



Integrated e-Challan/ e-Ticket Management Software





INTEGRATED E-CHALLAN/ E-TICKET MANAGEMENT SOFTWARE

Videonetics Integrated e-Challan/ e-Ticket Management Software (ICMS) is an open architecture software that integrates with the Intelligent ITMS application suite. It enables efficient management of e-challans/ e-tickets generated to penalise traffic violations like red light/ stop line jumping, overspeeding, driving without seat belt/ helmet, use of cell phone while driving, triple riding etc. Additionally, it allows the operator to include other violations such as having a broken or non-standard number plate, as and when visually detected during the validation of challans/ tickets. ICMS also integrates with handheld terminal/ PDA for spot challan generation.

Highlights

- National vehicle database (NIC VAHAN) integration
- Ready APIs for integration with regional and international vehicle database
- Automated, semi-automated and spot mode of operation
- Secure web access
- Mobile user authentication and mobile device authorisation for HHT/ PDA
- Challan/ ticket traceability
- Detailed MIS reports and statistics
- Multiple challan/ ticket printing options
- Integrated with payment collection system and third party web portals

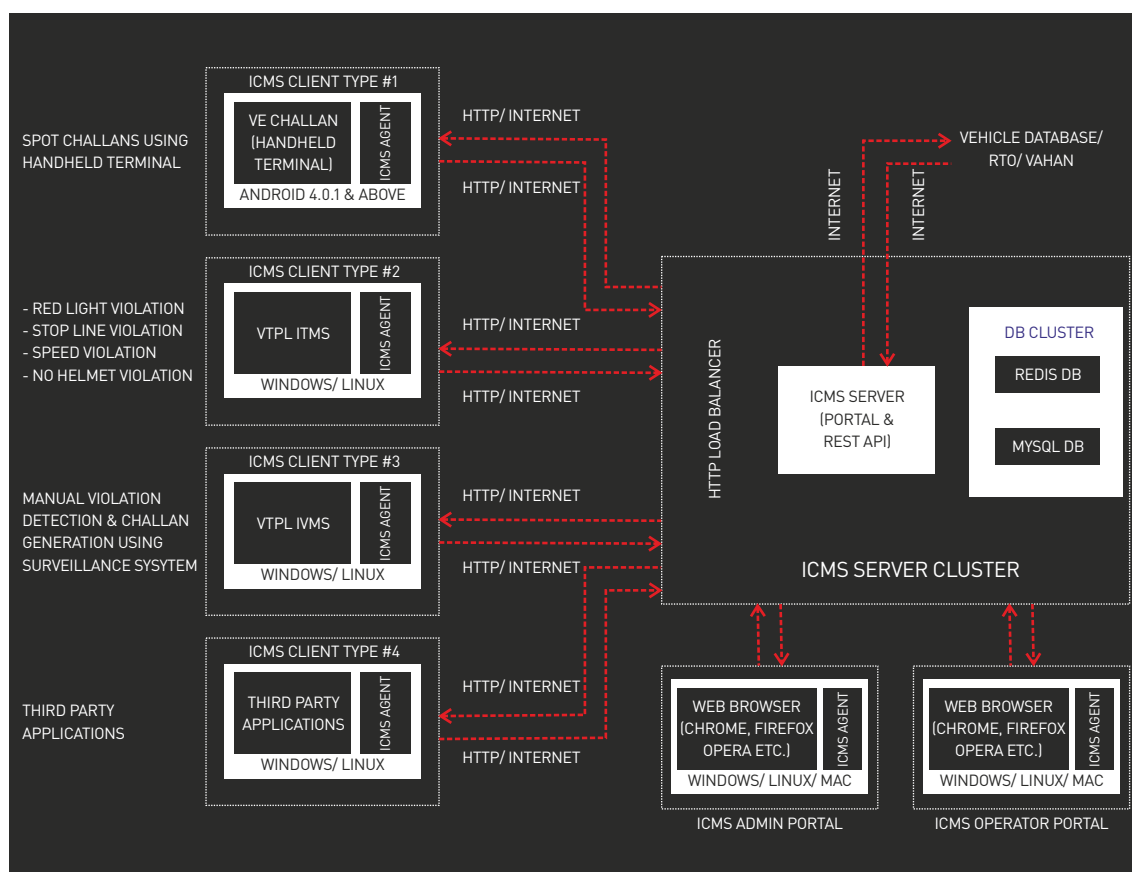
Violation	Terminal	Challan #	Vehicle #	Operational Zone	Vehicle Owner	Generated Time	Operator	Status	Fine Amount	Paid Amount	Data Source	Actions
Red Light Violation Detection	ITHS_BHOPAL	ICHSHP04H B910908May 201809226 AH	AB01CD2345	BoardOffice2	XOXO SHARMA	May 8, 2018 9:02:26 AM	BHOPAL SMART CITY (bhopalitsms)	Unpaid	500	0	ITHS Terminal	
Red Light Violation Detection	ITHS_BHOPAL	ICHSHP04CL 592208May2 018052644A H	XY01ZZ2345	BoardOffice2	ABCD SRIVASTAVA	May 8, 2018 8:56:44 AM	BHOPAL SMART CITY (bhopalitsms)	Unpaid	500	0	ITHS Terminal	
Red Light Violation Detection	ITHS_BHOPAL	ICHSHP04A H518408Ha y201808555 SAH	AB01ZZ2345	BoardOffice2	XYZ SINGH	May 8, 2018 8:55:55 AM	BHOPAL SMART CITY (bhopalitsms)	Unpaid	500	0	ITHS Terminal	

