

A large, light blue, stylized play button icon is positioned on the left side of the slide. It consists of a large right-pointing triangle with a smaller, similar triangle inside it, creating a nested effect.

APEX Media Extension

as a replacement for
Oracle Multimedia

Dimitri Gielis - dgielis@united-codes.com

Dimitri in Leuven, Belgium



Dimitri Gielis Blog (Oracle Application Express - APEX)

I created this Blog to share my knowledge especially in Oracle Application Express (APEX) and my feelings ...

TUESDAY, SEPTEMBER 17, 2019

Best and Cheapest Oracle APEX hosting: Free Oracle Cloud

I really have to write about the [Oracle Cloud Free Tier](#) as it's the third time in my career I've been blown away by Oracle.

The first time was when I first saw and worked with the [Oracle Database](#), the second time when I saw HTMLDB (now [APEX](#)) and today, again, with the announcement of the [Free Autonomous Oracle Cloud](#).

The Free Oracle Tier is a hardcore smackdown on any other cloud offering which includes a virtual machine, database, and development environment!



The Free Oracle Cloud was announced by Andy Mendelsohn at Oracle Open World 2019. You get a free Oracle Autonomous Database, 2 Virtual Machines (Compute), Storage and other services:

My next public appearances:

- [Oracle Open World: 6/9-OCT-2020](#)

About Me



 [Dimitri Gielis](#)

Passionate about bringing ideas to life with code. Founder and CEO of [United Codes](#) and [APEX R&D](#). Loves the Oracle Database and Oracle Application Express (APEX).

 [View my complete profile](#)



Inventor of products: AOP & AME

Need to export to PDF, Excel, HTML, ... or print data in the Oracle database and APEX?

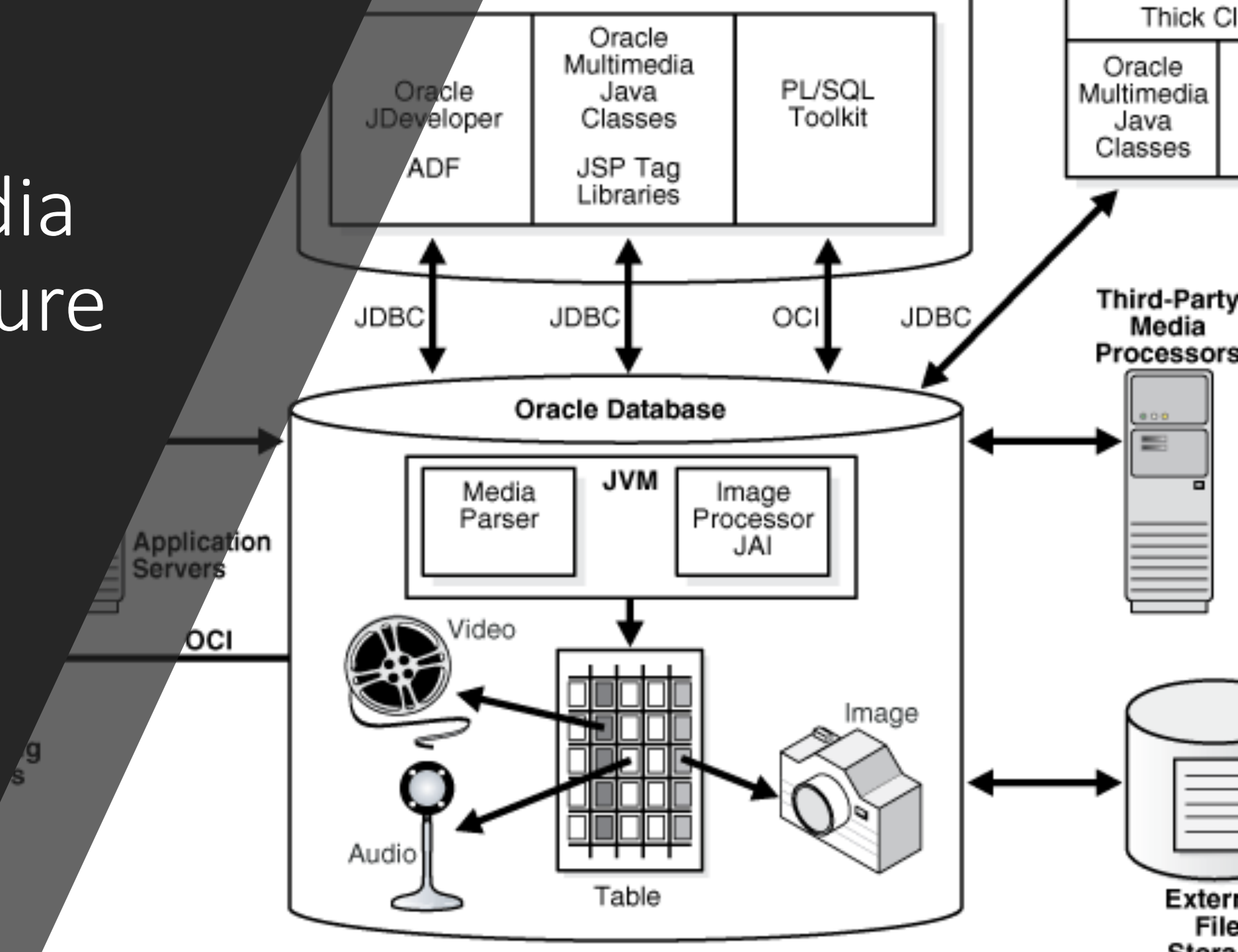
Check out [APEX Office Print \(AOP\)](#).



