

INF115: Cool features in The Domino Optimizer

PREEMPTIVE.



What is the Domino Optimizer?

- It's a Domino application and add-in that schedules and optimizes all aspects of database maintenance
- Contains the world's first Domino-specific database defragmentation engine, running natively as a Domino server task.

What is the Domino Optimizer?

- Intelligently selects databases for maintenance and optimizations, including DAOS enablement and View separation
- Provides a scheduler and UI for DBMT.
- Helps reduce future fragmentation.
- Reduces I/O and increases performance

Super easy to install

- Supplied and managed as a single Domino Database
- Nothing extra to download
- One click install
- Supports Windows 2012/2016/2019 NTFS file systems
- 64 bit

Here are some of its key features

The missing user interface for DBMT

- The Domino Optimizer includes a DBMT scheduler
- No more trial and error of command line settings

Technical Settings

Start Processing Schedule

	Start Time	DBMT+ Duration minutes	Only Compact if not compacted in N Days	Only Compact when Freespace exceeds
<input checked="" type="checkbox"/> Sun	02:30 AM	120	7	0%
	<input type="checkbox"/> Then Backup with options			
<input checked="" type="checkbox"/> Mon	04:57 PM	120	7	10%
	<input checked="" type="checkbox"/> Then Backup with options			
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<input checked="" type="checkbox"/> Sat	02:30 AM	120	7	10%
	<input type="checkbox"/> Then Backup with options			
<input type="checkbox"/> Auto Tune the Schedule				

Extends DBMT with new features

- Provide fine granular control of DBMT's operations, including databases and directories that should be excluded from processing

Technical Settings

[General](#)[Defrag](#)[DBMT+](#)[Schedule](#)[Properties](#)[DAOS](#)[Views](#)[Stop](#)[System DBs](#)[Freespace](#)

DBMT+ Settings

DBMT Compact Threads: DBMT Updall Threads:

Exclude the following databases from DBMT processing:

Exclude the following directories from DBMT processing:

Maximum Entries in DBMT filter: *Set to 0 if running Domino 9.01 FP4 or later, [more information](#)

Intelligently excludes databases from DBMT

- Extends the functionality of DBMT allowing it to skip compacting databases that don't have freespace issues.

Technical Settings

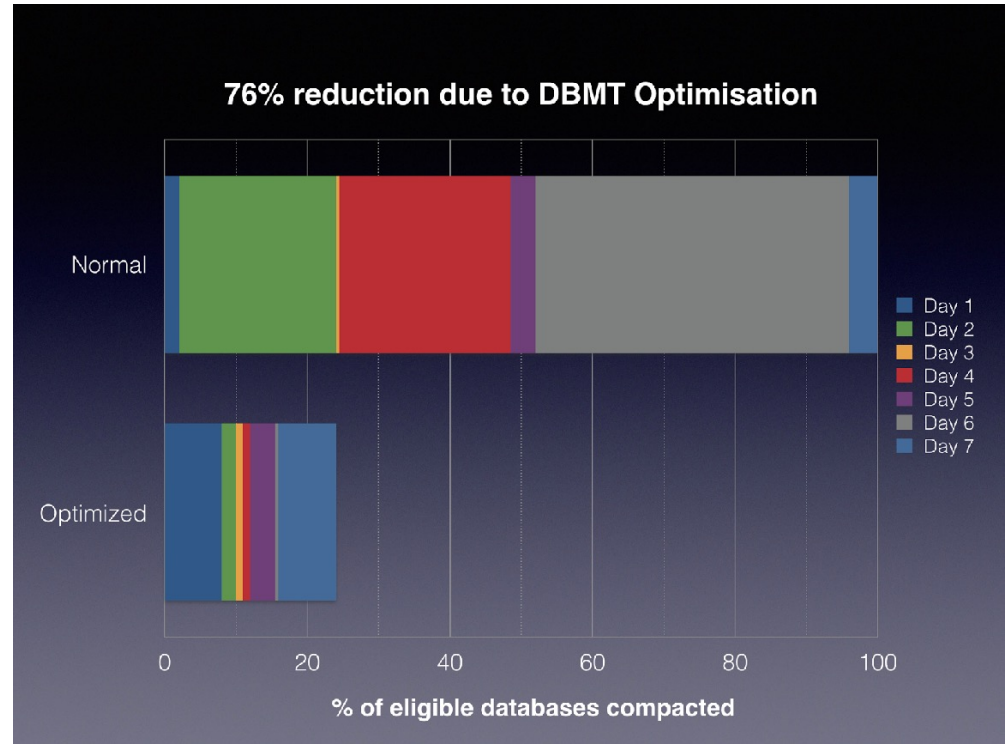
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☐ Auto Tune the Schedule

