IMS Buffer Pool Analyzer

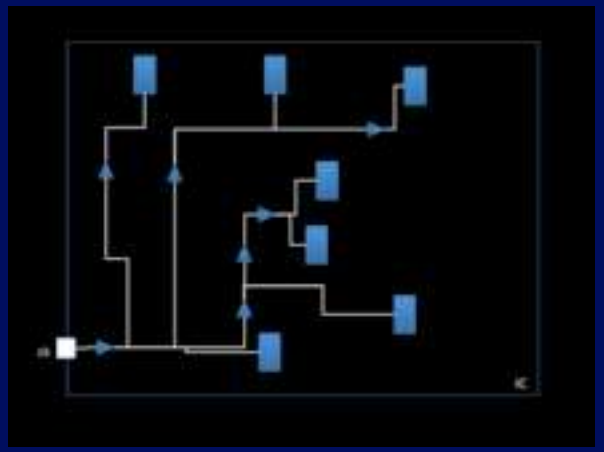
Enhancing Buffer Pool performance!

IMS Buffer Pool Analyzer

When was the last time anyone in your organization looked at the IMS Buffer assignments?

Processing costs continue to rise, I/O gets more expensive every day.

Are you paying more and getting less bang for your processing dollar because your system is constantly reading and re-reading data?



IBM can help!

IMS Buffer Pool Analyzer

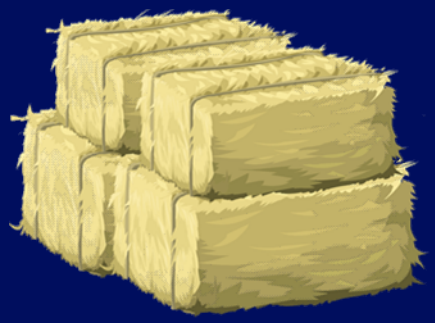
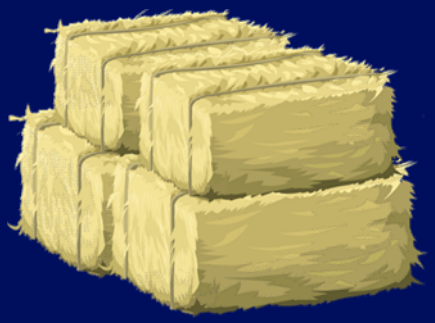
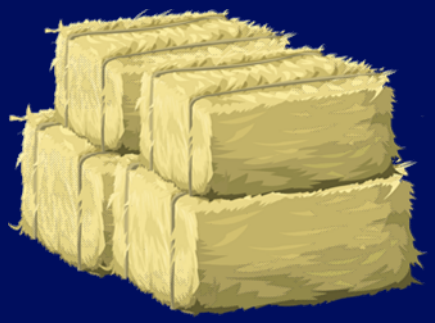
IMS always looks for data in the buffers first, then, if it isn't found, makes a costly read of the database.

The more data placed in the buffers, the less I/O.

Ideally, it would be nice to have the entire database loade[illegible] that isn't practical.

IMS Buffer Pool Analyzer

IMS Buffer Pool Analyzer can give you the next best thing – maximum use of the buffers that are available!

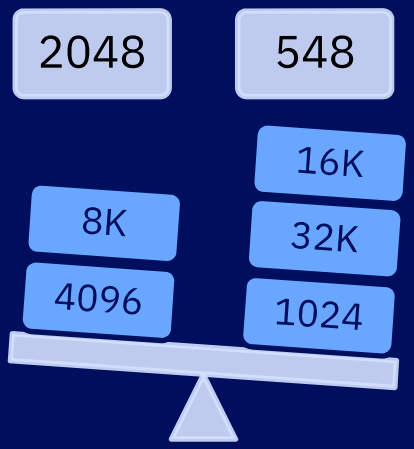
So, What exactly is IMS Buffer Pool Analyzer?

IBM IMS Buffer Pool Analyzer for z/OS (also referred to as IMS Buffer Pool Analyzer) provides a way to analyze database buffer pool performance for both IMS batch jobs (DLI and DBB) and IMS subsystems (DBCTL and DB/DC).

IMS Buffer Pool Analyzer provides more information than just IMS database buffer pool hit ratios and I/O rates. It provides a way to determine the impact of buffer pool changes before they are made.

