AZZIDO - G Cloud SaaS Service Description

Overview

Azzido is a cloud-native, modular platform designed to deliver trusted, real-time passenger information across complex transport and public environments. It unifies data ingestion, intelligence, orchestration, and edge delivery into a single, resilient information ecosystem that ensures passengers and operational teams receive accurate, consistent, and timely information—especially during disruption.

Built for scale, resilience, and operational efficiency, Azzido supports multi-channel communication across displays, public address, mobile, web, and third-party systems. The platform enables transport operators and infrastructure owners to manage live information centrally, automate decision-making through configurable business rules, and maintain service continuity even when upstream systems or connectivity are degraded.

Azzido is designed to operate across station environments, network control centres, and distributed device estates, supporting both modern digital assets and legacy infrastructure. Its modular architecture allows customers to adopt individual components or deploy the full platform as an integrated solution, aligned to operational maturity, budget, and transformation timelines.

Service Scope

The Azzido service encompasses:

- Secure cloud-hosted application services
- Real-time data ingestion, processing, and orchestration
- Distributed edge delivery and presentation

- Content, campaign, and control tooling
- Integration with operational, timetable, and third-party systems
- Monitoring, audit, and operational assurance capabilities

This document outlines the key platform components, their capabilities, and how they work together to deliver a trusted, scalable, and future-ready information service.

Platform Objectives

Azzido is designed to:

- Improve accuracy, consistency, and trust in passenger information
- Reduce manual workload through automation and orchestration
- Strengthen operational resilience during disruption
- Enable scalable, network-wide information management
- Support legacy-to-modern migration without service compromise
- Deliver a secure, compliant, and auditable information platform

Document Structure

The following sections describe the core components of the Azzido platform, including their role, functionality, and operational benefits:

- Azzido Core — Intelligence & Orchestration
- Azzido Cloud — Application Layer
- Azzido Edge — Secure Delivery & Presentation

AZZIDO CLOUD

Real-Time Information Network

ROLE BASED APPLICATIONS PLATFOMR

At the heart of Azzido Cloud are a suite of role based applications that give operators real-time visibility and control of their services, cloud connected assets and insight on how they are performing.

CONTROL TOWER
Train Service Management

CAMPAIGNS
Media & Messages

QuAD
Insights and Dashboards

Together, these applications create a fully integrated digital information ecosystem. Operators can manage real-time services, deliver proactive passenger communications, and measure performance through one cohesive platform — ensuring the right information is delivered to the right people, at the right time.

CONTROL TOWER

Train Service Management

Control Tower is the central operations interface within the Azzido Cloud platform, designed to give operators a single, unified view of their network. Delivered through a secure, browser-based application, Control Tower enables real-time management of train services, station assets, disruptions, campaigns, passenger messaging and public address from one intuitive environment.

By consolidating multiple legacy systems into a single platform, Control Tower significantly reduces operational complexity, improves responsiveness, and strengthens service resilience. Its modern interface allows staff to act quickly and consistently, whether managing routine operations, handling service changes, or responding to disruption.

With full integration to industry data sources such as Darwin and ITPS, TfL Unified API. TD.net and external feeds including weather and events, Control Tower ensures that accurate, consistent, and accessible information is delivered to passengers at every touchpoint. Remote monitoring and asset control further reduce downtime and on-site interventions, driving efficiency and lowering operational costs.

KEY CONTROL TOWER FEATURES

Trains

The central hub for all train service actions. Users can delay, cancel, delete, reinstate, hide, or create services; change platforms; amend train formations and facilities; and add service comments. Changes can be applied individually or in bulk. Flexible filtering allows operators to view all trains on the network, those at a specific station, or services on a defined line of route.

Disruptions
Enables rapid switch into Disruption Mode, presenting services in two lists: *Unconfirmed* and *Confirmed*. Users confirm, amend, or cancel services in real time, all cancelled trains or those with unknown delays are excluded from passenger displays and announcements. Disruptions can be used independently or in tandem with Incidents. Default messages and announcements allow fast communication during the initial phase of a disruption, while more tailored messaging can be applied as the situation develops.

Incidents (optional)
Designed to support compliance with the PIDD framework, the Incidents module enables operators to create *Problem–Impact–Advice* messages for passengers. Features include an incident timeline for quick updates, configurable default messages and announcements, and direct integration with Disruption Mode. Through the Incidents API within AZZIDO CONNECT t Incidents API, information can also be published to websites, apps, or staff devices (browser, mobile, or tablet).

Basket (Optional)
Adds enhanced workflow functionality to the Trains module. The basket allows users to prepare complex, multi-train changes in advance without immediate submission. It can also serve as a 'to-do' list, holding services that will require amendments at a later stage.

Delay Repay (Optional)
Automates passenger communications related to compensation entitlement. Configurable triggers—set at TOC or station level—generate targeted messages on displays and announcements over the PA when delays reach thresholds that may entitle passengers to Delay Repay compensation.

