

UniNews - Fall 2014

Introduction

Thank you very much for downloading our Fall 2014 Newsletter. It introduces the latest upgrade of UniPile 5.0 and its Examples Manual.

Information on how registered users of UniSettle 4.0 and UniPile 5.0 may obtain the latest releases at no cost is provided at the end of this newsletter.

A complete history of the releases affecting UniSettle 4.0 and UniPile 5.0 may be obtained by visiting:

<http://www.unisoftltd.com/support/history-releases/unipile5/>

<http://www.unisoftltd.com/support/history-releases/unisettle4/>

Decourt and O'Neill-Reese SPT methods

The new release of UniPile now includes the Decourt and O'Neill-Reese methods of calculating pile capacity from SPT N-indices (previous version was limited to the Meyerhof method). Many users rely on the SPT records for geotechnical design of piled foundations. In Canada and in many South-East Asian countries the preferred method is the Meyerhof method. US users apply the O'Neill-Reese method and South American users apply the Decourt method. Our Demo Example 8 - SPT distributed with the latest release is a perfect example on how the methods compare.

The three SPT-methods, in addition to the five CPT and CPTU methods, enable users to compare the results of the in-situ methods to each other. Moreover, each set of results show a correlation of the in-situ method results to the β -coefficients and total stress unit shaft shear values. This enables a fast and simple way for the user to apply the "calibrated" β -coefficients to site conditions not present when the SPT or CPT/CPTu data were obtained, such as new fills and/or excavations.

The Bidirectional Test Simulation

The analysis of the bidirectional test has been "tweaked". As before, the option called "Shaft Buoyant Weight", when marked "Include", simulates the cell loads measured in an actual test, which measurements are affected by the pile weight (buoyant). It now also includes the downward force effect of the water pressure at the cell level. As before, the option marked "disregard" shows the upward and downward load-movement and load-distributions corresponding to the input soil and resistance parameters just like the results calculated for the head-down simulation.

If the bidirectional test results are used to produce a theoretical response that fits the measured, selecting the Head-down option then produces the Equivalent Head-down Load-Movement results of the test. The "Equivalent" results include adjustment for buoyant weight, water force, the larger pile compression of the head-down test (which are calculated per the actual force as it develops pile element for element), and, not least, the fact that the head-down test engages the softer upper soil layers first, whereas the bidirectional test engages the stiffer layer immediately above the cell first. Those adjustments done manually are time-consuming and difficult, often resulting in a stiffer head-down load-movement curve, which could be interpreted to a higher capacity than would be the case for an actual head-down test.

The Examples Manual

The latest Example Manual's background to Demo Example 1 is expanded to show all steps of the input procedure. A segment on choosing representative t-z and q-z Functions has been added that provides much detail on this aspect of simulation of a static loading test. We believe that new and current users of UniPile 5.0 will benefit from a review of Demo Example 1.

Three examples have been added to the examples file. Demo Example 10 details a design analysis per the Fellenius Unified Method. Demo Example 11 is taken from the US Corps of Engineers Design Guidelines (USCOE-HSDRRSDG, Chapter 3, Geotechnical), which applies the Unified Method as recommended by the Corps of Engineers. Demo Example 12 illustrates the UniPile approach to designing where to place the cell for a bidirectional cell test and how to fit the test results to t-z and q-z Functions.

Several of the case history papers written by Dr. Bengt H. Fellenius rely on analysis performed with the aid of UniPile. The papers are available for online downloading from <http://www.Fellenius.net>. Users of UniPile might find it of interest to look at the details of the analyses. To assist, the demo examples files also include a some of the UniPile files used in the writing of the papers. Example files preceded with a three-digit number file refers to the online download number.

Forthcoming Price Increase

Unfortunately our "Introductory Pricing" structure is coming to an end. In an effort to stay on top of new technologies and the current and future needs of our users, we will increase our prices by an average of 25% effective January 1st, 2015. This price increase will affect the cost of new licences as well as the cost to upgrade from UniPile 4.0 and UniSettle 3.0.

In our opinion, our UniSettle 4.0 and UniPile 5.0 provide options not available in comparable competing software, or is only obtainable by purchasing separate modules. Even including our forthcoming price increase, we believe that our products are a great value and compare with the competition. Moreover, there is still time to purchase and order at the old prices!

Please visit http://www.UniSoftLtd.com/uploaded/file/UniSoft_2015_Price_Increase.pdf to see how our price increase may affect your budget for the next year.

