

Bacula:

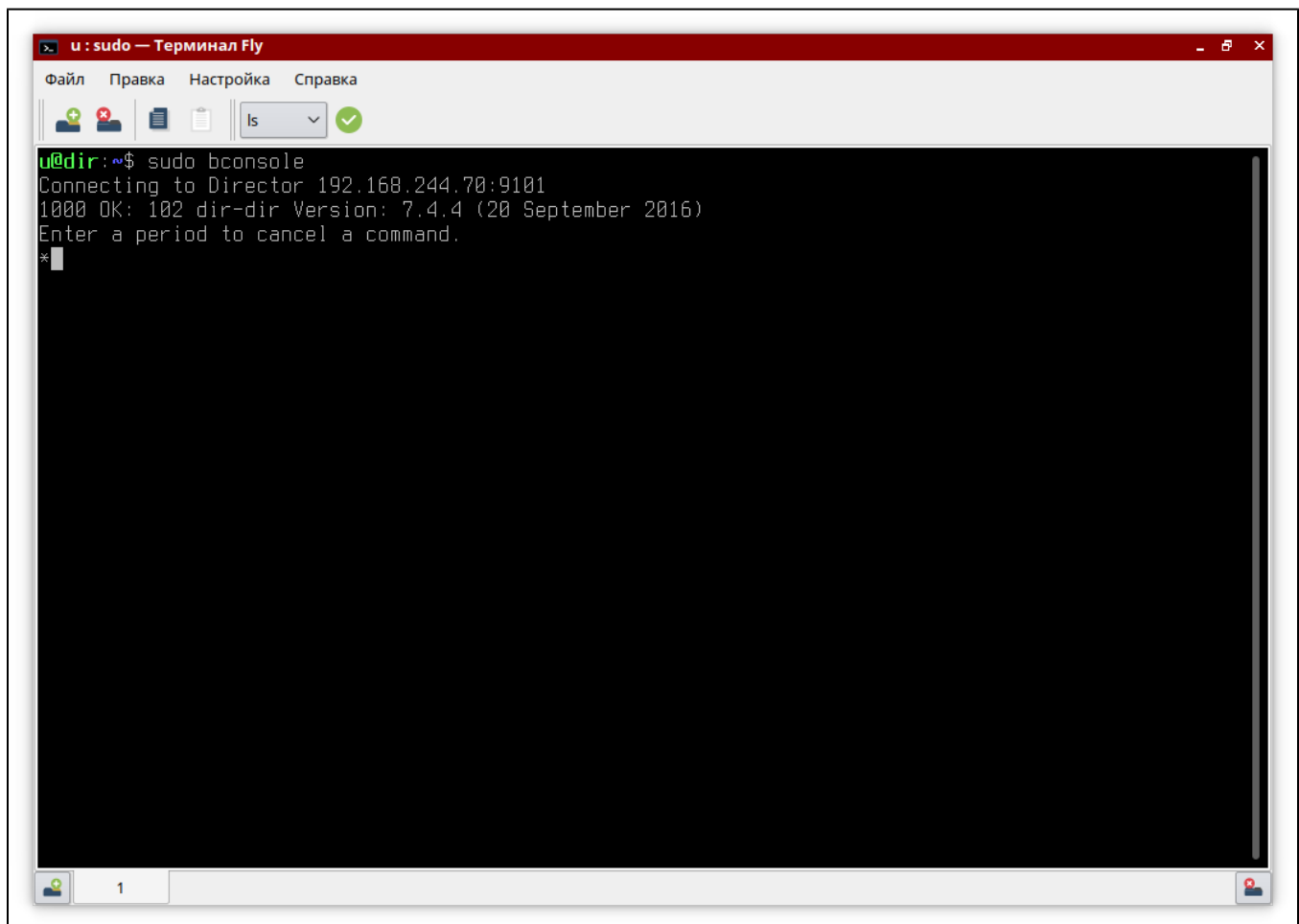
- Bacula:
- Bacula:
 - Bacula Director:
 - Bacula Storage:
 - Bacula FileDaemon ():
- Bacula: .
- Bacula: BackUp and Restore
 - Bacula:
 - Bacula:

