



Transaction Journaling

Synopsis

- ▶ Where is your data?
- ▶ How would its loss impact you?
- ▶ How do you protect it?
- ▶ What does transaction journaling add?
- ▶ How easy is it to implement?
- ▶ How do I use it after it is installed?
- ▶ When can I get it?
- ▶ Discussion on implementation and options

Where is your data?

1970's

- ▶ Everything is written down
- ▶ All papers are filed (usually twice)
- ▶ Receipts are duplicated and filed
- ▶ Major documents are in a fireproof vault

Now

- ▶ Nothing is written down
- ▶ Filing cabinets are seldom accessed
- ▶ Receipts are queued and printed later
- ▶ All major documents are put in a fragile electronic box

Data loss impact

- ▶ **Average hourly downtime is expensive**
 - \$78,000 per hour
 - \$8,000 per minute
 - Somewhere in between
- ▶ **Priceless problems include**
 - New customers entered that day
 - Phone information without a paper trail

How do you protect it?

- ▶ Nightly Saves
- ▶ Uninterruptible Power Supplies
- ▶ RAID – Redundant array of inexpensive disks
- ▶ Dual (or more) everything
 - Processors
 - Memory
 - Network Cards

Nightly Save

- ▶ Backup the data - usually to tape
- ▶ Verify the backup is good
- ▶ Either a courier service or employee takes the day's tape off-site
- ▶ This is great and now you are reasonably assured that your days data is safe.

Nightly Save

Nightly saves alone are comparable to having your employees use an etch-a-sketch during the day and then taking a picture of it every night.

The picture at the end of the day will be complete and perfect, but if somebody “shakes” that thing during the day....

RAID

- ▶ All data is written at least 2 ways to disk
- ▶ Most RAID systems now allow hot-swap
- ▶ Every transaction is done instantly
 - Newly created items and changes
 - **CLEAR-FILE**
 - **DELETE-FILE**
 - **DELETE**

They all happen INSTANTLY, oh and redundantly

Dual Everything

- ▶ Processors even if redundant, require a reboot and often data loss occurs
- ▶ Memory is much the same
- ▶ Network cards really only influence current data entry

What's Missing?

- ▶ Everything is written down
 - Not until the end of the day (backup)
- ▶ All papers are filed (usually twice)
 - This is pretty much covered by backup / offsite
- ▶ Receipts are duplicated and filed
 - Again only at the end of the day
- ▶ Major documents are in a fireproof vault
 - Again, covered by the offsite storage

What does TJ add?

- ▶ Everything is written down
 - With TJ, transactions are instantly “written down” in a separate journal
- ▶ Receipts are duplicated and filed
 - Again, “all” transactions including the receipts are duplicated to a separate journal.
- ▶ TJ adds up-to-the-minute journaling so that **zero percent** captured data is lost

How easy is it to implement?

- ▶ The entire procedure is on the next slide
- ▶ It is incorporated in jBASE and no new software is needed
- ▶ Run reports and/or recovery processes immediately
- ▶ This is a marketing presentation, but it really can be that simple

Implementation

- ▶ Run the tjinit script provided by your vendor
- ▶ License the jBASE transaction journaling
- ▶ Add process to change logsets to the backup process or to an administrator's daily task list
- ▶ Create a TJLOG file for reporting and admin processes

How do I use it?

- ▶ The journals are updated automatically and require no changes to your installation
- ▶ Use the TJLOG file to report and/or select journals for processing
 - SORT TJLOG WITH
 - SELECT TJLOG WITH
Followed by jlogdup which “plays back” the transaction journal

When can I get it?

NOW!

- ▶ Transaction journaling is included in your current jBASE server
- ▶ You need only purchase a license from your vendor and run the setup process

Planning your Implementation

- ▶ What existing files hold temporary or transitory information and should not be logged?
- ▶ Should newly CREATED files be logged?
- ▶ Should print jobs be logged?
- ▶ Do any processes need to be changed to use the jBASE jEDI so that they get logged?

Options

- ▶ Hot standby configuration
- ▶ Transactional management methods
- ▶ Audit reports
- ▶ Offsite journaling
- ▶ Professional services can help with the implementation