Next Fastest Trains
Provides customers with clear advice on their next fastest journey options. The module operates in two parts:

- A Next Fastest Departure board to a fixed list of key destinations.
- Dynamic messaging and announcements advising alternatives when services are cancelled or severely delayed, directing passengers to the next viable train(s).

Campaigns (pop-out)
Enables the management and creation of messages, media and announcements from within the Control Tower application. Campaigns can be created on the fly or in advance and saved to the champaign library. See the Campaign overview for a detailed list of capabilities.

CAMPAIGNS

Media & Messages

The Campaigns application is a powerful scheduling and targeting tool for planned and reactive communications. It enables operators to create, manage, and distribute notices, media, and announcements to specific screens, stations, routes, or the entire network—ensuring passengers receive timely, consistent, and relevant information.

Delivered through a browser, Campaigns can be used as a module within Control Tower or as a standalone tool for marketeer and staff based outside of the ROC. Operators gain clear visibility of content, locations, and timings, supported by an integrated Content Library for reusable templates that streamline creation and maintain consistency. The EDF Bridge (Azzido output for legacy displays) further extends compatibility to legacy dot-matrix displays, eliminating double entry and preserving quality, this is particularly useful during migration away from legacy displays.

With advanced campaign settings, operators retain full control over when, where, and how content is displayed. Campaigns can be scheduled in advance, repeated at defined intervals, and delivered in flexible formats such as full-screen, text-only, or media overlays. Automated triggers allow proactive messaging during disruption, extreme weather, or major events—reducing workload for staff while ensuring passengers are always kept informed.

Content Library

A central repository of reusable templates for notices, media, and announcements. This streamlines campaign creation by reducing duplication of effort, while ensuring tone, style, and branding remain consistent across all communications. Operators can quickly adapt templates for different scenarios, saving time and maintaining quality under pressure.

Legacy Support

Full compatibility with legacy dot-matrix displays is maintained through the EDF Bridge, avoiding the need for duplicate entries when publishing content. Operators can preview messages before deployment, ensuring accuracy and consistency across both modern digital screens and older display technologies. This allows networks to benefit from Azzido Campaigns without needing to immediately replace existing assets.

Advanced Scheduling

Operators have full control over campaign timing, with options for precise start and end dates, repeat intervals, and day-of-week publishing. Campaigns can be targeted to individual screens, specific groups, stations, or across the network as required. Flexible display formats—including full-screen, text-only, or media overlays—support varied use cases, while campaigns can also be tied to operational modes such as *Disruption* or *Recovery* for rapid, context-specific deployment.

Triggers

Campaigns can automatically triggered by live operational or environmental data, using predefined rules and thresholds. For example, hydration reminders during heatwaves or safety alerts during

adverse weather can be issued without operator intervention. This ensures timely, proactive, and consistent messaging, reducing manual workload for staff while improving the passenger experience.

QuAD

Insights and Dashboards

A browser based dashboard tools surface providing operators with transparent performance and analytics metrics, audit trails, and reporting aligned to regulatory frameworks such as PIDD. QuAD dashboards enables operators to build role based outputs such as Gaps in Service to help maintain services during disruption or campaign expiry notices.

Performance Dashboards

A browser-based environment giving operators real-time visibility of network performance, service delivery, and communication effectiveness. Dashboards present clear, role-based views that highlight operational priorities such as *Gaps in Service*, ensuring issues can be identified and addressed quickly.

Analytics & Metrics

QuAD provides detailed analytics on both operational and passenger-facing communications. Metrics can be filtered by line, station, service, or campaign, giving operators actionable insights into service quality and the effectiveness of messaging.

Audit Trails

Every action taken within Azzido Cloud is tracked, producing comprehensive audit logs that support transparency and accountability. These trails not only underpin compliance but also allow operators to review decision-making during disruption and refine future responses.

Regulatory Reporting

Reporting is aligned to industry frameworks such as PIDD, helping operators demonstrate compliance while maintaining a consistent, evidence-based approach to service quality. Configurable outputs can be tailored for different stakeholder groups, from frontline teams to executive management.

AZZIDO CORE

Ingest & Orchestrate

Azzido Core — Intelligence & Orchestration Layer

Azzido Core is the intelligence and orchestration engine at the heart of the Azzido platform. It ingests live operational data from multiple sources, applies configurable business rules, and transforms raw inputs into trusted, coordinated passenger information across displays, audio, and digital channels. By centralising data processing and decision logic, Azzido Core ensures consistent, accurate, and timely information delivery across the network—especially during disruption or complex service scenarios.

Delivered as a secure, cloud-hosted service, Azzido Core operates as the central decision layer within Control Tower and supporting applications. It enables operators to manage complex data flows, prioritise messages, and automate responses to real-world events. Through intelligent orchestration, Core reduces manual intervention, improves operational efficiency, and strengthens passenger trust by ensuring information remains aligned across all touchpoints.