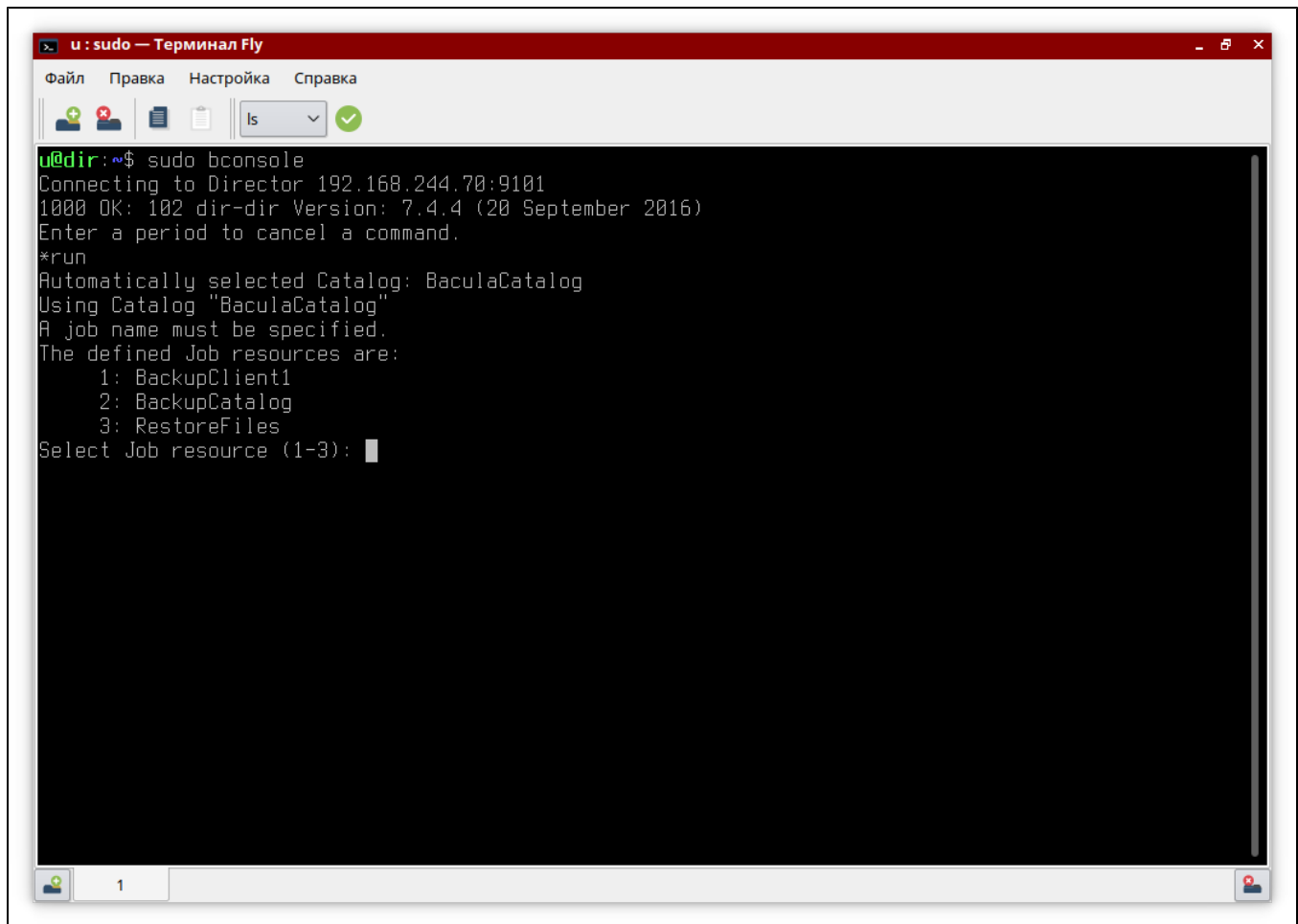
•

:

```
sudo bconsole
```

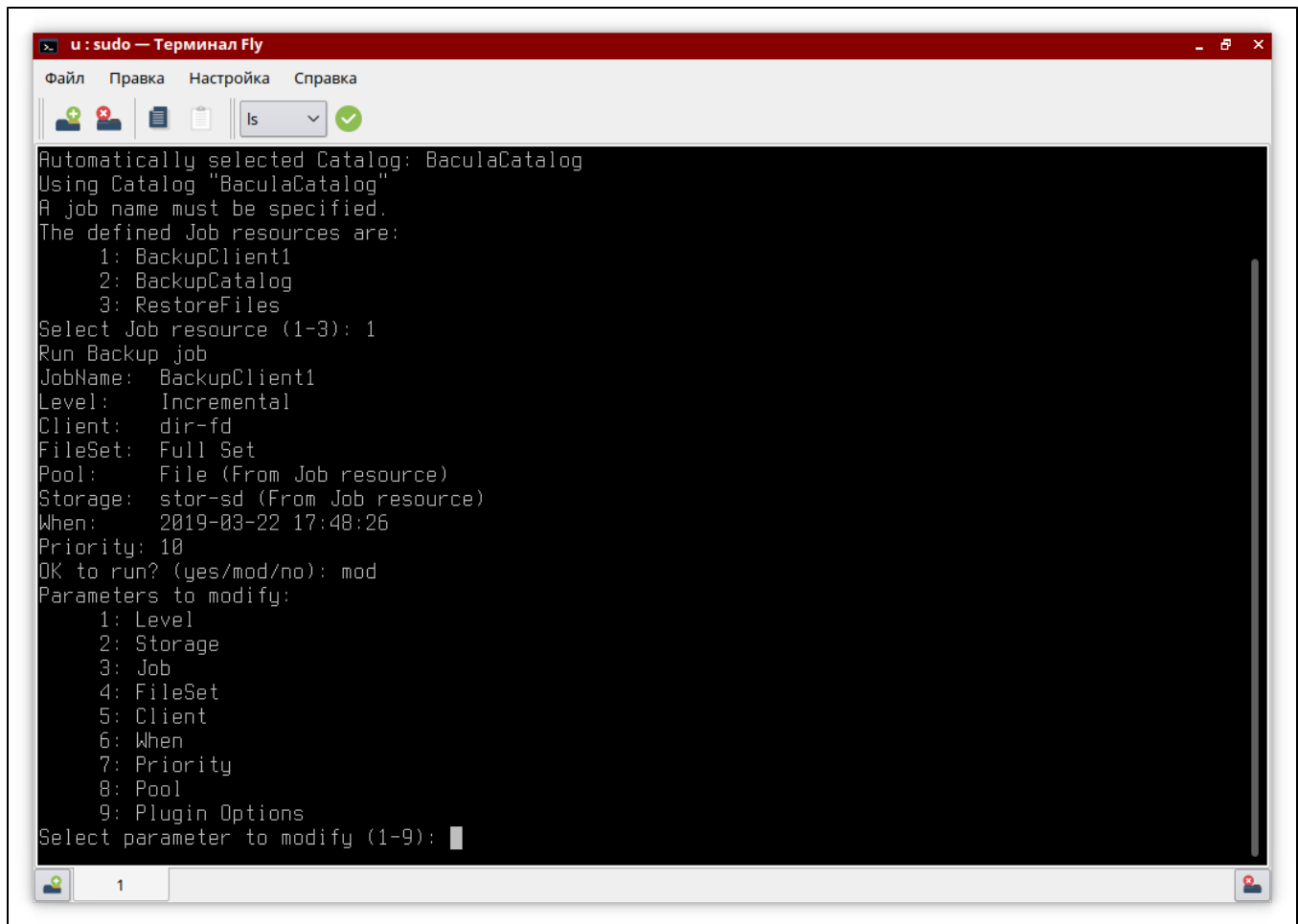
bconsole.conf ,

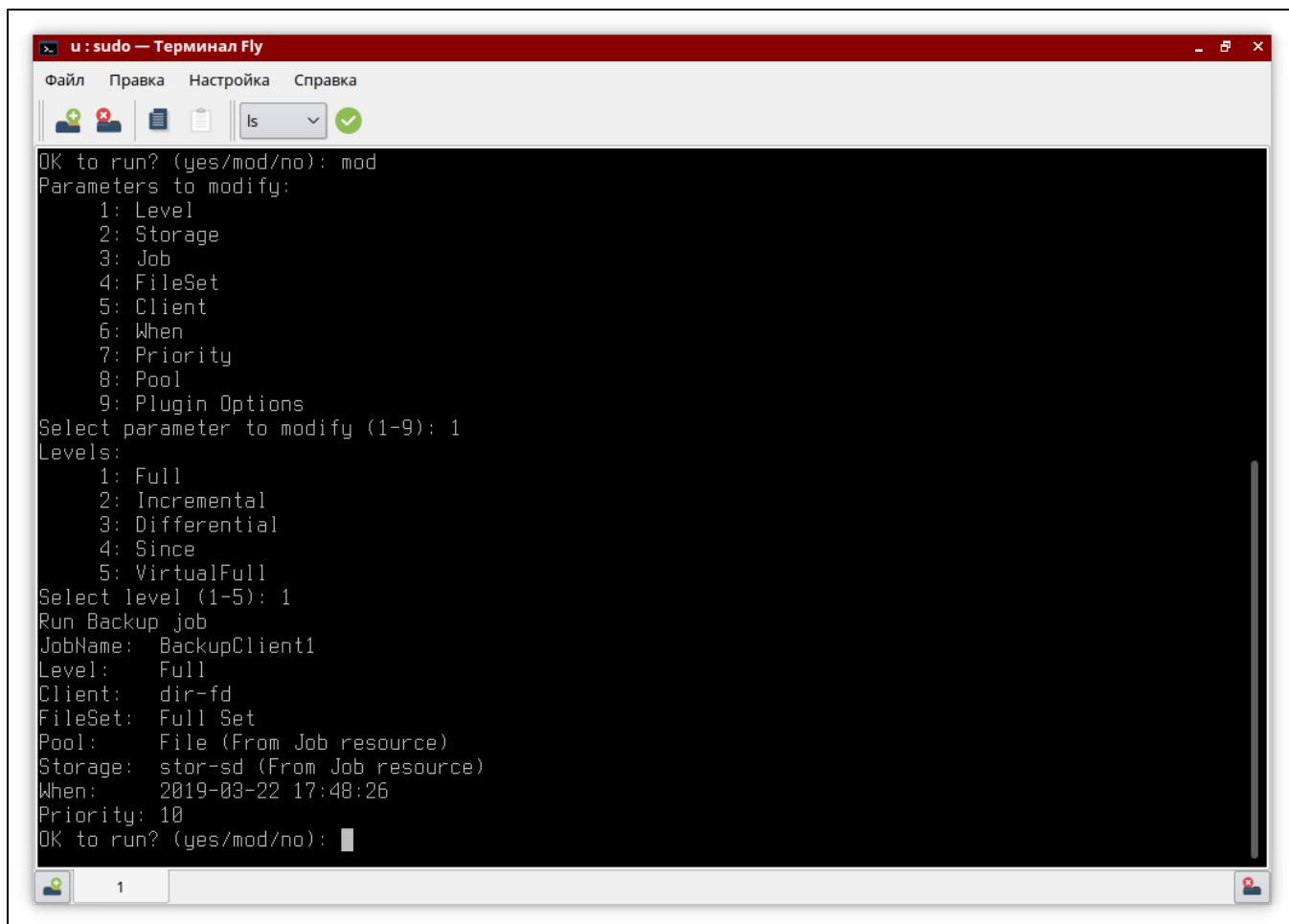


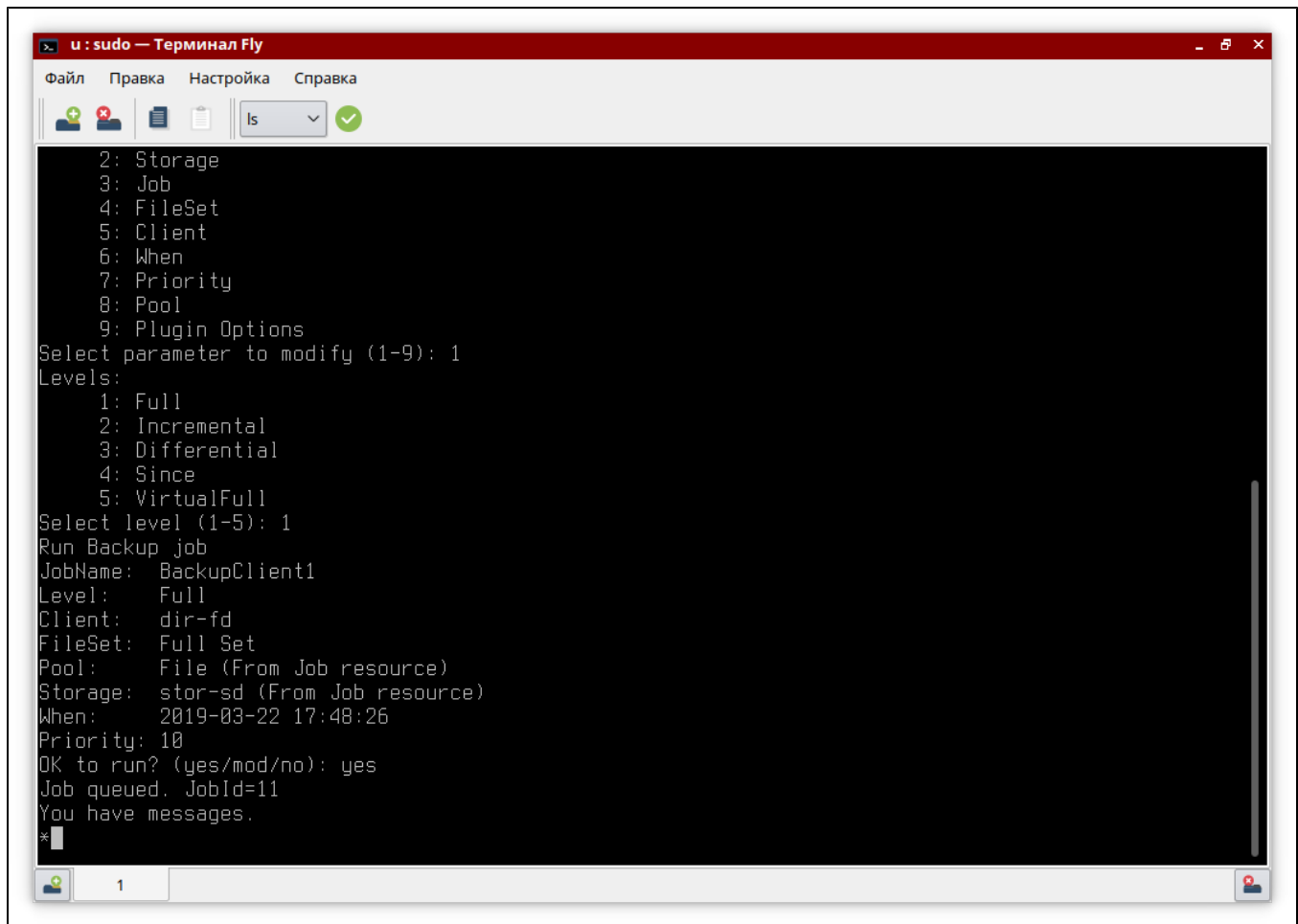


```
u: sudo — Терминал Fly
Файл  Правка  Настройка  Справка
ls
u@dir:~$ sudo bconsole
Connecting to Director 192.168.244.70:9101
1000 OK: 102 dir-dir Version: 7.4.4 (20 September 2016)
Enter a period to cancel a command.
*run
Automatically selected Catalog: BaculaCatalog
Using Catalog "BaculaCatalog"
A job name must be specified.
The defined Job resources are:
    1: BackupClient1
    2: BackupCatalog
    3: RestoreFiles
Select Job resource (1-3): 1
Run Backup job
JobName: BackupClient1
Level: Incremental
Client: dir-fd
FileSet: Full Set
Pool: File (From Job resource)
Storage: stor-sd (From Job resource)
When: 2019-03-22 17:48:26
Priority: 10
OK to run? (yes/mod/no):
```