Dimitri

- CEO and Founder of  [united codes](#).
- Oracle ACE Director
- APEX Developer of the year 2009 by Oracle Magazine
- Oracle Developer Choice award (ORDS) in 2015
- Member of year apex.world 2019
- Author Expert Oracle APEX
- Twitter: [@dgielis](#)
- Email: dgielis@united-codes.com
- Blog: dgielis.blogspot.com

Oracle Multimedia Architecture



Oracle Multimedia Example

```
DECLARE
    myimage ORImage;

BEGIN

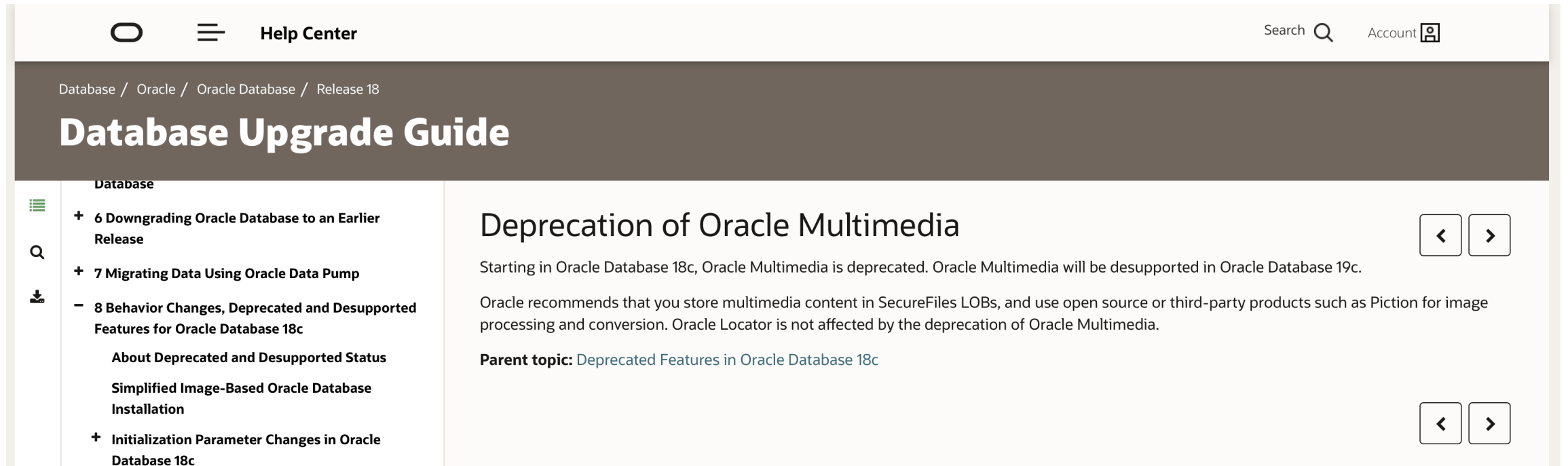
    SELECT image
        INTO myimage
        FROM image_table
        WHERE id=1
        FOR UPDATE;

    myimage.process('scale=",75"');

    UPDATE image_table
        SET image = myimage
        WHERE id=1;

END;
/
```

Oracle Multimedia in 18c +



How to use multimedia in the Oracle Cloud?





