How to enable Vehicle Signature in Vision Portal

Vision LPR · https://qa.flashparking.com/docs/how-to-enable-vehicle-signature-in-vision-portal/

Field	Detail
Article Title	**Flash Vision**: Enabling Vehicle Signature in the Vision Portal
Dev Task	20
Configuration Access	Internal Flash Support / Operations (Level 2 Support or Flash Admin with edit access to Site Configuration).
Firmware / App Version Requirement	**Flash Vision App** version 2.3.2 or higher
Known Limitations	• 8 FPS Limit: Enabling Signature automatically adjusts and locks the camera processing rate to 8 FPS to allocate processing resources for the Luxonis signature pipeline.• Detector Restart: Toggling this setting initiates a detector reboot.• Lane Scope: Changes apply at the detector level and affect all associated lanes.• Setting is hidden for older app versions (< 2.3.2).
Also Known As	Vehicle Signature, FVR Signature, Luxonis Signature Feature
Sales & Marketing Assets	N/A (Internal engineering & technical enablement)
L&D Course	N/A

Vehicle Signature provides secondary vehicle identification beyond the license plate text. When license plates are misread, dirty, obscured, or damaged, vehicle signature data acts as a fallback mechanism to match entry and exit transactions accurately, minimizing lost revenue and manual ticket reconciliation. Introduces a configuration flag within the Vision Portal allowing authorized Flash

users to enable or disable vehicle signature processing on supported Flash Vision Robots (FVR).

Requirements

- **Required Release Version**: Flash Vision App version v2.3.2 or newer.
- **Hardware**: Flash Vision FVR (Mark IV / Luxonis-enabled detector cameras).
- **Configuration Role**: Internal Flash Support / Operations (Level 2 Support or Flash Admin with edit access to Site Configuration).

How it Works

End-User Experience

The vehicle signature process is completely touchless and transparent to drivers:

