

DataBlast 2.14

Release Notes



© Copyright 2026 Datamine Corporate Ltd

All Rights Reserved Confidential and Proprietary

Published: Tuesday, 1 September 2026

The information contained in this documentation is subject to change without notice and is not warranted to be error-free. This documentation contains confidential information proprietary to Datamine Corporate Ltd which must not be disclosed, copied, or distributed to any third party without prior written consent of Datamine. Any unauthorised use or disclosure of this information would constitute a breach of confidentiality and would result in legal action.



Contents

Overview	7
Further information	7
DataBlast 2.14 release notes (September 2026)	8
System requirements	8
User interface enhancements	8
CAD enhancements	9
Initiation enhancements	9
Blast costs	9
Custom properties enhancements	10
BlastPad enhancements	10
DataBlast Ignite	11
MineTrust integration	11
Defect fixes	11
DataBlast 2.13 hot fix release notes	14
DataBlast 2.13 hot fix 1 (April 2026)	14
Defect fix	14
DataBlast 2.13 release notes (March 2026)	15
Blast costing	15
User interface enhancements	15
CAD enhancements	16
Charging enhancement	16
System administration	17
MineTrust integration	17
Defect fixes	17
DataBlast 2.12 hot fix release notes	21
DataBlast 2.12 hot fix 3 (October 2025)	21

Defect fix	21
DataBlast 2.12 hot fix 2 (September 2025)	21
Defect fixes	21
DataBlast 2.12 hot fix 1 (September 2025)	22
Defect fixes	22
DataBlast 2.12 release notes (September 2025)	23
Design module enhancements	23
CAD enhancement	23
Sandvik OptiMine drill machine interface	23
Installation	24
Defect fixes	24
DataBlast 2.11 release notes (August 2025)	25
Support utility for upgrading from DataBlast Ignite to DataBlast Pro ...	25
Performance improvement	25
DataBlast 2.10 release notes (July 2025)	26
DataBlast licencing	26
DataBlast Ignite SQLite database transition	27
WencoMine drill machine interface	27
Design module enhancement	28
Drill module enhancement	28
Measure module enhancement	28
Initiation module enhancements	28
System administration enhancement	29
User interface enhancements	29
Defect fixes	29
DataBlast 2.9 hot fix release notes	31
DataBlast 2.9 hot fix 3 (November 2024)	31

Defect fixes	31
DataBlast 2.9 hot fix 2 (November 2024)	31
Defect fix	31
DataBlast 2.9 hot fix 1 (November 2024)	32
Defect fixes	32
DataBlast 2.9 release notes (October 2024)	33
Documentation	33
Firing module	33
BlastPad drill collar elevation entry	34
Design module enhancement	34
Custom properties enhancements	35
System administration enhancements	35
System requirements and installation	36
DataBlast licensing	36
Defect fixes	36
DataBlast 2.8 hot fix release notes	38
DataBlast 2.8 hot fix 2 (April 2024)	38
Defect fix	38
DataBlast 2.8 hot fix 1 (April 2024)	38
Custom properties	38
DataBlast 2.8 release notes (February 2024)	39
Documentation	39
Custom properties	39
Imperial measurement support	40
Modal screens and support for multiple monitors	40
Streamlined menus and navigation	41
Dynamic hole filtering	42

CAD viewport enhancements	42
Design module enhancements	42
Drill module enhancements	43
Measure module enhancements	43
Charge module enhancements	44
Fragmentation utility enhancements	44
System administration enhancements	44
Other enhancements	45
System requirements and installation	45
Defect fixes	46
DataBlast 2.7 release notes (August 2023)	47
System requirements and installation	47
Performance improvements	47
User experience improvements	48
Defect fixes	49
DataBlast 2.6 release notes (October 2022)	51
DataBlast Ignite	51
Multi-language support	51
Documentation	51
User interface (UI) refresh	52
Saved screen size and position	52
Computer assisted drawing (CAD) speed	53
CAD functionality	53
BlastPad functionality (DataBlast Pro only)	53
System requirements	54
Other enhancements	54
Defect fixes	55

Overview

DataBlast covers the entire open pit drill and blast (D&B) process, from design to firing, using CAD-based design tools and an intuitive user interface. Used by D&B engineers and operators, DataBlast enables detailed D&B pattern design and efficient management of field operations, including drilling, quality assurance, charging, and initiation. DataBlast ensures safe, consistent, and high-quality blasting with features like firing simulations, contour and charge analysis, and vibration modelling. DataBlast Pro, a multi-user system, includes field data capture and a reporting data source, integrating seamlessly with BlastPad for complete control over D&B implementations. DataBlast Ignite, a stand-alone desktop solution, offers the same design tools and incorporates field data without the need for additional IT infrastructure.

Further information

This document includes cumulative release notes since DataBlast 2.6.

Release notes for other versions of DataBlast are available via the Support Portal <https://www.dataminesoftware.com/support/>.

For the latest DataBlast documentation, see <https://docs.dataminesoftware.com/DataBlast>.

DataBlast 2.14 release notes (September 2026)

System requirements

- DataBlast now uses Microsoft .NET 8. The installers include the required Microsoft .NET Desktop Runtime (x64) and Microsoft ASP.NET Core Runtime - Windows Hosting Bundle prerequisites.

User interface enhancements

- For DataBlast Pro, SQL Server connection screens provide a recent connections list, a dedicated server browser, connection string editing tools and an explicit **Encrypt** setting for compatibility with current Microsoft SQL Server database drivers.
- The **Properties** panel is faster and easier to use, particularly when selecting and editing items. The panel refreshes more reliably, retains the current position in the list, presents information more clearly and handles custom and calculated fields more consistently.
- Pane divider positions are saved and restored more consistently across DataBlast screens. When a window is resized or maximised, DataBlast keeps panes at practical minimum sizes so screen content is less likely to be hidden.
- Date and time entry fields are easier to use across more DataBlast screens, with popup controls for selecting or adjusting time values. Time entry also follows the 12-hour or 24-hour format from the Windows regional settings.
- When a **Drill Log Data Entry Sheet**, **Dip Data Entry Sheet** or **Backfill Data Entry Sheet** is opened, a warning displays if no active operators with the required competency are available. The **Drill Log Data Entry Sheet** also warns if no active drill machines are available.
- The **Zoom In** and **Zoom Out** buttons include magnifier icons in the **Drill Log Data Entry Sheet**, **Dip Data Entry Sheet**, **Backfill Data Entry Sheet** and **Blast Cost Items Maintenance** screens.
- The **Export Hole Pattern Data** screen is easier to use, with a search field for available columns, double-click support for adding columns, a dedicated **Save Template As** button and drag-and-drop reordering from the data preview.

- Hole data exports add **Hole Identifier** as a sort field automatically when applicable, and sort hole identifiers more logically. Numeric-only hole identifiers are sorted numerically, and mixed numeric and non-numeric identifiers are sorted alphanumerically.
- Open, save and folder selection dialogs open from safe user-writable locations and remember the last-used folder for each workflow. This improves consistency across import, export and file selection tasks, and prevents dialogs from defaulting to protected installation folders.

CAD enhancements

- DataBlast uses VectorDraw 12 for CAD display and drawing functionality.
- When printing **Viewport** objects with **2D Wire Mode** unchecked, printed meshes use the current CAD display mode from the **View** toolbar. **2D Wire Mode** is unchecked by default.

Initiation enhancements

- Vibration analysis data can be exported to separate CSV files for the **Monitor List**, **PPV** and **Timing Windows** tables. The new **Vibration Analysis Export** screen lets you select which tables to export and displays output file names based on the base output file name.
- The **Timing Contours** screen can show contour arrows that indicate the blast direction from the highest timing to the lowest timing. The arrows point towards the lower timing zone and can be shown or hidden from the **Layers** toolbar. The arrow size and spacing can be adjusted in **Local Settings**, and the arrow colour is controlled by the **Contour - Arrow Colour** item in **Initiation Colours**. Electronic contour line colours continue to use the applicable Z timing zone colours.

Blast costs

- The zoom level can be adjusted in the **Blast Cost Items Maintenance** screen.
- Product costs can be exported to CSV, updated outside DataBlast and imported back into the **Product Costs** tab with a selected effective date.

