

**IBM LTO Tape Drive Dump Collection
Using
ITDT-SE v2.x and higher**

Dump collection ITDT-SE v2.x and higher

This document briefly describes how to collect with ITDT LTO tape drive dumps. The outlined procedure is intended for Windows platforms but works also with Linux.

1 Supported IBM System x LTO tape drives

- IBM 400/800 GB LTO Gen 3 tape drive, p/n 25R0012 and p/n 39M5657, any FRU
- IBM Half-high LTO 3 SAS tape drive, p/n 43W8478, any FRU
- IBM Half-high LTO 4 SAS tape drive, p/n 44E8895, any FRU
- IBM Half High LTO Gen 5 Internal SAS Tape Drive, p/n 49Y9898, any FRU
- IBM Half High LTO Gen 6 Internal SAS Tape Drive, p/n 00D8924, any FRU
- IBM Half High LTO Gen 3 External SAS Tape Drive, p/n 3628N3X and 3628L3X, any FRU
- IBM Half High LTO Gen 4 External SAS Tape Drive, p/n 3628N4X and 3628L4X, any FRU
- IBM Half High LTO Gen 5 External SAS Tape Drive, p/n 3628N5X and 3628L5X, any FRU

2 Backup application considerations

Some backup applications will lock access to a tape backup unit and will have exclusive access to the tape drive. Thus diagnostics software such as ITDT may not be able to access the tape drive, even if the backup application is not running.

The first step is to close the backup application.

In order to be able to collect IBM LTO tape drive dumps

- Users of CA ARCserve have to stop the Tape Engine
- Users of Symantec Backup Exec or NetBackup have to stop the corresponding Backup Exec / NetBackup services in the Windows management console
- Users of other backup applications need to review the backup application documentation or contact their backup application support for further assistance

3 Starting ITDT-SE the first time

When starting ITDT-SE – the text based version of ITDT – the following steps are to be gone through.

```
Please wait for startup completion.... (Q to quit)
```



Figure 1 – ITDT-SE startup

```
International License Agreement for Non-Warranted Programs
```

```
Part 1 – General Terms
```

```
BY DOWNLOADING, INSTALLING, COPYING, ACCESSING, CLICKING ON AN "ACCEPT"  
BUTTON, OR OTHERWISE USING THE PROGRAM, LICENSEE AGREES TO THE TERMS OF THIS  
AGREEMENT. IF YOU ARE ACCEPTING THESE TERMS ON BEHALF OF LICENSEE, YOU  
REPRESENT AND WARRANT THAT YOU HAVE FULL AUTHORITY TO BIND LICENSEE TO THESE  
TERMS. IF YOU DO NOT AGREE TO THESE TERMS,
```

```
* DO NOT DOWNLOAD, INSTALL, COPY, ACCESS, CLICK ON AN "ACCEPT" BUTTON, OR USE  
THE PROGRAM; AND
```

```
* PROMPTLY RETURN THE UNUSED MEDIA AND DOCUMENTATION TO THE PARTY FROM WHOM  
IT WAS OBTAINED FOR A REFUND OF THE AMOUNT PAID. IF THE PROGRAM WAS  
DOWNLOADED, DESTROY ALL COPIES OF THE PROGRAM.
```

```
1. Definitions
```

```
"Authorized Use" – the specified level at which Licensee is authorized to  
execute or run the Program. That level may be measured by number of users,
```

```
< [B] Back [Enter] Next [L] Last [Q] Quit > L
```

Figure 2 – Read the License Agreement through or enter L and hit Enter

Licensee has done so.

L/N: L-TOSD-9F8EME
D/N:L-TOSD-9F8EME
P/N: L-TOSD-9F8EME

< [B] Back [I] I Agree [Q] Quit > I

Figure 3 - Agree to the license agreement by entering I and pressing Enter

4 Collecting IBM LTO Tape Drive dump

After accepting the license agreement or after starting ITDT-SE at a later point in time

- empty the content of the OUTPUT directory which is in the same directory as the itdt.exe application
- complete the following steps in order to collect an IBM LTO tape drive dump.

```

IBM Tape Diagnostic Tool Standard Edition - Version: 8.0.0.20140716

Entry Menu

[S] Scan for tape drives (Diagnostic/Maintenance Mode)
[U] Tapeutil (Expert Mode)
[A] Add Device Manually (Expert Mode)

[H] Help
[Q] Quit program

Notes:
- During a test, user data on the cartridge will be erased!
- Make sure no other program is accessing the devices used by ITDT!
- A device scan may take several minutes in some cases!

- Q + Enter will always close this program.
- H + Enter will display a Help page.

<[H] Help ; [Q] Quit ; Command > S

