



MAIN FEATURE TAB

Data Chain

A lineage and cascade view that shows how a record connects to the rest of the database through foreign keys — and the exact, safe order to remove it.

Who

WHO IT IS FOR

Developers and DBAs who need to delete a record and everything that legitimately hangs off it, without violating foreign keys or leaving orphans.

What

WHAT IT DOES

Pick a table (and optional WHERE clause) and Data Chain analyses its foreign-key dependencies, then builds a transactional, dependency-ordered delete script along with the affected row counts.

When

WHEN TO USE IT

Use it for cascade deletes, test-data teardown, or GDPR-style record removal — any time “delete this and all of its children, in the right order” would otherwise be traced by hand.

Where

WHERE TO FIND IT

The Data Chain tab is on the main top tab bar (a Pro feature). Choose the table and WHERE at the top, then use View Data Chain and Build Script.

Why

WHY IT MATTERS

It removes the guesswork — and the danger — of manual cascade deletion, giving you the precise deletion order and impact in seconds instead of hours.

SCREENSHOT

McSaver Search — Data Chain

Table: Address (Person) Where: WHERE clause... Limit: 100

☒ Use No Lock

View Data Chain

Possible Candidates: 100

#	AddressID	AddressLine1	AddressLine2	City	StateProvinceID	PostalCode	SpatialLocation	rowguid	ModifiedDate
1	15733	7588 Deerfield Dr	#36	Palo Alto	9	94303	POINT (-122.214891815914 37...	2a616054-5c61-491d-a556-6e...	9/6/2013 12:00:00 AM
2	15734	539 Rolling Green Circle		Sooke	7	V0	POINT (-123.916864282061 48...	3f7562b0-0b3d-4f84-b189-320...	3/17/2012 12:00:00 AM
3	15735	81, cours Mirabeau		Paris	161	75012	POINT (2.27668241004802 48...	77672343-e801-4bd5-92a7-bc...	12/21/2013 10:09:29 AM
4	15736	6093 Midway Ct.		Hawthorne	64	4171	POINT (152.865678182475 -27...	577e089b-1af3-4f1e-9fd3-a27...	12/9/2013 12:00:00 AM
5	15737	5890 Yosemite Circle		Hawthorne	64	4171	POINT (153.217726905634 -27...	35e3e609-8f60-4072-a617-3f7...	2/6/2014 12:00:00 AM
6	15738	844, rue Basse-du-Rocher		Paris	161	75017	POINT (2.30764363006416 48...	14ea28d4-b75e-422e-b1c6-52...	12/21/2013 10:09:29 AM
7	15739	7228 Sierra Ridge	Unit A309	North Sydney	50	2055	POINT (151.221616268872 -33...	e1e4872f-0131-4241-aaf1-257...	9/4/2013 12:00:00 AM
8	15740	3575 Tulip St		N. Vancouver	7	V7L 4J4	POINT (-123.248996736813 49...	01de2889-a5dd-4e92-bfa9-ea...	7/29/2013 12:00:00 AM
9	15741	5070 Via Alta		Oregon City	58	97045	POINT (-122.46670851431 45.3...	5c50e45-4029-47ee-b5ff-eb4...	4/20/2014 12:00:00 AM
10	15742	Heiderplatz 662		Salzgitter	19	38231	POINT (0 0)	928811f0-c177-44a4-b789-71...	6/8/2014 12:00:00 AM
11	15743	332 Laguna Niguel		Seaford	77	3198	POINT (145.083394800255 -38...	0e195a2f-ba45-434a-8481-4c5...	11/10/2012 12:00:00 AM
12	15744	1185 Laguna St		Tacoma	79	98403	POINT (-122.603414874578 47...	2d5105ac-9951-48d5-b515-4a...	6/29/2014 12:00:00 AM
13	15745	2934 Trest Blvd		Grossmont	9	91941	POINT (-116.9693117647428 32...	c4ff732-4776-bd8f-abef-e77...	5/28/2014 12:00:00 AM
14	15746	9302 Blue Ridge		Lynnwood	79	98036	POINT (-122.349574037626 47...	0a65e7d6-16ba-4618-83d6-20...	3/3/2014 12:00:00 AM
15	15747	123, rue de Cambrai		Lille	145	59000	POINT (3.07364095630126 50...	4ffacc84-34de-4551-8714-eef...	12/21/2013 10:09:29 AM
16	15748	3519 Woodruff Lane		Irbank	9	91502	POINT (-118.45169442341 34...	6e40761-a229-4227-943c-d1...	4/12/2014 12:00:00 AM
17	15749	584 Blue Circle		Portland	58	97205	POINT (-122.833976139302 45...	ca0c3b1-8f58-4f5d-91ea-eae...	5/22/2014 12:00:00 AM
18	15750	2103 Baldwin Dr		Liverpool	14	L4 4HB	POINT (-2.97188475407706 53...	256a07a-e849-462c-b50e-bb5...	9/19/2013 12:00:00 AM
19	15751	8153 Shoe St		Port Hammond	7	V6B 3P7	POINT (-123.074240393706 49...	b5d426e-698b-4715-85bd-cb...	4/4/2014 12:00:00 AM
20	15752	5030 Race Ct		Marysville	79	98270	POINT (-122.123517979597 48...	d52a14d-e1d0-427e-9643-c5...	3/31/2014 12:00:00 AM
21	15753	2853 Rollinghill Way		Chula Vista	9	91910	POINT (-117.040907526625 32...	d927ae5-5767-4724-b092-60e...	8/13/2011 12:00:00 AM
22	15754	1061 Carzino Ct		Bracknell	14	RG12 8TB	POINT (-0.755761962104532 5...	67ee4738-884f-435e-8175-ffcd...	8/13/2011 12:00:00 AM
23	15755	2639 Parkview Court		Oregon City	58	97045	POINT (-122.711788979617 45...	b2b4b904-424d-4c1d-9970-a6...	6/27/2013 12:00:00 AM
24	15756	4956 Vista Del Diablo		Ballard	79	98107	POINT (-122.492818256593 47...	f6e3e64-0bf7-4d52-9a79-6cb...	9/21/2013 12:00:00 AM
25	15757	717 Ridge Park Drive		Corvallis	58	97330	POINT (-123.138766901075 44...	93311e90-94f3-47d6-a684-5a7...	7/27/2013 12:00:00 AM