Custom properties enhancements

- The **Expression Editor** displays the value resolved for each field when testing a calculated custom property expression, including *Null* values. Test values can be edited and the expression retested to help diagnose a *Null* result.
- The **Expression Editor** is easier to use, with drag-and-drop insertion of value fields, functions and measurement unit converters; search filters that persist for the current login session; functions grouped for easier browsing; and specific *Integer*, *Double* and *Decimal* labels for numeric value fields. Expressions also use syntax highlighting for text strings, numeric values, function names and data field names. The colours can be customised in **Local Settings**.
- Calculated custom property expressions include more string, date and time, list, geometry, resource and data type conversion functions, with canonical names and aliases for compatibility. Resource custom properties can also be defined with a resource type.
- Custom property definitions maintenance supports showing and hiding inactive items, and custom property definitions can be activated or deactivated from the **Active** column. If an inactive custom property definition is reactivated and its field name conflicts with another active custom property definition, the **Custom Property Definition** screen displays so that a unique field name can be entered.
- Custom property values can be populated into the DataBlast Reporting database and exposed through selected reporting views.
- User-editable custom properties with a *String*, *Integer* or *Decimal* data type can use a property-specific list of fixed values. Administrators can require users to select a listed value, allow users to enter other values and optionally add new user-entered values to the list automatically.
- User-editable custom properties with an *Integer* or *Decimal* data type can restrict values to a range, an interval or both. Default values and user-entered values are adjusted to comply with the selected restrictions.

BlastPad enhancements

- In BlastPad, Load activity operators can select a stemming truck as secondary equipment and load aggregate products without changing to the Backfill activity. If secondary equipment is not selected at login, BlastPad prompts for aggregate equipment when the operator adds an aggregate deck.

- The StemSafe and Bowton truck plugins and the related settings controls were removed from BlastPad, because these truck-control interfaces are no longer supported.

DataBlast Ignite

- The DataBlast Ignite demo database has been updated with electronic initiation examples. Demo database templates have also been updated so export data sorts by **Hole Identifier** by default, and older CAD and report templates use the current logo templates.

MineTrust integration

- MineTrust integration is temporarily disabled while MineTrust is being made ready for integration with DataBlast. The MineTrust connector panel, local MineTrust settings and MineTrust custom-property options are not available in this release.

Defect fixes

- An issue was fixed where some fixed Designer layers, including surface and burden check layers, were locked and could not be unlocked from the **Layer Control** screen.
- An issue was fixed where DM and DMX wireframe files could fail to import correctly if their point indexes started at 0 instead of 1.
- An issue was fixed where generating a burden report from an unsaved drill pattern could produce an empty report. DataBlast now prompts you to save the pattern before generating the report.
- An issue was fixed where printing a CAD view to PDF could display a **Cannot Open PDF File** error after the PDF was generated successfully. DataBlast now opens the generated PDF using the Windows default PDF viewer.
- An issue was fixed where timing contour lines could use the white background colour in the CAD view, making them difficult to see on dark backgrounds. Timing contour lines now use the appropriate display colour in the CAD view and the white background colour when printed.
- An issue was fixed where saving electronic timing exports from the **Initiation** module could fail if the default save location was a protected installation

folder. Timing exports now open from a user-writable location and handle restricted save paths more reliably.

- An issue was fixed where added or edited mobile vibration monitor points did not always display correctly after switching away from and back to the **Initiation** module.
- An issue was fixed where **Average Burden** and **Average Spacing** could print as zero on firing pattern CAD print borders. DataBlast now recalculates and repairs stale burden and spacing values for affected patterns, with progress shown during the startup repair if it takes more than a moment.
- Performance was improved for calculated custom properties, making the **Properties** panel more responsive. An issue was also fixed where expressions that used string concatenation could display incorrect values.
- An issue was fixed where editing custom property definitions in **Site Maintenance** could cause problems with CAD print border item categories and language-resource names or descriptions.
- An issue was fixed where opening **Product Maintenance** from the **Initiation** module could cause an exception in some non-electric detonator scenarios.
- An issue was fixed where rows made inactive in some maintenance grids could keep inactive styling or fail to hide correctly when **Hide Inactive Items** was selected. Inactive row styling and filtering are now more consistent across Product Maintenance and Charge Standards maintenance screens.
- Licence checks at startup are now logged more reliably, including failed checks, regardless of the configured log level.
- An issue was fixed in DataBlast Pro where Charge Standard Application service settings did not populate correctly and edited processing delay and timeout values were not saved reliably.
- An issue was fixed where the **Edit Colour** button did not work for string-value fields when mapping block model data during import.
- An issue was fixed where BlastPad base file generation did not populate the Seam table in the generated pattern data for drill patterns with applied G-Blast charge standards.
- An issue was fixed in DataBlast Ignite where removing the last hole from a **Charge Pattern** could fail if the removed hole had as-built deck data. A related issue was also fixed where a base **Drill Pattern** could not be deleted after its child patterns had been cleared. Charge patterns can now be saved correctly after all holes are removed, and saving charge pattern metadata no longer changes hole membership.
- An issue was fixed in DataBlast Ignite where creating a new SQLite mine site by copying from an existing mine site could fail when Measure Sheets were

selected. SQLite mine site filenames are now also checked earlier so duplicate database names are reported before creation starts.



DataBlast 2.13 hot fix release notes

DataBlast 2.13 hot fix 1 (April 2026)

Defect fix

- An issue has been fixed in DataBlast Pro where creating or saving a mine site could fail during database setup when the Windows display language was set to a supported language other than English, because some translated mine site role names or site details could exceed the allowed field length. The **Mine Site Role > Role Name** maximum length has been increased from 50 to 100 characters, and related text input controls now apply the same limits. This prevents errors during database setup, site maintenance, and database conversion in languages such as French.

DataBlast 2.13 release notes (March 2026)

Blast costing

- DataBlast includes a new module for blast costing, which allows users to define unit costs and generate blast costing reports for selected patterns.
- Blast costs can be maintained as general cost items (for example, per pattern, per hole, per hole detail or per charge deck) and as product-linked costs (for example, explosives and accessories). Access to blast cost items maintenance is via the DataBlast Application Menu.
- Product costs are effective-dated, and historic entries are retained automatically when prices change, so reports can be generated using older prices when required.
- The Blast Costing Report can be run from the **Reports** ribbon tab for one or more selected patterns in any module. One of the selected patterns must be the active pattern.
- The report date controls which effective-dated prices are used. To compare costs at different times, run the report multiple times using different report dates, then compare the generated outputs.
- Blast costing calculations can be based on design data and/or as-built data (where available), depending on how cost items are configured.
- Blast Costing Report templates can be imported. The **Data Dictionary: Blast Costing Report** topic in the DataBlast help describes available data for report design.

User interface enhancements

- The **Local Settings** screen has customisable colour options for detonator cord product buttons and initiation analysis deck-per-delay graphs.
- To improve usability of the **Local Settings** screen, all colour-related controls have been consolidated onto a new dedicated **Display Colour** tab, and the CAD View and CAD Drawing/Rotation settings have been combined onto a single **CAD View** tab.

CAD enhancements

- The **View** toolbar has three states for how triangulations display: render, shade and 3D wire-frame. The render display mode displays mesh-texture images if available, otherwise rendering meshes like the shade display mode.
- Textured wireframe importing has been improved so that multi-texture OBJ models (and other supported wireframe formats) are imported as a single polyface, matching the behaviour previously available with PLY files. This prevents models from being split into multiple sub-meshes and making them easier to use as a single, uniform surface in DataBlast.
- A new local CAD local setting has been introduced for draw timeout (**Timer Break for Draw**) to improve how textured wireframes render on different machines. The default has been increased from 40 ms to 100 ms, giving OpenGL more time to complete redraws and significantly reducing the 'tearing' effect when rotating large textured surfaces and polyfaces.
- Pattern boundaries can now be drawn using a new VDraw Alpha Shape method that more closely follows ('hugs') the outline of holes, improving visual accuracy in CAD views such as pattern boundaries, XY zones, and timing design. This option is enabled by default (with a default cutoff value) and can be turned on or off in Mine Site settings. When enabled, multiple boundary loops are supported by drawing all generated boundary items with a connecting line and a single pattern name arrow, while existing workflows that rely on the original boundary retrieval method can continue to use the previous approach.

Charging enhancement

- An option to **Treat Wet Holes as Dewatered** has been added to conventional and G-Blast charge standards (with a mine-site default for new charge standards) to support sites where wet-hole charging needs to follow dewatered behaviour. When enabled, wet holes are charged using the wet explosive up to the wet level plus an extra cover amount, and then the standard (non-wet) explosive is used above that, improving consistency and control for this non-standard workflow.

System administration

- When configuring custom property definitions, for *Boolean*, *Decimal*, *Integer* and *String* data types you can specify whether to use a default value and enter the default value. The custom property displays the default value on all targeted items until selectively changed by the user in the Properties Pane.
- When making changes to site coordinate settings, GPS references or drill offset settings, a verification prompt displays when saving the changes and the changes are logged with the date and the username of the person making the changes.

