SEARCHER SUB-TAB

Tree

> *Browse the database schema as a navigable tree of tables and the foreign-key relationships that join them to your root table.*

Base tier. The Tree tab is included in Base; choosing Inner or Left on a join-type pill (Join Control) is Pro, though joins saved with a search apply on every tier.

Who

WHO IT IS FOR

Anyone exploring an unfamiliar database who wants to understand its structure and how tables connect.

What

WHAT IT DOES

The Tree tab shows the root table's relationships in two halves: the Left Side lists the tables it references through its foreign keys (green depth bars), and the Right Side lists the tables that reference it (blue depth bars). Each row has a Level pill for its join depth and a join-type pill whose letter shows how it is joined; hover it for the type and the foreign-key column. ▶ expanders reveal deeper tables — left-click for the next level, right-click to expand every level of that branch. When a table has two foreign keys into the same table, each gets its own row labelled "(via ColumnName)" with its own alias and join. In Pro, tap a join-type pill to choose Inner, Left, or Default; a chosen join is tinted and saved with the search, and once a join is Left, every join after it in the chain is Left too.

When

WHEN TO USE IT

Use it to orient yourself in a new database, to find the right root table for a query, to follow relationships from one table to the next, or to control which rows a join keeps.

Where

WHERE TO FIND IT

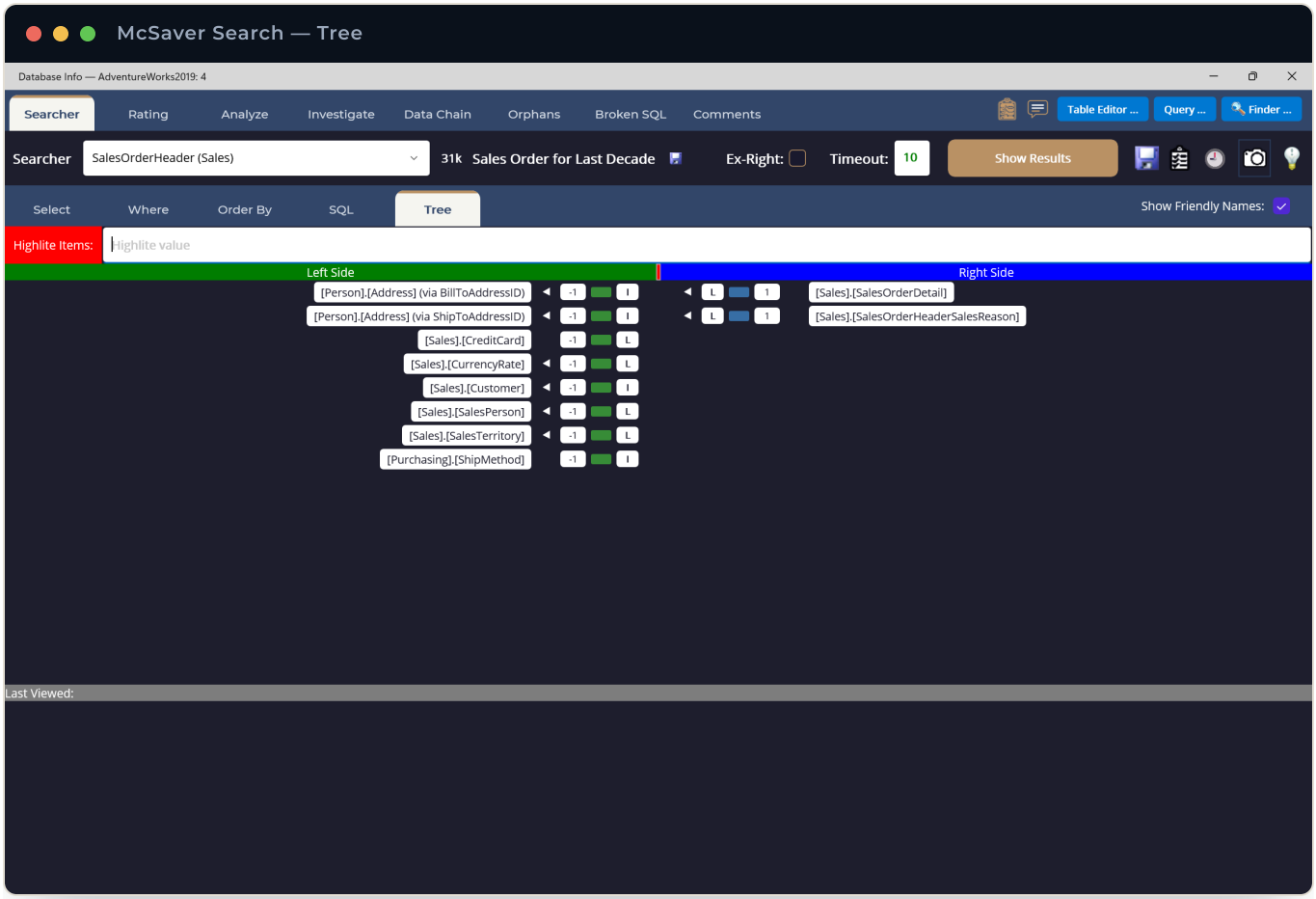
Inside the Searcher tab, Tree is the last sub-tab. Type in "Highlite Items" to highlight matching tables, click a table name to re-root the query on it without leaving the Tree, and right-click a name to give that table a custom alias. The Last Viewed bar at the bottom jumps back to recent root tables.

