



HikCentral Master V1.0.0
Datasheet

Introduction

HikCentral Master is an intelligent management platform under the architecture of AI Cloud, facing to edge domain. It focuses on data application, data collection, storage, processing, and intelligent applications. It provides data integration, storage and analysis of multidimensional data in the scenario of Edge Domain and Cloud Center, integrated with technologies of Artificial Intelligence and Internet-of-Things (IoT).



Key Components

- Server Modules:

Module ID	Module Name
HikCentral-Master-VAS	Video System Management
HikCentral-Master-METIS	Application of Electronic Map
HikCentral-Master-VPS	Video Parsing application
HikCentral-Master-FAS	Face Application
HikCentral-Master-BMS	Vehicle Application
HikCentral-Master-IBODY	Human Body Application
HikCentral Master-ARHIGHNUM	AR Scenario Number
HikCentral-Master-LANE	Vehicle Lane
HikCentral-Master-VIDEO	Video Channel
HikCentral Master-VIOLATION	Violation Management

- Web Client/Control Client/Plug-in Assistants/AR Client

System Requirements

Feature	Description
OS for Server	Linux Centos7.4(for hik)
OS for Control Client	Microsoft® Windows 7 (32/64-bit) Microsoft® Windows 10 (32/64-bit)
Browser Version	Chrome 68 and above

Function Features

Platform

- Intelligent Platform Management
 - Supports on-stop installation, parameter configuration, server monitoring, and log analysis.

- Supports cluster management and authorization management.
- Intelligent Applications: With the integration of multiple functionality and application software, the platform extends its applications from video surveillance to the ones based on artificial intelligence algorithms, such as Automatic Number-Plate Recognition (ANPR) and facial recognition. This makes the platform applicable to the usage scenarios such as city surveillance system and intelligent transportation system.
- Intelligent Scheduling
 - Supports dynamic scheduling of computer resources based on the integrated management of computers.
 - Supports accessing multiple types of storage devices and the integrated management of storage devices.
 - Compatible with devices of multiple manufacturers and algorithms of multiple versions.
- Open Platform: Supports integrating with third-party infrastructure, data, platform, and applications based on open standards.
- Comprehensive Security Mechanism: Provides security mechanism for device, network, host computer, data, and applications, and supports multiple security control schemes.
- Extensibility and Scalability
 - Supports expanding the capacity of the services such as the maximum added device amount, stream storage, events, and data library.
 - Increases capacity and stability by distributed deployment.
 - Supports cluster deployment for some key services such as streaming gateway.
 - Supports techniques such as clustered proxy, distributed cache, and load balancing to improve the response speed, and decrease performance losses caused by the interaction among different components and modules, therefore improving the fluency of the platform.
- Multiple Usage Scenarios: Supports assembling different modules into different platforms based on different usage scenarios. The platforms can be compatible with each other and cooperate with each other.

Web Client

- Video Application
 - E-map: Supports basic video application (video plan, video tracking, video linkage, three-circle monitoring, etc.), data analysis application (pattern analysis and area comparison), GPS application (route plan, GPS positioning, video relay, etc.), and situation analysis (alarm view and flow heat map).
 - Video Search: Supports live video, video footage search, camera search, Favorites, and video plan management.
 - Video Parsing: Supports parsing the live videos and history videos.
- Search Center
 - Face Picture Search
 - ◆ Supports searching facial information by facial features.
 - ◆ Supports filtering facial information by related human body information and related vehicle information.

