

# FindLock v2.16 for Win32

## Program Description

The FindLock utility allows a user to scan through a complete set of records in a given file, locking each record briefly as it searches. If another lock is encountered, FindLock will query the database for lock information and display information about the record found and the user who is holding the lock.

This tool requires the availability of the Extended Stat function. Because of this, it requires Pervasive.SQL 2000i or newer and the related W3BTRV7.DLL file. Using the /E option requires the DTI interface DLL's as well.

## Platform and Package

Win32; GSLic

## Pricing

\$100 Per Workstation, \$250 Per LAN Site License

## Command Line Syntax and Help Screen

FindLock Version 2.16: 11/01 (C)2021 Goldstar Software Inc.

Usage: FindLock DataFile [/Options]

```
This program finds record locks within data files and reports the holder.
The /O= option specifies the file's owner name
Use /K to indicate a key to traverse (Default = -1)
Use /S to indicate the starting offset for the output data (Default=0)
Use /L to indicate the length for the output data (Default=10)
Use /F to indicate the display format: I=Int, H=Hex, A=ASCII, B=ASC/Hex(Def)
    Add the D flag to display the detailed report format.
Use /E to retrieve engine-specific details for the connection via DTI.
    Use /N<servername> to specify a server [Default=localhost].
    Use /U<username> to specify a user [Default=Administrator].
    Use /P<password> to specify a password.
The /D option enables additional debugging output.
```

## Examples and Sample Usage

The FindLock command line must indicate which datafile to scan. If you want to search by a specific key number, specify the /K parameter, or else it will scan the file in physical order.

The /S, /L, and /F options allow you to indicate which bytes from the file to include in the report, so that the locked record can be identified. The /S option provides the offset of the field, the /L specifies the length of the field, and the /F option indicates the data type. The default is to display the first 10 bytes of the record in an ASCII/Hex display.

The following is the output from the command

```
findlock person.mkd /s9 /l30 /fbd

Searching for locks...
|
Found Locked Record:
Locked By   : Bill
Client ID   : Local:0D30 (WR) 0D30
Trans Level: 0
Trans Time  : 0 ms
Key Number  : 0
Lock Flags  : Explicit RecordLock ReadNoWait
ASCII Data  : <L i s a                               T u m b l e s o n                >
Hex Data    : <4c697361000000000000000000000000054756d626c657366f6e00000000>

/
Processing completed: Found 1 record locked of 1500 checked.
```

Note that the text in parentheses is the Service Agent ID – a two character ID provided by the application developer on the BTRCALLID function call. If the developer populates this value, this may be used to identify the application. If not, it may simply indicate WR, meaning Windows Requester. The two-byte value AFTER the Service Agent ID is the Thread ID, which may be a random number

if not set by the application. The two-byte value BEFORE the Service Agent ID is the Task ID, which (depending on the environment) may directly indicate the Windows PID of the source process.

Using a /FA option (without the D), you will get the condensed version:

```
Searching for locks...
Local, Bill, "Lisa"          Tumbleson      "
/
Processing completed: Found 1 record locked of 1500 checked.
```

When a true SPX or TCP address is detected, it will be displayed with an SPX or TCP indicator, as in this example:

```
TCP:192.168.1.39, bill, ABIABLIENE 41424941424c49454e45
```

When a connection index is detected instead, the connection index value will be displayed, as in this example:

```
000103010101, bill, ABIABLIENE 41424941424c49454e45
```

It is possible to identify the network address from the connection index, but you must go through the DTI interface, which can slow down the process. If needed, add the /E option to retrieve connection data from the Engine. In this case, you must ALSO indicate the correct server name to connect to (via the /N parameter), and provide login credentials (via the /U and /P parameters). This additional data allows FindLock to retrieve the network address stored by the engine for that connection, as in this example:

```
T:FireStorm.empire.goldstarsoftware.com, bill, ABIABLIENE 41424941424c49454e45
```

Adding the “D” option back to the /F switch, you can get additional details from the engine, including the network address, lock count, transaction state, and the disk and cache accesses counters:

```
Found Locked Record:
Locked By   : bill
Client ID   : 000103010101:5AE3(WR)0000
Trans Level: 0
Trans Time  : 0 ms
Key Number  : 0
Lock Flags  : Explicit RecordLock ReadNoWait
Net Address : T:FireStorm.empire.goldstarsoftware.com
Lock Count  : 1
Trans State : 0
Disk/Cache  : 0 / 503
ASCII Data  : <A B I A B L I E N E >
Hex Data    : <41424941424c49454e45>
```

These last counters can help you determine if a user is idle or actively performing tasks by running it back to back and checking to see if the numbers are increasing.

## Other Information

## Version History

For more information on these utilities contact us at [www.goldstarsoftware.com](http://www.goldstarsoftware.com)

Version 1.0: First documented version.

Version 2.0: Added GSLic capability; Created evaluation download.

Version 2.1: Reduced Twirly to improve performance, Added ability to press <Esc> to exit in the middle of a run.

Version 2.11: Updated licensing code.

Version 2.12: Fixed byte order for TaskId and ThreadId Fields.

Version 2.13: Added 32-byte owner name support.

Version 2.15: Fixed display of indexed client ID data (when a TCP address is not provided), and added additional Engine lookup (via DTI) to display the network

address of the session.

Version 2.16: Eliminated some extraneous messages; If DTI connection fails, run without it instead of failing outright.

### **Known Problems**

Some problems with FindLock were seen with older versions of DataExchange. Pervasive has since addressed these issues in more recent patches.

This package does NOT work with Btrieve 6.x engines or requesters, as it depends on calls available in PSQL 2000i and above.