Caltta

Convergent Voice

Single call, group call, hybrid group call, multiple selection call, dynamic regroup, barge-in, forced release, status check, multi-screen display, recording, and playback

Convergent Position

Positioning, box select call, box select video, Geofence, and layer

Convergent Video

Video dispatch functions like video-to-wall, video pull-up, video distribution, recording, playback, and remote PTZ

It can be integrated and interconnected with Safe City, Xueliang Project, 340M Image Transmission, 3/4G Image Transmission, LTE Private Network Transmission, Video Conference System, UAV Image Transmission, Law Enforcement Recorder and other systems.
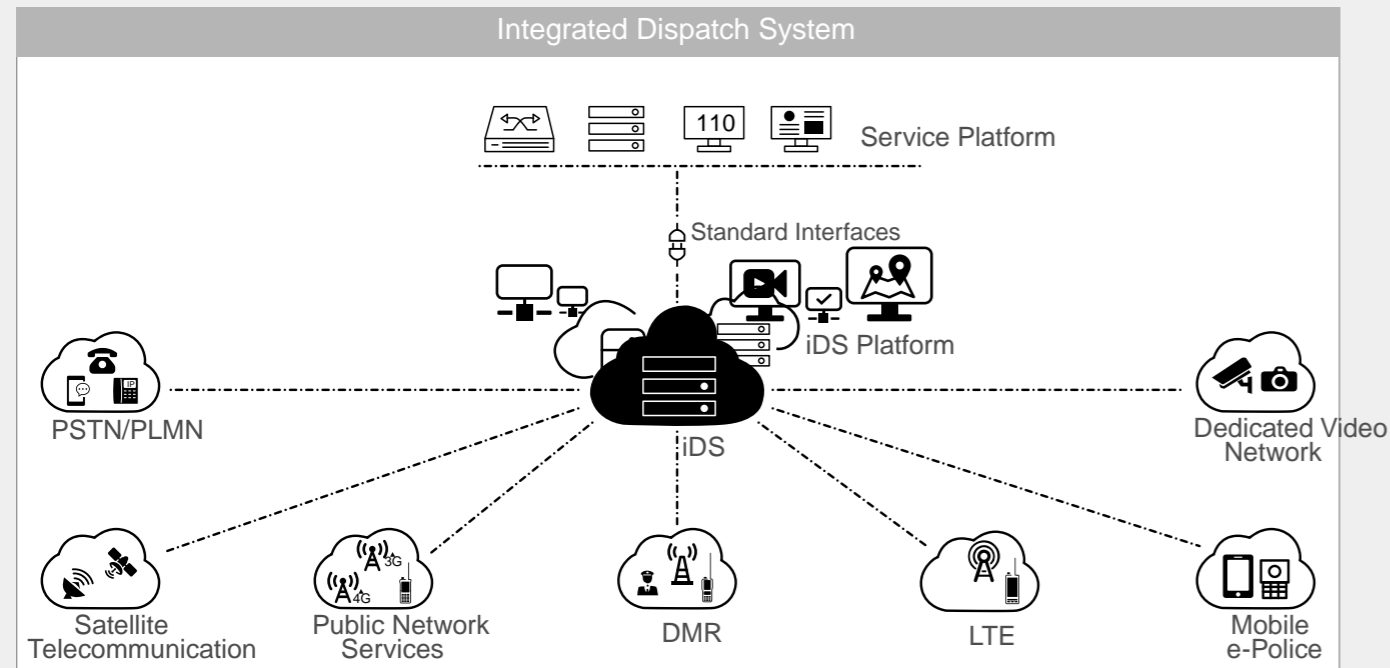
ConvergentMessege

Transmission and receiving of messages such as text, voices, pictures, short videos, and files

iDSintegrated Dispatching System

With the rapid development of information communication and computer network technologies, public security communication has evolved from a simple use of wired telephones and wireless walkie-talkies to a comprehensive application of wired, wireless, satellite, network, and video communication technologies. So it is imperative to integrate various communication means to build an integrated communication system with strong information support and comprehensive analysis and judgment.

