

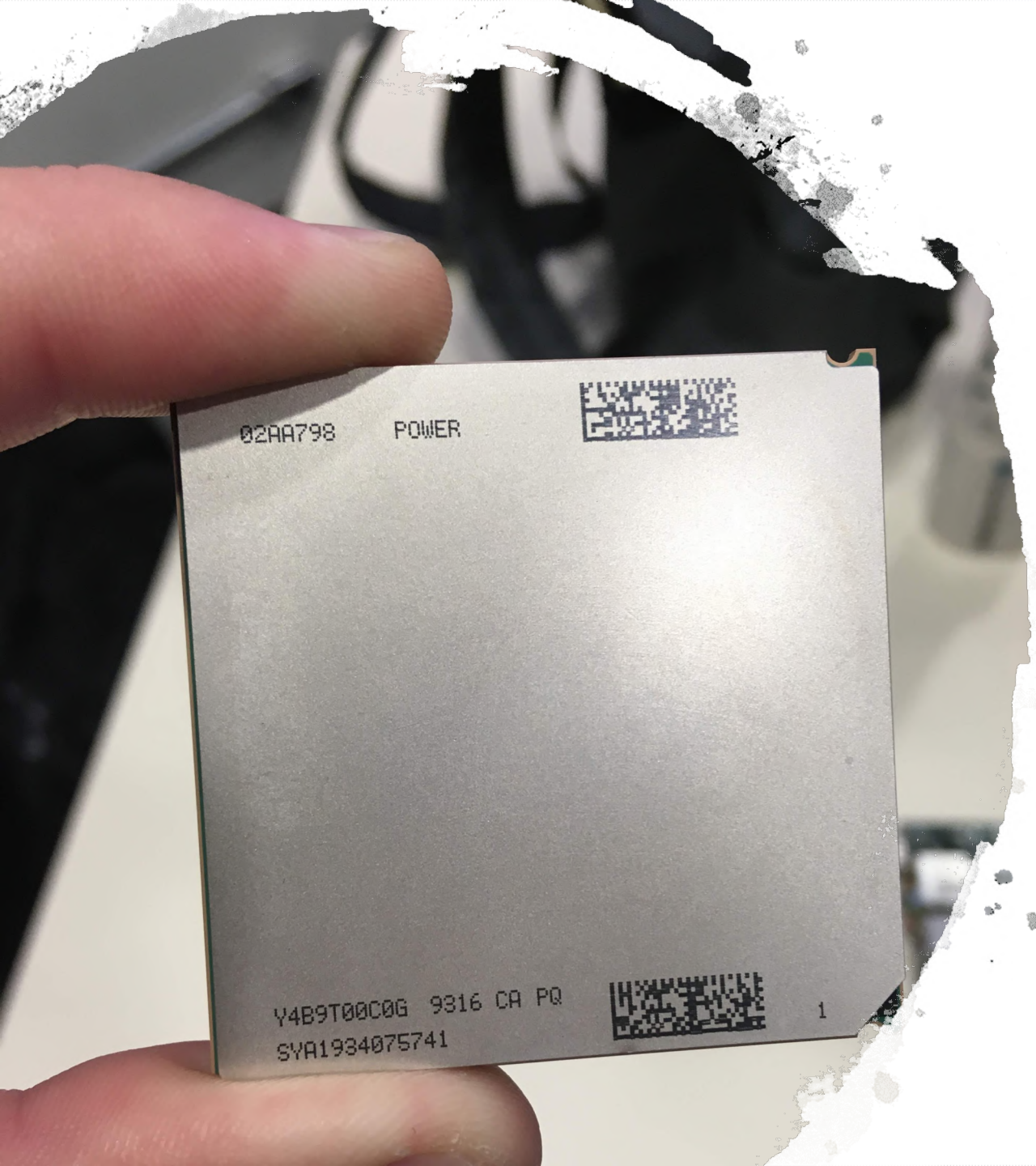
02AA798

POWER



The POWER of supercomputers at your fingertips

Rafael Sene | August 2019



About

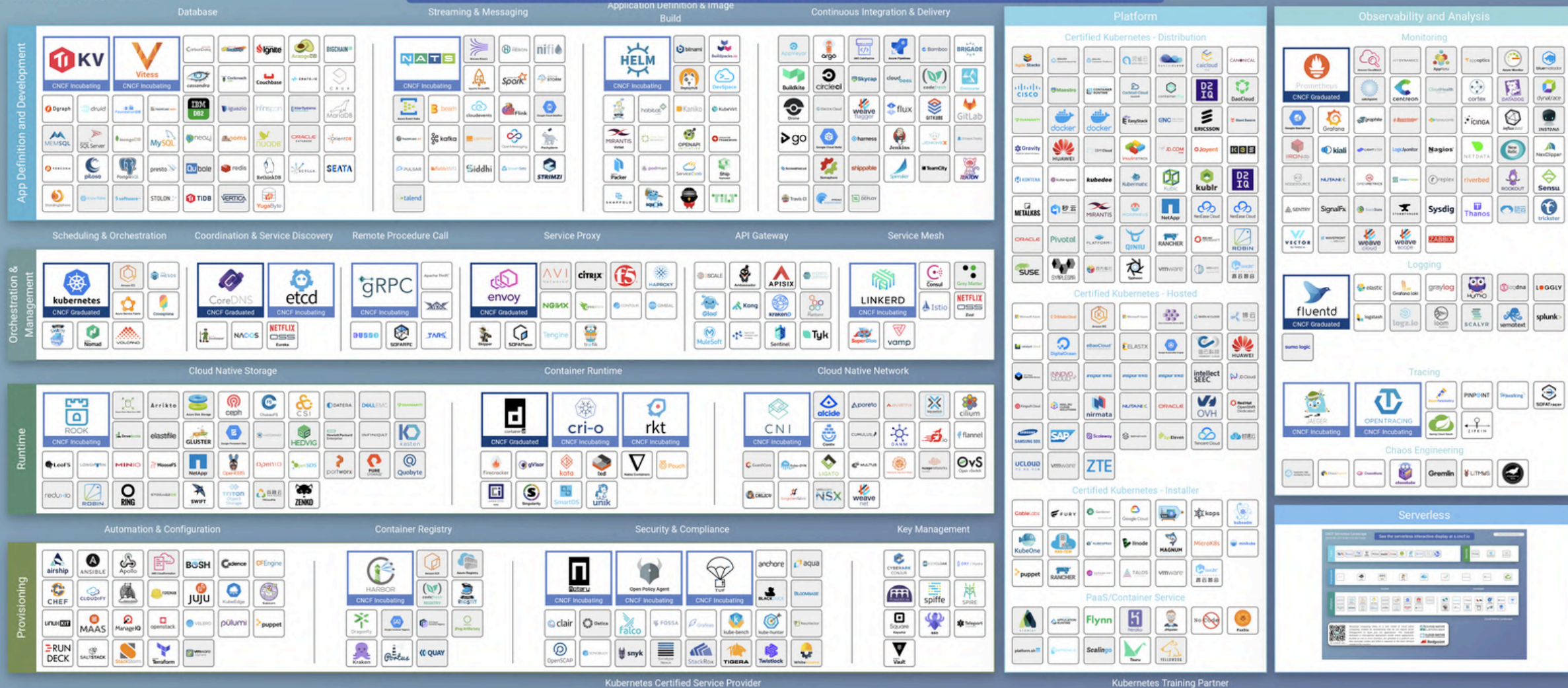
rpsene.com

rpsene@br.ibm.com

Today Making the
journey to
POWER
easy.

