

# **Working With AMANDA**

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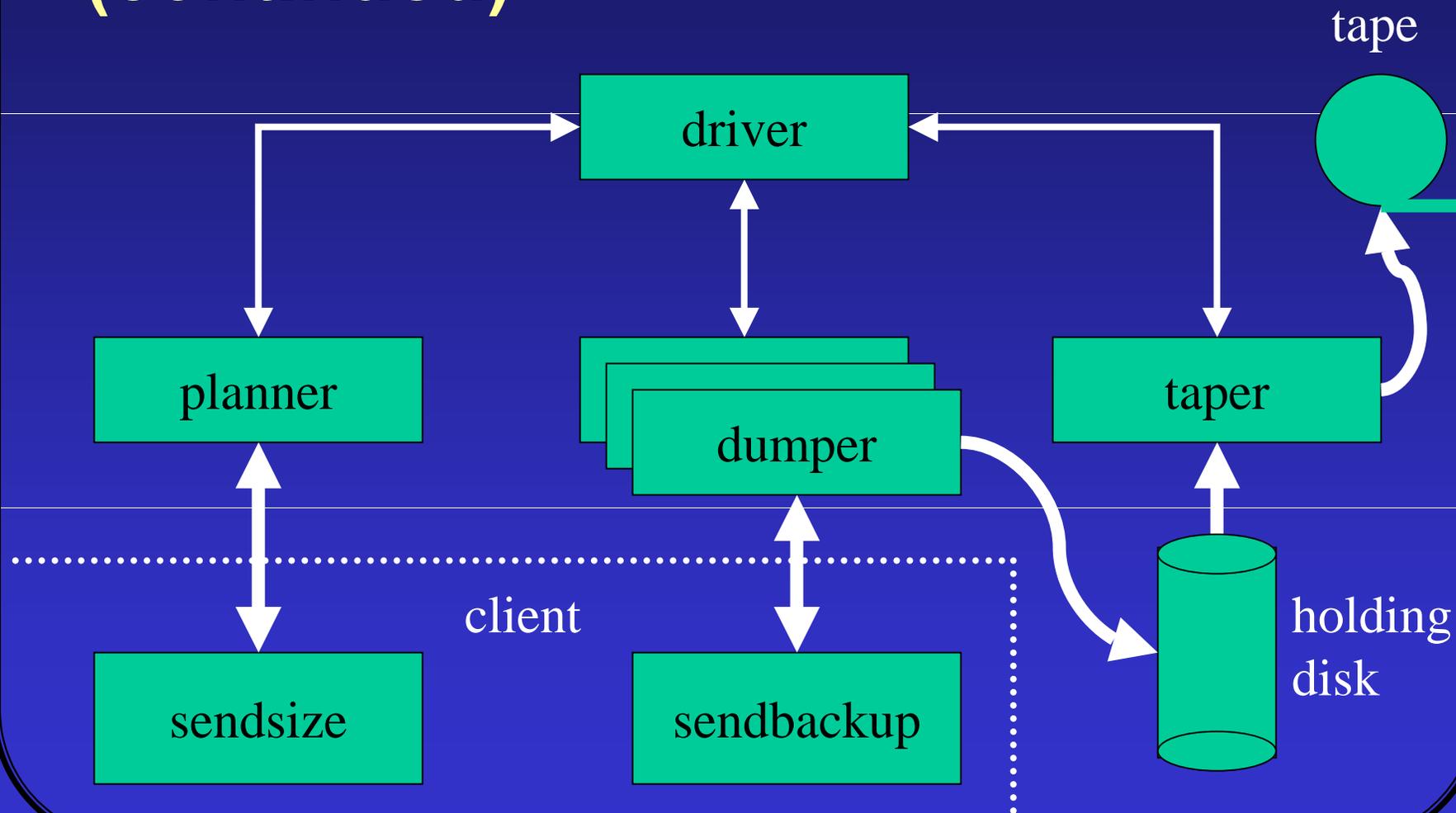
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# Overview

- **Not a backup program itself**
- **Manages other standard backup programs**
  - System dump
  - GNU tar
  - sbmtar
- **Optimized schedule**
  - Dump cycle
  - Tape cycle
  - Estimated image sizes

# Overview (continued)



# Getting Help

- Release notes and documentation
- “The book chapter”
  - <http://www.backupcentral.com/amanda.html>
- Home page/FAQ
  - [www.amanda.org](http://www.amanda.org)
- Mailing lists
  - [amanda-users@amanda.org](mailto:amanda-users@amanda.org)
  - [amanda-hackers@amanda.org](mailto:amanda-hackers@amanda.org)

# Before You Begin

- **Optional software**
  - GNU tar, readline, awk
  - SAMBA
  - Perl
  - gnuplot
- **Amanda user/group**
- **Access through a firewall**
- **Installation location**
- **Tape server capacity**
  - I/O and network
  - CPU
  - Holding disk

# Installation

- Don't use pre-built binaries (e.g. RPM)
- [ftp.amanda.org](http://ftp.amanda.org)
- [cvs.amanda.sourceforge.net](http://cvs.amanda.sourceforge.net)
- Standard GNU build sequence:
  - make distclean
  - ## apply patches
  - ./configure ...
  - make
  - make install ## as root
- patch-system

# What's A Configuration?

- Logical grouping of clients
- Alternate set of options
- Client/config rule

# Typical Directory Structure

- **--with-configdir (\$prefix/etc/amanda)**
- **Owned by the AMANDA user/group**
- **amanda.conf**
  - logfile
  - infofile
  - indexdir
- **disklist**
- **tapelist**
- **Changer config file(s)**
- **amdump.<nn>**

# amanda.conf

## (general parameters)

- org
- mailto
- dumpcycle
- tapecycle/runspcycle/runtapes
- tapedev (no rewind!!!)
- tpchanger
- labelstr
- netusage

# **amanda.conf** **(holdingdisk)**

- **directory**
- **chunksize**
- **use**

# **amanda.conf**

## **(dumptype)**

- **program**
- **compress**
  - none
  - client fast
  - client best
  - server fast
  - server best
- **dumpcycle**
- **record**
- **index**

# amanda.conf (tapetype)

- FAQ at [www.amanda.org](http://www.amanda.org)
- `cd tape-src ; make tapetype`
- `length`
- `filemark`

# Tape Changers

- **AMANDA uses an external program**
- **Test the external program first, then amtape**
- **chg-manual**
- **chg-multi**
- **chg-scsi**

# Label the Tapes

- All AMANDA tapes must be pre-labeled
- `amlabel [-f] <config> <label> [slot <slot>]`
- Run as the AMANDA user

# Setting Up a Client

- **disklist**
  - hostname (FQDN)
  - “disk”
  - dumptype
- **inetd.conf on the client (HUP)**
- **amcheck -cl <config>**
- **/tmp/amanda/\*.debug**

# Operation

- **amcheck**
- **amdump**
- **amstatus**
- **amverify**

# Restoring

- **amrestore**
  - Retrieve images from tape or holding disk
  - Tape “catalogue”
- **amrecover**
  - Command line (ftp-like) interface to index files
- **Emergency**
  - `dd if=$TAPE bs=32k count=1`
  - `dd if=$TAPE bs=32k skip=1 [ | gunzip ] | restore`

# Maintenance

- Read the E-mail report from each run
- Failures vs. “strange” results
- Timeouts
- amcleanup
- amflush
- amadmin
- Adding/removing clients and disks
- Adding/removing tapes

# Future

- **Security framework**
- **Strategy API**
- **Filter API**
- **Dumper API**
- **Taper rewrite**

