

Next Steps in Community building

Building an open ecosystem for architectures, APIs, and frameworks based on DPU/IPU technologies

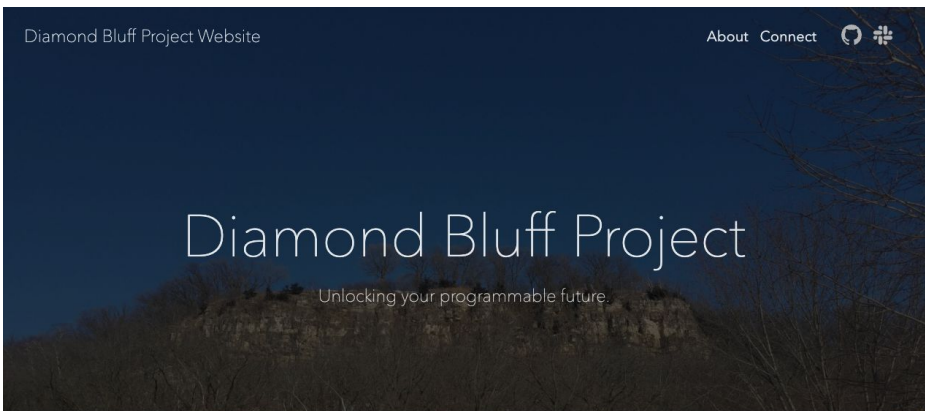
Kyle Mestery (Intel)

Kris Murphy (Red Hat)

Paul Pindell (F5)



IPDK and Diamond Bluff history



The objective of the Diamond Bluff initiative is to foster a community-driven standards-based open ecosystem for next generation architectures and frameworks based on DPU/IPU-like technologies.

ipdk Infrastructure Programmer Development Kit

Infrastructure Programmer Development Kit (IPDK) is an open source, vendor agnostic framework of drivers and APIs for infrastructure offload and management that runs on a CPU, IPU, DPU or switch. IPDK runs in Linux and uses a set of well-established tools such as SPDK, DPDK and P4 to enable network virtualization, storage virtualization, workload provisioning, root-of-trust and offload capabilities found in the platform. IPDK provides a common platform for increasing performance, optimizing resources and securing the infrastructure as an open source community.

Use Cases

- IaaS: NETWORK, STORAGE, CRYPTO
- PaaS: FIREWALLS, MLN, SaaS
- Inline Acceleration: Compiler Driven

IPDK Infrastructure Application Interface

Open Community | ipdk | Compiler Driven

IPDK Target Abstraction Interface

IPDK Targets: CPU Target, IPU Target, Switch Target

IPDK.io Calendar

Today | Monday, March 14 | Week | Month | Agenda

Tuesday, March 15
8:00am Day 1: Open Programmable Infrastructure (OPI)

Wednesday, March 16
8:00am Day 2: Open Programmable Infrastructure (OPI)

Wednesday, March 23
8:00am OVS with P4 feature updates
Showing events until 5/15. [Look for more](#)

Events shown in time zone: Pacific Time - Los Angeles | Google Calendar



Vision Statement



*The objective of the project is to foster a **community-driven standards-based open ecosystem** for next generation architectures, APIs, and frameworks **based on DPU/IPU-like technologies.***



Today

- Current working groups in the project
- Self governed
- Have code name for the project





Tomorrow



- Joining a foundation
- Open Programmable Infrastructure Project
- Add contributors and contributions



Join the Project

<http://opiproject.org/>

Google form to request more information or get added to the project

<https://ipdk.io/>

<https://diamond-bluff.github.io/>

OPI Project Website

About Connect

Connect

Join the Open Programmable Infrastructure Project

Connect

The Open Programmable Infrastructure Project is in the early stages of forming. The Information below is how you can participate.

Overview Slides

Previous Next Page: 1 / 11

Q&A

We could not cover all details, so ask away

**THANK
YOU!**