The fast pace of new open-source projects



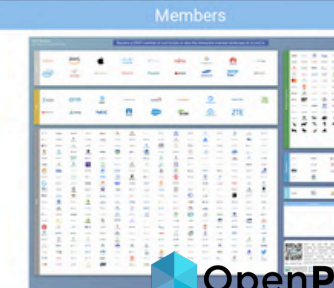


l.cncf.io

This landscape is intended as a map through the previously uncharted terrain of cloud native technologies. There are many routes to deploying a cloud native application, with CNCF Projects representing a particularly well-traveled path



Special



OpenPOWER™



Remove extraneous backtick ✓

#2370 opened 7 days ago by thomwiggers • Review required 1 of 1

Clarify c... restic/restic on Jul 16

#2368 opened

Add support for ppc64le #2342

This commit adds support for cross-compiling Restic for ppc64le as part of the releas...

```
restic:master ← rpsene:master
```

Doc Add...

#2354 opened

Add AW...

#2350 opened

Add support for ppc64le ✓

#2342 opened on Jul 16 by rpsene • Review required 6 of 6

Prune speedup ✓

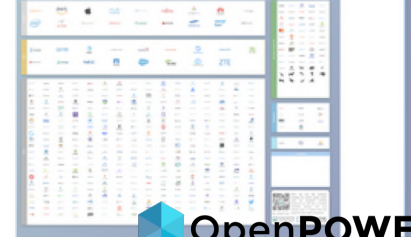
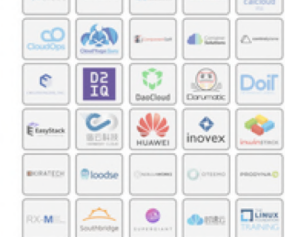
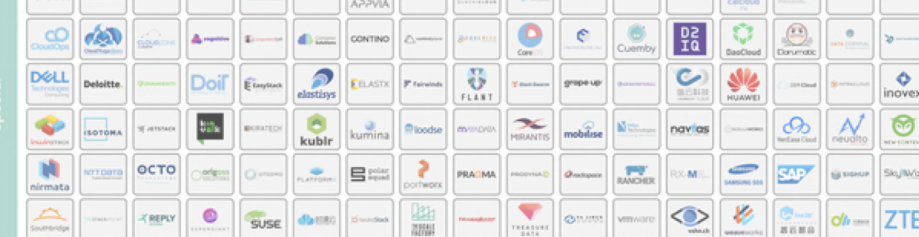


l.cncf.io

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Special

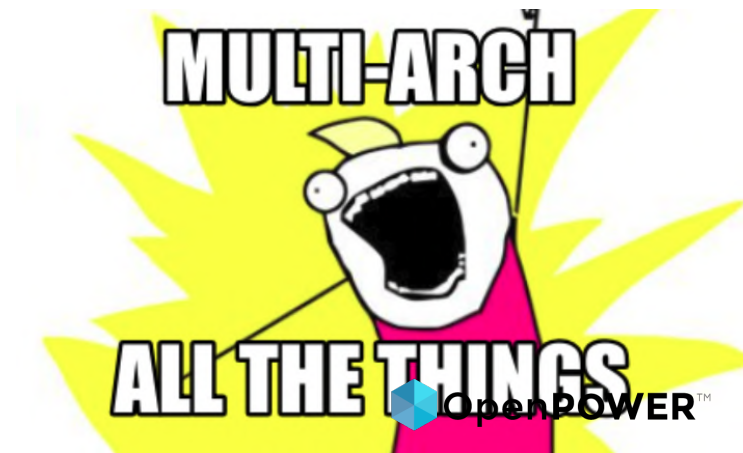


The adoption of open-source software comes from developers organically downloading/cloning and using it.



The World is multi-arch.

So should be
the development!



Chapter I

The POWER SDK

Migration Advisor

✓ Linux/Power 32 bits to Linux/Power 64 bits application migration

- ✓ Cast to pointers with different size
- ✓ Implicit cast to variable with different size
- ✓ Long usage
- ✓ Union, structs and classes with incompatible type declarations

✓ Linux/Power application optimization

- ✓ Sync built-in to C11 standard atomic built-in

✓ Linux/x86 to Linux/Power application migration

- ✓ Cast with endianness issues
- ✓ Char usage
- ✓ Float128 usage
- ✓ Hardware Transactional Memory (HTM)
- ✓ Linux/x86-specific API
- ✓ Long double usage
- ✓ Non-portable Pthreads implementation
- ✓ Performance Degradation
- ✓ Struct with BitFields
- ✓ Syscall not available for Linux on Power
- ✓ Union with endianness issues
- ✓ x86-specific assembly
- ✓ x86-specific compiler built-in

1

4

```
// Sum 2 Vectors
#ifdef __PPC__
    v1 = vec_add(test.v, test2.v);
#else
    v1 = __builtin_ia32_addps(test.v, test2.v);
#endif
```

3

// Sum 2 Vectors

v1 = builtin_ia32_addps(test.v, test2.v);

x86-specific compiler built-in

1 quick fix available:

[Built-in quick fix](#)

