

Pursuing Excellence is a non-stop journey



Dahua DSS Products

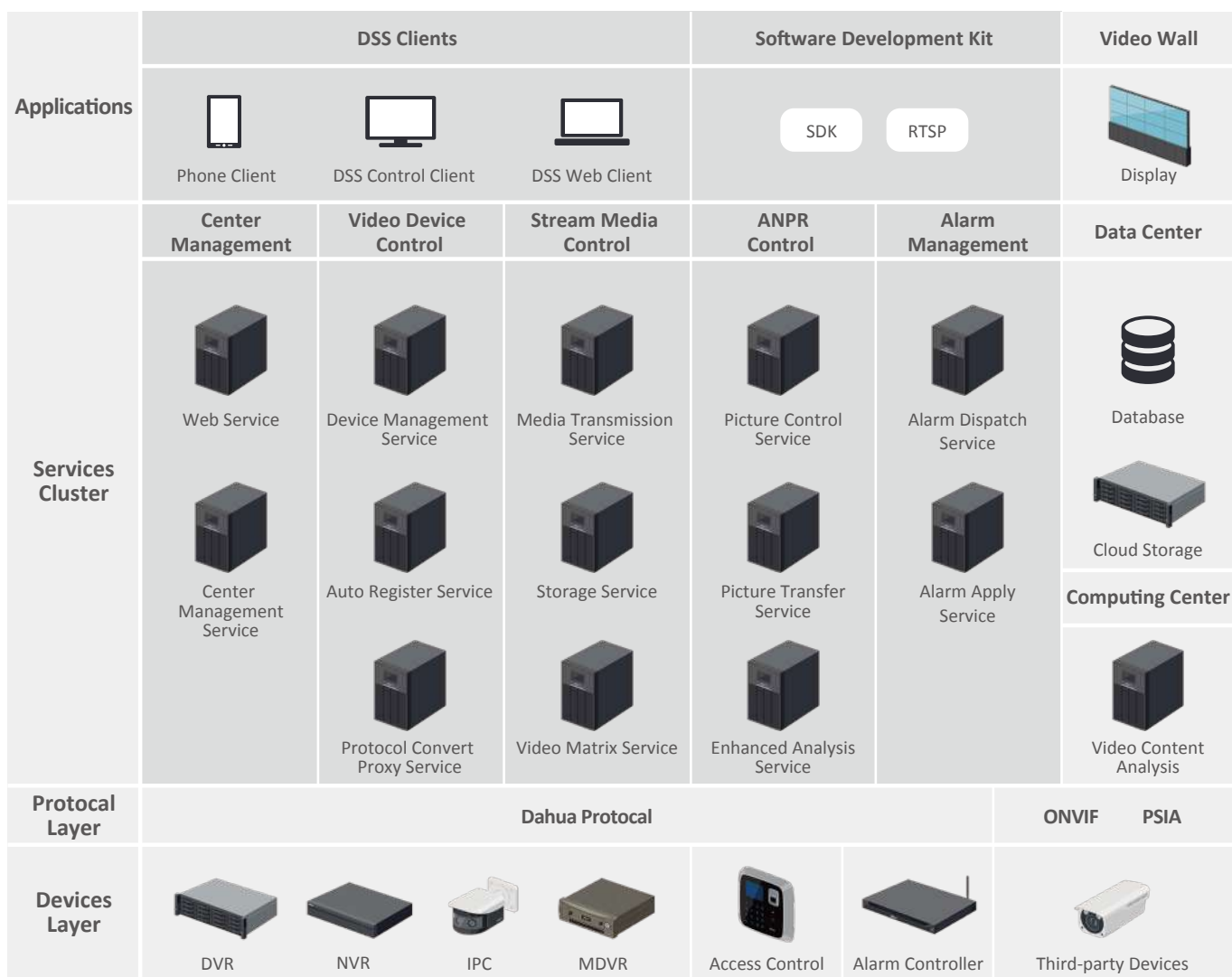
2017 Ver.1

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Overview

Dahua Security Software(DSS), is a platform developed by Dahua using Client Server(C/S) architecture. The DSS is based on a modular design which enables flexible deployment of each service module according to customer needs. The DSS is a powerful central management system with flexibility, scalability and high reliability. Beyond its basic application as a CCTV management system, DSS can be used in many vertical industries, such as retail, banking, parking lots, transportation, and residential areas through extending functionality with add-ons.



Main Services Introduction

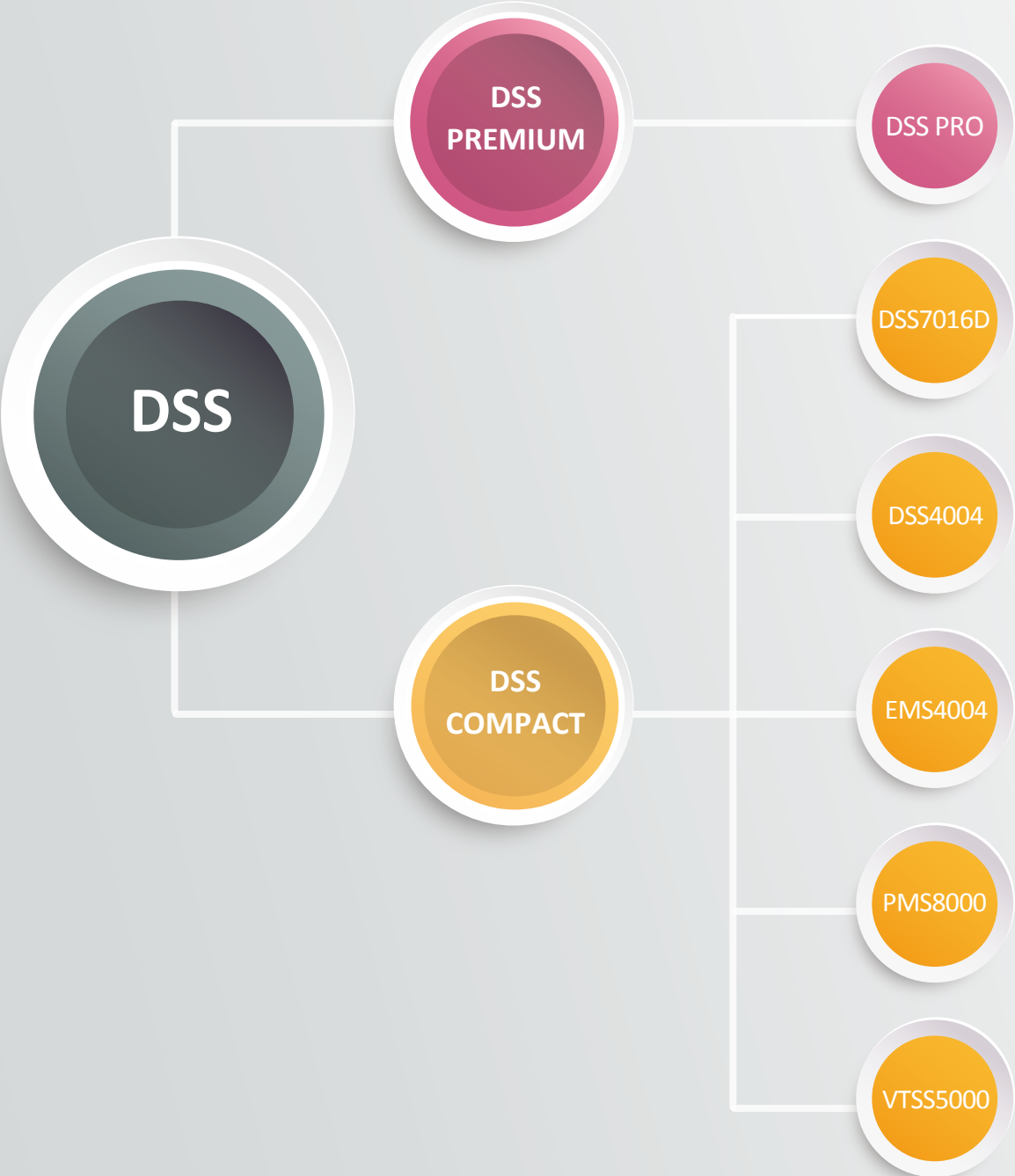
- CMS(Centre Management Service): Manage other service registration and command distribution.
- DMS(Device Management Service): Manage devices, and receive/send/forward alarms.
- MTS(Media Transmission Service): Receive Audio/Video streams from devices and forward to SS(Storage Service), client and decoding devices.
- SS(Storage Service): Management/Search/playback of Audio/Video records.

