

**Rustup,
Cargo and
Cross-compiling Rust programs**

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`https://rustup.rs`

Toolchain manager for Rust

```
$ rustup toolchain install nightly  
$ rustup toolchain list
```

Install multiple rustc

```
$ rustup run nightly rustc hello.rs
```

```
$ rustup run stable rustc hello.rs
```

Compile with multiple rustc versions

```
$ rustup target list
```

```
$ rustup target add <triple>
```

Add other compile targets

```
$ rustup update
```

```
$ rustup update nightly
```

Keep updated

```
$ curl https://sh.rustup.rs -sSf | sh
```

Install rustup and play around

\$ cargo

Manage dependencies & builds


```
$ cargo new hello --bin
```

Create a new cargo project

```
$ cargo build
```

```
$ cargo run
```

Build (run) the project

```
$ cargo install <crate>
```

Install from crates.io

\$ cargo build

Dependencies are fetched and built

\$ cargo build

Dependencies are fetched and built

Cross-compiling

```
add rustc target  
install proper linker  
tell cargo about the linker  
cargo build --target=<target>
```

Thanks !