Different challan/ ticket search criteria



Unified Systems Architecture

The figure below shows overall systems architecture explaining the working of the software. It shows how the unified system takes inputs from handheld devices in the field, Intelligent Traffic Management System, as well as manual inputs from other surveillance systems to generate and manage challans.



■ Features

- Ease of operation
 - Intuitive UI for ease of operation
 - Central web-based interface for administration, user management, challan/ ticket management and payment status management
- Ease of installation
 - Web-based central application which can be easily installed in any web server
 - Android-based mobile app which can be installed in any compatible mobile device – smart phone, handheld device/ PDA
- Vehicle database integration
 - Integrated with NIC VAHAN database
 - Web API based framework available to integrate with local, regional and international vehicle databases
- Scalability
 - Web service based architecture to support receipt of data from different system
 - Client-server architecture is useful for parallel operation of multiple field devices
 - Central software for challan/ ticket management is scalable with IT infrastructure

■ Security/ Cyber security

- All the communication to and from the server is fully secured and protected to eliminate possibility of eavesdropping

■ User management

- Pre-defined user roles like admin, supervisor and operator available
- Role-based device user authentication

■ Challan/ ticket management

- Each challan/ ticket is identified by unique identifier assigned to it when challan/ ticket is generated
- Very large number of challans/ tickets can be uniquely identified and searched
- Authorised users can search the history of offences – by device, location, offender, device user, generation type

■ Challan/ ticket traceability

- Each challan/ ticket is identified by unique identifier for future references
- Challan/ ticket tagged to issuing officer's details
- Challan/ ticket with accurate time stamp
- Challan/ ticket generated using handheld device can be tagged with GPS location to accurately trace the location of offence

ITMS SYSTEM

नोटिस
 सर / मैम,
 Video Analytic System से वास्तविक पुलिस जहाँगीरवाद ने पहचान की है कि आप / इरादतन द्वारा वाहन नम्बर AB01CD2345 को चलेते हैं, निम्न स्थान / स्थिति / समय पर वास्तविक के निम्नो का उल्लंघन किया गया है जो निम्न प्रकार से मोटर वाहन अधिनियम 1968 के अन्तर्गत सजायित अवस्था है।

ध्यान वास्तविक
 जहाँगीरवाद
 भोपाल - 462008 (म.प्र.)
 फोन : 2443850, 267734

Challan Number	Vehicle Number	Vehicle Class	Date & Time of Detection	Date & Time of Generation
ICMSMP04AM51 9408May20180855 55AM	AB01CD2345	MCY	May 08, 2018 07:12:02 AM	May 08, 2018 08:55:55 AM




नियमों का उल्लंघन :-

<input checked="" type="checkbox"/> 1. सड़क का उल्लंघन	धारा 119/177	शमन शुल्क 500 रुपये
<input type="checkbox"/> 2. हेल्मेट धारण नहीं करना	धारा 129/177	शमन शुल्क 250 रुपये
<input type="checkbox"/> 3. स्टॉप लाइन का उल्लंघन	धारा 113(1)/177	शमन शुल्क 100 रुपये
<input type="checkbox"/> 4. अप्रत्याशित गति में वाहन चलाना	धारा 112-183	शमन शुल्क 1000 रुपये

इस हेतु आप शमन शुल्क 500 रुपये ध्यान वास्तविक जहाँगीरवाद भोपाल में, पारसी सिग्नल से 15 फीस के अन्दर जमा करवाकर, रसीद पत्रा करी, अन्यथा आप के विरुद्ध अप्रति वैधानिक कार्यवाही की जायेगी।