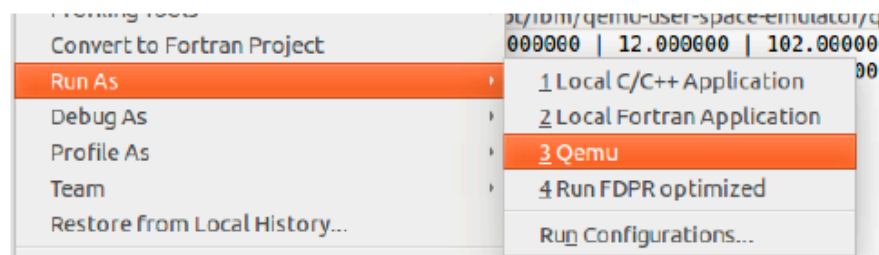
Press 'F2' for focus

2

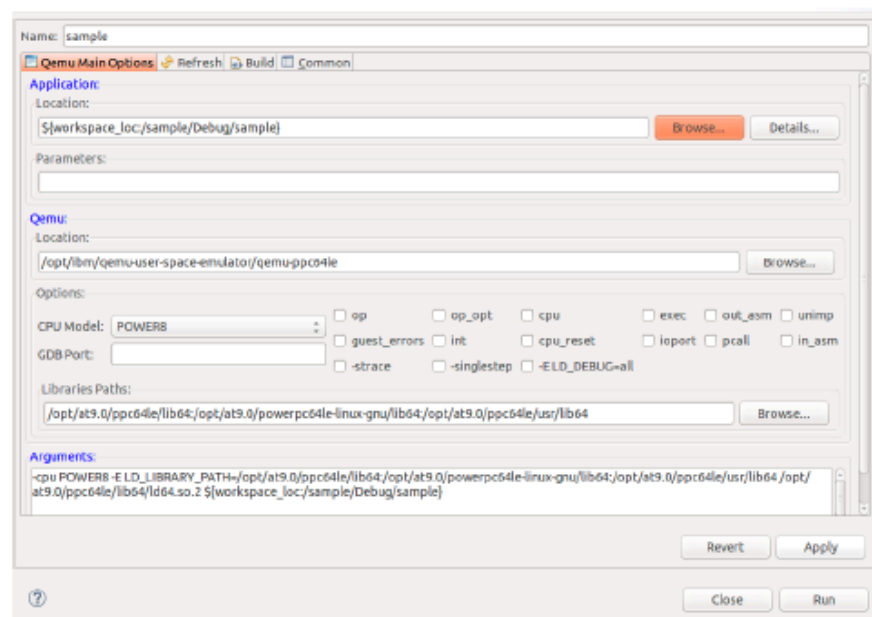
Migration Advisor				
0 errors, 8 warnings, 0 others				
Description	Resource	Path	Location	Migration Advisor Type
Union with endianness issues (1 item)				
Potential endianness issue when creating a Union	sample.c	/sample/src	line 22	Union with endianness issues
Cast with endianness issues (1 item)				
Potential endianness issues when casting from	sample.c	/sample/src	line 37	Cast with endianness issues
Long double usage (1 item)				
Potential migration issue due size of long double	sample.c	/sample/src	line 38	Long double usage
x86-specific compiler built-in (4 items)				
x86-specific compiler built-in	sample.c	/sample/src	line 28	x86-specific compiler built-in
x86-specific compiler built-in	sample.c	/sample/src	line 49	x86-specific compiler built-in
x86-specific compiler built-in	sample.c	/sample/src	line 66	x86-specific compiler built-in
x86-specific compiler built-in	sample.c	/sample/src	line 77	x86-specific compiler built-in
x86-specific assembly (1 item)				
Possible arch specific assembly	sample.c	/sample/src	line 74	x86-specific assembly

QEMU user-mode integration and IBM POWER8 Functional Simulator

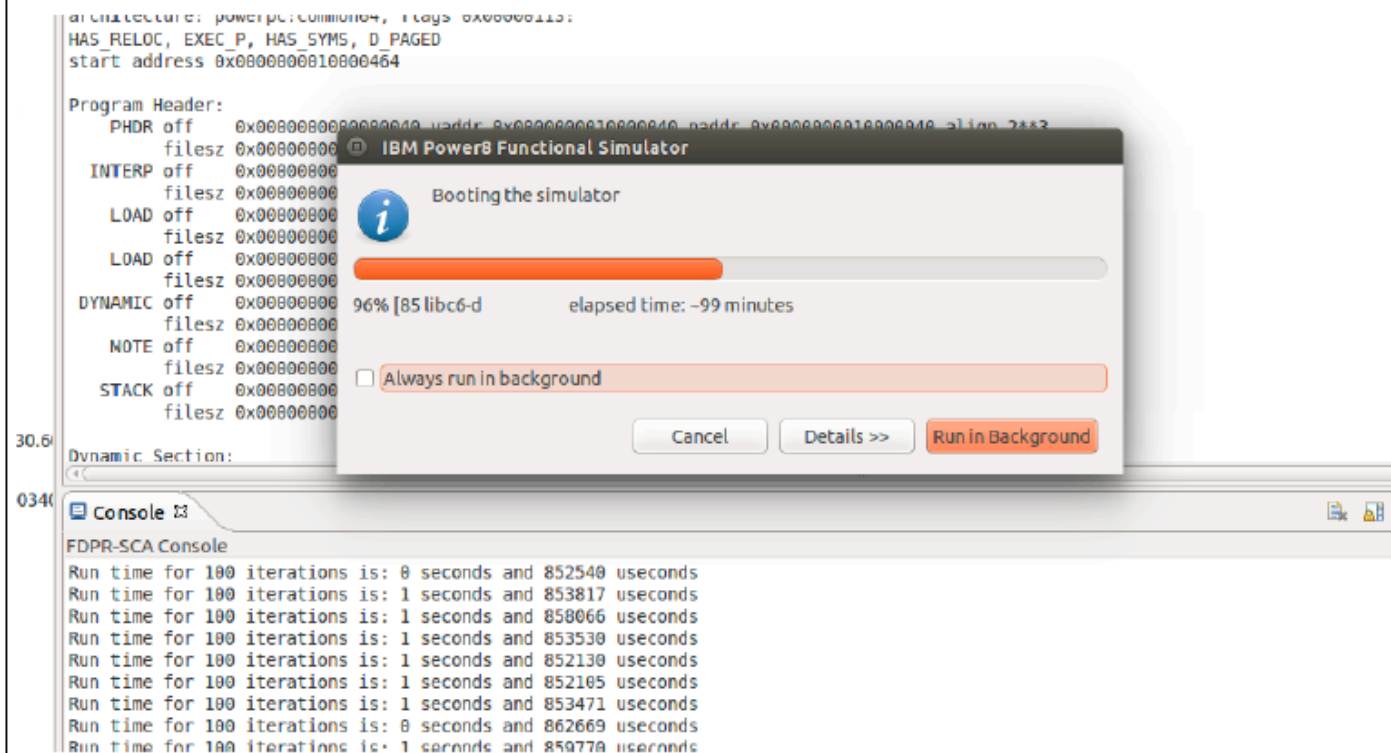
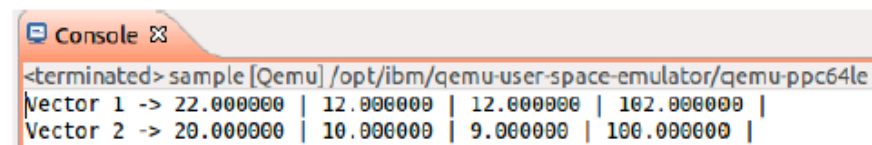
1



2



3





Software Development Toolkit and Libraries for Power

<https://developer.ibm.com/linuxonpower...> iplsdk@linux.vnet.ibm.com

Repositories 11

Packages

People 7

Teams

Projects 2

Settings

Type: AllLanguage: AllCustomize pinsNew

fedora

collect resources associated with fedora builds of open-power-sdk projects

Apache-2.0 0 0 0 0 Updated 13 days ago

pveclib

Power Vector Library

C Apache-2.0 4 9 1 0 Updated 13 days ago

curt

Compute processor utilization and system call processing metrics based on "perf" trace data

Python GPL-2.0 4 11 12 1 Updated on Jun 13

splat

System Performance Lock Analysis Tool

Python GPL-2.0 0 3 14 0 Updated on May 14

automated-install

Automates the installation of the IBM SDK for Linux on Power, including all its dependencies.

Top languages

Python

Shell

C

People

7 >



Invite someone

CLI tools are opensource

Not enough.

Chapter II

FREE Access to POWER



**Flowery
field where
developers
can get the
resources
they need.**



Developers

Resources

Minicloud

The FREE OpenPOWER Cloud by Unicamp
openpower.ic.unicamp.br/minicloud



And
they
came!



debian





1000+ Requests

“...I developed a rendering software tool that I'd like to optimise and test on the POWER platform. It's still being developed, and I'd like to **make it multi platform** Intel, ARM and **POWER**)...”

“... I am trying to **enable** LuaJIT **for PPC64LE** and would like to test it on actual hardware...”

“...**Test** software **on ppc64le**, troubleshoot compile errors and build packages...”



