Document Revision History

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Rev 4.14.0 – February 16, 2026

Updated:

- Section "Default Network Interface Configuration"
- Section "Default Ports and OVS Configuration"
- Section "Grub Configuration"

Rev 4.13.0 – October 31, 2025

Added:

- Note to step 2 under "Deploying BlueField Software Using BFB with PXE"
- Section "Deferred Update"

Rev 4.12.0 – August 05, 2025

Updated:

- Section "bf.cfg Parameters"
- Section "System Configuration Dump"
- Page "BlueField Boot Flow Configuration"
- Page "BFB FW-Bundle Extraction Process"

Rev 4.11.0 – April 30, 2025

Added:

- Page "BFB FW-Bundle Extraction Process"
- Page "BlueField Boot Flow Configuration"

Rev 4.10.0 – January 31, 2025

- UEFI attributes in section "bf.cfg Parameters"

Rev 4.9.1 – December 06, 2024

Updated:

- Section "BlueField Image Types"

Rev 4.9.0 – October 31, 2024

Added:

- Section "System Configuration Dump"
- Section "Disabling IPMI from BlueField Arm to BMC"
- Page "RAS"
- Section "RShim Ownership"
- Section "OOB VLAN"
- Section "DHCP Client Configuration"
- Section "Passing Arguments from BMC to DPU via Redfish"

Updated:

- Section "Deploying BlueField Software Using PXE"
- Section "Enroll Certificate into UEFI DB"

Rev 4.8.0 – August 14, 2024

Added:

- Section "Ubuntu Password Policy"
- Section "RShim Ownership"
- Page "Deploying DPU OS Using BFB with PXE"
- Page "Deploying BlueField Software Using ISO with PXE"
- Page "Customizing BlueField Software deployment using bf.cfg"

- Note on host type interoperability limitation to "Multi-Host"
- Troubleshooting page "Ubuntu Kernel Debug"

Updated:

- Page "Deploying BlueField Software Using PXE"
- Step 2 under section "Installing Local Repo Package for Host Dependencies"
- The note at the top of the "fTPM over OP-TEE" page

Rev 4.7.0 – May 06, 2024

Added:

- Section "UEFI Menu"
- Section "Redfish"
- Section "BlueField SR-IOV"
- Section "NVIDIA BlueField Reset and Reboot Procedures" and updated graceful shutdown guidance with pointers to this section

Updated:

- Section "Software Installation and Upgrade" with `bf-fwbundle-<version>.prod.bfb` information
- Section "BFB Installation"
- Section "Changing Default Credentials for 'ubuntu' User via bf.cfg"

Rev 4.6.0 – February 08, 2024

Added:

- Page "Default Passwords and Policies"
- Section "VF Msix_num/Queue Requirement"

Updated:

- Section "Customization of BFB Installation Using bf.cfg"
- Section "bf.cfg Parameters"
- Section "Default Ports and OVS Configuration"
- Section "SystemD Service"

Rev 4.5.0 – December 12, 2023

Added:

- Section "Updating Software Using Redfish"
- Section "Sanitizing DPU eMMC and SSD Storage"
- Section "How to perform graceful shutdown"
- Section "BFB installation monitoring"

Updated:

- Page "Updating DPU Software Packages Using Standard Linux Tools"
- Section "RShim Logging"
- Section "Enabling OVS-DPDK Hardware Offload"
- Section "Enabling IPsec Packet Offload"
- Section "Setting IPSec Packet Offload Using strongSwan"
- Section "Running strongSwan Example"
- Section "Building strongSwan"
- Section "IPsec Packet Offload and OVS Offload"

Rev 4.2.2 – October 24, 2023

N/A

Rev 4.2.0 – August 10, 2023

Updated:

- Step 3 under section "PXE Server Preparations"
- Section "Removing Previously Installed DOCA Runtime Packages"
- Sections "Connection Tracking With NAT" and "Querying Connection Tracking Offload Status" with conntack command for Ubuntu 22.04 kernels
- Section "LAG Configuration"
- Section "SystemD Service"
- Page "QoS Configuration"
- Section "bf.cfg Parameters"

