

# **BUILDING GO WITH BAZEL**

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**WHAT IS BAZEL**

# CORE CONCEPTS

# 2 LANGUAGES

# BUILD

```
genrule(  
    name = "hello",  
    outs = ["hello_world.txt"],  
    cmd = "echo Hello World > $@",  
)
```

# SKYLARK

```
def _impl(ctx):
    # You may use print for debugging.
    print("Rule name = %s, package = %s" % (ctx.label.name, ctx.label.package))

    # This prints the labels of the deps attribute.
    print("There are %d deps" % len(ctx.attr.deps))
    for i in ctx.attr.deps:
        print("- %s" % i.label)
        # A label can represent any number of files (possibly 0).
        print("  files = %s" % [f.path for f in i.files])

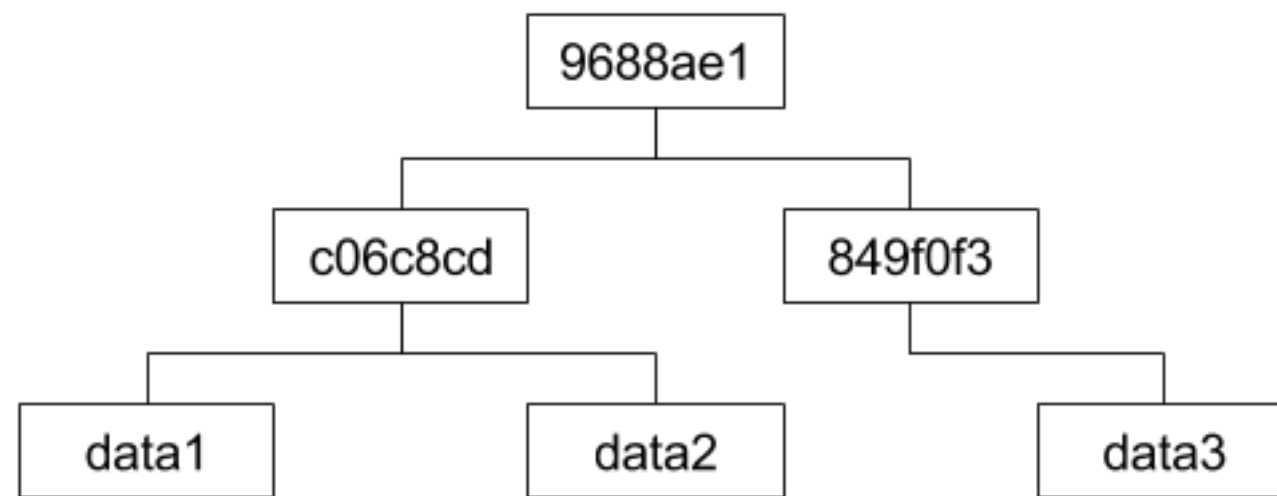
printer = rule(
    implementation=_impl,
    attrs={
        # Do not declare "name": It is added automatically.
        "number": attr.int(default = 1),
        "deps": attr.label_list(allow_files=True),
    })
```

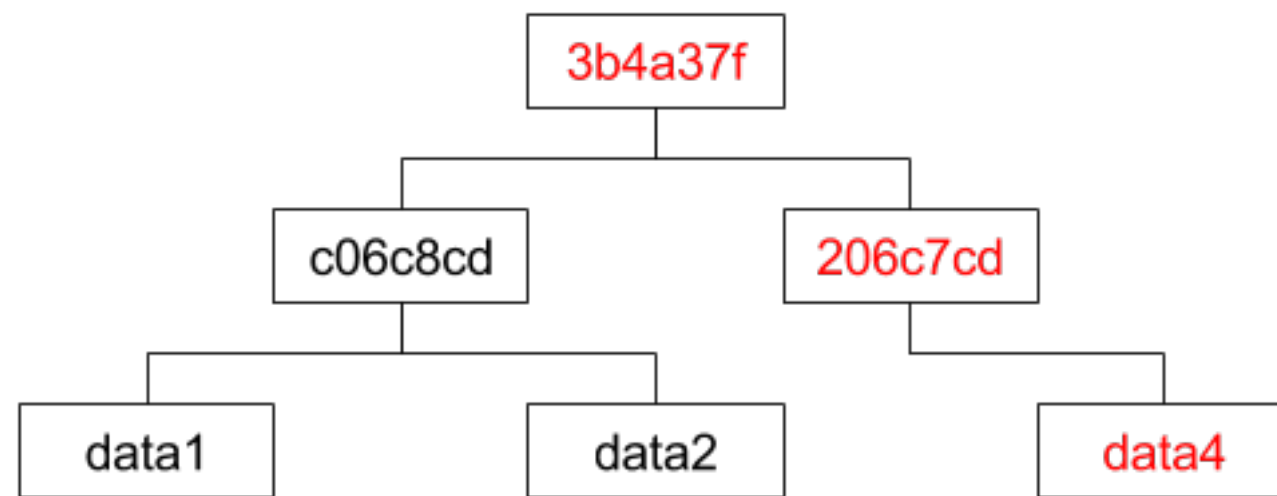
**REPEATABILITY**

**VENDORING**

**INCREMENTAL**







**SHARED CACHING**

# REMOTE WORKERS

# SHARDING TESTS

```
go_test(  
    name = "mytest",  
    srcs = ["file_test.go"],  
    library = ":go_default_library"  
)
```

**POLYGLOT**

**ALTERNATIVES**

**LET'S BUILD A  
STARTUP**



**WORKSPACES**

**RULES \_ DOCKER**

**RULES \_ GO**

# GAZELLE

```
$ gazelle \  
  -go_prefix github.com/paulbellamy/example \  
  -external vendored
```

**or, add**

```
gazelle(  
  name = "gazelle",  
  external = "vendored",  
)
```

# then

```
$ bazel run //:gazelle
```

**WEBPACK**

# TARGET SYNTAX

**@workspace//foo/bar:wiz**

**foo/...**

**.\***  
**.**

**REPEATABLE**

**BUILDS**

**IS IT WORTH IT?**



# THANKS

► **Big thanks to: @tom\_wilkie**

**HTTP://GARLIC.BUILD**

# MORE READING

- ▶ **Building Software at Google Scale**

**<https://www.youtube.com/watch?v=2qv3fcXW1mg>**

- ▶ **Watch and rebuild (or run tests)**

**<https://github.com/bazelbuild/bazel-watcher>**

- ▶ **Dave Cheney - Reproducible Builds**

**<http://go-talks.appspot.com/github.com/davecheney/presentations/reproducible-builds.slide#1>**

