DATAMINE

DATABLAST

DataBlast 2.10

Release Notes

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Contents

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 2.10 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.
- A 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.
- A 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 in order 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 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 IRESDES 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
- Less 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

DATABLAST

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