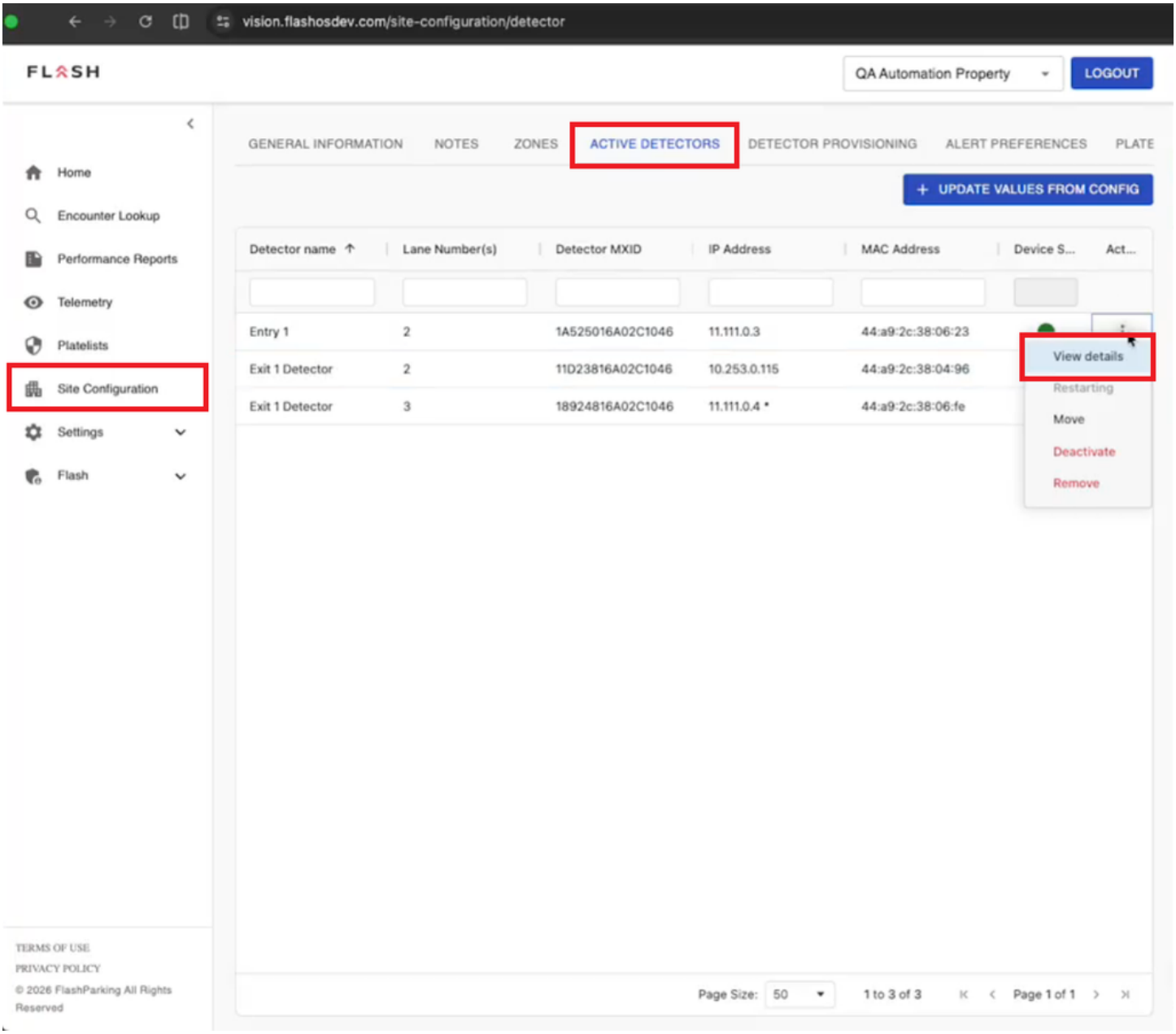
- As a vehicle enters an LPR lane, Flash Vision captures both plate images and high-dimensional vehicle signature attributes.
- If plate recognition encounters an edge case (e.g., misread character or unreadable plate), the backend leverages vehicle signature matching to correctly reconcile entry and exit encounters.