APEX Media Extension

Solution AME

apexmediaextension.com

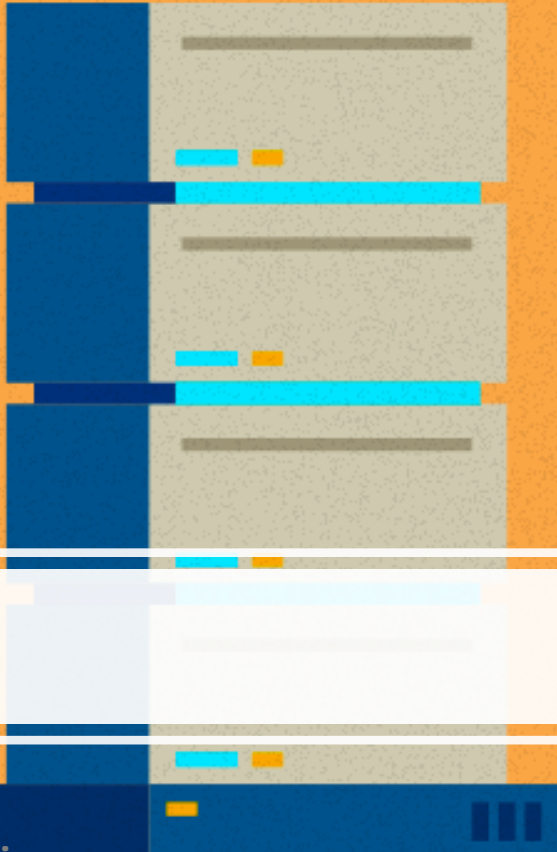
AME Features

- Resize images
 - Rotate and flip images
 - Crop images
 - Compress images
 - Greyscale images
 - Change image formats (jpg, png, ...)
-
- Add one or more watermarks or overlays (images and text)
-
- Get image information (width, height, mime type, ...)
 - Read media metadata (Exif, IPTC and XMP)

APEX Media Extension Example

```
update ame_images_wt i
  set i.thumbnail = ame_api_pkg.convert_image_b1(
    p_source_blob => r.image,
    p_max_width   => 80,
    p_greyscale   => 'true'
  )
where i.id = r.id;
```

**SERVER
SIDE
RENDERING**



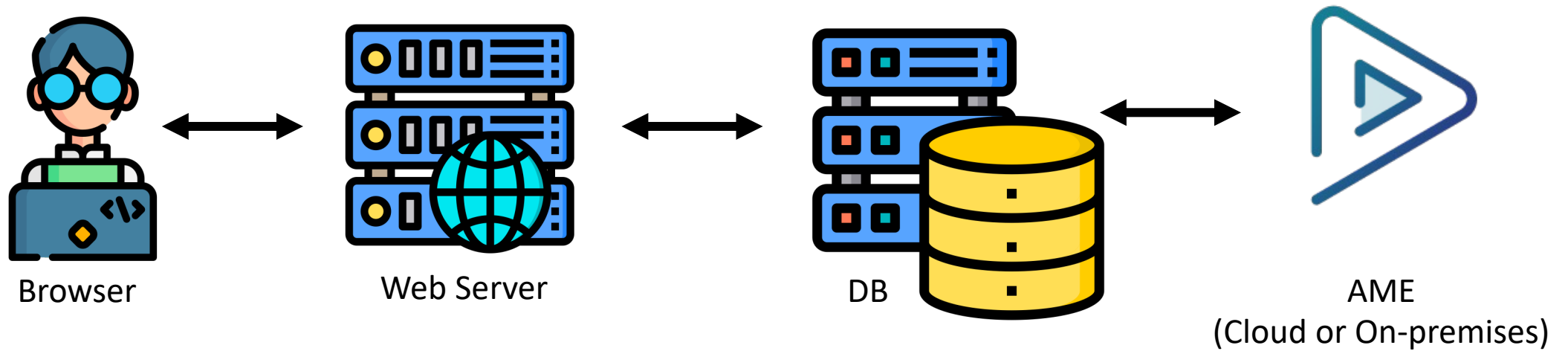
VS

**CLIENT
SIDE
RENDERING**



What is AME?

