



yarn

EII

ASW

SemEs2-03

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¿Qué es yarn?



- Gestor de dependencias de JavaScript, **enfocado en la velocidad y la seguridad**
- Colaboración de código abierto entre: **Google, Facebook, Exponent y Tilde**





- **Velocidad y seguridad**
- **Mejor** y más clara **ayuda**
- YARN utiliza el registro de NPM
- Para utilizarlo necesitamos **NodeJS**

¿Cómo trabaja yarn?



- **Almacena en caché local todos los paquetes que descarga por primera vez**
- **Paraleliza las operaciones de descarga de paquetes**
- **No se detiene por un fallo**

Comandos Básicos



- yarn init
- yarn add nombre_del_paquete
- yarn upgrade nombre_del_paquete
- yarn remove nombre_del_paquete
- yarn install

yarn vs npm



```
C:\Users\crima\OneDrive\Escritorio\Prueba_Yarn>yarn cache list
yarn cache v1.22.0
```

```
warning package.json: No license field
```

Name	Version	Registry	Resolved
accepts	1.3.7	npm	https://registry.yarnpkg.com/accepts
array-flatten	1.1.1	npm	https://registry.yarnpkg.com/array-flatten
body-parser	1.19.0	npm	https://registry.yarnpkg.com/body-parser
bytes	3.1.0	npm	https://registry.yarnpkg.com/bytes
content-disposition	0.5.3	npm	https://registry.yarnpkg.com/content-disposition
content-type	1.0.4	npm	https://registry.yarnpkg.com/content-type
cookie	0.4.0	npm	https://registry.yarnpkg.com/cookie
cookie-signature	1.0.6	npm	https://registry.yarnpkg.com/cookie-signature
debug	2.6.9	npm	https://registry.yarnpkg.com/debug
depd	1.1.2	npm	https://registry.yarnpkg.com/depd
destroy	1.0.4	npm	https://registry.yarnpkg.com/destroy
ee-first	1.1.1	npm	https://registry.yarnpkg.com/ee-first
encodeurl	1.0.2	npm	https://registry.yarnpkg.com/encodeurl
escape-html	1.0.3	npm	https://registry.yarnpkg.com/escape-html
etag	1.8.1	npm	https://registry.yarnpkg.com/etag
express	4.17.1	npm	https://registry.yarnpkg.com/express

```
C:\Users\crima\OneDrive\Escritorio\Prueba_Yarn>yarn add express
yarn add v1.22.0
```

```
warning package.json: No license field
```

```
warning package-lock.json found. Your project contains lock files
is warning, remove package-lock.json.
```

```
warning No license field
```

```
[1/4] Resolving packages...
```

```
[2/4] Fetching packages...
```

```
[3/4] Linking dependencies...
```

```
[4/4] Building fresh packages...
```

```
warning No license field
```

```
success Saved 1 new dependency.
```

```
info Direct dependencies
```

```
└─ express@4.17.1
```

```
info All dependencies
```

```
└─ express@4.17.1
```

```
Done in 0.48s.
```

Stakeholders /Partes Interesadas Internas

- Propietarios



- Empleados



- Comunidad JavaScript



Compartir ideas, escribir documentación, apoyarse mutuamente y ayudar a construir una gran comunidad para cuidarlo. Creemos que Yarn ya ha tenido un gran comienzo, y puede ser aún mejor con su ayuda.

Facebook



- **Facebook**

Esta empresa ha utilizado el cliente npm con éxito durante años hasta que tuvieron problemas de consistencia, seguridad y rendimiento.

Actualmente están usando Yarn.





