DSS Professional

General Surveillance Management Center

Introduction

DSS Pro is a flexible, scalable, high reliable and powerful central management system. Client-Server Architecture, Integrating with multiple surveillance systems. DSS Pro provides the central management, information sharing, convenient connection and multi-service cooperation. It is capable of user permission management, device management, alarm management, central storage, video wall, Map and other advanced features, which includes Business Intelligence (People counting and heatmap).

Key Components

Service

· Central Management Service (CMS)
· Device Management Service(DMS)
· Storage Service (SS)
· Media Transmission Service (MTS)
· Auto Register Service (ARS)
· Alarm Dispatch Service(ADS)

Client

· PC Client

Running Environments

Operating System

• OS for Server:
· Windows 7 Ultimate (64-bit)/Windows 10 Enterprise / Windows Server 2008 R2 Standard

• OS for Control Client:
· Windows 7 / Windows 8.1 / Windows 10

Hardware

• Hardware for Server

Recommended

CPU	E5-2640 v3@2.60GHz 8 Core Processor
Memory	16GB
System Disk	1TB, 500G free for DSS
Ethernet port	4 Ports@1000Mbps

Minimum

CPU	E3-1220 v5@2.60GHz 4 Core Processor
Memory	8GB
System Disk	1TB, 500G free for DSS
Ethernet port	2 Ports@1000Mbps

• Hardware for Control Client

Recommended

CPU	Intel Core i5, 64 bits 4 Core Processor
Memory	8GB
Graphics Card	NVIDIA® GeForce®GT 730
Hard Drive Capacity	200G free for DSS Control Client
Ethernet port	1000Mbps

Minimum

CPU	Intel Core i3, 64 bits 4 Core Processor
Memory	4GB
Graphics Card	Intel® HD Graphics 4400
Hard Drive Capacity	100G free for DSS Control Client
Ethernet port	1000Mbps

Browser Version

· Internet Explorer: 9/10/11
· Chrome: 40.0.2214.91 and above
· Firefox: 40.0.2 and above

DSS Professional

Features

New Design, Easy to Use
· Based on Windows OS.
· New design interface, make DSS easier to use.

High Compatibility
· Dahua's devices included: network camera, network speed dome, NVR, DVR, etc.
· Connect third-party devices via standard ONVIFprotocol.

Main Function

1. DSS Professional Web Manager

Organization Management
· Through organization to achieve device group management.

Device Management
· Add the devices via auto search, IP, Domain, IP Segment, auto register(for 3G, 4G, DHCP device).
· Manage Dahua's devices such as network camera, network · speed dome, NVR, DVR, MDVR, etc.
· Through the ONVIF protocol to add third-party devices to manage.

Role and User Management
· Add, edit and delete the roles and users.
· Assign different roles with different permissions.
· User can be assigned with the roles to obtain the corresponding permissions.
· User can be limited by the MAC and expiry data.
· User has PTZ permission.
· User can be locked.
· Support import domain user and assign roles to the user.

Event Management
· Detect the device exception, video events, alarm input and alarm host.
· Alarm Scheme: all day template, Weekday template, Weekend template and custom template.
· Alarm Priority: Low, Meduim, High.
· Linkage: Record, Snapshot, Live video, Alarm output, PTZ, Vido wall, E-mail.
· Add, edit, delete, enable and disable alarm scheme.

Storage
· Central storage: Extend storage through ISCSI.
· Add, edit, delete, enable and disable the record plan.
· Support edge storage and central storage for record plan.
· Backup the video from the front-end EVS, NVR, DVR and etc. by schedule

· Backup the video from MDVR by WiFi.
· Disk Quota: Different cameras can be allocated to different disk groups.

Map
· Google online map, Google offline map, Raster map
· Main map and sub maps.
· Up to 8-level sub map.
· Add, edit and delete the hot zone on the map.
· Add, edit and delete the hot spots (camera, alarm input) on the map.

Video Wall
· Add and manage the Video Wall.
· Support On/Off the screen ID.
· Support to combine screens to one screen.
· Bind the decode channel with the corresponding screen.