DSS Family

The Dahua DSS family consists of DSS Premium Products and DSS Compact Products.

DSS Premium is a pure software based product. Its capacity and add-ons can be flexibly adapted to different projects. It is generally targeted at large and medium-sized applications.

The DSS Compact Products are hardware based series with Plug & Play which enable users to use the product with minimal initial configuration and management.

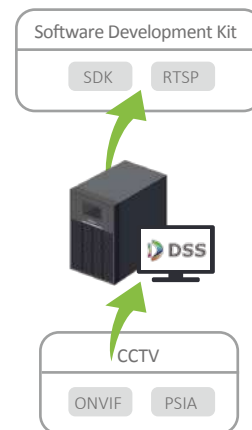


Features

Embrace Openness

DSS is designed for 3rd party device integration by standard ONVIF or PSIA protocol.

DSS SDK for 3rd party VSS integration supports Windows, IOS, and Android.



Easy Expansion

Easy performance upgrade via distributed hardware extension.

Easy function upgrade via add-ons.

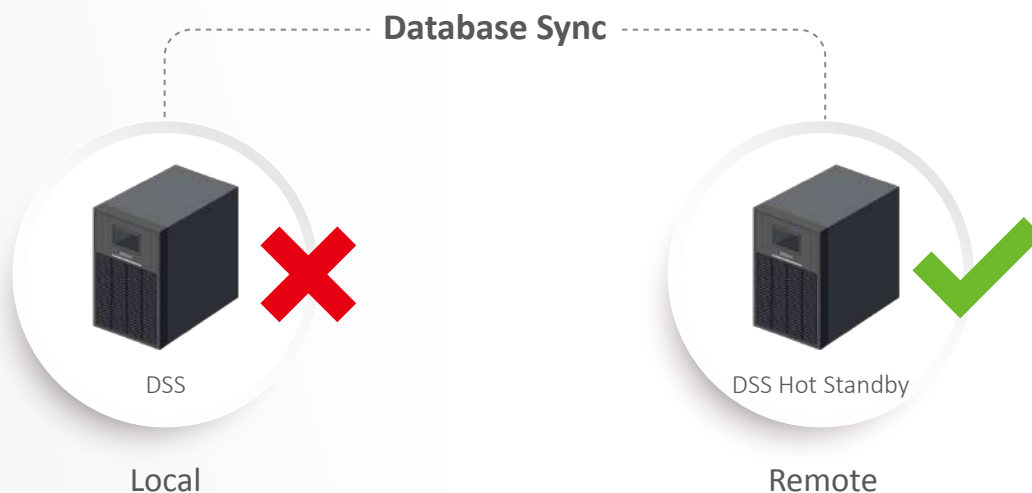
Easy capacity expansion via license. Scale-as-you-go.



High Reliability

DSS supports hot standby which ensures system reliability for critical applications.

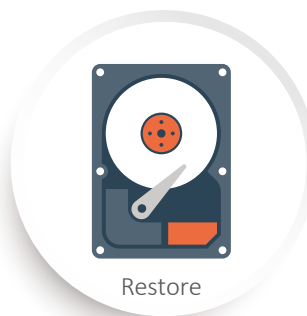
When abnormal behavior is detected on the server, the detection service will auto-restart the server to ensure the service stability.



