TECoSA Edge Computing Summit

17th June 2024

How did this CVE get into production?

Secure your software supply chain end to end with Red Hat's Trusted Software Supply Chain

Vem är jag?

Red Hat
11 yrs 5 mos

- **Principal Chief Architect, Global CTO Organisation**
  Full-time
  Feb 2023 - Present · 1 yr 5 mos
  Global · Remote
- **EMEA Chief Technologist - Infrastructure Platform and Security**
  Full-time
  Jan 2020 - Feb 2023 · 3 yrs 2 mos
  EMEA
- **Principal Architect**
  Mar 2017 - Jan 2020 · 2 yrs 11 mos
- **Senior Architect**
  Sep 2014 - Mar 2017 · 2 yrs 7 mos
  Europe, Middle East & Africa
- **Senior Consultant**
  Feb 2013 - Sep 2014 · 1 yr 8 mos

CHRIS JENKINS

Principal Chief Architect
Red Hat Global CTO Office

Red Hat

Software supply chain attacks: a matter of when, not if

742%

average annual increase in software supply chain attacks over the past 3 years

20%

data breaches are due to a compromised software supply chain

78%

have initiatives to increase collaboration between DevOps and Security teams

92%

say enterprise open source solutions are important as their business accelerates to the open hybrid cloud

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When it can go wrong

- Defence in Depth
- Patched systems
- 24/7 Monitoring and alerting
- Experienced IT/Security teams
- Annual compliance auditing

Malicious code in an untrusted or unknown dependency

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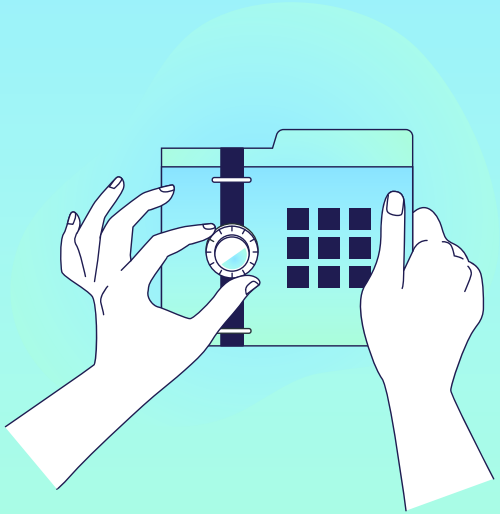
Growing attack surfaces with new, emerging threats daily

Secure software supply chain security is a critical component to securing data, Intellectual Property, source code and edge devices



- Lack of CVE awareness
- Typosquatting Attack (i.e. Goggle.com)
- Dependency Confusion
- Compromised Build Environment
- Malware preinstalled on edge devices
- Edge deployment
- Etc, etc, etc!

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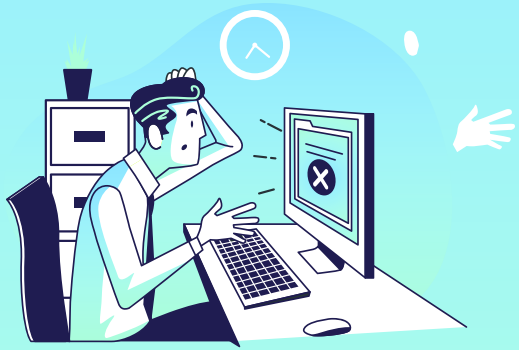
Minimum Requirements For Trust



Software Bill of Materials (SBOMs)

Understand where your software comes from (provenance), who created it (licensing) and who certifies it (signatures/attestation)

Vulnerability management

Access to vulnerabilities databases, understand vulnerability exploitability (VEX) and access to fixes and remediations

Software composition analysis

Understand and map relationships to open source software for all business critical applications across all environments

Continuous updates, monitoring and logging

Once deployed to your edge device, security doesn’t end!