Backup and Restore
· Backup system data automatically .
· Backup system data manually .
· Restore system data from server or local PC.

Statistic
· Overview and detail system information.
· Running status: CPU, Storage, Bandwidth.
· Online information of Service, Device and User, Device Health Report.
· Event information statistics: total events and processed events.
· Source Information: Video channel, alarm channel.

Log
· System log, web manager log, control client log.
· Search and export log.

2. DSS Professional Control Client

Live View
· Display device tree. Show/hide offline device.
· Display the device IP address or device name on the device tree
· View real-time video.
· Common layout and custom layout
· PTZ control
· Manual recording
· Snapshot
· Instant playback
· Digital zoom
· Fisheye dewarping
· Fisheye and speed dome smart tracking
· Audio talk
· Set alarm window.

· Decode the video to video wall quickly

· Turn on/off the audio in live view

· Region of Interest: Divide one window into 4 or 6 parts, one shows whole image, others show the detail.

· Display raster map in Live View

· Save the current live view as a view.

· Max support 4 Live View tabs.

· Support adding channel to favorite

· Video Tour by device, Org, Favorite, View.

· Fast switch to playback.

· Support NKB to control on Live View

Playback

· Playback the record from the front-end devices or central storage.

· Video filter: Normal, motion, alarm, video loss, tampering video

· Sync play

· Reverse playback

· Slow and fast forward

· Playback frame-by-frame

· Timeline zoom in and zoom out.

· Locate the record through timeline: drag to any time you want to play through timeline.

· Lock and mark the important record for central storage.

· Download the assigned records, support AVI and DAV format.

· Decode the video to Video Wall.

Download Center

· Download record from central storage or device.

· Download record by timeline, files or tags.

· Support multi-task download.

· Support DAV and AVI format.

Event

· Display event alarm info including alarm time, alarm name, alarm status, etc.

· View the live video or pictures from related camera.

· Acknowledge the event alarm.

· Arming control for event alarm

· Forward the alarm to relevant user

· Send alarm e-mail.

· Process the alarm.

Video Wall

· Decode the real-time video to wall

· Decode the playback video to the Video Wall by decoder or matrix.

· Manually/automatically decode to wall.

· Control the Video Wall split

· Change the stream type of video channel.

· Adding box, on/off screen and back display.

· Tour the video channel

· Schedule plan: Set the running task on timeline.

· Tour plan: Loop different task, can set loop time

· Support NKB to control video wall.

Map

· View the live video and playback on the map

· Zoom in and zoom out the map

· Decode the video to Video Wall quickly

· Support to calculate the area or length for GIS map

· Support visible range and initial angle.

· Channel flash on map when alarm is occurring.

Smart track

· Fisheye and speed dome

Business Intellgence (Add-Ons)

· People counting and heat map

· Statistic the count of enter and exit

· Search the people counting data via time

· Generate the daily, weekly, monthly report.

· Search the heat map

· Export the people counting and heatmap data.

Performance Specification

Org, User and Role

Organization	10 hierarchies, 999 organizations per hierarchy
Role(User Permission)	100
User	200 online users and unlimited users

Device and Channel

Total Device and Camera Channel	500 devices, 1500 video channels
Dahua	500 Devices, 1500 video channels
Auto-Register	200 devices, 500 video channels
ONVIF	100 Channels

Media Transmission Server

Video Input per Server	600 Mbps
Video Output per Server	600 Mbps

Playback, Storage and Download

Playback Bandwidth per Server	100 Mbps
Video Storage Bandwidth per Server	600 Mbps
Maximum Capacity per Storage Server	200TB
Download Task	UP to 5 per Client

Alarm

Number of alarm reception without Pic	80 per Second
Number of alarm reception with Pic	5 per Second

Map

Hierarchy of Raster Map	8 Hierarchies
Hot zone of Raster Map	32 per Hierarchy
Map size of Raster Map	Up to 15MB
Channel Number	Up to 200(GIS and Raster)

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