

# TWENTY YEARS OF PERFORMANCE TUNING

by Chris Lawson



## TIP #5

### Understand Stored Outlines

In spite of Oracle's plans to make this feature obsolete, outlines are still in use. There is a good reason for this--outline are fast, easy, and effective. In contrast to most other tuning features, a stored outline *preserves* an execution plan. They can be transferred to other databases, or quickly re-created.

A sql profile, in contrast, simply gives the optimizer more cardinality information. That's not really the same thing, and so, a profile in one database may not work right in another. The two tools seem similar, but the way they do the job is different.

There is also an important distinction between outlines and SPM (Sql Plan Management.) SPM assumes that *many* plans need to be kept from changing. Outlines assume that only a *few* plans need to be locked. SPM's perspective is that the optimizer is too risky. Stored Outlines see the optimizer as making mistakes *rarely*. SPM is touted as designed to keep plans from changing. To achieve that, it's scope must be database-wide. It has to stop any plan from changing. Outlines deals with the relatively few exceptions.

One of the biggest benefits of stored outlines is the ability to *change* an execution plan--not just lock one down. This happens with no change to code, and no downtime.



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