- Disponible en GitHub



GitHub

Stakeholders / Partes Interesadas Externas



- Principal competidor: **NPM**



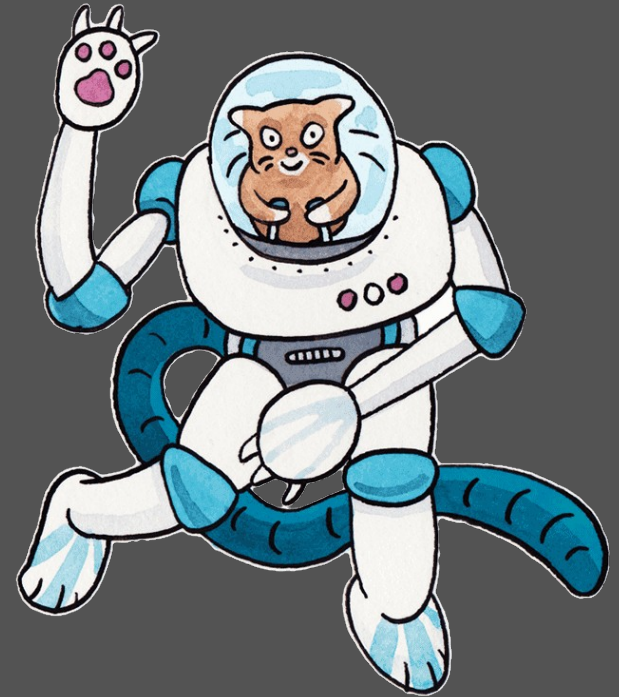
Rápido

- Caché en paquetes de descarga
- Paralelismo



Seguro

- Sumas de comprobación
- $\text{Valor resultante} = \text{Dato} + \text{Trabajo} = \text{Valor esperado}$

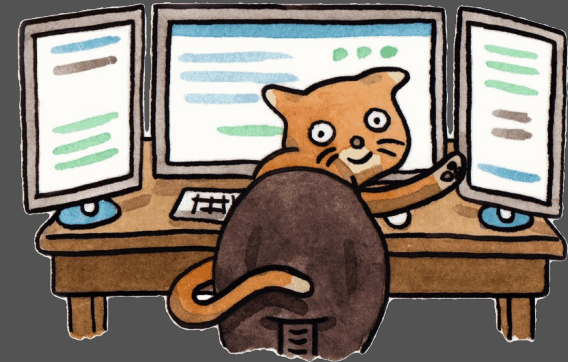


Principales atributos de calidad



Confiable

- Trauma de instituto
- Archivo de bloqueo ("lockfile")



Restricciones

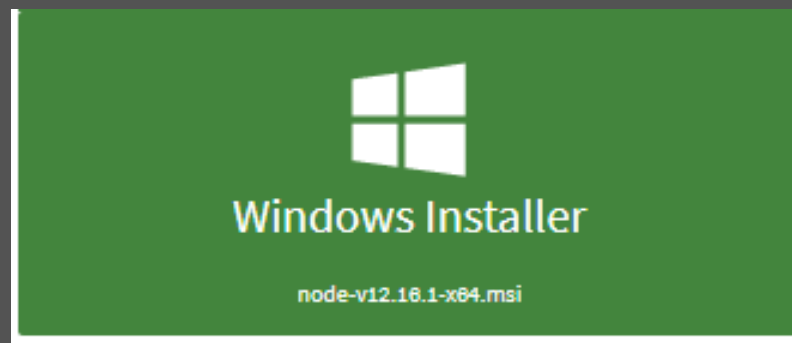


- CloudFLare
- Tamaño del clúster
- Hanging requests
- Tamaño del contenedor
- Limitaciones a causa de Drill: Uso del disco y configuración



○ Instalación Windows

Download Installer



node-v13.9.0-x64.msi
yarn-1.22.0.msi

- **Instalación Linux**

Ubuntu en particular

```
curl -sS https://dl.yarnpkg.com/debian/pubkey.gpg | sudo apt-key add -
```

```
echo "deb https://dl.yarnpkg.com/debian/ stable main" | sudo tee /etc/apt/sources.list.d/yarn.list
```

```
sudo apt update && sudo apt install yarn
```

Aspectos del Desarrollo



○ Iniciar Proyecto

```
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ yarn init
yarn init v1.21.1
question name (yarn): Prueba
question version (1.0.0): 1
question description: probando
question entry point (index.js):
question repository url:
question author: Aique Montes
question license (MIT):
question private:
success Saved package.json
Done in 32.23s.
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$
```

```
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ cat package.json
{
  "name": "Prueba",
  "version": "1",
  "description": "probando",
  "main": "index.js",
  "author": "Aique Montes",
  "license": "MIT"
}
```

