Builds and Streams

Builds

In OpenShift, build is a process of transforming images into containers. It is the processing which converts the source code to an image. This build process works on pre-defined strategy of building source code to image.

The build processes multiple strategies and sources.

Build Strategies

- **Source to Image**: This is basically a tool, which helps in building reproducible images. These images are always in a ready stage to run using the Docker run command.
- **Docker Build**: This is the process in which the images are built using Docker file by running simple Docker build command.
- **Custom Build**: These are the builds which are used for creating base Docker images.

Build Sources

Git: This source is used when the git repository is used for building images. The Dockerfile is optional. The configurations from the source code looks like the following.

```
source:
  type: "Git"
  git:
    uri: "https://github.com/vipin/testing.git"
    ref: "master"
  contextDir: "app/dir"
  dockerfile: "FROM openshift/ruby-22-centos7\nUSER example"
```

Dockerfile: The Dockerfile is used as an input in the configuration file.

```
source:

type: "Dockerfile"

dockerfile: "FROM ubuntu: latest

RUN yum install -y httpd"
```

