



Document Revision History

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Rev 4.8.0 – August 14, 2024

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Rev 4.2.2 – October 24, 2023

Rev 4.2.0 – August 10, 2023

Rev 4.0.2 – May 08, 2023

Rev 3.9.3 – November 02, 2022

Rev 3.9.2 – August 02, 2022

Rev 3.9 – May 03, 2022

Rev 3.8.5 – January 19, 2022

Rev 4.8.0 – August 14, 2024

Added:

- Section "[Ubuntu Password Policy](#)"
- Section "[RShim Ownership](#)"
- Page "[Deploying BlueField Software 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
- Section "[Zero-trust Mode](#)"

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](#)"
- Section "[Configuring NIC Mode on BlueField-3 Using Redfish](#)"

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 "[Configuring NIC Mode on BlueField-3 Using Redfish](#)"
- Section "[Configuring NIC Mode on BlueField-3 from UEFI](#)"
- Section "[NIC Mode for BlueField-2](#)"
- 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 BlueField Software Packages Using Standard Linux Tools](#)"
- Section "[RShim Logging](#)"
- Section "[NIC Mode](#)"
- 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

Updated:

- Section "[NIC Mode](#)"

Rev 4.2.0 – August 10, 2023

Updated:

- Step 3 under section "[PXE Server Preparations](#)"
- Section "[Removing Previously Installed DOCA Runtime Packages](#)"
- Section "[NIC Mode](#)"
- 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 BlueField 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 BlueField 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](#)"
- Separated Mode from "[Modes of Operation](#)"

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 "[NIC Mode](#)" with supported MLNX_OFED versions
- Section "[PKA Use Cases](#)" with support for OpenSSL version 3.0.2

Rev 3.9 – 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 "[NIC Mode](#)"
- 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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