

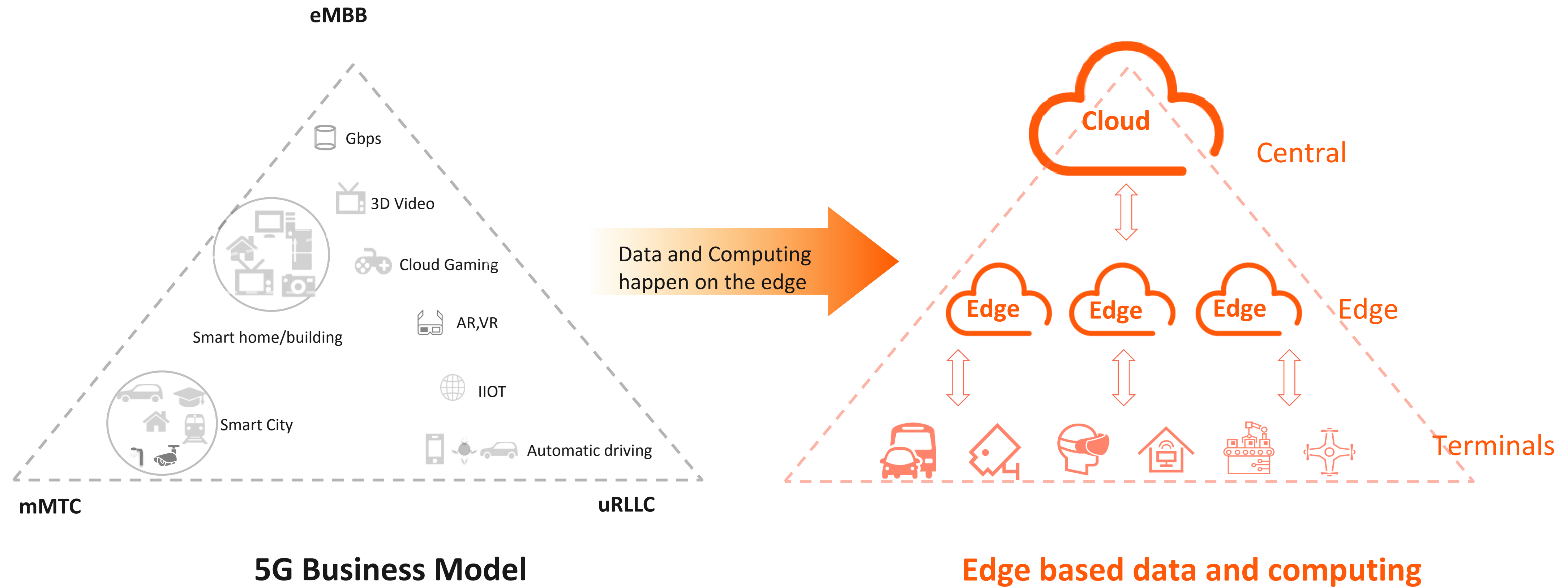


Alibaba Edge Cloud ENS 2022

April, 2022

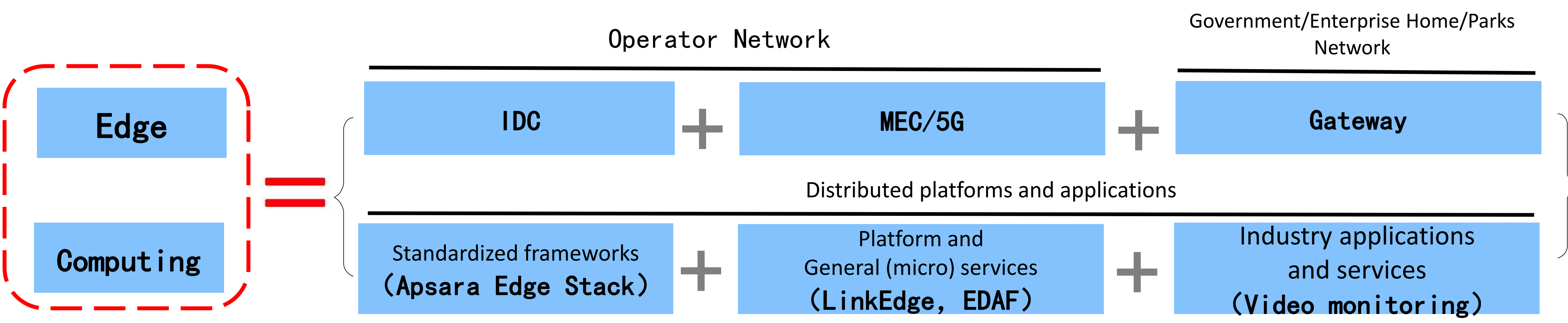
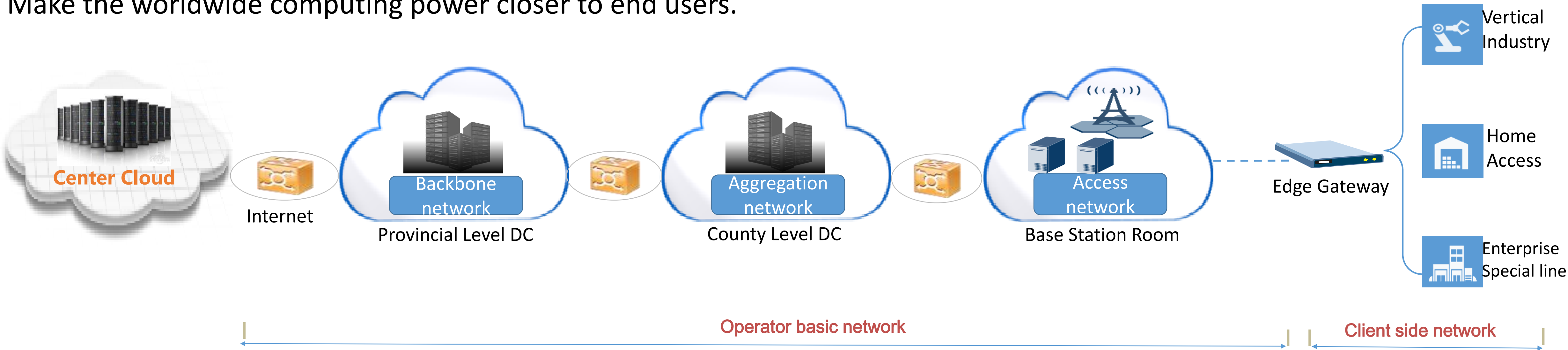
Edge Cloud--Industry Application Scenario Changes and Customer Requirements

With the emergence of diverse and complex scenarios, computing power is achieved through collaboration between the center and the edge



Alibaba Cloud Edge Computing—The infrastructure of the distributed Cloud

Extend the boundary of the cloud.
 Make the worldwide computing power closer to end users.



Alibaba Cloud ENS : Definition and Characteristics

ENS (Edge Node Service) Based on CDN edge node, Provide flexibility distributed computing resources, can be computing/forwarding application down to the edge. Reduce the response latency and bandwidth costs, Reduce the load on the central cluster, Be suitable for all kinds of businesses under the "center + edge" architecture model.



Wide coverage

- One-stop shopping the edge resource that close to the user
- covers mainstream areas and operators across the country
- Low latency guarantee terminal users



Cost-effective

- Buy on demand, pay by quantity
- Dynamic expansion of resources
- Advance funds 0 pay
- Exempting supply chain negotiations, purchase, administration cost



