



## **BlueField and DOCA User Types**

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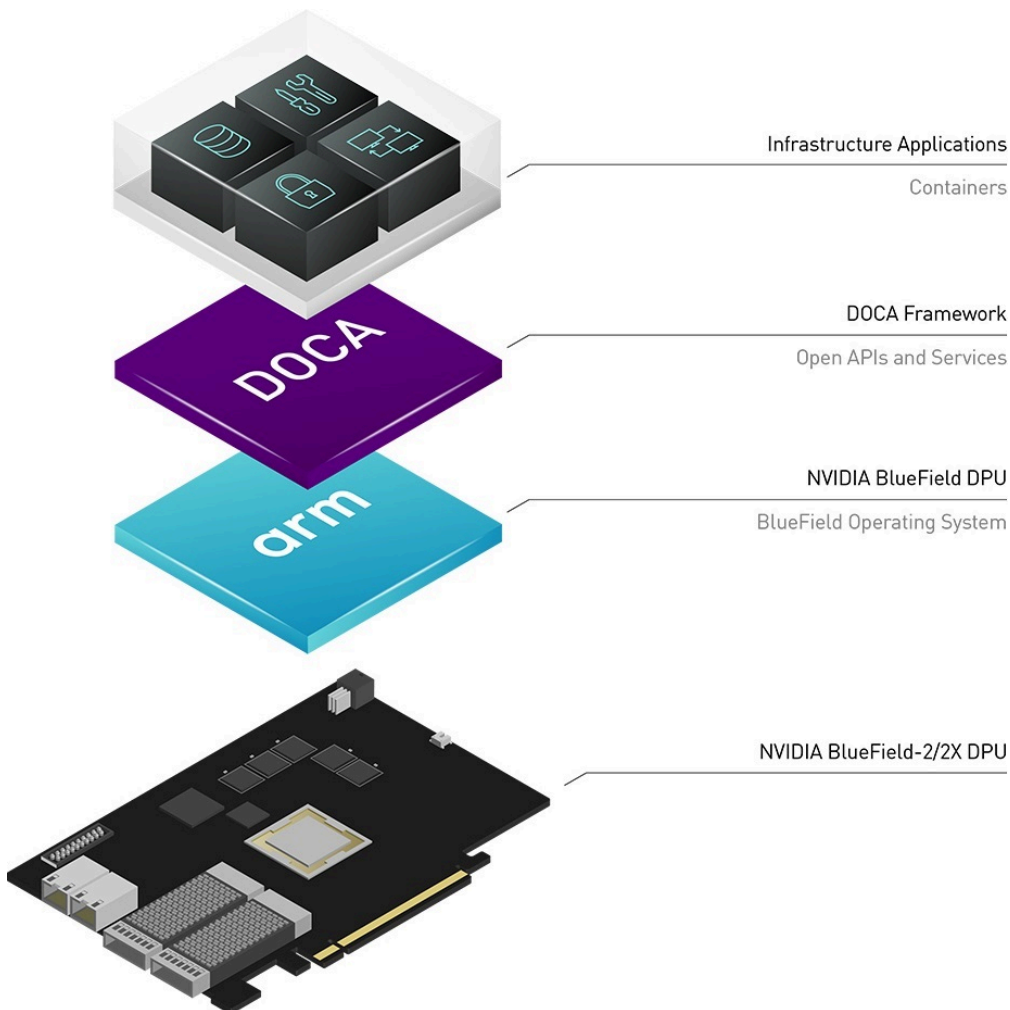
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This guide provides a quick introduction to the NVIDIA® BlueField® networking platform, its DOCA software components, and BlueField user types.

## Introduction

The BlueField family of networking platforms includes data processing units (DPUs) and SuperNICs, and is optimized for traditional enterprise, high-performance computing (HPC), and modern cloud workloads, delivering a broad set of accelerated software-defined networking, storage, security, and management services. BlueField enables organizations to transform their IT infrastructures into state-of-the-art data centers that are accelerated, fully programmable, and armed with zero-trust security to prevent data breaches and cyber-attacks.