yes no - . mod .
 , "Incremental" "Full"







```
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ls ✓

Elapsed time:      1 sec
Priority:          10
FD Files Written:  282
SD Files Written:  282
FD Bytes Written:  374,000 (374.0 KB)
SD Bytes Written:  408,989 (408.9 KB)
Rate:             374.0 KB/s
Software Compression: 96.5% 28.9:1
Snapshot/VSS:      no
Encryption:        no
Accurate:          no
Volume name(s):    Vol-0011
Volume Session Id: 1
Volume Session Time: 1553263344
Last Volume Bytes: 1,264,227 (1.264 MB)
Non-fatal FD errors: 0
SD Errors:         0
FD termination status: OK
SD termination status: OK
Termination:       Backup OK

22-map 17:50 dir-dir JobId 11: Begin pruning Jobs older than 6 months .
22-map 17:50 dir-dir JobId 11: No Jobs found to prune.
22-map 17:50 dir-dir JobId 11: Begin pruning Files.
22-map 17:50 dir-dir JobId 11: No Files found to prune.
22-map 17:50 dir-dir JobId 11: End auto prune.

*
*
```

`/backups` `"Vol-00**"`.

- Bacula , Bacula .

:

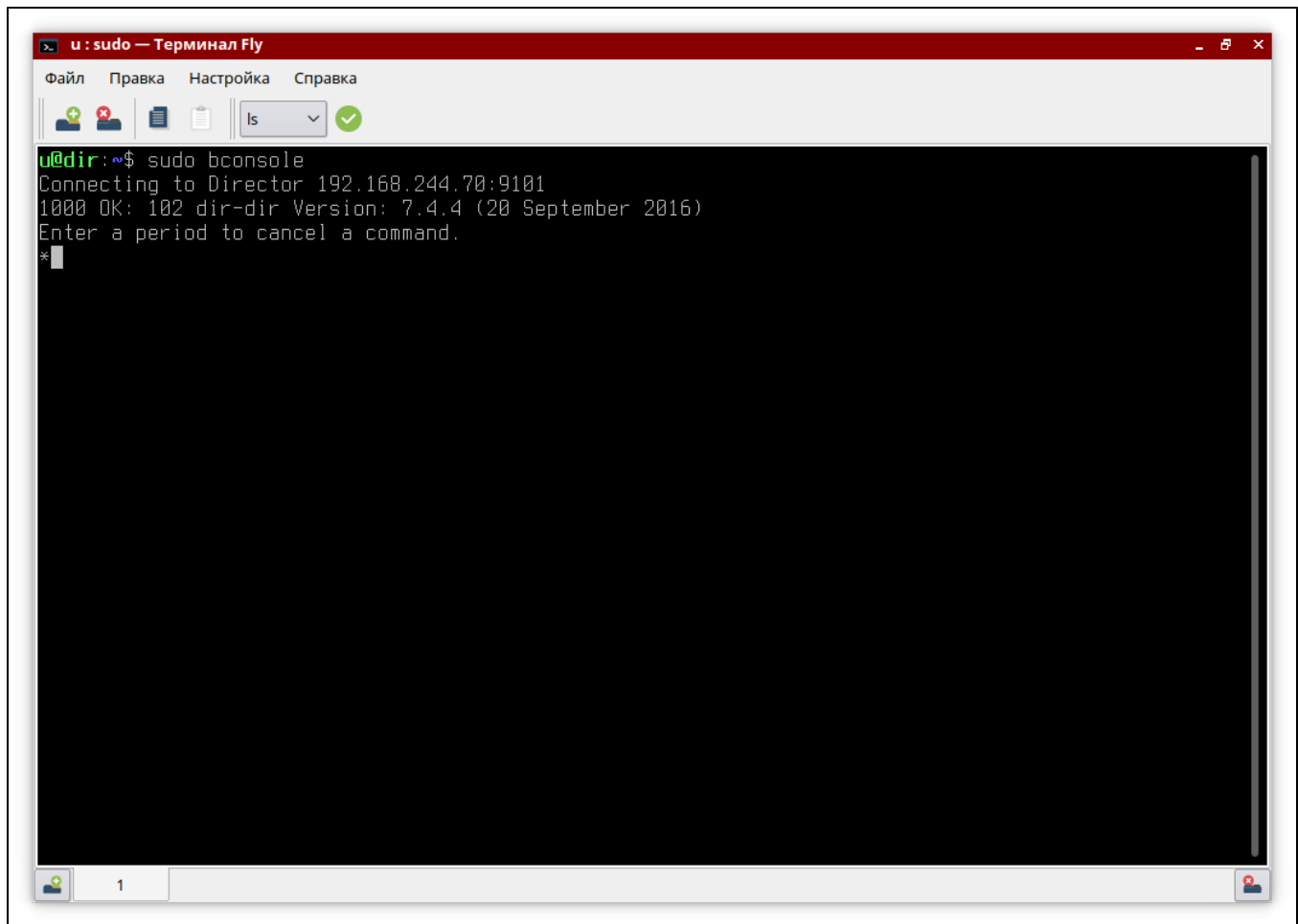
```
sudo journalctl -xe
```

`"bconsole"` `"exit"`.

:

```
sudo bconsole
```

`bconsole.conf` ,



```
u: sudo — Терминал Fly
Файл  Правка  Настройка  Справка
[Icons] [ls] [Checkmark]

u@dir:~$ sudo bconsole
Connecting to Director 192.168.244.70:9101
1000 OK: 102 dir-dir Version: 7.4.4 (20 September 2016)
Enter a period to cancel a command.
*restore
Automatically selected Catalog: BaculaCatalog
Using Catalog "BaculaCatalog"

First you select one or more JobIds that contain files
to be restored. You will be presented several methods
of specifying the JobIds. Then you will be allowed to
select which files from those JobIds are to be restored.

To select the JobIds, you have the following choices:
  1: List last 20 Jobs run
  2: List Jobs where a given File is saved
  3: Enter list of comma separated JobIds to select
  4: Enter SQL list command
  5: Select the most recent backup for a client
  6: Select backup for a client before a specified time
  7: Enter a list of files to restore
  8: Enter a list of files to restore before a specified time
  9: Find the JobIds of the most recent backup for a client
 10: Find the JobIds for a backup for a client before a specified time
 11: Enter a list of directories to restore for found JobIds
 12: Select full restore to a specified Job date
 13: Cancel
Select item: (1-13): █
```

20 "1". "9".

"JobId" .

