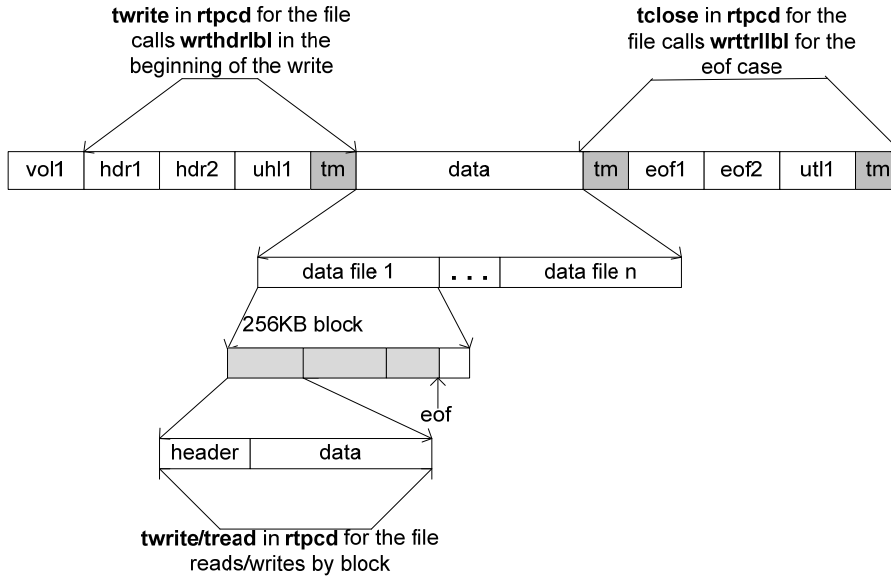


1. rtpcd+tape thoughts

ALB tape looks like AUL tape but has data in ALB format



Is it possible to use `lseek` though the tape file descriptor?!

`rtpcd` uses `twrite/tread` `topen/tclose` functions.

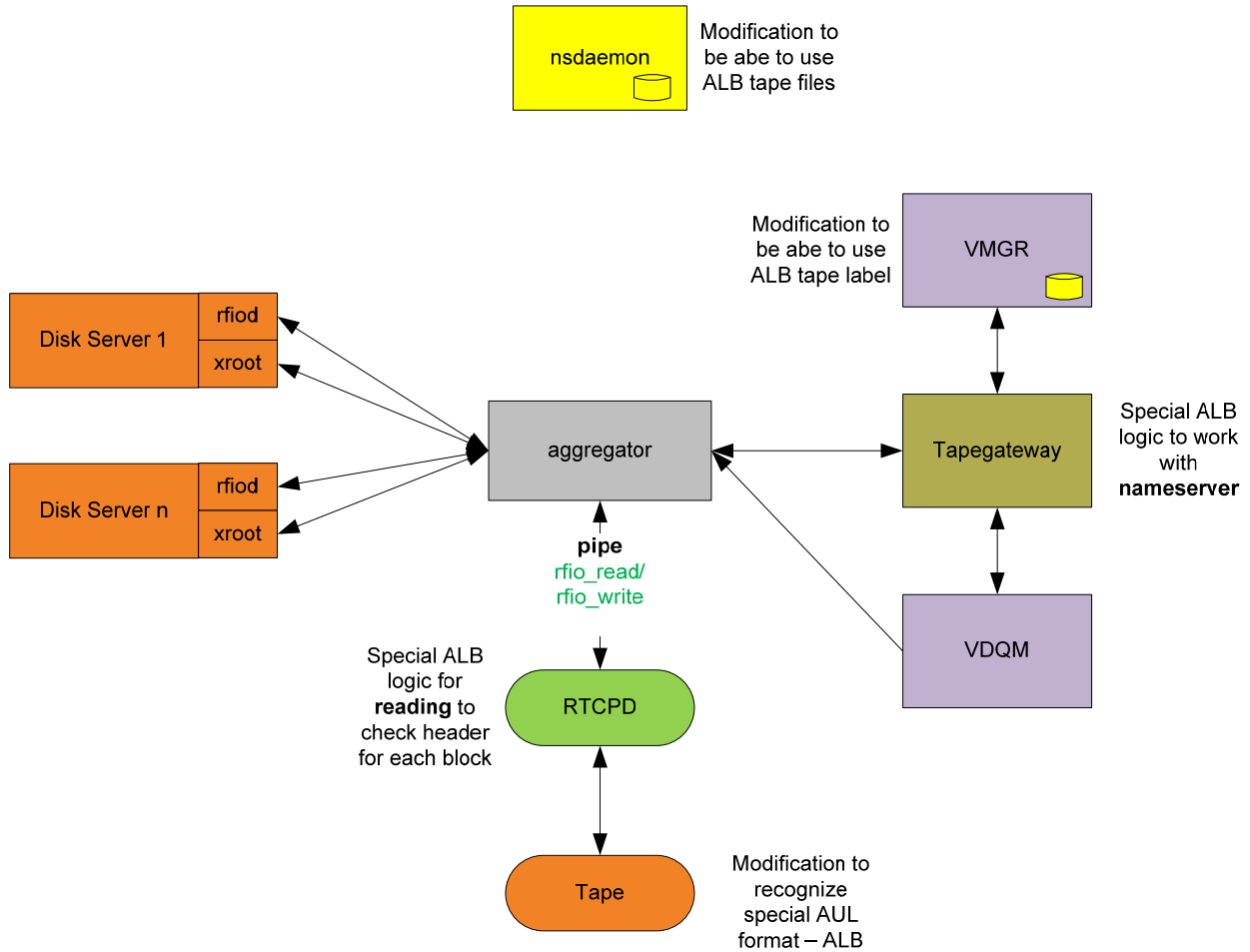
All data is written/read to/from tape by blocks in `twrite/tread`.