AME Server-side



REST API

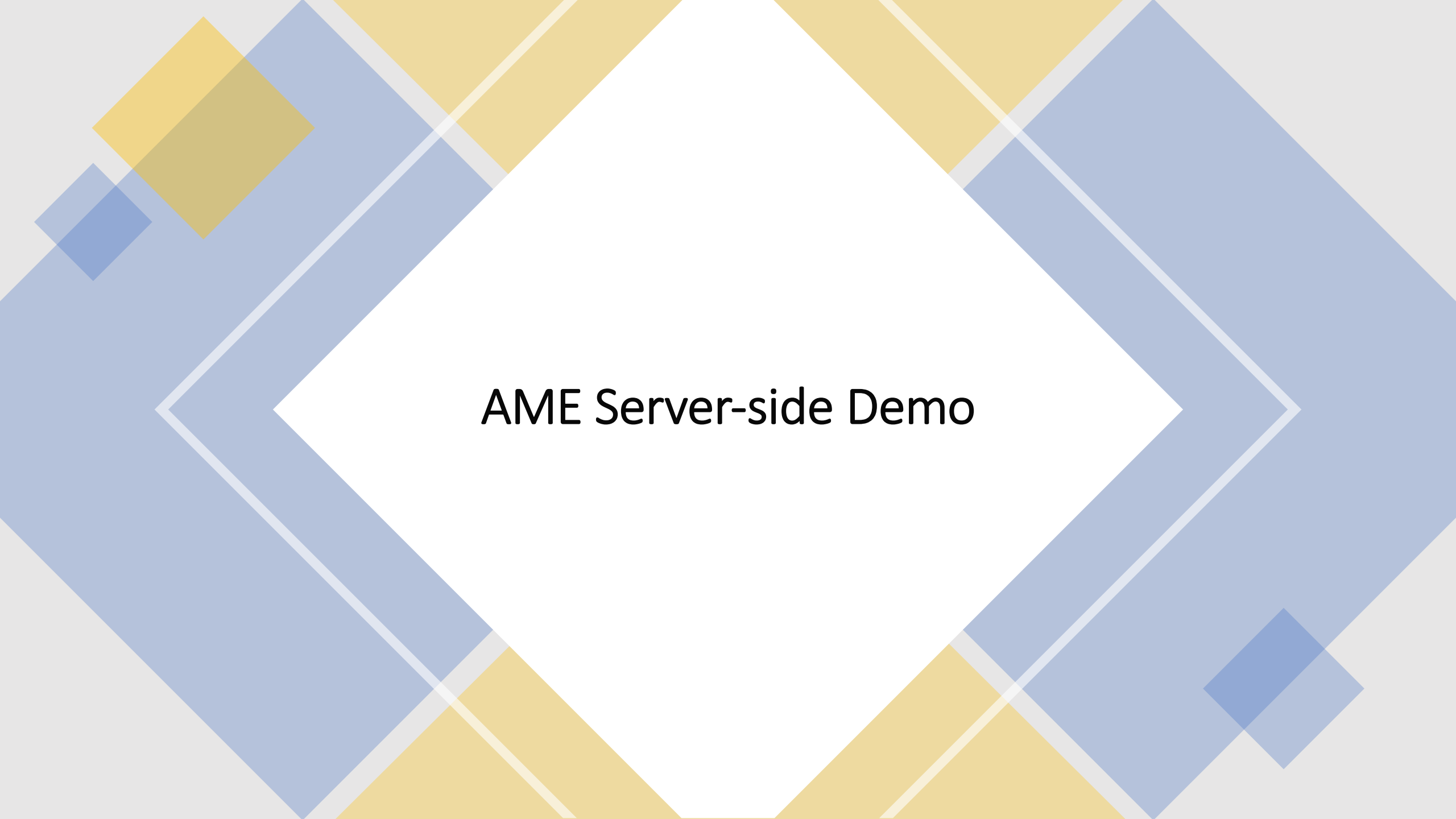
```
{
  "version": "21.1.0",
  "ame_url": "http://www.apexmediaextension.com",
  "apex_version": "18.1.0.00.45",
  "logging": {},
  "output": {
    "output_encoding": "raw"
  },
  "media_files": [{
    "file": "lena.tif",
    "output_filename": "output.png",
    "output_mime_type": "image/png",
    "greyscale": true
  }]
}
```

