

ENVR-R2215P21

Release Notes

Zhejiang Uniview Technologies Co., Ltd.

ENVR-R2215P21 Release Notes

Keywords: Version information, usage notes, precautions.

Abstract: This document provides information about the ENVR-R2215P21 board software, including version information, usage notes, precautions, and features.

Acronym

Acronym	Full Name
NVR	Network Video Recorder

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1 Version Information

1.1 Version Number

ENVR-R2215P21

1.2 Applied Product Models

Table 1 Applied Product Models

Product Models	Description
NVR204-16E	4 slots, 16-ch, 1 U with front panel
NVR204-32E	4 slots, 32-ch, 1 U with front panel
NVR208-16	8 slots, 16-ch, 2 U with front panel
NVR208-32	8 slots, 32-ch, 2 U with front panel

1.3 Release History

Table 2 Released Versions

Version No.	Basic Version No.	Released On
ENVR-R2215P21	ENVR-R2215P15	2015-11-10
ENVR-R2215P15	ENVR-B2212P15	2015-10-29
ENVR-B2212P15	ENVR-B2211P15	2015-8-14
ENVR-B2211P15	ENVR-B2211P08	2015-6-19
ENVR-B2211P08	ENVR-B2211P05	2015-5-18
ENVR-B2211P05	ENVR-B2210P10	2015-4-30
ENVR-B2210P10	ENVR-B2208P08	2015-3-19
ENVR-B2208P08	ENVR-B2208P07	2015-1-27
ENVR-B2208P07	ENVR-B2207P05	2015-1-8
ENVR-B2207P05	ENVR-B2206P35	2014-11-28
ENVR-B2206P35	ENVR-B2206P10	2014-11-05
ENVR-B2206P10	ENVR-B2202P05	2014-09-22
ENVR-B2202P05	Initial release	2014-08-05

2 Usage Notes

None.

3 Software Features

Table 3 Software Features

Service	Feature
Audio and video decoding	H.264 video compression, with a maximum of 1080P resolution and 8Mbps bit rate.
Data storage	Local storage of recordings in hard disk(s).
Web-based management	Web-based user interface for device configuration and management.

4 Version Change Description

4.1 Feature Change Description

Table 4 R2215P21 Feature Changes

Item	Feature	Description
Newly added features	None	None
Improved features	Optimized startup wizard	Displays different procedures intelligently, simplifies steps and improves usability.
	Optimized stream selection in multi-window preview in system interface	Optimizes rules for choosing streams in multi-window preview: uses sub stream by default and uses main stream if sub stream is unavailable; enables stream preference configuration (main or sub stream) in multi-window preview.
	Enhanced capability of connecting IP cameras via ONVIF	Enables compatibility with XiongMai IP cameras, enables automatic adding of IP cameras and changing of IP addresses.
Deleted features	None	None

Table 5 R2215P15 Feature Changes

Item	Feature	Description
Newly added features	Holiday configuration	Schedule configuration includes holidays.
	Image snapshot and upload via FTP	Supports scheduled snapshot, alarm-triggered snapshot, and snapshot sending via e-mail and upload via FTP. Models that support this feature: NVR202-08EP, NVR202-08EN, NVR202-16E, NVR202-16EP, NVR202-16EN, NVR204-16E, and NVR208-16.
	Pre-record configuration	Pre-record time is configurable.
	Network bandwidth control	Network bandwidth control includes the control of sending bandwidth, receiving bandwidth, and live view and playback capacity. On-screen bandwidth statistics are added.
	Small preview window for playback on NVR	During playback on NVR, a small preview window displays images of the corresponding time point when the mouse cursor is placed on the progress bar.

