



**Hewlett Packard**  
Enterprise

# **Media Management and Analysis Platform**

Software Version: 11.5

## **Installation Guide**

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# Chapter 1: Introduction

This section provides an overview of HPE Media Management and Analysis Platform (HPE MMAP).

## HPE Media Management and Analysis Platform (HPE MMAP)

The HPE Media Management and Analysis Platform (HPE MMAP) is a media analytics platform designed for viewing, searching, and analyzing video footage from a variety of sources, typically CCTV surveillance camera footage and broadcast footage from IP streams.

HPE MMAP offers source management features, where you can organize cameras or TV channels in folders and sub-folders. You can record and view video footage from any supported source at a later point.

Clients use a rich set of REST APIs to access and modify source, recorder, and video stream information. You can then view live and archive video streams from a web browser, with advanced playback capabilities such as fast forward, fast rewind, live pause, and fast seeking.

HPE MMAP combines these video stream viewing capabilities with the video analytics capabilities of HPE IDOL Video, where you can create events based on object detection and scene analysis. You can retrieve these events by using the REST API, and you can view the associated video footage in a web browser.

You can analyze video that contains audio (for example, broadcast footage), and extract audio transcripts. You can then use the Optical Character Recognition (OCR), face recognition, and Automatic Number Plate Recognition (ANPR) features of HPE IDOL Video to further enhance the information extracted from the footage.

The purpose of the HPE Media Management and Analysis Platform is to provide a standard interface for these tasks, regardless of the components that you use. You might use an HPE IDOL Media Server to perform all of these tasks, or your system might ingest video through Video Input Server (VIS) or Wittwin ACI Server; these are legacy products superseded by the HPE IDOL Media Server, but still supported by HPE MMAP.

For more information and documentation on HPE IDOL Media Server, see the HPE Big Data Support site at [customers.autonomy.com](https://customers.autonomy.com).

## HPE Media Server

HPE Media Server can ingest video from files and IP streams. Many devices (such as IP cameras, network encoders, and IPTV devices) can produce IP streams. HPE Media Server can also request video from third-party video management systems, such as Milestone XProtect. HPE Media Server provides automatic processing that reduces the operator's workload and can help them respond to suspicious events.

HPE Media Server can run many types of analysis, including:

- Automatic Number Plate Recognition (ANPR)
- Barcode recognition
- Color analysis
- Face detection, recognition, demographic, and expression analysis
- Intelligent scene analysis
- Keyframe analysis
- Object detection
- Object classification
- Optical Character Recognition (OCR)
- Speaker identification
- Speech-to-text
- Vehicle Model identification

HPE Media Server can encode the video that it ingests, so that operators can review suspicious events at a later time and video is available to prosecute offenders. HPE Media Server can output the metadata that it extracts to many formats and systems, including:

- HPE IDOL Server
- Vertica
- XML

For more information and documentation on HPE IDOL Media Server, see the HPE Big Data Support site at [customers.autonomy.com](http://customers.autonomy.com).

## Video Input Service

The Video Input Service (VIS) ingests video from cameras, encoders, video streams, and files. It then makes the video available to other applications, such as HPE Surveillance analytics.

VIS is a legacy product; it has been superseded by HPE IDOL Media Server.

## Wittwin ACI Server

Wittwin ACI Server records and streams video. It receives compressed video, audio, and metadata from Video Input Service. Wittwin ACI Server can simultaneously write the video to a rolling buffer (a storage area on disk), and stream both the live input and recorded data to other applications. In response to requests from other applications, Wittwin ACI Server can save video from the rolling buffer to a file, and stream this content.

Wittwin ACI Server is a legacy product; it has been superseded by HPE IDOL Media Server.

## The HPE MMAP REST API

The HPE Media Management and Analysis Platform includes a REST API that can be used to:

- Manage video sources (for example, cameras and channels), organized in a hierarchical tree structure
- Manage video recorders, by assigning recorders to video sources
- Store custom metadata associated with the sources or recorders (for example, camera model and manufacturer)
- Play back archive and live footage by using HTTP Live Streaming (HLS) or Real Time Streaming Protocol (RTSP), and pause live content
- Start and stop recording on demand
- View video streams with varying speed (fast or slow), forwards or backwards
- Extract frames from video and save them as images
- Generate video clips from archive footage
- Use the HPE Media Player browser plugin to watch video in the Google Chrome and Internet Explorer web browsers. Alternately, the HPE Media Element can use the browser's own native HTML5 player for MIME types that it understands

## HPE Media Player

HPE MMAP includes the HPE Media Player component that allows for live and archive video of the managed sources in the system.