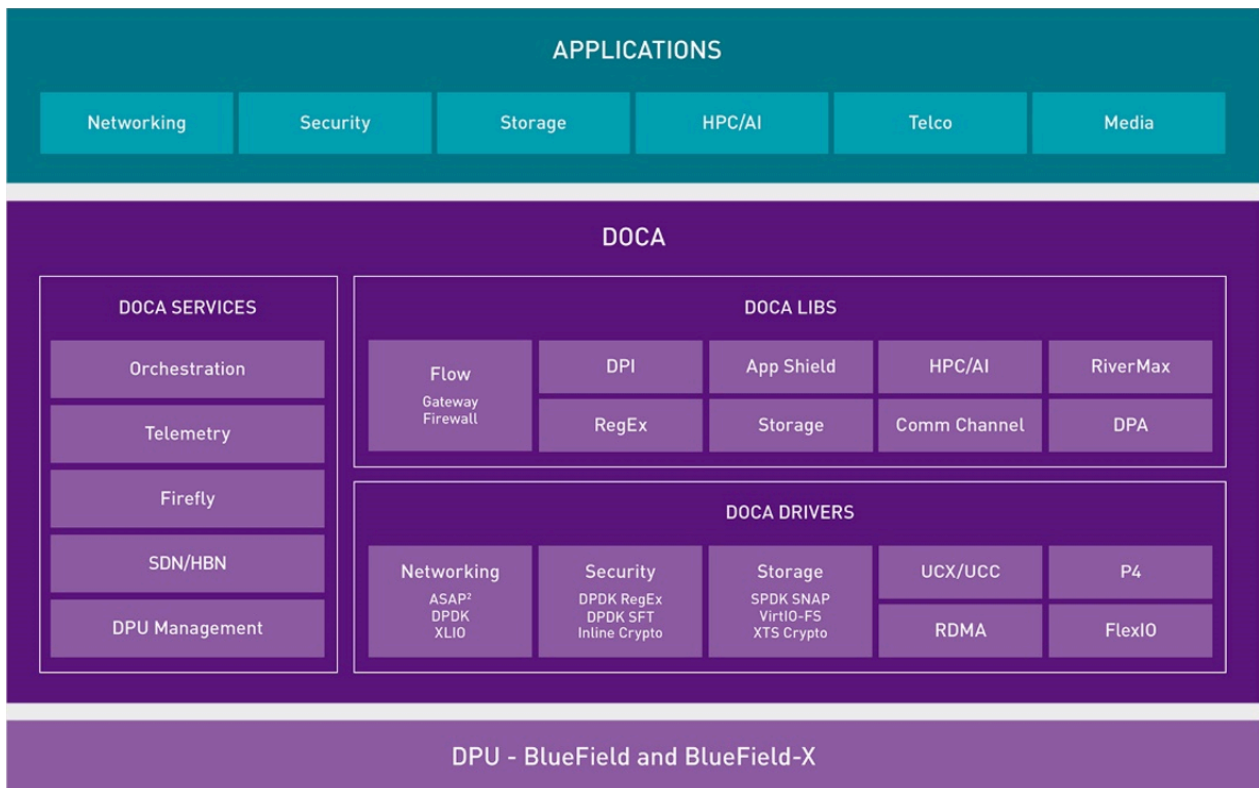
NVIDIA DOCA™ brings together a wide range of powerful APIs, libraries, and frameworks for programming and acceleration of the modern data center infrastructure. Like NVIDIA® CUDA® for GPUs, DOCA is a consistent and essential resource across all existing and future generations of BlueField products.



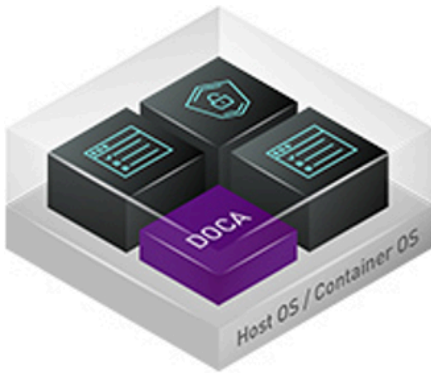
# DOCA Components

DOCA software consists of a development and a runtime environment.

- DOCA-Devel provides industry-standard open APIs and frameworks, including Data Plane Development Kit (DPDK) and P4 for networking and security, and the Storage Performance Development Kit (SPDK) for storage. The frameworks simplify application offload with integrated NVIDIA acceleration packages. The Devel environment supports a range of operating systems and distributions and includes drivers, libraries, tools, documentation, and reference applications.

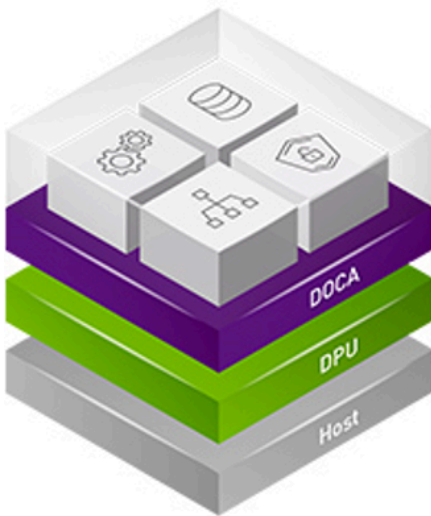


- **DOCA runtime** includes tools for provisioning, deploying, and orchestrating containerized services on BlueField Platforms in bulk across the data center.



Business Application  
Domain

Functional Isolation



Infrastructure Services  
Domain

## BlueField Networking Platform User Types

### BlueField Administrator

A BlueField administrator can be a system admin, an IT specialist, a security operations specialist, or anyone managing data center servers and their functionality. The admin would usually be interfacing with BlueField configuration and DOCA services and applications running on the BlueField Platform.

Common operations performed by the BlueField admin:

- Updating the BlueField image
- Running reference applications on the BlueField Platform
- Running DOCA services on the BlueField Platform

For more information, please visit [BlueField Administrator Quick Start Guide](#).

## DOCA Developer

A DOCA developer creates the services and applications that run on top of the BlueField Platform and usually interfaces with DOCA libraries and drivers to create the necessary workflow and functionality.

Common operations performed by the DOCA developer:

- Developing DOCA applications using DOCA libraries and drivers
- Compiling DOCA reference applications
- Using DOCA sample code to create a new workflow

For more information, please refer to the [DOCA Developer Quick Start Guide](#).

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