Why

WHY IT MATTERS

Seeing the schema as connected structure — rather than a flat list — makes it far quicker to find what you need, understand how the pieces fit together, and see exactly how each table is joined.

SCREENSHOT



Tree in McSaver Search

💡 Tip of the Day 98 tips

These Searcher Tip of the Day entries apply across all of its sub-tabs — open them in the app from the lightbulb icon in the Searcher header.

VALUE	Build complex SQL queries visually without writing a single line of code — pick tables, columns, filters, grouping, and sorting through the tabs and let the Searcher generate the SQL for you.
OVERVIEW	The Searcher is a visual SQL query builder where you choose a root table and assemble a SELECT statement using the Select, Where, Group By, Having, Order By, SQL, and Tree tabs.
NAVIGATION	Use the root-entity Picker beside the "Searcher" title to choose the table your query is built from; its tooltip shows the table's description.

FEATURE	The name of the saved search you load — or one you just saved — shows next to the title, with an unsaved-changes indicator you can click to overwrite the saved copy.
FEATURE	Check "Ex-Right" in the header to eliminate every column that sits to the right of the root entity in the join tree.
PERFORMANCE	Set the "Timeout" value in the header to cap how many seconds an SQL operation may run before it is cancelled.
ACTION	Click "Show Results" in the header to run the query and open the results in a separate Search Results window.
WORKFLOW	Click the save (disk) icon in the header to open the Save SQL dialog and persist your query.
WORKFLOW	Click the list icon in the header to load a previously saved Searcher criteria back into the builder.
WORKFLOW	In the manage-criteria dialog you can delete saved criteria one at a time; each delete asks you to confirm and warns that any charts saved under that criteria will be deleted along with it.
VISUAL	Click the camera icon in the header to save images of the current view when image capture is available.
ACTION	Single-tap the camera icon to capture the full Searcher window plus the currently visible tab; double-tap it to capture the window and then cycle through every tab, saving a separate screenshot of each one.
NAVIGATION	Click the tip (lightbulb) icon in the header to reopen this Tip of the Day window.
NAVIGATION	On the Tree tab, type in the "Highlite Items" entry to highlight matching entities in yellow across the join tree.
VISUAL	Use the "Show Friendly Names" toggle in the tab bar (visible on every sub-tab) to show columns as readable names such as "Unit Measure ↠ Modified Date (Sales Order Detail)" instead of raw aliases; it starts checked.
VISUAL	On the Tree tab, green depth bars mark the Left Side of the tree and blue depth bars mark the Right Side, with a Level pill showing each join's depth.
NAVIGATION	Click any entity row in the Tree tab to re-root your query on that table without leaving the Tree tab.
ACTION	Right-click an entity in the Tree tab to set a custom alias for that table.
VISUAL	Each Tree row shows a join-type pill whose letter tells you the kind of join used to reach that entity; hover it for the join type and the foreign-key column it follows.
NAVIGATION	Use the "Last Viewed" bar at the bottom of the Tree tab to jump back to any of your recently viewed root entities.
ACTION	On the Order By and Group By tabs, uncheck "Limit to used columns" and an All/Alt pill appears — click it to switch the left list between every column and unique column names.
ACTION	On the Select tab, check "Distinct" to return only unique rows in your results.
PERFORMANCE	Check "No lock" on the Select tab to add a NOLOCK hint that reads without taking locks on a busy database.