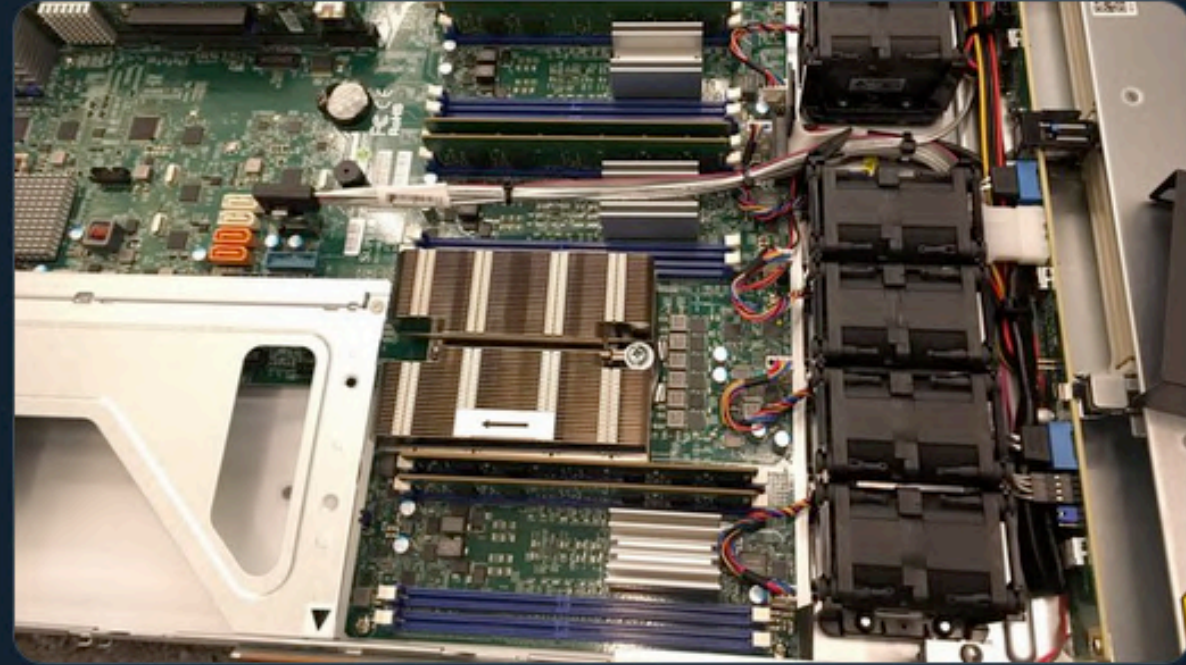
“...**Development** of the OpenSource RocksDB **for ppc64le** architecture. IBM have started a port to PPC64le, and we would like to ensure its continued functionality...”

“...I require access to **study Linux** software development on the POWER architecture. This program is the best free option...”

Eventually, free access is no longer an option and it creates sales opportunities.



Jo Shields @directhex · 10 de jan de 2018
1T SSD, 64GiB RAM, Dual 8 core 2.32GHz POWER8



3 1



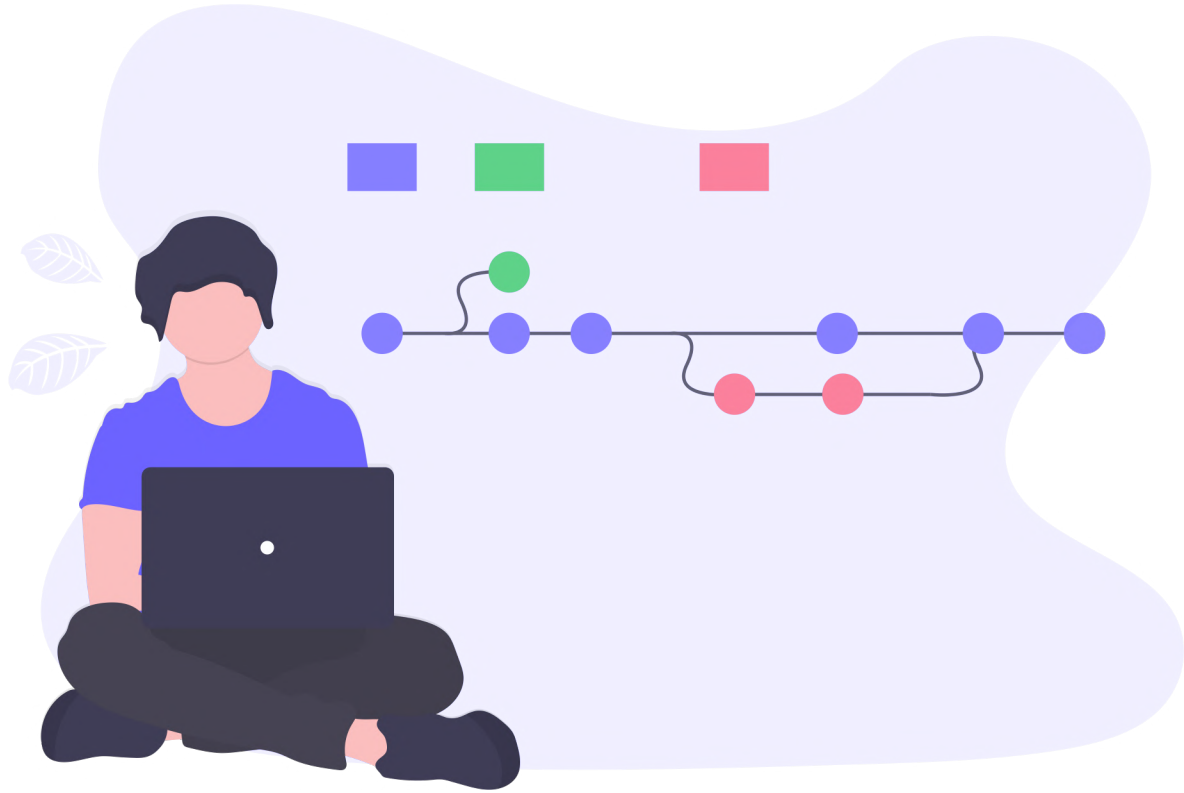
Jo Shields
@directhex

Am eternally grateful to Minicloud, from University of Campinas & @OpenPOWERorg, for providing us with PowerPC VMs for years. But our needs have vastly outstripped what we could expect for free, hence new hardware

Cool, is this enough?

NO

Chapter III

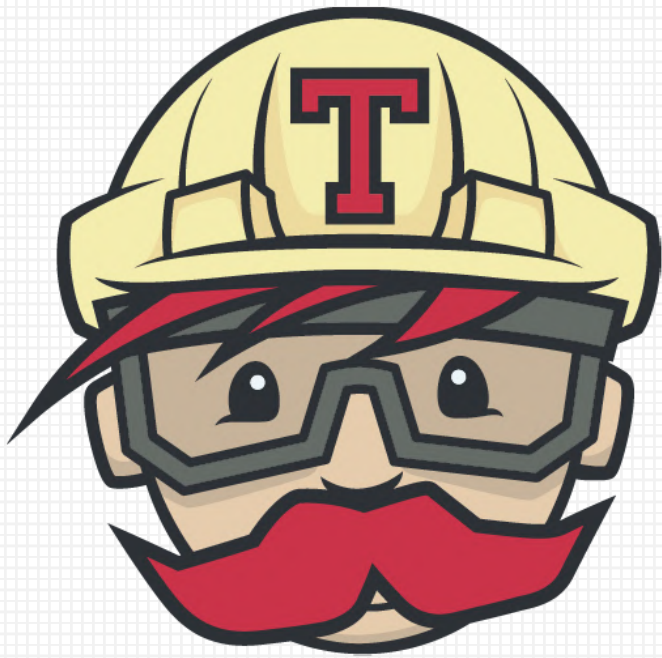


Be where developers are!

