

# SCC 10.8.1

**Date:** 18 September 2013  
**Re:** Release notes for SCC 10.8.1

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We are pleased to announce a new release of SCC with SCC 10.8.1. This is available for immediate download here;

Full install (860mb): [www.atlas-files.com/scc-users/setup-scc-10-8-1-full.exe](http://www.atlas-files.com/scc-users/setup-scc-10-8-1-full.exe)

Update install (56mb): [www.atlas-files.com/scc-users/setup-scc-10-8-1-update.exe](http://www.atlas-files.com/scc-users/setup-scc-10-8-1-update.exe)

Zip file for 32 bit (16mb): [www.atlas-files.com/scc-users/SCC-10-8-1.zip](http://www.atlas-files.com/scc-users/SCC-10-8-1.zip)

Zip file for 64 bit (11mb): [www.atlas-files.com/scc-users/SCC64-10-8-1.zip](http://www.atlas-files.com/scc-users/SCC64-10-8-1.zip)

Please note when running these installations under Windows 7, download the set-up program, and from explorer use the **Run as Administrator** option given by right clicking the downloaded file. The full installation of this release of SCC is significantly larger than previous releases as it includes some large tutorial sample files and updated on-line help.

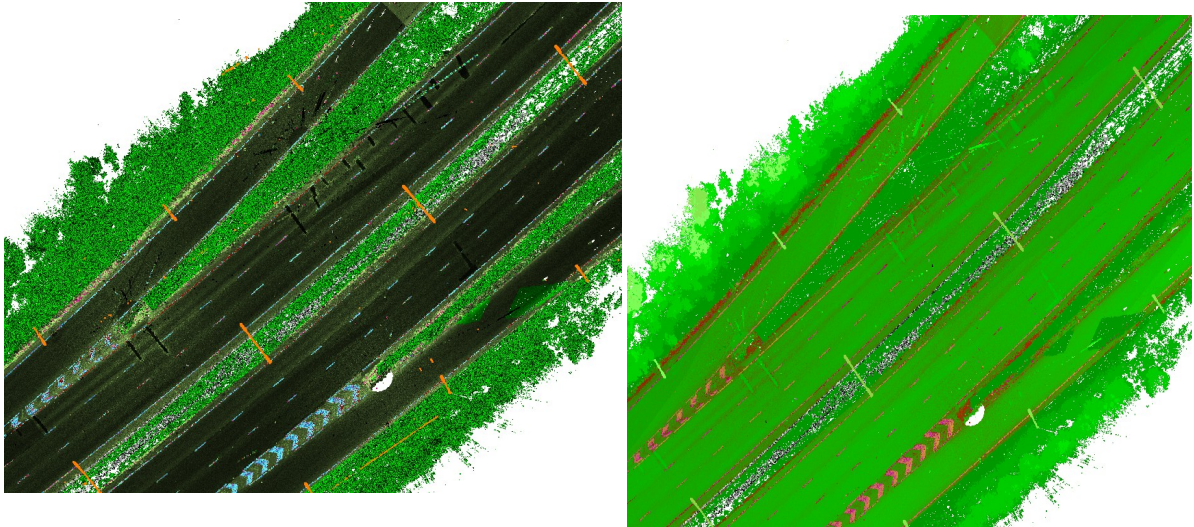
This release contains the following modifications from SCC 10.7.5;

- **Native 64 bit release supports huge model and clouds**

SCC now includes separate native 32 bit and 64 bit versions of SCC. The 64 bit version of SCC requires Windows 7 (64 bit) with 2GB or more of RAM. This version can work with point clouds of up to 4 billion points and TIN models of hundreds of millions of points. A point cloud of 4 billion points will take between 12gb and 20gb of RAM depending on colour and intensity scheme used. A typically large cloud of ~ 1 billion points take ~10 seconds to open and can be displayed and edited in real time on a mid range multi-core workstation. The point cloud engine has been optimised such that it can take full advantage of modern multi-core processors for most tasks, thus making it up to eight times faster than previous versions where eight core processing (e.g. Intel i7 or AMD 8350) is available. This installation of SCC installs both 32 and 64 bit versions by default. The current 64 bit version is limited insofar as it does not as yet support the geodetic grid or SnakeGrid transformations available under 32 bit.

