
Making the move to GEOREKA

A practical transition guide for Leapfrog Geo, Edge, Central and Driver users

You already know how to build geological models. GEOREKA's project tree and right-click menus will feel familiar from day one, and every action is captured as an editable recipe.

CONTENTS

In this guide

- 1 What to expect from this guide

- 2 Familiar interface, plus an explicit recipe

- 3 Terminology cheat-sheet

- 4 Which Seequent package does what, and how GEOREKA covers it

- 5 Feature map: “I used to do X, now I do this”

- 6 Right-click tool reference

- 7 Walkthroughs

- 8 Driver, structural trends and locally varying anisotropy (LVA)

- 9 What’s different, and how to think about it

- 10 Getting help and next steps

SECTION 1

What to expect from this guide

This guide is written for geoscientists who are fluent in Leapfrog Geo, and often in Leapfrog Edge (estimation), Central (collaboration) or the newer Driver (machine-learning trend analysis). It maps your daily tasks onto GEOREKA, with right-click paths and step-by-step walkthroughs.

A note on sources: the information about Seequent products in this guide is based on publicly available material. It may be incomplete, incorrect or out of date, so please check Seequent’s own documentation for the current position. Tell us if you spot an error and we will correct it.

The short version: GEOREKA’s interface is closer to Leapfrog than you might expect. You work in a project tree and drive most workflows by right-clicking objects: import, composite, interpolate, build surfaces, estimate, simulate, report. Nearly every capability you rely on has a direct home here, and a few (locally varying anisotropy, support-vector methods, Turning-Bands simulation) extend it.

How to use it: skim the terminology table (section 3), see which Seequent package each tool comes from (section 4), scan the feature map (section 5) and the right-click reference (section 6), then follow the walkthrough you need (section 7). Section 8 covers Driver and LVA specifically.

SECTION 2

Familiar interface, plus an explicit recipe

You will feel at home immediately. GEOREKA uses a project tree, and you build models by right-clicking objects, the same interaction pattern you know from Leapfrog. Right-click a drillhole set to composite or interpolate; right-click a surface to modify or interpolate it; right-click a grid to estimate, simulate or report.

The one addition worth knowing. Every operation you perform is recorded as an editable node graph, which you can open with **Show Workflow** on any model. You keep the fast, familiar right-click interface, and you also get a transparent, re-runnable record of exactly how each result was produced. In Leapfrog the logic is held inside each object; in GEOREKA you can open it, read it, change a parameter and re-run.

Why it matters. The model documents itself. A colleague, or you months later, can open the workflow and see which composites, which variogram and which search produced a grade shell, without reverse-engineering a tree of settings.

	Leapfrog	GEOREKA
Main interaction	Project tree + right-click	Project tree + right-click (familiar)
Model logic	Held inside each object	Also captured as an editable workflow (Show Workflow)
Updating	Automatic re-compute	Re-run the workflow or a branch
Sharing a method	Duplicate the project	Copy the workflow

SECTION 3

Terminology cheat-sheet

Same ideas, different words. Keep this nearby for your first week.

In Leapfrog you say...	In GEOREKA it is...	Notes
Drillhole data (collar / survey / interval)	Drill Logs (collar / survey / interval)	Identical structure
Interpolant / numeric model	Implicit function / Interpolate	Right-click ► Interpolate
Contact surface	Implicit function / surface	From contacts, points or structure
Geological model	Model (from implicit functions)	Right-click Models ► New Model
Fault system	Fault System	New / Edit / Copy / Remove
Structural trend / anisotropy	Locally Varying Anisotropy (LVA)	Cross-validatable; see section 8
Estimator (OK / ID / NN)	Interpolate (method parameter)	Dual OK / IDW / NN / RBF / SVR
Experimental variogram / model	Variogram estimator / model ★	Plotting + workflow
Block model / sub-blocked	Grid / model (tetrahedral sub-blocks)	Import CSV / DataMine; evaluate onto grid
Mesh	Surface / Solid	OBJ, DXF, GOCAD, DataMine...
Cross section / fence	2D / Dynamic Section View	Batch export supported
Project (.lfpj)	Project (.geom)	SQLite-backed

SECTION 4

Which Seequent package does what, and how GEOREKA covers it

Seequent splits capability across several separately licensed products. GEOREKA delivers the same ground in one desktop application, with the advanced tools in the Premium tier. This table orients you; the feature map in section 5 tags every row with its Seequent package.