System Backup and Restore



Backup



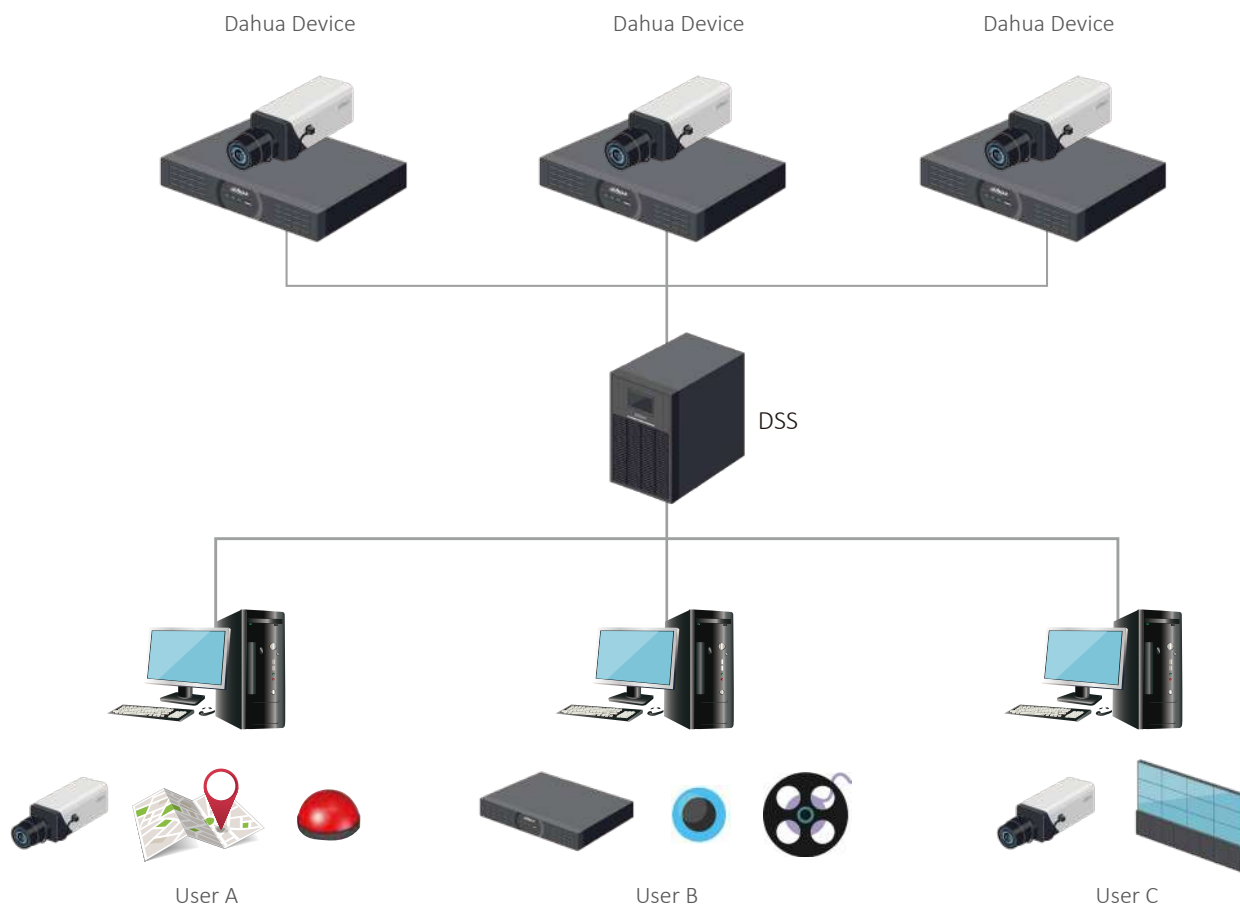
Restore

DSS provides database backups so that your system config data can be well protected and recovered when accidents occur.

Central Management

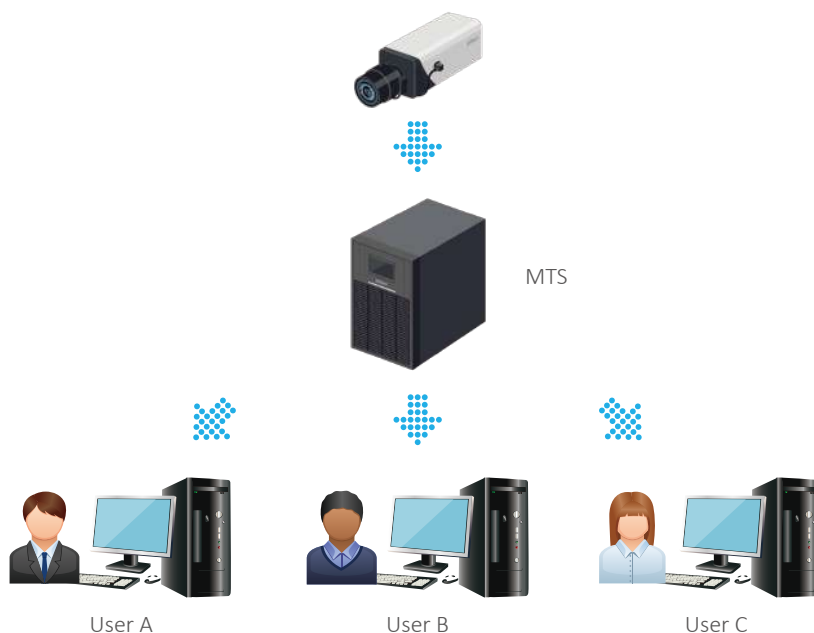
Advanced group management concepts grant different access rights to different users.

Active Directory support enables the system to synchronize with Windows Active Directory to quickly import a large number of users.



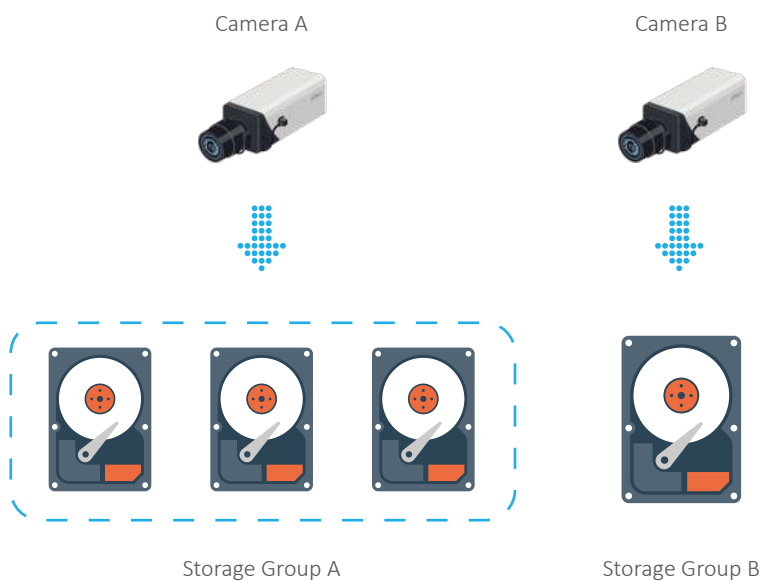
Stream Media Management

Allow a large quantity of users in various locations to view a video simultaneously without overloading the device itself by using the Media Transmission Service (MTS) to distribute the video streams.



Storage Management

- Recordings are retrieved from camera and NVR storage based on schedules and events to reduce the risk of missing evidence.
- Edge Storage is an additional redundancy option to ensure the continuous recording of video.
- More storage capacity is allocated to important cameras according to user needs.



DSS CLIENTS

The DSS Control Client, DSS Web Client, and DSS Mobile application provide instant, around-the-clock access to video surveillance, giving users a choice of viewing interfaces to best suit their needs.



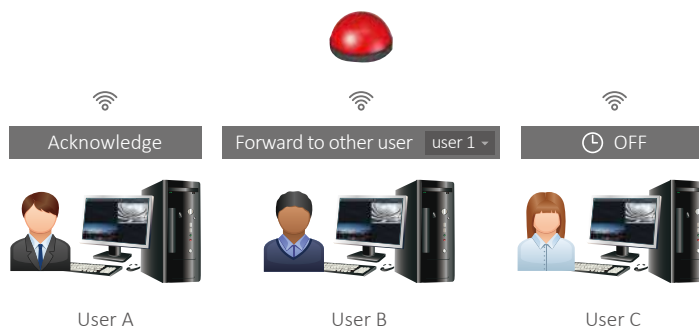
DSS Control Client



The DSS Control Client provides powerful functions for daily operation and surveillance tasks handling. GPU decoding and multi-screen support allow the simultaneous display of multiple types of content.

Alarm Management

- Alarm acknowledgement mechanism prevents duplicate tasks.
- Disarm alarms for a period of time if detection device becomes defect.
- Assign alarms to other users



E-Map

DSS provides a multi-layer, hierarchical E-Map interface that enables easy monitoring and control of the whole system. Alarms can be shown on the map when an event occurs.



DSS Web Client

DSS Web Client is an internet-based access method offering convenient DSS access from any Internet-enabled PC browser. It is easy to learn and operate for users of all skill levels. It offers high-scalability and is optimized for a superior user experience.

