



Cast software configures, manages, and monitors the ongoing performance and operation of Vix Smart Gates and platform validators. Cast utilises the latest technology to offer a sophisticated and up-to-date rail device management solution.

Features and Benefits

Stay Up-To-Date from Automated Communications

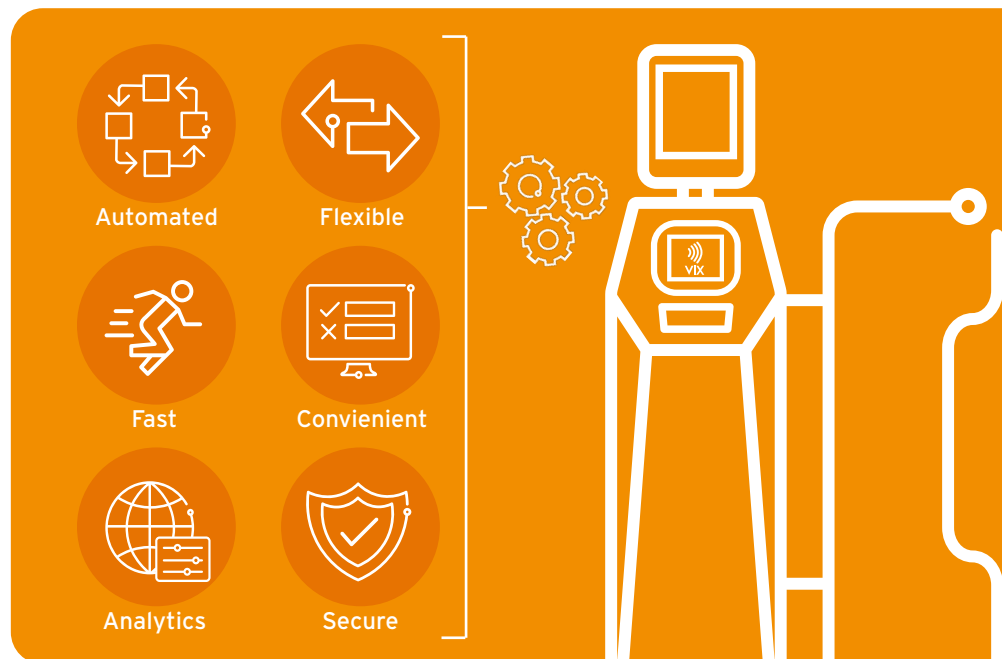
Cast offers sophisticated device monitoring to allow operators to always be in-the-know about how their gates and platform validators are performing. The monitoring features include helpful and frequent email alerts such as device alert emails and daily device status emails which keep operators informed and up-to-date about how their estate is currently operating.

Fast Operation for Configuration Updates and ITSO Fareset Management

Device configuration is made easy with Vix Cast. Gates and validators can be configured to validate ITSO and barcodes using the Cast portal, with updates taking effect within minutes or scheduled ahead of time. Gate schedules can also be defined, allowing automatic gate mode switching to take place, and making these types of operations more convenient and faster than ever before.

Sophisticated Data Reports for Operator Analysis

Operators can analyse and integrate the latest data easily and quickly by using Cast's range of data reports. These include gate status reporting, ticket data reporting and a device monitoring dashboard. The data reporting suite allows all relevant data from the gates' operation to be captured and analysed by operators, so improvements and maintenance can be implemented without fuss.



Flexibility as Standard

Cast is built to adapt to business needs, allowing users to fine-tune alerts, configure maps and reports, and define service hours for rail device alerts. Operators can grant access to functionality in Cast as they see fit to users within their organisation, and work with Vix to get Cast set up optimally for their business.

Convenient management through a web browser

Operators can monitor and control devices easily via the Cast Dashboard and Rail Monitoring Screen. Cast software provides remote gate configuration which allows gates to be monitored and controlled conveniently from back-office and on-station locations, fitting in with operator's day-to-day roles and increasing productivity.

Security Built-In

Cast possesses a number of high-end security features to ensure data integrity. Certificate pinning and support for TLS 1.2 ensure devices will only connect to Cast, and device management ensures only authorised devices are able to connect. With no limit on user seats, Cast expects each user to have their own account and user activity is audited. The cloud-native aspect of Cast allows regular, frequent backups and fast recovery to recent restore points. This ensures that Cast operators can work confidently with the system without worrying about compromising their data.



Technical Specification

Function	Items
Dashboard	The dashboard provides an at-a-glance summary of key information, including firmware, fareset, and ITSO message versions reported by devices and allowing quick identification of devices that have not yet updated. It also provides a snapshot of all devices connected to Cast. Error and warning thresholds can be configured.
System Requirements	Cast Portal The Cast Portal works with Chrome, Safari, Edge, and Firefox. Depending on the Cast functionality being used, a mouse and keyboard are recommended. Device network connectivity Devices require a breakout to AWS or 4G connectivity in order to connect to Cast. Rail gates at the same location must be networked together.
Company and user management	Cast offers management of companies, including defining locations where devices are installed, and specifying positions at each location for devices. Custom rail maps can be configured, allowing large networks to be broken up and making management easier. User accounts are managed within Cast, with support for custom roles based on a comprehensive list of permissions. Scheduled tasks can be defined in Cast and run at specific times or frequencies, for specific companies or for the whole system. Tasks include generating and sending status emails, cleaning and archiving old data, and running import and export tasks.
ITSO	Cast is used to configure ITSO product acceptance on Vix devices, and serves as a conduit for ITSO messages between POST and HOPS. Vix devices with Cast are ITSO certified (ITSO certificates CO0203 and CO0223). Cast supports multiple HOPS within the same Cast instance, and supports TLS 1.2 with HOPS certificates where these are required. Cast also supports configuration of a failover HOPS where one is available. Cast provides an overview of all ITSO messages between HOPS and POST, allowing the visibility of ITSO message flow, download, and inspection of messages.
Validation configuration and Fareset Management	Cast uses a fareset to define products accepted by Vix devices. The fareset can be augmented with break of journey, break of zone, and out of station interchange files, necessary for support of these features. Cast also supports generation of required break of journey files. Rail Barcode ticket types (FTOT) are imported from IDMS and can be mapped to specific fare rules or optionally wildcarded. eTVD configuration is also managed in the fareset. Cast supports both a test phase and a pilot phase (targeting a limited selection of devices) for rolling out of faresets. Faresets are compiled with device firmware, and can be configured to take effect in the future, or activated immediately.
Asset Management	Cast provides management of devices. This includes authorising new devices and deactivating old devices. Cast will prevent devices from going into service if they are not configured correctly, and will not allow devices to connect if they are not authorised. Remote commands can be prepared for devices or groups of devices, including logfile uploads, screenshots, ISAM management commands, configuration file changes, and reboot. These are collected and executed by the devices the next time they connect
Rail Monitoring	Cast provides a comprehensive overview of rail estates, giving an easy to understand view of any operational issues and allowing management of Vix rail devices. A number of health checks (including validator status, ITSO status, EMV and barcode status) are carried out every time a device communicates with Cast, with alerts clearly visible to users and alert emails sent to specified users Where alerts have been acknowledged by Vix engineers, this is clearly visible. Rail alerts can also be extensively configured, allowing for fine tuning of alerts based on business needs. Rail gates are monitored and controlled from the Rail Monitoring screen, allowing mode changes within seconds.
Reporting	Cast offers both a Smart Gate All Tickets Report and a Smart Gate Status Report. Enabling the monitoring of gate activity and ticket usage trends. Report output is available in .xls and .pdf formats.