Open and easy to use

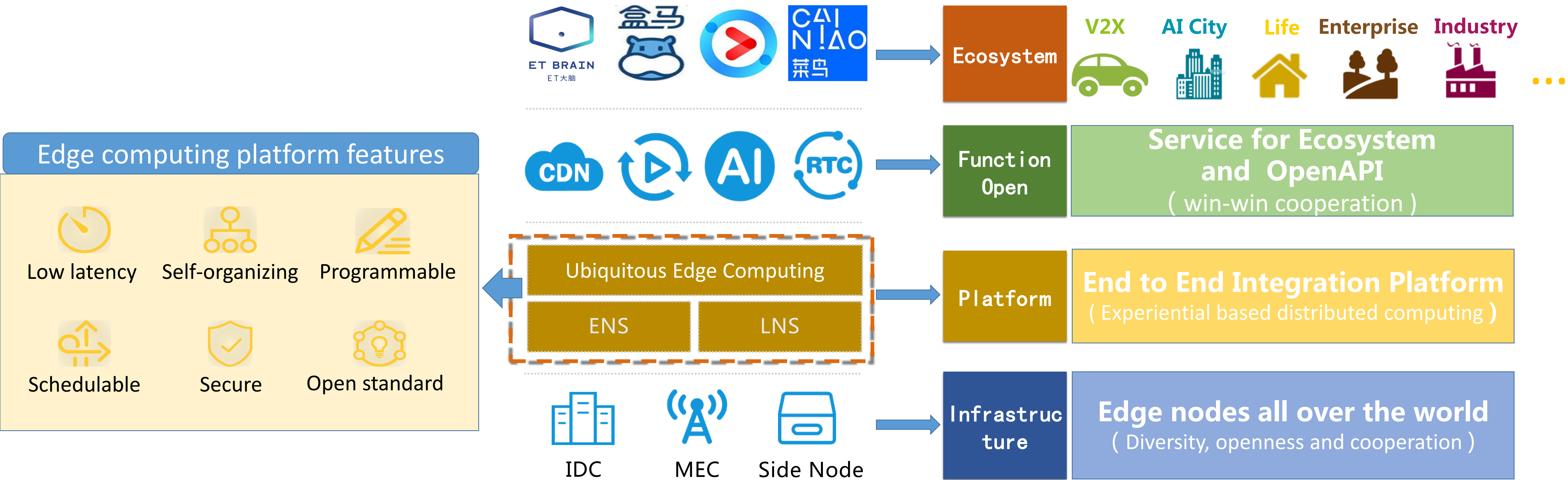
- No threshold transition experience
- Flexible ratio of computing specification
- Web remote management online
- Real-time visual monitoring of operational indicators



