



Layout Builder

Decide which tables, which columns and which dropdowns make up data entry — once, for the whole team.

- Group: Data Management
- Configurable dropdown sources
- Named, duplicable layouts
- 101 analysable tables

Configuring: DHDrillProgram

Total 17	Visible 17	Hidden 0	Combobox 0
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Legend: **Visible** = Data Entry | **Combobox** = dropdown from source table | **Auto-Type** = detected from database schema

COLUMN NAME
ProgramID
UID
Object
ObjectID
ObjectLasting
ObjectNothing
URL
Dip
Azimuth
Comments
ProgramBy
Age
Entity
DrillType
Depth
Used_synced_at
Used_backs
Show All
Hide All

Executive summary

The Layout Builder turns a raw table into a field form: every field gets its position, its label, its value list, its formula and its display condition — without a line of code.

01 What it replaces

The Access form drawn by a contractor, which had to be re-commissioned every time the logging protocol changed.

02 How it works

You draw against the real table: the fields offered are those of the schema, the value lists are the database's own reference lists, and the result is immediately what the geologist sees when capturing.

03 Who it is for

The database owner and the chief geologist, who fit the form to the campaign's protocol rather than the other way round.

1

layout per table

f

fields computed on the fly



conditional visibility rules

.dmproj

everything stored in the project

Contents

01 What the module is for

The configuration layer that entirely drives Data Entry.

02 Named layouts

"DrillHole Entry", "Geochem Entry": one capture workspace per role.

03 Table selection

Tick, order, duplicate — the tab order is set here.

04 Column settings

Visible, combobox, detected type, list source.

05 Overview tab

Coverage indicators to audit how complete the configuration is.

06 Analyse All

A global sweep that detects types across every table.

07 Anonymised data

101 tables analysed, 15 retained in the demonstration layout.

08 Business value

A data-entry operator sees only what concerns them.



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SECTION I

The module

The problem addressed, the capabilities delivered, the processing chain and the module's place in the platform.

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- 01 Context
 - 02 Key capabilities
 - 03 Processing chain
 - 04 Place in the platform
-

Context

A complete drillhole database holds more than a hundred tables. A capture operator uses fifteen of them, and only some of their columns.

The Layout Builder settles that question once: it decides what appears, in what order, in what form — and Data Entry complies.

— One layout per role

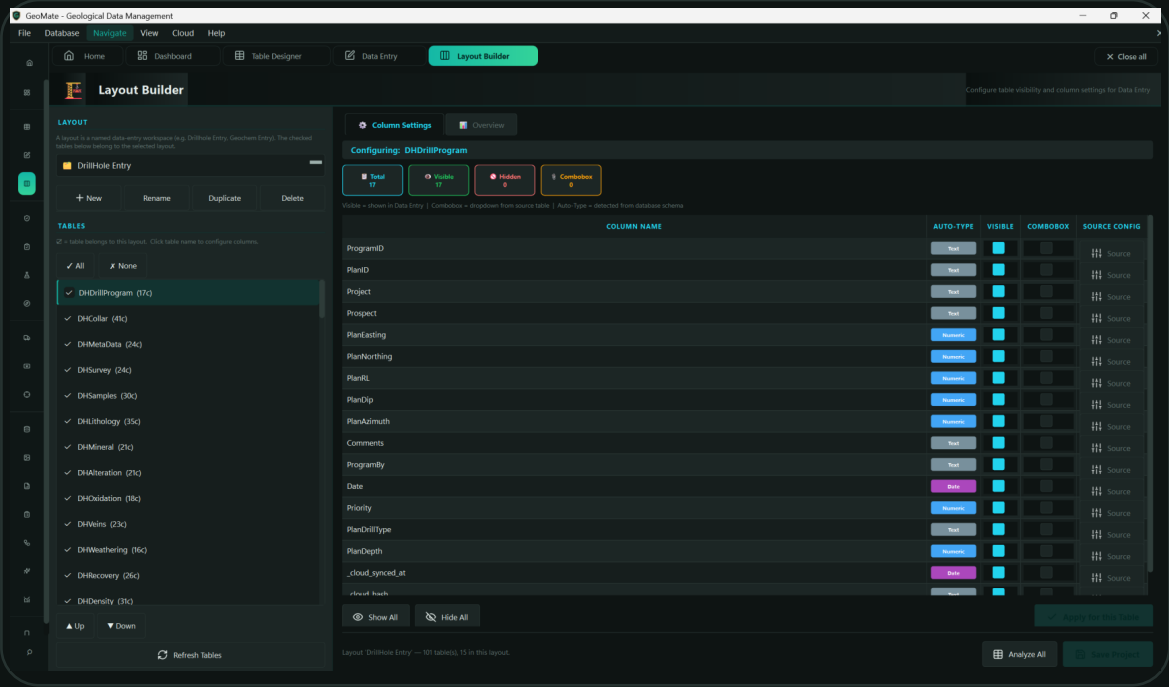
“DrillHole Entry” for drill logging, another for soil geochemistry: both live in the same project.