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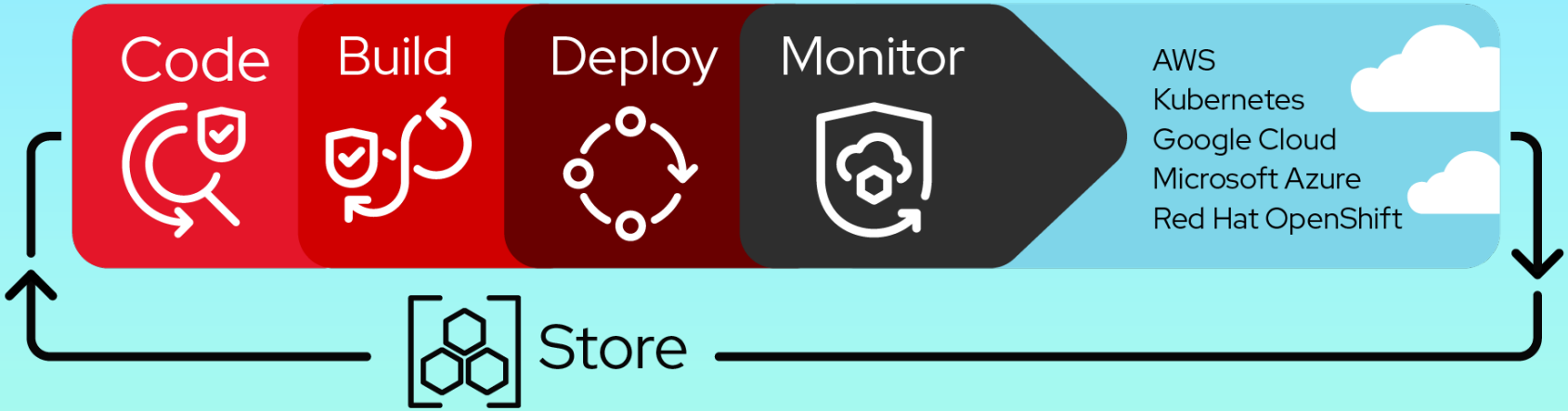
The Software Supply Chain



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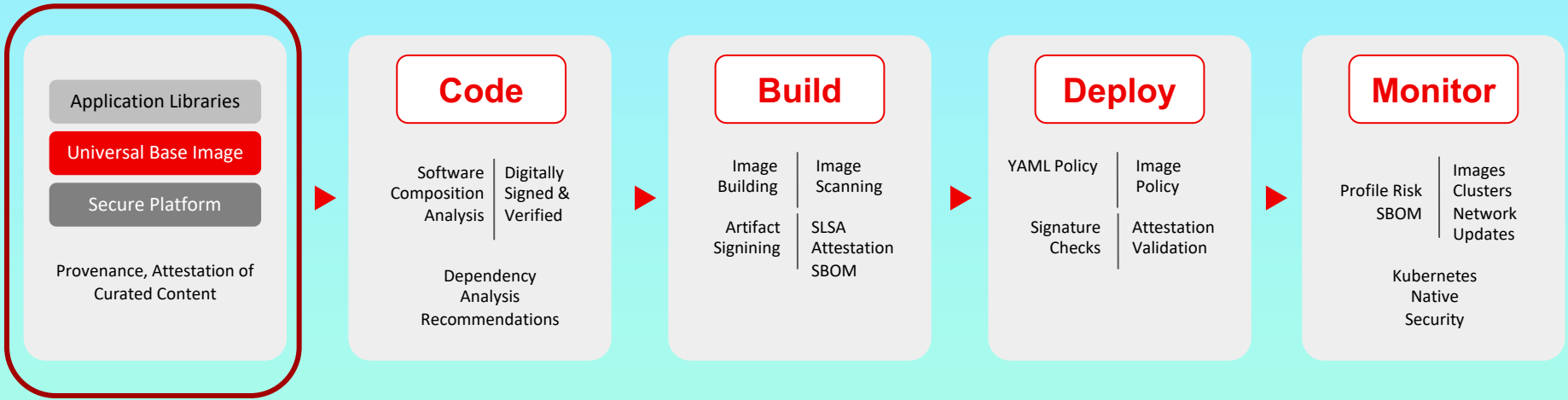
What can we do to
SECURE
the Software Supply Chain?