Operator / Admin Management

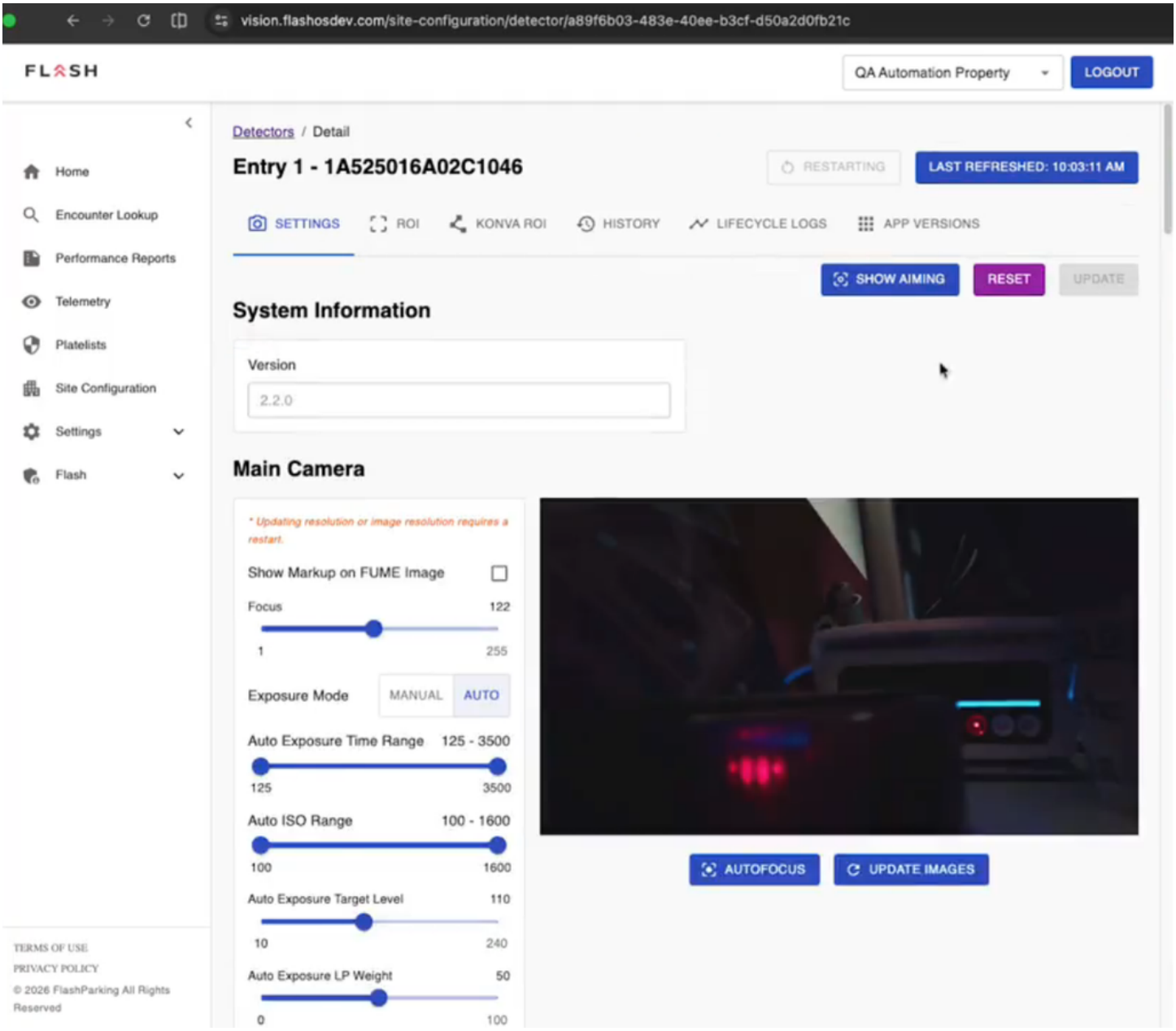
Authorized Flash users manage the feature directly in the Vision Portal at the detector and lane level.