MineTrust integration

- The **Local Settings** screen includes general and support settings related to MineTrust integration and the **Utilities/View** ribbon tab includes an icon to show or hide the **MineTrust Tree**.
- A startup prompt has been added to DataBlast Client (Pro) and Ignite to help users configure the **MineTrust Root Directory** when MineTrust is installed but no root path has been set in local settings. This ensures the integration can be configured immediately on first run, with the selected location validated for suitable access so MineTrust files can be created and managed reliably.

Note: MineTrust integration in DataBlast is under development and will be documented in a future version. These settings are currently only for beta testing purposes.

Defect fixes

- When users rearranged dockable panels, the Items Tree would briefly disappear even if the tree itself was not being moved, which created an unnecessary and distracting visual flash during normal panel dragging. The Items Tree is still temporarily hidden when its own dockable panel is dragged to prevent flickering on large mine site databases, but it no longer hides when other panels are moved, making panel layout changes feel smoother without reintroducing repaint or accidental drag-and-drop issues.
- Textured wireframe models imported from DM/DMX files could previously be split into multiple sub-meshes, making them harder to use and manage as a

single uniform surface. The import process has been updated so textured DM/DMX wireframes are brought in as one polyface with correctly mapped textures (using the texture index rather than a colour face element), and textures continue to display reliably even if the source image files are later renamed or moved.

- An issue has been fixed where changes made in Mine Block Designer (such as importing a model, adding CAD objects, or editing properties) could be lost after clicking Save Changes, causing the CAD view to clear and previously edited values to revert. Saving logic has been corrected so mine block data is fully persisted as expected, ensuring CAD objects and property updates remain intact after saving.
- When creating Design Lines (Pit Shell) in DataBlast Pro using a SQL Server database, attempting to add an item with the same name as an existing one could trigger an exception dialog instead of a clear "name already in use" message. This has been fixed by improving SQL Server error translation and adding explicit duplicate-name checks for design lines, surfaces, and mine blocks so users now receive a friendly, localised message and can resolve the conflict by choosing a unique name.
- When designing a new drill pattern, collar hole flags (such as misfires) on nearby existing patterns were not displayed, making it difficult to identify flagged holes while working in the designer. This has been fixed by ensuring the required measurement display mode is included for holes shown from other patterns in the designer, so flags now appear correctly on adjacent patterns while the pattern being edited continues to display in design mode.
- An issue was identified where Stimulsoft charge sheet reports using ChargeProducts.QuantityAsBuilt continued to show explosive quantities that had been removed ("unloaded") in BlastPad, which could make as-built totals appear too high. The report data sources for as-built hole decks have been updated so unload operations are represented as negative versions of the unloaded decks (with corresponding negative mass, length, and load quantity), ensuring printed charge sheets now reflect the true as-built outcome after unloads, including multiple unloads on the same hole.
- Vibration monitor points were not appearing on the Initiation main 3D screen unless users opened vibration analysis, which made it difficult to quickly confirm monitor locations while reviewing a pattern. The restriction that only displayed monitor points for electronic patterns has been removed, so mobile and fixed monitor points now display correctly on the main screen for both electronic and non-electric patterns (with existing behaviour still applying where a pattern reload may be required after adding points).
- When displaying vibration monitor points, the label text was incorrectly drawn at RL 0 while the target point, text boundary box, and connecting arrow were

positioned at the pattern's average RL, causing the annotation to appear misaligned. The drawing logic has been updated so the text now uses the same pattern average RL as the other monitor point elements, ensuring the entire monitor point display is aligned correctly.

- In Product Maintenance, changing the core load value for a detonating cord product and then selecting Abandon Changes did not always revert the value in the grid, leaving the edited number displayed even though it was never saved. The abandon/revert logic has been updated to also discard changes on the embedded DetonatorProduct record, so core load values now reliably return to the original value when changes are abandoned.
- An issue in Product Maintenance for non-electric detonators has been fixed where a length's display name could appear to match the auto-generated product name but was actually stored as a site-specific override, preventing that length name from updating when the parent delay value was changed. The system now automatically clears these redundant overrides when they exactly match the generated name, ensuring length display names reliably update after delay edits.
- An issue in the Ignite (SQLite) database layer meant that when users removed holes from an initiation pattern and the removal left zero holes in the pattern, the change was not saved and the pattern would reload with the holes still present. This has been fixed by removing the conditional logic that skipped the update when no holes remained, so hole removals (including removing all holes) now reliably persist after Save Changes in Ignite SQLite.
- After converting large DataBlast Ignite SQLite databases to SQL Server for use in DataBlast Pro, some sites could retain Ignite-specific drill log importer service control entries that are not appropriate in Pro and could lead to incorrect service behaviour until reviewed. The database converter has been updated so the ServiceControlDrillMachineImport table is excluded from the copy and is left empty after conversion, ensuring Pro starts cleanly and allowing administrators to configure only the required importer settings.
- An issue has been fixed where saving changes in Site Maintenance > Custom Property Definitions in DataBlast Pro (SQL Server) could fail with a "SqlDateTime overflow" error after duplicating or adding a new definition, applying it, and then re-editing it before saving. The maintenance workflow now preserves the Added state for new definitions until they are saved (so the change date is set correctly), ensuring Save Changes completes reliably without triggering this database error.
- An issue was identified where DataBlast Server could fail while processing incoming BlastPad files created by an older version, resulting in the file being rejected with a processing error. DataBlast now automatically upgrades the embedded hole-storage data used by BlastPad files (including generic

upgrades when columns have been appended) and provides clearer handling when incompatible data is encountered, so files are processed more reliably and any genuinely invalid files are moved to the error folder without interrupting other imports.

- The names shown for some DataBlast components in Windows "Installed apps" were inconsistent (for example, the server installer name did not match the "Datamine DataBlast Server" service name) and several installers were missing the Datamine prefix. All installers have now been updated so the installed application names are consistently prefixed with "Datamine" and the server installs as "Datamine DataBlast Server", with these changes applying cleanly to both fresh installations and upgrades.
- When the DataBlast service was connected to a Reporting Database with an incompatible version, the service could fail with a misleading message such as "Invalid column name 'ReportingStartOfWeek'," making it unclear that a version mismatch was the real cause. The service now checks the Reporting Database Population version during startup and, if it does not match, displays a clear "Incorrect Reporting Database Version" message showing the required and current versions along with upgrade guidance so customers can quickly resolve the issue by upgrading either the Reporting Database or the service.



DataBlast 2.12 hot fix release notes

DataBlast 2.12 hot fix 3 (October 2025)

Defect fix

- Annotations could not be added from DM files because the system was incorrectly performing texture checks, even when no texture data was present. The DMFile class has been updated to correctly handle cases without texture data, ensuring that null texture lists are safely ignored and annotations can now be imported without error.

DataBlast 2.12 hot fix 2 (September 2025)

Defect fixes

- Some drill machine exports were using reporting pattern names instead of drill pattern names, making it difficult to identify the source of faults in the Drill Machine Fault Log. The log now includes both reporting patterns and drill patterns, improving visibility and traceability of imported data.
- Intermittent network issues could cause license checks to fail, unnecessarily blocking access to the software. A three-attempt grace failure has been added to the license check to prevent disruptions from brief network outages.
- Licenses were not being released when the DataBlast Service or executable was terminated, which could lead to license availability issues. A stop call to the License Manager has been added to ensure licenses are properly freed when the service or executable exits.

DataBlast 2.12 hot fix 1 (September 2025)

Defect fixes

- An issue was identified where the `SerializableVector` class was not correctly handled by the coordinate system serialiser, which could lead to errors when users created a custom coordinate system. Projection plane and alignment data are now correctly saved and restored, enabling reliable projection of drill patterns onto complex design surfaces.
- Changes were made to the Sandvik drill integration to fix issues with the display of items being processed and the unit of measure of diameters.



DataBlast 2.12 release notes (September 2025)

Design module enhancements

- When importing a drill pattern from a CSV file, you can map a column to a custom property that is configured with a **Target** of *Hole* and a **Data Type** of *Boolean*, *Decimal*, *Integer* or *String*. This column mapping can be saved in a drill pattern import template.
- Textured wireframe data can be imported from PLY, OBJ, DM or DMX files. If you are importing a wireframe with more than one texture, a prompt displays giving you the choice to import each texture as a wireframe or to import a single non-textured wireframe.
- When importing a wireframe, a progress bar displays the status of the import.

CAD enhancement

- Previously, after you entered print mode you could not change which layers were shown, making it difficult to declutter pattern and analysis printouts. You can now open the **Layer Control** screen while in print mode to show or hide layers for the print or PDF.