Introduction

The integrated communication & command dispatch platform self-developed by Caltta is connected by multiple island systems such as DMR, ZiLTE, public network intercom, mobile e-police, and video network to realize unified command and dispatch of the systems. The platform features a powerful converged communication capability and realizes cross-island service interconnection to connect individual island networks.

Integrated Dispatch System

110
Service Platform

Standard Interfaces

iDS Platform

PSTN/PLMN

iDS

Dedicated Video Network

Satellite Telecommunication

Public Network Services

DMR

LTE

Mobile e-Police

Composition

Based on the professional converged communication architecture, the integrated communication command and dispatch system can satisfy the new demand of integrated, flat, visible, mobile, and intelligent police practice with system integration and information sharing.

iDS Architecture

Integrated Application Layer

Security dispatch system | Integrated operation system | Video conferencing system | Other application systems

Standard Capability Interfaces   Standard Data Interfaces

Uni ed Support Layer

Message service engine | Position service engine | Voice service engine | Video service engine | Data Warehouse

Data Bus
Capability Bus

Aggregation and Convergence Layer

Intelligent aggregation gateway
Message intelligent gateway | Position intelligent gateway | Voice intelligent gateway | Video intelligent gateway | SkyNet | Police Data Center

Information Island

DMR Trunking | PoC | LTE Trunking | IP Call | Satellite Call & Da | Police Vehicle | Safe City Network | Body-wo Camera | Image Transfe | Police Database | "Three-in One" | Mobile e-Police

Caltta integrated communication command platform mainly consists of three layers: aggregation and convergence layer, uniform support layer, and integrated application layer.