	Output preference mode	Allows the user to choose a preferred image output mode on NVR.
	Changing IP address of cameras to be added	Allows the user to manually change the IP address of an IP camera to be added in the search list.
	Dedicated storage	Supports the configuration of recording storage space and image storage space by channel.
	Image parameter enhancement	Supports exposure configuration when connected to Uniview IP cameras via the private protocol.
Improved features	Uplink ONVIF function enhancement	Supports these new functions when connected to third-party platforms via ONVIF: privacy mask, recorded patrol, network configuration, drag-to-zoom, Uniview auxiliary PTZ control commands (e.g., focus, iris), and full frame rate for playback/download.
	Downlink ONVIF function enhancement	Supports these new functions when connected to Uniview IP cameras via ONVIF: auxiliary Uniview PTZ control commands (e.g., focus, iris), 3D positioning.
	Optimized bitrate configuration	Adds a drop-down list of frequently used bit rates for easy configuration.
	Improved compatibility with third-party IP cameras	Improves compatibility with third-party IP cameras in motion detection alarms and tampering detection alarms.
	Multi-channel backup on Web	Supports simultaneous multi-channel recording download on Web.
	Optimized display for video clipping	Shows time information during video clipping.
	Recording stops at full storage	Offers two recording storage modes: stops at full storage and overwrite.
	Improved playback on NVR	Allows playback to start from any time point on the NVR.
	Optimized PoE camera modification	Shows a list of discovered PoE cameras when editing cameras in the camera management window.
Deleted features	Mac OS Safari support	Allows Web interface access from Mac OS.

Table 6 B2212P15 Feature Changes

Item	Feature	Description
Newly added features	Connection to DVS	Supports connection to DVS via ONVIF.
	New UI	Provides a full-screen UI for easier operation and configuration.
	Mac and Safari compatibility	Allows access to the NVR's Web interface from a Mac OS.
	NVR port configuration	Enables the configuration of SDK port, media port, HTTP port, HTTPS port, RTSP port and ONVIF port.
	Connection to surveillance keyboard	Connects to Uniview network and serial surveillance keyboards.
	Multiple date and time formats	Supports three date formats (YY-MM-DD, MM-DD-YY, DD-MM-YY) and two time formats (12-hour and 24-hour).
	Adding discovered cameras in order	For the system interface, enables users to sort discovered IP cameras by IP address and add them in the same order as displayed. For the Web interface, automatically sorts IP cameras by IP address and adds them in the same order as listed.

	Video loss alarm and triggered actions	Raises a video loss alarm after losing video signals from a connected IP camera. Actions to be triggered are configurable.
	Uniview DDNS	Supports Uniview private DDNS.
	Dual playback progress bars	Uses dual progress bars to indicate playback progress: one indicates overall progress for all the listed cameras, and the other indicates progress for the currently selected camera.
	Load balance and fault tolerance by dual NICs	The 4-slot and 8-slot NVRs use dual NICs for load balance and fault tolerance.
	Zoom-in during playback on Web	Supports digital zoom during playback on the Web interface.
	DDNS server address configuration	Allows users to modify the default DDNS server address and connect to a private DDNS server.
	Main or sub stream for live view in a window on Web	Enables users to choose the main or sub stream for live view in a window on the Web interface.
	Two-way audio	Supports two-way audio between the NVR's system interface and an IP camera and between the NVR's Web interface and an IP camera.
	IP camera version number display	Displays models and version numbers of IP cameras.
Improved features	Inaccurate zoomed in area in corridor mode	Addressed the problem of inaccurate zoomed in area, motion detection area and tampering detection area in corridor mode.
	Intermittent stop in playback	Addressed the problem of intermittent playback stop that occurs occasionally.
	Motorized zoom lens control	Supports PTZ control of motorized zoom lens on IPC242E-IR-Z-IN.
	Disk load balance	4-slot and 8-slot NVRs support disk load balance.
Deleted features	Snapshot and FTP upload	Supports scheduled snapshot, alarm-triggered snapshot, image sending via email and FTP upload. Models that support this feature: NVR202-08EP, NVR202-08EN, NVR202-16E, NVR202-16EP, NVR202-16EN, NVR204-16E and NVR208-16.

Table 1 B2211P15 Feature Changes

Item	Feature	Description
Newly added features	Video loss alarm and triggered actions	Raises a video loss alarm when video signals from a connected IP camera are lost. Actions to be triggered are configurable.
	Multiple date and time formats	Supports three date formats (YY-MM-DD, MM-DD-YY, DD-MM-YY) and two time formats (12-hour and 24-hour).
	Snapshot and FTP upload	Supports scheduled snapshot, alarm-triggered snapshot, image sending via email and FTP upload. Models that support this feature: NVR202-08EP, NVR202-08EN, NVR202-16E, NVR202-16EP, NVR202-16EN, NVR204-16E and NVR208-16.
	NVR port configuration	Enables the configuration of SDK port, media port, HTTP port, HTTPS port, RTSP port and ONVIF port.
	Adding cameras found in order	For the system interface, enables users to sort IP cameras found by IP address and add them in the same order as displayed. For the Web interface, automatically sorts IP cameras by IP address and adds them in the same order as listed.