Sandvik OptiMine drill machine interface

- This release introduces the Sandvik OptiMine interface for exporting hole designs and importing drill logs from Sandvik systems. Both DataBlast Pro and DataBlast Ignite can export to Sandvik systems. Only DataBlast Pro can import drill logs.
- When recording data about drill machines and operators for Sandvik OptiMine, use the same fields as for Atlas Copco. These fields are also in the Reporting Database.

Installation

- The Datamine Table Editor was not previously included with the DataBlast Pro Workstation and Ignite installers, which meant customers sometimes needed to install it separately to open DM or DMX files directly. The installers have been updated to install the Datamine Table Editor if required, ensuring that DM and DMX files open correctly without any additional setup.

Defect fixes

- Several stability issues were identified in the DataBlast Ignite SQLite database, including missing foreign key enforcement, duplicate rows in key tables, incorrectly reused foreign key names, and the insertion of empty GUIDs in the **HoleDetail** table. The database upgrade process now corrects these issues by restructuring affected tables, cleaning duplicate and invalid data, and enforcing foreign key and unique constraints to ensure data consistency and prevent future violations.
- When the **Line Drawing Method** was set to *Quality* in **Local Settings**, initiation boundaries displayed incorrectly with distorted lines. The **Line Drawing Method** and the unrelated **Double Buffered OpenGL** setting have both been removed, and line rendering is now always performed using the reliable *High Speed* mode to ensure consistent display across all patterns.
- An error occurred when saving a drill pattern in the Drill Pattern Designer, caused by an invalid attempt to convert internal data (a GUID) into a string during XML serialisation. This issue has been resolved by correcting the serialisation logic, ensuring drill pattern state can now be saved without error.

DataBlast 2.11 release notes (August 2025)

Note: DataBlast 2.11 is not a general release and is intended solely to fulfil the requirements of a specific customer.

Support utility for upgrading from DataBlast Ignite to DataBlast Pro

- A new utility has been developed to support upgrades from DataBlast Ignite to DataBlast Pro by converting site databases from SQLite format into a consolidated SQL Server database. This DataBlast Pro Database Converter is intended for Datamine support use only and is included with the DataBlast Server installation to streamline upgrade processes for supported customers.

Performance improvement

- Loading large objects such as surfaces from the SiteObjectData table in the SQLite database was slow and memory-intensive due to inefficient byte array handling. The loading process has been optimised to use a more memory-efficient method for assembling chunked data, significantly improving performance and reliability when dealing with large data objects.

DataBlast 2.10 release notes (July 2025)

DataBlast licencing

We are introducing a more flexible licensing model for DataBlast Pro to provide sales teams and customers greater control over features and pricing. The new model is designed to allow customers to purchase only the components they need.

New licensing option: DataBlast Pro Starter

A new licence type, DataBlast Pro Starter, has been added. It includes one DataBlast Workstation licence and allows customers to selectively purchase additional features. These add-ons include:

- BlastPad: Enables support for BlastPad tablet devices.
- Reporting: Activates the Reporting Database for aggregated data insights.
- Drill Import: Allows import of drill logs from supported systems.

Continued availability: DataBlast Pro Core

The existing DataBlast Pro Core licence remains unchanged. It includes all features and one DataBlast Workstation licence. This option matches the original DataBlast Pro licence and is ideal for customers who want full functionality out-of-the-box.

Add-on licences

Additional workstation and BlastPad licences can be purchased as needed:

- Workstation Add-On: Adds a DataBlast Client on an extra machine.
- BlastPad Add-On: Adds BlastPad functionality on a specific tablet device.
Note that neither Core nor Starter licences include BlastPad by default.

DataBlast Ignite

The DataBlast Ignite product continues as a single-machine solution with a one-licence-per-machine model. It supports multiple users on the same machine (but only one user at a time) and remains unchanged in this release.

DataBlast Ignite SQLite database transition

- DataBlast Ignite now uses SQLite as the default database format for new mine site databases, replacing the previous LocalDB approach. This change is designed to be seamless for users. Installation steps remain unchanged. Existing LocalDB-based databases can still be restored and will be automatically converted to SQLite on restore. SQLite databases are stored in a new folder (with _db appended to the folder name) to avoid conflicts with older cleanup routines. Backup files now use the ZDB extension for SQLite, whereas ZBK remains in use for LocalDB. Users will see all available backups in the backup list, with both formats supported for restore.

WencoMine drill machine interface

- This release introduces the WencoMine interface for exporting hole designs and importing drill logs from Wenco systems. Both DataBlast Pro and DataBlast Ignite can export to Wenco systems, with separate configuration available for WencoLite and WencoMine. Only DataBlast Pro can import drill logs.
- For DataBlast Pro, WencoMine enables a direct database connection via a connection string, replacing the manual script setup in the previous Wenco drill machine interface. The WencoMine interface uses a timestamp field to track the last imported record, ensuring more reliable data capture and automating reprocessing where required. The previous interface is still available, and has been renamed WencoLite.
- The drill machine configuration screens have been reorganised. For DataBlast Pro, the drill offset fields and Wenco GPS references, which were previously in **Site Maintenance > Mine Site Settings > Site Coordinates**, have been moved to dedicated tabs under **Site Maintenance > Service Control > Drill Machine Import**.
- For DataBlast Ignite, the **Site Maintenance > Mine Site Settings > Site Coordinates** tab has been simplified. The drill offset and Wenco GPS references have been removed because they relate to the drill log import functionality only available in DataBlast Pro.
- Fields for both WencoLite and WencoMine are available when recording data about drill machines and operators. These fields are also in the Reporting Database.

Design module enhancement

- You can import block models and load drawing files using the new Datamine DMX file format. This enhanced format supports extended attributes, Unicode characters, and integrated metadata, allowing for seamless data management. Additionally, it accommodates up to 2048 columns per file while delivering significantly reduced file sizes, optimising both performance and storage efficiency.

Drill module enhancement

- When processing drill log faults, the **Discard Invalid Collar / Toe GPS** setting enables a hole to be matched while ignoring the logged collar and toe GPS locations.

Measure module enhancement

- Previously, generating a backfill sheet always created a backfill pattern with a random selection of holes marked for check dip, and calculated backfill quantities only used dip depths, which sometimes limited workflows. Now, a simplified backfill option allows users to create backfill sheets without generating a backfill pattern, and backfill calculations can use any available measured depth, streamlining data entry and improving flexibility in backfill management. The **Simplified Backfill** and **Use Any Measured Depth when Calculating Backfill** options are in the advanced mine site settings.

Initiation module enhancements

- A **Process Firing Radius** option has been added to the Decks Per Delay analysis to improve safety checks during blast initiation design. When enabled, this highlights drillholes firing within the same delay window that are also within a specified **Firing Radius** distance. Holes within this proximity display in red, indicating potential high-energy interaction risks such as fly-rock, while those firing at the same time but outside the radius are blue. This visual proximity warning makes it easier to identify dangerous neighbouring holes.

- In the **Detonator/Cord Selection** screen, the detonators and cords display only two levels deep, making it quicker to find the products you want to use.
- When exporting initiation timing to a CSV file, the separator character aligns with your Windows regional settings. For example, it uses a comma for English (Australia) or a semicolon for French (Canada).

System administration enhancement

- In the configuration of non-electric detonator delays, detonating cords and lead-in lines, a preview shows how the button will look in the **Detonator/Cord Selection** screen when tying up a non-electric initiation pattern.

User interface enhancements

- For DataBlast Pro, the **About** screen displays the Server connection status and a list of the licensed components.
- The **Hole Search Filter** is hidden while in **Product Maintenance** or **Site Maintenance**. If the **Hole Search Filter** was visible before entering product or site maintenance, then it is restored when exiting the maintenance screen.

Defect fixes

- A problem was identified where connection files produced by later versions of DataBlast could not be deserialised by the Service, causing it to overwrite the file with a null connection string and fail silently. This has been resolved by implementing a common serialisation method based on XmlSerializer.
- The **Dip Entry** screen was always forced to the front of all windows on a user's desktop, preventing them from interacting with other applications while the screen was open. This has been fixed by updating the base entry form so that Dip, Drill, and Backfill entry forms are now modal only within the DataBlast application and no longer remain topmost over all other applications.
- An issue was identified where using the CAD **Offset** tool to offset polylines with bulges multiple times would result in incomplete or incorrect offsets, with parts of the lines missing in the final offset. The tool has been updated to use the new CmdOffsetEx command, which correctly processes bulges in polylines to produce accurate curved offsets.

