Market Requirements Document

Feature Name: Page Level Backup

Version: 2 **Date Submitted:** 01/31/05
Version: 1 Date Submitted: 01/13/05

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Description of the Problem

The oobackup utility currently backs up the whole of a container that has been updated. In many cases only a few pages have been updated, so the backup process takes longer and uses more storage than necessary.

Description of the Requested Feature

When an incremental backup determines that a container has been changed it should only backup the physical pages that have changed.

Part of an existing feature or does it require another feature, if so, which one?

This is a change to oobackup and oorestore.

How is this problem being solved now, and why isn't that acceptable?

It isn’t.

What languages must support this capability?

- C++
- Java
- Smalltalk

Which platforms must be supported?

- All current platforms.

Do any competitors already have this feature?

- Oracle and DB2.

Customers who require this feature

- VLDB sites.
- Any system that has a lot of containers and where updates only affect a few pages.
- Any system that has any large, primarily read (versus written) databases.

Revenue at risk, or which could be won

- Having this tool will improve the performance of oobackup. While this feature is rarely benchmarked, it could become an issue at VLDB sites.

When is this required?

- Release 10.

Additional Notes

1. We will also need:

- Marketing collateral

- Technical Publications

2. If no additional information is held in each file or container, the oobackup tool would need to physically compare the most recently backed up version of a container with the current container. This could cause oobackup to run slower, rather than faster. It may be better to store a zeroed bit map in each container after it has been backed up and then set the bits corresponding to updated pages as they are flushed to disk.