- ◆ Supports searching the captured face pictures by an uploaded face picture.
- ◆ Supports searching the face library by an uploaded face picture to identify the ID information of the target person.
- Vehicle Search
 - ◆ Supports searching passing vehicles by vehicle features.
 - ◆ Supports searching vehicle information related with facial information.
 - ◆ Supports searching passing vehicles by an uploaded vehicle picture.
- Human Body Search
 - ◆ Supports searching human body information by body features.
 - ◆ Supports searching human body information which reaches the similarity threshold by an uploaded human body picture.
- Device Alarm Search
 - ◆ Supports displaying alarm information of all alarm devices, including device type, device name, alarm type, and alarm time.
 - ◆ Supports filtering alarm information by device type, device name, device No., alarm type, etc.
 - ◆ Supports view alarm details, including the basic information of the alarm and the alarm related picture (the picture can be enlarged).
- VCA Alarm Search
 - ◆ Supports displaying all VCA alarm information, including analysis type, device name, alarm type, and alarm time.
 - ◆ Supports filtering alarm information by analysis type, device name, alarm type, and alarm time, etc.
 - ◆ Supports viewing alarm details, including basic information of the alarm and the alarm related picture (the picture can be enlarged).
- Integration Search
 - ◆ Supports searching globally by keywords or the uploaded picture.
 - ◆ Supports searching human bodies, faces, and vehicles by features and the uploaded picture.
- Facial Application
 - Companion Analysis
 - ◆ Supports creating a companion analysis task by uploading a picture and setting information such as min. appearance with companion, companion interval, execution time period, etc.
 - ◆ Supports viewing the analysis results, including comparison of companion in the group, target PICUTRE, companion capture picture, large picture of companion appearing together with target person, face information of the current target, etc.
 - Person Hideout Analysis
 - ◆ Supports creating a person hideout analysis task by uploading a picture and setting information such as similarity.
 - ◆ Supports viewing the analysis results such as the capture records of the target person, map position of the captured place, face information, cameras which captured the face picture of the target person, etc.
 - Frequent Passing Analysis

- ◆ Supports creating a frequent passing analysis task by uploading a picture and setting information such as similarity and frequency threshold.
- ◆ Supports viewing the analysis results, such as the analyzed face picture set, map positioning of the target picture, face picture information, the cameras which captured the face picture, etc.
- Vehicle Data Application
 - Driving Pattern Analysis
 - ◆ Supports searching the information of the passing vehicles within a specified time period.
 - ◆ Supports displaying the results on map and playing back pattern.
 - Area Collision Analysis
 - ◆ Supports searching the passing vehicles of multiple checkpoints by a specified time point or a license plate number.
 - ◆ Supports displaying the results in list or on map.
 - Vehicle Hideout Analysis
 - ◆ Supports hideout analysis of suspicious vehicles based on the driving pattern among city checkpoints using statistical algorithm.
 - ◆ Supports displaying the results in list and switching view to show results.
 - Frequent Passing Vehicle Analysis: Supports displaying frequent passing vehicles of specific check point(s) within a specified time period.
 - Driving Rule Analysis
 - ◆ Supports analyzing vehicle rule within a specified time period.
 - ◆ Supports viewing the passing vehicle details of the target checkpoint by clicking it on the map.
 - Vehicle Driving Along Analysis
 - ◆ Supports filtering passing vehicles based on a specified checkpoint or intersection violation system, by the filtering condition(s) such as a specified time point, or license plate number and vehicle type.
 - ◆ Supports displaying the results in list or on map.
 - Search Vehicle by Vehicle Picture
 - ◆ Supports searching vehicles by an uploaded vehicle picture.
 - ◆ Supports displaying results in groups by license plate number, and displaying the comparisons between the target vehicle and the matched results.
- Arming Alarm Center
 - Vehicle Arming
 - ◆ Supports creating a vehicle arming task basing on license plate, vehicle model, red list, and vehicle list library, and configuring client linkage and SMS message linkage (when the armed vehicles are detected, the platform will remind user by the linkage).
 - ◆ Supports operations including disarming, exporting, and approving arming task, etc.
 - Face Picture Arming
 - ◆ Supports creating a face picture arming task basing on the blacklist or a single face picture, and configuring client linkage and SMS message linkage (when the armed face(s) are detected, the platform will remind user by the linkage).