IMS Buffer Pool Analyzer

The IMS Buffer Pool Analyzer is designed to help the IMS support specialist tune IMS database buffer pools to gain optimized performance in online and batch processing

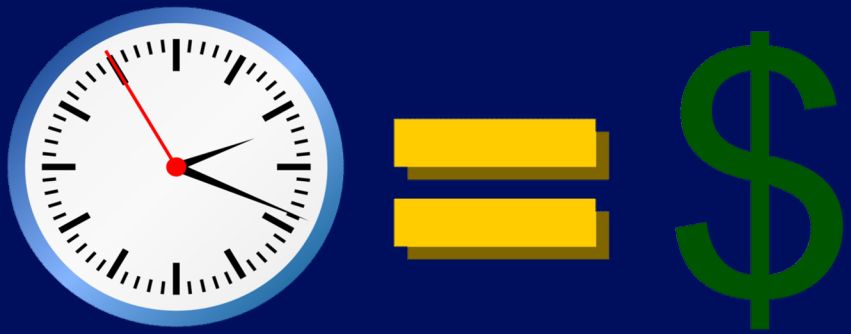


IMS Buffer Pool Analyzer

Without a way to look at the buffers while processing, analyzing the buffer assignments in an IMS system can be a long drawn out process, filled with guesswork, and prone to errors.

IMS Buffer Pool Analyzer

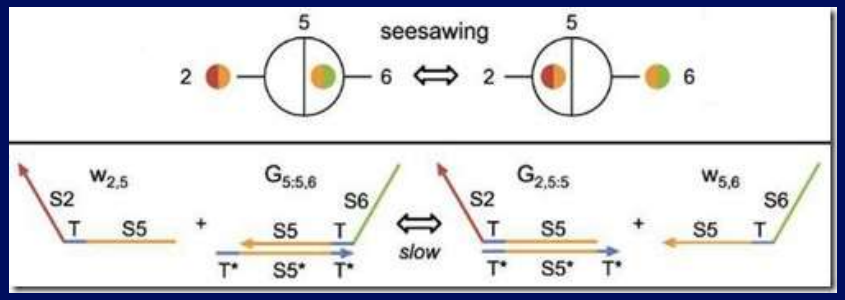
If you’re making changes in a production environment, these changes can be time consuming if you have to enter a change request each time you try to implement your changes.



IMS Buffer Pool Analyzer

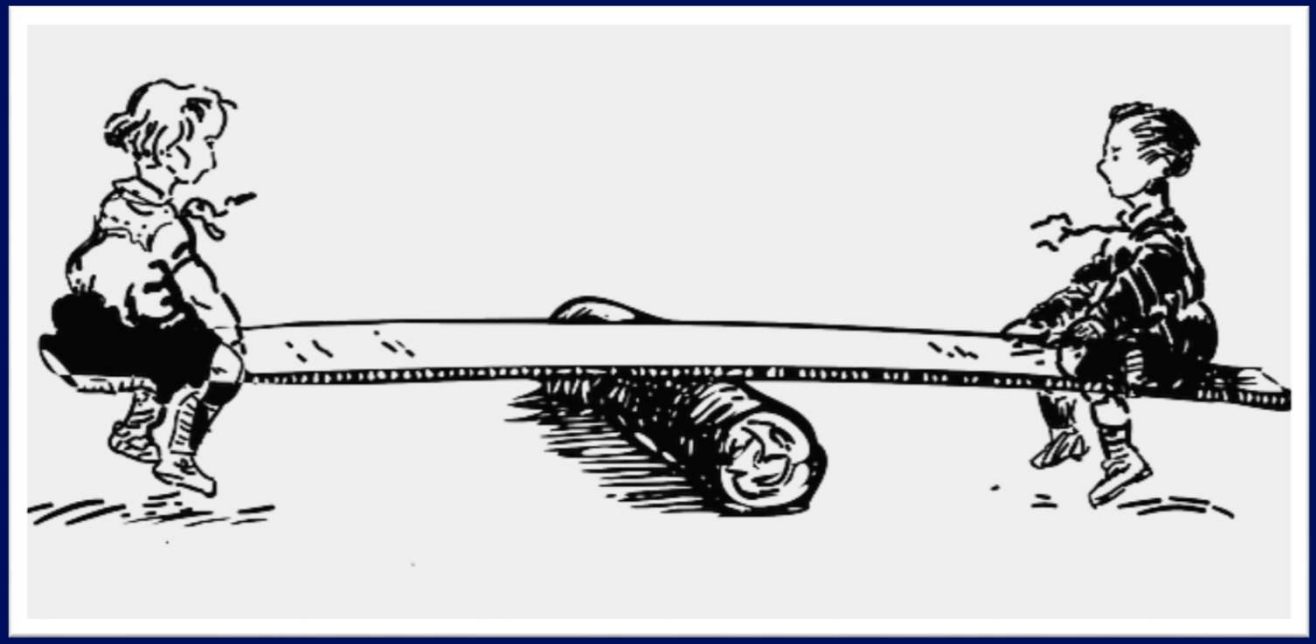
IMS DB Buffer Pool tuning is a balancing act. It is simply a tradeoff between I/O rate and storage. Wasting either resource can have negative impacts on IMS and the entire MVS system.