Improved features	Inaccurate zoomed in area in corridor mode	Addressed the problem of inaccurate zoomed in area, motion detection area and tampering detection area in corridor mode.
	Intermittent stop in playback	Addressed the problem of intermittent playback stop that occurs occasionally.
	Motorized zoom lens control	Supports PTZ control of motorized zoom lens on IPC242E-IR-Z-IN.
Deleted features	None	None

Table 2 B2211P05 Feature Changes

Item	Feature	Description
Newly added features	Export recording with audio through the system interface	The recording exported through the system interface contains audio and can be played with a common media player.
	Camera offline alarm	Reports an alarm when a camera goes offline.
	Format disks in batch mode	Formats multiple hard disks at a time.
	Display frame rate, resolution and bit rate information	Displays frame rate, resolution and bit rate information for streams from a camera on the system interface.
	Access through HTTPS	Supports secure access to the Web interface through HTTPS.
Improved features	Enhanced security	<ol style="list-style-type: none"> 1. Disables Telnet by default and allows Telnet password modification through the command line interface. 2. Detects weak passwords (prompts to change the default password or for a stronger password, denies access from the same IP after consecutive failed login attempts). 3. Requires authentication through RTSP. 4. Supports fingerprint identification.
	Faster online speed	Shortens the latency when multiple cameras go online simultaneously.
	Motion detection alarm supports default detection area and triggered actions	The default detection area and triggered actions are preset when motion detection alarm is enabled.
Deleted features	None	None

Table 3 B2210P10 Feature Changes

Item	Feature	Description
Newly added features	Uplink ONVIF functions	Provides the standard ONVIF interface for connection to a higher-level platform and offers functions including live view, playback, PTZ and alarm reporting.
	Downlink ONVIF configuration function	Enables the configuration of IP cameras connected via ONVIF, including the configuration of bit rate, optical settings, PTZ camera patrol by preset, motion detection, OSD, tampering detection, privacy mask and alarm input.
	Standard access by ONVIF 2.42	Supports alarms from IP cameras compatible with ONVIF 2.42, eliminating the need of feature development for specific IP camera models.

Item	Feature	Description
	Use ONVIF to connect to third-party IP cameras with adaptive usernames and passwords	Automatically adapts to IP cameras from mainstream manufacturers for successful connection by matching their factory default usernames and passwords via ONVIF.
	Playback on mobile phones	Provides dual streams for storage, including a low bit rate stream (128Kbps by default) for playback on mobile phones.
	DDNS	Supports two types of DDNS: No-IP and DynDNS.
	Maintenance information	Displays maintenance information, including S.M.A.R.T information, information about online users, IP cameras (online or offline status, mobile detection, tampering alarm), recoding status, network status, and network monitoring, captured packets.
	Display recording status in preview window	Displays recording status in the upper right corner of the preview window.
	IP camera upgrade by cloud or from a USB drive	Enables IP cameras to be upgraded by cloud or from a USB drive.
	Expanded capacity for alarm and operation logs	Saves up to 180,000 alarm and operation logs in the hard disk and up to 2,000 records in flash memory.
	3D positioning	Supports 3D positioning for Uniview PTZ cameras.
	Zoom	<ol style="list-style-type: none"> Supports zoom in live view on the Web interface and allows users to move the zoomed-in view in the navigator as needed. Supports zoom in live view and playback on the system interface and allows users to move the zoomed-in view in the navigator as needed.
	Request for main stream first in split view on the system interface	<ol style="list-style-type: none"> Optimized decoding capability management and displays No Resource when decoding capability is insufficient. Requests for the main stream by default in split view on the system interface.
	Quickly add IP camera on the system interface	Provides an easy way to add IP cameras. Users can add an IP camera by clicking the plus sign (+) in the preview window.
	Alarm reporting to mobile phone and EZStation	Supports alarm reporting to mobile phones or EZStation.
	Easy access to the Web interface of IP cameras	Enables users to access the Web interface of an online IP camera that is connected to the PoE port or LAN port on the NVR.
	Smart search	Supports smart recording search for Uniview IP cameras. Supports adjustment to the playback speed according to the movement of the object in the recording. Detection sensitivity can be adjusted. The recording is played at a faster speed until a motion detection alarm is triggered.
	Snapshot during preview and playback on the system interface	Supports snapshot during preview and playback.
	Playback by tag	Enables users to tag recordings during playback and search recordings by tag.
	Playback by alarm event	Enables users to play recordings triggered by alarm events.