- At its core AME is a RESTful service
- Receives JSON in a specific format containing the media and manipulations
- Simplest way to interact with the server
- Can be used from any technology

PL/SQL API

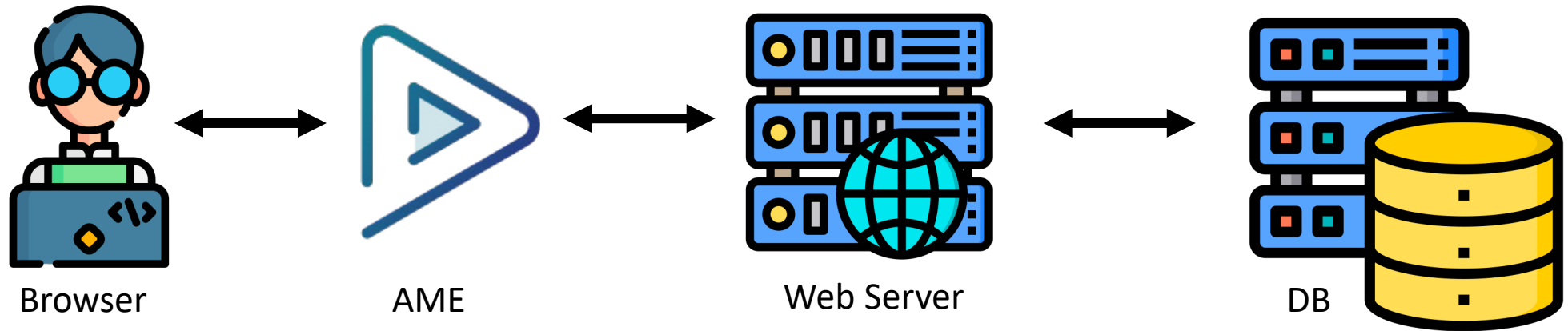
```
7  from ame_images
8  where id=1;
9
10 ame_api_pkg.g_ame_url := apex_app_setting.get_value('AME_URL');
11 ame_api_pkg.g_api_key := apex_app_setting.get_value('AME_API_KEY');
12
13 l_new_blob := ame_api_pkg.convert_image_b1(
14     p_source_blob      => l_orig_blob,
15     p_manipulator       => :P12_MANIPULATOR,
16     p_quality           => :P12_QUALITY,
17     p_width             => :P12_WIDTH,
18     p_max_width         => :P12_MAX_WIDTH,
19     p_height            => :P12_HEIGHT,
20     p_max_height        => :P12_MAX_HEIGHT,
21     p_resize_method     => :P12_RESIZE_METHOD,
22     p_crop              => :P12_CROP,
23     p_flip              => :P12_FLIP,
24     p_rotate            => :P12_ROTATE,
25     p_overlay           => :P12_OVERLAY,
26     p_greyscale         => :P12_GREYSCALE,
27     p_output_filename   => :P12_FILENAME,
28     p_output_mime_type  => :P12_MIME_TYPE
29 );
30
31 APEX_COLLECTION.CREATE_OR_TRUNCATE_COLLECTION(p_collection_name => 'DROPZONE_UPLOAD');
32 APEX_COLLECTION.ADD_MEMBER(p_collection_name => 'DROPZONE_UPLOAD', p_blob001 => l_new_blob);
33 end;
```

