Infrastructure plan 2024

Making the Adoptium processes secure, repeatable and Relevant to the team and our customers so we can deliver trusted binaries of Temurin to the industry

Focus themes (GitHub labels)

SECURITY

- SSDF, SLSA, Access control to systems and Github permissions

RELIABILITY and REPEATABILITY

Systems should be available and able to run all build and test jobs successfully

CURRENCY

- Ensure we are testing on the latest versions of OSs out there that match what our customers are likely to be using and have a wide variety of different distributions/versions to catch problems before users see them
- Other important ongoing labels will be "systemdown" and "testFail"

2024 Infrastructure epics

- Machine specific issues (testFail + systemdown)
- Equinix x64 machine replacements
- Jenkins maintenance
- Aim to get Windows to SLSA build level 3 compliance
- Further enhancements to infrastructure security
- Improving docker static deployments/maintenance
- Documentation (overarching theme, not just for infra)

Equinix/x64 machine replacement

- Replacement of xlinux dockerhost machines
- Replacement of C3jenkins (Jenkins workspace machine)
- Move AWX to a new host
- Migrate to a new host for Solaris/x64 systems (inc. TCK)

Jenkins server maintenance

- Routine updates patch to latest LTS every month
- Clearing up warnings in logs to expose important stuff
- Audit of plugins (Basing on Andrew's docs)
- Space management on jobs file system
 - Includes policy on retention of old build artifacts
- <u>Improving isolation of build+test systems</u> (<u>SSDF Phase 3</u> PO 5.2)
- Update matrix authorization plugins (requires some remediation)
- Define process surrounding script approvals
- (Trestle?)

Project security

- Remaining items from the external audit
- Fix ssh host keys and don't "accept on first use"
- Semgrep deployment
- Document systems that don't have MFA enabled
- Process for downloading/hosting "prerequisites"
- Process for checking for vulnerabilities in preregs
- Keeping the infrastructure relevant with supported OS levels

Improving docker static deployments

- Clean up DockerStatic ansible role to be more dynamic
- Define inventory-based container definitions
- Create AWX job to deploy onto each dockerhost machine
- Create templated containers for OSs to avoid duplication of distribution versions
- Automation for creation/deletion of nodes in jenkins

Machine currency

- Ensure the operating systems and versions we use are appropriate for our needs and consistent with what customers use (using this data)
- Overhaul of DockerStatic work to ensure timely and appropriate updates
- Make sure we are not exposing insecure, out of support operating systems to the internet