



INTRODUCING VIRTUAL VOLUME STAGING

Virtual Volume Staging

Virtual Volume Staging (VVS) provides a facility to pre-stage Virtual Volumes. By fetching the volumes while the job is still in the queue, VVS minimizes the delays when the job is executing. Throughput is increased and the batch window can accommodate a greater workload.

Advantages

- **Critical path runs in less time.** Jobs run faster because staging delays are moved to queue time. Delays are further decreased because multiple volumes can be staged in parallel, rather than serially as happens when resources are staged at initiator time.

The entire workload benefits from having the critical path jobs complete sooner. The “batch window” can accommodate more jobs and ultimately hardware upgrades can be postponed to a later time.

- **Throughput is increased.** When initiators are not held up waiting for external resources, such as a volume being staged, then the job spends less time executing, the initiator is available sooner to process other jobs and the entire workload finishes earlier. Utilization of initiators is increased, again postponing hardware upgrades.

How ThruPut Manager’s Virtual Volume Staging works

At job submission time, ThruPut Manager analyses each job and determines, among other things, the volumes it will need. While the job is still in the queue, it recalls all non-cached virtual volumes. Volumes can be staged in parallel with each other, and at the same time as other external resources are being fetched (e.g., DFSMSHsm recalls). Installation rules control whether the job is held either until the volume is staged or a maximum length of time has passed.

Powered by ThruPut Manager

Virtual Volume Staging is part of ThruPut Manager and accrues the associated benefits:

- Applies to all batch, not just scheduled jobs. Because ThruPut Manager analyses all jobs, it can apply this technique to all jobs, making sure non-production jobs don’t create a bottleneck for production jobs.
- Supports different workloads. Installations can use the various ThruPut Manager features to provide the appropriate level of service for Production, Development, ad hoc and other batch workloads.
- Transparent to End Users. Virtual Volume Staging does not rely on end users changing their JCL or complying with any other standards. This allows the datacenter to change the implementation details quickly and transparently. There is no need to train users, “publish” new standards, or manage a “migration window”.

- Integrates with other Job Setup Solutions. Virtual Volume Staging integrates with the broader ThruPut Manager batch management solution. In particular the installation rules, operator commands and displays are all built on the same high quality principles as the other job setup services.
- Independent of external pre-processing steps. With ThruPut Manager's Analyzer, the relevant information to stage virtual volumes is deduced at run-time, is always accurate and is never out of date. No pre-processing of SMS records or other files is ever necessary.
- Eases the transition from Robotic to Virtual Tapes. The capacity of robotic volumes is significantly higher than virtual volumes. Therefore volume counts may need to be adjusted. This can be done automatically at run-time by a simple ThruPut Manager installation rule.

Supported Virtual Volumes

IBM, StorageTek, and CA-Vtape are supported.

Availability

Virtual Volume Staging is an extension of Job Setup Services, part of the base component of ThruPut Manager. Virtual Volume staging is available in Version 6 Release 1.1 of the product which can be ordered in the Customer Center of our website www.mvssol.com or contact us as noted on the first page.

This document assumes the reader is familiar with ThruPut Manager. Only certain highlights of the product have been discussed here. For further information, please contact us as noted on the first page.

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511