



## Demo: Rust with Yocto Project®

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# About Me

- Involved in Yocto Project since 2013
- Work across the whole embedded stack
- Principal Engineer @ Konsulko Group
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# Contact Details

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# About This Talk

- **Brief Introduction**
  - Mostly covered by Randy already
- **License Compliance with Rust & Yocto Project**
- **Installing Rust**
- **Demo**

# License compliance with Rust & Yocto Project (1)

- Like many newer languages Rust has its own package manager / build tool called Cargo
- These tools often present issues for Embedded development and license compliance
  - These just don't seem to be first class concerns

# License compliance with Rust & Yocto Project (2)

- **Features we need from language package managers:**
  - Offline build support
  - Download source archive
  - Including license text & other collateral
  - HTTP/HTTPS proxy support
  - Source mirror support

## License compliance with Rust & Yocto Project (3)

- Cargo actually integrates quite well
- All features in the previous slide are supported
- However, licenses & license text are not collected for dependency crates

# Installing Rust (1)

- Installing Rust natively is not required to build with Yocto Project
- However, it is required to run cargo-bitbake
- Being able to build natively can help with debugging



# Installing Rust (2)

- See <https://rustup.rs/>
- Run the following:
  - `curl https://sh.rustup.rs -sSf | sh`
  - `source $HOME/.cargo/env`
- For cargo-bitbake:
  - `cargo install cargo-bitbake`

# Demo Tricks

- Pre-populated sstate cache
- Local mirrors of poky, meta-openembedded & meta-rust
- Using podman to run builds on a stable distro
  - Insert Arch Linux evangelism here



# Demo

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# Thanks for your time

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