Start by using Trusted Content



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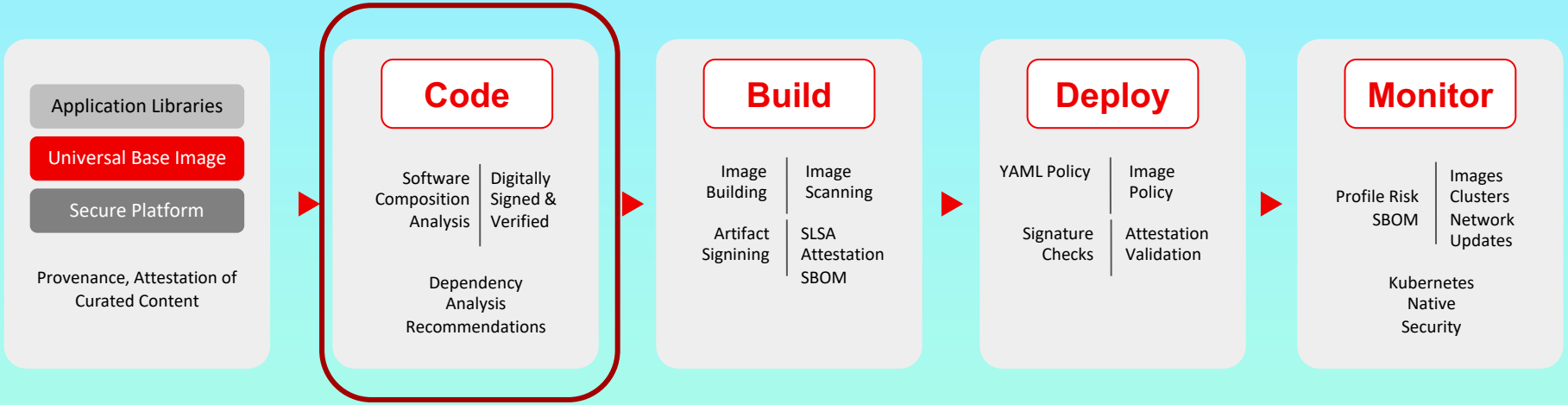
Ensure you have Trusted Code



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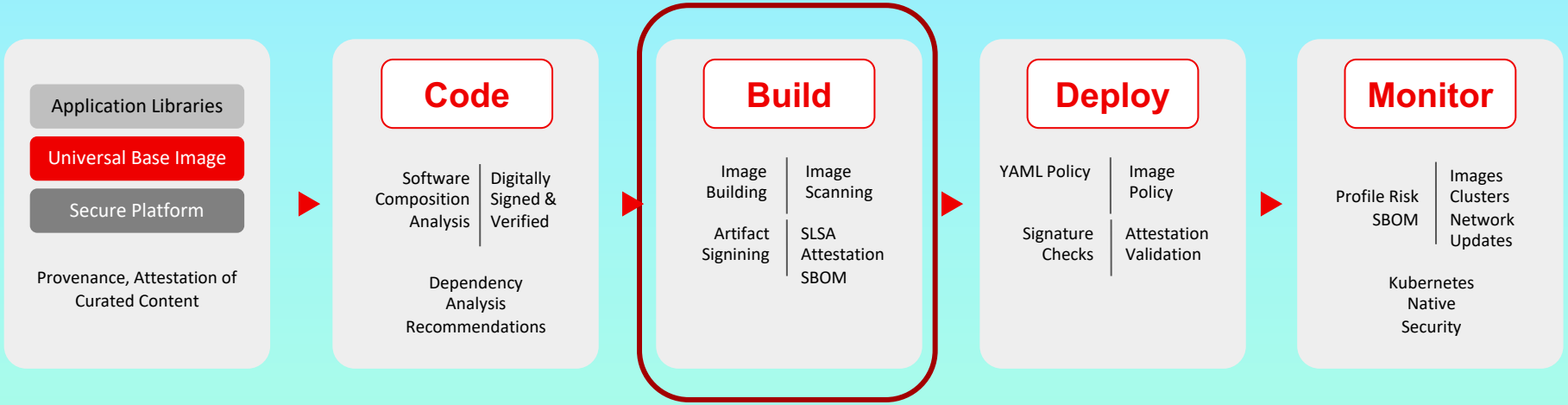
Automate and attest your build process



