Project Talan: CLI

pitch deck

Talan CLI

Talan CLI (tln) is an open-source framework for managing third-party components from wide range of ecosystems (Java, Node.js, C++, Golang, Angular etc.).

tln helps to create fully isolated development environments,

uniformly manages mono- & multi- repo configurations,

builds smooth onboarding experience,

melts borders between local development environments and CI/CT/CD setups,

gets maximum from Polyglot Programming Polyglot Persistence (4Ps) design,

implements Software Architecture as Code

Projects cataloging

- Single point of truth for all company projects, internal or/and external
- Painless switch between projects
- Handle mono-/multi- repo configurations

```
/
└ petramco
  ├ delivery
  │ ├ hyperhype
  │ │ ├ cms
  │ │ ├ crm
  │ │ ├ portal
  │ │ └ warehouse
  │ └ skeletons
  │   ├ java
  │   ├ nodejs
  │   ├ rust
  │   └ typescript
  ├ hr
  │ └ referral-grid
  └ it
    └ web
      ├ brand-site
      ├ portal
      └ solutions
```

Uniform Dev/CI implementation

- All key development steps should have the same structure everywhere.
- CI acts as a "silly developer" and implements just CI specific steps: scheduling, vault, execute PR/PUSH/NIGHTLY builds

Cross –platform/–ecosystem virtual environment

- Manage different versions of components (java, kubectl, helm, angular, go, etc.)
- Handle multiple environments at the same dev box
- Quick project/developer onboarding
- Don't modify underlying OS

```
module.exports = {
  options: async (tln, args) => {},
  env: async (tln, env) => {},
  dotenvs: async (tln) => [],
  inherits: async (tln) => [],
  depends: async (tln) => ['mvn-3.6.3', 'openjdk-11.0.2', 'go-1.14.4', 'node-14.4.0', 'angular-9
  steps: async (tln) => [
    {
      id: "versions",
      builder: async (tln, script) => script.set([
        'java –version && mvn –v && go version && node –v && cordova –v && ng version'
      ])
    }
  ],
  components: async (tln) => []
}
```

```
openjdk version "11.0.2" 2019-01-15
OpenJDK Runtime Environment 18.9 (build 11.0.2+9)
OpenJDK 64-Bit Server VM 18.9 (build 11.0.2+9, mixed mode)
Apache Maven 3.6.3 (cecedd343002696d0abb50b32b541b8a6ba2883f)
Maven home: /root/work/maven/mvn-3.6.3
Java version: 11.0.2, vendor: Oracle Corporation, runtime: /ro
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "4.15.0-143-generic", arch: "amd64"
go version go1.14.4 linux/amd64
v14.4.0
9.0.0 (cordova-lib@9.0.1)
```

Software Architecture as Code (tln–cli–2.x.x)

- Maintain consistent relation between source code and UML/C4 diagrams
- Every PR will show changes not only at source code level, but also unhide changes in architecture