Aspectos del Desarrollo



○ Añadir Dependencias

```
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ yarn add https://github.com
/plantuml/plantuml.git
yarn add v1.21.1
info No lockfile found.
[1/4] Resolving packages...
. https://github.com/plantuml/plantuml.git
[2/4] Fetching packages...
[3/4] Linking dependencies...
[4/4] Building fresh packages...
success Saved lockfile.
warning Your current version of Yarn is out of date. The latest version is "1.22
.0", while you're on "1.21.1".
info To upgrade, run the following command:
$ sudo apt-get update && sudo apt-get install yarn
success Saved 1 new dependency.
info Direct dependencies
└─ plantuml@0.0.0
info All dependencies
└─ plantuml@0.0.0
Done in 14.71s.
```

```
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ cat package.json
{
  "name": "Prueba",
  "version": "1",
  "description": "probando",
  "main": "index.js",
  "author": "Aique Montes",
  "license": "MIT",
  "dependencies": {
    "plantuml": "https://github.com/plantuml/plantuml.git"
  }
}
```

Aspectos del Desarrollo



```
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ ls
node_modules package.json yarn.lock
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn$ cd node_modules/
aique_montes_maestre@SATELLITE-Aique:~/Desktop/yarn/node_modules$ ls
plantuml
```

yarn upgrade

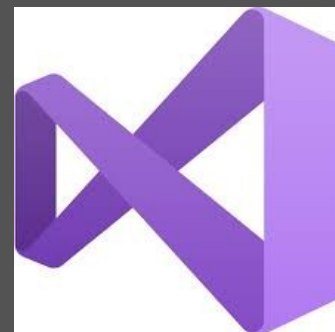
yarn remove

yarn install

Aspectos del Desarrollo



- Plugins y Extensiones



Módulos y Componentes



- Paquete principal

```
▼ yarn-master
  > __tests__
  > .circleci
  > .github
  > .idea
  > bin
  > end_to_end_tests
  > flow-typed
  ▼ packages
    > lockfile
    > pkg-tests
  > resources
```

```
> scripts
▼ src
  > cli
  > fetchers
  > lockfile
  > registries
  > reporters
  > resolvers
  > util
```

- **Patrones y Estilos Arquitectónicos**

- ❖ Command

- ❖ Decorator

```
HelloWorldCommand.addOption(`
```

```
`email`, Command.String(`--email`));
```

Módulos y Componentes



- Ejemplo de Plugin
- <https://yarnpkg.com/advanced/plugin-tutorial>

```
module.exports = {  
  name: `plugin-hello-world`,  
  factory: require => ({  
    // What is this `require` function, you ask? It's a `require`  
    // implementation provided by Yarn core that allows you to  
    // access various packages (such as @yarnpkg/core) without  
    // having to list them in your own dependencies - hence  
    // lowering your plugin bundle size, and making sure that  
    // you'll use the exact same core modules as the rest of the  
    // application.  
    //  
    // Of course, the regular `require` implementation remains  
    // available, so feel free to use the `require` you need for  
    // your use case!  
  })  
};
```


Módulos y Componentes



- Ejemplo de Plugin

```
module.exports = {  
  name: `plugin-hello-world`,  
  factory: require => ({  
    hooks: {  
      setupScriptEnvironment(scriptEnv) {  
        scriptEnv.HELLO_WORLD = `my first plugin!`;  
      },  
    },  
  })  
};
```

Módulos y Componentes



- Ejemplo de Plugin

```
module.exports = {  
  name: `plugin-hello-world`,  
  factory: require => {  
    const {Command} = require(`clipanion`);  
  
    class HelloWorldCommand extends Command {  
      async execute() {  
        this.context.stdout.write(`This is my very own plugin 😎\n`)  
      }  
    }  
  }  
}
```

Módulos y Componentes



- Ejemplo de Plugin

```
HelloWorldCommand.addPath(`hello`);

return {
  commands: [
    HelloWorldCommand,
  ],
};
}
```