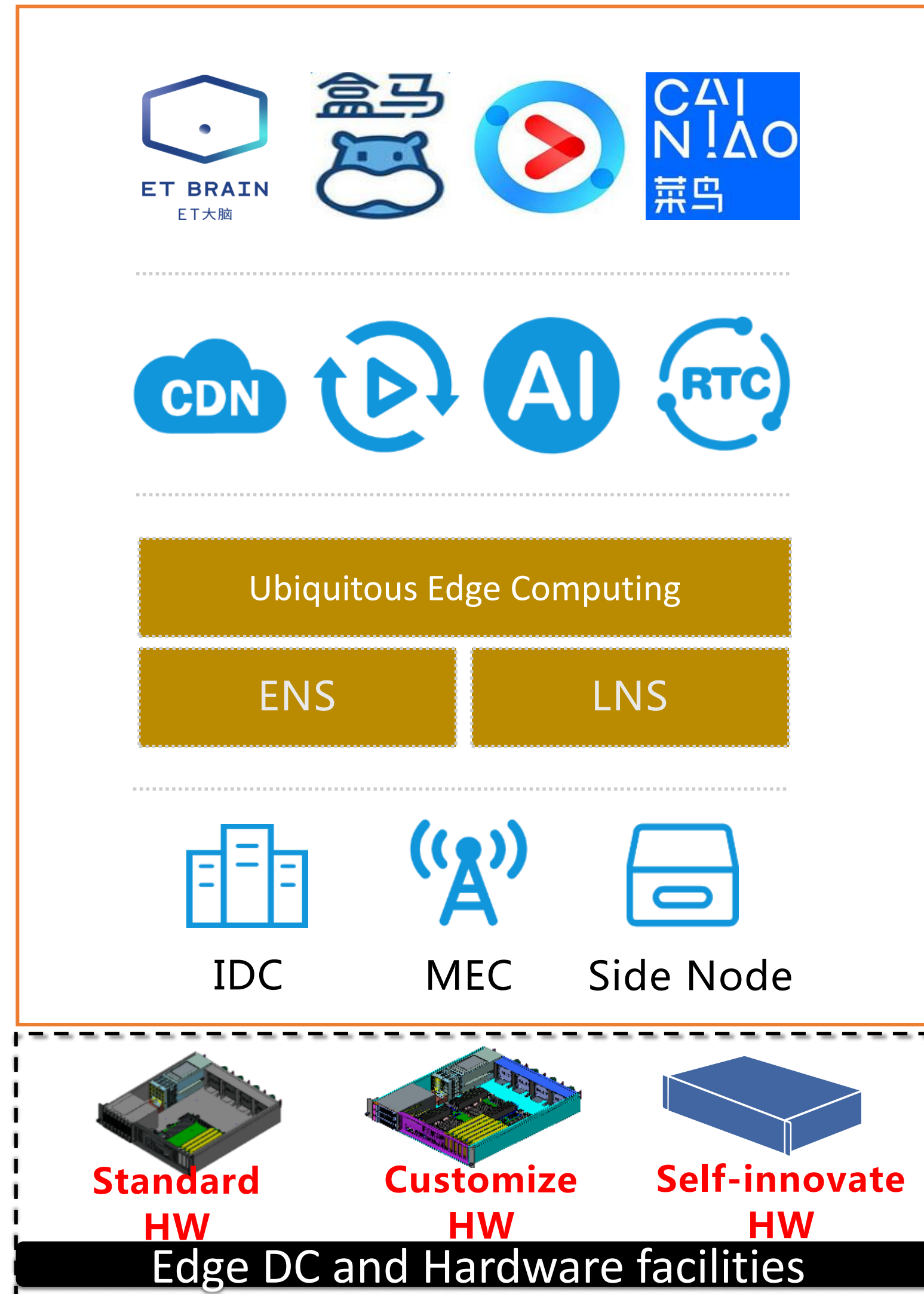
Safe and reliable

- DDoS cleaning and black hole protection
- Multi-tenant isolation
- Ali cloud feitian system technical support
- Global leading automation operation and maintenance capabilities