New Releases

We invite registered users of UniSettle 4.0 and UniPile 5.0 to upgrade their copies at no cost by downloading the latest setup files from our secure server at:

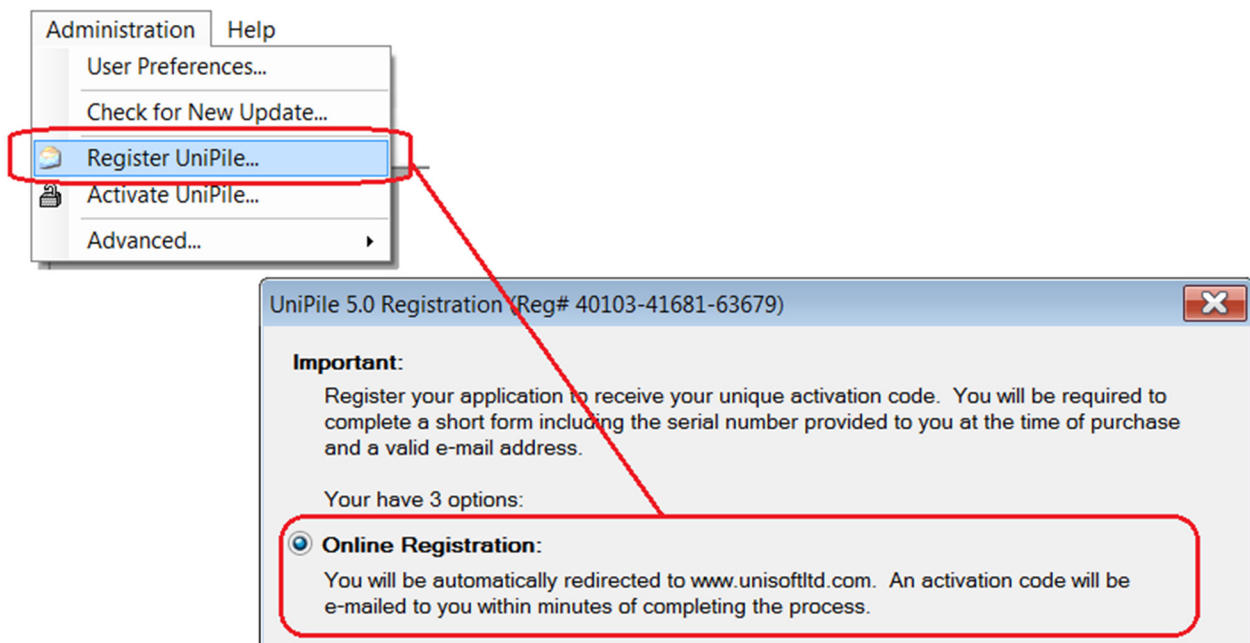
UniSettle 4.0.0.40:

http://www.unisoftltd.com/Files/Setup/UniSettle4/UniSettle4_Latest_Setup.exe

UniPile 5.0.0.35:

http://www.UniSoftLtd.com/Files/Setup/UniPile5/UniPile5_Latest_Setup.exe

Upgrading to our latest releases is important and should only take a few minutes. Registered users re-installing the software on the same folder will not be asked for re-activation. If you are required to activate your licence, you may obtain your new activation code in seconds by visiting our online registration located under the main "Administration" menu. You will be required to specify the 10 digits serial number provided to you at the time of purchase. Alternatively, you may also obtain an activation code by contacting us at info@unisoftltd.com.



Our Last Words... Almost!

If you have not yet tried UniSettle 4.0 and UniPile 5.0, this is the perfect time to visit our website at <http://www.unisoftltd.com> and see what we have to offer. You may also contact us directly by e-mail at info@unisoftltd.com. We would be glad to offer your office a free 30-day trial licence so you can evaluate our software on actual projects. UniSettle and UniPile have been developed for the Microsoft Windows 7 and 8 environments and are 100% network compatible.

In case you have just joined our mailing group, a list of useful internet links to all our documentation, previous newsletters, and technical bulletins is presented at the end, all free of charge.

Useful Internet Links

Documentation, examples and manuals:

<http://www.UniSoftltd.com/Uploaded/file/RedBook.pdf>

http://www.UniSoftltd.com/Uploaded/file/UniSettle4_User_Manual.pdf

http://www.UniSoftltd.com/Uploaded/file/UniSettle4_Examples.zip

http://www.UniSoftltd.com/Uploaded/file/UniPile5_User_Manual.pdf

http://www.UniSoftltd.com/Uploaded/file/UniPile5_Examples.zip

Brochures and price lists

http://www.UniSoftltd.com/Uploaded/file/UniSettle4_Brochure.pdf

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