LUMD VAST.NG

Introduction

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Introduction

- Unique Micro Design's VAST Next Generation (VAST-NG™) is a cloud based platform that provides events and venues such as entertainment complexes, football stadia and racecourses with a scalable and flexible patron access control solution
- VAST-NG™ follows on from the original Venue Access Systems for Turnstiles (*VAST*), originally developed as an on-premises server based system
- It provides venues their own access control infrastructure, independent of ticketing providers
- It also provides other benefits such as enhanced reporting, monitoring, control and integration to other sub-systems



Key Features

- Cloud based solution accessible anywhere
- Event may operate without VAST-NG™ Cloud access* i.e. the system can operate with no or poor internet connection
- Management, operation and administration functions are performed through a web browser interface minimal training
- Manages and tracks ingress to controlled areas, attractions, events and journeys fine detailed monetisation opportunities
- Real-time voiding and re-issue of tickets independent of ticketing provider
- Multi-user system with security access levels
- · Module based enable functionality as required, pay for what you need
- Ready integration with third party systems through published VAST-NG™ APIs protection of investment in other services
- Accepts multiple ticket sources, including VAST-NG™'s ticketing modules ticketing provider independence
- Open TCP/IP and "legacy" VAST™ infrastructure make use of new technology whilst protecting investment in legacy hardware
- Real time control, monitoring and management visibility of current conditions for OH&S, resource allocation
- Supports fixed turnstiles, handhelds and BYO devices invest to suit your needs
- May be customised to meet each implementation's unique requirements

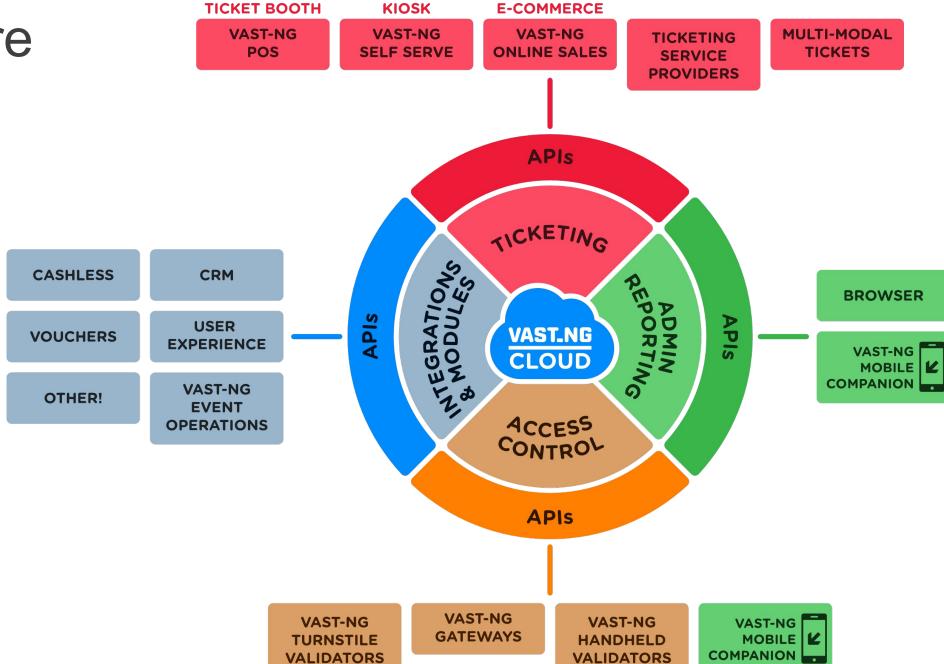


Ticketing

- Ticket information is generated internally by VAST-NG and/or externally e.g.:
 - Ticketing Service Providers
 - Ticketing resellers
 - On-line ticket sales
 - Ticket Booths
 - Self Serve Kiosks
- This ticket data is used by VAST-NG™ Cloud to manage access control
- VAST-NG™ can also manage on-the-day (i.e. real-time), ticket replacement and cancellation *independent* of the ticketing source. For example, to deal with a lost ticket or forgotten membership card.
- Powerful ticket type configuration allows any commercial model to be implemented e.g. multi event tickets, multi patron tickets, user defined expiry mechanisms



Architecture





VAST-NG™ - Cloud

- VAST-NG™ Cloud Based Access Control Platform
 - Holds tickets attributes
 - Records all access and ticket usage attempts
 - Provides real-time statistics*
 - Extensive reporting
 - Device management (e.g. turnstiles, kiosks)
- APIs mechanism for interfacing to other applications
 - Access Control communicates with VAST-NG™ turnstile and handheld validators
 - Control & Monitor monitor, configure and control hardware
 - Ticket Sales input from third parties
 - Additional functionality, e.g. CRM integration

^{*} Optional modules may be required



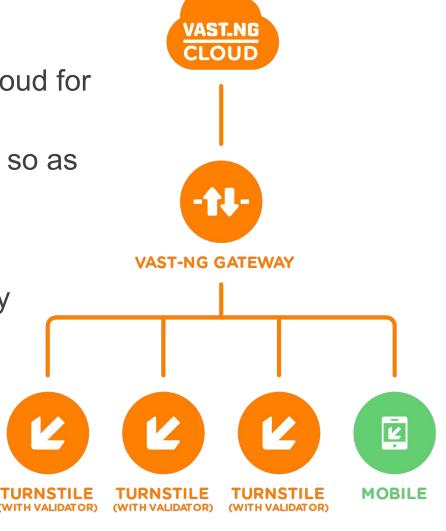
Ticketing

- VAST-NG™ Online Sales
 - On-line sales via e-commerce web site
- VAST-NG™ POS (Ticket Booth)
 - Point of Sale system for selling tickets at the venue
- VAST-NG™ Self Serve
 - Allow patrons to purchase on the day tickets from self service kiosks at the venue (EFTPOS and cash options)
- Ticketing Service Providers
 - APIs allow third party providers to integrate to VAST-NG™
 - Custom integrations developed as required
- Multi-Modal Ticket
 - Use other tokens (e.g. airline, attraction, bus and companion tickets) to gain entry



Access Control

- VAST-NG™ Gateways
 - VAST-NG Gateways communicate with VAST-NG Cloud for ticket feed and reporting
 - Provides local intelligence for VAST-NG™ Validators so as to be able to operate offline
- VAST-NG™ Validators
 - Use unified VAST-NG™ API that gives great flexibility
 - VAST-NG™ Turnstile Validators for fixed Turnstiles
 - Can integrate to existing VAST "legacy" turnstiles
 - VAST-NG™ Handheld Validators for staff use
 - VAST-NG™ Mobile Companion for ad hoc use





Modules

- Published VAST-NG™ REST/JSON APIs provide mechanism for adding internal and external functionality
- Modules on the road map:
 - Client provided CRM Provide controlled member access and loyalty point accrual
 - Cashless adds "cash" value to ticket
 - Market Redemption enables ticket to be used as a redemption voucher
 - User experience lucky patron, video streams to turnstiles, are my friends here
 - Persons of Interest report when specified tickets are seen
 - Limited by imagination only!



Administration/reporting

- Standard web browser interfaces to VAST-NG™ Cloud
 - Authorised access to the system from anywhere in the world at any time
 - Dashboards and reports (e.g. attendance, occupancy, gate usage, statistics)
 - View status of tickets, turnstiles and gates
- VAST-NG Mobile Companion
 - Provides mobile friendly and controlled access to onsite staff during an event
 - Ticket queries, statistics
 - Can be used as a low throughput validator



Thankyou!

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