Singularity Container Services

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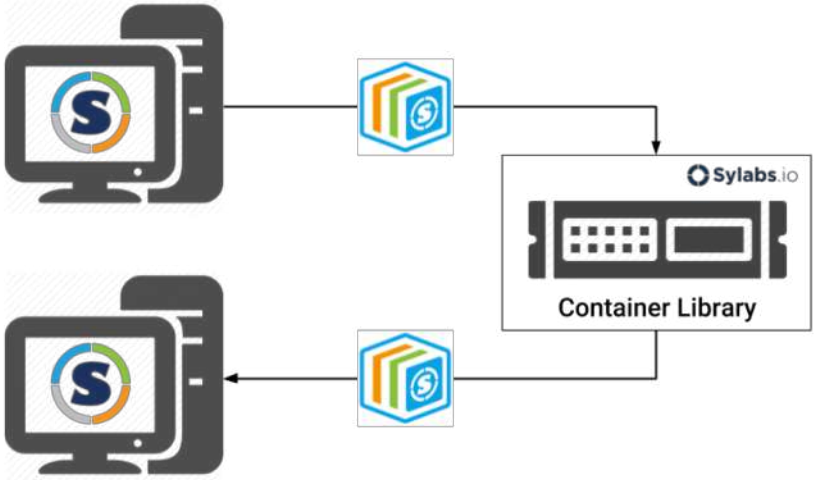
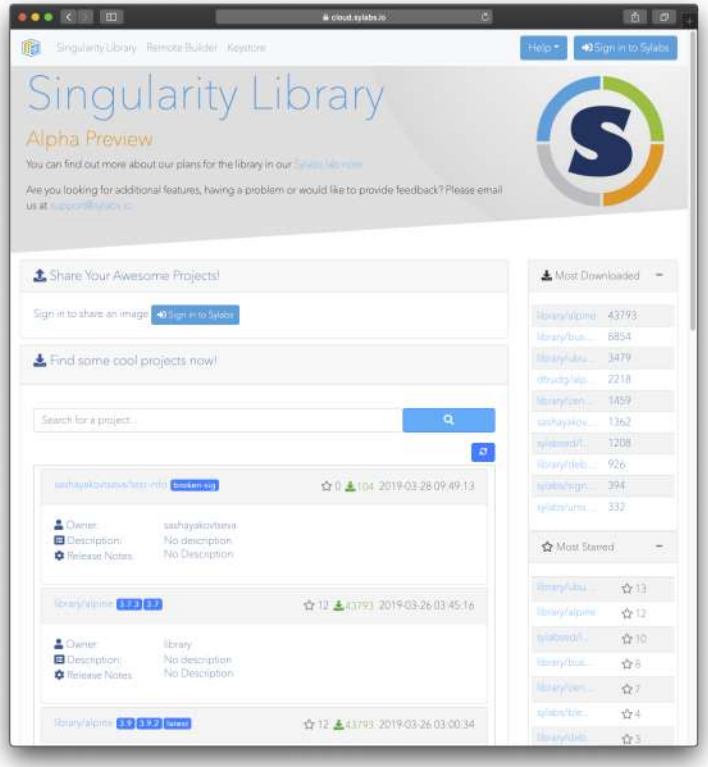
Singularity Container Services Overview

- The Singularity Container Services are a series of value added container services:
  - Container Library
  - Remote Build Service
  - Key Server
- Available in preview now
  - https://cloud.sylabs.io

Singularity Container Library

```
$ sudo singularity build <local_path> <def>
$ singularity push <local_path> library://<path>
```



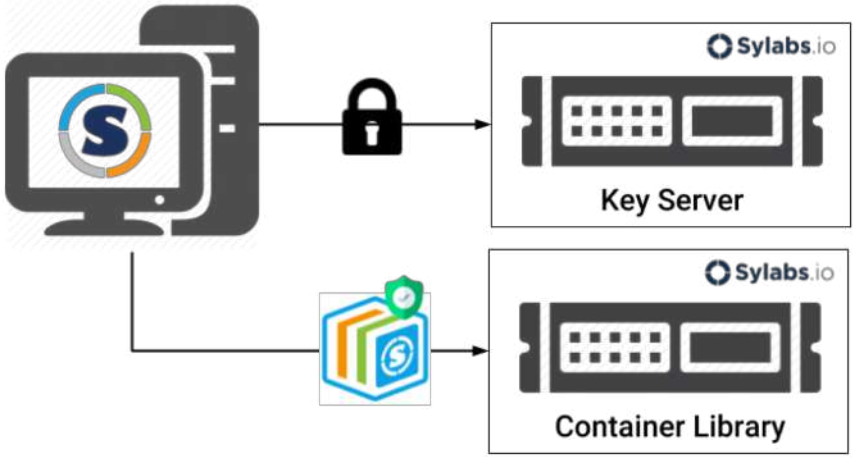



```
$ singularity pull library://<path>
```