The HPE Media Player consists of a browser plugin for Google Chrome that allows for playback of video within the browser, as well as AngularJS directives which you can use to embed the player (with custom drawn playback controls) into a HTML5 page.

The AngularJS directives use the HPE Media Element internally, which is a JavaScript wrapper that mimics the HTML 5 MediaElement API. This means that to use the Media Player, you can write normal HTML 5 `<video>` elements, and depending on the MIME type of the source, it will display the correct player.

The HPE Media Player supports the following types of content:

- **Content natively supported by browser's HTML 5 player.** The HPE Media Element uses the browser's own native player for MIME types that the browser's own native player understands. HPE Media Element acts as a polyfill around the native media element, to add functionality such as switching the HPE Media Element implement when changing source.
- **Live and archive RTSP streams generated by the legacy Wittwin ACI Server.** You need a separate installer (the Virage Media Player) to play back content generated by Wittwin ACI Server using the HPE Media Player.
- **Live and Archive HLS streams generated by HPE IDOL Media Server.** HPE Media Player uses Google Native Client for its playback functionality. No additional download and installation process is required to use the player in any Google Chrome supported webpage when playing HLS streams generated by HPE IDOL Media Server.

## Supported Browsers

HPE Media Player is supported on the following browsers:

- Internet Explorer 10 - supports only legacy Wittwin streams and any video stream that the browser native player supports. Does not support HLS playback.
- Google Chrome - supports only HLS playback and any video stream that the browser native player supports. Does not support legacy Wittwin streams.



# Chapter 2: Install HPE Media Management and Analysis Platform

This section describes how to install the HPE Media Management and Analysis Platform (HPE MMAP).

## System Requirements

This section describes the system requirements for HPE Media Management and Analysis Platform. The HPE Media Management and Analysis Platform must be hosted by:

- A JBoss enterprise application server (JBoss EAP 6.2.0).
- A fully compliant Java 7 or later Runtime Environment.

**NOTE:**

Check the Red Hat JBoss EAP documentation for information on supported versions of Java Runtime for JBoss EAP 6.2.0.

## Dependencies

This section describes the dependencies for HPE Media Management and Analysis Platform:

- HPE IDOL Media Server version 11.3.0.  
HPE MMAP 11.5 is not compatible with previous versions of HPE IDOL Media Server.  
For more information and documentation on HPE IDOL Media Server, see the HPE Customer Support site at [customers.autonomy.com](http://customers.autonomy.com).
- (Optional) HPE IDOL Speech Server 11.3.0 is required for speech-to-text features.

## Minimum Server Requirements

The minimum server requirements depend on many variables, such as the frequency of requests that HPE Media Management and Analysis Platform must serve. The following are minimum requirements but there may be additional requirements. HPE recommends that you refer to the documentation for JBoss EAP 6.2.0.

- 1.4 GHz dual-core processor
- 4 GB RAM
- 20 GB free disk space

## Prerequisites

Before installing HPE Media Management and Analysis Platform, collect the following components. You must use the same versions as shown below:

- **HPE Media Management and Analysis Platform**

File name: mmap-all-11.3.0.zip

Download from: HPE Big Data Support site - <https://customers.autonomy.com/>

- **Java Runtime Environment (JRE)**

A fully compliant Java 7 (or later) Runtime Environment is required.

**NOTE:**

Check the Red Hat JBoss EAP documentation for information on supported versions of Java Runtime for JBoss EAP 6.2.0.

Download from: <http://www.oracle.com/technetwork/java/javase/downloads>

- **JBoss EAP 6.2.0 (exact version)**

JBoss EAP is an enterprise application server that is used to host the Media Management and Analysis Platform.

File name: jboss-eap-6.2.0.zip

Download from: <http://www.jboss.org/products/eap/overview/>

MD5: 03ec01654cf4aee8c8e26313fae68c16

- **ModeShape 3.8.1.Final subsystem for EAP 6.2.0.GA (exact version)**

ModeShape is a content repository that stores information for the Media Management and Analysis Platform.