Item	Feature	Description
	Playback by external files	Supports the playback of video files in USB drive (only videos in MP4 format are supported).
	Lock recording	Supports recording locking. Locked recordings will not be overwritten.
	QR code	Supports scanning QR code on the Web and myCloud (referred to as P2P overseas) on the system interface.
	Modification of the IP camera's address, mask and gateway on the system interface.	Allows users to modify the IP address, subnet mask and gateway for Uniview and third-party cameras after the cameras are added and get online.
Improved features	Preset triggered by motion detection alarm	The PTZ camera goes to a preset after being triggered by a motion detection alarm.
	Display of the pre-record time	Pre-record time is displayed when you configure the storage schedule.
	Improved display of UPNP mapping	The internal port number is displayed on the UPnP mapping interface. If the mapping failed, the external IP and port are displayed as N/A.
	Improved display of the recording search bar in the playback window on the system interface	The recording search bar is widened to become more distinct.
	Improved function of copying to week	The week is displayed as abbreviation of the week instead of the digits 1-7.
	Improved function of stream selection when an IP camera is connected via ONVIF	For some IP cameras with 1080P/720P/CIF as the main/sub/third streams, the NVR can receive CIF as the sub stream.
	Improved backup function on the system interface	Supports playback for selected recordings during backup.
	Improved auto-add function	The auto-add function of devices that do not support PoE is improved. Uniview IP cameras can be assigned an IP address and added to the NVR automatically. The third-party IP cameras which have been assigned an IP address can be added to the NVR automatically.
	Supports non-standard resolution for connected IP camera	IP cameras with non-standard resolution (over 3 megapixels) can be identified and connected to the NVR.
Deleted features	None	None

Table 4 B2208P07 Feature Changes

Item	Feature	Description
Newly added features	Connection to 3-megapixel IP camera	Connects to the Uniview 3-megapixel IP camera and supports live view and playback functions.
	Sub stream storage for the recording	Provides the option to record the sub stream from an IP camera.
	Alarm-triggered	Sends an E-mail when an alarm is triggered.

Item	Feature	Description
	E-mail	Configuring the E-mail settings is available through the Web or system interface in advance.
	Recording clip through system interface	Enables the users to clip recordings through the system interface. To clip recordings, enable the playback function first and then select the clipping time. The clipped recordings can be exported through a USB drive.
Improved features	Corridor format	1. Configuring corridor format for IP cameras is available. 2. Three submenu items are available under the Corridor menu: 3 Screens , 5 Screens , and 7 Screens .
	Improved display of icons on the system interface	1. Icons for configuring image on the live view interface are beautified. 2. Layout of the buttons for adding IP cameras is improved.
Deleted features	None	None

Table 5 B2207P05 Feature Changes

Item	Feature	Description
Newly added features	Detection of network disconnection and address conflicts	Detects network disconnection and address conflict, and triggers audio alarms and logs.
	Mouse-based zoom operations for PTZ cameras	Enables users to use the mouse to zoom in or out when controlling a PTZ camera in the system or Web interface.
	Corridor format	With corridor format enabled on the Web interface of an IP camera, the NVR system interface provides a right-click menu that enables the display of live and recorded video in 3/5/7 corridor format. Configuring corridor format for IP cameras is currently not available.
	Scene switching for IP cameras	Allows users to switch scenes for IP cameras on the NVR system or Web interface.
	USB drive in NTFS format	Allows users to export recordings to a USB drive in NTFS format. Formatting USB drives in NTFS format is currently not available.
	DST	Allows users to configure Daylight Saving Time (DST) in the NVR and Uniview IP cameras.
Improved features	Date and time format for OSD	Provides multiple international date formats for Uniview IP cameras.
Deleted features	None	None

Table 6 B2206P35 Feature Changes

Item	Feature	Description
Newly added features	Enhanced network connection through the mobile client	Enables the UPnP function in the router to realize the auto-mapping and NAT function.
	Play live videos by third-stream on the mobile client	Plays the live videos of the connected IP camera by third-stream on the mobile client.
	UPnP is available to	For the device with multiple Ethernet ports and PoE ports, the