For Vertical industry, setup ecosystem to provide End-to-End platform service



Alibaba edge infrastructure hardware



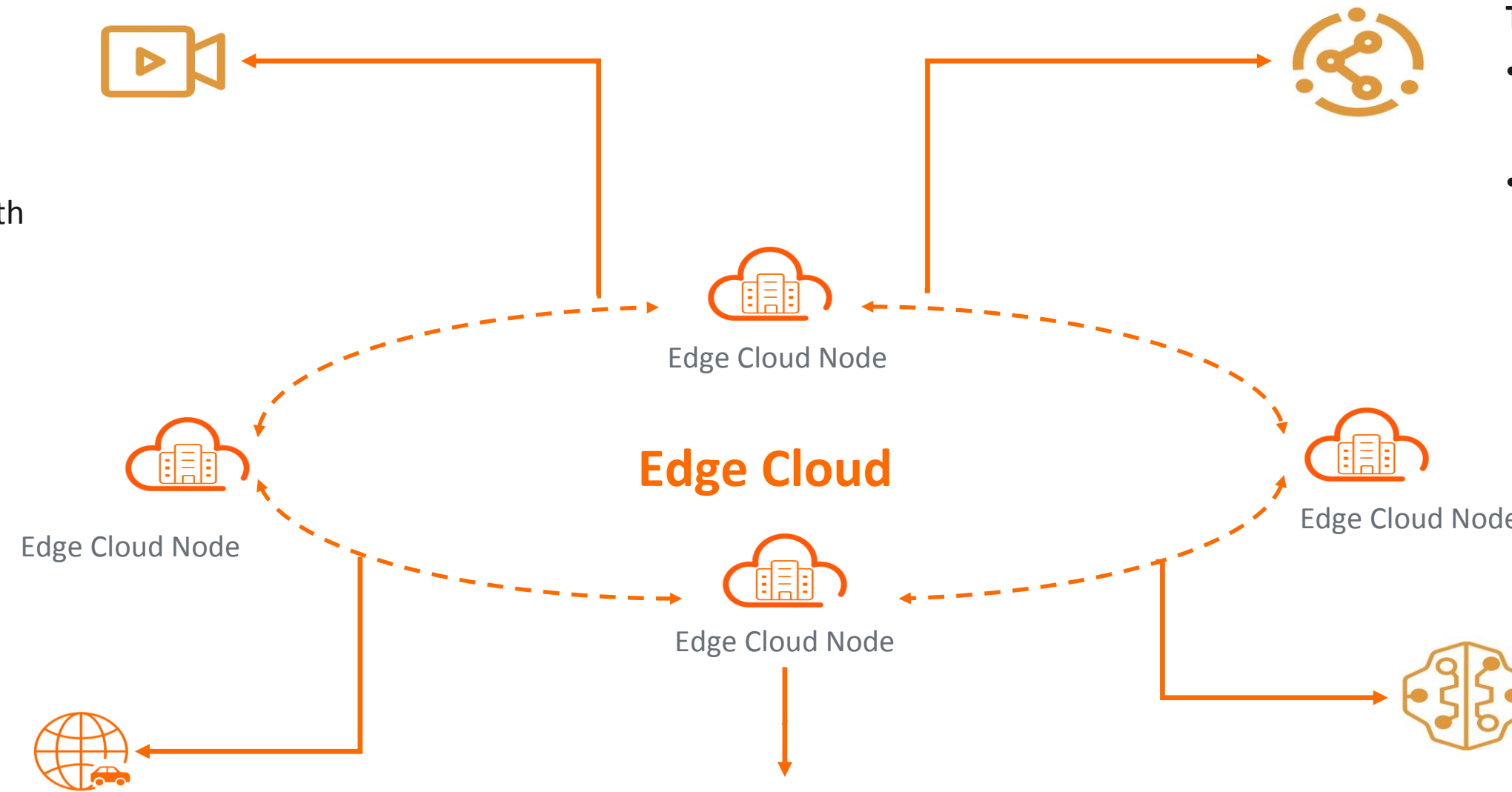
Alibaba edge computing infrastructure hardware

- Customized edge computing hardware
- Open cooperation

Edge Cloud—Features and application promotion

Content distribution(Video/Live Streaming)

- Improve Customer Experience: Nearest Service / Lower Network Latency
- Lower operating costs: low-cost premium bandwidth



Terminal cloudification

- Reduce terminal cost: reduce terminal configuration and extend terminal life cycle
- Expand customer coverage and create value-added benefits

Internet of Vehicles

- Data upload processing nearby
- Reduce data transmission costs and overall cloud service costs
- In-vehicle terminal cloudification, enriching service capabilities

Industrial Internet(manufacturing/port/park, etc.)

- Lowering the Cost of Asset Ownership: CAPEX to OPEX
- Improve business stability
- Improve IT resource operation and maintenance capabilities
- Multi-branch intranet interconnection to improve collaboration capability and data security

Cloud Link Node(Commercial/self-use)

- Self-sustaining assets
- External operation, business revenue generation
- Reduce operational complexity

Our Features :

Computing power coordination: High availability is guaranteed through the management of multi-node complex networks, the coordinated scheduling of resources, and the collaborative decision-making between nodes.

Edge application hosting: Based on containers and K8S, the edge container application hosting PaaS service is responsible for aggregating and scheduling the computing and storage resources of multiple distributed edge cloud nodes, ensuring no sense of upper-layer business.

