RIFT TD VERSION 1.2.3.265

RELEASE NOTES

MAY 2015

ENHANCEMENTS

Rift TD Version 1.2.3.265 is a maintenance release. Significant work has been undertaken following the release of **Version 1.2.3.250**, most of this is "under the hood".

The following enhancements are incorporated into this release:

- Performance enhancements
- Break lines (preview feature)
- Modification to the select line/area mechanism
- Node Audit — Exclude Nodes
- Help file rewrite
- User manual rewrite
- Improved tailings flow algorithm
- Improved beach cyclone deposition algorithm
- Numerous bug fixes

More details are provided on the following pages.

We hope that you enjoy this release.

RIFT SOFTWARE

PERFORMANCE ENHANCEMENTS

Rift TD version 1.2.3.265 introduces significant performance enhancements. We have benchmarked it against Version 1.2.3.250 using four deposition models:

- Point deposition.

- Upstream boundary deposition.

- Downstream deposition.

- Downstream cyclone deposition.

These models are available from our online tutorials at www.riftxone.com.

We have also benchmarked it against an upstream deposition model comprising 72,500 nodes, 144,900 elements and 87 deposition locations.

All benchmarking was undertaken on a Pentium® Core™ i7—2760QM CPU with 8 GB of RAM. Results are presented in Table 1 and Figure 1.

Table 1: Benchmark Results

| Description	Number of Nodes	Number of Elements	Run Time (seconds)		Time Reduction (seconds)	% Reduction	% of Original Time
			1.2.3.265	1.2.3.250			
Point Deposition	3,976	7,921	4	21	17	81%	19%
Boundary Deposition	225	426	11	83	72	87%	13%
Downstream Deposition	4,740	9,434	6	50	44	88%	12%
Downstream Cyclone Deposition	1,860	3,651	16	194	178	92%	8%
Upstream Deposition	72,540	144,874	790	9,080	8,290	91%	9%
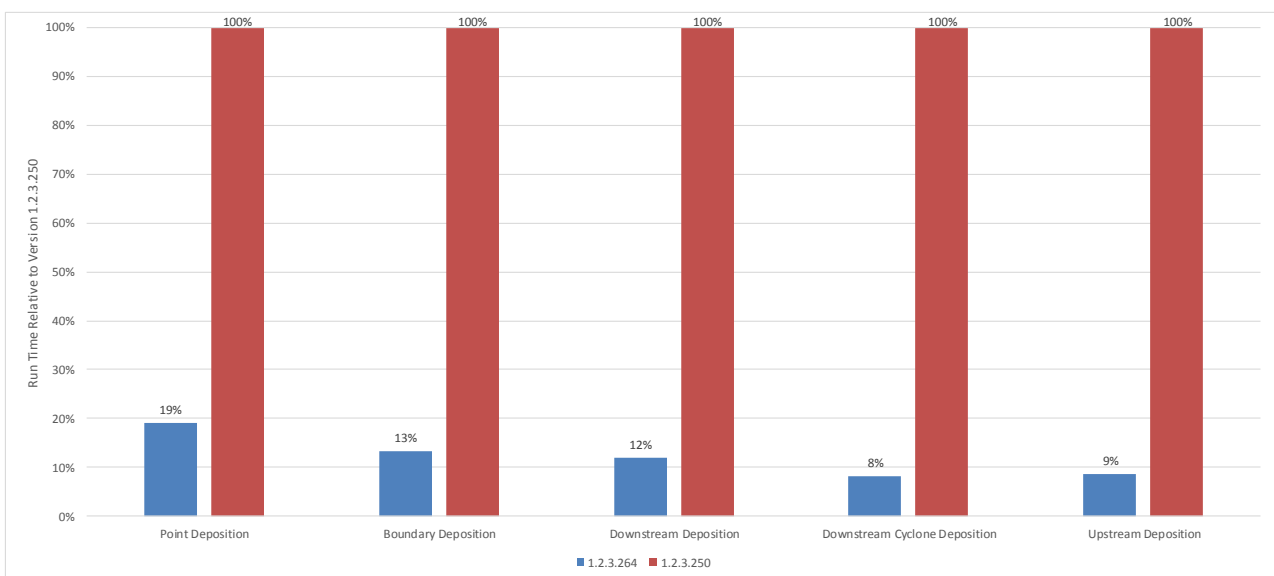
Figure 1: Benchmark Results—Run Time Relative to Rift TD Version 1.2.3.250