File name: modeshape-3.8.1.Final-jbosseap-dist.zip

Download from: <http://modeshape.jboss.org/downloads/downloads3-8-1-final.html>

MD5: 67eec4695d4b30b8e8706dff01676f24

- **RestEasy JBoss Modules 3.0.5 (exact version)**

RestEasy JBoss Modules provide features required to host the application's REST API.

File name: resteasy-jaxrs-3.0.5.Final-all.zip

Download from: <http://sourceforge.net/projects/reteasy/files/Resteasy%20JAX-RS/3.0.5.Final/>

MD5: 6b30e854b4c873ab117e348a1700c4a6

- Extract the following file from the `resteasy-jaxrs-3.0.5.Final-all.zip` archive for use in step 6 of the HPE MMAP installation. See [Install HPE Media Management and Analysis Platform, below](#).

File name: `resteasy-jboss-modules-3.0.5.Final.zip`

MD5: `467891e4e3f1c2bb92a981ecbc8c4e6a`

## Install HPE Media Management and Analysis Platform

Extract the contents of the prerequisite archive files into the indicated directories.

### To install HPE MMAP

1. Install the Java 7 or later Runtime Environment.

**NOTE:**

Check the Red Hat JBoss EAP documentation for information on supported versions of Java Runtime for JBoss EAP 6.2.0.

2. Ensure that all HPE IDOL Media Servers in the HPE MMAP environment are running version 10.11 or later. [Dependencies, on page 9](#)
3. Create a directory path for the HPE MMAP installation.

#### Windows

`x:\hpemmap`

where `x`: is a volume letter.

#### UNIX

`/hpemmap`

4. Extract the JBoss EAP 6.2.0 archive (`jboss-eap-6.2.0.zip`) into the `/hpemmap` directory.  
This creates a directory named `jboss-eap-6.2`.
5. Extract ModeShape 3.8.1.Final archive (`modeshape-3.8.1.Final-jbosseap-dist.zip`) into the `/hpemmap/jboss-eap-6.2` directory.  
When prompted to allow the merging of directories and replacing of files, click **OK**.
6. Extract the RestEasy JBoss Modules 3.0.5 files to a temporary location.  
This creates a directory named `resteasy-jaxrs-3.0.5.Final`.
  - a. Navigate to the `resteasy-jaxrs-3.0.5.Final` directory.  
This directory contains the RestEasy JBoss Modules 3.0.5 (`resteasy-jboss-modules-3.0.5.Final.zip`) archive file.
  - b. Extract the RestEasy JBoss Modules 3.0.5 archive (`resteasy-jboss-modules-3.0.5.Final.zip`) into the `/hpemmap/jboss-eap-6.2/modules/system/layers/base`

directory.

When prompted to allow the merging of directories and replacing of files, click **OK**.

7. Extract the HPE MMAP 11.3.0 archive (mmap-all-11.3.0.zip) into the /hpe mmap/jboss-eap-6.2 directory.

When prompted to allow the merging of directories and replacing of files, click **OK**.

## Configure a PostgreSQL Event Datastore

HPE MMAP uses a database to store analytic events generated by Media Server (for example, transcription data). By default, HPE MMAP is configured to use an embedded H2 database that can be used for initial testing purposes; however, you must install and configure a PostgreSQL event datastore for use in production systems.

### Prerequisites

- **PostgreSQL**

To use PostgreSQL for the event datastore, you must install the PostgreSQL for your platform. For installation instructions, see your PostgreSQL documentation.

Download from: <http://www.postgresql.org/>

- **PostgreSQL JDBC driver**

The PostgreSQL JDBC driver version binary JAR file must match the database server being used.

Download from: <https://jdbc.postgresql.org/download.html>

### Install PostgreSQL

Install the PostgreSQL database server for your platform. For more information, see your PostgreSQL documentation.

During installation and configuration of PostgreSQL, take note of the following items. These items are required later during configuration of HPE MMAP to use the PostgreSQL server.

- Database name
- Host
- Port
- User name
- Password

### Configure HPE MMAP to use PostgreSQL

Configure HPE MMAP to use PostgreSQL as its event datastore.