— Type is detected, not declared

Text, numeric or date are read from the database schema and shown as a chip on each column.

— The list source is configurable

Each dropdown points at a specific reference table and column, with an optional filter.



After adding a table in the Table Designer, click Refresh Tables: the new table appears without restarting GeoMate.

Key capabilities



01

Named layouts

Create, rename, duplicate or delete a whole capture workspace; each layout carries its own table selection.



02

Table selection

One checkbox per table, with its column count; All / None to switch in one gesture.



03

Tab order

The Up / Down arrows fix the order in which tabs will appear in Data Entry.



04

Column settings

For every field: visible or hidden, rendered as a dropdown or a text box, with its detected type.



05

List source

The Source button opens the reference configuration: table, code column, label column, filter.



06

Coverage overview

Total / Visible / Hidden / Combobox indicators and a stacked bar of coverage per table.

Processing chain

From the table schema to the form the geologist actually uses.

A Inputs

Schema and reference lists

- Table columns, types and constraints
- Reference tables for the value lists
- The campaign's logging protocol
- The existing layout, if it is to be revised
- The capture order wanted in the field



B Design

Drag and drop, property by property

- Position and size of every control
- Displayed label, distinct from the column name
- Value list bound to a reference list
- Computation formula and its source fields
- Visibility condition and position locking



C Outputs

A working form

- A ready-to-use capture tab in module 03
- Layout saved into the .dmproj file
- The same form for the whole project team
- Reusable on a new project
- Capture consistency enforced by the closed lists

WHY THIS MATTERS

The quality of a logging database is decided when the form is designed, not when errors are corrected afterwards. A closed list in the right place, a formula that computes length instead of having it typed, a condition that hides irrelevant fields: as many errors that will never be made.

Place in the platform

FED BY

02 Table Designer

Supplies the available fields and their types — you only draw what exists.

Database reference lists

Feed the closed dropdown lists of the coded fields.

Logging protocol

Dictates field order, mandatory entries and display conditions.



Layout Builder

The design layer between the schema and the geologist: it decides what can be captured, how, and under which constraints.

FEEDS

03 Data Entry

The form drawn here is exactly the one that appears when capturing.

19 Mobile Sync

The same layout goes to the field with the project package.

05 Data Validation

Less free typing upstream, fewer findings to deal with downstream.



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SECTION II

In practice

The real interface, the operating workflow, the reference settings, good practice and the questions that come up.

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- 01 The interface
 - 02 Operating workflow
 - 03 In depth
 - 04 Good practice
 - 05 Frequently asked
-

The interface

The screenshot shows the 'Layout Builder' window in GeoMate. The sidebar on the left contains a 'TABLES' list with various tables like 'DHDriProgram (17c)', 'DHCollar (41c)', etc. The main area is titled 'Configuring: DHDriProgram' and shows a table with columns: COLUMNS, AUTO-TYPE, VISIBLE, COMBOBOX, and SOURCE CONFIG. The table lists various fields like ProgramID, PlanID, Project, etc. The bottom right has buttons for 'Analyze All' and 'Save Project'.

COLUMNS	AUTO-TYPE	VISIBLE	COMBOBOX	SOURCE CONFIG
ProgramID	Text	☒	☐	Source
PlanID	Text	☒	☐	Source
Project	Text	☒	☐	Source
Prospect	Text	☒	☐	Source
PlanEasting	Numeric	☒	☐	Source
PlanNorthing	Numeric	☒	☐	Source
PlanRL	Numeric	☒	☐	Source
PlanDip	Numeric	☒	☐	Source
PlanAzimuth	Numeric	☒	☐	Source
Comments	Text	☒	☐	Source
ProgramBy	Text	☒	☐	Source
Date	Date	☒	☐	Source
Priority	Numeric	☒	☐	Source
PlanDrillType	Text	☒	☐	Source
PlanDepth	Numeric	☒	☐	Source
_cloud_synced_at	Date	☒	☐	Source
cloud hash	Text	☒	☐	Source

1 Active layout

“DrillHole Entry” — create, rename, duplicate, delete.

2 Table list

Ticked = belongs to the layout, with its column count.

3 Table indicators

Total, visible, hidden, comboboxes — for the table being configured.

4 Column grid

Auto-detected type, visibility, combobox rendering, per-field Source button.

5 Analyse All

Sweeps all 101 tables and pre-fills types across the whole project.

Actual GeoMate 2026 v2026.3.1.5 screen capture — Midnight theme.

Operating workflow

Five actions that configure capture for the whole campaign.

1

Pick the layout

Select an existing layout, or create a new one for a new role.

2

Tick the tables

Only ticked tables will become capture tabs.

3

Configure the columns

Visible, combobox, and for every list the reference table that feeds it.

