

# DeltaBack

## Snapshot Software for Backup and Replication

### Breakthrough Technology

Kadena Systems now delivers *snapshot technology*, the cornerstone of enterprise backup, in the form of DeltaBack™ software, a simple embeddable object for snapshot backup, restore and archiving on disk, DVD, and storage systems. Using DeltaBack software, developers and OEMs can now deliver the best of two worlds: powerful, instantaneous, backup and restore with the simplicity of “one-click” operation --- in a portable, software application.

Conventional backup techniques have evolved little since the advent of tape drives. Most backup applications are ill-suited for disk and other random access storage devices, especially when applied to small business and consumer applications. The primary reasons: (1) Backup, including file-based incremental backup, consume large amounts of storage space; (2) Backup applications are difficult to install and administer; (3) File restoration is a time-consuming and complicated task, usually beyond the abilities and patience of the average computer user. By comparison, conventional snapshot technology, found traditionally in high-end storage systems, solves most of

these problems, except that they're designed for use by IT administrators, not typical computer users.

### How DeltaBack Works

DeltaBack snapshot backup is accomplished using patent-pending, *content-based replication technology* that detects and stores only the changes made to a given set of files. This method greatly reduces backup storage consumption and time spent backing up. In fact, with DeltaBack, typical backups on a PC take just 1-2 seconds. Moreover, by avoiding storage of redundant data, the method effectively reduces or “compresses” document storage by about 40 percent. Each snapshot appears exactly as the target file set does on the time and date it is taken, making it possible for users to go “back in time” to select and retrieve files from dates in the past as well as the most recent set of backup files.

Snapshots are highly compact, making it possible to maintain a large archive of snapshots on the same storage device. All data is stored, organized, and accessed from a directory catalog on the device. DeltaBack is written in C++.

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### PRODUCT SUMMARY

■ *DeltaBack™ is an embeddable snapshot engine designed for integration into customized backup and replication applications* ■ *The software is an ideal complement for storage devices and systems such as disk drives, DVD-R and network attached storage (NAS).* ■ *Simple function calls enable rapid integration, and operation in user space enable easy installation and application management.* ■ *Snapshot backups are highly compact, supporting near limitless snapshot archives on a single device or system.* ■ *DeltaBack is written in C++.*

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### Kadena Systems, Inc.

Kadena Systems is a privately held development and technology licensing company specializing in the development of unique storage applications for consumer and small/mid-size business markets. The company principals draw from extensive storage industry experience at companies such as Veritas, Network Appliance, Auspex Systems, Sun Microsystems, and Adaptec. Evaluation software is available under Confidential Disclosure Agreement.

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