- Wrapper around the REST API
- Generates JSON
- Performs the REST call



AME Server-side Demo

AME Client-side



APEX Plug-in

700px

Height

300px

max. Filesize in MB

2

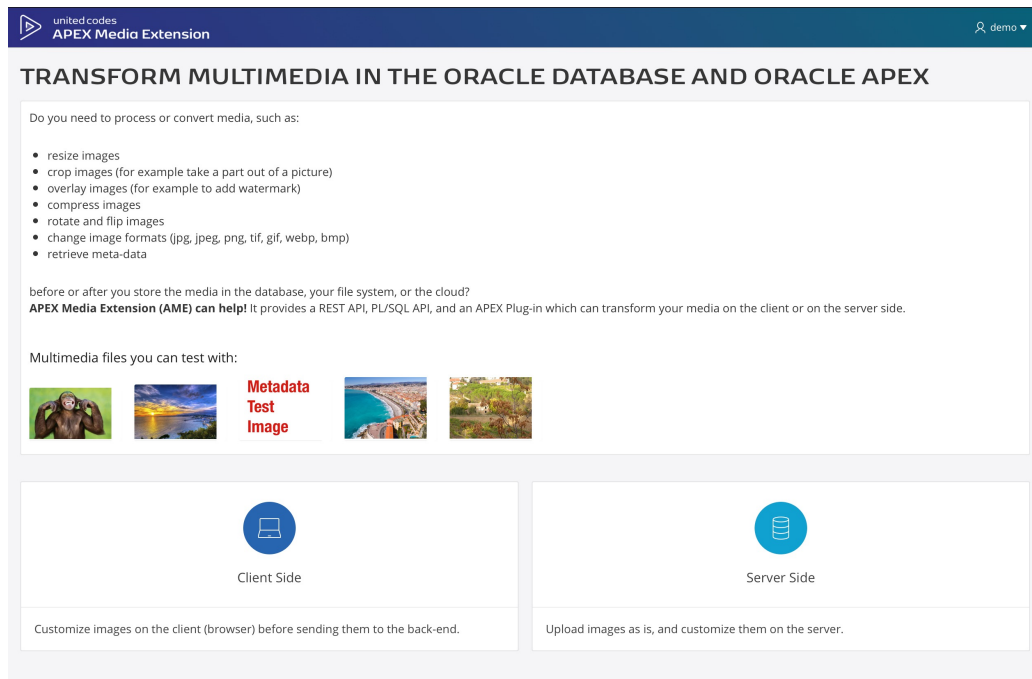
max. Files

- Region plug-in
- Contains plug-in events
- Easy!



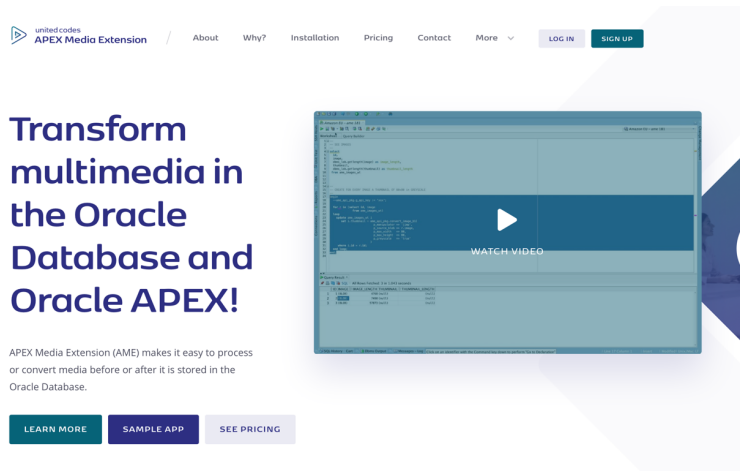
AME Client-side

AME Sample Application



- Download to install in your own workspace or use the online version apexmediaextension.com
- Showcase of all different features
- It's an APEX application – install it and look behind the scenes how things are done

Where to get it?



The screenshot shows the homepage of the APEX Media Extension website. The header includes the logo and navigation links: About, Why?, Installation, Pricing, Contact, and More. There are also buttons for LOG IN and SIGN UP. The main content area features the heading "Transform multimedia in the Oracle Database and Oracle APEX!" followed by a paragraph explaining that APEX Media Extension (AME) makes it easy to process or convert media before or after it is stored in the Oracle Database. Below this text are three buttons: LEARN MORE, SAMPLE APP, and SEE PRICING. A video player with a "WATCH VIDEO" button is also visible.