It can feel like you're dealing with this:



IMS Buffer Pool Analyzer

IMS Buffer Pool Manager can make it more like this:



IMS Buffer Pool Analyzer

Not only will BPA show you what the buffers look like now, it will also show you what you can do to improve performance by improving buffer assignments.

BUFFER SUBPOOL SUMMARY IMS IEA1 BUFFER POOL REPORT

DATABASE SUBPOOL SUMMARY

TYPE	BUFFER SIZE	SUBPOOL	NUMBER BUFFERS	REQUESTS PER SECOND	READS PER SECOND	HIT RATIO	BUFFER LIFE	MARGINAL REDUCTION
OSAM	1,024		50	----------	NO SUBPOOL ACTIVITY			-------
OSAM	2,048		50	-------	NO SUBPOOL ACTIVITY			-------
OSAM	4,096		50	4	1	77.0%	53	4
OSAM	8,192		50	1	0	95.6%	995	0
OSAM	32,768		50	0	0	89.3%	2915	0
OSAM	*TOTAL		250	5	1	81.3%		
VSAM	512		50	----------	NO SUBPOOL ACTIVITY			-------
VSAM	1,024		50	-------	NO SUBPOOL ACTIVITY			-------
VSAM	2,048		50	1	0	99.4%	8163	0
VSAM	4,096		50	2	0	96.7%	927	2
VSAM	8,192		50	0	0	70.3%	2550	0
VSAM	16,384		50	-------	NO SUBPOOL ACTIVITY			-------
VSAM	32,768		50	-------	NO SUBPOOL ACTIVITY			-------
VSAM	*TOTAL		350	3	0	97.3%		
*GRAND	TOTAL		600	8	1	86.9%		

THE BUFFER SIZE USED BY THE FOLLOWING DATABASES EXCEEDS THE MOST EFFICIENT SIZE

DBDNAME	DCB	TYPE	SUBPOOL	CI SIZE OR BLKSIZE	USED BUFFER SIZE	BEST BUFFER SIZE	STORAGE
HOTELDBA	1	OSAM		12,288	32,768	12,288	1,000K
*TOTAL							1,000K

THE FOLLOWING BUFFER SUBPOOLS HAVE DATABASES WITH HIGHLY VARIED HIT RATIOS
(THE 10 BUSIEST DBDS PER SUBPOOL ARE SHOWN)

