






MSO V2.04

Release Notes

2nd October 2015



Version Highlights

-  64 bit compatibility! *MSO* will run under the dedicated 64 bit version of *Surpac* running on 64 bit *MS Windows*
- Compatibility issues with the recently released *Surpac V6.7* have been resolved and tested
-  The *MSO* installer has been re-written to cater for both 32 and 64 bit versions of *Surpac*. Computer registry entries are no longer created to assist with compatibility in restricted computing environments.
-  An interface to the popular *RefSet* on board program has been included into the upload function.
- A *MSO* reference manual has been written and is available in the *MSO* Help directory.
- Any user/job scale is now displayed and can be applied to processing.
- Sometimes all stations for a multi station resection were not displayed in the dat file
- Resolved processing issues with uncoordinated surveys
- Issues with directory names containing spaces have been resolved
- Fixed crashing problem when the job log file was incorrect
- DBX generation would timeout on some computers
- A database constraints (.DBC) file could not be used to apply constraints when opening the survey database
- MSO_Settings.cfg* file is now stored in the new Custom directory.



Important Note on Surpac 64 Bit Compatibility

Please note that *MSO V2.03* and all previous versions **will not function** on the 64 bit versions of *Surpac*.

MSO V2.04 is now **compatible with 64 bit versions of Surpac**. Note that both 32 bit versions and 64 bit versions of *Surpac* with *MSO* can coexist on the same computer.



New Installer

The installation program for *MSO* has been re-written to solve a number of issues. It now correctly detects all versions of *Surpac* including 64 bit installations.

The previous installer wrote a key into the computers registry which generally required computer administrator privileges. This no longer happens making the program easier to deploy in a restricted environment. A normal user should be able to run the installer.

The installer contains all files for both 32 bit and 64 bit versions of *Surpac*, separate installers are not required.



Recommendations

The following versions of *Surpac* have been tested with *MSO* and appear to be stable;

- Surpac 6.3+
- Surpac 6.4+
- Surpac 6.5+
- Surpac 6.6+
- Surpac 6.7

It is recommended to gain the full benefit of *MSO V2.04* that you use *Surpac V6.3* or better



Version Details

A new interface to the popular *RefSet* program that runs on *Lieca* instruments has been implemented. See below for further information.

To bring *MSO* in line with other *Mine Solutions* products all custom files are now stored into the Custom directory beneath the main *MSO* directory. This means the *MSO_Settings.cfg* file now resides in that directory unless you have setup a *MSO* share point directory. This change is automatic, there is no setup required.

Sometimes all stations for a multi station resection were not displayed in the dat file. This issue has been fixed.

Problems processing uncoordinated survey data have been resolved. Stations details were not being correctly read from the job file.

When the working directory contained spaces in the path name, the field (fld) file would not be displayed on the screen prior to processing. This also affected the display of the dat file after processing. Both issues have been resolved.

If the pathname to the job log file was incorrect *MSO* would crash. This issue has been rectified.

When creating a *DBX* file for upload it was possible on some computers that no files were generated. This issue was caused by an insufficient timeout period which has been increased.

A database constraints (.DBC) file could not be used to apply constraints when opening the survey database in *MSO* the upload function. Previously if you tried to load a dbc file the database constraints form would automatically apply itself.

A reference manual for *MSO* has been written. This is distributed with the installation and is available in the Help directory underneath the main *MSO* install directory.



If a user defined scale factor has been set for the job on the instrument it is now displayed and you have the option to apply this scale when processing the job. Previously a scale value of 1.0 was always used unless the default scale value in the instrument was changed.