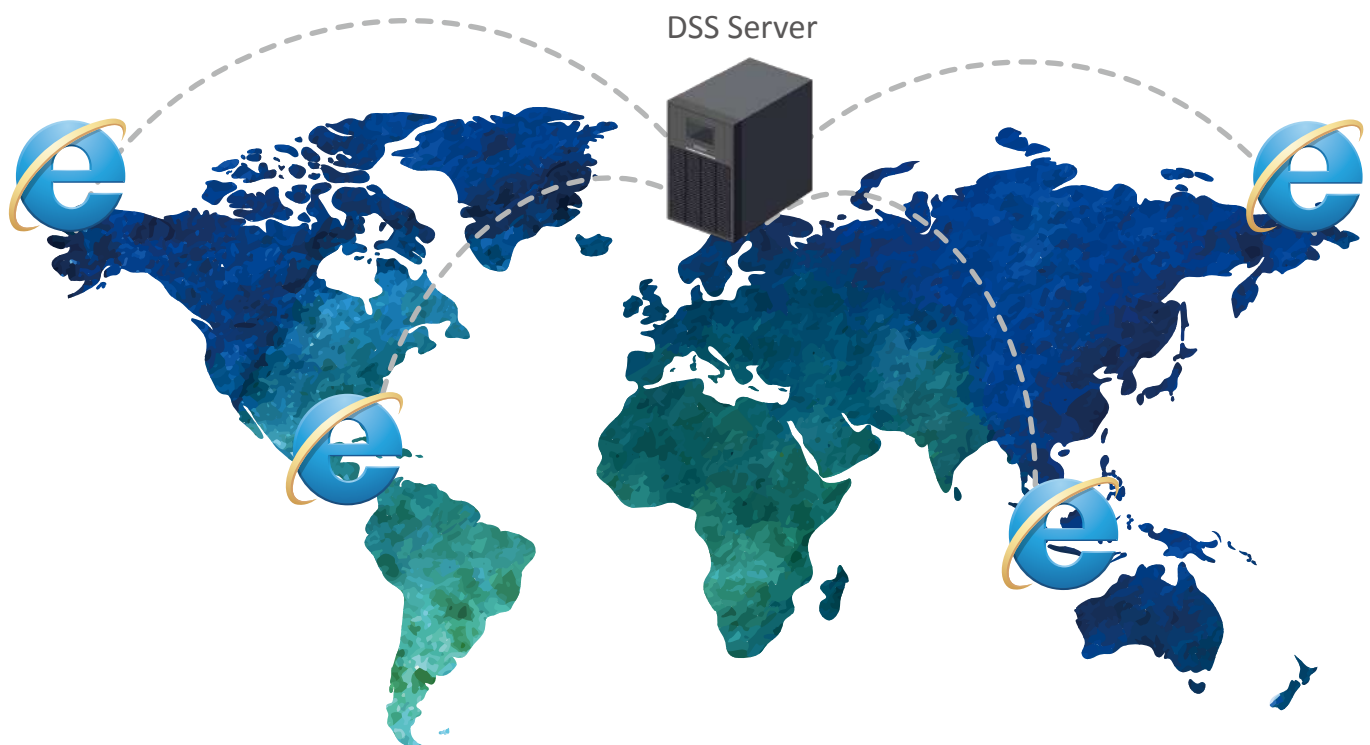


Easy to Learn

DSS Web Client runs on any internet-enabled computer. It provides an easy to use interface that requires zero training.

Flexible Access

DSS Web Client enables instant access to the DSS server anywhere via any internet-enabled computer. Users can instantly verify whether areas under surveillance are safe and secure.



DSS Mobile

DSS Mobile enables users to view up to 4 cameras simultaneously. It supports remote viewing of recorded footage from selected cameras and control of PTZ cameras.



Flexible Access

DSS Mobile enables instant access to the DSS server from anywhere, at any time, via any internet-enabled mobile device. Users can instantly verify whether areas under surveillance are safe and secure.

E-Map

E-Map features provide an intuitive management experience. When mobile DVR is paired with DSS, users can instantly monitor the location and speed of buses or cars in real-time.



Fast Event Response

Push notifications notify users immediately through the DSS Mobile App once defined events occur.



ADD-ONS

DSS add-ons are separate software components installed on the top of existing DSS video surveillance system, providing users with extra and powerful functionality. Add-Ons are license based and customers can pay-as-you-go to save initial investment.



ADD-ONS

Business Intelligence

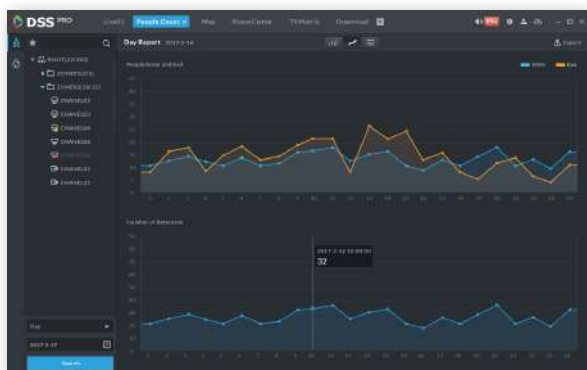
Alongside of surveillance capabilities, DSS also provides intelligent analytics features. It helps businesses improve customer satisfaction, secures the shopping environment, and optimizes business results to guide them to growth.



Multiple store management support allows the DSS to improve management efficiency for chain stores.



Based on structured data gathering from front-end devices, DSS creates four-dimensional analysis reports for your reference, including customer analysis, sale analysis, and order analysis, which can help with critical business decisions.



People counting provides management with traffic flow data throughout a shop, mall, or any other region. It also supports daily, monthly, and annual reports.



Point-of-Sale (POS) video integration provides useful business analytics. Text search is supported to retrieve specific order and associated video recording data.

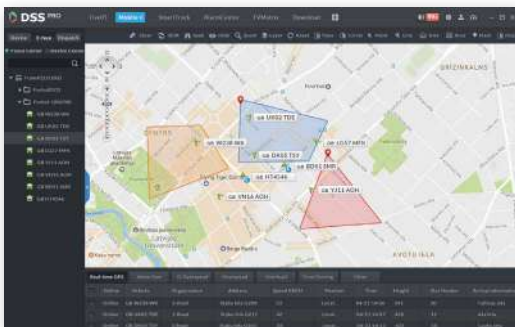
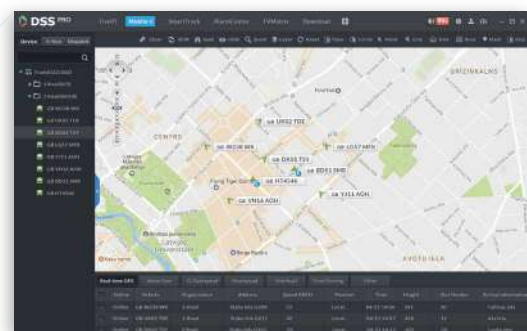
Mobile

The safety of public transportation systems is a global concern, especially in guarding against potential terrorists entering transportation facilities and responding quickly to traffic accidents.