- ◆ Supports operations including disarming, exporting, and approving arming task, etc.
- Target Alarm Search: Supports searching alarms basing on an arming task. The alarm details include alarm records, pattern on map, arming information, and picture information.
- Video Maintenance
 - Overview
 - ◆ Supports displaying the data overview, including the total number of cameras, camera online rate, normal image rate, video integrity rate, resource running status, , the camera running status trend, video exceptions, etc., in a visualized way.
 - ◆ Supports quickly inspecting running status of the resources and ranking a selected area and its child areas based on theirs score in terms of resource health level.
 - Video Surveillance
 - ◆ Supports online status monitoring, video quality diagnosis, and recording check for cameras.
 - ◆ Supports status monitoring and management of encoding devices, storage devices, and decoding devices, and viewing details of these devices.
 - ◆ Supports customizing device topology tree and topology page functions.
 - Alarm Search
 - ◆ Supports viewing current day alarms, total alarm amount, and amount of each type of alarms, which includes alarm about resource status, recording exception, video quality, and others.
 - ◆ Supports viewing alarm details, and other operations including acknowledging, deleting, exporting and refreshing alarms, etc.
 - ◆ Supports filtering alarms by alarm status, alarm source name, and alarm source, etc.
 - Report Analysis: Supports generating area overview report, video quality report, recording status report, streaming status report, camera status report, and video retention status report.
- Analysis Center
 - Face Picture Data Statistics
 - ◆ Supports displaying the amount of face library, the total person amount, as well as the modeling succeeded times, and modeling failed times.
 - ◆ Supports filtering the capture data and pre-alarm data by a specified time period.
 - Vehicle Data Statistics
 - ◆ Supports analyzing the passing vehicle data of a specific checkpoint in a specified time period, and displaying the results in the form of daily report and monthly report.
 - ◆ Supports analyzing passing vehicle total number, top 5 checkpoint of passing vehicle (redirecting page is allowed to display more), top 5 frequent passing vehicles (redirecting page is allowed to display more) in a specified time, and peak hour; Calculating total amount of all vehicles, out-of-town vehicle, and first-time entry vehicle in specified time; Displaying in list or graph by registration location, brand, vehicle type and vehicle color.
 - Human Body Statistics:
 - ◆ Supports displaying total amount of human body structured data, structured data

in today, analysis result total amount of real-time task and recording task, and top 10 camera analysis data amount.

- ◆ Supports displaying daily added data amount in line chart (the last 7 or 30 days are available); Calculating data amount density which can be searched by month or by day.

Control Client

- Video Wall
 - Supports dividing video wall evenly into 1, 4, 6, 8, 9, or 16 windows.
 - Supports jointing or cancel jointing of windows, opening window (i.e., open a layer of image to show the live image of a specific camera), roaming (i.e., drag window to adjust its size and position), and resizing a video wall screen to the whole video wall.
 - Supports video wall image layer operations, such as sticking a specific image to the top or to the bottom.
 - Supports dragging a specific camera to a window of the video wall to display the camera's live video.
 - Supports audio control, PTZ control, configuring storage location and storage type, and local playback by the selected date.
 - Supports playback on video wall and audio control during playback.
 - Supports auto-switching cameras for live videos.
 - Supports displaying system desktop of the PC where the Client is installed on video wall.
 - Supports displaying live view of analog channel on video wall.
 - Supports configuring stream type (main stream and sub-stream) for a camera whose video is displaying on video wall.
 - Supports audio control for the output channel.
 - Supports adding virtual textbox on the video wall and editing the text.
 - Supports fuzzy search for cameras.
 - Supports setting decoding resolution of the channel displayed on video wall to D1 resolution, 720P, or 1080P.
- Smart Linkage
 - Supports automatically detecting moving objects in the images and highlight the objects by red or green frames.
 - Supports locating object in red frame through PTZ camera.
 - Supports selecting object in green frame and relocating it through PTZ camera, and then tracking the target.
 - Supports selecting an area in the images of the fixed camera, and then the PTZ camera will locate and track the area.
- Real-Time Video Alarm
 - Supports temporarily disarm alarm cameras and batch deleting alarm information.
 - Supports displaying the alarm details, including alarm name, alarm priority, alarm source, alarm type, alarm time, etc.
 - Supports viewing the live video of the selected alarm cameras and the video footage recorded during the alarm time.