Seequent package	What it provides	GEOREKA coverage
Leapfrog Geo (core)	Data import, implicit geological modelling (surfaces, veins, faults, structural trend), RBF numeric models, meshes, GIS, sections, block-model build and export	GEOREKA Core
Leapfrog Edge (add-on)	Resource estimation: kriging / ID / NN, variography, domained estimation, validation, grade estimation, resource reporting	Core (estimation, including dual Ordinary Kriging) + Premium (variography, cross-validation, simulation, resource classification, grade-tonnage, swath plots)

Seequent package	What it provides	GEOREKA coverage
Seequent Central	Cloud version control, branching, multi-user collaboration, model history	Not covered. Desktop .geom projects are shared via your own storage
Seequent Driver (Evo, cloud)	Cloud / ML spatial analysis of drilling data → locally varying anisotropy field and continuity domains feeding Leapfrog trends	GEOREKA LVA + Stats and Charts (on the desktop, inspectable; see section 8)
Hydrogeology extension	MODFLOW / FEFLOW flow models	Not covered

Reading the Package column in section 5: Geo = Leapfrog Geo · Edge = Leapfrog Edge · Driver = Seequent Driver · GEOREKA+ = a GEOREKA capability with no direct Leapfrog equivalent.

SECTION 5

Feature map: "I used to do X, now I do this"

Grouped by workflow. The Where column gives the right-click path; the Package column shows which Seequent product the capability comes from. ★ marks a GEOREKA Premium tool.

Data in

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Import drillholes (CSV)	Drill Logs (CSV) wizard	File ► Import ► Drill Logs (CSV)	Geo
Import drillholes (database)	Excel / ODBC / Access / external DB	File ► Import ► Drill Logs (Excel / ODBC)	Geo
Import points / GIS / imagery	Text files import · GIS shapes	File ► Import	Geo
Import meshes / solids	Solids / Surfaces	File ► Import ► Solids / Surfaces	Geo
Import block models	Block Models (CSV) / DataMine	File ► Import	Geo
Import structural readings	Structural Data	File ► Import ► Structural Data	Geo

Drillhole data management

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Desurvey	Automatic on import	Import wizard	Geo
Find / fix errors	Error Check · Disable selected holes	Right-click drillhole set	Geo
Composite	Compositing (fixed length or to domains)	Right-click ► Compositing	Geo
Merge interval tables	Merge with another drillset	Right-click ► Merge	Geo
Group lithologies	Group Categories	Right-click ► Group Categories	Geo
Data selections / filters	Open Selections	Right-click ► Open Selections	Geo

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Interval mid-points	Extract interval mid points	Right-click ► Extract mid points	Geo

Estimation and geostatistics

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Ordinary / simple kriging	Interpolate ► Dual Ordinary Kriging	Right-click points / DH ► Interpolate	Edge
Inverse distance / nearest neighbour	Interpolate ► IDW / NN	Right-click ► Interpolate	Edge
RBF interpolant	Interpolate ► RBF	Right-click ► Interpolate	Geo
(no equivalent)	Support-vector regression / classifier	Right-click ► Interpolate	GEOREKA+
Experimental variogram + model	Variogram estimator + model ★	Plotting / workflow	Edge
Search ellipsoid / anisotropy	Anisotropy and search settings; LVA	Interpolate settings	Geo + Edge
Evaluate estimator onto blocks	Evaluate function(s) on this grid	Right-click grid ► Evaluate	Edge
Cross-validate a model	Cross-validate LVA interpolation ★	Right-click points ► Cross-validate	GEOREKA+
Swath / drift plots	Swath / drift plots ★	Right-click grid ► Swath plots	Edge
Grade-tonnage / resource report	Grade-Tonnage / Resource Report ★	Right-click grid ► Grade-Tonnage	Edge
Resource classification (M/I/I)	Classify resource (M/I/I) ★	Right-click grid ► Classify	Edge
Declustering	Declustering (in conditional simulation)	Simulation workflow	Edge
(specialised)	Conditional simulation (Turning Bands) ★	Right-click grid ► Conditional simulation	GEOREKA+
Grade shell / iso-surface	Contour / closed-surface contour	Model Builder ► contour	Geo