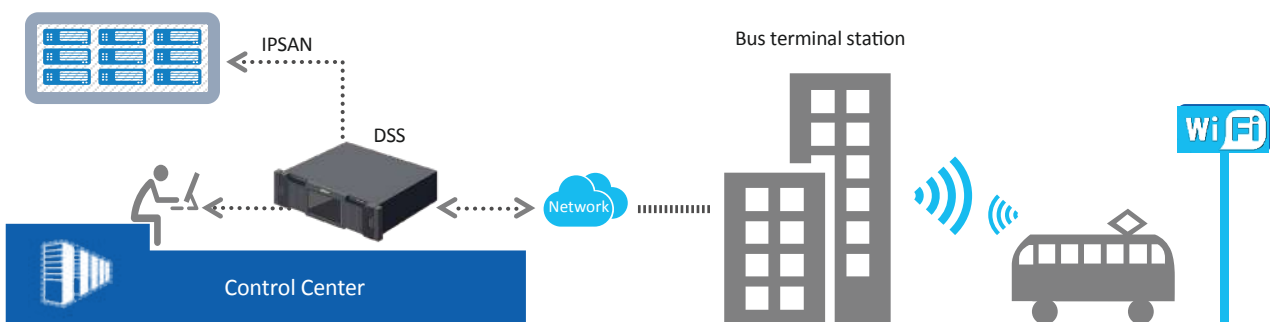


Through the DSS control panel, managers can view live video feeds, as well as the real-time location and speed of vehicles with GPS data received from mobile DVR systems.

Dispatch control can communicate with drivers immediately through real-time or two-way calls, ensuring an instant response to emergencies.



DSS supports setting location boundary alerts. Administrators are notified immediately once a vehicle breaks defined rules, such as speeding above the set speed limit within a boundary.



Mobile DVR can switch from 3G to Wi-Fi if it detects the Wi-Fi signal once reaching the bus station. Video backup from DVR to DSS can then be triggered via Wi-Fi.

An aerial view of a multi-lane highway interchange. Several vehicles are visible, including cars and trucks. Four blue callout boxes with white text and blue lines pointing to specific vehicles are overlaid on the image. The callouts are: 'Vehicle Proceeding through Red Light' pointing to a red car at a junction; 'Driving in Bus Lane' pointing to a blue car in a lane marked with a bus symbol; 'Parking Violation' pointing to a car parked on the shoulder; and 'Point/Section Speed Enforcement' pointing to a truck on the highway.

The screenshot displays the DSS PRO software interface. At the top, a dark navigation bar contains the 'DSS PRO' logo, a 'Tools' button, and links for 'Kiosk Center', 'Help', 'Download', and 'Logout'. Below this is a map of New York City, specifically the area around Times Square and the Port Authority Bus Terminal. Several blue location pins are placed on the map, indicating vehicle positions. Below the map, there is a 'Traffic Islands' section with a dropdown menu set to 'Central'. Below this, there is a list of vehicle details, each with a small image of the vehicle, its license plate, and its vehicle type. The vehicles shown are a white sedan (HH NX 305), a yellow taxi (HH NX 335), a white sedan (MHU B510), a white sedan (HH NX 305), and a green sedan (AU 62 789).

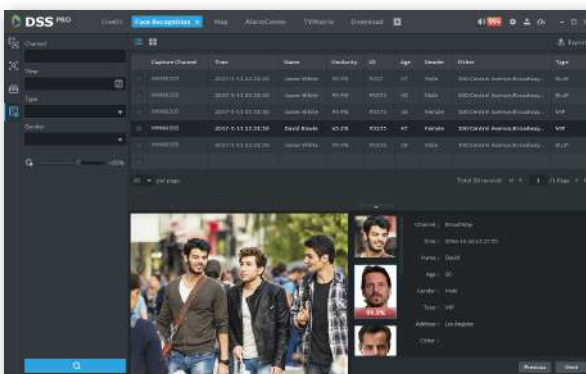
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Face Recognition

Face recognition can be used in a broad spectrum of applications, such as the entrances and exits of railway and metro stations or airport terminals, commercial buildings, seaports, schools, factories, offices, etc.



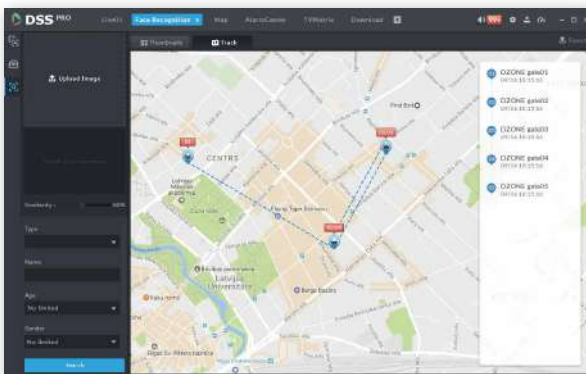
The Face Recognition module supports facial data collection, recognition, and comparison.



The Face Recognition module logs all persons that pass through a specified zone by recording an image of their face and time of capture.



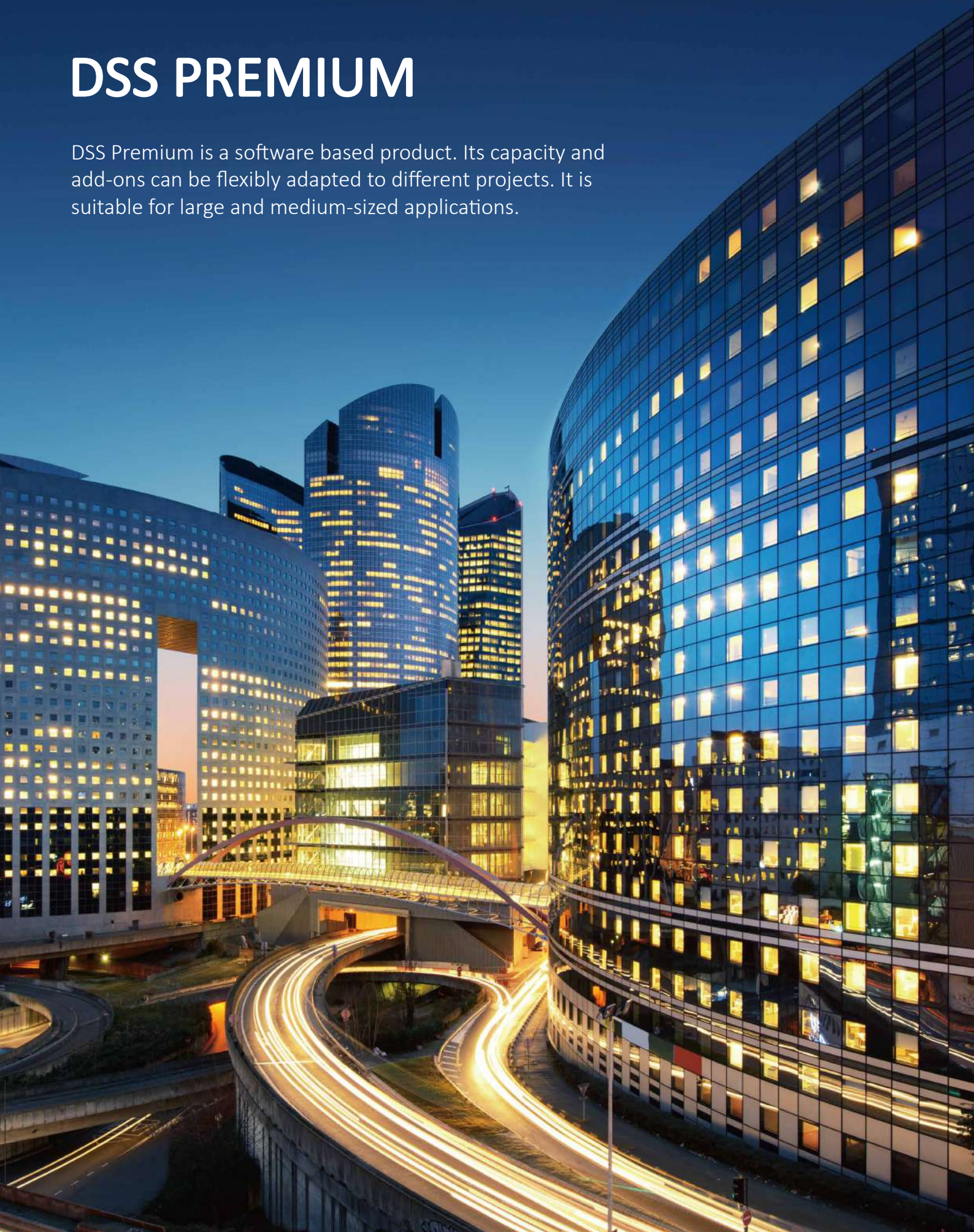
Once a previously defined face is detected and recognized, the Face Recognition panel can automatically send out a notification, allowing administrators to take immediate action.