- Supports filtering alarms by alarm name, alarm type, alarm priority, and alarm time.
- Real-Time Face Picture Alarm
 - Supports displaying information, including the similarity between the captured face picture and the ones in the blacklist, the name of the capture camera, and the captured time, etc.
 - Supports viewing the video footage recorded when the face picture was captured.
 - Supports viewing alarm details, including the similarity between the captured face picture and then armed face picture, the information of the matched face pictures in blacklist, and corresponding arming information, etc.
 - Supports switching the matched face pictures in blacklist and viewing their similarities with the captured face picture.
 - Supports downloading face pictures to a specified directory.
 - Supports setting arming tasks that need to be received.
 - Supports setting a similarity threshold to receive alarms.
- History Face Picture Alarm
 - Supports searching history alarms by arming task, arming scope, arming object, similarity, start/end time, name, certificate No., etc.
 - Supports ranking history alarms by similarity, time, location, target, etc.
 - Supports exporting data in a page, all the data, or the selected data.
 - Supports viewing the video footage of the capture device, and downloading face pictures to a user specified directory.
- Face Picture 1V1 Comparison
 - Supports comparing two uploaded face pictures and getting a similarity level afterwards
 - Supports saving the uploaded face pictures and displaying them on the face picture sample area.
 - Supports adding face picture samples to comparison tasks, and deleting or clearing face picture samples.
- Real Time Face Picture
 - Supports viewing the live videos of the up to 4 cameras simultaneously.
 - Supports enlarging the live view window to the whole Video Surveillance area.
 - Supports saving the face pictures to the default directory.
 - Supports switching the enlarged version of the captured pictures.
 - Supports saving the face pictures to a user specified directory, and viewing the details of the alarm records, including the similarity between captured face picture and the armed face picture, the information of the face picture matched with the one in the blacklist, and the similarity between the captured face picture and the one in the blacklist.
 - Supports viewing the face pictures matched with those in the blacklist, and checking the corresponding face pictures in the blacklist and the similarities.

Operation and Management Center

- Parameter Configuration
 - Center Server Configuration
 - ◆ Supports configuring parameters for components and servers.

- ◆ Supports detecting port conflicts.
- ◆ Supports verifying the validity of the user-specified parameter values.
- Local Server Configuration
 - ◆ Supports configuring parameters for local servers and components of the servers, and setting the parameters to be consistent with the corresponding parameters of the Operation and Management Center or not.
 - ◆ Supports detecting port conflicts.
 - ◆ Supports verifying the validity of the user-specified parameter values.
- Center Alarm Configuration
 - ◆ Supports adjusting the alarm strategy
 - ◆ Supports restoring the alarm strategy to its default value.
- Local Alarm Configuration
 - ◆ Supports adjusting alarm strategy, which can be inconsistent with alarm strategy of the Operation and Management Center.
 - ◆ Supports restoring the alarm strategy to the value same with the alarm strategy of the Operation and Management Center.
- Time Synchronization Configuration
 - ◆ Supports setting NTP service in central management server or external servers.
 - ◆ Supports automated time synchronization by server.
 - ◆ Supports manual synchronization.
- Multi-Domain Configuration
 - ◆ Supports filtering by service name, server name, port, and keywords.
 - ◆ Supports creating new domains.
 - ◆ Supports editing the multi-domain configuration of a specified service.
- Software Running Status Monitoring
 - Displaying Status in Chart and List
 - ◆ Supports displaying the topology and running status of the servers and components in charts, as well as alarms and status statistics.
 - ◆ Supports displaying the running status of the current server and component on video wall.
 - ◆ Supports scoring system running status.
 - ◆ Supports statistics of server online rate and relevant details.
 - ◆ Supports statistics of alarms (handled, ignored, and unhandled) in recent 7 days.
 - ◆ Supports statistics of active users in recent 7 days.
 - Server Status Monitoring
 - ◆ Supports viewing the status of the servers, including CPU usage, memory usage, HDD usage, etc.
 - ◆ Supports viewing alarms and handling alarms.
 - ◆ Supports displaying the records of maintenance for software.
 - ◆ Supports viewing the basic information of the servers.
 - Component Status Monitoring
 - ◆ Supports viewing the running status of the components, including CPU usage, and memory usage.
 - ◆ Supports enabling/disabling services within components.

