

**Performance Tuning Tips
Compiled by Critical Path Software Inc.**

www.cpsigroup.com

**All of these VSAM Tuning TIPS were submitted
from various sources and should be tested prior to use.**

VSAM TUNING TIPS

- Always use efficient Data and Index CI sizes.
- Assuming your record size permits, 4K or 8K works best for the Data CI size of CICS online files.
- The Index CI should be large enough to hold all of the index entries for a DATA CA. For large keys that do not compress well, this could be 8K or 16K. Too small an Index CI may result in unnecessary CA splits.
- The Index CI should be also large enough so that Index Levels is no more than 2 if possible. You can make it too big but 2K is often too small.
- Always define your VSAM clusters with the SPEED parameter.
- CI and CA Splits can greatly reduce CICS response time.
- Code CI and CA Freespace very carefully and monitor regularly.
- REORG of files does NOT fix splitting problems. It just covers the problem up for a short period of time.
- Allocate better FREESPACE.
- Never use SHROPT 4 if at all possible.
- Do not use ERASE ever.
- Do not use WRITECHECK ever.
- Do not use IMBED or REPLICATE, they are no longer supported and they waste DASD space.
- Optimize VSAM performance for both random and sequential processing by always specifying the appropriate number of NSR or LSR buffers.
- Remove Catalog Orphans from the Catalog.

- Make all ESDS files use the SPANNED parameter.
- Additional Great VSAM Tuning Tips can be found at:
<http://www.lascon.co.uk/d002003.htm>
- Critical Path Software, while working on a client site, using it's TurboTune Software has discovered the following:
Unprintable characters appearing in Listing Listcat files.
IBM reports back with the following: "This looks like it should be fixed by open apar OA22542. The problem overlay occurs during processing of large catalogs. A local fix you may use is specifying IDCNOGFL as the program name instead of IDCAMS. You may want to reference info apar I114250 For information regarding GFL processing."

Please remember that VSAM tuning is an art and takes a lot of experience. ALWAYS TEST all changes prior to implementing into production.

Send in your VSAM Tuning TIPS and we will include them here.

**Do you have a VSAM TUNING TIP that we can put here?
Please send us an e-mail. It will help others.**

Send to: Ralph@cpsigroup.com

Additional TIPS are posted on
<http://www.linkedin.com/pub/ralph-bertrum/b/24a/471>

If you send your e-mail address I will send them to you every time they are updated. The JCL, COBOL, DB2, CICS, VSAM, SMS, and TSO TIPS will all be sent. All of the TIPS have been sent in from donors so please test them. If you ever have a performance problem give me a call. We do a free no charge no obligation analysis.

**Very Best Regards,
Ralph E. Bertrum
Principal - Critical Path Software, Inc.**

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www.cpsigroup.com
www.TurboTune.com

I post TIP updates on twitter <http://twitter.com/RalphEBertrum>

Please link to me on LinkedIn <http://www.linkedin.com/pub/ralph-bertrum/b/24a/471>

To get free lists of Mainframe Tuning TIPS for
JCL, COBOL, DB2, CICS, VSAM, SMS, and TSO
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