

TWENTY YEARS OF PERFORMANCE TUNING

by Chris Lawson



TIP #4

Become Adept at Using Sql Hints

DBAs sometimes make the comment, "Sql hints should be your last resort." Well, they might be the last resort, but they are a *frequent* last resort. The optimizer works well, but as the size of tables and the complexity of sql grows, the optimizer makes more wrong choices. Furthermore, the consequences of a wrong plan are more severe on large systems.

If you are working on a large system with many batch jobs, it is a near-certainty that you will need sql hints. Of course, you will need to know hints related to Parallelism, but also how to change the join method, join order, index usage, cardinality, plus merging of views.

Here are some of the hints I use most frequently: FULL, PARALLEL, PARALLEL_INDEX, LEADING, INDEX, USE_HASH, USE_NL, NO_MERGE, CARDINALITY, INDEX_FFS, MATERIALIZE. There are a ton more, but most are rarely used. If you become adept at using hints such as the ones here, you will have far more tools at your disposal.

Without the knowledge of how to use hints, you will likely be reduced to using some type of tool to make the choice for you. Then, when the tool fails, you will be out of options. Gaining expertise in sql hints was one of the smartest career moves I made.



Chris Lawson is the author of *The Art & Science of Oracle Performance Tuning*, as well as *Snappy Interviews: 100 Questions to Ask Oracle DBAs*. When he's not solving performance problems, Chris is an avid hiker, runner, chorister, Amazon reviewer, and geocacher. Chris writes using the penname, "*Bassocantor*."

Twenty Years of Performance Tuning is a series of tips based on the author's experience solving performance problems over the last 20 years.