- ◆ Supports self-inspection for the component status.
- ◆ Supports viewing alarms and handling alarms.
- ◆ Supports viewing maintenance records.
- ◆ Supports viewing basic information of the components.
- Enabling/Disabling Service
 - ◆ Quickly enabling, disabling, or rebooting all services or the selected ones.
 - ◆ Enabling, disabling, or rebooting a single service.
- Alarm Solving
 - Supports searching alarms generated within the whole system.
 - Supports batch solving alarms. Including batch handling alarms and batch ignoring alarms.
 - Supports providing different handling suggestions for users to help them handle the detected exceptions. Users can save their methods and experience for handling problems to the knowledge base.
 - Supports exporting the matched alarms after search.
- Log Analysis
 - System Log
 - ◆ Supports searching system logs by service, log time, log level, keywords, and categorizing the search results in different tabs by service types.
 - ◆ Supports viewing error codes and call chains in the logs, as well as the related contents.
 - ◆ Supports exporting the search results.
 - Operation Log
 - ◆ Supports searching logs by log time, operation result, and keywords.
 - ◆ Supports exporting search results.
- Knowledge Base
 - Provides a forum for maintenance personnel to communicate and share their experience in solving problems.
 - Supports exporting and importing the shared experience.
 - Supports searching articles in the knowledge base by keywords.
- License Management
 - Supports activating new product license, managing activated license file or activation code, deactivating license, and expanding license capacity.
 - Supports viewing the current license status, including the authorized items and corresponding values.
- Service Management
 - Supports searching services by components, service type, server and keywords.
 - Supports manually adding services, and other operations such as editing, viewing and deleting services.
- Person Group Management
 - Supports manually adding person information.
 - Supports batch importing person information.
 - Supports exporting person information.
- Data Backup

- Supports manually backing up all data or the data of the specified components. And the backed up data can be manually deleted.
- Supports automatic backup and setting automatic backup strategy.

Software Specification

The following table shows the maximum performance of the HikCentral Master.

Note: All the data below is tested by 4 servers (64 GB RAM each) and 3 big data analysis clusters.

Features		Performance	
General	Maximum concurrent logins via Web Client	240	
	Maximum concurrent logins via PC Client	240	
	Maximum concurrent online users of the platform	8,000	
	Time for single user login	≤2 seconds	
Video Center	Maximum concurrent users loading organization tree in Video Patrol module	240	
	Average response time for searching cameras	≤1 second	
	Average response time for loading organization tree on the Web Client	≤1 second	
	Average response time for loading zoomed map	≤3 seconds	
	Average response time for searching cameras on the organization tree on map.	≤1 second	
	Average response time for searching cameras within the drawn rectangle on map	≤1 second	
	Average response time for loading E-map	≤3 seconds	
	Time for search 1,000,000 historical GPS data	≤5 seconds	
Query Center	Data Transmission	The maximum number of concurrent URL queries within 1 second	25
		Maximum concurrent transmission capability for transmitting face pictures (picture size: 300-400k) when there're 30,000,000 data	200 per second
		Maximum concurrent transmission capability for transmitting data without pictures when there're 30,000,000 data	3,000 per second
	Face Query	Average time for searching 30,000,000 face picture data by 5 uploaded face pictures for a same target under the precondition that 20 users are online and 8 of them do such a search concurrently	≤5 seconds
		Average time for searching 30,000,000 face picture data by 5 uploaded face pictures for different targets under the precondition that 20 users are online and 8 of them do such a search concurrently	≤2 seconds
	Vehicle	The response time for generating search	≤1 second

	Search	results after 40 users search vehicle features concurrently in any 30-day period	
		Time for exporting 2,000 passing vehicle data without pictures	≤2 seconds
	Human Body Search	Time for exporting 2,000 results	≤2 seconds
		The response time for generating search results after 50 users concurrently search 50,000,000 human body data	≤2 seconds
		The response time generating search results after 10 users concurrently search 25,000,000 human body data by human body picture	≤2 seconds
Target Arming and Alarm	Alarm Search	Maximum time for returning results of searching 2,000,000 data.	2 seconds
	Vehicle Arming Alarm	Time for saving the triggered alarm information into data library when the captured license plate number matches the armed target (under the precondition that the camera captures at a frequency of 200 pictures per second)	≤5 seconds
		Time for sending the triggered alarm information to Client when the captured license plate number matches the armed target (under the precondition that the camera captures at a frequency of 200 pictures per second)	≤7 seconds
	Face Arming Alarm	Success rate of applying face arming tasks	100%
		The time for applying arming tasks to each TDA and taking effect	≤1 second
		Maximum time for running the real-time alarm module stably under the precondition that the alarms are triggered at a frequency of 20 per second	8 hours
	Vehicle Application	Driving Pattern Search	Time for returning the results of driving patterns analysis of vehicles captured during any 30-day period when 5 users do such analysis concurrently
Area Collision		Average time for area collision analysis of checkpoints in two or more areas in a day when 5 users do such analysis concurrently	≤1 second
Vehicle Search by Driving pattern		Time for returning results of the search of passing vehicles of 5 checkpoints by driving pattern in any 30-day period when 5 users do such analysis concurrently	≤1 second