Geological modelling

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Build a geological model	New Model from implicit functions	Right-click Models ► New Model	Geo
Contact surfaces from lithology	Create implicit functions	Right-click drillhole set ► Create implicit functions	Geo

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Model a vein (HW / FW)	Dedicated vein tool	Geological modelling	Geo
Define and order faults	Fault System (New / Edit)	Right-click Fault Systems ► New	Geo
Structural trend / anisotropy	Locally Varying Anisotropy (LVA)	See section 8	Driver
Form surfaces from structure	Form surfaces	Right-click structural data ► Form surfaces	Geo
Surface from points / topography	Interpolate; Topography	Right-click surface ► Interpolate	Geo
Edit a surface	Modify Surface	Right-click surface ► Modify	Geo

Meshes, blocks and output

Leapfrog task	GEOREKA equivalent	Where (right-click / menu)	Package
Boolean / clip meshes	Boolean mesh operations	Model Builder ► boolean mesh	Geo
Decimate / clean mesh	Decimate / beautify mesh	Model Builder	Geo
Build / evaluate block model	Grid + Evaluate function(s) on grid	Right-click grid	Geo + Edge
Export meshes / data	DXF / STL / GOCAD / CSV	Export / workflow export	Geo
Cross sections and fences	2D / Dynamic Section View	Section tools	Geo
Stereonet and structural analysis	Show stereonet; Stats and Charts ★	Right-click structural / points	Geo

SECTION 6

Right-click tool reference

What you can do by right-clicking each object type in the tree. This is the fastest way to learn GEOREKA if you know Leapfrog: pick the object, right-click, act. ★ marks a Premium tool.

Right-click on...	Available tools
Drillhole set	Compositing · Merge with another drillset · Group Categories · Create implicit functions · Extract interval mid points · Disable selected holes · Error Check · Open Selections · Save DH data
Structural data	Edit Structural Data · Form surfaces · Interpolate (implicit function) · Show stereonet
Points / numeric object	Interpolate · Stats and Charts ★ · Cross-validate LVA interpolation ★ · Edit Indicator Points · Open Selections · Save item
Surface	Modify Surface · Interpolate · Save item
Polyline	Interpolate (implicit function) · Save item
Implicit function	Show Workflow · Edit function (indicator points) · Save item

Right-click on...	Available tools
Model / grid	Edit model · Evaluate function(s) on this grid · Conditional simulation (Turning Bands) ★ · Classify resource (M/I/I) ★ · Grade-Tonnage / Resource Report ★ · Swath / drift plots ★ · Copy / Save model
Fault system	New Fault System · Edit · Copy · Remove
Models folder	New Model from implicit functions
Drillholes folder	Interpolate from DH data

SECTION 7

Walkthroughs

Task-based, in the order a project usually flows.

7.1 Import drillholes

- 1 File ► Import ► Drill Logs (CSV), or Drill Logs (Excel / ODBC) for a database.
- 2 Select the collar, survey and interval files (or pick the sheet or table).
- 3 Map columns to roles: Hole ID, X, Y, Z; depth, azimuth, dip; From, To, lithology and assays.
- 4 Finish. Holes desurvey automatically and the traces appear in the tree, ready to colour.

7.2 Prepare data (right-click the drillhole set)

- 1 Error Check to flag issues; Disable selected holes to exclude bad data.
- 2 Compositing: fixed length, or to domain boundaries.
- 3 Merge with another drillset to bring lithology and assays together; Group Categories to simplify lithologies.
- 4 Stats and Charts ★ for exploratory analysis.

7.3 Estimate (Leapfrog Edge users)

- 1 Right-click the composited points ► Interpolate; choose Dual Ordinary Kriging (available in Core), IDW, NN, RBF or SVR.
- 2 Set the search and anisotropy (or an LVA field, see section 8). In Premium, fit and inspect the variogram in Plotting ★.
- 3 Right-click the target grid ► Evaluate function(s) on this grid.
- 4 Validate with Swath / drift plots ★, Grade-Tonnage / Resource Report ★ and Classify resource (M/I/I) ★.
- 5 Cross-validate LVA interpolation ★ to tune range and smoothing objectively.