```

Figure 4 - Scan for attached LTO tape drives

```

IBM Tape Diagnostic Tool Standard Edition - Device List

+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| Host | Bus | ID | LUN | Model | Serial | Ucode | Changer | [#] |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 0 | 3 | 0 | 2 | 0 | ULTRIUM-HH5 | 1068000051 | B17A | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | | | | | | | | |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+

[S] Scan [T] Test [D] Dump [F] Firmware Update
[E] Encryption [W] Full Write [U] Tape Usage [O] Other...
[H] Help [V] Toggle View [M] Main Menu
<[Q] Quit ; + ; - ; [N] Next ; [P] Previous ; Line # ; Command >

```

Figure 5 - Select the tape drive for which a dump is to be collected by entering its number

```

IBM Tape Diagnostic Tool Standard Edition - Device List
-----+-----+-----+-----+-----+-----+-----+-----+-----+
Host Bus ID LUN Model Serial Ucode Changer [#]
-----+-----+-----+-----+-----+-----+-----+-----+
0 3 0 2 0 ULTRIUM-HH5 10680000051 B17A
1
2
3
4
5
6
7
8
9
10
11
-----+-----+-----+-----+-----+-----+-----+-----+

[S] Scan [T] Test [D] Dump [F] Firmware Update
[E] Encryption [W] Full Write [U] Tape Usage [O] Other...
[H] Help [V] Toggle View [M] Main Menu
<[Q] Quit ; + ; - ; [N] Next ; [P] Previous ; Line # ; Command > 0
    
```

Figure 6 - Press Enter

```

IBM Tape Diagnostic Tool Standard Edition - Device List
-----+-----+-----+-----+-----+-----+-----+-----+-----+
Host Bus ID LUN Model Serial Ucode Changer [#]
-----+-----+-----+-----+-----+-----+-----+-----+
0 3 0 2 0 ULTRIUM-HH5 10680000051 B17A X
1
2
3
4
5
6
7
8
9
10
11
-----+-----+-----+-----+-----+-----+-----+-----+

[S] Scan [T] Test [D] Dump [F] Firmware Update
[E] Encryption [W] Full Write [U] Tape Usage [O] Other...
[H] Help [V] Toggle View [M] Main Menu
<[Q] Quit ; + ; - ; [N] Next ; [P] Previous ; Line # ; Command > D
    
```