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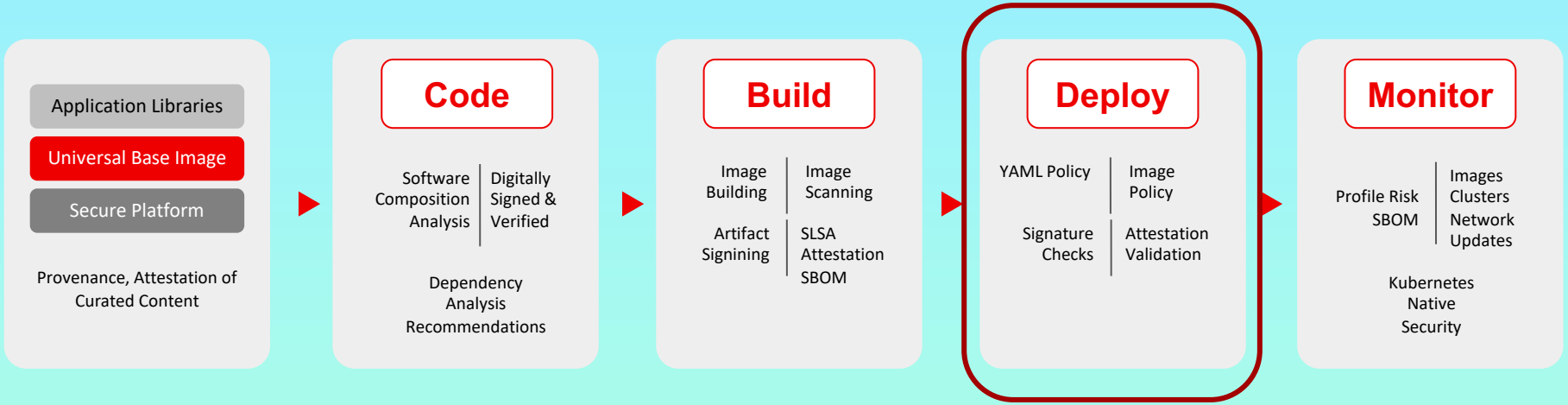
Secure and verified deployment



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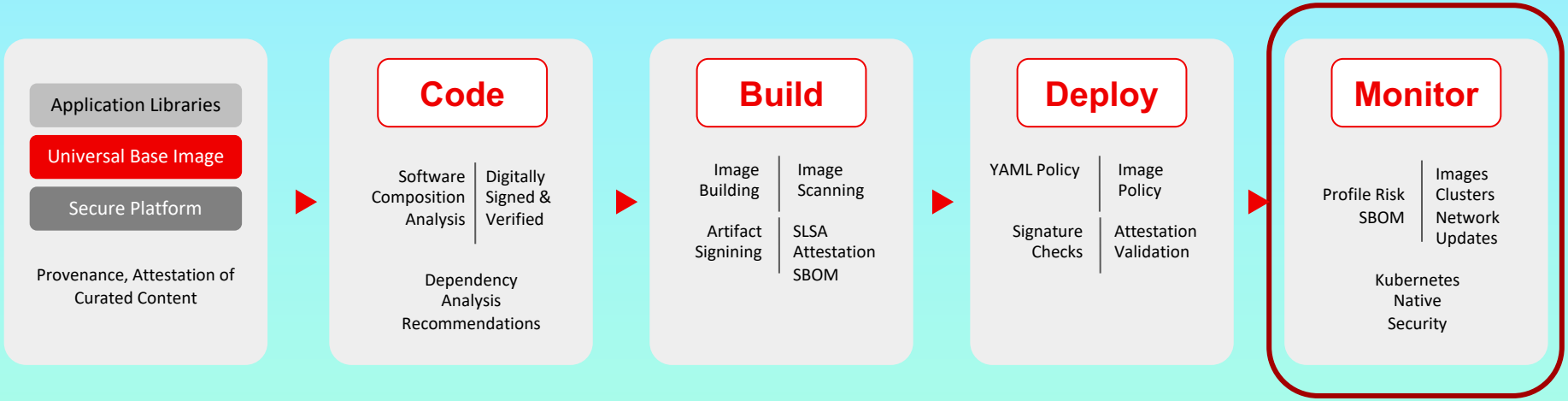
Continuous monitoring