### To configure HPE MMAP to use PostgreSQL

1. In the `/hpemmap/jboss-eap-6.2` directory created in step 1 of [Install HPE Media Management and Analysis Platform, on page 11](#), navigate to the `modules/org` subdirectory.
2. In the `modules/org` directory, create a directory structure as follows:

```
postgresql/main
```

3. Copy the PostgreSQL JDBC driver `.jar` file into the `postgresql/main` directory.
4. In the `main` directory, create a file named `module.xml` with the following content:

```
<?xml version="1.0" encoding="UTF-8"?>
<module xmlns="urn:jboss:module:1.0" name="org.postgresql">
  <resources>
    <resource-root path="postgresql-9.1-903.jdbc4.jar"/>
  </resources>
  <dependencies>
    <module name="javax.api"/>
    <module name="javax.transaction.api"/>
  </dependencies>
</module>
```

**NOTE:** The `<resource-root path="postgresql-9.1-903.jdbc4.jar"/>` parameter is the `.jar` file name for the PostgreSQL JDBC driver version. Replace `resource-root path` with the `.jar` file name downloaded in [Prerequisites, on the previous page](#).

5. Save the `module.xml` file.
6. In the `/hpemmap/jboss-eap-6.2` directory, navigate to the `standalone/configuration` directory and open `avalanche.xml` in a text editor.
  - a. Add three new system properties in the `<system-properties>` section:

```
<property name="hibernate.dialect"
value="org.hibernate.dialect.PostgreSQL82Dialect"/>
<property name="avalanche.vms.database.timezone" value="UTC"/>
<property name="hibernate.hbm2ddl.auto" value=""/>
```

- b. Replace the following `<datasources>` section that uses H2:

```
<datasource jndi-name="java:/datasources/EventsDS" pool-name="EventsDS"
enabled="true" use-java-context="true">
  <connection-url>jdbc:h2:file:${jboss.server.data.dir}/h2/events;AUTO_
SERVER=TRUE;
INIT=runscript from
'classpath:/com/autonomy/avalanche/persistence/h2/init.sql'\;</connectio
n-url>
  <driver>h2</driver>
  <security>
    <user-name>${avalanche.vms.database.user:sa}</user-name>
    <password>${avalanche.vms.database.password:sa}</password>
  </security>
```

```
</datasource>
```

with the following datasource that uses PostgreSQL:

```
<datasource jndi-name="java:/datasources/EventsDS" pool-name="EventsDS"
enabled="true" use-java-context="true">
  <connection-url>jdbc:postgresql://host:port/events</connection-url>
  <driver>postgresql</driver>
  <security>
    <user-name>${avalanche.vms.database.user:sa}</user-name>
    <password>${avalanche.vms.database.password:sa}</password>
  </security>
</datasource>
```

In the `connection-url` section, replace the following settings with the information that you saved when you installed PostgreSQL.

- Replace `host` with the host name of your server.
- Replace `port` with the port number that the PostgreSQL communicates on.
- Replace `events` with the database name.

In the `security` section, replace the following settings with the information that you saved.

- Replace `user-name` with the user name of a user account created for the PostgreSQL database.
- Replace `password` with the password of the user account.

For example:

```
<datasource jndi-name="java:/datasources/EventsDS" pool-name="EventsDS"
enabled="true" use-java-context="true">
  <connection-url>jdbc:postgresql://localhost:5432/postgres</connection-
url>
  <driver>postgresql</driver>
  <security>
    <user-name>${avalanche.vms.database.user:postgres}</user-name>
    <password>${avalanche.vms.database.password:myPassword}</password>
  </security>
</datasource>
```

- c. Add a new driver property in the `<drivers>` section:

```
<driver name="postgresql" module="org.postgresql">
  <xa-datasource-class>org.postgresql.xa.PGXADatasource</xa-datasource-
class>
</driver>
```

7. Save the `avalanche.xml` file.
8. Restart the JBoss application server.

## Create the HPE MMAP Database Schema in PostgreSQL

The HPE MMAP archive contains the following SQL scripts that create the HPE MMAP database schema in PostgreSQL:

- `schema.sql`
- `stored-procedures.sql`
- `searchable-text.sql`
- `partition-word-table.sql`

### To run the SQL scripts on Windows

- Open a command-line window and use the tool `psql.exe` (supplied in the `bin` directory of your PostgreSQL installation) to run each script. Ensure that you run `schema.sql` first. You can use the following command:

```
psql.exe -f <path-to-script> -d<database> --username=<user>
```

where,

- `<path-to-script>` is the path of the script.
- `<database>` is the database name.
- `<user>` is the user account created for the PostgreSQL database.