Face Recognition can also create an individual walking path for each person detected according to their face and time information.

DSS PREMIUM

DSS Premium is a software based product. Its capacity and add-ons can be flexibly adapted to different projects. It is suitable for large and medium-sized applications.



DSS PREMIUM

DSS PRO

DSS Pro is a comprehensive software that provides reliable video-based solutions. Its capacity and add-ons can be scaled to adapt to various hardware devices. Add-ons and storage capacity are subscription based, lowering the cost of initial investment, while offering the flexibility to expand features as needed. It is best used in medium and large applications such as transportation and safe city solution.



Easy to Deploy

The DSS wizard makes system configuration and operation a breeze.

Easy Expansion

Easy performance upgrade via distributed hardware extension.

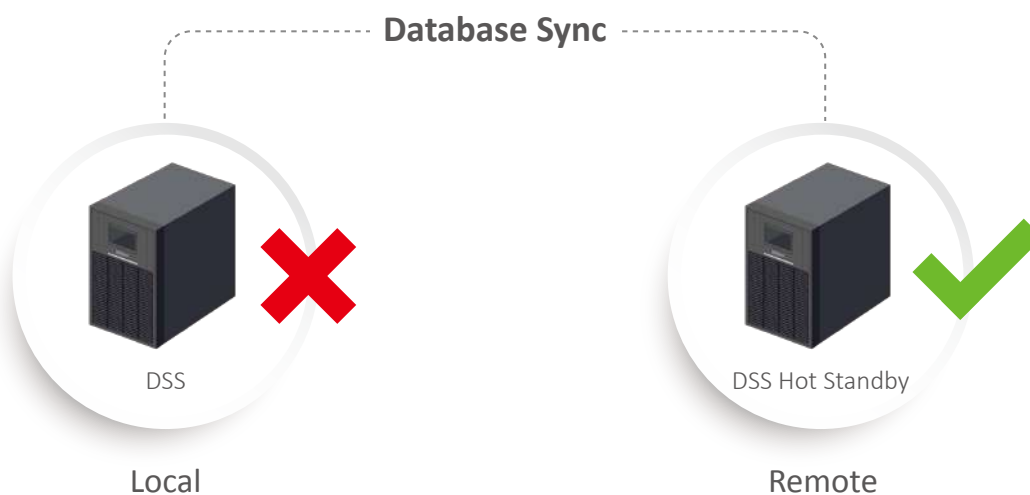
Easy function upgrade via add-ons.

Easy capacity expansion via license subscription. Pay-as-you-go.

High Reliability

DSS supports hot standby which ensures system reliability for critical applications.

When abnormal behavior is detected on the server, the detection service will automatically restart the server to ensure stability.



Features

| KEY FEATURES | DSS PRO |
|---|---|
| Performance | |
| Supported Channels Per Server | 1500 ① |
| Supported Devices Per Server | 500 ① |
| ONVIF | 100 ① |
| Maximum Users | 200 simultaneous online users / unlimited users |
| User Roles | 100 |
| Failover | Optional |
| Storage Server | |
| Maximum Capacity Per Storage Server | 200TB ① |
| Media Transmission Server | |
| Maximum Video Input Bandwidth Per Server | 600Mbps |
| Maximum Video Output Bandwidth Per Server | 600Mbps |
| Add-Ons | |
| Business Intelligence | Optional |
| LPR | Optional |
| Face Recognition | Optional |

① Hardware dependent(CPU: E3, Memory: 8GB)

DSS COMPACT

DSS Compact is a hardware-based series of products with Plug & Play which enable users to use with minimal configuration and maintenance. They are tailored to meet the demands of various industry surveillance installations, from guarding business entryways to managing complex parking systems.



DSS COMPACT

DSS7016D

DSS7016D is an All-in-One DSS server with pre-installed DSS software and Linux OS. It supports one system disk and 15 data disks. It is geared to medium-sized projects.

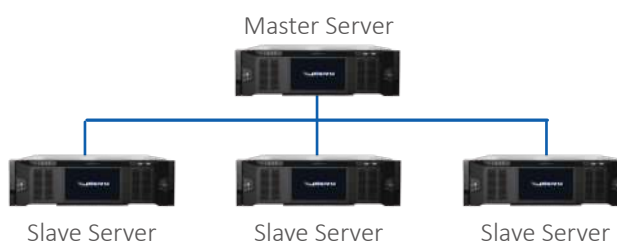
Beyond its basic application as a CCTV management system, DSS7016D also integrates mobile DVR, an alarm system, access control, video intercom, and entrance control. It can be used in mobile and residential applications.



Easy to Deploy and Expand

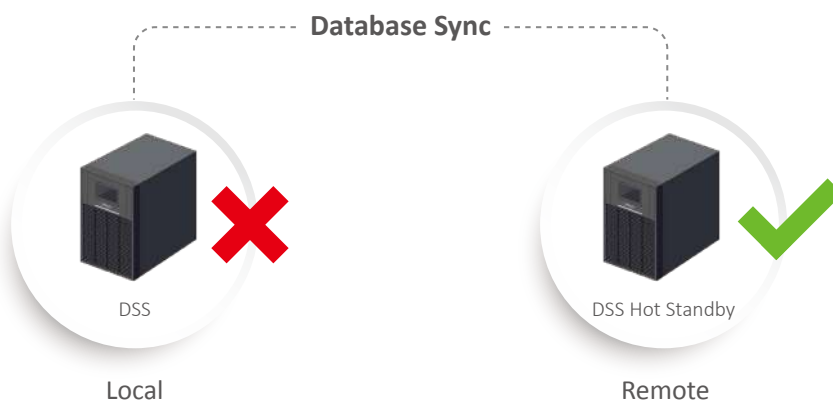
Plug & Play. No additional actions required except booting up the device.

