Building from source & keeping you secure

Runtimes created on the ActiveState Platform are built from source from our vetted, secure package catalog. This process makes it easy for your organization to use Open Source in a consistent, scalable and easy-to-audit way. Here's how the process works...

PHASE 1
Analyze Usage

The secure build process begins with analyzing what Open Source components you are currently using. We are able to analyze a variety of sources to start this process, or you can specify your dependencies via the Platform's web UI.

We can analyze your Open Source usage based on your...

- GitHub Repositories
- Docker Images
- Requirements files
- SBOM files
- Kubernetes `COMING SOON`
- ...and more

PHASE 2
Resolve Dependencies
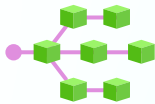
Our dependency solver analyzes the Open Source you're using and determines the specific transitive dependencies that you will need, generating an exhaustive build plan for each OS you run on.

Policy compliant `COMING SOON`
The solver ahderes to your organization's Vulnerability and License policies.

Maximum compatibility
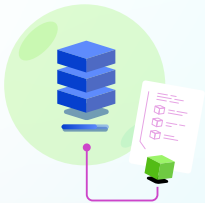You get the best, most compatible versions available at any given time.

Sytem-level libraries
We even determine which packages will be used to build your dependencies.

PHASE 3
Build from Source

We build each artifact in your runtime from source, using only our vetted, secure package catalog.

Hermetic
The build systems are sealed off, protecting you from build tampering.

Fully auditable
Every build generates an exhaustive SBOM & Attestation files.

Reproducable
We can replay any past build exactly at any time, so no history is ever lost.

> **Building from source keeps you secure!**
> **We always build from source and only use source code that has passed our strict criteria.**
>
> - We scan source code for exploits, suspicious patterns & common threats
> - We prevent packages from pulling external resources at build time
> - We quarantine suspicoius source code for further investigation

PHASE 4
Scalable Deployment

Our CLI utility makes it easy to deploy our secure runtimes across a variety of target platforms and environments, with full virtualization, and to keep runtimes in sync across many machines.

Keep teams in sync
Our CLI tooling makes it easy to deploy and manage multiple environments.

Know what's running where
Access usage details for all deployed environments.

Multi-OS
Use one tool across different infrastructure to simplify your processes.

PHASE 5
Update to keep Secure

As the complexity of your Open Source grows, you may need add new dependencies or choose newer, more secure versions of ones you're already using. When you do, we repeat this process automatically to give you a brand-new, built-from source runtime.

`3.4.3` `3.4.12`

Contact us to learn more and get a demo
We'll walk you through the ActiveState Platform's capabilities and figure out how we can help your organization manage Open Source at scale.

Get in Touch