7.4 Build the geological model: veins, faults and domains

- 1 Right-click a drillhole set ► Create implicit functions to build contact surfaces.
- 2 Use the dedicated vein tool for hanging-wall and footwall veins.
- 3 Right-click Fault Systems ► New Fault System; edit fault geometry and relationships.

- 4 Right-click Models ► New Model from implicit functions to assemble bounded volumes; open Show Workflow to inspect the recipe.

7.5 Meshes, sections, GIS and migrating a Leapfrog project

- 1 Import existing meshes via Solids / Surfaces (OBJ, DXF, GOCAD TS, DataMine).
- 2 Boolean and decimate in the Model Builder; create 2D / Dynamic Section Views; batch-export sections.

Migrating from Leapfrog. GEOREKA does not open .lfpj files, so export from Leapfrog and import into GEOREKA. It is a one-time step of minutes per data type.

What to move	Export from Leapfrog as...	Import into GEOREKA via...
Drillholes	Original CSV / database	Drill Logs (CSV / Excel / ODBC)
Surfaces and solids	OBJ, DXF, GOCAD (.ts)	Solids / Surfaces
Block models	CSV or DataMine	Block Models (CSV) / DataMine
Points / GIS	CSV / Shapefile / GeoTIFF	Text files / GIS shapes

SECTION 8

Driver, structural trends and locally varying anisotropy (LVA)

If your team uses Seequent Driver, this section matters most. Driver is a separate, cloud-based machine-learning tool in Seequent Evo. It analyses drilling data to detect 3D continuity and produces a locally varying anisotropy field, which is then fed into Leapfrog's Structural Trend to guide the implicit-modelling engine.

GEOREKA covers the same ground with a built-in LVA. Instead of a separate cloud product feeding a trend into a modeller, GEOREKA computes locally varying anisotropy on the desktop, directly inside the interpolation you are already running. You can then **Cross-validate LVA interpolation** to tune and defend it objectively.

Multiple attributes, one continuity field. Like Driver, GEOREKA can analyse several attributes at once. It combines them into a single averaged structural continuity field (a multi-attribute continuity estimate) that directly drives the anisotropy, so you get one coherent, inspectable field to review and report.

	Seequent (Driver → Leapfrog)	GEOREKA (LVA)
Where it runs	Cloud (Seequent Evo)	On the desktop, inside the interpolation
How it works	Machine-learning trend detection	Local anisotropy analysis you can inspect
Multiple attributes	Explores several attributes (ML)	Combined into one averaged continuity field
Products involved	Driver + Geo / Edge structural trend	One tool, no separate product
Explainability	ML output used to guide a trend	Cross-validatable and inspectable

Why it matters in a report. A continuity field you can inspect and cross-validate is easier to explain in a technical report or to a Competent Person than a model output you have to take on trust.

SECTION 9

What's different, and how to think about it

- **Re-run instead of silent auto-update.** More deliberate, and far easier to audit and reproduce.
- **Collaboration is project-file based.** If your team relies on Central's cloud version control, GEOREKA shares desktop .geom projects through your own storage. Ask us about team workflows.
- **Soft and semi-soft domain boundaries** are supported via the signed-distance boundary function: select samples within a chosen distance across the contact and include them in the interpolation. This is a manual workflow rather than a one-click toggle.
- **Some specialised Leapfrog add-ons (hydrogeology and flow models) are out of scope.** Tell us if they matter and we will be candid about fit.
- **GEOREKA extras Leapfrog users enjoy:** inspectable LVA, support-vector interpolation and classification, and Turning-Bands simulation, several of which cover ground that otherwise needs separate Seequent products.

SECTION 10

Getting help and next steps

Start with one dataset you know well: import the drillholes (7.1), run a familiar estimate (7.3) and compare. Familiar results in a new tool build confidence fastest.

Questions during your evaluation? Contact the GEOREKA team and we will pair you with someone who has migrated a project like yours.

Try it on your own data

Start the 14-day free trial, or compare Core and Premium plans, at georeka.com.

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