System Configuration	Time for redirecting to the Department Management page	≤2 seconds
	Time for redirecting to the User Management page	≤2 seconds
	Time for redirecting to the Role Management page	≤2 seconds
	Time for user search on User Management page	≤1 second
	Time for role search on Role Management page	≤1 second
	Time for exporting user information on User Management page	≤5 seconds
	Time for expanding department tree on Department Management page	≤0.5 second
	Time for assigning role on Role Management page	≤2 seconds
	Time for page turning on User Management page	≤1 second
	Time for page turning on Role Management page	≤1 second
	Maximum exportable results of duplicate check for a single time of exportation.	2,000
	Maximum departments	10,000
	Maximum roles	30,000
	Maximum users	100,000
	Maximum cameras	500,000
Maximum devices (current cascading level)	100,000	

Hardware Specification

Hikvision bought 3-year platinum service from Dell. You can get assistance from your regional Dell support center if you encounter any problems on the Dell server.

Processor	Up to two Intel® Xeon® SP, up to 28 cores per processor This model is configured two Intel® Xeon® SP(4114x2)	
Memory	24 DDR4 DIMM slots, Supports RDIMM /LRDIMM, speeds up to 2666 MT/s, 3 TB max Up to 12 NVDIMM, 192 GB Max Supports registered ECC DDR4 DIMMs only This model is configured 64G DDR4 DIMM	
Storage Controllers	(Optional) Internal controllers: PERC H330, H730p, H740p, HBA330, Software RAID (Optional) (SWRAID) S140 Boot Optimized Storage Subsystem: HWRAID 2 × M.2 SSDs 120 GB, 240 GB (Optional) External PERC (RAID): H840 (Optional) External HBAs (non-RAID): 12 Gbps SAS HBA This model is configured PERC HBA	
Drive Bays	Front drive bays: up to 8 × 3.5" SAS/SATA HDD max 80TB, Optional DVD-ROM, DVD+RW This model is configured 600G SAS 15K × 4	
Power Supplies	Titanium 750W, Platinum 495W, 750W, 1100W, 1600W 48VDC 1100W, 380HVDC 1100W, 240HVDC 750W (China/Japan) Hot plug power supplies with full redundancy and Up to 6 hot plugs fans with full redundancy This model is configured 495W(1+1)	
Sizing	Form factor: Rack (2U) Chassis depth: 715.5 mm	
Embedded Management	IPMI 2.0 compliant iDRAC9 with Lifecycle Controller (Express, Enterprise) Quick Sync 2 wireless module optional	
Bezel	security bezel	
OpenManage™ Software	OpenManage Enterprise OpenManage Essentials	OpenManage Mobile OpenManage Power Center
Net Weight	26.5kg	
Integrations and Connections	Integrations: Microsoft® System Center, VMware® vCenter™, BMC Software Connections: Nagios & Nagios XI, Oracle Enterprise Manager,	HP Operations Manager, IBM Tivoli® Netcool/OMNibus, IBM Tivoli® Network Manager, CA Network and Systems Management
Security	TPM 1.2/2.0 optional Cryptographically signed firmware Secure Boot	System Lockdown Secure erase
I/O & Ports	Network daughter card options: 4 × 1GE or 2 × 10GE + 2 × 1GE or 4 × 10GE or 2 × 25GE This model is configured 4 × 1GE	

	<p>Front ports: Video, 2 × USB 2.0, available USB 3.0, dedicated iDRAC Direct Micro-USB</p> <p>Rear ports: Video, serial, 2 × USB 3.0, dedicated iDRAC network port</p> <p>Video card: VGA</p>
Net Weight	25.7 kg
GPU Options	<p>Nvidia Tesla P100, K80, K40, Grid M60, M10, P4</p> <p>Quadro P4000. AMD S7150, S7150X2</p> <p>This model is not configured by default</p>
Supported Operating Systems	<p>Canonical® Ubuntu® LTS</p> <p>Citrix® XenServer®</p> <p>Microsoft Windows Server® with Hyper-V</p> <p>Red Hat® Enterprise Linux</p> <p>SUSE® Linux Enterprise Server</p> <p>VMware® ESXi</p>



See Far, Go Further