



The NAV/SQL Server Performance Toolbox (PTB)

The **PTB** is a collection of powerful utilities to take care about all major aspects of performance-optimization including configuration, monitoring/analysis, optimization and maintenance to improve the NAV/SQL system remarkably!

It is easy to install and to use, even for those administrators and developers who are not too familiar with SQL Server features.

The PTB provides a *scalable* set of optimization-features to suit small, medium and (very) large systems, as well!



After all, the throughout performance of the whole NAV system could be increased **up to 100%** and more! *

Supported versions & platforms:

*Microsoft SQL Server 2000 **, *Microsoft SQL Server 2005*, *Microsoft SQL Server 2008/R2*
*Navision Financials 2.60 **, *Navision Attain 3.00/3.10 **, *Microsoft Business Solutions Navision 3.60/3.70 **
Microsoft Business Solutions Navision 4.00, *Microsoft Dynamics NAV 5.00/5.00SP1*
Microsoft Dynamics NAV 2009/SP1/R2 (Classic Client)

**) not all features available*

THE NAV/SQL PERFORMANCE TOOLBOX – EASY TO USE, EFFICIENT IMPROVEMENT FOR YOUR SYSTEM!

✓ **System Configuration**

Most of the NAV & SQL Server systems are configured wrong. The PTB sets the right **parameters** and implements the right **configuration** for the *SQL Server* and the *NAV database*.

✓ **Index Optimization**

Optimized indexes are the most crucial part of the system regarding performance! Unfortunately, most of the NAV indexes are quite insufficient: the B-Trees are too big, fill-factors wrongly adjusted and of poor selectivity. The PTB reduces the size of indexes while adjusting the ideal fill-factor for each table/index and could optimize the index selectivity to provide improved read- and -write-performance!

Once the index structure has been improved, the PTB automatically maintains the indexes to keep the performing optimal (including scheduling features for individual re-indexing). This re-indexing also features advanced scheduling possibilities, e.g. to support large databases with small “time-frames” for maintenance.

With long-term monitoring of SQL Server site “Index Usage” statistics it could be determined which indexes could be safely disabled in NAV.

✓ **Statistic Maintenance**

According to the index optimization, the relevant statistics are maintained by the PTB. In addition to the standard features, the PTB removes irrelevant statistics from the system.

✓ **SIFT/VSIFT Optimization**

The SIFT feature of NAV is primarily responsible for poor write performance and lots of blocking issues. After adjusting the SIFT structure the PTB cleans up periodically the SIFT tables to keep them performing fast.

To further enhance the SIFT – and also VSIFT – performance optimized SQL site indexes could be implemented.

**) depending on transactions, customizations and pre-tuning*



✓ **Block and Deadlock Detection**

Whenever a blocking situation occurs in NAV – in worst case a “deadlock” – it’s hardly possible to precisely determine the reasons for it.
The PTB automatically keeps track of any blockings, recording detailed information about involved processes and resources, to provide clues for solving or avoiding them.

✓ **Profiler Trace Analysis**

Automatically create SQL Profiler Traces to investigate problematic processes. The output file from SQL Server Profiler could be easily analyzed to get hints about bad execution plan, lacking indexes, over-indexing etc..

✓ **Query Hinting**

Simply create INDEX or RECOMPILE hints for C/SIDE to improve problematic queries.

✓ **Graphical User Interface for MS Dynamics NAV**

Even though the PTB is (almost) throughout a SQL tool, a GUI for NAV could be implemented to quickly get relevant information and to easily use the features even without knowing about TSQL.

✓ **Generic Features**

Most of the PTB features are generic – means not NAV specific – and could be used with any other SQL Server database, as well (e.g. with MS Dynamics AX (Axapta))!

... and much more!

But ...

**“IT’S NOT THE TOOL WHICH FIXES A PROBLEM ...
... IT’S THE PERSON USING IT!”**

Just a “tool” by itself could do just minor enhancements. It is necessary that a trained and experienced person is thoroughly investigating the occurring problems to decide which optimization to implement – or not - and when. It crucial to exactly know about the “DOs and DON'Ts” of NAV/SQL tuning, as “*prescribing the wrong medicine*” could also worsen existing problems or raise new ones.

The “NAV/SQL Performance Toolbox” is exclusively provided by STRYK System Improvement and authorized distribution partners.

These competent partners grant the correct installation and configuration of the tools, and appropriate training of the local administrators in using the tools.

And last but not least:

**THERE IS NO LICENSE FEE FOR THE TOOLBOX –
IT COMES WITH THE WORKSHOP OR TRAINING!**





Authorized Partners (Want to become a "Toolbox Partner"? You're welcome! Please send a notice to toolbox@stryk.info !):

3Li business solutions	9-23 rue Paul Lafargue 93210 La Plaine Saint Denis France http://www.3li.com
Abakion	Masnedøgade 20 2100 København Ø Denmark http://www.abakion.dk
ACP Business Solutions	Franz Josef Strasse 12 8330 Feldbach Austria http://www.acp.at/
Agiles Trade	Glockengießerwall 3 20095 Hamburg Germany http://www.agiles.de
AGS Andreas Gruber Software	Theodor-Althoff-Str. 47 45133 Essen Germany http://www.ags-online.de/
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amball business software	Nordostpark 12-14 90411 Nürnberg Germany http://www.amball.de
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Computenz EDV-Lösungen	Obere Vorstadt 16 71063 Sindelfingen Germany http://www.computenz.de
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E Foqus	Aarhusgade 88 2100 København Ø Denmark http://www.efoqus.dk/
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GOB Software & Systeme	Europark Fichtenhain A4 47807 Krefeld Germany http://www.gob.de
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IT-Gruppen	Hojvangen 4 8660 Skanderborg Denmark http://www.itgruppenas.dk/
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Navet	Järnvägsgatan 11 25224 Helsingborg Sweden http://www.navet.se/
Network Dimensions	Stubenring 4 1010 Wien Austria http://www.netdim.at
Nplus	Nordager 22 6000 Kolding Denmark http://nplus.dk
prisma informatik	Merianstrasse 26 90409 Nürnberg Germany http://www.prisma-informatik.de

Qurius Solutions (Germany/Austria)	Notkestrasse 7 22607 Hamburg Germany http://www.qurius.com
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SHB business solutions	Rosenheimer Landstrasse 145 85521 Ottobrunn Germany http://www.shb-bs.com
Sievers SNC	Hans-Wunderlich-Strasse 8 49078 Osnabrück Germany http://www.sievers-snc.de/
Singhammer IT Consulting	Geisenhausenerstrasse 11a 80997 München Germany http://www.singhammer.com/
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