ACTION	Use "Skip" and "Top" on the Select tab to page through or cap result size — great for previewing large tables quickly.
FILTER	Type in the "Filter value" entry on the Select tab to narrow the list of selectable columns by name.
ACTION	Tap a column in the left list of the Select tab to add it to your query; double-tap a selected column on the right to remove it.
ACTION	Right-click the "X of" count on the Select tab to add all filtered columns, or right-click the total count to add every column at once.
SELECTION	Right-click the selected-columns count on the Select tab to remove all selected columns in one step.
VISUAL	Red row-count bars warn that a table has over a million rows and yellow bars warn of over a hundred thousand rows — add WHERE filters before querying those.
COLUMN	In the column lists, a blue "R" means the column exists in the root table, a green "1" marks a one-to-one relationship, a red "M" marks one-to-many, and an orange flag marks a natural key.
ACTION	Click the small green key icon on an ID or foreign-key column in the Select, Order By, or Group By column lists to instantly add the referenced table's natural key — its human-readable column (e.g. a name) — instead of the raw Id.
ACTION	Click the ▶ expander beside a foreign-key column to open the table it points to and add any of that table's columns through the join, without re-rooting your query.
FEATURE	The foreign-key expander works even when the referenced table has no natural key of its own, and nested foreign keys expand further — so you can drill from table to table to any depth to reach the column you want.
ACTION	Click the rotated aggregation icon next to a selected column to change its aggregation (Sum, Count, Avg, Min, Max, and more).
ACTION	Right-click a selected column on the Select tab to rename its output alias in the results.
ACTION	Drag and drop selected columns on the Select tab to reorder them in the query output.
FILTER	Check "Exclude Nulls" on a selected column to filter out null values from nullable or left-joined columns.
FEATURE	Click the dictionary icon on a selected column to open the advanced popup for Ranking, Window, Percentile, Offset, and Expression support.
VISUAL	On a selected column, a blue bar marks a required left join, a red bar marks a one-to-many path, and a green bar marks a nullable column.
ACTION	On the Where tab, click "+ Condition" to add a filter row, or "+ Group" to add a nested group — a group is a set of parentheses.
ACTION	Set each group's "Match All / Any of the following" picker to choose whether its conditions are joined with AND (All) or OR (Any).