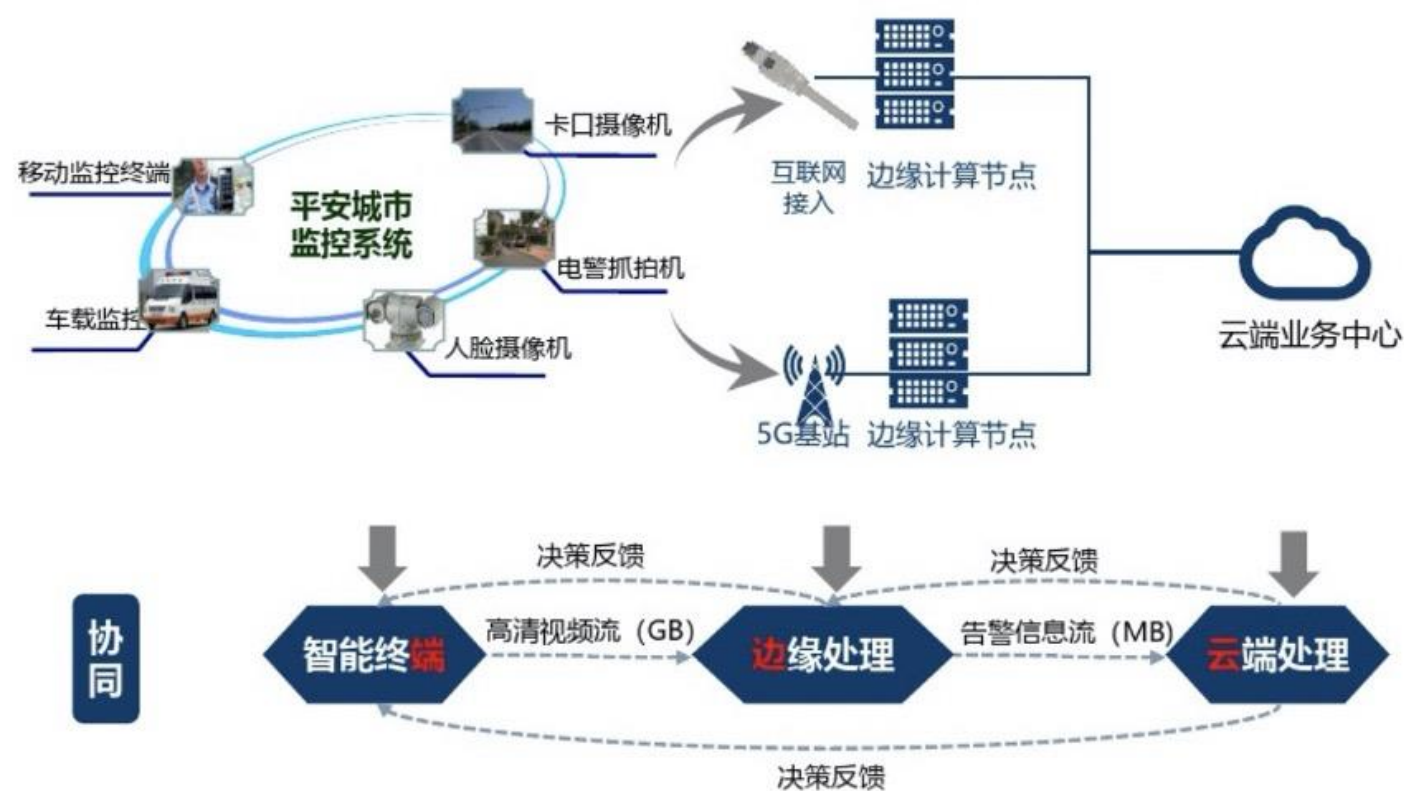
Heterogeneous resources: Provide CPU/GPU/arm array/PC Farm and other computing power virtualization resources based on the edge

Collaborative storage: Based on the characteristics of wide distribution, re-collaboration, and unified management of edge cloud, it provides distributed object storage capabilities across the network. Users do not need to pay attention to the specific location of storage. Data scheduling is implemented by the collaborative storage system according to storage policies.

Edge-to-edge network: Inter-node intranet communication channel to achieve link optimization, low latency and secure communication

