**Project Plan**

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**Project:** Kube CF – Endgame Platform on Z

**Project Description:** Following up on the previous projects that helped build the Cloud Foundry components and the CF Operator on Z. The Kube CF project will be incubated in the Cloud Foundry Foundation in 2020, and there are release integration efforts happening, that will allow us to plugin tests and builds specifically for s390x.

**Problem Definition:** We want to make contributions to the upstream projects so an s390x build is always a first-class citizen

**Deliverables:**

* Quarks-operator helm chart for s390x
* S390x images for all KubeCF bash releases
* Solution for MySQL and s390x
* 1 buildpack (binary)
* 1 stack (sles)

**Coding Plan:** Throughout the project, we will make use of the Agile development methodology. This way we can adjust and discuss about different technologies and instruments to use within the project, based on the results we are getting at a given stage of the implementation.

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| Week | Tasks | Goals |
| Week 1 (1st of May) | We don’t want to try and build MySQL using the KubeCF process, so we’re going to shortcut by using an already available solution | Solution for **MySQL on s390x** |
| Week 2 | Build the **cf-operator** and **coredns** images on s390x | Solution for **cfcontainerization/cf-operator:v4.5.6-0.gffc6f942** and  **cfcontainerization/coredns:0.1.0-1.6.7-bp152.1.2** |
| Week 3 | Build the **quarks-job** and **capi** images on s390x | Solution for **cfcontainerization/quarks-job:v0.0.86** and **docker.io/cfcontainerization/capi:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-1.91.0** |
| Week 4 | Build the **cf-cli** and **cf-networking** images on s390x | Solution for **docker.io/cfcontainerization/cf-cli:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-1.25.0** and  **docker.io/cfcontainerization/cf-networking:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-2.28.0** |
| Week 5 | Build the **cf-syslog-drain** and **diego** images on s390x | Solution **for docker.io/cfcontainerization/cf-syslog-drain:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-10.2.11** and **docker.io/cfcontainerization/diego:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-2.44.0** |
| Week 6 | Build the **garden-runc** and **log-cache** images on s390x | Solution for **docker.io/cfcontainerization/garden-runc:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-1.19.10** and **docker.io/cfcontainerization/log-cache:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-2.6.8** |
| Week 7 | Build the **loggregator-agent** and **loggregator** images on s390x | Solution for **docker.io/cfcontainerization/loggregator-agent:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-5.3.7** and  **docker.io/cfcontainerization/loggregator:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-106.3.8** |
| Week 8 | Build the **nats** and **routing** images on s390x | Solution for **docker.io/cfcontainerization/nats:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-33** and  **docker.io/cfcontainerization/routing:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-0.198.0** |
| Week 9 | Build the **sle15** image on s390x | Solution for **docker.io/cfcontainerization/sle15:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-10.93** |
| Week 10 | Build the **statsd-injector** image on s390x | Solution for **docker.io/cfcontainerization/statsd-injector:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-1.11.15** |
| Week 11 | Build the **uaa** image on s390x | Solution for **docker.io/cfcontainerization/uaa:SLE\_15\_SP1-23.21-7.0.0\_374.gb8e8e6af-74.15.0** |
| Week 12 | Build the **suse-binary-buildpack** on s390x | Solution for **registry.suse.com/cap-staging/suse-binary-buildpack:SLE\_15\_SP1-25.1-7.0.0\_374.gb8e8e6af-1.0.36.1** |
| Week 13 | Start testing the builds | See if what we have built can be deployed |
| Week 14 | Testing to see if applications can be deployed, with automatic scaling, logs. | See if applications work correctly on KubeCF for Z |
| Week 15 | Bugfixes and cleanup | Make all the bits ready for a release. |
| Week 16 | Publish the build | We want this build available to the community, so we get feedback. |
| Week 17 | Feedback from community (and fixes) | We want to address any bugs. |
| Week 18 (23rd of September) | Writeup | Everything we have done should be documented so the work can continue and the project stays alive outside of the OMP. |

**More info here:** <https://docs.google.com/drawings/d/1HdDp0W2ybYquuh5jSgkodIZZv6tp7Ye06O8WlpmmwDc/edit?usp=sharing>