Azzido Core supports integration with real-time data feeds such as timetables, Darwin, signalling, vehicle tracking, and third-party operational systems. Its rules engine enables operators to define how information should behave under different conditions—such as delays, platform changes, short formations, or disruption—ensuring outputs remain consistent, relevant, and context-aware.

Data Ingestion & Normalisation

Azzido Core aggregates live and static data from multiple upstream sources, normalising inputs into a unified model. This ensures consistent interpretation of timetable data, service alterations, disruption events, and operational updates, regardless of originating system. Built-in validation and filtering improve data quality and reduce the risk of conflicting or misleading passenger information.

Business Rules Engine

A configurable rules framework enables operators to define how information should be prioritised, formatted, and distributed across channels. Rules can manage message precedence, service recovery logic, disruption handling, and customer messaging tone. This allows organisations to align outputs with operational policies, regulatory requirements, and passenger communication standards.

Orchestration & Channel Coordination

Azzido Core coordinates information delivery across multiple channels—including displays, public address, mobile, and web—ensuring messages remain synchronised and consistent. When conditions change, Core dynamically updates outputs to prevent conflicting information and maintain a single source of truth across the network.

Automation & Event-Driven Logic

Core supports automated responses to live operational triggers such as delays, cancellations, platform changes, or environmental conditions. Event-driven workflows reduce manual workload by generating and updating passenger information automatically, ensuring rapid, accurate communication during high-pressure scenarios.

Resilience & Continuity

Designed for high-availability environments, Azzido Core maintains continuity of information even during partial data outages or upstream system degradation. Cached data, fallback logic, and prioritisation rules ensure passengers continue to receive reliable and meaningful updates when full data feeds are unavailable.

Auditability & Control

Operators benefit from full visibility of data inputs, rule execution, and output decisions. Logging, monitoring, and audit trails support operational assurance, incident investigation, and governance requirements, providing confidence in how passenger information is generated and managed.

AZZIDO EDGE

Embedded App

Azzido Edge — Secure Delivery & Presentation Layer

Azzido Edge is the secure edge computing layer of the Azzido platform, responsible for processing, validating, and presenting trusted passenger information at the point of delivery.
Deployed on enrolled devices at stations, on vehicles, or in operational environments, Edge ensures information is delivered reliably to displays, public address systems, and other passenger touchpoints—even when connectivity to the cloud is limited or disrupted.

Operating as the final mile of the Azzido information chain, Edge receives orchestrated outputs from Azzido Core and Cloud, applies local validation and fallback logic, and renders content in real time. This architecture ensures continuity of service, low-latency performance, and consistent presentation across heterogeneous device estates.

Azzido Edge supports modern digital display technologies as well as legacy systems, enabling phased migration strategies while maintaining consistent information quality. Local processing reduces reliance on constant upstream connectivity, strengthening resilience and ensuring passengers continue to receive accurate, timely updates during disruption or network outages.

Secure Local Processing

Edge securely processes information locally on each enrolled device, validating incoming content before presentation. This protects against data inconsistencies, reduces latency, and ensures that only trusted, verified information is displayed or announced.

Resilience & Offline Continuity

Designed for high-availability environments, Azzido Edge maintains service continuity during partial or full connectivity loss. Cached schedules, fallback messaging, and last-known-good content ensure passengers continue to receive meaningful information even when upstream data feeds are degraded.

Device & Display Compatibility

Azzido Edge supports a wide range of output technologies, including high-resolution digital displays, LED mainboards, audio systems, and legacy dot-matrix devices. This enables consistent information delivery across mixed estates and reduces the need for immediate hardware replacement during modernisation programmes.

Real-Time Rendering & Playback

Edge handles the real-time rendering of dynamic content such as service changes, countdowns, platform alterations, disruption messages, and multimedia campaigns. Content is optimised for local screen resolution, aspect ratio, and performance requirements to ensure clear, legible, and timely

presentation.

Health Monitoring & Remote Management

Azzido Edge provides continuous device health reporting, performance monitoring, and remote management capabilities. Operators can detect faults, monitor uptime, and manage updates across large distributed estates, reducing maintenance overhead and improving operational reliability.

Security & Integrity

All communications between Edge devices and cloud services are encrypted and authenticated. Role-based access controls, secure update mechanisms, and tamper-resistant configurations ensure system integrity and compliance with operational and information security requirements.

Operational Assurance

Edge logs content playback, data updates, and system events, providing full auditability and operational transparency. This supports fault investigation, service assurance, and performance reporting across the device estate.

Summary

Azzido is more than a software platform—it is a trusted information ecosystem designed to support operational excellence, service resilience, and superior passenger experience. By unifying intelligence, orchestration, and delivery in a single SaaS platform,

Azzido empowers organisations to move faster, operate smarter, and communicate with confidence. Through structured discovery, operators can cost-effectively define requirements, validate use cases, and establish a scalable roadmap aligned to operational priorities and budget.

Lets discuss your requirement and start making a difference.

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