Enabling Signature

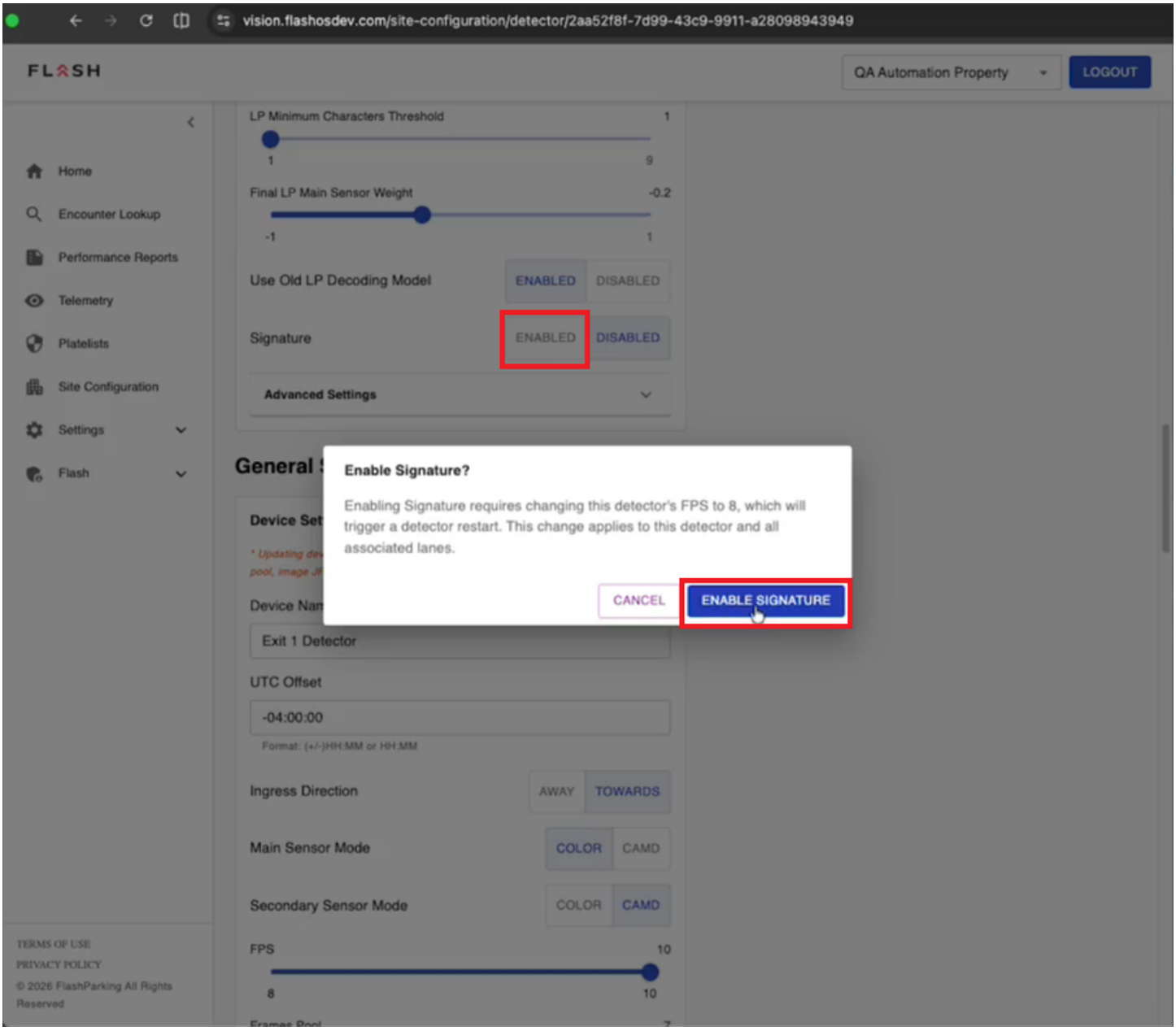
1. Log in to the **Flash Vision Portal**.
2. Navigate to **Site Configuration → Active Detectors**.