GitHub



GitLab



Travis CI

The home of open source testing

Over 900k open source projects and 600k users are testing on Travis CI.

932977

Always **free** for open
source projects

os: linux-ppc64le

Is all you need!

alpha version

step 1: sign in

Travis CI [About Us](#) [Blog](#) [Status](#) [Documentation](#) [Help](#)

[Sign in with GitHub](#)

Test and Deploy with Confidence

Easily sync your GitHub projects with Travis CI and you'll be testing your code in minutes!

 [Sign Up](#)

travis-ci.org

step 2: enable your project

Travis CI

 Dashboard Changelog Documentation Help

MY ACCOUNT

 **Rafael Peria de Sene**

 Sync account

A SINGLE PLACE FOR ALL YOUR BUILDS

You can now have all your public and private repositories together at travis-ci.com

Sign up for the beta

ORGANIZATIONS

 International Business Machines

 Software Development Toolkit and Li...

 OpenPower | Unicamp

MISSING AN ORGANIZATION?

[Review and add your authorized organizations.](#)

 **Rafael Peria de Sene**
@rpsene

Repositories

Settings

We're only showing your public repositories. You can find your private projects on travis-ci.com.

Legacy Services Integration

 travis

 hello-travis   Settings

 travis-build   Settings

 travis-cookbooks   Settings

 travis-power-recipes   Settings

rpsene.com | rpsene@br.ibm.com | OpenPower Summit 2019

 **OpenPOWER™**

step 3: create a travis.yml file

[Pull requests](#) [Issues](#) [Marketplace](#) [Explore](#)

 **rpsene** / **hello-travis**

Unwatch 1

★ Star 0

🍴 Fork 0

<> Code

🔔 Issues 0

🔗 Pull requests 0

🎮 Actions

📁 Projects 0

📖 Wiki

🛡 Security

📊 Insights

⚙ Settings

Branch: master ▾

hello-travis / **.travis.yml**

Find file

Copy path

 **rpsene** Create .travis.yml

1152b18 12 minutes ago

1 contributor

4 lines (3 sloc) | 50 Bytes

Raw

Blame

History

📄

✎

🗑

```
1 language: bash
2 os: linux-ppc64le
3 script: uname -a
```

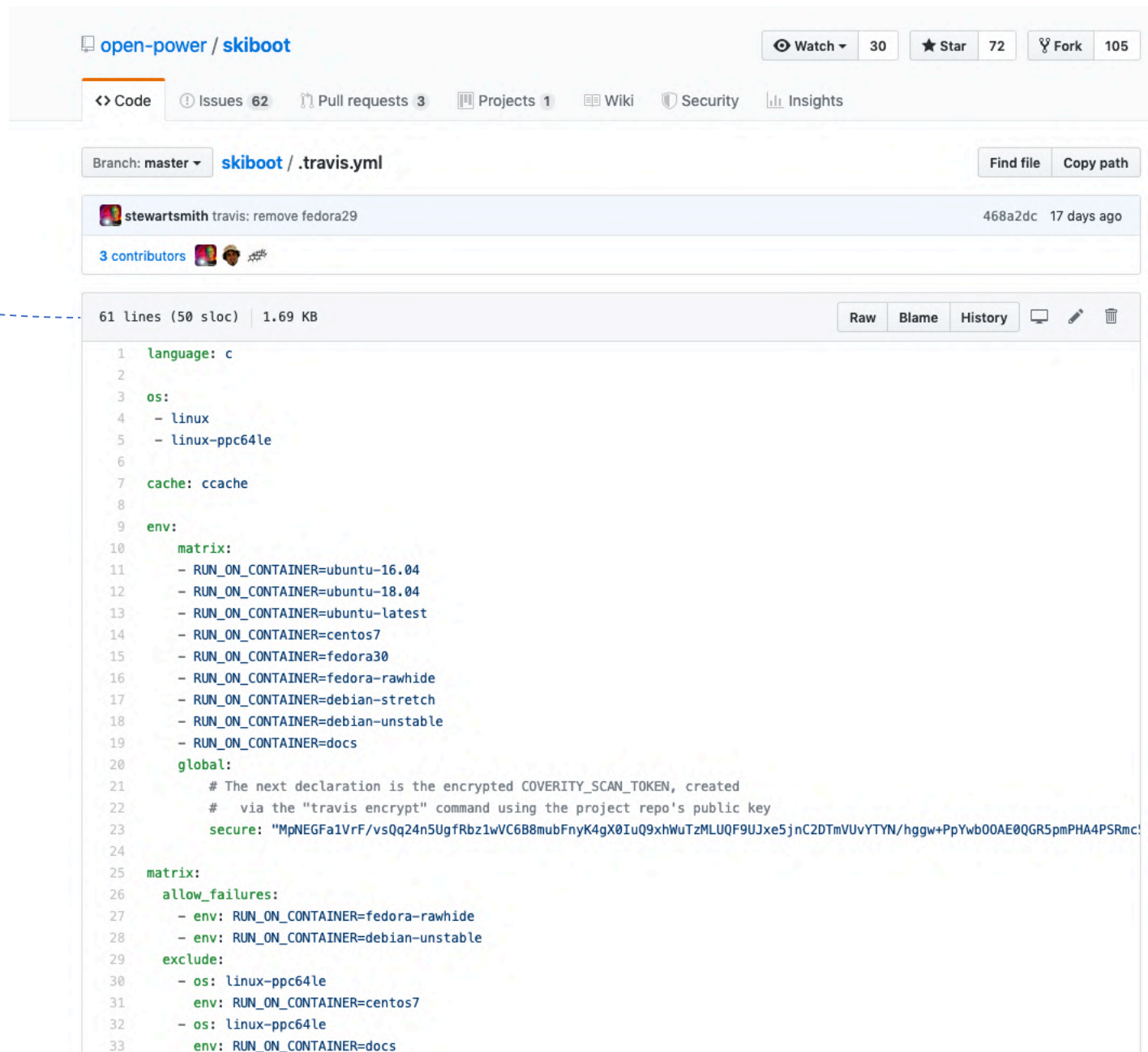
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[Contact GitHub](#) [Pricing](#) [API](#) [Training](#) [Blog](#) [About](#)



Describe your build according your needs.