MSO V2.04 (Job Details)

MINE SOLUTIONS MSO V2.04
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support@minesolutions.com

Processing
Surveyed by TMeasure
Processed by TMeasure
Process method 1. Polar & Cartesian

Databases
Database 1 C:/Consulting/vComp/MSO/stations.sdb
Database 2

Input File
Job name 150923LW1
Job description Test Scale Factor
Survey date 23.09.15
Survey time 15:42:54
Instrument type TS15 P 3 R1000
Serial number 1668771

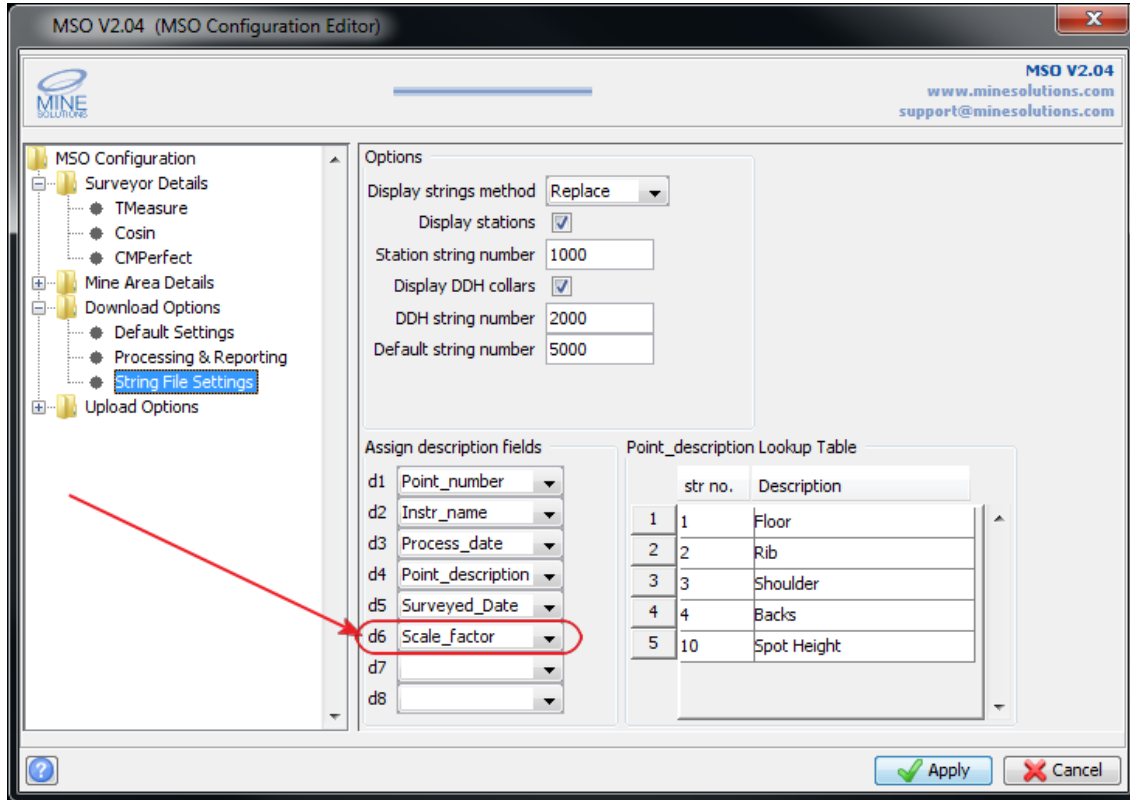
Scale Information
Default scale 1.00000000
User/job scale 0.99956000
Apply user Scale yes

Output Files
FLD file C:/Consulting/vComp/150923LW1.fld
DAT file C:/Consulting/vComp/150923LW1.dat
String file Location C:/Consulting/vComp/150923LW
String file ID 1

Apply Cancel



The scale factor used to process the job can be set into a nominated dfield of the string file. This is set in the configuration editor under Download Options → String File Settings.