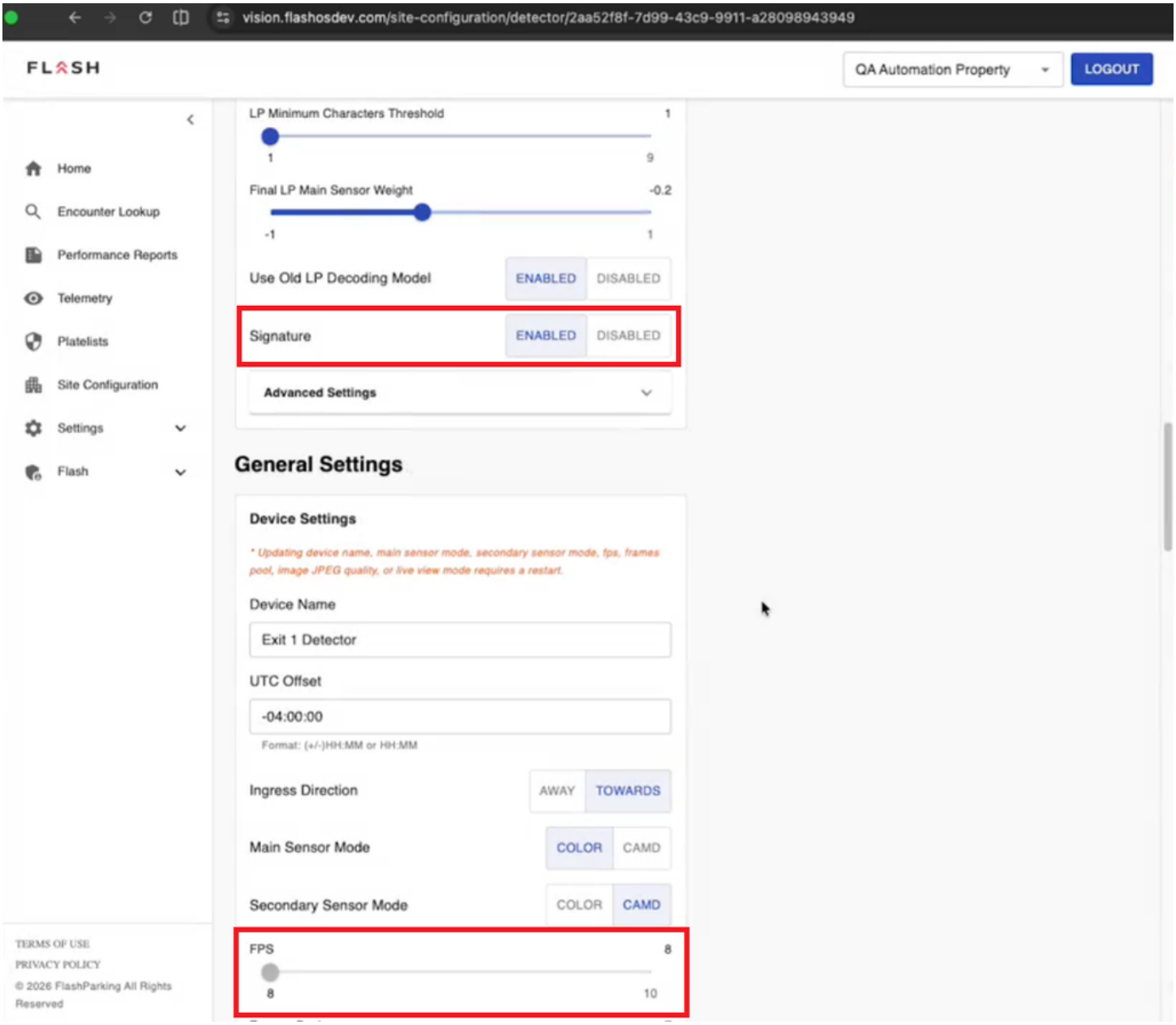
3. Select the target detector to open **Detector Settings**.



4. Scroll to the **Vehicle Monitoring** section.
5. Locate the **Signature** toggle (visible only on detectors running v2.3.2+).
6. Select **Enabled**.