Edge Cloud-- Special Use Cases

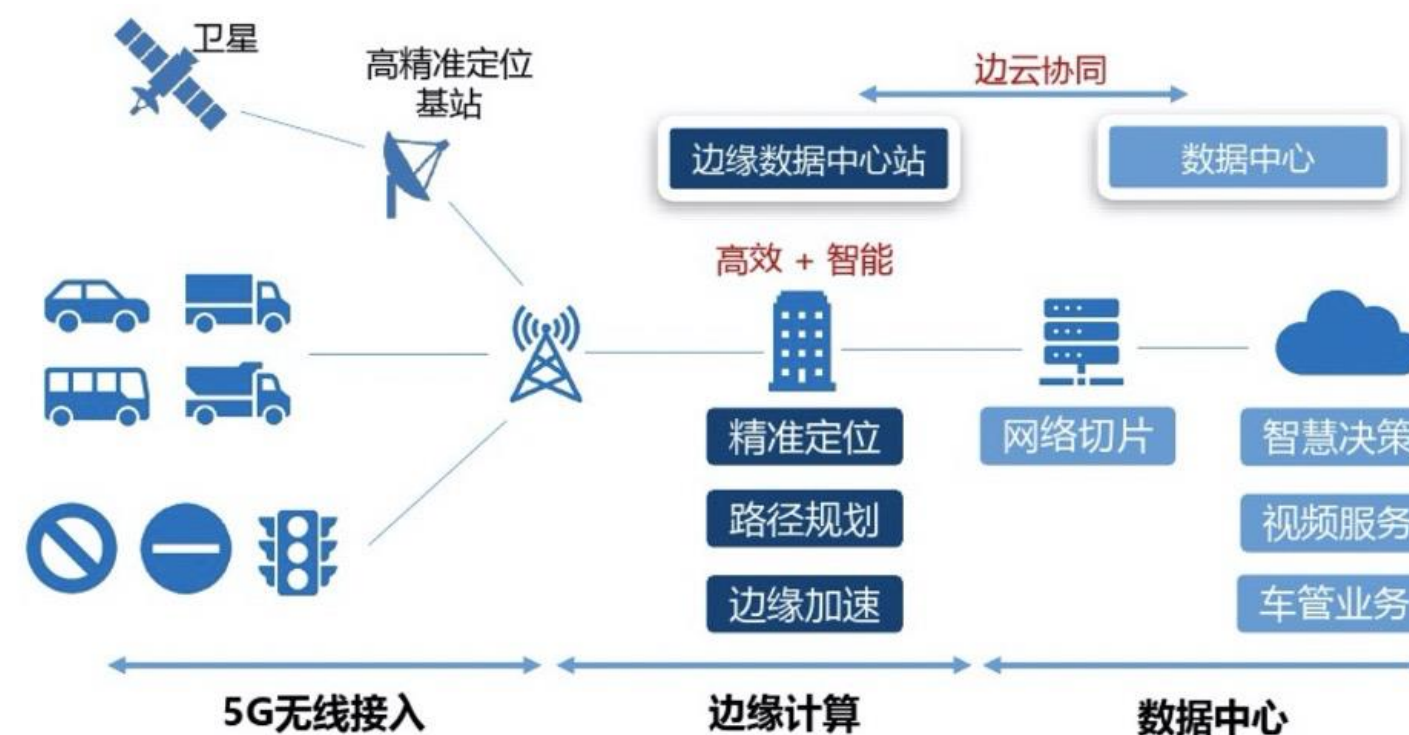
1 (To G) Video Surveillance



- Widely used in traffic, security and other scenarios in smart cities
- Human, vehicle, and object recognition all require computing power support from the edge
- Video storage brings massive demand for edge storage

(Telecom operators, Hema New Retail)

2 (To B) Internet of Vehicles Service



- Autonomous driving and vehicle-road collaboration require low latency, high computing power, and rapid decision-making
- The edge cloud can provide nearby computing to meet the needs of the Internet of Vehicles such as autonomous driving

(Beijing Shouqi Group)

3 (To C) Cloud Gaming/Live Streaming



- Cloud games require a lot of computing power for graphics processing/rendering, and at the same time, heavy experience requires high latency response.
- Edge cloud is currently the preferred solution for games to improve fluency and response

(Byte dance, Taobao Live)

4 Ecological Services in the Energy Industry



- New demands such as low-carbon buildings and low-carbon parks require a nearby response to comprehensive energy and precise processing, which has a large demand for edge computing power
- The edge cloud architecture is adopted to build a comprehensive energy service platform from point to plane to meet the timely prediction and processing of energy.

(State Grid)