ACTION	The radio button at the right of a Where row marks the insertion point — the next "+ Condition" or "+ Group" in that group is added right after the checked row.
VISUAL	A ⚠ beside a Where value means it doesn't fit the column's type; the FILTER line at the bottom of the tab previews the whole WHERE clause as you build it.
ACTION	Click ✕ at the end of a Where row to delete that condition.
ACTION	Use the Value / Column / When switch on a Where row to compare against a typed value, another column, or a relative date.
FEATURE	The Where value editor adapts to the column type, offering text, numeric, date, time, or a dropdown of known reference values.
WORKFLOW	Switch the Where tab from Visual to Advanced to edit the WHERE clause as text; Undo steps back through your edits and "Restore original" returns to what the visual builder produced.
FILTER	When a Where or Having condition compares a date or datetime column with a single-value operator (or on either bound of a BETWEEN), pick When on the Value / Column / When switch to filter by a relative date such as Today, This Month, or This Year instead of typing a literal date.
FILTER	In the "When" relative-date editor, choose a token (Today, ThisMonth, ThisYear, Now, and more) plus an optional offset in that token's own unit — days for Today, months for This Month, years for This Year — where -1 means the previous one; a hint shows the date it resolves to now, and it re-resolves each time the query runs.
CLARIFICATION	The Having tab works just like the Where tab but filters after aggregation — it appears only when your query uses GROUP BY.
CLARIFICATION	The Group By and Having tabs appear automatically once an aggregation forces a GROUP BY, and hide again when none is needed.
ACTION	On the Order By tab, click the arrow icon next to a sort column to toggle between Ascending and Descending.
ACTION	Check "Best Guess" on the Order By tab to auto-suggest a reasonable sort order for your query.
FILTER	Check "Limit to used columns" on the Order By or Group By tab to show only columns already used in your query.
ACTION	Drag and drop Order By columns to set sort priority — the topmost column sorts first; double-tap a column to remove it.
ACTION	Click "Clear all" on the Order By or Group By tab to remove every selected sort or grouping column at once.
ACTION	On the Group By tab, check "Best Guess" to auto-suggest grouping columns based on your selected columns.
NAVIGATION	The SQL tab shows a read-only, syntax-highlighted preview of the generated query with line numbers.
CLIPBOARD	When the query can't build, click the red error banner at the bottom of the SQL tab to copy the message to your clipboard.

FEATURE	In the advanced popup, the Ranking tab builds ROW_NUMBER, RANK, DENSE_RANK, PERCENT_RANK, CUME_DIST, and NTILE functions with optional PARTITION BY and ORDER BY columns — for NTILE, set Buckets to the number of equal-sized groups.
FEATURE	The Window Aggr. tab computes an aggregate OVER a window, with optional ORDER BY and a Frame clause using ROWS BETWEEN preceding and following bounds.
FEATURE	The Percentile tab calculates distribution percentiles from 0.0 to 1.0 within an ordered group, with optional PARTITION BY columns.
FEATURE	The Offset tab builds LAG and LEAD functions, letting you set the offset, a default value, and null handling to compare a row to its neighbors.
FEATURE	The Expression tab lets you write a free-form expression and map @0, @1, @2 placeholders to columns you pick below.
ACTION	Check "Simple Expression" in the Expression tab for guided DateTime, String, or Math function pickers chosen by the column's data type.
VISUAL	In the advanced popup, give your new column a name in the "AS" entry, then click Ok to add it or Cancel to discard it.
WORKFLOW	In the Save SQL dialog, choose a Format of Criteria, SQL, View, Proc, or Func to control what gets generated.
WORKFLOW	Save as Criteria to preserve the full visual query structure so you can reload and edit it later.
EXPORT	In the Save SQL dialog, pick a Destination of File, Database, or Clipboard for the generated SQL.
WORKFLOW	Saving to the Database creates or replaces a real SQL object, so each such save is recorded in the host SQL change log where you can review it later.
TECHNIQUE	Check "Generate Test Script" when saving to also place a runnable test version of your query on the clipboard.
ACTION	When saving to a file, check "Open Directory" to reveal the saved file's folder once the save completes.
WORKFLOW	Click the feedback icon (top-right, visible when registered) to open the Send Feedback popup — describe a bug, request an enhancement, paste screenshots, and optionally include your database schema for context.
FEATURE	In the feedback popup, choose a category (Bug, Enhancement, or Other), type your comment, and paste one or more screenshots from the clipboard to illustrate the issue.
FEATURE	Check "Include database schema" in the feedback popup to attach your DDL with the message — a confirmation dialog warns this may take a minute for large databases.
FEATURE	"Send me a copy" is checked by default in the feedback popup, so you receive a copy of your message at the email address you enter.
ACTION	On the Where and Having tabs, tap the Field cell to open a searchable column browser — pick from unique column names, expand a name (▶) to choose a specific join path, and read its R/1/M/N flags.