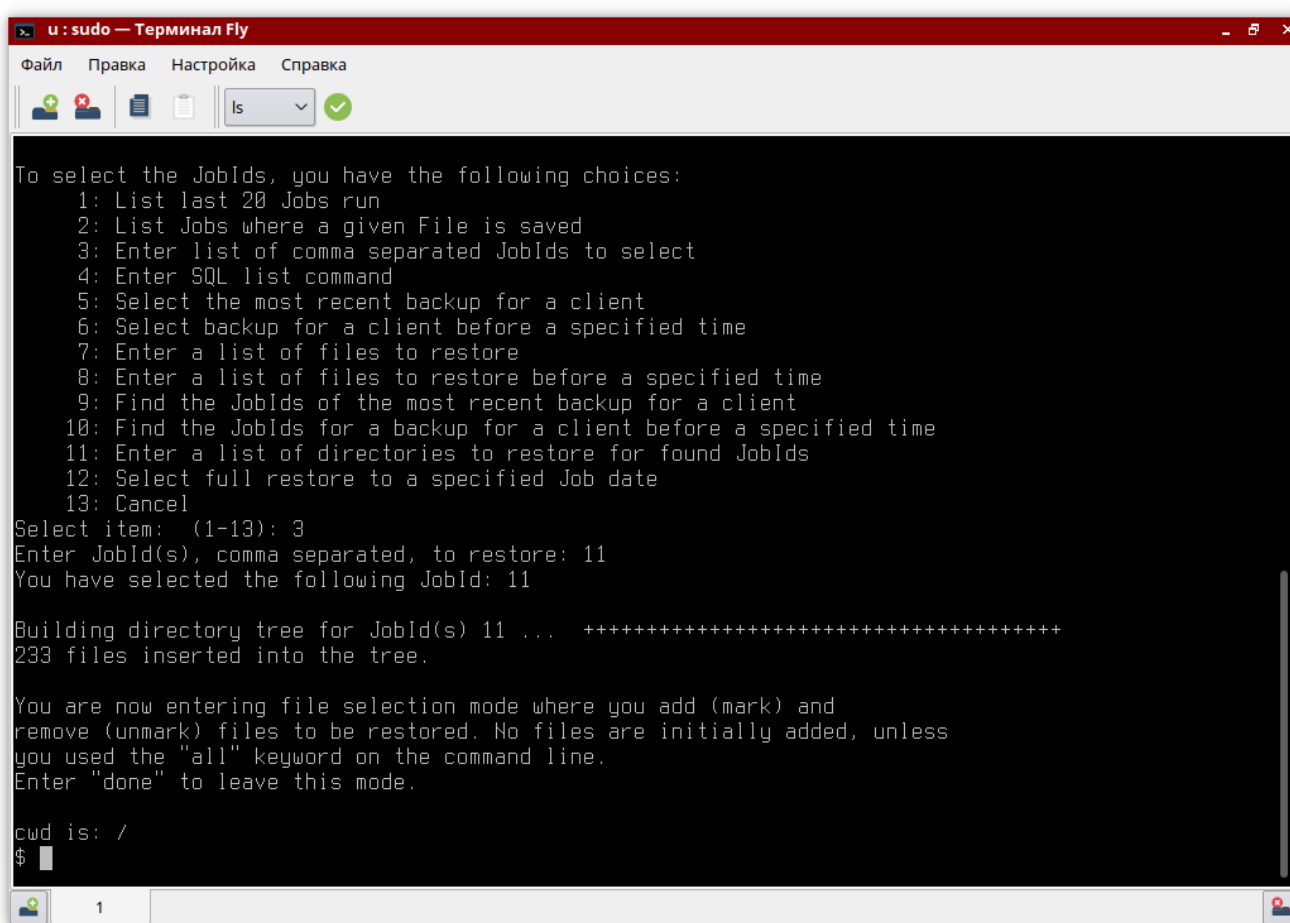
"JobId" = 11.

```
u: sudo — Терминал Fly
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[Icons] [ls] [Checkmark]

u@dir:~$ sudo bconsole
Connecting to Director 192.168.244.70:9101
1000 OK: 102 dir-dir Version: 7.4.4 (20 September 2016)
Enter a period to cancel a command.
*restore
Automatically selected Catalog: BaculaCatalog
Using Catalog "BaculaCatalog"

First you select one or more JobIds that contain files
to be restored. You will be presented several methods
of specifying the JobIds. Then you will be allowed to
select which files from those JobIds are to be restored.

To select the JobIds, you have the following choices:
  1: List last 20 Jobs run
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  3: Enter list of comma separated JobIds to select
  4: Enter SQL list command
  5: Select the most recent backup for a client
  6: Select backup for a client before a specified time
  7: Enter a list of files to restore
  8: Enter a list of files to restore before a specified time
  9: Find the JobIds of the most recent backup for a client
 10: Find the JobIds for a backup for a client before a specified time
 11: Enter a list of directories to restore for found JobIds
 12: Select full restore to a specified Job date
 13: Cancel
Select item: (1-13): 3
Enter JobId(s), comma separated, to restore: 11
```



```
u : sudo — Терминал Fly
Файл  Правка  Настройка  Справка

To select the JobIds, you have the following choices:
1: List last 20 Jobs run
2: List Jobs where a given File is saved
3: Enter list of comma separated JobIds to select
4: Enter SQL list command
5: Select the most recent backup for a client
6: Select backup for a client before a specified time
7: Enter a list of files to restore
8: Enter a list of files to restore before a specified time
9: Find the JobIds of the most recent backup for a client
10: Find the JobIds for a backup for a client before a specified time
11: Enter a list of directories to restore for found JobIds
12: Select full restore to a specified Job date
13: Cancel

Select item: (1-13): 3
Enter JobId(s), comma separated, to restore: 11
You have selected the following JobId: 11

Building directory tree for JobId(s) 11 ... *****
233 files inserted into the tree.

You are now entering file selection mode where you add (mark) and
remove (unmark) files to be restored. No files are initially added, unless
you used the "all" keyword on the command line.
Enter "done" to leave this mode.

cwd is: /
$
```

"Is" (L -) .

