

**STAGE 1:
OPENSSL-BUILDER (Build Stage)**

- Prepare Debian build environment
- Download & unpack OpenSSL source code
- Install build dependencies
- Compile & verify OpenSSL with PQC support

**STAGE 2:
LIBOQS-BUILDER (Build Stage)**

- Prepare Debian build environment
- Download & unpack liboqs source code
- Build liboqs with CMake/Ninja
- Install & verify liboqs library

**STAGE 3:
ACAPY-BUILDER (Build Stage)**

- ✓ Provide Python build image
- ✓ Install Poetry and fetch dependencies
- ✓ Copy project code and metadata
- ✓ Build package with Poetry

**STAGE 4:
MAIN (Final Image)**

- ✓ Prepare run environment
- Provision OpenSSL & liboqs
- Copy PQC root CA to the trust store
- Verify PQC support
- ✓ Install acapy from Poetry-Wheel
- Install pqc_didpeer4_fm plugin for acapy