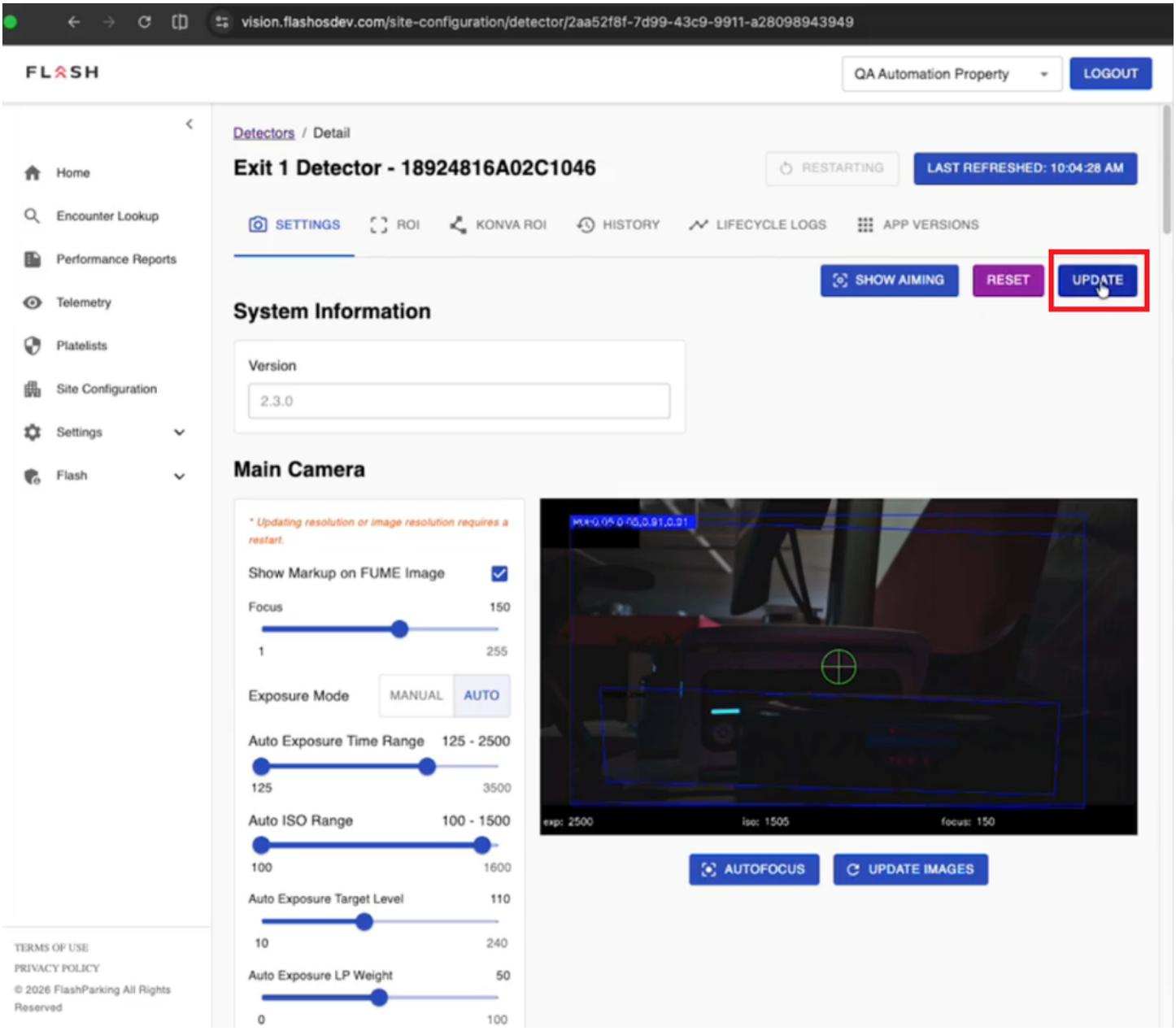


7. A confirmation modal will appear advising:
    - Camera frame rate will automatically adjust to **8 FPS** to support the feature.



- A detector restart will be triggered.
- Changes apply to the detector and all lanes associated with it.

8. Click **Enable Signature** in the modal, then click **Update / Save Settings**.



Disabling Signature

1. Open **Detector Settings → Vehicle Monitoring**.
2. Select **Disabled** for Signature.
3. Save/Update settings.
    1. The camera frame rate is restored to its previous value (e.g., 10 FPS).
    2. Standard restart confirmation occurs.

Implementation

Use Cases

- Edge-Case License Plate Reconciliation: Fallback matching when standard plate reads fail due to glare, weather, bent plates, or missing front/rear plates.
- Hybrid & Frictionless Parking: Guarantees higher confidence in entry-to-exit pairing without forcing parkers to stop or scan fallback tickets.
- Transaction Accuracy Improvement: Raises overall facility matching rates from baseline LPR (95–96%) into high-90s accuracy.

Compatibility List

- Flash Vision App v2.3.2+: Fully compatible. Displays the toggle and handles automatic FPS adjustment and restart payloads.
- Legacy Detectors (App < v2.3.2): Incompatible. The portal schema dynamically hides the Signature toggle, preserving legacy FPS and restart behaviors.