Multiple DSS7016D can be arranged in a master/slave structure to expand system performance.



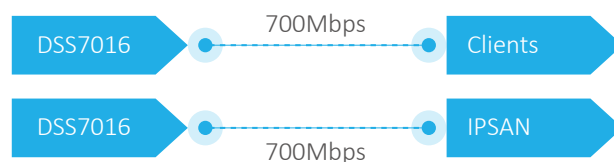
High Stability

A redundant power supply ensures the device always has power, automatically engaging standby power if a power source runs abnormally. DSS7016D also supports hot standby.



Outstanding Performance

Max support 2,000-ch/500-device input.
700Mbps for storage & 700Mbps for transmit capability.



Key Features

| KEY FEATURES | DSS7016D | DSS7016DR |
|---|---|------------------------|
| Performance | | |
| Supported Channels Per Server | 2000 | |
| Supported Devices Per Server | 500 | |
| ONVIF | 100 | |
| Maximum Users | 200 simultaneous online users / unlimited users | |
| User Roles | 100 | |
| Dimensions | 3U, 526mmx485mmx135mm | |
| Power Supply | Single Power Supply | Redundant Power Supply |
| Storage Server | | |
| Maximum Number of Storage Servers Per Master Server | 20 | |
| Maximum Write Bandwidth Per Server | 700Mbps | |
| Maximum Read Bandwidth Per Server | 700Mbps | |
| Maximum Capacity Per Storage Server | 200TB | |
| Media Transmission Server | | |
| Maximum Video Input Bandwidth Per Server | 700Mbps | |
| Maximum Video Output Bandwidth Per Server | 700Mbps | |
| Compatible Devices | | |
| Access Control | √ | |
| Alarm Controller | √ | |
| VDP | √ | |
| Mobile DVR | √ | |
| ITC (For Entrances) | √ | |

DSS4004

DSS4004 is an All-in-One DSS server with pre-installed DSS software and Linux OS. DSS4004 is geared to small and medium-sized projects. Beyond its basic application as a CCTV management system, DSS4004 also integrates mobile DVR, an alarm system, access control, video intercom, and entrance control. It can be used in mobile and residential applications.



DSS Software



Embedded Linux OS



Management Server



Easy to Deploy

Plug & Play. No actions required except booting up the device.

Cost Effectiveness

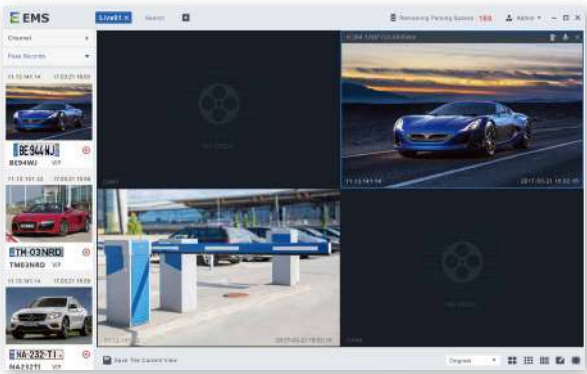
For medium-sized projects, DSS4004 offers a perfect solution with rich performance at reasonable cost.

Key Features

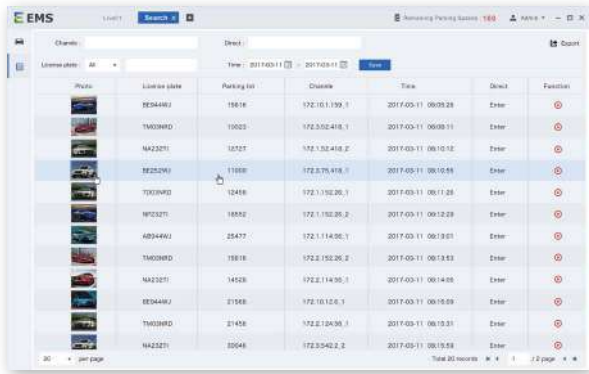
| KEY FEATURES | DSS4004 |
|---|--|
| Performance | |
| Supported Channels Per Server | 256 |
| Supported Devices Per Server | 256 |
| ONVIF | 50 |
| Maximum Users | 50 simultaneous online users / unlimited users |
| User Roles | 100 |
| Dimensions | 1U, 440mmx43.65mmx398.7mm |
| Media Transmission Server | |
| Maximum Video Input Bandwidth Per Server | 300Mbps |
| Maximum Video Output Bandwidth Per Server | 300Mbps |
| Compatible Devices | |
| Access Control | √ |
| Alarm Controller | √ |
| VDP | √ |
| Mobile DVR | √ |
| ITC (For Entrances) | √ |

EMS4004

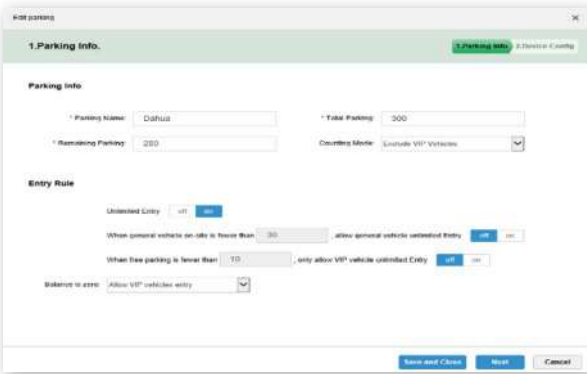
EMS4004 is customized for entrance management. It comes pre-installed with Entrance Management Software and Windows.



For car entrance, EMS4004 can easily judge if the approaching vehicle's plate is on the white list and open the barrier automatically.



View vehicle entrance/exit data and available spaces remaining. Search through the history and sort by car to view individual trends.



Define alarms for different groups of vehicles. Once an alarm is triggered through license plate detection, the system will automatically send a notification to the administrator, allowing them to take action immediately.

Key Features

| KEY FEATURES | EMS4004 |
|------------------------------|---------------------------|
| Supported Cameras Per Server | 10 ITC |
| Dimensions | 1U, 440mmx43.65mmx398.7mm |

PMS8000

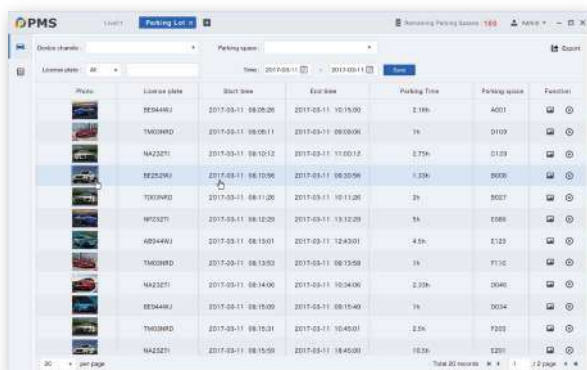
PMS8000 is customized for parking lot management. Pre-installed Parking Management Software and Windows greatly improves parking management efficiency.