Intelligently excludes databases from DBMT

- A live example of DBMT optimisation set at 10%, providing a reduction in compact activity of 76%



<https://ab1osborne.blogspot.com/2016/12/dbmt-optimizations-in-ddo-that-can.html>

Enables DAOS based on template or location

- Exclude particular databases
- Automatically monitor DAOS synchronization

Technical Settings

Automatically Enable DAOS

☒ DAOS enable all databases using the following templates:

StdR85Mail, StdR12Mail ▾

Databases in this directory path archive\

Never DAOSify the following databases:

☒ Automatically monitor DAOS synchronization:

<https://ab1osborne.blogspot.com/2021/12/how-to-master-daos.html>

Automatically enables View Optimization

Technical Settings

View Optimization (NIFNSF)

☒ Enable View Optimization on this server

File directory to store View NDX files (eg: d:\view_indexes):

☐ Process all eligible databases

☒ View Optimize all databases using the following templates:

View Optimise all Databases in this directory path (eg: mail):


Never view optimize the following databases:

Detailed Health and Optimization reporting


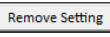





Defrag.NSF+ Health Check

Overall Health

Excellent



Comments on the server's configuration

-  **Updall detected in the Notes.INI**
When using DBMT+ for daily indexing updates, Updall is no longer required in the Notes.ini file

-  **Full Text Index location**
A separate path for Full Text Indexes has been detected
-  **Latest NSF On-disk structures**
This server is using the latest ODS level
-  **FTG_USE_SYS_MEMORY**
Domino is allowed to request system memory for full text indexing.
-  **FT_FLY_INDEX_OFF=1**
Domino will not create temporary full-text indexes. This is a best practice setting.
-  **UPDATE_FULLTEXT_THREAD**
Domino will use a separate thread to create full-text indexes. This is a best practice setting.

<https://ab1osborne.blogspot.com/2021/12/the-domino-optimizer-features-in-detail.html>

Easily maintains system databases

- Easily schedule weekly maintenance of system databases

Technical Settings

Off-line maintenance of System Database

Frequency	Start Day	Start Time	Rename wait time	If required restart the server
<input checked="" type="radio"/> Off <input type="radio"/> Once <input type="radio"/> Repeat	Sunday	02:30 AM	5 minutes	<input checked="" type="checkbox"/> Enabled

Note: Enabling this option WILL cause a server restart at the specified time.

Databases to target for off-line processing:

admin4.nsf, busytime.nsf, catalog.nsf, clbdir.nsf, clubusy.nsf, ddm.nsf, dbdirman.nsf, dircat.nsf, domlog.nsf, events4.nsf, log.nsf, lndfr.nsf, mtdatamtstore.nsf, names.nsf, statrep.nsf

☐ Shutdown Mail Router before maintenance

<https://ab1osborne.blogspot.com/2021/12/domino-optimizer-features-in-detail.html>

- Contains a built in defragmentation engine to reduce performance sapping I/O that builds up on NTFS over the years
- A must have to gain the greatest advantages from DBMT pre-allocation
- Runs live on both database, DAOS files, full-text indexes and freespace

Smart database defragmentation

- It's silly to defrag a 50+GB database that is in just a couple of fragments.
- Focus on best return on effort, making everything more ef

Technical Settings

Defragmentation Selection

- ☒ Top <n> databases by Health Index
- ☐ When fragments exceed
- ☐ When fragmentation Health Index exceeds
- ☐ Top <n> database