"mark home/" ,

```
u: sudo — Терминал Fly
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[Icons] [ls] [Checkmark]

3: Enter list of comma separated JobIds to select
4: Enter SQL list command
5: Select the most recent backup for a client
6: Select backup for a client before a specified time
7: Enter a list of files to restore
8: Enter a list of files to restore before a specified time
9: Find the JobIds of the most recent backup for a client
10: Find the JobIds for a backup for a client before a specified time
11: Enter a list of directories to restore for found JobIds
12: Select full restore to a specified Job date
13: Cancel
Select item: (1-13): 3
Enter JobId(s), comma separated, to restore: 11
You have selected the following JobId: 11

Building directory tree for JobId(s) 11 ... ++++++
233 files inserted into the tree.

You are now entering file selection mode where you add (mark) and
remove (unmark) files to be restored. No files are initially added, unless
you used the "all" keyword on the command line.
Enter "done" to leave this mode.

cwd is: /
$ ls
home/
$ mark home/
282 files marked.
$
```

"done" :

```
u: sudo — Терминал Fly
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[Icons] [ls] [checkmark]

Bootstrap records written to /var/lib/bacula/dir-dir.restore.1.bsr

The Job will require the following (*=>InChanger):
  Volume(s)           Storage(s)           SD Device(s)
=====
  Vol-0011            stor-sd             Autochanger1

Volumes marked with "*" are in the Autochanger.

282 files selected to be restored.

Automatically selected Client: dir-fd
Using Catalog "BaculaCatalog"
Run Restore job
JobName:      RestoreFiles
Bootstrap:    /var/lib/bacula/dir-dir.restore.1.bsr
Where:        /restore
Replace:      Always
FileSet:      Full Set
Backup Client: dir-fd
Restore Client: dir-fd
Storage:      stor-sd
When:         2019-03-22 19:04:01
Catalog:      BaculaCatalog
Priority:      10
Plugin Options:
OK to run? (yes/mod/no):
```

:

- :
- ()
-
-
-
-
- (, -)
-
-
-

"mod".

```
u: sudo — Терминал Fly
Файл  Правка  Настройка  Справка
[Icons] [ls] [Checkmark]

=====
Volume(s)                Storage(s)                SD Device(s)
=====
Vol-0011                  stor-sd                   Autochanger1

Volumes marked with "*" are in the Autochanger.

282 files selected to be restored.

Automatically selected Client: dir-fd
Using Catalog "BaculaCatalog"
Run Restore job
JobName:      RestoreFiles
Bootstrap:    /var/lib/bacula/dir-dir.restore.1.bsr
Where:        /restore
Replace:      Always
FileSet:      Full Set
Backup Client: dir-fd
Restore Client: dir-fd
Storage:      stor-sd
When:         2019-03-22 19:04:01
Catalog:      BaculaCatalog
Priority:      10
Plugin Options:
OK to run? (yes/mod/no): yes
Job queued. JobId=12
You have messages.
* [Progress bar]
```

```
u: sudo — Терминал Fly
Файл  Правка  Настройка  Справка
ls ✓
22-map 19:13 dir-fd JobId 12: Warning: Encountered 3 xattr errors while doing restore
22-map 19:13 stor-sd JobId 12: Forward spacing Volume "Vol-0011" to file: block 0:843144.
22-map 19:13 stor-sd JobId 12: End of Volume at file 0 on device "FileChgr1-Dev1" (/backups/files1)
, Volume "Vol-0011"
22-map 19:13 stor-sd JobId 12: End of all volumes.
22-map 19:13 stor-sd JobId 12: Elapsed time=00:00:01, Transfer rate=408.9 K Bytes/second
22-map 19:13 dir-dir JobId 12: Bacula dir-dir 7.4.4 (202Sep16):
  Build OS:      x86_64-pc-linux-gnu debian 9.0
  JobId:         12
  Job:           RestoreFiles.2019-03-22_19.13.22_11
  Restore Client: dir-fd
  Start time:    22-map-2019 19:13:25
  End time:      22-map-2019 19:13:25
  Files Expected: 282
  Files Restored: 282
  Bytes Restored: 11,824,376
  Rate:          0.0 KB/s
  FD Errors:     0
  FD termination status: OK
  SD termination status: OK
  Termination:   Restore OK

22-map 19:13 dir-dir JobId 12: Begin pruning Jobs older than 6 months .
22-map 19:13 dir-dir JobId 12: No Jobs found to prune.
22-map 19:13 dir-dir JobId 12: Begin pruning Files.
22-map 19:13 dir-dir JobId 12: No Files found to prune.
22-map 19:13 dir-dir JobId 12: End auto prune.

*
```

/restore

- Bacula , Bacula

:

```
sudo journalctl -xe
```

"bconsole" "exit".