- When editing an imported drill pattern and adding an excavation surface, the grade intercept depth on holes created outside **Drill Pattern Designer** was not being set because these holes were not marked as design holes during loading. Now, holes created outside **Drill Pattern Designer** are updated with the design property when loading into **Drill Pattern Designer** to ensure all inferred values, including grade intercept depth, are correctly assigned and saved.
- An issue was identified where upgrading a database linked to the Wenco drill importer could fail if the Wenco linked server did not exist, such as when restoring a test backup to a different SQL Server instance. A new option has been added to the Wenco Setup batch file to remove WencoLite synonyms and disable the importer, ensuring database upgrades and setup run smoothly even on test or restored environments.

DataBlast 2.9 hot fix release notes

DataBlast 2.9 hot fix 3 (November 2024)

Defect fixes

- When applying a new charge standard that changes the initiation system type, the affected holes are now correctly removed from the initiation pattern.
- An issue has been fixed in the Initiation Module where displaying an initiation pattern containing objects from an invalid primer type caused an exception.

DataBlast 2.9 hot fix 2 (November 2024)

Defect fix

- An exception error during initiation caused by a missing Z timing zone in electronic charge standards has been fixed. When upgrading from DataBlast 2.9.29, any electronic charge standard (either global, or applied to a pattern or hole) that has an explosive deck missing a Z timing zone will have the default Z timing zone applied. If any explosive decks were fixed, but the database has multiple Z timing zones defined, a warning displays during the database upgrade.

DataBlast 2.9 hot fix 1 (November 2024)

Defect fixes

- Holes can be moved from one charge pattern to another, but the holes were being retained in both patterns. Now the holes are removed from the original pattern.
- An issue has been fixed where a missing interface caused an exception error when exporting data to a Jigsaw drill navigation system.
- An issue has been fixed with saving changes to the database after applying a charge standard in DataBlast Ignite.
- Changes have been made to the permissions that are set during installation for the Datamine folder and the DataBlast subfolders in *ProgramData* to ensure that every user has full control.

DataBlast 2.9 release notes (October 2024)

Documentation

- The CHM help has been replaced with HTML5 help. During installation of DataBlast, a local copy of the help content is saved to the **Help Files** subfolder of your installation folder.
- The **Local Settings** screen includes a setting to control whether to use the local copy of the help or the latest online content from <https://docs.dataminesoftware.com/DataBlast/index.htm>. The default setting is to use the online content.
- DataBlast has context-sensitive help. When you press **F1**, the help displays content relevant for the active module or screen. You can edit the help base URL if required in the **Local Settings** screen.
- Descriptions of the views available in the DataBlast Pro Reporting Database have been added to the help.

Firing module

- DataBlast includes a new module for firing patterns, which allow users to map firing plans with annotations and ranges.
- A firing pattern consists of holes from one or more authorised initiation patterns. A hole can only be in a single firing pattern. All holes from an initiation pattern must be added to the same firing pattern. The authorisation cannot be removed from an initiation pattern if the initiation pattern is assigned to a firing pattern.
- The advanced mine site settings include a setting to specify a **Flyrock Factor of Safety**. DataBlast calculates the flyrock distance and multiplies the result by this factor of safety.

Note: Flyrock range calculations depend on accurate data being available for charge design and implementation (explosives, deck lengths, and so on). DataBlast's flyrock range calculations cannot account for wrong or poor charging instructions, geological faults or rock types that have not been mapped.

- The **Layers** toolbar has icons to toggle the display of scaled depth of burial, flyrock range with factor of safety and flyrock circle range with factor of safety. These icons display in the **Charge** and **Firing** modules.
- A flyrock safety boundary can be created for a firing pattern. This boundary displays as a polyline that encloses the flyrock circle range of all the holes in the firing pattern.
- The **Local Settings** screen includes a setting for the firing pattern boundary offset factor.
- CAD print borders specific to the firing module can be created.
- If you select a hole in the **Viewport**, the **Properties Pane** displays the firing pattern of the hole (if applicable) in the **Hole** category; and the flyrock range, flyrock range with factor of safety and the scaled depth of burial in the **Charge** category.
- If you select a firing pattern in the **Viewport**, the **Properties Pane** displays the maximum flyrock range with factor of safety in the **Charge** category.

BlastPad drill collar elevation entry

- When entering drilling data in BlastPad, the design **Collar RL** can be overridden.
- In DataBlast Pro, the **BlastPad Drill Toe Fixed to Design Toe** hole property controls how updating the collar RL of a hole via BlastPad impacts the toe position of holes. If *True* (default) and the collar RL is changed via BlastPad, the hole depth, angle and bearing are recalculated to preserve the fixed design toe position. If *False* and the collar RL is changed via BlastPad, the drill toe position is recalculated using the entered data.
- This hole property is editable via BlastPad, where it is called **Fix to Toe Point**.
- When filtering displayed holes in the **Viewport**, the list of boolean flags includes *BlastPad Drill Toe Fixed to Design Toe* and *BlastPad Drill Toe Not Fixed*.

Design module enhancement

- When added as an annotation, Datamine drill hole DM files are inserted as polylines. The XProperty tag of the polyline indicates the drill hole ID.



Custom properties enhancements

- Custom properties can be defined for a specific hole pattern type; for example, drill patterns, charge or firing patterns.
- In an upgrade to DataBlast 2.9, any existing text strings for CAD print borders (that have values) are converted to custom properties with the **Target** of *Mine Site*, the **Data Type** of *String* and the **Category** of *CAD Print Border Text*. The **Field Name**, **Display Name** and **Description** indicate the CAD border and specific layout (*P* for portrait or *L* for landscape) if applicable. This specific configuration is to identify the converted text strings. New custom properties do not require this configuration to be used in a CAD print border. Default values can be edited for converted text strings under **Site Maintenance > Mine Site > Mine Site Settings > Custom Properties**.
- When editing or deleting a custom property definition that has been used in another object (for example, in the calculation expression of another custom property definition, in a hole properties export template, in a text report or in a CAD print border), a warning displays and the custom property definition cannot be deleted.

System administration enhancements

- To facilitate data transfer between mine site databases, you can export or import the configuration of selected charge standards and their associated products and Z timing zones.

Note: G-Blast charge standard configuration includes strata (also known as seams). These strata are not exported because they relate to geological data specific to a site. If you export a G-Blast charge standard, dependent G-Blast components and the conventional charge standard that is used when there are no strata intersections are exported. If you import that exported G-Blast charge standard, you need to edit it to select appropriate strata before the G-Blast charge standard diagram can display and the G-Blast charge standard can be used.

- When configuring a conventional charge standard, a warning displays if a fixed-length inert deck in any charge standard definition is less than the **Minimum Stemming** length specified in the charge standard parameters.

- In a CAD print border design, a dynamic text object displays as <<PROPERTY_DISPLAY_NAME>>.

System requirements and installation

- .NET Framework 4.8 is required for any installation of DataBlast.

DataBlast licensing

- DataBlast Pro licensing has been simplified. A **DataBlast Pro Core** licence includes a single licence for **DataBlast Pro Workstation**. An additional **DataBlast Pro Workstation** licence is needed for each additional client installation. Also available are **DataBlast Pro BlastPad** licences for each device running BlastPad.
- Licensing for **DataBlast Ignite** is unchanged.
- The **About** screen displays the licence or maintenance expiry date.

Defect fixes

- When filtering holes, selecting the *None* option in the **Flags** or **Statuses** lists deselects all other items in the list.
- Validation of custom property date input has been improved to accept only a blank value or a valid date from 1970 onward.
- The **Text Border Items Override** screen now lists the custom properties, and their default/calculated values, used by any of the text fields in the CAD template that is being used to print the drill pattern. The custom property values can be edited to replace the value for the current print operation.
- When registering a polyline to a surface, an exception error could occur. This issue has been resolved with the update to newer VectorDraw libraries.
- When selecting entities from a polyline in a DXF file, an object reference error could occur. This issue has been resolved with the update to newer VectorDraw libraries.
- An error could occur in the Reporting database if charge delivery dockets had duplicated docket number values. Unique docket numbers are now required

and on upgrade, any existing duplicates have a suffix appended to force uniqueness.

DataBlast 2.8 hot fix release notes

DataBlast 2.8 hot fix 2 (April 2024)

Defect fix

- An issue has been fixed in the **Drill Fault Log** where the selected value in the **Drilled Diameter** override option was not correctly applied to the matched hole.

DataBlast 2.8 hot fix 1 (April 2024)

Custom properties

- When exporting hole properties, custom properties (with a **Target** set to *Hole*) can be included in the exported data.