Figure 7 - Enter D and hit the Enter key in order to collect a tape drive dump

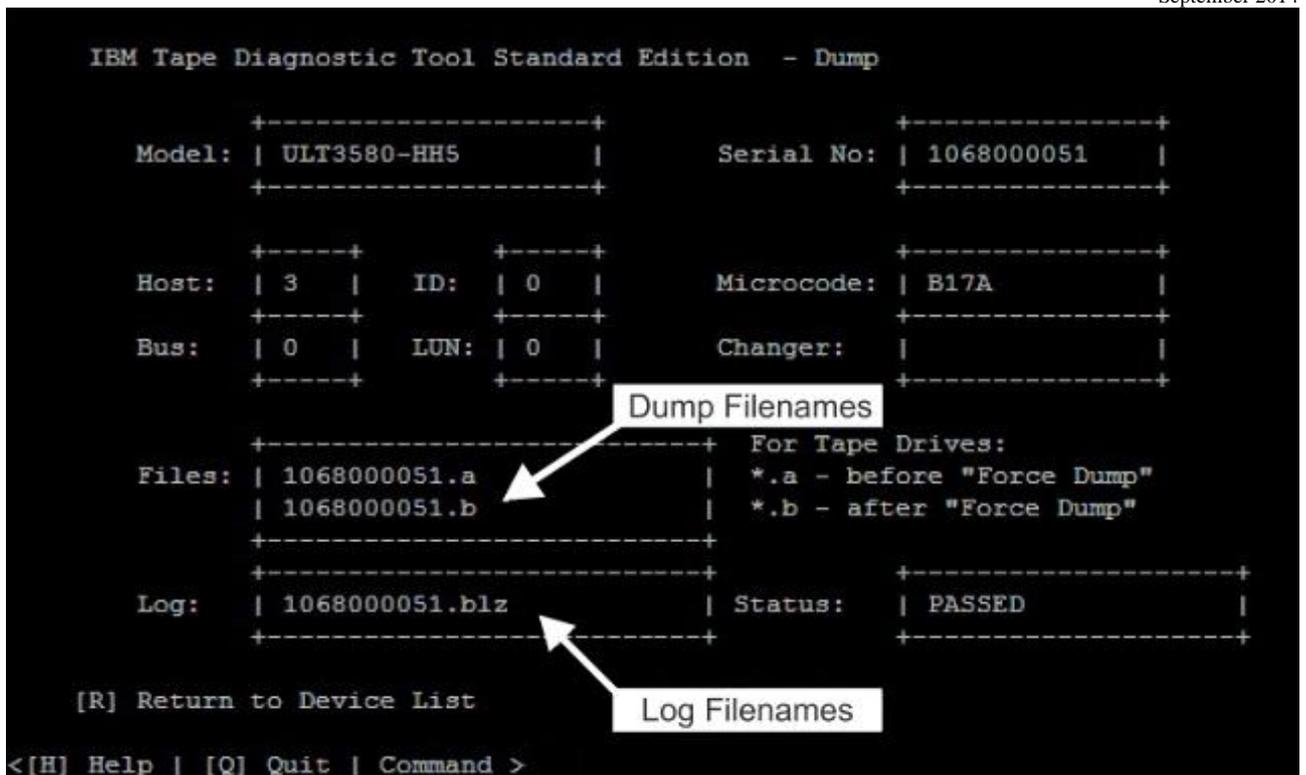


Figure 8 – Results after dump collection has been completed

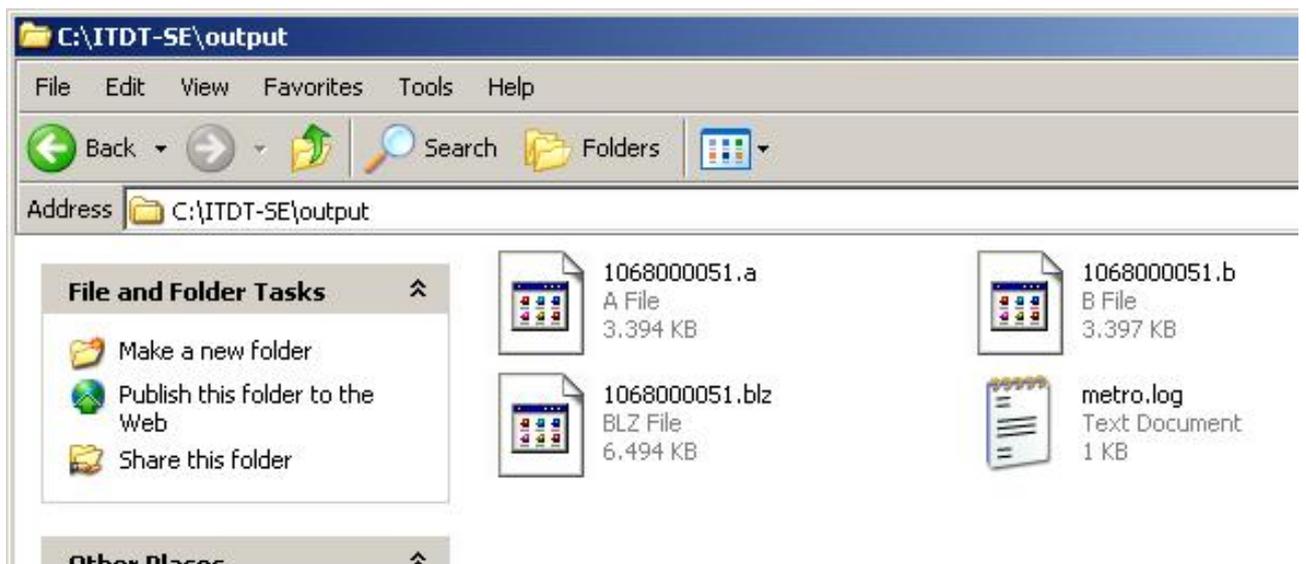


Figure 9 – Archive the .a, .b, .blz and the metro.log file into a standard .ZIP file

5 Supplying IBM LTO tape drive dumps to technical support

The results of the dump collection are stored in a directory called output which is in the same directory as the ITDT.EXE application itself.

Archive the files into a single standard .ZIP file and make them available to IBM technical support for analysis.

6 After collecting the IBM LTO tape drive dumps

For the following backup applications perform these steps

- CA ARCserve start the Tape Engine
- Symantec Backup Exec and NetBackup enable the Backup Exec or NetBackup services
- For any other backup application refer to the application documentation or application support