united codes
APEX Media Extension

About Why? Installation Pricing Contact More

LOG IN SIGN UP

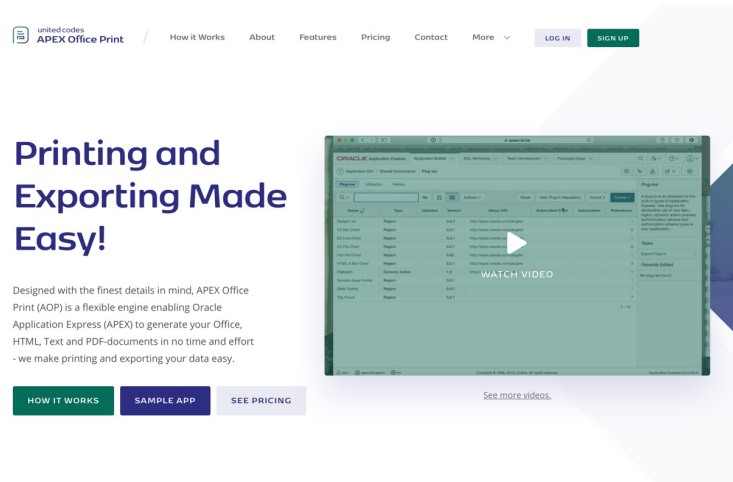
Transform multimedia in the Oracle Database and Oracle APEX!

APEX Media Extension (AME) makes it easy to process or convert media before or after it is stored in the Oracle Database.

LEARN MORE SAMPLE APP SEE PRICING

WATCH VIDEO

apexmediaextension.com



The screenshot shows the homepage of the APEX Office Print website. The header includes the logo and navigation links: How it Works, About, Features, Pricing, Contact, and More. There are also buttons for LOG IN and SIGN UP. The main content area features the heading "Printing and Exporting Made Easy!" followed by a paragraph explaining that APEX Office Print (AOP) is a flexible engine enabling Oracle Application Express (APEX) to generate Office, HTML, Text and PDF-documents in no time and effort, and that they make printing and exporting data easy. Below this text are three buttons: HOW IT WORKS, SAMPLE APP, and SEE PRICING. A video player with a "WATCH VIDEO" button is also visible.

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APEX Office Print

How it Works About Features Pricing Contact More

LOG IN SIGN UP

Printing and Exporting Made Easy!

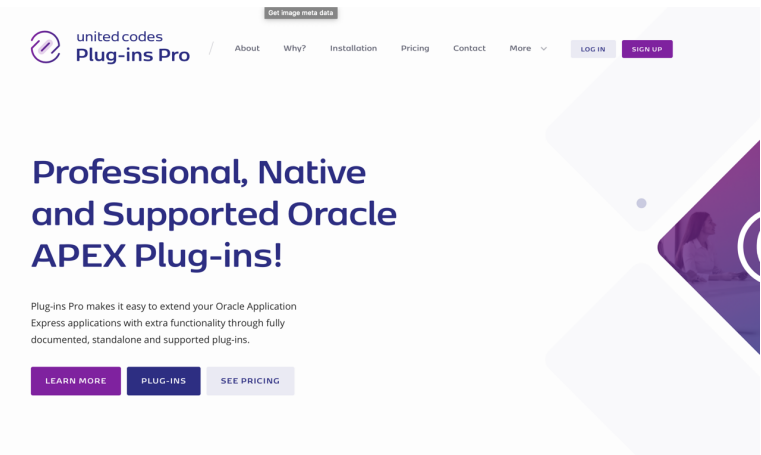
Designed with the finest details in mind, APEX Office Print (AOP) is a flexible engine enabling Oracle Application Express (APEX) to generate your Office, HTML, Text and PDF-documents in no time and effort - we make printing and exporting your data easy.

HOW IT WORKS SAMPLE APP SEE PRICING

WATCH VIDEO

See more videos.

apexofficeprint.com



The screenshot shows the homepage of the Plug-ins Pro website. The header includes the logo and navigation links: About, Why?, Installation, Pricing, Contact, and More. There are also buttons for LOG IN and SIGN UP. The main content area features the heading "Professional, Native and Supported Oracle APEX Plug-ins!" followed by a paragraph explaining that Plug-ins Pro makes it easy to extend your Oracle Application Express applications with extra functionality through fully documented, standalone and supported plug-ins. Below this text are three buttons: LEARN MORE, PLUG-INS, and SEE PRICING. A video player with a "WATCH VIDEO" button is also visible.

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Plug-ins Pro

About Why? Installation Pricing Contact More

LOG IN SIGN UP

Professional, Native and Supported Oracle APEX Plug-ins!

Plug-ins Pro makes it easy to extend your Oracle Application Express applications with extra functionality through fully documented, standalone and supported plug-ins.

LEARN MORE PLUG-INS SEE PRICING

WATCH VIDEO

plug-ins-pro.com

Questions?



APEX Media Extension



APEX Office Print



APEX Media Extension



APEX Project Eye



Plug-ins Pro