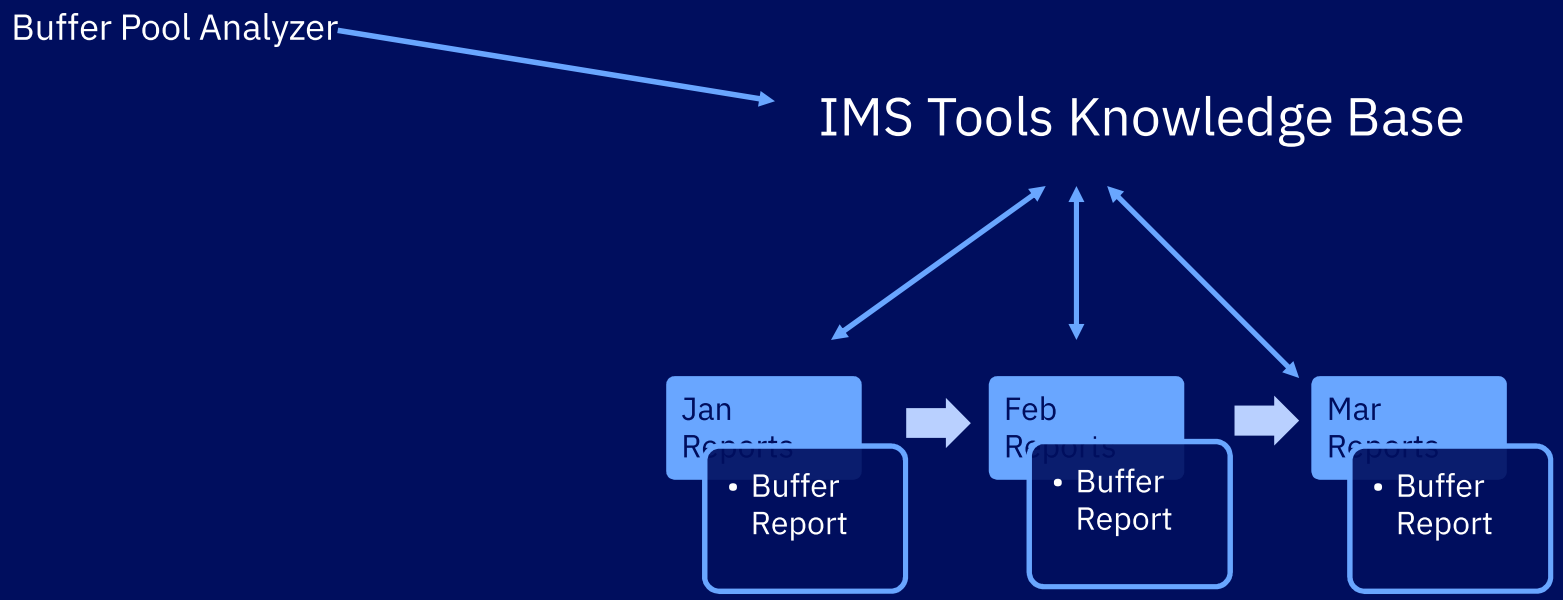
BUFFER SIZE	TYPE	SUBPOOL	DATABASE	DCB	HALDB MASTER OR AREA	HIT RATIO
4,096	OSAM		PARTSDBA	1		82.0%
			ITEMMASA	1		51.3%
			ITEMACTA	1		89.9%
			COMPOSDA	1		84.5%
			INVENTRA	1		92.0%
			CUSTOMRA	1		87.1%
			ITEMMASA	3		35.7%
			DEPSUMDA	1		66.6%
			EMPACTDA	1		50.0%

SUBPOOL BUFFER CHANGE RECOMMENDATIONS:

BUFFER SIZE	POOL TYPE	SUBPOOL NAME	CURRENT BUFFERS	NEW BUFFERS	----- CHANGE IN ---- STORAGE	READS/SEC	
1,024	OSAM		50	0	-50K	+0.00	SUBPOOL NOT USED
2,048	OSAM		50	0	-100K	+0.00	SUBPOOL NOT USED

IMS Buffer Pool Analyzer

Buffer Pool Analyzer also provides support for IMS Tools Knowledge Base



IMS Buffer Pool Analyzer performs the following functions:

1. Reviews your buffer pool environment

2. Recommends changes to the sizes of buffers in each subpool

3. Recommends the number of buffers for each subpool

4. Provides the resulting changes in storage usage

5. Provides the amount of reduction in the number of database reads

IMS Buffer Pool Analyzer

This?

OR

This?

IBM IMS Tools **Additional Resources**

• IMS Tools Product Support Documentation
IBM IMS Tools Support Documentation
https://www-01.ibm.com/support/docview.wss?uid=swg27020942

• Shop z Support
IBM Shop z User's Guide Documentation
https://www-304.ibm.com/software/shopzseries/ShopzSeries_public.wss?action=guide

• IMS Tools – IMS Buffer Pool Analyzer
https://www.ibm.com/us-en/marketplace/ims-buffer-pool-analyzer-for-zos


Thank
You