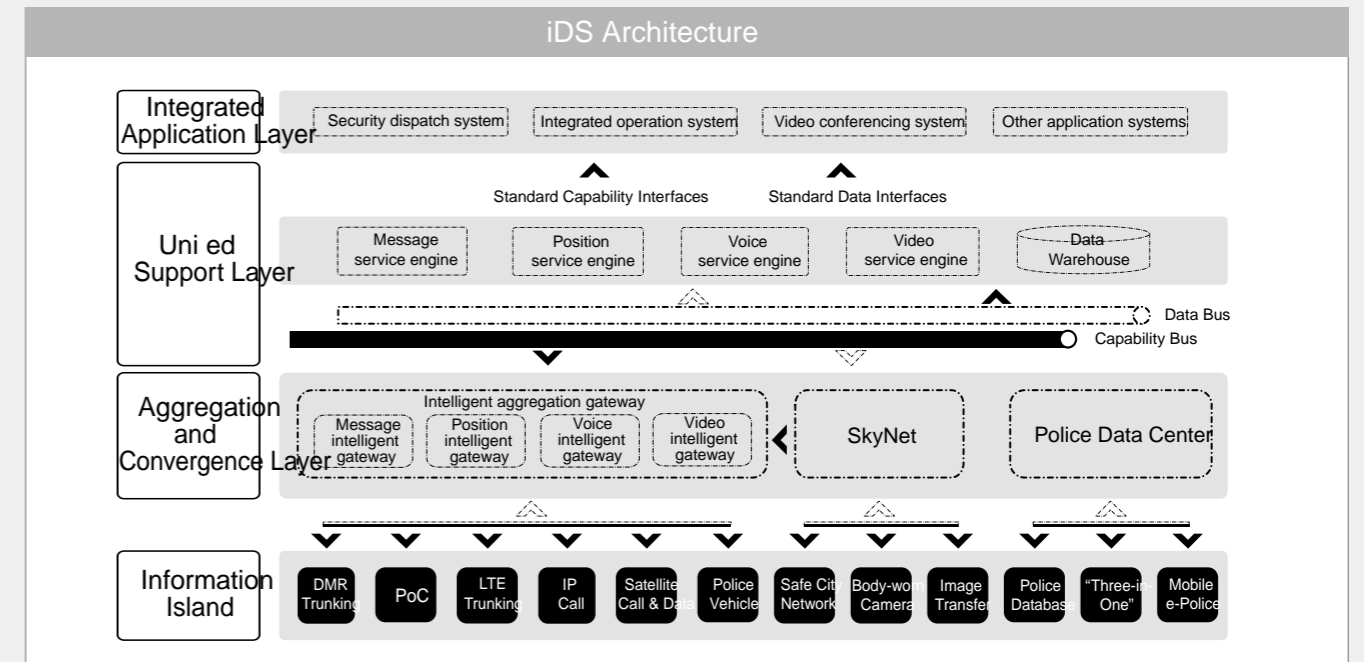# Features

Integrated communication command

Based on the all-IP audio and video dispatch, the platform implements the integration and interconnection of multi-heterogeneous network communication such as PDT narrowband trunking system, BTrunC broadband trunking system, mobile policing system, video service, and satellite communication through an intelligent aggregation gateway. As a result, the platform reduces the communication costs in public security practice, and effectively promote the flat management and capacity of public security communication command at practice level.

Integrated analysis and decision-making

The platform is connected to various types of police information systems and clearly displays public security resources, real-time dynamic police force, static police force, public security checkpoints and sensitive places. By analyzing police data in hotspots, key control areas, and four-color warnings, the platform can find high-incidence periods and areas of certain types of cases, and realize one-network display of police resources, one-network presentation of video resources, one-key call of police communication, and one-key delivery of police commands.
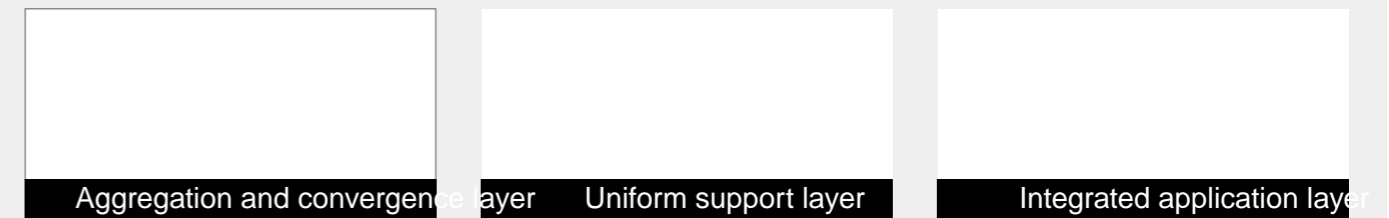
Normalized system support

The platform has broken through inter-network heterogeneous and remote technical bottlenecks. It integrates original various types of audio and video dispatch systems through the converged communication layer, and in perspectives of command and dispatch, data analysis and assistant decision-making, it establishes the application support layer to provide upper-layer services with unified, open, and standard interfaces based on the original dispatch means and information islands.

Aggregation and convergence layer

The aggregation and convergence layer is the first layer of the integrated communication command platform that directly connects to various information islands, and also a key layer to break through inter-network heterogeneity.

The core device of this layer is an intelligent aggregation gateway that connects to each island system, and translates the control flows and media streams of corresponding services in the island system into a standard format that can be understood by the uniform support layer.

Uniform support layer

The uniform support layer is the core layer of the iDS platform. This layer connects the intelligent aggregation gateway in the downlink direction and provides standard capability interfaces and data interfaces for the integrated application layer in the uplink direction.

Core devices of the uniform support layer are various convergent service engines. Services in the same type from different island systems are converged to the corresponding service engine. Engines and database in the uniform support layer are horizontally interconnected through capability buses and data buses.

Integrated application layer

The integrated application layer focuses on implementation and is the closest layer to public security users.

This layer is an ecosystem that incorporates a large number of manufacturers. The service vendors can provide diversified, and customized convergent service application systems based on standard interfaces provided by the uniform support layer.