VSAM Application Performance & Tuning

Course Summary

Audience

This course is designed for data processing personnel involved with the development and/or maintenance of systems using the virtual storage access method (VSAM).

Overview

The primary goal of the VSAM Tuning class is to provide the student with the ability to:

- Properly define a VSAM data set by determining which options to select based on the projected usage and size of the data set
- Understand buffer allocations and considerations for faster access to VSAM data sets
- Understand the usage, options, pros, and cons of alternate indexes
- Understand the options for data placement and index positioning
- Use the LISTCAT to monitor the performance of a VSAM data set
- Properly maintain a VSAM data set based on its historical usage and performance

Prerequisites

The student should have a basic knowledge of VSAM and some familiarity with access method services IDCAMS, DEFINE, and LISTCAT functions.

Duration

Four days

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Course Overview

The following topics are included for presentation in the VSAM Tuning and Performance workshop:

1. IDCAMS define cluster attributes

BUFFERSPACE, CISIZE, FREESPACE, IMBED, REPLICATE, KEYRANGES, ORDERED, REUSE, SHAREOPTIONS

2. Buffer usage

STRNO, BUFSP, BUFND, BUFNI, random and/or sequential processing considerations, DEFINE and JCL options and usage

3. Space utilization

CISIZE considerations and recommendations, FREESPACE and SPLITS considerations and recommendations

4. Alternate indexes

Spanned alternate indexes, alternate index RECORDSIZE considerations, effect of alternate indexes on buffering, UPGRADE option pros and cons

5. Data placement and cluster positioning

Index and data placement considerations, DASD seek considerations, IMBED and REPLICATE combinations and usage

6. Monitoring

What to look for in a LISTCAT, when to look at a LISTCAT (new clusters and production clusters)