4

Order the tabs

The Up / Down arrows fix the order in which the geologist will meet them.

5

Save the project

Data Entry refreshes automatically with the new configuration.

Per-column settings

SETTING	EFFECT IN DATA ENTRY	DEFAULT
Column Name	Field label in the form	Read-only
Auto-Type	Detected from the schema: text, numeric, date	Detected
Visible	The field appears on the capture form	Ticked
Combobox	The field is rendered as a list instead of a text box	Unticked
Source Config	Reference table, code column, label column and filter	To be set

The  Apply for this Table button saves the current table's configuration;  Save Project makes it effective in Data Entry.

Good practice

What has to be settled before a form goes into a team's hands.

✓ Follow the field order

The form should read in the order the observation is made, not in the order of the table's columns.

✓ Close every coded list

A coded field left free-text produces variants that can only be reconciled by hand, months later.

✓ Compute what can be computed

Interval length, weighted grade, derived indicators: a formula beats a keystroke.

✓ Hide rather than clutter

Conditional visibility rules cut the form down to what is relevant: fewer fields shown, fewer mistakes.

✓ Lock the final layout

A locked position () stops an accidental drag in edit mode disorganising the whole team's form.

✓ Save the project

The layout lives in the .dmproj: without Save Project it does not survive closing.

Frequently asked

The most frequent design questions.

Q Where is the layout stored?

In the .dmproj project file, not in the database. It therefore travels with the project and is shared with it.

Q Can the label differ from the column name?

Yes, and it is recommended: the database keeps a technical name, the geologist reads a business label.

Q What if I delete the field in the database?

The matching control loses its source. Remove it from the layout before deleting the column in the Table Designer.

Q Can a formula reference another tab?

Formulas work over the fields of the same record. Cross-table computations belong to the analysis modules.

Q Does the layout go out to the field?

Yes: the project package sent through Mobile Sync carries the layout, so the form is identical offline.

Q Can I start from an existing layout?

Yes: taking the previous project and adjusting it is the normal path from one campaign to the next.



GeoMate 2026

SECTION III

The data

What the module produces on a real dataset, and the vocabulary needed to read those results.

01 Anonymised data

02 Key concepts

Anonymised data

The real configuration of the “DrillHole Entry” layout on the demonstration database.

101

TABLES ANALYSED

global sweep by Analyse All

15

TABLES RETAINED

in the “DrillHole Entry” layout

41

COLUMNS — DHCollar

the widest table in the layout

17 / 17

VISIBLE — DHDrillProgram

full coverage, no hidden column

The layout's fifteen tables cover the drill programme, collars, metadata, surveys, samples, lithology, minerals, alteration, oxidation, veins, weathering, recovery, density, geotechnics and structures — 355 columns configured once and for all.

Source: KOUKOUDAN project database (Senegal) — figures computed from the real data exported from GeoMate.

Key concepts

The objects the builder manipulates.

Control

A field's representation on the form: text box, dropdown, checkbox, date picker.

Value list

The closed source feeding a dropdown — a database reference list, not a hard-typed list.

Visibility rule

The condition under which a control is displayed. It lightens the form and limits out-of-context capture.

Binding

The link between a control and the table column it writes to. Without a binding, a control is decorative.

Formula

The expression computing a field's value from other fields of the same record.

Project file (.dmproj)

The configuration container: database connection, layouts, mappings and module settings.



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SECTION IV

Value & specifications

What the module changes for the project, and its technical integration profile.

01 Business value

02 Technical profile

Business value

The operator sees only their scope

Fifteen tabs instead of a hundred and one tables: the possible error surface shrinks by an order of magnitude.

15 / 101

Dropdowns remove free typing

Every codified field points at its reference list: no more spelling variants of the same code.

Normalised codes

One configuration, several roles

Drill logging, soil geochemistry, geotechnics: each team gets its layout, inside the same project.

Named layouts

Schema change is absorbed

A column added in the Table Designer shows up after a simple Refresh, with no restart.

No restart

The configuration is auditable

The Overview tab quantifies visible / hidden / combobox coverage per table — a configuration hole is visible.

Quantified coverage

Technical profile

Scope

Analysable tables

101 in the demonstration database

Retained tables

15 in the DrillHole Entry layout

Layouts

Unlimited, named, duplicable

Type detection

Text, numeric, date from the schema

Dropdowns

Source

Any table in the project, typically rf*

Columns

Separate code and label columns

Filter

Per-list restriction clause

Effect

Free typing impossible on the field

Persistence

File

.dmpproj project

Scope

Follows the database between workstations

Propagation

Data Entry refreshes on save

Reversibility

Duplicate the layout before changing it



One platform, from field to report

The “Layout Builder” module is one of the 19 modules of GeoMate 2026 — a single, fully offline platform covering the whole chain: database design, data entry, validation, QA/QC, dispatch, analysis and reporting.