Data Chain Results

Ord	Lvl	Parent Table	Table	Columns	Affected	Skip	Del	Null	Set Value
1	3	Address (Person)	[Person].[BusinessEntityAddress]	AddressID	1	☐	☒	☐	value...
2	3	SalesOrderHeader (Sales)	[Sales].[SalesOrderHeader]	SalesOrderID	4	☐	☒	☐	value...
3	3	SalesOrderHeader (Sales)	[Sales].[SalesOrderHeaderSalesReason]	SalesOrderID	4	☐	☒	☐	value...
4	2	Address (Person)	[Sales].[SalesOrderHeader]	BillToAddressID	3	☐	☒	☐	value...
5	2	Address (Person)	[Sales].[SalesOrderHeader]	ShipToAddressID	3	☐	☒	☐	value...
6	1		[Person].[Address]		1	☐	☒	☐	value...

☐ Hide Empty Tables

Build Script ...

Chain analysis complete — 6 dependencies found across 5 tables, 16 rows affected

Data Chain as shown on mcsavertechnologies.com



Tip of the Day

35 tips

Every Tip of the Day for this tab — open them in the app from the lightbulb icon.

VALUE Data Chain eliminates the guesswork of manual cascade deletion — instead of tracing foreign keys by hand across dozens of tables, you get the exact deletion order and affected row counts in seconds.

OVERVIEW The Data Chain tool analyzes foreign key dependencies to determine the correct deletion order for database rows, then builds a safe delete/update script for you.

ACTION Pick a table from the Table dropdown, optionally type a WHERE clause, then click "View Data Chain" to analyze its foreign key dependencies.

ACTION The Limit box caps how many candidate rows are previewed — the box turns gold when more rows match than the limit allows.

