

Technical Note

Release note for Vision Remote Embedded Linux

Document No: TN-0090



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1 General

1.1 Purpose

This document contains SW release notes for Vision Remote Embedded Linux (VREL). These notes contains relevant information for end users that uses Vision Remote systems.

1.2 Common code base

The VREL is common for both VM-110 RU, VM-110 BU and VX-100 BU. Under each release there will be a comment for which platform the release is valid for.

2 Release history

VREL 24.02 (r1)

Date: 2025-01-02

VREL 24.02 is the first OS image released by Vision Remote that builds a custom Yocto Linux distribution on top of *Digi Embedded Yocto (DEY)* rather than using OS images from Digi mostly as-is.

The purpose of this transition is to improve how we handle software compatibility across devices and to prepare for a simpler and more robust software upgrade strategy as the project evolves.

Most of the changes included in this release come from Yocto 4.0 (kirkstone) and DEY 4.0.

Changes:

- **Linux kernel bumped from v5.4 to v5.15** Inherited from DEY 4.0. This set of patches from Digi has improved kernel security capabilites and better hardware support for the ConnectCore 6N.
- **Init system changed from SysVinit to Systemd** Inherited from Yocto 4.0 (kirkstone). This change enables more granular control of the booting process and better logging/toubleshooting capabilities at the cost of slightly slower boot times.
- **Bumped distributed Qt version from v5.13 to v5.15** Inherited from Yocto 4.0 (kirkstone). Testing indicates good compatibility with the previous release.
- **Firewall policy (`iptables`) changed to DROP** Changed default firewall policy from ACCEPT to DROP. This solves an issue where packets forwarded from the EG-Link port could mess with DNS behavior. Ports 22 (ssh) and 80/3000 (web interface) on the EG-Link port have been opened by default. Other ports must be opened manually by editing the configuration (`/etc/iptables/iptables.rules`). The Test Port remains less restricted. [BU only]

Added:

- **Updated network drivers** Added drivers for revised network hardware on the Digi ConnectCore 6N system-on-module. This addition is backwards- and pin compatible with the previously used ConnectCore 6 SoM.
- **OS-native drivers for backlight and display** Added kernel drivers for i2c backlight and display used on VM-110 RUs, allowing this hardware to be decoupled from libvisionlink in the future.
- **Systemd services for Vision Remote software** Added services for startup of VisionLink Server [BU] and VM-110 Dashboard [RU], replacing the old init.d daemon scripts. Also added services for logging of Vision Remote software.



Document No: TN-0090

Removed:

SysVinit (`init.d`) - Inherited from Yocto 4.0 (kirkstone). Removed SysVinit as it is no longer in use after moving to Systemd. `systemd-sysvinit` is included for compatibility to allow running legacy init daemon scripts if necessary.

Compatibility notes:

The following patches to other Vision Remote software has been updated and tested to support this release:

- * libvisionlink v2.2.2 (VM-110)*
- * VisionLink Server v2.1.2 (VM-110) | v1.3.13 (VX-100)
- * BU web interface v1.4.1 (VM-110 | VX-100)
- > *) VREL and libvisionlink v2.x currently not supported on VX-100 RU.

VREL DEY-3.0 (r4)

Date:

DEY 3.0 (r4)

Vision Remote has been using a Yocto Linux distribution provided by Digi up to and including this release ('dey-3.0-r4').

For more information about this distribution, see https://github.com/digi-embedded/metadigi.