open-power / skiboot

Watch 30 Star 72 Fork 105

Code Issues 62 Pull requests 3 Projects 1 Wiki Security Insights

Branch: master skiboot / .travis.yml Find file Copy path

stewartsmith travis: remove fedora29 468a2dc 17 days ago

3 contributors

61 lines (50 sloc) 1.69 KB

```
1 language: c
2
3 os:
4 - linux
5 - linux-ppc64le
6
7 cache: ccache
8
9 env:
10 matrix:
11 - RUN_ON_CONTAINER=ubuntu-16.04
12 - RUN_ON_CONTAINER=ubuntu-18.04
13 - RUN_ON_CONTAINER=ubuntu-latest
14 - RUN_ON_CONTAINER=centos7
15 - RUN_ON_CONTAINER=fedora30
16 - RUN_ON_CONTAINER=fedora-rawhide
17 - RUN_ON_CONTAINER=debian-stretch
18 - RUN_ON_CONTAINER=debian-unstable
19 - RUN_ON_CONTAINER=docs
20 global:
21 # The next declaration is the encrypted COVERITY_SCAN_TOKEN, created
22 # via the "travis encrypt" command using the project repo's public key
23 secure: "MpNEGFa1VrF/vsQq24n5UgfRbz1wVC6B8mubFnyK4gX0IuQ9xhWuTzMLUQF9UJxe5jnC2DTmVUvYTYN/hggw+PpYwb00AE0QGR5pmPHA4PSRmc!"
24
25 matrix:
26 allow_failures:
27 - env: RUN_ON_CONTAINER=fedora-rawhide
28 - env: RUN_ON_CONTAINER=debian-unstable
29 exclude:
30 - os: linux-ppc64le
31   env: RUN_ON_CONTAINER=centos7
32 - os: linux-ppc64le
33   env: RUN_ON_CONTAINER=docs
```

step 4: start building

The screenshot shows the GitHub interface for the repository 'rpsene / hello-travis'. At the top, there are navigation links: 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. Below these, the repository name is displayed along with 'Unwatch' (1), 'Star' (0), and 'Fork' (0) buttons. A secondary navigation bar includes 'Code', 'Issues' (0), 'Pull requests' (0), 'Actions', 'Projects' (0), 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Branch: master' dropdown is visible. The commit history on the left lists three commits: 'Update README.md' (committed 11 seconds ago), 'Create .travis.yml' (committed 3 minutes ago), and 'Initial commit' (committed 4 minutes ago). A blue arrow points to the first commit. A modal window is open over the first commit, displaying a yellow warning: 'Some checks haven't completed yet' with '1 pending check'. The pending check is 'continuous-integration/travis-ci/push' with a status of 'Pending ...' and a 'Details' link. To the right of the modal, three commit hashes are listed with their corresponding status: '8a70ad9' (pending), '1152b18' (pending), and 'ebbf739' (Verified). At the bottom of the commit list are 'Newer' and 'Older' buttons. The footer contains copyright information for GitHub, Inc. (© 2019), links to 'Terms', 'Privacy', 'Security', 'Status', and 'Help', the GitHub logo, and links to 'Contact GitHub', 'Pricing', 'API', 'Training', 'Blog', and 'About'.

Pull requests Issues Marketplace Explore

rpsene / hello-travis

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security Insights Settings

Branch: master

Commits on Aug 11, 2019

Update README.md
rpsene committed 11 seconds ago

Create .travis.yml
rpsene committed 3 minutes ago

Initial commit
rpsene committed 4 minutes ago

Some checks haven't completed yet
1 pending check

continuous-integration/travis-ci/push Pending ... Details

8a70ad9

1152b18

ebbf739 Verified

Newer Older

© 2019 GitHub, Inc. Terms Privacy Security Status Help

Contact GitHub Pricing API Training Blog About



Search all repositories



My Repositories +

✓ rpsene/hello-travis # 1

⌚ Duration: 32 sec
📅 Finished: less than a minute ago

✓ Unicamp-OpenPower/docker-ci # 70

⌚ Duration: 1 min 23 sec
📅 Finished: about an hour ago

✓ Unicamp-OpenPower/terraform # 166

⌚ Duration: 5 min 39 sec
📅 Finished: about an hour ago

✓ Unicamp-OpenPower/bazel-rel # 192

⌚ Duration: 1 min 56 sec
📅 Finished: about an hour ago

✓ Unicamp-OpenPower/glide-build # 139

⌚ Duration: 48 sec
📅 Finished: about 3 hours ago

✓ Unicamp-OpenPower/glide-rel # 150

⌚ Duration: 57 sec
📅 Finished: about 3 hours ago

✗ Unicamp-OpenPower/minikube # 171

⌚ Duration: 4 min 54 sec

rpsene / hello-travis build passing

Current Branches Build History Pull Requests > Build #1

More options

✓ master Update README.md

🔗 Commit 8a70ad9
🔗 Compare 1152b18..8a70ad9
🔗 Branch master

👤 Rafael Peria de Sene

→ #1 passed

⌚ Ran for 32 sec
📅 less than a minute ago

🔄 Restart build

📄 </> Shell

Job log

View config

Remove log
Raw log

```

1 Worker information
6 Build system information
142
143
144 $ git clone --depth=50 --branch=master https://github.com/rpsene/hello-travis.git rpsene/hello-travis
153
154 $ bash -c 'echo $BASH_VERSION'
155 4.3.48(1)-release
156
157 $ uname -a
158 Linux travis-20190703065617 4.4.0-143-generic #169-Ubuntu SMP Thu Feb 7 07:56:40 UTC 2019 ppc64le ppc64le ppc64le GNU/Linux
159 The command "uname -a" exited with 0.
160
161
162
163 Done. Your build exited with 0.

```

worker_info
system_info
git.checkout 0.43s
0.01s

Top

docs.travis-ci.com

Travis@IBM

POWER support started in 2017.



**POWER support
started in 2017.**



**Required for ICP
development parity
between X and P.**

**POWER support
started in 2017.**

**Required for ICP
development parity
between X and P.**

**Everyone can build on
POWER today at IBM
using Travis.**





Search all repositories

My Repositories Running (56/128) +

IBMPrivateCloud/icp-sert-bats # 1938

Duration: 52 min 57 sec

kernelbackports/iKOTD # 361

Duration: 1 hr 20 min 48 sec

IBMPrivateCloud/mcm-kui # 191

Duration: 7 min 57 sec

Finished: 13 minutes ago

IBMPrivateCloud/mcm-applicati # 334

Duration: 36 min 46 sec

Finished: 14 minutes ago

IBMPrivateCloud/icp-mgmt-repo # 101

Duration: 1 min 10 sec

Finished: 15 minutes ago

IBMPrivateCloud/icp-helm-repo # 172

Duration: 1 min 2 sec

Finished: 16 minutes ago

IBMPrivateCloud/findings-adapt # 34

Duration: 18 min 28 sec

Finished: 19 minutes ago

IBMPrivateCloud / mcm-ui build passing

Current Branches Build History Pull Requests

More options

✓ Pull Request #667 Import cluster

Commit 3990a2f

#667: Import cluster

Branch master

Alec Hsu authored and committed

#3283 passed

Restart build

Ran for 19 min 11 sec

Total time 46 min 11 sec

19 minutes ago

Build Jobs

✓ # 3283.1	</> Node.js	OSARCH=rhel7 TARGET=\${TARGET_IP}	7 min 35 sec
✓ # 3283.2	</> Node.js	OSARCH=linux-ppc64le	18 min 2 sec
✓ # 3283.3	</> Node.js	OSARCH=linux-amd64	9 min 33 sec
✓ # 3283.4	</> Node.js	OSARCH=linux-s390	11 min 1 sec



200K+ builds and counting.



GitLab CI/CD

GitLab Runner

step 1: sign in

The screenshot displays the GitLab web interface. The top navigation bar includes the GitLab logo, a search bar, and various navigation links. The left sidebar contains a project tree with options like Project, Repository, Files, Commits, Branches, Tags, Contributors, Graph, Compare, Charts, Locked Files, Issues, Merge Requests, CI / CD, Security & Compliance, Operations, Packages, Wiki, Snippets, and Settings. The main content area shows the repository page for 'hello-gitlab-on-power' on the 'master' branch. It features a commit history table and a preview of the README.md file.

