

# Top 5 Manual Tips to Optimize DAX Queries

Tip	Why I Choose It (Benefit)
1. Minimize the number of <b>FILTER</b> calls	<b>FILTER</b> iterates row-by-row; reducing its use in favor of simpler <b>CALCULATE</b> conditions speeds up queries.
2. Use variables ( <b>VAR</b> ) to store intermediate results	Prevents recalculating the same expression multiple times, reducing engine work.
3. Replace <b>ALL</b> with <b>ALLSELECTED</b> or <b>REMOVEFILTERS</b> when possible	<b>ALL</b> removes all filters, which can break context; more selective functions maintain context and improve performance.
4. Use measures instead of calculated columns where possible	Measures are computed on demand, saving memory and avoiding unnecessary storage costs.
5. Reduce cardinality of columns	Lower cardinality (fewer unique values) in model columns leads to faster scan and aggregation times.

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## Benefits of DAX Optimization Tools

Tool	Key Benefit
<b>DAX Studio</b>	Analyzes query execution times, identifies bottlenecks, shows server timings.
<b>Performance Analyzer (in Power BI)</b>	Records the rendering time of visuals and the query time separately to pinpoint slow visuals.
<b>Tabular Editor</b>	Helps refactor measures, remove unused columns, and manage calculation groups for performance and maintainability.