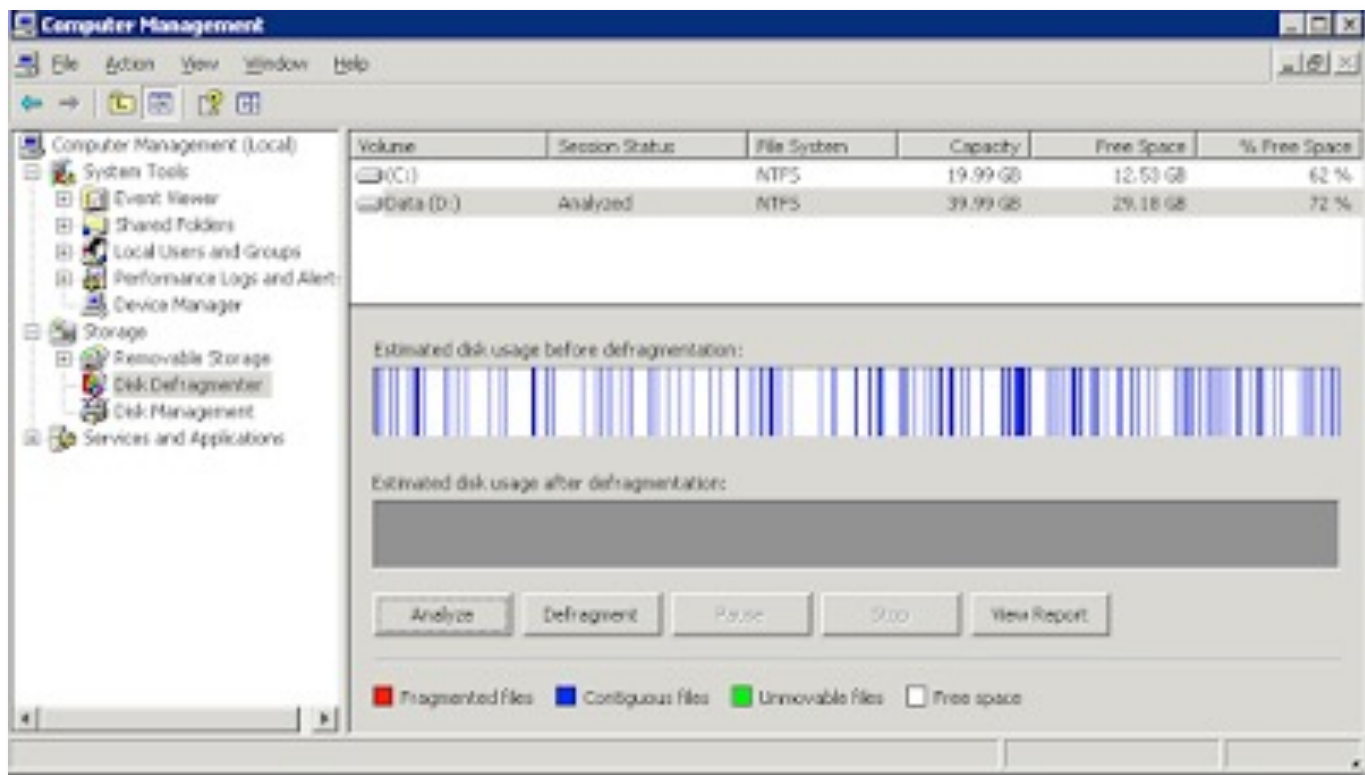
Number of databases: 2000

Defragmentation Options

- ☒ Multi Stage Optimization
- ☒ Transaction Log Optimization

- Some file defraggers can seriously fragment freespace. This is not helpful and interferes with DBMTs smooth operation.

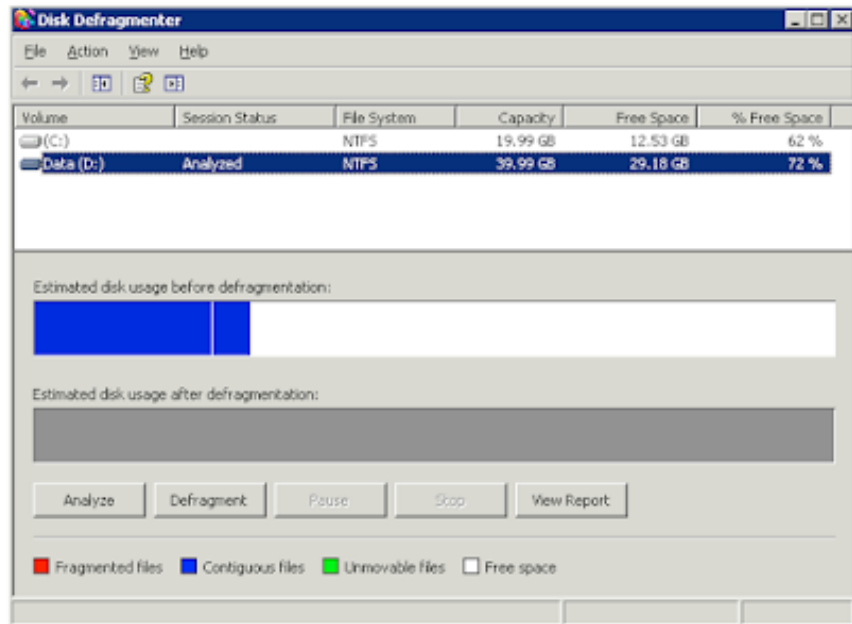
Smart database defragmentation



<https://ab1osborne.blogspot.com/2010/07/closer-look-at-smart-file.html>

Smart database defragmentation

- The Domino Optimizer can optionally create contiguous freespace to help DBMT perform much better.