Signing a SIF Image

- The `sign` command adds a digital signature block to the SIF image
- The signature block ensures the integrity of the contents of the image
- The Sylabs Key Server lets you easily share your public key

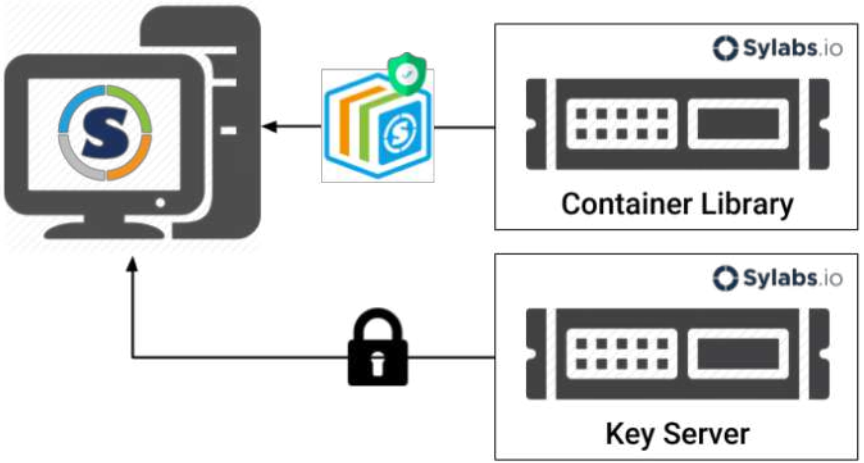
```
$ singularity sign image.sif
$ singularity push image.sif library://<path>
```



Verifying a SIF Image

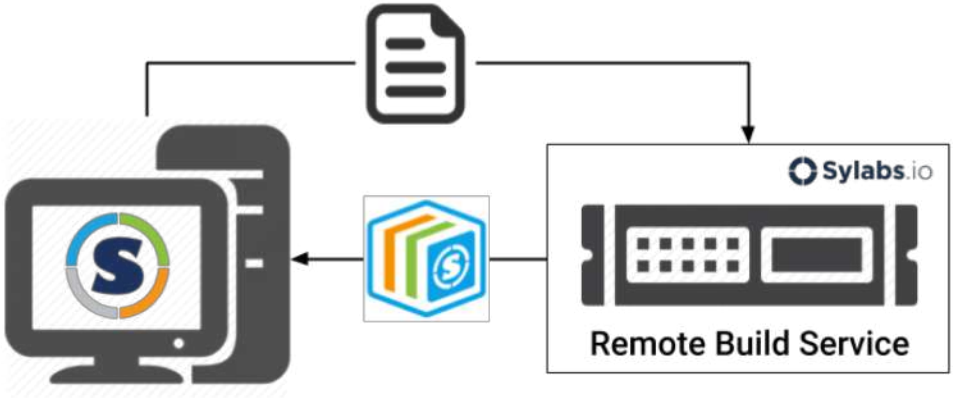
- The `verify` command cryptographically verifies the digital signature in the SIF image
- If the public key material is not in the local keyring, it fetches it from the Key Server

```
$ singularity pull alpine
$ singularity verify alpine_latest.sif
Verifying image: alpine_latest.sif
Data integrity checked, authentic and signed by:
            Sylabs Admin <support@sylabs.io>,
Fingerprint
8883491F4268F173C6E5DC49EDECE4F3F38D871E
```



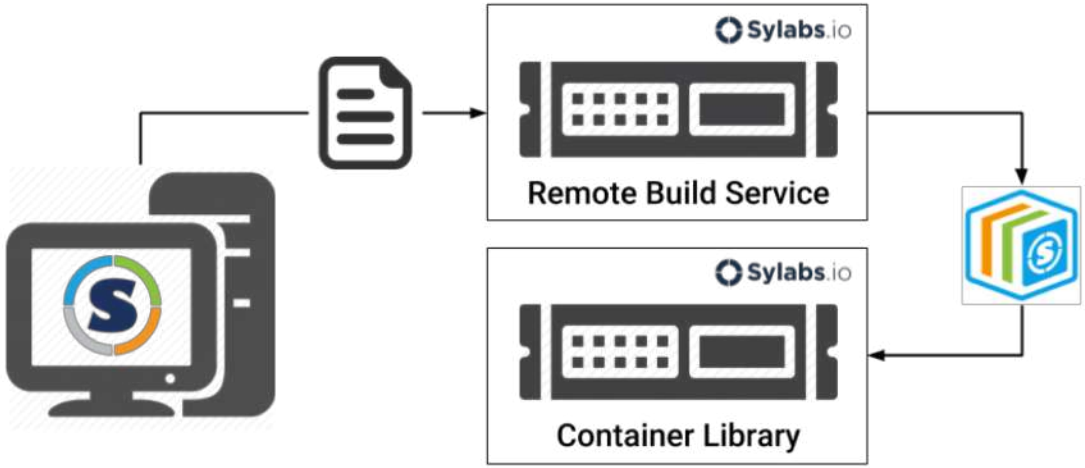
- The Remote Build Service allows you to build without privilege
- Build output is live-streamed to the Singularity CLI or web browser
- When using the CLI, the image is pulled back to the workstation

```
$ singularity build --remote <local_path> <def>
```



