<https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre>

[What are the main differences between OPTION(OPTIMIZE FOR UNKNOWN) and OPTION(RECOMPILE)?](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre)

I run into the classic [Parameter Sniffing](https://blogs.technet.microsoft.com/mdegre/2011/11/06/what-is-parameter-sniffing/) issues in SQL Server 2012. Based on some research I found multiple options around this problem. The two options that I need to understand the difference between are OPTION(OPTIMIZE FOR UNKNOWN) vs OPTION(RECOMPILE).

I am hesitating to use OPTION(RECOMPILE) at the end of my queries that are having this issue because it will force the server to generate a new execution plan each time. If I call this query often this will spike up the CPU of that machine.

So that I use he best available solution, what are the real differences between the two options?

Will OPTION(OPTIMIZE FOR UNKNOWN) reuse cache instead of recompiling each time?

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asked Nov 4, 2016 at 22:54

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How complex are your queries? You don't want to recompile queries in a transaction environment if you expect them to complete in a fraction of a second. But if they are larger queries, then the overhead for the recompile is probably negligible compared to the actual execution.

– [Gordon Linoff](https://stackoverflow.com/users/1144035/gordon-linoff)

[CommentedNov 4, 2016 at 22:59](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre" \l "comment68114213_40432794)

* My understanding is that OPTIMIZE FOR UNKNOWN applies at the time the query is compiled. It tells the optimizer to ignore the specific parameter values and use its statistics to generate the plan. The resultant plan would be cached and not recompiled.

– [John D](https://stackoverflow.com/users/6212666/john-d)

[CommentedNov 4, 2016 at 23:01](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre" \l "comment68114243_40432794)

* @GordonLinoff I am not using it in a transaction. It is for a report that has to run often. It has about 10 left joins and 1 inner join. The query itself is not complicated.

– [Junior](https://stackoverflow.com/users/4967389/junior)

[CommentedNov 4, 2016 at 23:07](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre" \l "comment68114326_40432794)

* @JohnD so is it fair to say the OPTION(RECOMPILE) recompiled every time where OPTION(OPTIMIZE FOR UNKNOWN) compiles once using UNKNOWN so OPTION(OPTIMIZE FOR UNKNOWN) is cheaper in the case?

– [Junior](https://stackoverflow.com/users/4967389/junior)

[CommentedNov 4, 2016 at 23:08](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre" \l "comment68114365_40432794)

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I haven't tested it, but that is my understanding, yes. However if the query plan is not very good for the particular cases that you will be using, you may be better off with the recompile option. Sometimes it's obvious from the query plan whether it works for you or not in your use cases. If not obvious, you can do benchmarks. Recompile option is expensive, but inefficient queries may be even more costly.

– [John D](https://stackoverflow.com/users/6212666/john-d)

[CommentedNov 4, 2016 at 23:17](https://stackoverflow.com/questions/40432794/what-are-the-main-differences-between-optionoptimize-for-unknown-and-optionre" \l "comment68114487_40432794)