Last Monday Amnon Z. and my self had an issue that became a problem in one of our customer (Tana Graphics). Customer said he had (Timna) archived one particular job (actually, we found more) that could not be retrieved via FileTrak. Informix DB shows it, yet Legato "says" it is not there.

Here is the scenario:

root@timna01:/ 21 % mminfo -av timna01.archive.032

volume	client	date	time	size	ssid	fl	lvl	name	
timna01.archive.032	timna01	01/09/02	12:37:20	124 MB	37832	cS		15639.6526	
timna01.archive.032	timna01	01/09/02	12:37:53	498 MB	37833	cS		14520.6527	End of 032
timna01.archive.032	timna01	01/09/02	12:40:07	489 MB	37834	cS		15522.6528	
timna01.archive.032	timna01	01/09/02	12:42:13	2561 MB	37835	cE		14856.6529	

timna01.archive.033

timna01.archive.033	timna01	11/29/01	11:48:16	300 MB	35761	cS		bom_dummy	
timna01.archive.033	timna01	01/15/02	13:18:49	752 MB	37805	cS		15663.6595	Beginning
timna01.archive.033	timna01	01/15/02	13:23:43	200 MB	37806	cS		15734.6597	of 033
timna01.archive.033	timna01	01/15/02	13:24:29	647 MB	37807	cS		15479.6598	

Please notice 033 was labeled ahead of time November 29 as well as no archiving information from 1/9/02 12:42 thru 1/15/02 11:48

root@timna01:/ 23 % mminfo -am

volume	written	(%)	read	expires	mounts	capacity
timna01.archive.033	84 GB	100%	1516 MB	11/29/03	4	2000 MB

Legato shows the Volume is full. Also it shows (via daemon.001) that this job was archived Jan 9:

01/09/02 17:47:51 nsrd: timna01:14856.6537 saving to pool 'ScitexArchive' (timna01.archive.033)

This is exactly where the gap in archiving.
Now, to find what most likely happened we went to Ripro Mail messages (/usr/spool/mail/backup) and we saw some discrepancies. Look at the following:

From cdesci **Fri Jan 11** 07:11:05 2002
Received: (from root@localhost) by timna01 (AIX4.2/UCB 8.7/8.7) id HAA40102 for backup; Fri, 11 Jan 2002 07:11:04 -0500 (EST)
Date: Fri, 11 Jan 2002 07:39:57 -0500 (EST)
.
.

01/09/02 05:28:28	9	37815	713	0	timna01.045
01/09/02 07:07:30	full	37827	718	0	timna01.046
01/09/02 07:37:22	full	37830	1069	0	index.002
01/10/02 05:37:07	9	37854	874	0	timna01.046
01/10/02 07:08:04	full	37868	913	0	timna01.046
01/10/02 07:37:28	full	37871	1082	0	index.002
01/11/02 05:41:20	9	37904	1068	0	timna01.046
01/11/02 07:08:39	full	37923	1112	0	timna01.046
01/11/02 07:37:33	full	37926	1095	0	index.002

Note: 3 records a day for daily backup. Up to Friday Jan 11

From root **Sat Jan 12** 06:45:16 2002
Received: (from root@localhost) by timna01 (AIX4.2/UCB 8.7/8.7) id GAA43626 for backup; Sat, 12 Jan 2002 06:45:15 -0500 (EST)
Date: Sat, 12 Jan 2002 06:45:15 -0500 (EST)
.
.
01/03/02 07:37:06 full 37545 992 0 index.002
01/04/02 05:35:22 9 37559 796 0 timna01.037
01/04/02 07:07:59 full 37574 836 0 timna01.037
01/12/02 06:43:11 9 37607 431 0 timna01.027

Please note: The very next day (Sat), the record shows a discrepancy. No longer record about the 3rd backup on Jan 4 as well as up to Jan 12.

For my opinion an 'mmrecov' was done on Friday Jan 12 and the record brought back was the following:

01/04/02 07:07:59 full 37574 836 0 timna01.037

So far so good. However, this issue became a problem since the person who executed the 'mmrecov' "forgot" to tell the customer to, immediately, lock (write-protect) the cassette preventing Legato from writing to Volume timna01.archive.033.

It is important to know Legato DB is in charge of writing into tapes. Since the DB brought back is from January 4th , all written data from January 4th thru January 11th presumably gone.

Now, volume timna01.archive.032 was write-protected and scanning it back to the newer (Jan 11- after the restoration) recovered all archives up to **01/09/02 12:40:07**, yet volume 033 was not protected.

In short, It is OK to do 'mmrecov' any time however we have to:

1. Utilize the tool Legato has notifying the data on each archive tape:
   # **mminfo -av timna01.archive.xxx** ; Print this information of all volumes beyond the date you about to bring 'mmrecov' from
2. Immediately notify the customer to lock all archiving volumes even if they just started a new archiving volume as well as telling him/her they would have to scan all "unknown" volumes
3. Do the 'mmrecov'
4. Scan all "unknown" volumes into the restored Legato DB ASAP