ACTION	When a Where or Having condition compares against another column, tap the column cell to choose it from that same searchable browser popup.
FEATURE	In the advanced popup, the PARTITION BY and ORDER BY add buttons — and the Expression tab's @0/@1/@2 parameter slots — open the same searchable column browser to pick each column.
VISUAL	On the Ranking, Window Aggr., and Offset tabs, a live count beside the + button shows how many PARTITION BY and ORDER BY columns you have chosen.
ACTION	On the Select tab, a plain click on a multi-path column adds the copy from your root table when the column lives there; click the ▶/▼ arrow beside its name to expand every reachable column that shares that name, listed fewest-join-links first.
FEATURE	Expanding a multi-path column on the Select tab gives each join-path variant its own row — showing that path's link count, a hover tooltip with the full join route, its own green key icon, and its own ▶ drill-in expander — so you can add, swap to a natural key, or drill deeper along that exact path.
ACTION	Right-click a multi-path column on the Select tab to open the join-paths popup, where paths are sorted shortest first and the hops that differ from the row above are highlighted; click a path to add that column, or click its key icon to add that path's natural key.
FEATURE	When a column's referenced table has a multi-part (composite) natural key, clicking its green key icon adds one free-form expression that concatenates the key's columns separated by " | " — and any part that is itself a foreign key is replaced with its own natural key.
NAVIGATION	On the Tree tab, click the ▶ expander on an entity row to reveal or hide the tables connected deeper beneath it, so you can collapse whole branches of a large join tree and focus on the part you care about.
FEATURE	Set your preferred Searcher defaults — Friendly Names, the Select tab's Distinct / No lock / Top, the Where and Having Visual-vs-Advanced mode, the Order By and Group By "Limit to used columns" and "Best Guess" options, and the Rating toggles — from the App Default Preferences panel in your account's Edit Profile dialog; new Searcher windows and tabs open with those values.
TECHNIQUE	Launch McSaverSearch with the --copy-pref-path switch to copy your preferences file's location to the clipboard, or --delete-prefs to delete the file and reset your saved defaults.
VISUAL	A compact record count (e.g. "12k" or "230m") sits right beside the root-entity Picker — hover it for the exact number; a view shows "?" because its row count isn't worked out, for performance reasons.
FILTER	The "When" relative-date editor also offers ThisWeek, ThisQuarter, ThisHalf, ThisDecade, ThisCentury, ThisMonday through ThisSunday, 1stQuarter–4thQuarter, 1stHalf/2ndHalf, and Month or Week — for Month the number picks the calendar month (1-12), and for Week the ISO week (1-53).
FILTER	On the Having tab, switch a condition to Column to compare one aggregate against another, e.g. Sum(Volume) > Count_Big(Volume); the column list offers your Group By columns and the Select tab's aggregates.

WORKFLOW	Renaming a selected column on the Select tab carries the new name through to the Order By and Group By tabs automatically, so your sort and grouping keep pointing at the right column.
ACTION	While Show Results runs, a "Running query..." overlay shows the elapsed time with a Cancel button that stops the query on the server; closing the Searcher window cancels it too.
SAFETY	If Top is empty, Show Results asks before running, since every matching row would be loaded into memory — it quotes the root table's row count when it knows it.
FEATURE	Click the 🕘 icon in the header to open Query History — every search and query run against this database; Load on a Searcher entry reloads that whole search into the builder. Viewing history is Pro; it is recorded on every tier.
FILTER	Type in the box at the top of Query History to narrow the list; hover an entry to read its full SQL, server and database, and any error it hit.
ACTION	Tap a join-type pill on the Tree tab to choose Inner, Left or Default for that join (Pro); a chosen join is tinted and is saved with the search.
CLARIFICATION	Once a join in a chain is LEFT, every join after it is LEFT too — otherwise a later inner join would silently drop the rows the LEFT join kept.
FEATURE	When a table has two foreign keys into the same table (say BillToAddressId and ShipToAddressId), the Tree shows one row per key, labelled "(via ColumnName)", and each gets its own alias and JOIN.