- Once all the optimizations have taken place, you can take advantage of Domino 12's new backup feature and have it scheduled to run

What's new for Domino 12

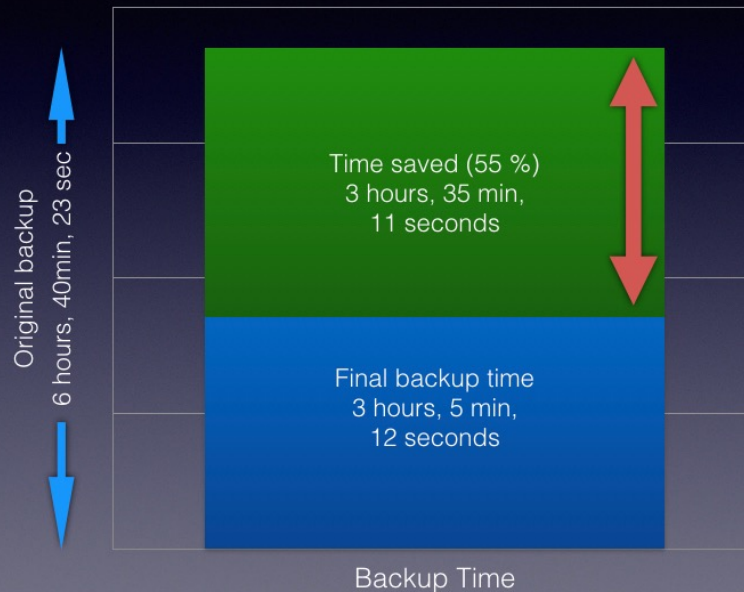
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- This leads to ...

The positive effect of removing
742,289 fragments in 144 Databases



- One more thing !

Runs fine in a browser with Nomad Web

The screenshot shows a web browser window displaying the Domino Optimizer application. The browser's address bar shows the URL `http://localhost:8080/`. The application's header bar is dark blue with the text "HCL Nomad" and a menu with options: "Open", "File", "Edit", "View", "Create", and "Actions". On the right side of the header, there is a help icon and a user profile icon labeled "Adam Osborne". Below the header, a blue banner displays "Domino Optimizer" in large white text, followed by "on pecdm3 Version 12.10 - November 2021" in smaller white text. A "Settings" gear icon is located on the right side of the banner. A dark grey sidebar on the left contains a list of navigation items: "Home" (house icon), "Databases" (calendar icon), "Health Reports" (heart icon), "Processing Log" (document icon), "Live Status" (wifi icon), "Domino Console" (monitor icon), and "Support" (hand icon). The main content area has a white background and features a "Welcome" section. The "Welcome" section includes a paragraph about the Domino Optimizer (DO) and its capabilities, followed by a paragraph about its primary focus on performance and I/O reduction. Below this, there is a paragraph about the Database Maintenance Tool (DBMT) and its integration with DO. At the bottom of the main content area, there is a copyright notice: "(C)opyright Preemptive Consulting Pty Ltd 2021".

HCL Nomad Open File Edit View Create Actions ? Adam Osborne

Home Domino Optimizer x

Domino Optimizer on pecdm3 Version 12.10 - November 2021 Settings

Welcome

Domino Optimizer (DO) is a server maintenance utility that automates and simplifies many Domino administrative features, allowing hands-off fine-tuning and additional optimization of Domino databases and the server overall. These new extended capabilities are selectable and can be simply enabled/scheduled if and when you want via an intuitive UI in the familiar Domino admin client. DO can also perform defragmentation maintenance using Preemptive's custom-built-for-Domino multi-stage defrag engines. Maintenance tasks can be done either manually or using the integrated scheduling options and selection criteria.

The primary focus of DO is maximising the performance of your databases and the Domino server and minimising I/O. Each new release of Domino features ODS (On-Disk Structure) upgrades to databases as HCL continues to place great emphasis on I/O reduction. Reducing I/O leads to improved performance for the entire system, delivering performance improvements that manifest through the entire system in many ways, a more responsive server, an improved experience for end-users as they interact with applications and replicas, right through to faster backup times and back-end storage efficiencies.

DO can be configured to just defrag your nsf files if that's all you'd like it to do, that can be its default function. The DBMT (Database Maintenance Tool) is also seamlessly integrated into the custom optimization process. This integration can be optionally enabled by you, extending the capabilities of DO to offer all the benefits of DBMT integrated with defragging and then backing up the optimized databases. This provides a powerful, easy to use, one-stop interface to leverage the benefits of multiple complimentary maintenance tools and advanced Domino tuning techniques. With DO, administrators are no longer burdened with configuring and monitoring numerous Program Documents, or time researching beneficial settings. DO delivers this to you, allowing you to very easily manage, configure and continuously perform extensive best-practice database and server maintenance automatically, so you can focus on other duties - just set and forget!

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Want to know more?

- Just go to <https://www.preemptive.com.au/optimizer>
- More features are discussed there
- Extensive blogging on all topics discussed
- Trial The Domino Optimizer for free

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