Item	Feature	Description
	the device with PoE port	connected port is bound as a channel. UPnP is also available for the IP camera connected through ONVIF.
	Long distance transmission through PoE port	Long distance transmission is available through PoE port.
	Detection of IP address conflicts	Detects IP address conflicts when the IP address of the NVR is changed.
	36 split view	The 32-channel NVR supports a 36 split view layout.
	Patrol setting for a PTZ camera	Only the PTZ dome camera and analog camera support the patrol function. (Currently only the PTZ dome camera supports patrol function. The network camera and analog camera connected through ONVIF do not support the patrol function.)
	Exporting recordings to a USB drive in NTFS format	Allows users to export recordings to a USB drive in NTFS format. Note: Currently the NVR does not offer the function to format a USB drive into NTFS format.
Improved features	Upgrade through a USB drive	Allows users to select the directory and mirror file from a USB drive for upgrade in the system interface.
	Improved unbranded method	1. "Uniview" is removed from DDNS configuration. 2. myCloud is differentiated by Uniview and unbranded.
	Recording download	On the recording download page in the Web interface, the width of the recording name column can be adjusted by dragging the mouse.
	Frame rate configuration	Supports 1, 2, 4, 6, 8, 10, 12, 15, 16, 18, 20, 22, and 25 frames per second. Random frame rate configuration is not allowed. More frame rates are to be supported.
	Improved Web interface	1. The switching of the Area Configuration tab is improved. 2. When the number of the motion detection areas reaches the upper limit, there is a prompt message.
	Improved playback function on the system interface	1. Allows users to play back recordings of a camera fluently by clicking the camera. 2. Allows users to start playback by double-clicking a date.
	Deletion of IP cameras in batch on the system interface	Allows users to delete IP cameras in batch.
Deleted features	None	None

Table 7 B2206P10 Feature Changes

Item	Feature	Description
Newly added features	Enhanced network connection through the mobile client	The mobile client is applicable to various network conditions.
	Diagnostic information exporting	Allows users to export diagnostic information for troubleshooting on both the Web and system interface.
	Preview configuration on the system interface	Enables users to configure the binding relationship for the preview pane and the analog or digital channel.
	Automatically adding IP camera	1. Automatically searches the IP cameras which are on the same network segment as the NVR after the NVR is started. (Including IP

Item	Feature	Description
		cameras connected through ONVIF.) 2. Detects the newly-added IP cameras on this network segment and adds them automatically.
	Modification of the IP camera's IP address on the NVR device	Allows users to change the IP address of the connected Uniview IP camera on the NVR device.
	Cloud upgrade	Enables users to upgrade the device connected to the public network remotely through myCloud.
	Improved configuration for Uniview IP camera	Obtains the IP camera's capabilities and supports the configuration of the video and audio settings, OSD and alarm parameters for the IP camera.
Improved features	Quickly start recording playback	Allows users to start playback by double-clicking the progress bar on the Web.
Deleted features	None	None

4.2 Operation Change Description

None

5 Related Documents and Delivery Method

Table 8 Related Document List

Manual Name	Manual Version	Delivery
Network Video Recorders Quick Guide	V1.00	Deliver with device.

6 Version Upgrade Guidance

6.1 Precautions

- This software system includes a software program mirror (Program.bin). Before you start upgrade, please back up configuration data through the system or Web interface in case the upgrade fails.
- Maintain proper network connection and power supply during the upgrade.

6.2 Upgrade Procedure

The version can be upgraded through the system interface and the Web interface, both support cloud upgrade.

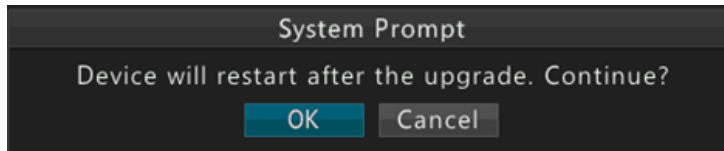
6.3 Upgrade Through the System Interface

The system interface provides two options for upgrading the system software: local upgrade using a USB drive and cloud upgrade.

1. Local upgrade

Before you start, copy the correct upgrade file to the root directory of the USB drive.

- (1) Plug the USB drive into the USB interface on the NVR.
- (2) Log in to the system interface as “admin”.
- (3) Click **Maintain > Upgrade**.
- (4) Click **Upgrade**, select the upgrade file from the drop-down list, and then click **Upgrade**. A prompt message appears.
- (5) Click **OK**.