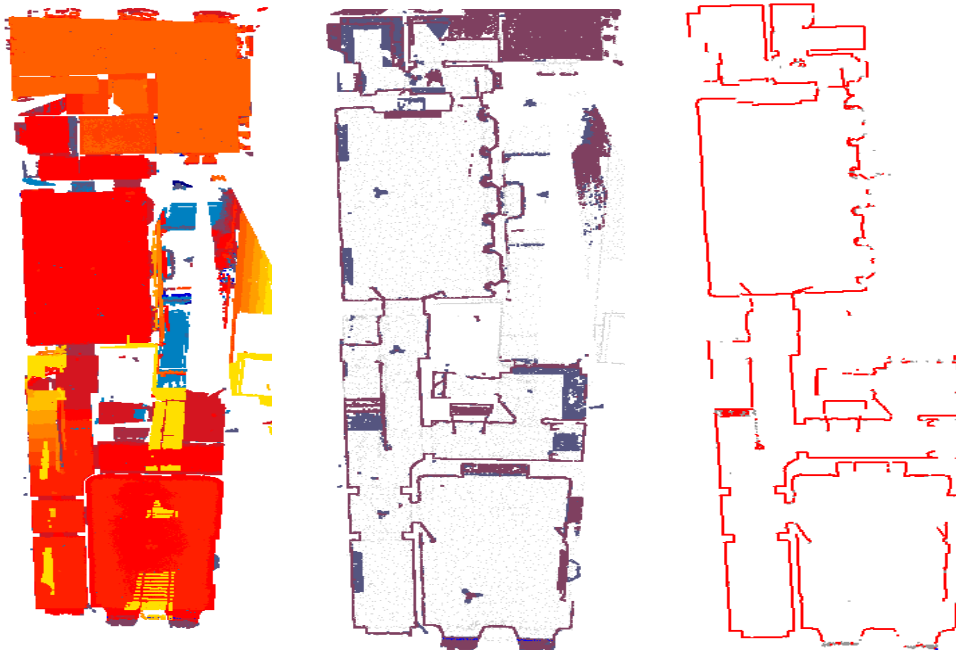
- **Major new point cloud functionality**

Point clouds can now be colour by RGB, feature, height, intensity, or combinations of feature and intensity, feature and height, or height and intensity. Colour type can also be broken down by feature groups, and separate colour schemes for height and intensity saved as part of the point cloud feature library.



*Monochrome cloud coloured by combining feature and intensity versus elevation and intensity*

A new smoothing tool has been added to search for best fit lines and arcs in extracted floor plans, elevations and traced outlines. This includes options for automatic parameter driven trimming, extending, squaring and paralleling, such that high quality line work can be automatically extracted from clouds.



*Slice, trace, smooth and tidy to automatically extract clean line work*

The tool to trace linear features based on a section template has been enhanced to have a clearer layout, allow selection of points, support multiple surfaces / features, and preview goodness of fit. Full details are available [here](#);

Additional selection methods have been added to select cloud points by intensity percentage, and based on distance to a best fit plane.

Some additional tutorials on the point cloud module [here](#);

Volumes from point files: [www.atlas-files.com/scc-users/SCC%20Point%20cloud%20volume%20tutorial.pdf](http://www.atlas-files.com/scc-users/SCC%20Point%20cloud%20volume%20tutorial.pdf)

Tracing linear features: [www.atlas-files.com/scc-users/SCC%20Tracing%20linear%20features%20from%20a%20point%20cloud.pdf](http://www.atlas-files.com/scc-users/SCC%20Tracing%20linear%20features%20from%20a%20point%20cloud.pdf)

- Support has been added for downloading point cloud data directly from the Leica Scanstation MS50, via the Leica Nova SDK.
- Four additional symbology types have been added to streamline surveying features comprised of two vertically separated strings, such as overhead lines with poles, and fences. These allow you to survey the ground line, enter a height, and SCC will automatically create any or all of the ground line, elevated line, and connecting vertical line, where each can have separate features on output.
- Improved support has been added for importing 3d blocks as symbols from AutoCAD, with a sample 3d tree symbol included in the release.
- A new option has been added to sections to allow re-numbering of ISIS and MIKE-11 chainages, either in the same or reverse direction of the main alignment.
- The check station tag code (CHK) now searches for the nearest station to the sighted point if a valid station name is not included in the survey. And additional report, Setup misclosures and checks.RPT, has been added to include all station set-up misclosures and check shots as a single report..
- The least squares adjustment has been modified such that where a 1D level only adjustment is carried out, existing plan positions will not be overwritten, even if they are marked as not being fixed.
- An additional option has been added to the Leica GSI interface to treat all slope distance values of 1.0 as 0.0, as output by certain instruments.
- An additional option has been added to the section annotation dialog to control whether gradients are centred under the matching ground line segment (default), or lined up with the level and chainage text.

- The Trimble JXL interface has been enhanced to translate a wider range of point classification codes as traverse codes, include point IDs as traverse remarks, and treat the remark code “BLANK” as no remark.
- A bug has been corrected where turning on curved contouring on models with extreme differences in position (e.g. mixed points in local and national grids) was leading to a crash
- A bug has been corrected where sections including 2D non-DTM reference points were not displaying correctly in plan when attached to models.
- A bug has been corrected in the least squares adjustment, where adjusting an unconstrained network with no redundancies / degrees of freedom was causing an error in the chi squared analysis.

If you would like a demonstration of the new features or any existing features of SCC, we can be contacted directly at 003531 4958714 or via SCCS at 0044 1480 404888.