BC – HCE 4.12 Patch Notes

September 2018

We are pleased to introduce the 4.12 patch to BC – HCE for Construction users. This release is a patch update that fixes a number of known issues in the application. Below is a list of the more important changes.

Image Management

- 1. See the notes under CAD and Layer Management below for some improvements to PDF File import and vector extraction.
- 2. In prior releases there were some issues associated with Plotting High Resolution Images through Dynaviews using the Sheet Plotting workflows. This has been addressed allowing High Resolution images to be plotted with High Resolution in this manner.

CAD and Layer Management

- 1. On importing Vector data from PDF files, we noticed that if the Layers that were being created already existed in the project and had been Grouped, that we were recreating the Layers (thereby creating duplicate layer names) in the Layers Group. This has now been addressed so that if the Layers already exist and have been grouped, the data that is being created from the Vectors now ends up on the existing layers in the correct Layer Groups. This means that a template can be established for a standard source of PDF files e.g. a DOT for Highways projects.
- 2. From the Layer Manager you can Export and Import a Layer List / Groups .Layer file. We found that if we imported that into a project where the Layers already existed but were not being Grouped, that the Group information from the imported Layer file was being ignored. This has been addressed so that a Layer that has no Group assigned will be grouped based on the imported Layer file definition. All other properties of the Layers (Color, Linestyle, Line Weight etc.) will be left the same, only the Group will be used in this scenario.
- 3. In the Sheet view, the distance based snap modes were working in ground units not sheet units. This has been addressed.
- 4. In the Sheet View, the use of the Fillet command with small radii (less than 10mm in size) is not working when you check the "Trim Object" check box. If you leave it unchecked the Fillet is drawn correctly. You will still need to break the source lines for the Fillet at the ends of the arc. If you try to join the elements together, the Fillet will turn into a chamfer if the radius is <10mm. This is a defect that we are still trying to address.
- 5. The Distance Distance snap was not working correctly when the distances entered are small values (e.g. distances of ~.05')
- 6. In some imported files, Arcs were defined with UCS values of 0,0,-1. When we joined the arc to another line element, this would cause the Arc to reverse graphically. This has been addressed.
- 7. When user Floated the 3D View onto a second monitor, the View became unusable. This has been addressed.

8. There were some minor issues in the way that View Filter controls were working in v4.11 these have now been addressed

Drafting and Sheet Layout

- 1. A minor issue relating to the labeling of Grids (using Grid Styles) where the Grid Interval coincided with the Top and or bottom axes of the Dynaview was getting its' orientation incorrect has been addressed the Grid Styles now work correctly in this scenario. i.e. if the Top axis was 575' and the bottom axis was 525' and the grid interval was set to 25' the 525' and 575' elevation grid labels were rotated 90 degrees to where they should have been.
- 2. When we break a Profile drawing the Break Points were not working correctly, however we Lose the Interval Labels along the Bottom Axis at the Break Points we also Break at the nearest Major Grid Interval not at the Station specified by the User (this may be an issue if you are trying to do something specific). Changing the Grid Intervals allows you to split the alignments where you want to.
- 3. For European customers where they use, as a decimal point, we found some problems with labels using the diff smart text (Elevation Difference between the Node and a surface etc.). We have added better support for, in these smart text items so you can now use; as the separator and not, in your drafting templates. (I still need to fix the Metric Drafting Templates to address this issue)
- 4. On export to DWG of Dynaview based data that has a rotation in Business Center HCE we have resolved the rotation failure in the created DWG file improving the plot workflow to AutoCAD
- 5. The Hatch command has been improved through the addition of Hatch Boundaries to the Hatched Areas

Corridors

- 1. The Station Offset View had issues with Text being drawn incorrectly. This has now been addressed.
- The import of the Station, Offset, Elevation data required a header that stated TBC Excel. This
 was case sensitive. If the typing was not exact we were not importing the data correctly or
 recognizing the file as a Station Offset Elevation file correctly. You can now use TBC EXCEL, tbc
 excel, TBC Excel or any other combination of upper case and lower case characters and get the
 correct import.
- 3. At the request of a Rail Customer we have added support for the Half Sine Spiral type in our Alignments. Note that SCS900 and Siteworks do not support this spiral type in its alignment support. GCS900 and Earthworks both use a chorded approximation for spiral curves so they will support this new type of spiral without problem.
- 4. When you mirror a Conditional Instruction where a Horizontal Distance between nodes is used as the Condition Test, we were not changing the sign or the order of the nodes of the Distance Checks in the mirrored conditions (a positive test on the right side becomes a negative test on

the left side etc.). This has been addressed. If the check on the Right is ROW – TEST then on the Left it is now TEST – ROW (which effectively reverses the sign of the calculations).

Surface Modeling

- 1. In the Create Subgrade Surface command, the ability to select the "Bottom of Engineered Materials" was eliminated by mistake in the last release, this has now been restored.
- 2. The Cut Fill Map had an incorrect Zoom Extents causing it to Zoom out too far. This has been corrected.

Takeoff

1. The Area Length Count report was slow to generate EXCEL files when there was a large amount of source data selected. This has been addressed and the report runs exceedingly quickly now.

Utility Takeoff

- 1. Length of Utilities made up of multi-node lines wasn't working correctly in all situations that has been addressed
- 2. Exporting of Utility Nodes and Lines to SCS900 using the Design Manager has been improved to eliminate the possibility of deleting the Utility Nodes and Lines during Export.

Data Prep

- 1. The Change Elevation Command using the Surface Option would sometimes fail to elevate one of the line ends if the line end fell within a thin triangle. This has been addressed
- 2. In the standardize layer command, we have added support for the "Shift Key" to allow users to deselect or select individual objects that need to be "standardized" rather than all objects on the selected layer only. This helps remove objects from selected data items that were placed on the wrong layer by the CAD operator or Engineer.

Import / Export

- 1. LandXML import has been further enhanced to allow the Surface Name, Breakline Name or Breakline Description fields to be used to create Layers onto which the Breaklines are placed during Import. This allows a user of Bentley or Autodesk products to use the Template tools available to them to add these attributes to the LandXML data that can then be used to Layer and Group the imported information in Business Center HCE. This makes the LandXML data easier to manage. Note that the Layers and Layer Groups can be setup in a BC-HCE Template in advance so that after import the data is nicely layered and grouped making it more rapidly usable.
- 2. MX Import has been enhanced to resolve a "missing data" issue reported on certain MX files written in specific formats of the GENIO standard.
- 3. 12DAZ Files can now be imported into Business Center HCE without having to rename the file to .zip.
- 4. ADA XML Files are now supported in addition to the 12DA and 12DAZ file formats for the Australia / New Zealand Markets.

5. Trimble Earthworks .DSZ files can now be imported into Business Center – HCE

Reporting

1. We found an issue that when Excel was set in a certain way, that it was prohibiting BC-HCE from writing Excel based reports. We have updated the Excel report writer function to automatically change Excel settings prior to writing the report data to resolve this issue.

General Issues

1. There have been reports that if a Project was left unattended and unsaved for a period of time, that it was sometimes stopping the user from saving a Project or Saving the Project As. This has been corrected.