They use a standard file descriptor to work with the tape data and several special functions to work with tape drive.

If we will use it to write ALB file there is no modification needed.

For reading ALB if we do not want to read all ALB data we can try to check each data file block's header in sequential reading trying to find necessary file name. And, if this is possible (I doubt it) we might try to use `lseek` function for the tape file descriptor (need to check with tape people).

2. ALB CASTOR work around



I have greped the sources (see below) there are several parts where we will need to add ALB format support. But it depends on how we will implement it to tape. Maybe it will be better to fully split AUL- ALB tape formats and make ALB tapes only. But it is possible to use mixed AUL+ALB tapes too. If we will create only ALB tapes (which will look like AUL) then we will need to add small changes everywhere: VMGR+tapegateway+rtcpd+tpdaemon+nsdaemon 😊

3. grep for aul

no need to modify

```
rtcopy/rtcpdVmgrInterface.c:    if (strcmp(labeltype, "aul") == 0)    /* Ansi (extended)
User Label */
```

vmgr/vmgr_procreq.c

int **vmgr_srv_entertape**(magic, req_data, clienthost, thip)

int **vmgr_srv_modifytape**(magic, req_data, clienthost, thip)

grep

vmgr/vmgr_procreq.c: strcmp (tape.lbltype, "aul") &&

vmgr/vmgr_procreq.c: strcmp (lbltype, "aul") &&

castor/tape/tapegateway/VmgrTapeGatewayHelper.cpp

castor::stager::Tape*

castor::tape::tapegateway::VmgrTapeGatewayHelper::**getTapeForStream**

void castor::tape::tapegateway::VmgrTapeGatewayHelper::**updateTapeInVmgr**

grep

castor/tape/tapegateway/VmgrTapeGatewayHelper.cpp: if (strcmp(label,"aul") == 0)
/* Ansi (extended) User Label */

castor/tape/tapegateway/VmgrTapeGatewayHelper.cpp: else if
(strcmp(vmgrTapeInfo.lbltype,"aul") == 0) /* Ansi (extended) User Label */

tape/mounttape.c

int **main**(argc, argv)

grep

tape/mounttape.c: static char labels[6][4] = {"", "al", "nl", "sl", "blp", "aul"};

```
tape/mounttape.c:      if (tplbl == AL && lblcode == AUL) tplbl = AUL;
```

tape/tpdaemon.c

```
*****
```

```
void procmountreq(req_data, clienthost)
```

```
void procstatreq(req_data, clienthost)
```

```
### grep ###
```

```
tape/tpdaemon.c:  else if (! strcmp (lbltype, "aul")) lblcode = AUL;
```

```
tape/tpdaemon.c:  static char labels[6][4] = {"", "al", "nl", "sl", "blp", "aul"};
```

```
h/Ctape.h:#define AUL 5
```

tape/buildhdrlbl.c

```
*****
```

```
int buildhdrlbl(hdr1, hdr2, fid, fsid, fsec, fseq, retentd, recfm, blksize, lrecl, den, lblcode)
```

```
### grep ###
```

```
tape/buildhdrlbl.c:  if (lblcode == AL || lblcode == AUL)
```

tape/posovl.c

```
*****
```

```
int main(argc, argv)
```

```
### grep ###
```

```
tape/posovl.c:      if (lblcode == AL || lblcode == AUL || lblcode == SL) {
```

```
tape/posovl.c:          if (lblcode == AL || lblcode == AUL || lblcode == SL) {
```

```
tape/posovl.c:              if (lblcode == AUL) {
```

tape/usrlbl.c

int **wrthdrlbl** (tapefd, path)

int **wrttrllbl** (tapefd, path, labelid, nblocks)

grep

tape/usrlbl.c: if (dlip->lblcode == AUL) {

tape/usrlbl.c: if (dlip->lblcode == AUL) {

tape/buildvollbl.c

int **buildvollbl**(vol1, vsn, lblcode, name)

grep

tape/buildvollbl.c: if (lblcode == AL || lblcode == AUL)

tape/initlabel.c

int **setlabelinfo** (path, flags, fseq, vol1, hdr1, hdr2, uhl1)

grep

tape/initlabel.c: if (dlip->lblcode == AL || dlip->lblcode == AUL || dlip->lblcode == SL) {

others

test/rtcopy/rtcpcheck.fix: #if ["\$lab" != "aul"]; then

test/vmgr/testvmgr.c: if (strcmp(labeltype, "aul") == 0) /* Ansi (extended) User Label */

man pages

vmgr/vmgrentertape.man

vmgr/vmgr_modifytape.man

tape/Ctape_mount.man

tape/tplabel.man

tape/Ctape_label.man