DataBlast 2.8 release notes (February 2024)

Documentation

- The Installation Guide for DataBlast Pro has been entirely rewritten. The Installation Guide now only includes activities that are required for the installation and configuration of the DataBlast Server, DataBlast Clients and BlastPad devices. Activities that are performed in the DataBlast Client (including Service Control activities) or in BlastPad have been moved to the full DataBlast Pro help.
- The DataBlast help includes the full data dictionary for text reports that can be created using the in-built Stimulsoft Report Designer.
- The DataBlast Pro help includes basic documentation of BlastPad functionality.

Custom properties

- In addition to the many pre-defined properties in DataBlast, you can define custom properties for your mine site, mine blocks, hole patterns and holes. For example, you can use custom properties to identify holes that require a particular implementation, such as pre-split or probe holes. Custom property values can be either user-editable or calculated.
- Before you can view or enter values for a custom property, you must configure the custom property definition. The custom property definition includes the applicable object type; the field name as it will be stored in the database; one or more language definitions; the data type and a format string for that data type if required; the expression to calculate the value if required. For each language, you can define the category name under which the property displays, as well as the display name and description.
- You can view and edit custom property values in the **Mine Site Custom Properties** screen and **Site Maintenance** (for mine site custom properties) or in the **Properties Pane** (for mine block, hole pattern and hole custom properties).
- Custom properties can be included in text reports and CAD print borders.

- For DataBlast Pro, the *Custom Property Definitions* permissions can be used to control who can maintain custom property definitions and edit values for custom properties.

Imperial measurement support

- When you create a mine site database (for DataBlast Ignite) or set up the DataBlast Pro database, you can choose whether to use metric or imperial measurements.
- The selected measurement type impacts the entire user interface of DataBlast. For example, whether hole depths are in metres or feet, the pre-configured drill diameters, the units of measure for products, and the definition of charge standards.
- If you import product configuration from an export with a different measurement type, DataBlast converts the specifications. For example, if you export products from a metric mine site and import the products into an imperial mine site, the imported specifications are in imperial units of measure.

Note: For DataBlast 2.8, the **Fragmentation** utility is only compatible with the metric measurement type.

Modal screens and support for multiple monitors

- Modal screens can be moved to another monitor, making it possible for you to view your drill pattern at the same time. Many areas of DataBlast functionality have been converted to display in modal screens.
- The **Inventory** and **Fragmentation** utilities are now separate screens with the previous ribbon menu options replaced by buttons on the screens.
- Data entry for drill logs, dip data and backfill data now opens in a separate screen. The ribbon menu options for each screen have been replaced by buttons on the screen, and selected text zoom levels are retained.
- Exporting hole data to CSV and exporting holes to a surface are now in separate screens. The ribbon menu options for each screen have been replaced by buttons on the screen.

- If you have changed your monitor configuration (number of monitors or their layout) since you last used DataBlast, a prompt displays on start-up asking if you would like to reset the DataBlast layout.
- The sizing and positioning of dockable tool panes has been reviewed to ensure that the dimensions of each pane always stay above a practical minimum size.

Streamlined menus and navigation

- The quick access toolbar above the ribbon menu has icons to **Refresh**, **Exit...Maintenance**, **Save Changes**, **Abandon Changes**, **Print**, **Undo** and **Redo** as applicable for the context.
- The quick access toolbar includes icons to collapse or show the ribbon menu.
- The module selection tabs for the **Design**, **Drill**, **Measure**, **Charge** and **Initiation** modules have been moved to the left of the **Viewport** by default. You can control this placement with the **Main Menu Tab Position** setting in the **Local Settings** screen.
- Access to the **Fragmentation** and **Inventory** utilities has been moved to the **DataBlast** application menu.
- The options on the **BlastPad** ribbon menu have been moved to the **DataBlast** application menu.
- The order of options in the **DataBlast** application menu has been changed to prioritise more common options.
- The icons on the **DataBlast** application menu have been modernised.
- The options on the **Export** ribbon menu have been moved to the new **Utilities/View** ribbon menu. This menu also has options to show or hide various dockable panes in the user interface to help you maximise the display of your patterns in the **Viewport** when required.
- The **Export to Blastplan** option was removed from the **Charge Loading** ribbon menu.
- The icons on CAD toolbars and menus have been modernised and made 24x24 px by default. You can control the size of toolbar icons with the **Use Large Toolbar Icons** setting in the **Local Settings** screen.
- The appearance and navigation of the **Local Settings** screen have been improved with a new tabbed layout.

Dynamic hole filtering

- The functionality previously on the **Hole Filter** ribbon menu has been transformed into a dockable pane, by default at the bottom of the user interface. When active, the **Hole Search Filter** dynamically filters the display of holes in the **Viewport**; that is, as you change filtering options, the drill pattern in the **Viewport** is immediately filtered. You can still set ranges for numerical filters; search by linked resources, such as drill machines or operators; and filter by boolean flags and statuses. Saving and managing hole filter search templates has been simplified.

CAD viewport enhancements

- The fixed CAD circle cursor has been improved to allow customised drawing of multiple circles at fixed spacings and/or to draw a fixed crosshair with tick marks to denote spacing. As a result of this enhanced functionality, the **Display Cursor Circle Radius** local setting has been deprecated.
- The **Show Pattern Boundary Border** setting in the **Local Settings** screen controls the default state of the **Show/Hide Pattern Boundary Border** option on the **Layers** toolbar.
- If you are printing multiple patterns, the **Dim Inactive Patterns for CAD Printing** setting in the **Local Settings** screen controls the brightness of inactive patterns.
- The **Automatically Hide Text on Zoom** setting in the **Local Settings** screen controls whether text in the **Viewport** always displays or whether it is automatically hidden when a pattern is zoomed below a **Zoom Factor** that you specify.

Design module enhancements

- You can use the **Curved Hole Pattern** tool to create a grid of holes parallel to a selected polyline.
- When creating a line of holes, you can select to use the polyline elevation for the hole collars or toes. These options enable creation of the holes at a fixed RL.
- The screen for importing a drill pattern has been changed to be a wizard that steps you through the process. The data in each row is validated prior to the

import and you can review the imported drill pattern before saving it to the database. If you import a drill pattern from a mine block in the **DataBlast Items Tree**, that mine block is preselected in the import wizard.

- The **Single Hole Design Position** tool on the **Holes** ribbon menu has been changed to enable you to create multiple holes using the same settings. Specify your hole details first and then select the locations for individual holes.
- If the **Show Bootleg** layer is active and you move a hole in the drill pattern design, the bootleg is recalculated automatically.
- The **CAD Tools** ribbon menu includes an option to create an angled surface. When designing a drill pattern, select a rectangle and slope direction and enter a start RL and end RL.
- Improvements were made to burden checking. Holes that do not intercept the face or surface are still included in the final calculations.
- You can import a design interchange file from the context menu option on the **DataBlast Items Tree**. If the file matches an existing pattern, its name displays in the **Pattern Name** field. If you select to update the existing pattern, the **Pattern Name** field is disabled. However, it is that pattern that is updated, not the pattern associated with the node that was right-clicked. If you import a design interchange file via the **Drill Pattern Designer Ribbon Menu**, the file must match the active pattern. The imported data replaces the data in the active pattern.

Drill module enhancements

- When processing a drill machine fault log, if you select either **Match and Abandon** or **Flag as Abandon**, confirmation is required.

Measure module enhancements

- When flagging holes as drilled, backfilled, dewatered or reactive, you can set the action date/time to be the start of the current shift, the current date/time, or a custom date/time.
- The ability to rename or delete a backfill pattern has been extended to when the **Drill** and **Measure** modules are active.

Charge module enhancements

- Your selection of *Electronic* or *Non-Electric* for the **Initiation System Type** is the default value when you next open a screen for editing or selecting a conventional or G-Blast charge standard. If a charge pattern already has an applied charge standard, the initiation system type of the current charge standard is retained as the default initiation system type.

Fragmentation utility enhancements

- Rock types only display in the **DataBlast Items Tree** of the **Fragmentation** utility because they are only relevant to the functionality of that utility.

System administration enhancements

- When configuring export settings for Flanders ARDVARC drill systems, you can use the **Flanders ARDVARC Blast Plan File Import Specification** screen to select which predefined fields and custom properties to export.
- You can use the **Multi-Line Text** CAD command to add a text field to CAD print borders. Text within the text box wraps by default. However, long words are not hyphenated. If a word is too long to fit the text box, the text box expands to fit the longest word.
- For DataBlast Pro, multiple drill systems can be assigned to a single fault reprocessing time in the **Service Control > Drill Machine Import** settings.
- For DataBlast Pro, the configuration for Flanders drill integration includes a setting that may assist in fault recovery if an import has failed for an unspecified reason when trying to save a drill entry.
- Disallowed diameters display in strike-through text and should not be selected when maintaining bulk explosives, cast boosters and other products.
- The **Hole Maintenance** screen is accessible without restriction, so that any user can view hole state history records. However, only users with *Super Admin* or *Allow Hole Detail Maintenance* security permissions can delete records. A PIN is not required to delete a dip entry that is the last record by date. However, a PIN is still required to delete other records.

