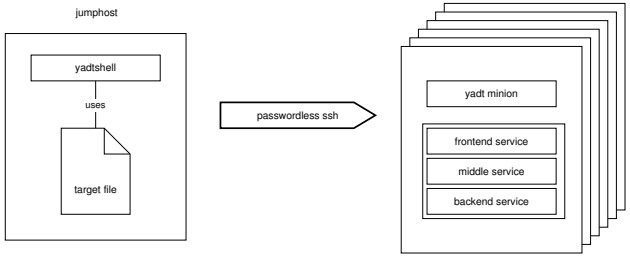
yadt 1.8

cheat sheet 0.3

http://www.yadt-project.org/

Concept



Using the yadtshell you can execute high level operations like updating a group of hosts . The only requirement is that the hosts are accessible via passwordless ssh and provide a yadt client.

Definition: Component URI

```
host://<hostname>
service://<hostname>/<name>
artefact://<hostname>/<name>/<version>
```

Examples

```
host://hostname
service://hostname/tomcat6
artefact://hostname/web-application/0:1.23
```

Components are *always* host-specific.

Brace Exception

```
artefact://{hostname01|hostname03}/myapp
```

Range Expression

```
host://hostname0[1..3]
```

Wildcards

```
service://hostname/*
```

yadt.conf.d (directory)

The yadt minion gets configured via *.yaml files in /etc/yadt.conf.d; they get merged in alphanumeric order. *Keep in mind*: Indented blocks have to start with *4 blanks*. Do not use tabs.

```
services:
    frontend:
        needs_services: [middleservice1]
        is_frontservice: true
    middleservice1:
        needs_services: [middleservice2]
```

The service name must be equal to the corresponding name of the service script (as found in /etc/init.d).

is_frontservice is a marker for the status overview. The status (shown in percentage) of the target will be calculated by determining how many frontservices are running.

needs_services the services that have to be running before starting this service (reverse for stopping)

The service definition may contain a component URI as string, which describes a service on another host, e.g.

```
needs_services: ['service://hostname/servicename']
```

Please note that this notation only allows the *hostname*, not the full qualified domain name. Yadtshell extracts the hostname from the fqdn as the string until the first dot.
Please see the *Merging configuration* section for more information.

target (file)

yadtshell uses a yaml file named target in the current working directory to define a yadt target (set of hosts), e.g.

```
hosts:
- hostname1.spam.eggs
- hostname2.spam.eggs
- hostname*.spammy.eggs
- hostname0[1..3].foo.bar
```

It is possible to group your hosts within a target:

```
hosts:
- hostname1.spam.eggs hostname2.spam.eggs
- hostname3.foo.bar hostname4.foo.bar
```

this will change the way the hosts will be displayed.

view (file)

If you have a lot of hosts in a target you can use a yaml-file called view to configure the rendering of the status overview. Place the view file together with the target file in the current working directory.

```
info-view: [matrix, color]
```

matrix	show status information in matrix
color	display status in color
maxcols	maximum number of columns
3cols	use three columns

Executing yadt commands

All involved hosts have to be accessible via *passwordless ssh*.

1. Entering the yadtshell

Enter the yadtshell by calling

```
init-yadtshell
```

- activates autocompletion for component uris,
- allows to omit `yadtshell` when executing a yadtshell commands.

To restores your shell environment you can use `CTRL+D` or

```
deactivate
```

2. Using yadtshell as a command

Use the `yadtshell` command if you prefer to execute yadtshell commands without entering the yadtshell itself:

```
yadtshell [options] <command> [<uri> ...]
```

-v	verbose
–dryrun	no actions executed (just logging)
-n	same as dryrun

Status Information

To retrieve the status of all services and artefacts versions from the current target use:

```
status
```

this will also perform `info`, which displays a summary of all services for each host within the current target:

```
info [--full]
```

–full	shows complete information (artefacts of hosts, etc.)

To display low-level data of components (in yaml format) use

```
dump [uri-query0 [uri-query1 ...]]
```

additional arguments for `dump`:

–attribute

–show-pending-updates

–show-current-artefacts

Example: dump info of all services.

```
dump service://
```

Note: The output of info and dump is generated using cached data.

Hosts

To prevent others from executing commands on a host it is possible to lock the host:

```
lock -m "message" [--force] <host_uri> [<
    host_uri> ...]
```

afterwards commands can only be executed

- by you,
- from the current target directory
- on the current host.

Example: lock the host `hostname01`

```
lock -m "message" host://hostname01
```

Example: hijacking a lock from somebody else

```
lock -m "message" --force host://*
```

Attention: when using the `-m "message"` option, the message should reflect the reason why you are doing what you are doing and include your name as well:

```
lock -m "Need this host. [Michael]" host://
    hostname31
```

To release a lock use:

```
unlock <host_uri> [<host_uri] ...]
```

Example: release all of your locks on all target hosts.

```
unlock host://*
```

Services

To start a service, regarding its dependencies, use:

```
start <service_uri> [<service_uri> ...]
```

Example: start all services.

```
start service://*
```

To stop a service and all services depending on the service:

```
stop <service_uri> [<service_uri> ...]
```

Keep in mind: When stopping a service all services depending on this service will be stopped as well. But starting the service will *not* start the services depending on the service again.
If a service is currently out of order you can ignore the state of a service (e.g. assume all operations on that service are successful):

```
ignore -m "message" <service_uri> [<service_uri>
    ...]
```

Example: ignore all nagios checks, since the nagios server is down

```
ignore -m "nagios server is down" service://*/
    nagios
```

To unignore services on host use:

```
unignore <service_uri> [<service_uri> ...]
```

Artefacts

To install updates (if there are any) and stop/start the defined services use:

```
update <host_uri> [<host_uri> âĂę] [-p <number>]
```

If you only want to update artefacts without restarting services, use `updateartefact`. Take care when using this command: it is ignoring all service dependencies.

```
updateartefact <artefact_uri> [...]
```

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