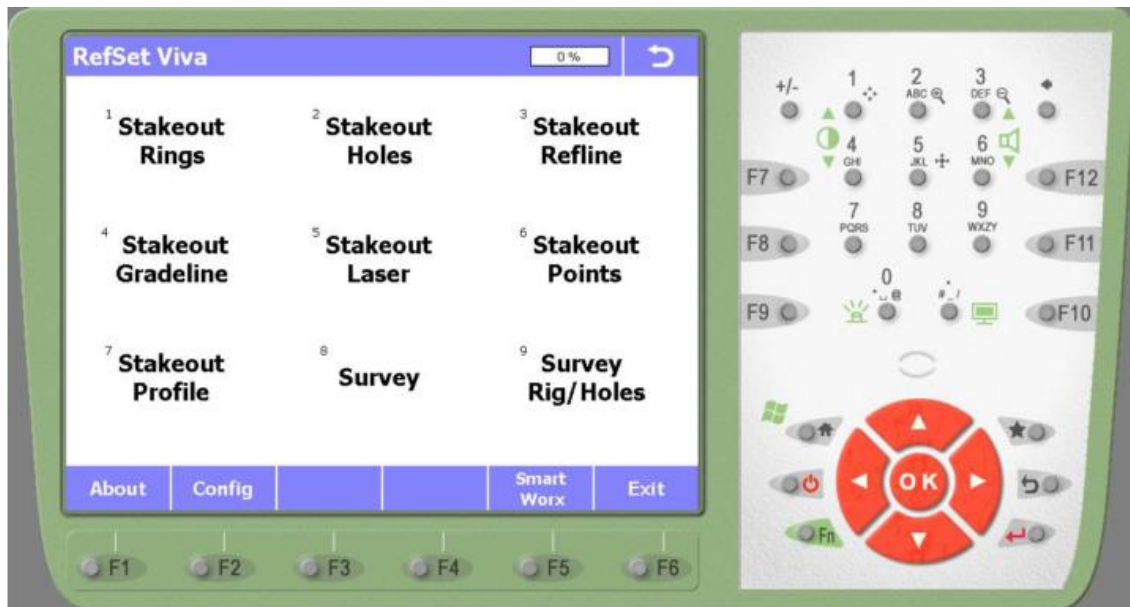


RefSet Interface

RefSet is a program used to control *Leica* Total Stations to automatically set out most types of underground survey mark-ups by reference line or stakeout. It runs on the 1100 series, 1200 series, and new instruments running the Viva operating system.

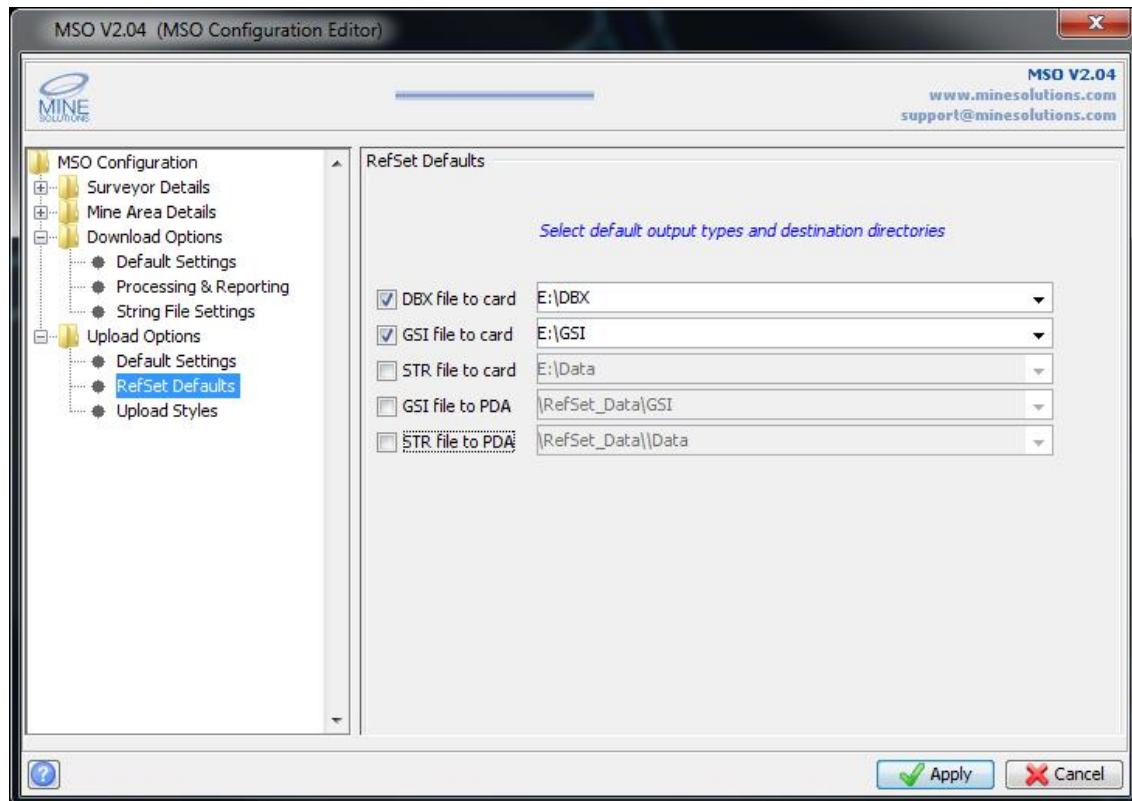
The program can be used by a single person to complete underground survey mark-ups without the need to return to the Total Station to 'point' the instrument at the next stakeout point as the program automatically sets out the current feature and then proceeds to set out the next feature.