पत्नी,
 XYZ KUMAR SINGH
 0123, ABCD LANE
 EFG STREET
 मो : 99XXXXXXX

धारा पारसी
 ध्यान वास्तविक जहाँगीरवाद

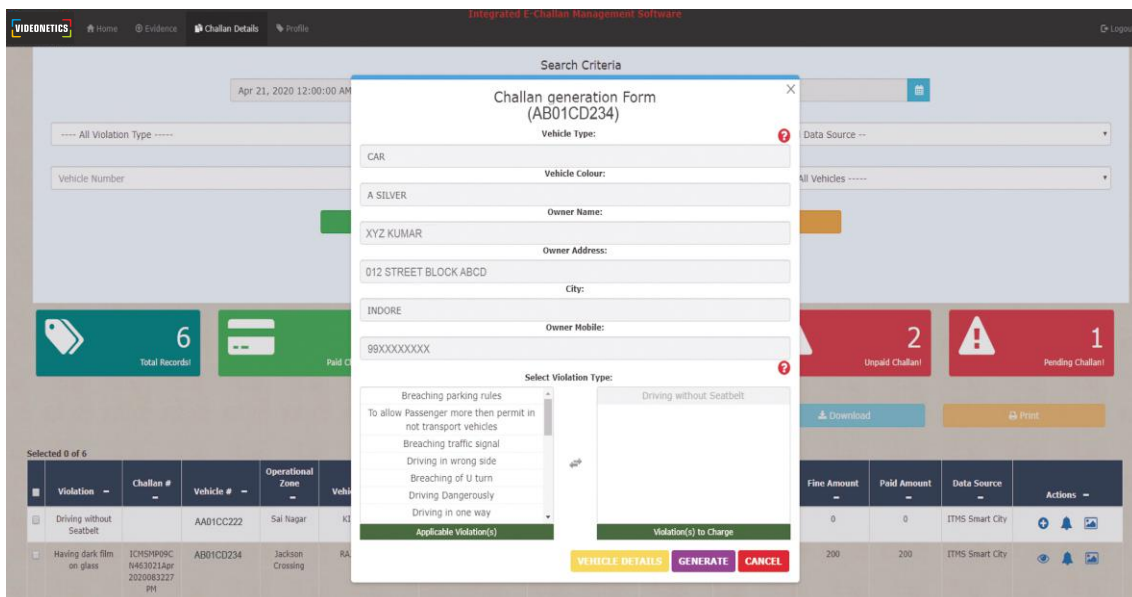
धारा :
 क्षेत्र :
 वाहन चलने का समय:
 पता : 10.30 - रात 07.00
 Lunch Time : 02.00 - 3.00
 रसिद अवकाश

■ Digital signature

- Challans/ tickets are signed digitally by the responsible authority

■ Detailed MIS reports

- Detailed MIS reports available from central location
- Standard reports readily available based on type of offence, location, officer, offender



The screenshot displays the 'Integrated e-Challan Management Software' interface. A 'Search Criteria' pop-up is active, showing details for vehicle AB01CD234, including its color (A SILVER), owner name (XYZ KUMAR), and address (012 STREET BLOCK ABCD, INDORE). Below the pop-up, a table lists violations, with 'Driving without Seatbelt' selected. The main interface shows a dashboard with statistics (Total Records: 6, Paid: 0, Unpaid: 2, Pending: 1) and a table of generated challans.

Violation	Challan #	Vehicle #	Operational Zone	Vehi
Driving without Seatbelt	AA01CC222	Sai Nagar	KI	
Having dark film on glass	ICMSRP09C 1461012Apr 2020083227 PM	AB01CD234	Jackson Crossing	RA

- Pictorial evidence
 - Each challan/ ticket is embedded with event images as evidence of the offence in central mode of operation
- Manual challan/ ticket generation
 - Upload images and text to generate challans/ tickets in semi-automated mode

- Web-based data entry for manual challan/ ticket generation
- Control room officers can generate e-challans/ e-tickets for the violations observed in Videonetics IVMS footage. Event image and video clip from Videonetics IVMS is used as evidence

■ Additional features in spot operation using handheld devices

- Device management
 - Device is pre-registered and managed centrally
- Security
 - OTP (one-time password) based user authentication
- Device hot listing
 - Hot listing and black listing of devices by IMEI from central location by authorised personnel
- Spot challan/ ticket
 - Spot challan/ ticket is generated by traffic officer at point of violation

- Offence history
 - For an offender, display of detailed history of previous offences, if any
- Frequent offence detection
 - Displays frequent offence types in hand-held devices
- Contextual help
 - Full context-based help is available to the officer for easy operation of the software
- Offline operation
 - Offline session per user is maintained in the handheld device. Once authenticated, the user can continue to work even if connectivity is lost



Making the world
a safer, smarter, happier place.

Videonetics's Unified Video Computing Platform™ helps you make sense of surveillance, by providing you with an end-to-end solution for a wide range of applications. The platform is powered by our Artificial Intelligence and Deep Learning engine, which is trained on humongous data sets, making our solutions incredibly robust and smart. All our products and solutions are integrated yet modular, ONVIF compliant, OS and hardware agnostic, scalable and interoperable.

Videonetics has been ranked #1 Video Management Software provider in India, and among the top 5 in Asia (OMDIA Informa Tech 2021). We remain driven by innovation, and committed to making the world a safer, smarter, happier place.

Providing an end-to-end solution for a wide range of applications



Intelligent
VMS



AI Enabled
Video Analytics



Facial
Recognition



Intelligent Traffic
Management System



VCPaaS™
Video Computing
Platform as a Service

Technology leader across verticals, in different parts of the world



CITIES &
NATION



AVIATION &
TRANSPORTATION



COMMERCIAL
BUILDINGS



INDUSTRIAL



FINANCIAL
& LEGAL



EDUCATION



CRITICAL
INFRASTRUCTURE



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India | Singapore

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