- The Remote Build Service can push directly to the Library
- Optionally, you can use `--detach` to start the build without streaming console output
- Build output can be retrieved later via a web browser

```
$ singularity build --remote library://<path> <def>
```



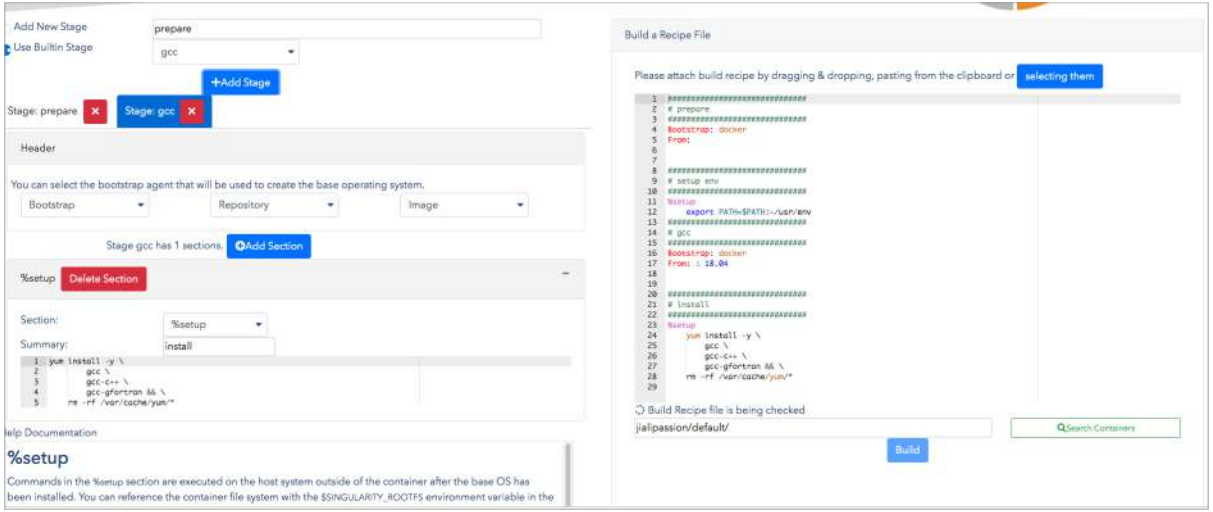
SCS Front End Enhancements

Website Internationalization

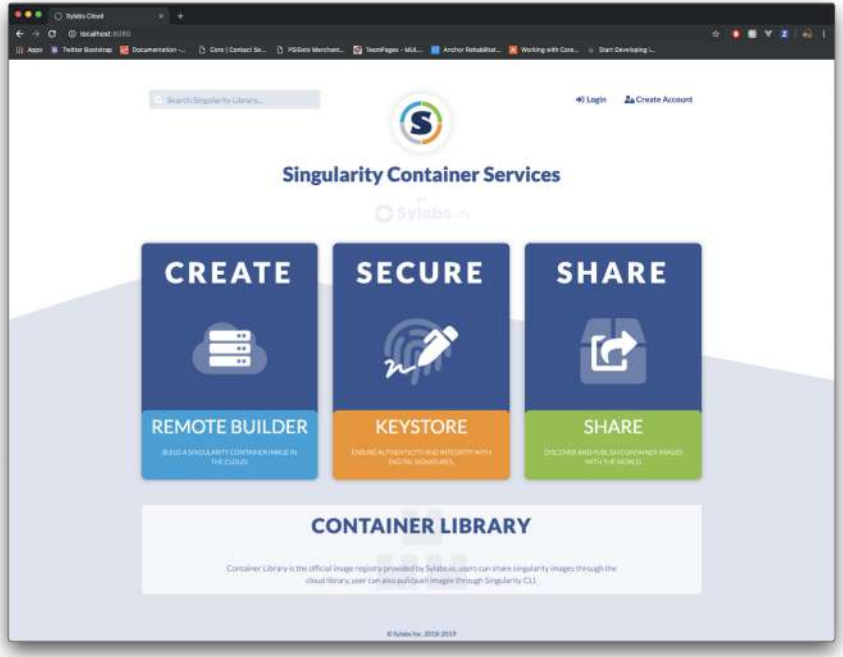
- Sylabs is a global company
- We are working hard to make our products reflect that
- We love community feedback!

Website Recipe Editor!

- Edit Recipe Step by Step
- MultiStage support
- Built-in Stage (gcc/openmpi/etc..)
- Live documentation and editor output



Website UX Enhancements



Questions?

THANK YOU!

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https://www.sylabs.io

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