BREAK LINES

Break-lines are introduced as a preview feature in this release. They are lines that element borders are not allowed to cross, thus ensuring that surface definition is maintained during triangulation.

In this preview feature break-lines are only generated when using the embankment wizard to generate an embankment. Break-lines are subsequently merged into models that the embankment is merged into.

Break line options are provided on the Surface Model menu. Options include:

- View Active Model Break-lines
- View All Break-lines
- Delete Active Model Break-lines
- Delete All Break-lines

Break-line functionality will be improved in future releases. This will include user defined break-line functionality.
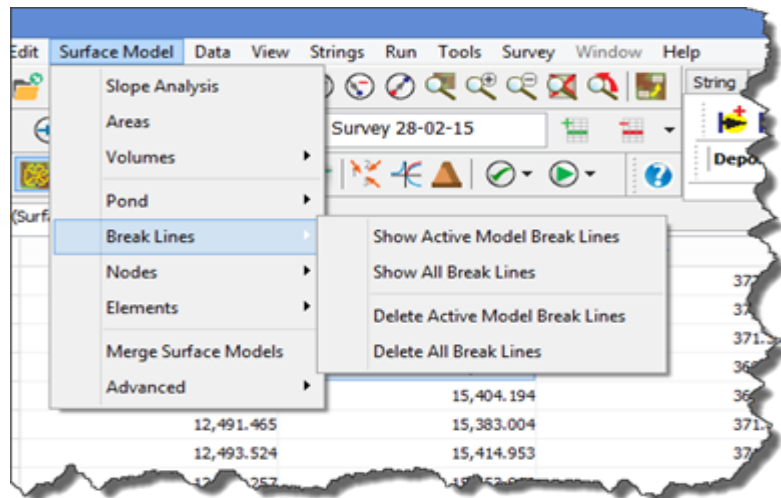
NODE AUDIT—EXCLUDE NODES

This release allows user to exclude identified nodes from a node audit. This is useful to ensure that nodes are not deleted from areas that require high node definition. A typical example would be an embankment.

To enable this functionality:

- Identify nodes using **Rift TD's** node identification functionality
- Select a Node Audit function
- Check Exclude Identified Nodes on the Audit Nodes Node Spacing Dialog
- Click Ok
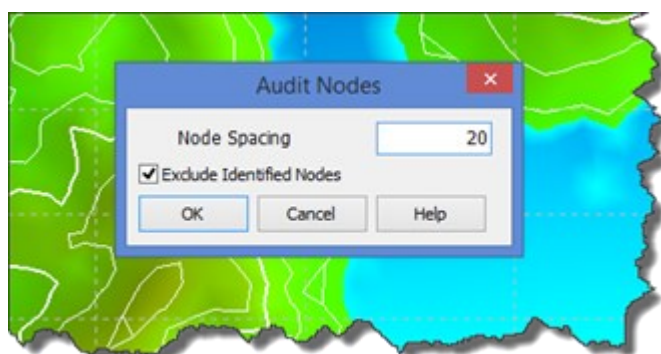
LINE/AREA SELECTION

The line and area selection procedure has been modified. Data is now input on the Data Grid and not a separate window. All lines/areas are maintained in memory during the modelling session and can be selected using the navigation tool-bar. These lines are not saved to the data file and are deleted from computer memory when opening a file or starting a new project.

Click **Ok** to accept and close the selection pane, or **Cancel** to delete data and close the selection pane.

The following shortcuts are defined:

- **Ctrl Enter**: Accept the line/area.

- **Ctrl Esc**: Cancel line/area selection.