SELECTION Tap rows in the top "Candidate Rows" grid to select them — the chain analysis is then narrowed to just those rows by primary key.

CONCEPT Required foreign keys (non-nullable) mean dependent rows MUST be deleted first — they cannot be set to NULL.

CONCEPT Optional foreign keys (nullable) let you set the FK column to NULL instead of deleting the dependent row.

COLUMN	The "Lvl" column shows dependency depth — higher levels are deeper dependencies and are processed before shallower ones.
COLUMN	The "Ord" column gives the execution order — deepest dependencies are deleted first to satisfy foreign key constraints.
COLUMN	The "Affected" column shows how many rows in each dependent table would be impacted by your deletion.
VISUAL	An orange-red "Affected" count flags a required (non-nullable) foreign key with data that must be removed before the parent can be deleted.
VISUAL	Chain result rows are shaded by dependency level so you can see the depth structure at a glance.
COLUMN	Check "Skip" to exclude a table entirely from the generated script — no DELETE or SET NULL is emitted for it.
COLUMN	Check "Del" to generate a DELETE for that table; required FKs default to Del since their column cannot be nulled.
COLUMN	Check "Null" to SET NULL on the FK column instead of deleting — this cell is grayed out and disabled for required FKs.
COLUMN	Type a value in the "Set Value" box to replace the FK with a specific value instead of deleting or nulling; string values are auto-quoted, and hovering shows the FK constraint name.
FILTER	Enable "Hide Empty Tables" to focus only on tables that actually have affected rows in the chain.
ACTION	"Build Script ..." generates the full T-SQL without running it and opens it in a Query window for review before you execute anything.
SAFETY	The generated script always wraps everything in a transaction with SET XACT_ABORT and per-step row-count checks that RAISERROR and roll back if the affected count differs from what was expected.
FILTER	Click any chain results header (Ord, Lvl, Table, Columns, and so on) to open the filter/sort popup; an active filter or sort is marked with a glyph on that header.
FILTER	Click a column header in the top Candidate Rows grid to filter or sort the preview without changing your row selection.
NAVIGATION	Drag the purple splitter bar between the Candidate Rows and Data Chain Results panels to resize them.
ACTION	Right-click a chain row and choose "View Rows" to open the actual affected rows in a detail grid, narrowed by any candidates you have selected.
SELECTION	The chain row right-click menu also offers "Select All" and "Clear Selection" for the visible chain results.
PERFORMANCE	"Use No Lock" is on by default and adds WITH (NOLOCK) to candidate and analysis queries so reads don't block on busy tables.

- CLARIFICATION** Column header tooltips in the Candidate Rows grid show each column's database description (MS_Description) when one is defined.
- FEATURE** The camera icon captures a screenshot of the Data Chain panel to an image file and opens its folder for you.
- FEATURE** The "Show Log" button in the top toolbar opens the Data Chain execution log — a running record of every cascade delete/update script you actually ran against the database, kept verbatim so each script's "-- Delete from ... (Level N, FK: ...)" comments are preserved.
- CLARIFICATION** Each execution-log entry is timestamped and marked as succeeded or failed, and includes the server's PRINT output listing the rows affected per table; right-click the "Show Log" button to copy the log file's path to the clipboard.
- LAYOUT** The Candidate Rows and Data Chain Results grids keep their column headers pinned in view while you scroll through the rows.
- FEATURE** The "View Rows" detail grid now has a "View SQL" icon that opens the exact SELECT statement that produced those rows.
- CLARIFICATION** In the "View Rows" detail grid, SQL NULLs display as "(null)" and hovering any cell reveals its complete, untruncated value.
- PERFORMANCE** Clicking a Candidate Rows or chain-results header pops a quick spinner while the column is grouped off the UI thread, keeping the panel responsive until the filter/sort popup appears.
- PERFORMANCE** On a high-cardinality column, the filter/sort popup lists only the top 120 values for the current sort, while filtering, Select All, and the distribution chart still cover every value.
- VISUAL** The popup's chart plots the top 60 values by size to stay readable, flagging the cap with a yellow "Showing top N of M values" notice and an info icon.