Repository: hello-gitlab-on-power

master hello-gitlab-on-power / +

History Find file Web IDE

Add README.md
Rafael Peria de Sene authored just now f40406bf

Name	Last commit	Last update
README.md	Add README.md	just now

README.md

This is a hello-world on Power

step 2: get a POWER VM

Minicloud rafael.sene ▾

Project / Compute / Instances

Instances

Instance ID = ▾ Filter [Launch Instance](#) [Delete Instances](#) [More Actions ▾](#)

Displaying 1 item

☐	Instance Name	Image Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task	Power State	Time since created	Actions
☐	gitlab-runner-ubuntu	Ubuntu 18.04 ppc64le - Power8 Power9	10.8.40.190	minicloud.medium	rpsene	Active	Power8	None	Running	0 minutes	Create Snapshot ▾

Displaying 1 item

openpower.ic.unicamp.br/minicloud

step 3: install GitLab Runner

```
root@gitlab-runner-ubuntu:~# apt-get install gitlab-runner
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  cdebootstrap debian-archive-keyring libdebiana-installer-extra4 libdebiana-installer4
Suggested packages:
  qemu-user-static docker.io
The following NEW packages will be installed:
  cdebootstrap debian-archive-keyring gitlab-runner libdebiana-installer-extra4 libdebiana-installer4
0 upgraded, 5 newly installed, 0 to remove and 4 not upgraded.
Need to get 6682 kB of archives.
After this operation, 32.1 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
```

Official POWER support: <https://gitlab.com/gitlab-org/gitlab-runner/issues/2941>

step 4: configure GitLab Runner

The screenshot shows the GitLab web interface for a project named 'hello-gitlab-on-power'. The top navigation bar includes the GitLab logo, project navigation links (Projects, Groups, Activity, Milestones, Snippets), a search bar, and user profile icons. A blue banner at the top of the main content area states: 'New runners registration token has been generated!'. The left sidebar contains a list of project settings: Project, Repository, Issues (0), Merge Requests (0), CI / CD, Security & Compliance, Operations, Packages, Wiki, Snippets, Settings, General, Members, Integrations, Repository, CI / CD (highlighted with a blue circle), Operations, Pages, and Audit Events. The main content area displays several sections, each with an 'Expand' button: 'General pipelines' (Customize your pipeline configuration, view your pipeline status and coverage report.), 'Auto DevOps' (Auto DevOps will automatically build, test, and deploy your application based on a predefined Continuous Integration and Delivery configuration. [Learn more about Auto DevOps](#)), 'Protected Environments' (Protecting an environment restricts the users who can execute deployments.), 'Runners' (Register and see your runners for this project.), 'Variables ?' (Environment variables are applied to environments via the runner. They can be protected by only exposing them to protected branches or tags. Additionally, they can be masked so they are hidden in job logs, though they must match certain regexp requirements to do so. You can use environment variables for passwords, secret keys, or whatever you want. You may also add variables that are made available to the running application by prepending the variable key with `K8S_SECRET_`. [More information](#)), 'Pipeline triggers' (Triggers can force a specific branch or tag to get rebuilt with an API call. These tokens will impersonate their associated user including their access to projects and their project permissions.), and 'License Management ?' (Here you can approve or blacklist licenses for this project. Using [Gitlab CI/CD](#) or [Auto License Compliance](#) will allow you to see if there are any unmanaged licenses and approve or blacklist them in merge request.).

Projects ▾

Groups ▾

Activity

Milestones

Snippets

hello-gitlab-on-power

Project

Repository

Issues0

Merge Requests0

CI / CD

Security & Compliance

Operations

Packages

Wiki

Snippets

Settings

General

Members

Integrations

Repository

CI / CD

Operations

Pages

Audit Events

active

- Runner is active and can process any new jobs

paused

- Runner is paused and will not receive any new jobs

To start serving your jobs you can either add specific Runners to your project or use shared Runners

Set up a specific Runner automatically

You can easily install a Runner on a Kubernetes cluster.
[Learn more about Kubernetes](#)

1. Click the button below to begin the install process by navigating to the Kubernetes page

2. Select an existing Kubernetes cluster or create a new one

3. From the Kubernetes cluster details view, install Runner from the applications list

Install Runner on Kubernetes

Set up a specific Runner manually

1. [Install GitLab Runner](#)

2. Specify the following URL during the Runner setup:
<https://gitlab.com/>

3. Use the following registration token during setup:
[mskthPknrL4CK1pKZm5e](#)

Reset runners registration token

4. Start the Runner!

Shared Runners

Shared Runners on GitLab.com

run in [autoscale mode](#) and are powered by Google Cloud Platform. Autoscaling means reduced wait times to spin up builds, and isolated VMs for each project, thus maximizing security.

They're free to use for public open source projects and limited to 2000 CI minutes per month per group for private projects. Read about all [GitLab.com plans](#).

Disable shared Runners

for this project

Available shared Runners: 8

fa6cab46

shared-runners-manager-3.gitlab.com

#44028

docker

east-c

gce

git-annex

linux

mongo

mysql

postgres

ruby

shared

d5ae8d25

gitlab-shared-runners-manager-5.gitlab.com

#380989

gitlab-org

ed2dce3a

rpsene.com | rpsene@br.ibm.com | OpenPower Summit 2019

OpenPOWER™

step 5: register GitLab Runner

```
root@gitlab-runner-ubuntu:~# gitlab-runner register
Running in system-mode.

Please enter the gitlab-ci coordinator URL (e.g. https://gitlab.com/):
https://gitlab.com/
Please enter the gitlab-ci token for this runner:
mskthPknrL4CK1pKZm5e
Please enter the gitlab-ci description for this runner:
[gitlab-runner-ubuntu]:
Please enter the gitlab-ci tags for this runner (comma separated):
ubuntu-ppc64le
Whether to run untagged builds [true/false]:
[false]:
Whether to lock the Runner to current project [true/false]:
[true]:
Registering runner... succeeded runner=mskthPkn
Please enter the executor: docker-ssh, shell, docker-ssh+machine, kubernetes, docker, parallels, ssh, virtualbox, docker+machine:
shell
Runner registered successfully. Feel free to start it, but if it's running already the config should be automatically reloaded!
```

Specific Runners

Set up a specific Runner automatically

You can easily install a Runner on a Kubernetes cluster.
[Learn more about Kubernetes](#)

1. Click the button below to begin the install process by navigating to the Kubernetes page
2. Select an existing Kubernetes cluster or create a new one
3. From the Kubernetes cluster details view, install Runner from the applications list

Install Runner on Kubernetes

Set up a specific Runner manually

1. [Install GitLab Runner](#)
2. Specify the following URL during the Runner setup:
`https://gitlab.com/`
3. Use the following registration token during setup:
`mskthPknrL4CK1pKZm5e`

Reset runners registration token

4. Start the Runner!

Runners activated for this project

criBkYwD

gitlab-runner-ubuntu

#1053926

ubuntu-ppc64le

Pause

Remove Runner

Shared Runners

[Shared Runners on GitLab.com](#) run in [autoscale mode](#) and are powered by Google Cloud Platform. Autoscaling means reduced wait times to spin up builds, and isolated VMs for each project, thus maximizing security.