Please visit www.refset.com.au for further information on the *RefSet* program.





Run the *MSO Configuration Manager* to begin. A new panel in the *MSO* configuration tree has been created to setup the *RefSet* default settings as shown.



Depending upon the model of the instrument there are different methods to upload *RefSet* information onto the Total Station. If the instrument has an SD card then set the default values to the drive name for your card reader, ie E:. The different types of data must be copied into the appropriate directories on the card to be used by *RefSet*:

- DBX files must be copied to the \DBX directory on the card
- GSI files must be copied to the \GSI directory on the card
- Surpac string files must be copied to the \Data directory on the card

If you are using *RefSet* on a PDA device set the PDA directories accordingly.

Note that files can only be copied to the PDA device if you have *ActivSync* or *Windows Mobile Device Centre* installed.



On the upload to Instrument form is a new option for the *RefSet* interface. Select it to display the appropriate inputs.

Input filename – select the string file containing your set out information.

String range – you can enter a valid string range to only process certain strings from your input file or leave blank to process all strings in the file.

Point Id from – Select the string description field that contains the point Id's. You can select PTNo to have sequentially numbered point Id's generated for you.

Upload name – enter the name to identify the job to be created

DBX file to card – select if you use an SD card to transfer data to the instrument. Enter the drive and directory to copy DBX files too.



GSI file to card – select if you use an SD card to transfer data to the instrument. Enter the drive and directory to copy GSI files too.

STR file to card – select if you use an SD card to transfer data to the instrument. Enter the drive and directory to copy string files too.

GSI file to PDA – select if you use RefSet on a PDA device. Enter the drive and directory to copy GSI files onto the PDA.

GSI file to PDA – select if you use RefSet on a PDA device. Enter the drive and directory to copy string files onto the PDA.

Note that if you use a PDA device files can only be copied if you have *ActivSync* or *Windows Mobile Device Centre* installed.



Request for Enhancements

If there are any new features that you would like to see in upcoming versions of *MSO* please email support@minesolutions.com your requests or telephone David on +618 9312 6158.

Work on the report formats and log files are being anticipated for the next release. If you have ideas on improvements then please make these know. Possible changes are storing the logs directly into the database or directly in to an MS Excel spreadsheet. Reports such as the survey calculation report maybe created as a MS Word document for improved legibility.

MSO requires you the users input in order for it to grow and improve into the future. Your comments and suggestions are encouraged and are welcome.