## Delivering an Open, Hierarchical Software Ecosystem

Levels of Integration

**Product** 

Source and Delivery

Build all SDKs

Build complete stack

Containerize binaries

Group similar products

Make interoperable

Assure policy compliance

Include external products

Sauraa FO

**Source:** ECP E4S team, non-ECP products (all dependencies)

ECP ST Open Product Integration Architecture

Delivery: Spack install E4S, containers, CI testing

**Source:** SDK teams, non-ECP teams (policy compliant, Spackified)

**Delivery:** Apps directly, Spack install SDK, vendor/facility (future)

Standard workflow

Existed before ECP

ST Products

SDKs

**Source:** ECP L4 teams, non-ECP developers, standards groups

**Delivery:** Apps directly, Spack, vendor stack, facility stack

**ECP ST Individual Products**