- If a pattern is active, the pattern name is preselected in the **Hole Maintenance Pattern Selection** screen.
- Text reports created using the in-built Stimulsoft Report Designer can access the **MineBlockName** and **MineBlockRockType** report header properties and the **IsWet**, **IsWater**, **IsWetWalls** and **MineBlockRockType** hole properties. **IsWater** and **IsWetWall** are only set to *True* if values are not null and values are > 0. **IsWet** is set to *True* if **IsWater** or **IsWetWall** are set to *True*.

Other enhancements

- The **Properties Pane** has improved support for regions where commas are used as decimal separators. For properties with decimal values, the **Properties Pane** uses the decimal separator appropriate for your Windows regional settings.
- The display of 3D point and vector values in the **Properties Pane** has been improved to enhance readability by displaying X, Y and Z coordinates to only two decimal places and separating the values with a pipe (vertical bar) symbol.
- Files added to the **DataBlast Items Tree** can have a maximum file name length of 256 characters. Other object names in the **DataBlast Items Tree** have a maximum length of 50 characters.
- For DataBlast Pro, the **About** screen displays the status and connection string of the Reporting database and a list of active drill log importers.
- The **Misc** section of a pattern's properties includes the calculated averages of both designed and as-built charge toes, collars and toes of holes in the pattern. These properties are available for use in CAD print borders.
- On the **Export Hole Pattern Data** screen, the description of an available column displays as a tooltip and below the **Available Columns** list.
- Disallowed diameters display in strike-through text and cannot be selected when maintaining bulk explosives, cast boosters and other products.

System requirements and installation

- LocalDB (for DataBlast Ignite) has been upgraded to version 2022.

- A */ResetLocalDBInstance* command-line argument has been added to the DataBlast Ignite executable that resets the DataBlast Ignite LocalDB instance, which may help to address technical issues with LocalDB.
- The DataBlast Service database connection settings file has been changed to XML format and moved to a more reliable location in the system program data directory. The old settings file will be automatically migrated to the new format when the new version of the DataBlast Service application is installed.
- The **Database Upgrade** utility pre-populates connection string fields using configuration values obtained from the locally installed DataBlast Service.
- The new **Reporting Database Generator** makes it easier to create or update a Microsoft SQL Reporting database for a DataBlast Pro database. The **Reporting Database Generator** pre-populates connection string fields using configuration values obtained from the locally installed DataBlast Service. A longer database timeout value can be specified to help when generating a DataBlast Reporting database for a large DataBlast database or on a slow network connection or server.
- The exception logging email settings have been changed to XML format and moved to a more reliable location in the system program data directory. The old settings will be automatically migrated to the new format when the new version of the DataBlast Service, DataBlast Client or DataBlast Ignite is started.
- The **DataBlast Database Extractor** utility pre-populates connection string fields using configuration values obtained from the locally installed DataBlast Service.
- When upgrading DataBlast Pro server applications, if the DataBlast Service is running, it is stopped. The service display name is also updated to be "Datamine DataBlast Service".

Defect fixes

- An issue where initialising BlastPad from USB could take a very long time on a device with disconnected network drives has been fixed.
- An issue where the DataBlast Service could stop when cleaning up log files has been fixed.
- An issue where flattening text objects to an RL could reset the text colour has been fixed.

DataBlast 2.7 release notes (August 2023)

System requirements and installation

- .NET Framework 2.0 and .NET Framework 3.5 are no longer required to install DataBlast Ignite, DataBlast Pro Client or Service, or BlastPad. .NET Framework 4.7.2 is still required.
- The service name is now Datamine DataBlast Service when the DataBlast Server is installed as a service.

Note: The service name of an existing service will not be updated. The change will only take effect if the service is uninstalled using the /UNINSTALL option and then reinstalled using /INSTALL.

- BlastPad is now only available as a 64-bit application.

Performance improvements

- **Freshdesk case: 53602** Improved timing calculation and saving of non-electric initiation patterns when changing the initiation point. Caching of information has been improved, resulting in at least 70% faster calculation speeds.
- The calculation of the timing in non-electric initiation patterns has been optimised. During testing, a pattern that took 7 seconds to recalculate now takes under 1 second.
- Improved **Drill Pattern Designer** burden checking on large surfaces. Multiple parallel processing has been implemented and changes have been made to limit the triangle set based on the hole length and a minimum distance. During testing, a burden check that previously took over 5 minutes now takes less than 2 minutes to run.

User experience improvements

- In the **Drill Pattern Designer**, a progress bar displays the status when more than 1000 holes are created within a new pattern.
- In the **Drill Pattern Designer**, if you import a point file, DataBlast zooms the Viewport display to ensure that all imported points are visible, without you needing to click **Zoom Extents** in the **View** Toolbar.
- When creating a line hole pattern, the start location of the first hole may be offset from the start of the line by a specified distance.
- On the **Grid Hole Pattern** and **Line Hole Pattern** screens, a button has been added to enable reloading settings from the currently selected template.
- When running a burden check of a drill pattern, a progress bar displays the status of the calculations.
- The **Export Hole Data** option has been removed from the **Design** ribbon menu because the same functionality is available via the **Export** ribbon menu.
- To facilitate moving data between users or systems with different regional settings, when creating or using a template for exporting hole data to a CSV file, you can select or enter characters for field delimiters and decimal separators. An additional improvement in this screen is that if you select a column in the Columns to Export list, the column is highlighted in the data table and vice versa.
- To facilitate moving data between users or systems with different regional settings, when importing a drill pattern or a collar survey, you can select or enter characters for field delimiters, decimal separators and thousands separators.
- In the **Drill** module of DataBlast Pro, there is new functionality to delete drill machine fault log records from the database. The deletion can be limited to a selected drill pattern or all drill patterns, and a wide range of criteria can be combined to filter items to be deleted.
- When editing the structure of a charge standard definition, it is now possible to change the product assigned to an inert accessory or aggregate deck without replacing the whole deck.
- An alternative date/time picker has been implemented to improve the usability and speed of date and time value input.
- In **Product Maintenance**, the minimum diameter for bulk explosive products is no longer limited to the drill diameters specified in the mine site configuration. All available metric or imperial drill sizes display based on the measurement system for the mine site.

- DataBlast Ignite warns about potential multi-user issues when selecting a database backup directory that is within the user profile directories.

Defect fixes

- The hole caching system has been updated to improve reliability.
- Loading a new CAD document within a background thread was triggering a null reference exception. Changes have been made to handle such exceptions when loading patterns.
- On the **Drill Log Import** screen or **Measure Log Import** screen, clicking **Validate Data** when a template was selected, but no data file had been selected could result in an exception error. The **Validate Data** and **Import Data to Database** buttons are now disabled until suitable data is loaded. Additional improvements on these screens include the addition of a **Close** button and the display of a confirmation message to indicate how many rows of data will be imported.
- Stimulsoft is used for rendering reports for printing. Toggling a setting (such as whether to display bookmarks) that affected Stimulsoft's OnPaint method while a report was being prepared could result in an exception error. Code has been updated to make displaying a print report more reliable.
- Stimulsoft localisation settings are now forced to use the DataBlast language setting, which results in improved robustness in the handling of localisation for the text reports.
- Error handling has been implemented for when the CAD **Fillet** tool is unable to fillet a drawing, particularly from some DXF file formats.
- The Database Backup and/or Restore process across a network has been made more resilient to network interruptions.
- Inert accessories must have a unit of measure of *Single Units*. However, inert accessories may exist in customer databases with an incorrect unit of measure, which affected their display in printed reports. The database upgrade script for this version ensures that the unit of measure is correctly set for any inert accessories configured in **Product Maintenance**.
- Within the CAD view of a non-electric pattern, changes have been made to ensure that if an initiation point is assigned to a dummy hole and the dummy hole is moved, the initiation point label and any attached trunk lines move to the dummy hole's new position.
- An issue with the saving of **Default Hole Angle** settings for line hole and grid hole pattern templates has been fixed.