They're free to use for public open source projects and limited to 2000 CI minutes per month per group for private projects. Read about all [GitLab.com plans](#).

Disable shared Runners for this project

Available shared Runners: 8

9538b0ab

gitlab-shared-runners-manager-4.gitlab.com

#157329

gitlab-org

8a6210b8

gitlab-shared-runners-manager-6.gitlab.com

#380990

gitlab-org

72989761

shared-runners-manager-4.gitlab.com

#44949

docker

east-c

gce

git-annex

linux

mongo

mysql

postgres

ruby

shared

step 6: configure .gitlab-ci.yml

The screenshot shows the GitLab web interface for a project named 'hello-gitlab-on-power'. The left sidebar contains navigation links: Project, Repository, Files, Commits, Branches, Tags, Contributors, Graph, Compare, Charts, Locked Files, Issues (0), Merge Requests (0), CI / CD, Security & Compliance, Operations, Packages, Wiki, and Snippets. The main content area shows the 'Repository' view for the 'master' branch, displaying the file 'hello-gitlab-on-power / .gitlab-ci.yml'. A commit history entry shows 'Update .gitlab-ci.yml' by Rafael Peria de Sene, authored 2 minutes ago, with a green checkmark indicating a valid GitLab CI configuration. Below the commit, the file content is displayed in a dark-themed editor. The configuration is as follows:

```
1 power:
2   script: uname -a
3   tags:
4     - ubuntu-ppc64le
```

A yellow arrow points to the 'tags' section of the configuration. The file size is 55 Bytes. Action buttons include Lock, Edit, Web IDE, Replace, and Delete.

This screenshot shows the 'Runners activated for this project' section. A blue oval highlights the runner information. The runner is named 'criBkYwD' and is of type 'gitlab-runner-ubuntu'. It has a status of 'active' and a unique identifier of '#1053926'. The runner is associated with the tag 'ubuntu-ppc64le'. Buttons for 'Pause' and 'Remove Runner' are visible.

 GitLab

Projects ▾

Groups ▾

Activity

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+

Search or jump to...





 1





H

hello-gitlab-on-power

Project

Repository

Issues 0

Merge Requests 0

CI / CD

Pipelines

Jobs

Schedules

Charts

Security & Compliance

Operations

Packages

Wiki

Snippets

Settings

Rafael Peria de Sene > hello-gitlab-on-power > Jobs > #270704461

passed

Job #270704461 triggered just now by  Rafael Peria de Sene

Running with gitlab-runner 10.5.0 (10.5.0)
on gitlab-runner-ubuntu criBkYwD
Using Shell executor...
▾ Running on gitlab-runner-ubuntu...
▾ Cloning repository...
Cloning into '/var/lib/gitlab-runner/builds/criBkYwD/0/rpsene/hello-gitlab-on-power'...
Checking out 58827305 as master...

Skipping Git submodules setup

▾
▾
▾ \$ uname -a
Linux gitlab-runner-ubuntu 4.15.0-45-generic #48-Ubuntu SMP Tue Jan 29 16:27:02 UTC 2019 ppc64le ppc64le ppc64le GNU/Linux
▾
▾
Job succeeded

power

Retry

Duration: 3 seconds

Timeout: 1h (from project)

Runner: gitlab-runner-ubuntu (#1053926)

Tags: ubuntu-ppc64le

Commit 58827305

Update .gitlab-ci.yml

Pipeline #75963871 for master

test

→ power



Rafael Peria de Sene @rpsene · 1 month ago



I've been playing with Runner on Power for a while and just found out this discussion yesterday when I opened a ticket to the support asking about a person to talk about it.

My tests with Runner executing shell was executed using the free Power VMs at <https://minicloud.parqtec.unicamp.br/>.

It would be awesome to see something like a beta version of runner supported by the community running on Power. We did the same for Travis and GitHub :)

▼ Collapse replies



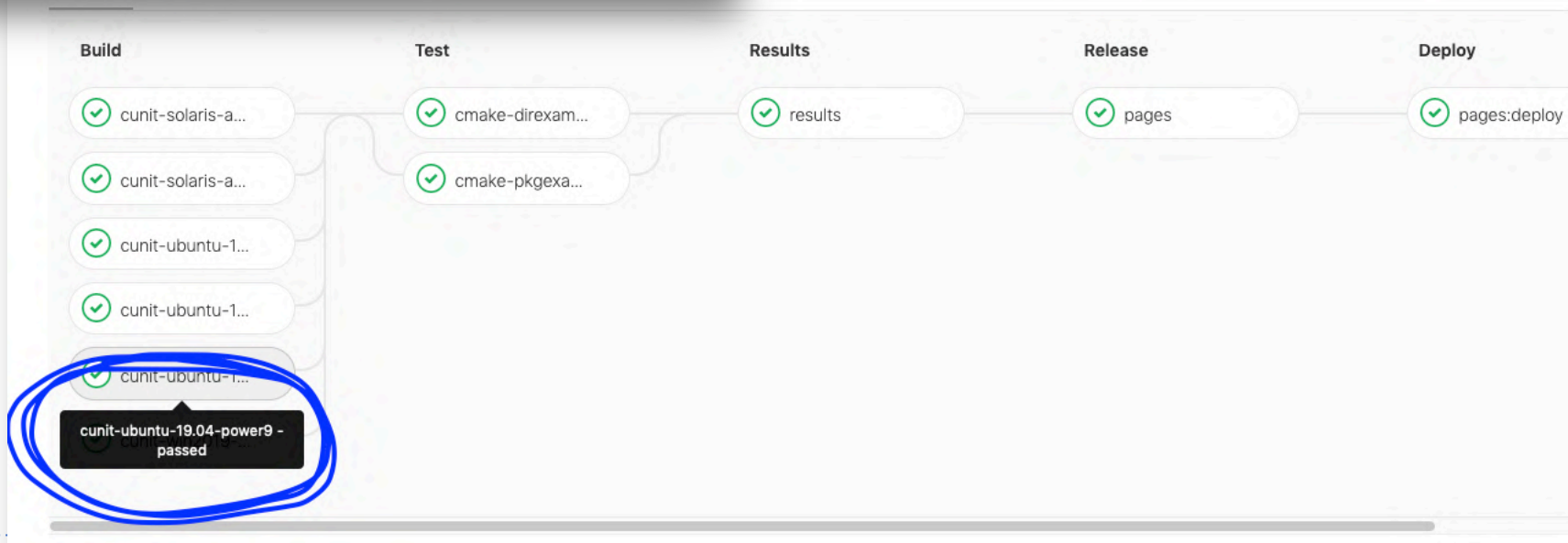
Ian Norton @inorton · 1 month ago



Hi Rafael, I was surprised and excited to read about those free Power VMs so I've set one up using your link and have it running gitlab builds for the CUnit project! I have it running using gitlab-python-runner - <https://gitlab.com/cunity/cunit/commits/master>

You should be able to get it installed and registered by following <https://gitlab.com/cunity/gitlab-python-runner/blob/master/README.md>

Edited by Ian Norton 1 month ago



docs.gitlab.com/ee/ci/

So, what next?

More POWER

Better Documentation

More Advocacy

Thank You!

Rafael Sene – rpsene@br.ibm.com | rpsene.com