



## SMS BUILDER 3.5 Release Notes

2019-04-09 - Gershwin Marks - [Comments \(0\)](#) - [BUILDER Release Notes](#)

# 1. Release Notes for BUILDER 3.5

## 1.1. 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.

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## **1.2. 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 a 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 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

### 2.1. 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.

### 2.2. 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.