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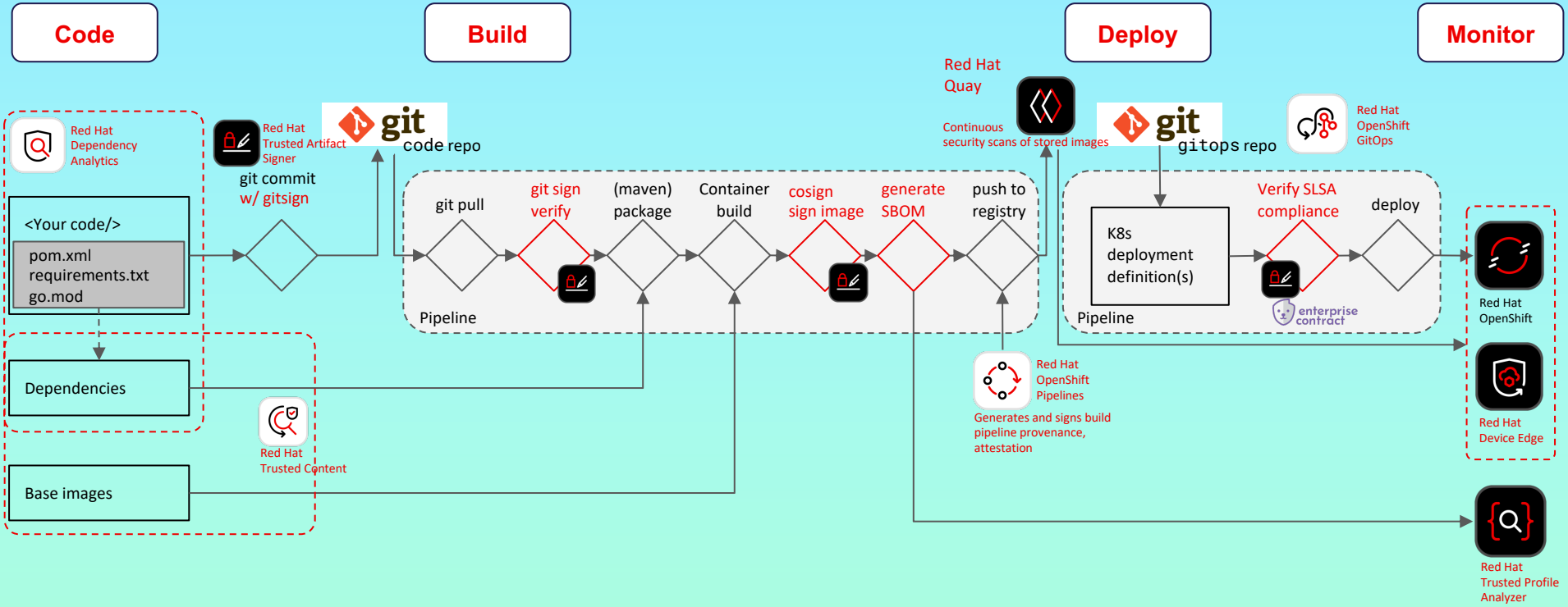
A security-augmented development process



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A Golden Path Pipeline Example

From Git commit to Production in 5 minutes and 39 seconds !

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Trusted Profile
Analyzer

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How can Red Hat help securing you Edge devices?

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Trusted Software
Supply Chain

Developer self-service hub with pre-integrated security guardrails: artifact signatures, attestations & SBOMs

Red Hat Trusted Application Pipeline = **Red Hat** Developer Hub + **Red Hat** Trusted Artifact Signer + **Red Hat** Trusted Profile Analyzer

Red Hat OpenShift

Red Hat Advanced Cluster Security for Kubernetes

Red Hat Quay

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QUESTIONS | THOUGHTS | COMMENTS

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Tack så mycket!

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