



**Hewlett Packard**  
Enterprise

# HPE Media Server

Software Version: 11.3.0

## Release Notes

Document Release Date: February 2017

Software Release Date: February 2017

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# New in this Release

This section lists the enhancements to HPE Media Server version 11.3.0.

## Media Server Core

- Media Server supports the service action `CancelACIAAction`. You can use this to cancel an action that is running synchronously, if the action can be canceled.
- New sample configurations are included in the `configurations` folder, in the Media Server installation directory. Some of these configurations are for HPE Media Server with GPU support, and use a GPU to accelerate processing.
- The `SSLCipherSuite` configuration parameter has been added. You can use this parameter to set an explicit list of ciphers to allow, or to disallow specific ciphers.
- The `SSLMethod` configuration parameter option `SSLV23` has been renamed to `Negotiate`. This option means that the server uses the highest available protocol in its SSL/TLS connections. The `SSLV23` name is still available, but might be deprecated in future.

## Ingest

- The handling of video frames has been improved, so that Media Server uses fewer CPU cycles or ingests a video file in less time. Ingestion now produces video frames that have square pixels, even if the source video has pixels with a non-square aspect ratio.
- Media Server can ingest MJPEG video that is streamed over HTTP. This feature is provided by a new ingest engine (`Type=MJPEG_HTTP`).

## Analysis

- Media Server includes a new image comparison analysis engine (`Type=ImageComparison`) that compares images to a reference image stored in the training database, and identifies regions of the image that have changed.
- Media Server can automatically enroll face images in your training database. For example, you can enroll images of unrecognized faces. This feature is provided by a new analysis engine (`Type=Enroll`).
- Face detection is better at tracking faces across video frames. The improved algorithm can reacquire a face when the track is temporarily lost, and has improved support for faces that are partially visible or not looking directly at the camera. The improved tracking performance means that Media Server is more likely to produce a single detection result for each face that appears in the video. This is particularly important if you are using face detection for people counting.
- The face recognition, face demographics, and image classification analysis tasks support parallel processing with a GPU (if you have installed Media Server with GPU support). This means that Media Server can use the GPU to process many video frames concurrently. Parallel processing on a GPU is configured using the new configuration parameters `GPUNumParallel` and `GPUBatchingDuration`. `GPUNumParallel` specifies the number of video frames to process concurrently on a GPU. If you are using a GPU to accelerate processing, HPE recommends that

you set `NumParallel=1` and use `GPUNumParallel` to control the number of frames processed concurrently.

- Face recognition, face demographics analysis, image classification with CNN classifiers, object detection, and vehicle make recognition are now up to 30% faster when analysis runs on a CPU. For even greater speed, install HPE Media Server with GPU support and run these tasks on a graphics card.
- The accuracy of number plate recognition for Dubai number plates (`Location=AE-DU`) has been improved.
- The color cluster analysis task supports a new parameter, `CombineNamedColors` (Boolean, default `true`). This parameter applies when you use a color dictionary, and specifies whether to combine clusters that have the same color name but different color values. This allows the color dictionary to have different definitions for the same color, to allow for lighting variations.
- The face detection configuration parameter `FaceDirection` now accepts a comma-separated list of values. For example, to detect all faces except those viewed in profile you can set `FaceDirection=front,three-quarter`.
- The clothing analysis task can now identify regions for clothing covering the full body, upper body, and lower body. To choose which regions are returned, use the new configuration parameter `ClothingMode`. The default value returns a location only for the full body. You can specify a comma-separated list of regions to identify, for example `ClothingMode=Upper,Lower,Full`.
- The barcode analysis task can read EAN-2 and EAN-5 supplements for EAN-8, EAN-13, UPC-A, and UPC-E barcodes.
- The OCR analysis task can be configured with `Languages=ASCII`. This means that the task uses ASCII as its base character set, and does not use any dictionaries unless you set the parameter `UserDictionary`. This is useful if you want to match text against a known list of words or codes that are defined in a custom dictionary.

### Encoding

- The rolling buffer encoder can encode video with an overlay produced by the new overlay transformation engine.

### Transformation

- Media Server includes a new transformation engine (`Type=Draw`) to draw regions on images and video frames. This allows you to encode video and images that show regions, such as detected faces, that were identified during analysis.
- Media Server includes a new transformation engine (`Type=Overlay`) to draw an overlay that can contain lines and shapes. This is similar to the draw engine, but instead of permanently modifying the video, the overlay is added to the subtitle track of the encoded video. This means that you can show or hide the overlay when the video is played.

### User Interfaces

- Media Server includes a new graphical user interface that you can use for training. You can access this interface by sending `action=GraphicalUserInterface` to Media Server from your web browser.

## Resolved Issues

This section lists the resolved issues in HPE Media Server version 11.3.0.

- Media Server could terminate unexpectedly if the `Image_1` track was used as the input for a task that required a different type of input.
- To run tasks that use convolutional neural networks on a machine that has a processor from the AMD Bulldozer series, download `libopenblas_AMD_Bulldozer.dll` from the [Big Data Download Center](#), and rename it such that it replaces the file `libopenblas.dll` that is included in the Media Server installation. This is necessary to work around an issue with these processors that caused Media Server to stop responding when a `process` action requested one of the affected tasks.
- Media Server did not give deterministic results when processing video files that were incorrectly multiplexed and `IngestRate=0`. Media Server is now more resilient to this issue. However, if you want to perform only video analytics or only audio analytics, HPE recommends setting `EnabledStreamTypes=video` or `EnabledStreamTypes=audio` so that corruption in the other stream does not affect processing.
- The Milestone ingest engine waited indefinitely for data to be received from Milestone. The engine now waits for a limited amount of time and if no data is received then ingestion stops. You can configure the timeout by setting the new configuration parameter `StreamTimeout`.

# Supported Operating System Platforms

The following operating system platforms are supported by HPE Media Server 11.3.0.

- Windows x86 64
- Linux x86 64

The documented platforms are the recommended and most fully tested platforms for HPE Media Server. The following sections provide more information about the most fully tested versions of these platforms.

## Windows

- Windows Server 2012
- Windows Server 2008
- Windows 7

## Linux

The minimum recommended versions of particular distributions are:

- CentOS 6
- Ubuntu 12.04

## Supported Platforms with GPU support

The following operating system platforms are supported by HPE Media Server 11.3.0 with GPU support.

- Linux x86 64

The most fully tested versions of these platforms are:

## Linux

- Ubuntu 16.04
- Ubuntu 14.04

# Notes

- Video frames with non-square pixels (such as those in standard definition broadcast content) are now processed at their display size, rather than their native size. For example, if you have video frames with a size of 720x576 and a pixel aspect ratio of 64:45, the display dimensions are 1024x576. All co-ordinates produced by HPE Media Server are now relative to the display size.
- The default values for the following configuration parameters have been updated:

Feature	Configuration parameter	Default value Media Server 11.2	Default value Media Server 11.3
Enable or disable modules	Enable	Enable all modules	Enable no modules, except those that cannot be disabled
HLS playlist server	MinimumSegmentsInPlaylist	5	10

**NOTE:**

HPE recommends that you set the parameter `Enable`, in the `[Modules]` section of your Media Server configuration file, unless it has been set already. If you upgrade to Media Server 11.3.0 and this parameter is not set, modules that you are using could be disabled.

- The following features have been deprecated:
  - The `DetectEyes` parameter, for face detection.

# Documentation

The following documentation was updated for this release.

- *Media Server Administration Guide*
- *Media Server Reference*