

## Synchronizing Production and Hot Sites With Serena ChangeMan SSM

A common application for Serena™ ChangeMan® SSM is the synchronization of a production data center with a contingency or disaster recovery site.

Traditional contingency plans call for making full volume backups of every DASD device in the data center to be sent off each day to the recovery site. This approach is neither practical nor cost effective. Many DASD volumes may be completely unchanged and even if there are sufficient CPU resources to perform the nightly backups, there may not be enough time each night to completely copy everything. Using Serena ChangeMan SSM, a complete image backup of the production environment may need to be taken only once a month.

Using Serena ChangeMan SSM each evening you can use a fingerprint data set of the entire production system to identify data sets or members that have changed during the day. You can perform the fingerprint process rapidly and concurrently with production processing. Only those files or members that have changed need to be exported to a Change Basket\* and sent off-site. Some users may even transmit changes over their network to the Hot Site periodically throughout the day to provide greater protection.

At the recovery site, Serena ChangeMan SSM may be used to import the changes quickly to contingency DASD each day. If the contingency plan calls for restoration of the production DASD in the event of a disaster, you can set up the application of the changes from the Change Basket as part of the recovery process.

*\*Change Basket is a single data set that contains the changes between two environments (e.g. Test/Prod, SYSRES/ALTRES, or LPAR/LPAR). This is a physical sequential file holding the data and information required to synchronize two environments, either locally or remotely. It is similar in concept to a Change Package in Serena™ ChangeMan®.*



### Accelerate Hot Site Activation and Lower Readiness Costs

The process begins with the normal end-of-month full volume backups that you send off site. At this time, Serena ChangeMan SSM fingerprints the production data sets and members. It takes fingerprints of all the volumes as often as you want. Only those data sets and members that have actually changed (usually a very small number) need to be backed up and sent off site. As the month progresses use the original fingerprint data set to extract the cumulative changes since the first full backup. While the number of data sets and members that need to be backed up increases, this number usually remains small since backup is at the member level.

This process can be used to greatly reduce the amount of time required to resume business after a disaster occurs. Because you have Change Baskets with updates that have been made since the original full volume backups, the full volume backups can be applied at the contingency site when they are first created. Then, when a disaster occurs, you apply only the most recent Change Baskets. Serena ChangeMan SSM does this quickly and automatically.

The Change Basket contains all the control information along with data sets and members required to bring the two environments into synchrony. For non-VSAM data sets, Serena ChangeMan SSM invokes IEBCOPY or PDSFAST (Software Engineering of America) to perform the creation of the Change Basket (EXPORT) or the application of the Change Basket (IMPORT).