The number of remaining available spaces is displayed by the PMS8000 on the screen at the entrance. Once a vehicle license plate number has been registered, the barrier is opened automatically.



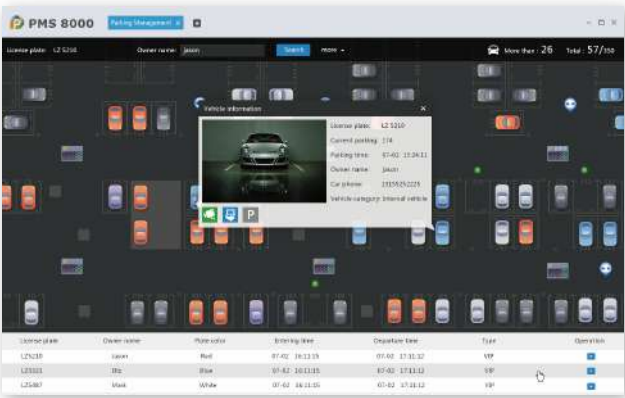
PMS8000 gathers the status of each parking space and calculates the number of available spaces in each direction, conveniently displaying them on indoor screens.



Search through vehicle entry and exit history and view stored video recordings.



PMS8000 supports vehicle location services, enabling drivers to easily find the best path to their cars.



E-Map features allow parking data to be visualized in real-time, simplifying monitoring and management. It supports live video, image preview, and playback.



PMS8000 supports parking space reservations. If a reserved parking space is illegally occupied, a notification will be sent to the administrator.

Key Features

| KEY FEATURES | PMS8000 |
|------------------------------|--|
| Supported Cameras Per Server | 1000 |
| Maximum Users | 1000 simultaneous online users / unlimited users |
| Dimensions | 1U, 495mmx42.8mmx434mm |

VTSS5000

VTSS5000 is an SIP server that consists of VDP management and video management. It comes pre-installed with management software and Linux, making it easy to deploy and operate.

VTSS Mobile allows operation from mobile devices.



VTSS5000



VTSS Mobile

Two-way video talk between VTO and control center.

Two-way audio call between VTH/SIP phone and control center.

Control center and VTSS Mobile can unlock remotely.

Support issuing card and fingerprint registration.



Key Features

| KEY FEATURES | VTSS5000 |
|---|---------------------------|
| Supported VDP Channels Per Server | 5000 |
| Maximum Video Input Bandwidth Per Server | 300Mbps |
| Maximum Video Output Bandwidth Per Server | 300Mbps |
| Dimensions | 1U, 440mmx43.65mmx398.7mm |

DSS PRODUCT COMPARISON CHART

| FEATURES | DSS PREMIUM | | |
|--|-------------------|---------|--|
| | DSS PRO | DSS4004 | |
| Deployment | | | |
| Hot Standby | √ | √ | |
| Distributed deployment | √ | √ | |
| Performance | | | |
| Supported Channels Per Server | 1500 ^① | 256 | |
| Supported Devices Per Server | 500 ^① | 256 | |
| Access Control | √ | √ | |
| VDP | | √ | |
| Alarm Controller | √ | √ | |
| ONVIF | √ | √ | |
| Access Rights Control | √ | √ | |
| Event Actions (Record, Email, I/O Output, PTZ, Audio Playback, Video Wall) | √ | √ | |
| Map | √ | √ | |
| Add-Ons | | | |
| Business Intelligence | Optional | | |
| Mobile | | √ | |
| LPR | Optional | | |
| Face Recognition | Optional | | |
| Service | | | |
| Software Upgrade Plan | 1 year | 3 year | |
| Customization | √ | | |

① Hardware dependent(CPU: E3, Memory: 8GB)

| DSS COMPACT | | | |
|-------------|---------|---------|----------|
| DSS7016D | EMS4004 | PMS8000 | VTSS5000 |

| | | | |
|---|--|--|--|
| ✓ | | | |
| ✓ | | | |

| | | | |
|------|--------|------|------|
| 2000 | 10 ITC | | 256 |
| 500 | | 1000 | |
| ✓ | | ✓ | |
| ✓ | ✓ | ✓ | 5000 |
| ✓ | | | |
| ✓ | | | ✓ |
| ✓ | ✓ | ✓ | ✓ |
| ✓ | | | ✓ |
| ✓ | | ✓ | ✓ |

| | | | |
|---|--|--|--|
| | | | |
| ✓ | | | |
| | | | |
| | | | |

| | | | |
|--------|--------|--------|--------|
| 3 year | 3 year | 3 year | 3 year |
| ✓ | | ✓ | |

SUCCESS CASES

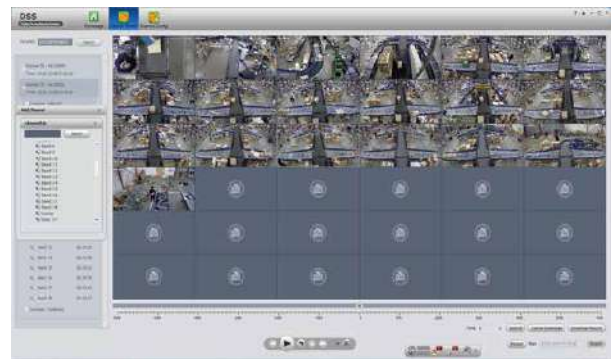
Paraguay Monitor Centre Project



Project Introduction:

- Project integrates DSS7016D with NKB3000. NKB3000 is used to control the multi-screen operation quickly.
- DSS integrates the video surveillance, Access control and alarm controller together.

Holland Logistics Project



Project Introduction:

- All the video of the parcel are monitored by DSS.
- The relations between the scanner ID, the conveyor ID and the camera are set by DSS.
- Administrator can search and playback the videos through the parcel number.

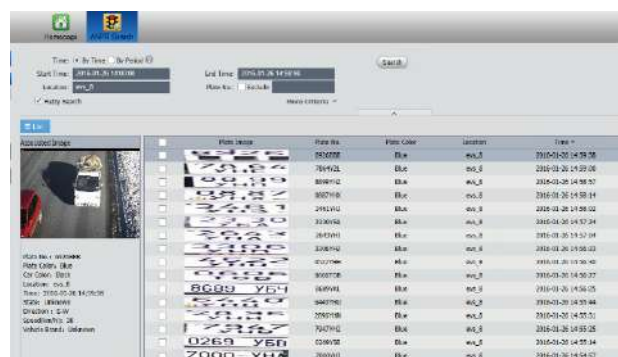
Mexico Bus Management Project



Project Introduction:

- View the real-time videos of the bus and records the real-time location and speed of the vehicles.
- Integrate traffic accidents detection and emergency button. This is helpful for protecting the public safety once the emergency occurs.
- DSS counts the total amount of the tickets, it offers the bus company the evidence to verify whether the actual income is right. It reduces the loss of income for bus company efficiently.

Mongolia ITS Project



Project Introduction:

- DSS supports the red light enforcement and speed enforcement. It greatly reduces the violations.
- DSS records image of the car, plate number, registration time, and violation information.
- DSS supports printing a ticket.



QUALITY BY DESIGN

* Design and specifications are subject to change without notice.

DSS Products - 01, May 2017



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