dCache post-1.9.7 configuration files

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Why?
Advantages

- Single domain installation
- Multi door per host installation
- Single place to define all domains on a host
Advantages

- No templates
- Per domain and per cell settings
- Single place to find default values
- Auto creation of pools
The players

- `etc/dcache.conf`
- `etc/layouts/`
- `share/defaults/`
etc/dcache.conf

- The main configuration file
- Replaces dCacheSetup
- An empty file is valid – no template is needed
- Most of the old parameters work as before
A few new properties

- `dcache.user`
- `dcache.namespace`
- `dcache.java.memory.heap`
- `dcache.java.memory.direct`
- `net.wan.port.min / net.wan.port.max`
- `net.lan.port.min / net.lan.port.max`
Layouts

- Defines which domains to start
- Defines which services to put in a domain
- Allows for per domain and per service configuration
- Stored in etc/layouts/xxx.conf with dcache.layout=xxx in etc/dcache.conf
messageBroker=none

[dCacheDomain]
[dCacheDomain/admin]
[dCacheDomain/broadcast]
[dCacheDomain/poolmanager]
[dCacheDomain/dummy-prestager]
[dCacheDomain/loginbroker]
[dCacheDomain/spacemanager]
[dCacheDomain/pnfsmanager]
[dCacheDomain/nfsv3]
[dCacheDomain/cleaner]
[dCacheDomain/acl]
[dCacheDomain/dir]
[dCacheDomain/gplazma]
[dCacheDomain/gsi-pam]
[dCacheDomain/pinmanager]
[dCacheDomain/billing]
[dCacheDomain/srm-loginbroker]
[dCacheDomain/httpd]
[dCacheDomain/topo]
[dCacheDomain/info]

[dCacheDomain/pool]
name=pool1
path=/path/to/pool1

[dCacheDomain/pool]
name=pool2
path=/path/to/pool2

# [dCacheDomain/replica]
[dCacheDomain/dcap]
# [dCacheDomain/sgidcap]
[dCacheDomain/gridftp]
[dCacheDomain/srm]
# [dCacheDomain/transfermanagers]
# [dCacheDomain/xrootd]
[dCacheDomain/webdav]
[dCacheDomain]
[dCacheDomain/poolmanager]
[dCacheDomain/dummy-prestager]
[dCacheDomain/broadcast]
[dCacheDomain/loginbroker]
[dCacheDomain/topo]

[adminDoorDomain]
[adminDoorDomain/admin]

[spacemanagerDomain]
[spacemanagerDomain/spacemanager]

[namespaceDomain]
[namespaceDomain/pnfsmanager]
[namespaceDomain/cleaner]
[namespaceDomain/acl]

[nfsDomain]
[nfsDomain/nfsv3]

[dirDomain]
[dirDomain/dir]

[infoDomain]
[infoDomain/info]

[statisticsDomain]
[statisticsDomain/statistics]

[httpdDomain]
[httpdDomain/billing]
[httpdDomain/srm-loginbroker]
[httpdDomain/httpd]

[gPlazmaDomain]
[gPlazmaDomain/gplazma]

[utilityDomain]
[utilityDomain/gsi-pam]
[utilityDomain/pinmanager]

# [${host.name}Domain]
# [${host.name}Domain/pool]
# name=pool1
# path=/path/to/pool1
Two doors

[gridftp-`${host.name}`-1Domain]
[gridftp-`${host.name}`-1Domain/gridftp]
port=2811
cell.name=GFTP-`${host.name}`-1

[gridftp-`${host.name}`-2Domain]
[gridftp-`${host.name}`-2Domain/gridftp]
port=2812
cell.name=GFTP-`${host.name}`-2
Java heap size

/etc/dcache.conf

dcache.java.memory.heap=512m
dcache.java.memory.direct=128m

/etc/layouts/myLayout.conf

[dCacheDomain]
dcache.java.memory.heap=2048m
dcache.java.memory.direct=0m

...

[utilityDomain]
dcache.java.memory.heap=384m
dcache.java.java.memory.direct=16m
Per host layouts

`etc/dcache.conf`
```
dcache.layout=${host.name}
```

`etc/layouts/host1.conf`
```
[dCacheDomain]
[dCacheDomain/poolmanager]
```

`etc/layouts/host2.conf`
```
[gridftp-${host.name}-1Domain]
[gridftp-${host.name}-1Domain/gridftp]
```
Pools

In your layout file:

```
[myPoolDomain/pool]
name=pool1
path=/san/pool1
lfs=precious
tags=hostname=${host.name}
maxDiskSpace=2T
```

The pool structure is auto created on first startup! May be suppressed with something like

```
waitForFiles=${path}/data
```

If maxDiskSpace nor "set max disk space" is defined, then the pool is auto sized!
Default values

- Taken from files in share/defaults/
- Don't modify them; the files will be overwritten on upgrade!
- A good source to learn about available properties
We are not done... 1.9.8

- PoolManager.conf optional
- All tags are optional with Chimera
- More defaults in share/defaults/