This will run the script against the PostgreSQL instance listening on the default port (5432).

For example:

```
psql.exe -f c:\hpemmap\jboss-eap-6.2\sql\postgresql\schema.sql -dpostgres --username=postgres
```

```
psql.exe -f c:\hpemmap\jboss-eap-6.2\sql\postgresql\stored-procedures.sql -dpostgres --username=postgres
```

```
psql.exe -f c:\hpemmap\jboss-eap-6.2\sql\postgresql\searchable-text.sql -dpostgres --username=postgres
```

```
psql.exe -f c:\hpemmap\jboss-eap-6.2\sql\postgresql\partition-word-table.sql -dpostgres --username=postgres
```

When prompted, type the password for the user.

### To run the SQL scripts on UNIX

1. Run the script `schema.sql` by typing the following commands, where `<database>` is the database name.

```
sudo su - postgres  
psql -hlocalhost -d<database> -f schema.sql
```

**TIP:** The `-f` parameter accepts either an absolute path or a path relative to the current directory. For more information about `psql` parameters, refer to the PostgreSQL documentation.

The script runs against the PostgreSQL instance listening on the default port (5432).

2. Run the scripts `stored-procedures.sql`, `searchable-text.sql`, and `partition-word-table.sql`:

```
psql -hlocalhost -d<database> -f stored-procedures.sql
psql -hlocalhost -d<database> -f searchable-text.sql
psql -hlocalhost -d<database> -f partition-word-table.sql
```



# Configure Media Application

You can configure the Media application by using a custom `config.json` file.

Set the `com.hpe.media.api.config.path` system property to an absolute path to the location of your `config.json` file. For example, you can do this by using JBoss CLI:

```
./<JBoss dir>/jboss-cli.sh -c "/system-property=com.hpe.media.api.config.path:add  
(value=/path/to/your.json)"
```

If you use JBoss CLI to set a system property, you do not need to restart JBoss.

## NOTE:

The contents of the `config.json` file must match the JSON specification. The JSON specification does not allow comments, and strings must be enclosed with double quotation marks, not single quotation marks.

The JSON included can contain the following properties (not all properties need to exist). The following example code shows the default values if they are not set:

```
{  
  "version": "11.3.0",  
  "app": {  
    "name": "BI for Human Information",  
    "url": "http://demo.havendemo.com/bifhi/"  
  },  
  "search": {  
    "url": "http://demo.havendemo.com/bifhi/public/search/query/{{query |  
encodeURIComponent}}"  
  },  
  "player": {  
    "src": "../player/plugins/mediaElement.nmf"  
  },  
  "mmap": {  
    "api": "../vms/api/v1"  
  }  
}
```

where:

- `version` is the version number of the application. This is currently unused.
- `app.name` is the application name, which is displayed in the bar at the top of the Media application.
- `app.url` is the URL you are redirected to if you click on the hyperlink in the top bar, specified by `app.name`.
- `search.url` is the URL you are redirected to when you press **Enter** in the search box at the top of the Media application.
  - `{{query | encodeURIComponent}}` denotes the point at which the query that you entered will be inserted into the URL. The query will be URI-escaped using the `window.encodeURI` JavaScript function.

- You can use `{{query |encodeURIComponent}}` if the query that you entered needs to be inserted as a URL parameter. The query will be URI-escaped using the `window encodeURIComponent` JavaScript function. For example:  
`http://mysearchapplication/mywebpage?query={{query | encodeURIComponent}}`
- `player.src` is the URL where the Media Player Chrome plugin is located.
- `mmap.api` is the URL of the HPE MMAP API.

# Chapter 3: Start HPE Media Management and Analysis Platform

To start the JBoss application server that hosts the HPE Media Management and Analysis Platform, use the following procedure.

**TIP:**

Before starting, ensure that the `JAVA_HOME` environment variable has been set correctly.

