Security updates.
-

BUILDER 3.3.5 Update, 03/2019

BUILDER 3.3.5:

- Feature: Login page can now display messages via an RSS subscription.
 - Enhancement: More descriptive messages for scenario configuration errors have been added.
 - Enhancement: Search bar now available to Master Planners.
 - Enhancement: Inspection Supervisors can now perform Rapid Inspections.
 - Enhancement: The self-service password reset feature now supports an alternate email for authentication purposes.
 - Enhancement: Work Planners can now create and run scenarios.
 - Fix: Deleting the last section in a component now removes the associated performance record so rollups produce accurate indices.
 - Fix: BUILDER no longer errors when browser window is resized to only a few pixels.
 - Fix: Section details can again be viewed when a standard has not been set.
-

BUILDER 3.3.4 Update, 03/2019

BUILDER 3.3.4:

- Enhancement: Added RSL "shift factor" configuration to be honored by both scenarios and rollup.
 - Fix: "Average of numeric" functionality assessments now work.
 - Fix: Changes to component sections now save every time.
 - Fix: BUILDER no longer erroneously reports an error when exporting images when no images have been added.
 - Fix: Scenarios can again be restricted to run only for selected systems.
-

BUILDER 3.3.3 Update, 03/2019

BUILDER 3.3.3:

- Feature: Cost factors for "High Security" and "Additional Access" have been added.
- Enhancement: "Read-only" option added to administration interface for editing user accounts.
- Enhancement: Facility "Systems at a Glance" tab now displays checkout information.
- Enhancement: System page now displays checkout information when hovering over the lock icon.
- Enhancement: Data in facility column in Site screen's "Facility Summary" tab now links directly to building screen.
- Fix: Distress Survey Inspection Report by Section now honors correct Unit of Measure when user has checked the Alternative UM box.
- Fix: Deleting a section now immediately removes its condition data.

ROOFER 3.3.3:

- Enhancement: Fiscal Year data has been added to several reports.
- Fix: Multi-Core Insulation inspections are now saved.
- Fix: MR&R Roof Section Analysis and Roof Section Cost Analysis reports now display repair/replace ratio correctly.

BUILDER 3.3.2 Update, 03/2019

BUILDER 3.3.2:

- Feature: Site screen's "Facility Summary" tab now lists complexes.
- Enhancement: Site screen's "Facility Summary" data is now sortable.
- Fix: Site screen's "Facility Summary" now displays the correct unit of measure for all facility types.
- Fix: Export to BRED again includes images associated with inspections.
- *(Site-Specific Fix): DHA Functionality Wizards now load the correct questionnaire, rather than always loading the HPSB questionnaire.*

ROOFER 3.3.2:

- Fix: The Roof Section Cost Analysis report now returns correct "Latest Visual Inspection Date."
-

BUILDER 3.3.1 Update, 03/2019

BUILDER 3.3.1

- Enhancement: User accounts no longer have a uniqueness requirement for users' first and last names, e.g., there can now be two users named "John Smith", but their usernames must still be unique.
- Fix: Global rollup now correctly computes Site and Organization level FCIs.
- Fix: Facility quantity fields using non-area units of measure now retain proper units during save and subsequent display.
- Fix: Scenarios no longer erroneously generate identical work items in consecutive years.

ROOFER 3.3.1

- Fix: Work Items may now be generated at the Site and Complex levels.
 - Fix: Work Plan and MR&R (Maintenance, Rehabilitation, and Repair) reports now generate correctly.
-

BUILDER 3.3.0 Update, 03/2019

BUILDER 3.3.0

- Feature: Work items can now be generated for Functional Areas.
- Feature: Self-Service reset system for users with locked accounts or forgotten passwords.
- Feature: BUILDER page now remains in existing tab (no longer in a popup window).
- Feature: Users can now attach images to questions in Functionality Wizards.
- Fix: BUILDER no longer generates an error when deleting a section associated with Work Items.

BRED 3.3.0

- Feature: Functionality Assessment are now available in BRED.