- The **Search Width** setting for searching for holes when adding incremental timing to an electronic initiation pattern was being reset each time changes were saved or abandoned. Changes have been made to ensure that the setting is retained while the user is editing the pattern.
- In text reports, where the **HoleCount_TemperatureElevated** field was previously returning an erroneous zero value, it now correctly reports the count of holes in the pattern with measurements recorded that show elevated temperature.
- Code has been changed to ensure that the **Collar Bearing** field in the **Properties Pane** is not editable if hole bearing have been locked via the option on the **Holes** ribbon menu.
- The **Charge Standard Selection** screen displays information about the drill size of the charge pattern or G-Blast charge standard, which makes it easier to identify why if there are no charge standards for that drill size, the list on the screen is empty.
- In the firing simulation of an initiation pattern, some holes were not displayed. Code has been updated to ensure that hole collars correctly show the playback state in the simulation.
- If the file name of mine site database for DataBlast Ignite had been renamed to include a dot (.) or a dash (-), the file name was being truncated when the database was imported. The handling of database file names has been improved for DataBlast Ignite. However, dots and dashes cannot be included in database file names when creating mine site databases.
- In BlastPad, the *Drill/Dip/Backfill/Load/Prime* activity name at the top left of the **Map** screen now displays correctly when the **Reverse Video** setting is on.
- The newer IREDES SmartRoc MKII drills produce log files not technically IREDES compliant with the XSD supplied by IREDES because they have null values for certain fields. We have modified the XSD supplied by IREDES to allow these fields to be nullable on the XSD.
- The paper size that is default for the printer is now assigned when the **Printer Settings** dialog box for CAD printing is first shown.

DataBlast 2.6 release notes (October 2022)

DataBlast Ignite

- DataBlast Ignite is the new stand-alone drill and blast (D&B) desktop solution based on DataBlast Pro, deployable on a Windows computer without the need for additional IT infrastructure such as SQL Server. Take advantage of the same design tools and incorporate D&B field data through data entry and file imports.
- DataBlast Ignite is a single application and simple to install and update. DataBlast Ignite is the preferred solution for sites with a single user.
- A wizard steps you through the process of creating a mine site, which is stored as a SQL LocalDB database. You can back up your mine site database any time with the option on the main DataBlast menu, and manage your backups via the Mine Site Database Utilities screen. New mine sites databases include common site settings, products and charge standards, which you can use or modify as required.
- New installations of DataBlast Ignite include a demo database with design examples.

Multi-language support

The DataBlast user interface is available in English, Portuguese, French, Spanish and Russian. When you log in, there is an option to change the user interface language if required.

Documentation

Documentation has been completely rewritten, with a focus on easy to follow steps for the most common tasks you need to complete to manage your mine site's data, create drill patterns and see those drill patterns through to initiation. Press **F1** to open the CHM version of the help specific to DataBlast Pro or DataBlast Ignite, or go to docs.dataminesoftware.com/DataBlast/ for the latest HTML5 version. Content is still being created, and feedback is welcome.

User interface (UI) refresh

Find your way more easily with:

- Screens that resize to accommodate shorter or longer text strings in different languages
- Consistent placement and size of icons common to multiple ribbon menus
- Consistent naming conventions for ribbon menus, screens and dialog boxes throughout DataBlast
- Simplified and consistent field names and other text on screens throughout DataBlast
- Less use of acronyms and abbreviations
- Consistent data entry and data export in the Inventory utility
- Consistent placement of common columns in tables, such as **Active** in site maintenance
- Units of measure displayed for more fields
- More lists displayed in alphabetical order
- A brighter icon colour to show if changes need to be saved
- Fewer mouse clicks to access charge standard maintenance
- Streamlined data entry for product maintenance
- Highlighting of mandatory fields if you try to save before filling in all required data
- Responsive tooltip text on toggle icons in the **View**, **Grid** and **Snap and Layers** toolbars

Saved screen size and position

DataBlast stores the size, position and docking of screens when you close the application, so that you have the same screen layout when you restart the application. To reset the layout, press and hold **Ctrl** while double-clicking the desktop icon or selecting the application from the Windows Start menu.

Computer assisted drawing (CAD) speed

- DataBlast redraws screens smoothly as you move between modules.
- Some text objects only display when you zoom in enough to make the text visible at the text scaling factors specified in local settings.

CAD functionality

- The View Cube is a 3D cube and compass that you can use to rotate the display. There is a local setting to control whether the cube displays by default. The **Grid and Snap** toolbar includes an option to show or hide the cube as required.
- Use the **Scene Rotation Speed** and **Lock Z Axis Rotation by Default** local settings to control screen rotation. The **View** toolbar includes an option to lock or unlock the Z axis rotation as required.
- There is a local setting to control whether the user coordinate system indicator displays by default. The **Grid and Snap** toolbar includes an option to show or hide the UCS axis as required.
- Use the drawing background CAD settings (in **Local Settings**) to configure whether the **Viewport** background is either a solid colour or a gradient between two colours.

BlastPad functionality (DataBlast Pro only)

- Similar to drill and dip, you can set up a *BlastPad Load Entry* measurement entry template. Use this template to configure what charge loading data you want to enter via BlastPad out in the field.
- If enabled in the applicable measurement entry template, you can use BlastPad to enter comments for drill, dip or load entry. In DataBlast and in the Reporting database, you can view these comments in the **Drill Comment**, **Dip Comment** and **Load Comment** hole properties.

- When you are entering load information via BlastPad, you can indicate whether a hole is short and whether a shotfirer has approved the hole. In DataBlast and in the Reporting database, you can view this information in the **Reported Short Hole** and **Shotfirer Approved** hole properties.
- In the **Load** module, the number of kilograms displays under the explosive density for both design and as-built decks.
- In the **Colour Map** site maintenance settings, you can configure the display colour for partially loaded holes that require attention in BlastPad. The default colour is teal.

System requirements

- Windows 11 is supported for DataBlast Ignite, DataBlast Pro Client and BlastPad devices.
- If running BlastPad on a Windows 10 tablet, the operating system must be 64 bit.

Other enhancements

- If you import a drill pattern from a CSV file, you can edit the pattern without needing to specify surfaces.
- To include a polygon in the DXF export of a drill pattern for Wenco, load the drill pattern and the set of design lines with the polygon in the **Viewport**. Click the **Show in Drill Navigation** menu option and select the polygon. Then export the data to the Wenco drill navigation system.
- (DataBlast Pro only) You can customise the Wenco CFG file export format to suit your site's drill setup. Use the **Wenco Template** field in the **Wenco Drill Machine Import** settings in the **Service Control**.
- In the **Drill Pattern Designer**, you can see more hole statuses on the design hole, such as if it has been charged.
- When you are working in the **Drill Pattern Designer**, the **Hole Editor** is a quick way to edit the properties of multiple holes. Data in the **Hole Editor** can now be filtered with *Equals*, *Does Not Equal*, *Starts With*, *Contains*, *Ends With*, *Does Not Start With*, *Does Not Contain* and *Does Not End With* operators.
- The detonator system is required when configuring electronic detonators.
- You can export configuration of all or selected products and import the configuration into another mine site database. Existing products are updated if included in the import.

- Deleting hole state history records is rarely required. For DataBlast Pro, you must enter a PIN to access the **Hole Maintenance** screen. Contact Datamine Support for assistance with hole maintenance.
- The performance of the DataBlast database has been improved by including more retries on timeouts.
- BlastPad has a default 5 second wait if it receives a busy response from DataBlast Service maintenance UI or configuration files.
- Sample CAD templates and print reports are available as a zipped folder in the DataBlast installation package. You can import and modify these templates and reports as required.
- Similar to DataBlast Ignite, a wizard steps you through the process of creating a database for DataBlast Pro.
- Code is signed for all DataBlast installers for added security.

Defect fixes

- Fixed issues with the target charge depth in the **Drill Pattern Designer** after a measured collar has been entered. Improved the calculation of charge depths and target charge depths, including if a charge surface is deleted.
- The Wenco data table was pointing to APS stored procedures. This has been fixed so that the data table points to Wenco stored procedures.
- A user could interact with the UI while charge standards were being applied. This has been restricted to prevent conflicting interactions.
- In 2D/3D depth reports, bars were displaying with different lengths when swapping the report from metres tolerance to percentage tolerance. The display has been fixed so the colours respond to the different tolerance type but the hole lengths remain consistent.
- Fixed an issue where CAD artefacts were being replicated in design line maintenance when loading other objects from the **DataBlast Items Tree**.
- In the **Hole Editor**, filtering was applied so that only holes with a specified toe value displayed. However, changes to that value were applied to all holes. Code has been changed to ensure that filtering does not just hide the rows from display.
- Fixed an issue where when a drill pattern was opened in maintenance mode, **Save Changes** was enabled even though no changes had yet been made.

Datamine enables efficient and sustainable mining through the application of world-leading technology and services.

Read the Docs

docs.dataminesoftware.com

Get in Touch

www.dataminesoftware.com/contact

www.dataminesoftware.com/support