Rev 4.0.2 – May 08, 2023

Added:

- Page "SoC Management Interface"
- Page "Legal Notices and 3rd Party Licenses"
- Section "Unable to load BL2, BL2R, or PSC image"

Updated:

- Section "Default Ports and OVS Configuration" with new step 2
- Section "BlueField Linux Drivers" with `gpio-mlxbf3`, `mlxbf-ptm`, `pwr-mlxbf`, and `pinctrl-mlxbf`
- Page "Updating DPU Software Packages Using Standard Linux Tools"
- Page "UEFI Secure Boot"
- Section "IPsec Hardware Offload: Full Offload" with Canonical note
- Section "How to upgrade ConnectX firmware from Arm side"
- Section "VirtIO-net PF Device Configuration" by removing `ECPF_ESWITCH_MANAGER` and `ECPF_PAGE_SUPPLIER` from step 4

- Section "Virtio-net SR-IOV VF Device Configuration" by removing `ECPF_ESWITCH_MANAGER` and `ECPF_PAGE_SUPPLIER` from step 7.b
- Section "vDPA over VirtIO Full Emulation"

Rev 3.9.3 – November 02, 2022

Added:

- Section "DHCP Client Configuration"
- Section "Updating DPU Software Packages Using Standard Linux Tools"
- Section "Creating Transitional Hotplug VirtIO-net PF Device"
- Section "Transitional VirtIO-net VF Device Support"

Updated:

- Section "Upgrading Boot Software" by specifying that the "Reset EFI Variables" action also wipes the BOOT option variables and secure boot keys
- Section "BlueField Linux Drivers"
- Section "Configuring Uplink MTU"
- Section "Disabling Host Networking PFs" by adding instructions for reactivating host networking for single-port DPUs
- Section "Configuring RegEx Acceleration on BlueField-2"
- Section "Virtio-net SR-IOV VF Device Configuration"
- `PXE_DHCP_CLASS_ID` in section "bf.cfg Parameters"

Removed:

- Step 7 in section "Configuring Host Server Side"

Rev 3.9.2 – August 02, 2022

Added:

- Section "Updating NVConfig Params"
- Page "System Configuration and Services"
- Section "Enrolling New NVIDIA Certificates"
- Section "bf.cfg Parameters"
- Support for OpenSSL version 3.0.2 in section "PKA Use Cases"
- Section "How to change the default network configuration during BFB installation"

Updated:

- Section "Firmware Upgrade"
- Section "Customizations During BFB Installation"
- Section "UEFI System Configuration"
- Page "Host-side Interface Configuration"
- Section "Enrolling Certificates Using Capsule"
- Section "PKA Use Cases" with support for OpenSSL version 3.0.2

Rev 3.9.0 – May 03, 2022

Added:

- Section "GRUB Password Protection"
- New note under step 2 in section "Default Ports and OVS Configuration"
- Section "BlueField Linux Drivers"
- Canonical db certificate to section "Existing DPU Certificates"
- New note under section "Enrolling Certificates Using Capsule"
- New power cycle note under section "Enabling Host Restriction"
- New power cycle note under section "Disabling Host Restriction"

- Section "LAG on Multi-host"
- New power cycle note under section "Disabling Host Networking PFs"
- Section "PKA Prerequisites"
- Section "OVS IPsec"
- Section "Rate Limiting VF Group"
- Note to section "User Frontend"
- Section "Controller Live Update"

Updated:

- Code block in section "Customizations During BFB Installation"
- Section "Building Your Own BFB Installation Image"
- Section "Configuring VXLAN Tunnel"
- Step 2 in section "Prerequisites"
- Section "Enabling IPsec Full Offload"
- Code block under step 1 in section "LAG Configuration"

Rev 3.8.5 – January 19, 2022

Added:

- Section "Another backend already attached"

Updated:

- Section "Ensure RShim Running on Host"

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