PERL6 & DOCKER

IN 5 MINUTES

by Arne Sommer

Nordic Perl Workshop
September 2018
Oslo

This presentation is available online:
https://npw2018.perl6.eu/

ABOUT ME

I have a master's degree in Computer Science.

I have programmed perl since 1989.

perl3 and 4 (1989-1995), perl5 (1994-), and perl6 (2015-).

Name: Arne Sommer
Web: bbop.org
Email: arne@bbop.org
CPAN: ARNE
GitHub: arnesom

DOCKER

Docker (a light weight container technology) is the easiest way to obtain and run perl6. On a Linux system, if Docker is installed already:

```
$ docker run -it rakudo-star
Unable to find image 'rakudo-star:latest' locally
latest: Pulling from library/rakudo-star
693502eb7dfb: Already exists
081cd4bfd521: Pull complete
c3439586dbe8: Pull complete
Digest: sha256:eac1ce2634c62857ee7e5e3f23b215 ...
Status: Downloaded newer image for rakudo-star:latest
To exit type 'exit' or '^D'
>
```

The last line is the REPL prompt.

DOCKER - RAKUDO STAR

Docker downloads the «rakudo-star» docker image the first time you run this command, and will use the local copy after that.

If a newer version is available, that one will be downloaded automatically.

That may not always be a good idea...

DOCKER PERMISSIONS

If you get an error message (permission denied), run the program as root:

```
$ sudo docker run -it rakudo-star
```

Or fix the permissions:

```
$   sudo usermod -a -G docker $USER
```

You have to log out and in again for this change to take effect. Reboot if that doesn't work.

DOCKER SHELL

If you want to *log in* to the container, so that you can run programs, use this command:

```
$ docker run -it -v $(pwd):/opt rakudo-star bash
```

This will give you a bash (shell) prompt, inside the docker file system, and the directory where you ran the command is available as /opt.

DOCKER OFFLINE PERL6 DOCUMENTATION

Rakudo Star comes with all the perl6 documentation files and the program p6doc.

If you get an error message about a missing «less» program:

```
$ apt-get update
$ apt-cache search less | grep ^less
less - pager program similar to more
$ apt-get install -y less
```

DOCKER SECURITY ISSUES

If you are using the Docker image for anything beside fun, keep it up to date with security patches. Run this command regularly:

```
$ apt-get -y upgrade
```

DOCKER PERL6

Inside the Docker container:

```
$ perl6 -v
This is Rakudo version 2018.07 built on
MoarVM version 2018.07 implementing Perl 6.c.

$ which perl6
/usr/bin/perl6
```

DOCKER ALIASES

If you, like me, find the two docker commands too much typing, set them up as shell aliases. I use «bash», and have added these lines to my .bash_aliases file:

```
alias p6-docker-sh='docker run -it -v \
  $(pwd):/opt rakudo-star bash'
alias p6-docker='docker run -it rakudo-star'
```

Feel free to choose better names…

MORE INFORMATION

http://perl6maven.com/rakudo-perl6-with-docker