- (6) The NVR will restart automatically when the upgrade is completed.

2. Cloud upgrade

Before you start, check that the NVR is correctly connected to the public network.

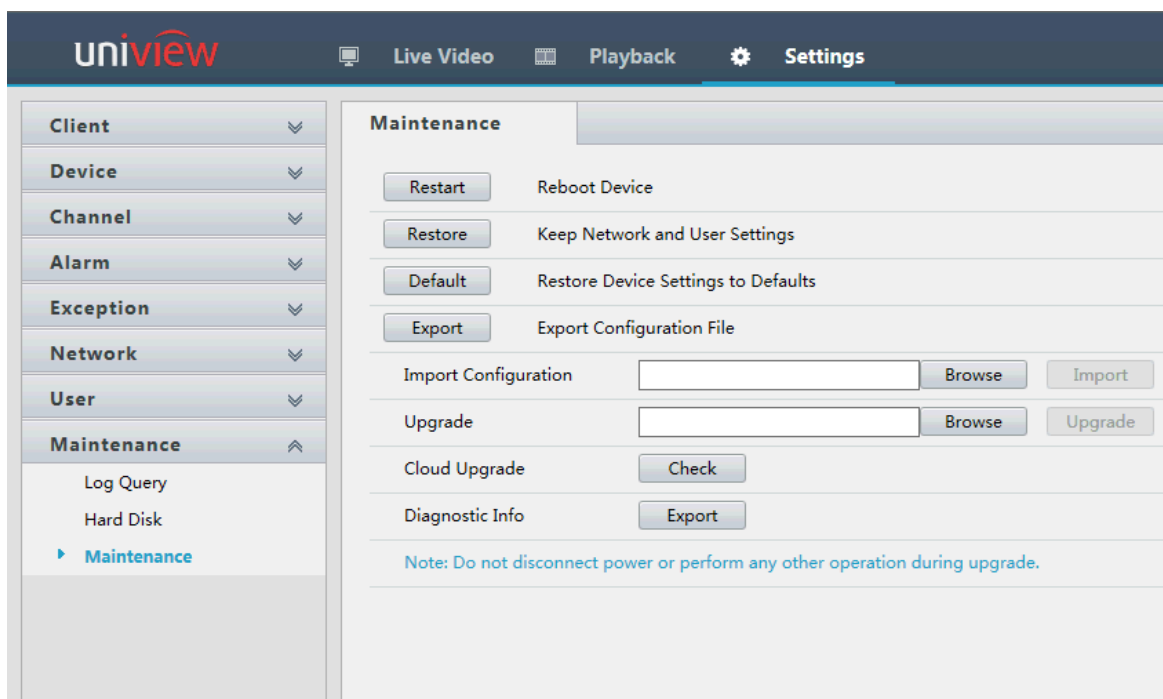
- (1) Click **Maintain > Upgrade**, and then click **Check** to check for the latest version.
- (2) Click **Upgrade** after a newer version is detected.

6.4 Upgrade Through the Web Interface

Perform the following steps to upgrade through the Web interface:

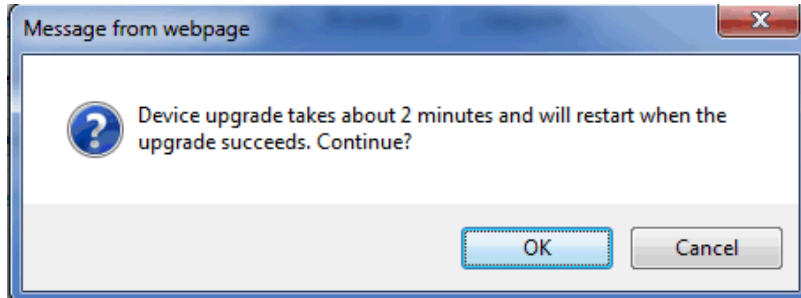
- (1) Log in to the Web interface as “admin”.
- (2) Click **Settings > Maintenance > Maintenance**.

Figure 1 System Maintenance



- (3) Click **Browse** right to the **Upgrade** field, select the **Program.bin** file to upgrade, and then click **Upgrade**.
- (4) If the NVR is connected to the public network, you may also click **Check** to perform a cloud upgrade. If a newer version is detected, a prompt message will appear. Click **OK** to start upgrade.

Figure 2 Prompt Message



- (5) The NVR will restart automatically when the upgrade is completed.

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