Jenkins Automation for WTS

By: Ajaya Dahal (AJ)

AMD
together we advance_

Proposed Applications

- GitHub Repo Automatic upgrade and push
- Petalinux project generation for Eval board using XSA
- Vivado example design generation for any IP from IP catalog

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Stage 1: Setup Workspace

- Git pull
- Create new version directory
- Copy files from previous version

Stage 2: Build Vivado in new version

- Copy last version design to a new directory
- Build with old Tools (can't simply run older version tcl in new Tools
- Open with new version of Tool and upgrade the IPs and run implementation. Generate XSA

Stage 3: Build PetaLinux

Completed

- Delete old Petalinux
- Create new Petalinux project with template
- Configure accordingly and build image

Stage 4: Boardfarm testing

- Use Boardfarm python APIs to acquire the boards
- Download the images via JTAG
- Run iperf and ping test and save logs.

Stage 5: Git Push New Design

- Check the logs and see if the test passed
- Push the designs that passed the test
- Inform the owner in Slack which test failed and share logs as message

Parallel Hardware Builds

Phase 1:
Create HW design with Old Vivado tools

Phase 2:
Upgrade & Build with new Tools

Output:
XSA

PetaLinux Builder: Jenkins Automation Flow

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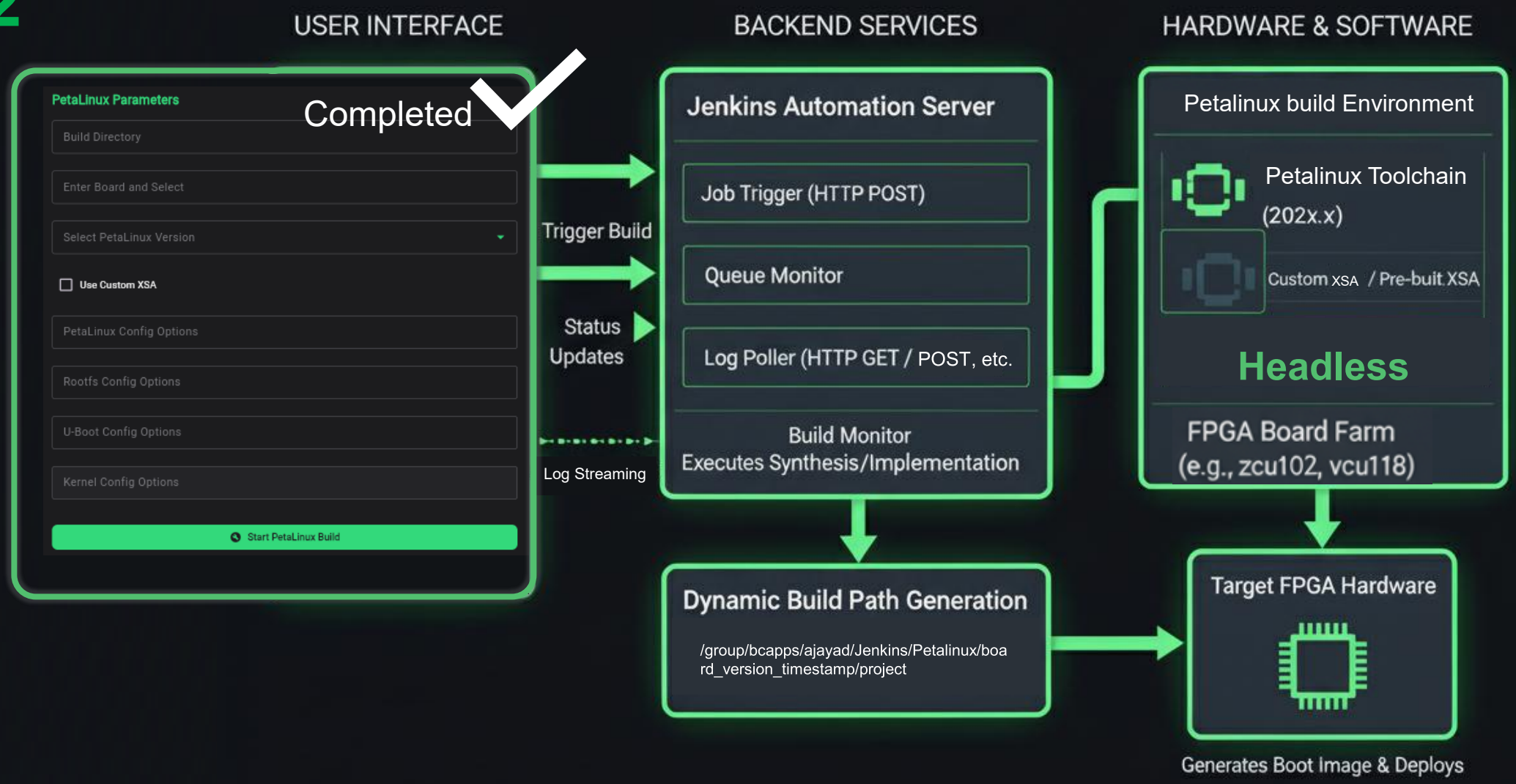

Vivado Builder: Jenkins Automation Flow

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