## To start the HPE Media Management and Analysis Platform System

1. Run the following command:

**For Windows:**

```
%JBOSS_BASE_DIR%\bin\standalone.bat -c avalanche.xml
```

where `%JBOSS_BASE_DIR%` is the directory location where you installed HPE MMAP

For example:

```
C:\hpemmap\jboss-eap-6.2
```

**For Unix:**

```
%JBOSS_BASE_DIR%/bin/standalone.sh -c avalanche.xml
```

where `%JBOSS_BASE_DIR%` is the directory location where you installed HPE MMAP.

## Verify HPE MMAP is Running

Verify that HPE MMAP is running on the JBoss application server.

### To verify that HPE MMAP is running

1. Check the log `server.log` located in the `%JBOSS_BASE_DIR%\standalone\log\` directory for the following status message:

```
Deployed "hpe-mmap-ear"
```

This indicates that the system is ready.

**NOTE:**

HPE MMAP does not run as a service; after verifying that HPE MMAP is running, you must not close the process.

## Troubleshooting

This section provides troubleshooting and error code information to help you identify and resolve issues that you may encounter when installing HPE MMAP.

## Description

JBoss displays the following error in `server.log` when starting up HPE MMAP:

```
Error occurred during initialization of VM. Could not reserve enough space for object heap
```

## Solution

Modify `%JBASS_BASE_DIR%\bin\standalone.conf.bat` (in Windows) or `standalone.conf` (in UNIX) and reduce the `Xms` and `Xmx` values as follows:

### For Windows:

Add the following line to `standalone.conf.bat`:

```
set "JAVA_OPTS=-Xms512M -Xmx512M -XX:MaxPermSize=256M"
```

### For UNIX:

Add the following line to `standalone.conf`:

```
JAVA_OPTS=-Xms512M -Xmx512M -XX:MaxPermSize=256M"
```

After modifying the file, restart JBoss.

## Next Steps

### To view the HPE MMAP Getting Started Guide

From a Google Chrome browser window, navigate to <http://localhost:8080>.

The HPE Media Management and Analysis Platform Getting Started Guide displays in the browser window.

From here, you can explore the REST API calls to manage media sources, create recordings and analytics and play video.

You can also view the HPE MMAP API documentation, follow the instructions to set up an HPE Media Server analysis and recording process and view a live demo with the channel you set up.

# Chapter 4: Upgrade HPE MMAP

This chapter describes the process to upgrade the HPE Media Management and Analysis Platform from previous versions to version 11.5.

## Before You Begin

Perform the following tasks before you begin the upgrade of the HPE Media Management and Analysis Platform.

1. Download the HPE MMAP 11.5 software from the HPE Big Data Support Site - <https://customers.autonomy.com/>.
2. Upgrade HPE IDOL Media Servers to version 11.5.  
Upgrade all HPE IDOL Media Servers that HPE Media Management and Analysis Platform uses.

## Perform the Upgrade

Upgrading the HPE Media Management and Analysis Platform environment includes backing up the current configuration and creating a clean JBoss directory for HPE MMAP 11.5.

**NOTE:** The `\hpemmap\jboss-eap-6.2\standalone\data\modeshape` directory contains all of the channels, cameras, and recorders previously created using the HPE MMAP REST API. In order to preserve your history, after upgrading to 11.5, you must copy back this repository to the clean JBoss directory.

### To upgrade

1. On the JBoss server, rename the original JBoss directory to `Jboss-eap-6.2_old`.  
For example:  
Rename `C:\hpemmap\jboss-eap-6.2` to `C:\hpemmap\jboss-eap-6.2_old`
2. Repeat steps 3 through 6 of the [Install HPE Media Management and Analysis Platform](#) procedure to create a clean JBoss directory.  
For example:  
`C:\hpemmap\Jboss-eap-6.2`
3. After the new JBoss directory is prepared with all of the software components, copy the backed-up `modeshape` directory to `\hpemmap\Jboss-eap-6.2\standalone\data\modeshape`.

## Upgrade the Database Schema

To keep existing analytics for each channel and camera in the database, contact your database administrator for details of the changes you need to make to migrate from the previous database schema to the new

database schema.

You can compare the previous `schema.sql` with the new `schema.sql` for information on the new tables and columns that you need to add.

If you do not wish to keep existing analytics, you can simply delete the database and recreate it from scratch.

# Send documentation feedback

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

## **Feedback on Installation Guide (Media Management and Analysis Platform 11.5)**

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We appreciate your feedback!