## Image Compression - Smart Service

* This Plugin contains smart services for **compressing** the given image file size of type **JPG, PNG and JPEG**.
* Two types of Image Compression are used in this smart service
  + Image Resizing - Resizing an Image typically involves **changing the visual dimensions** of the image. Such as Converting an 1920 X 1080 image into 480 X 270 image thus by reducing the size of image file
  + Image Compressing - Image Compression utilizes mathematical techniques to compress the image file size while **maintaining the resolution of the image**.
* Any type of image compression or resizing will have slight loss in Image Quality, Since we are reducing the overall file size.

### Smart Service - Parameters

#### Input

* Source Image (Document)
  + Provide the image that needs to be Compressed. Allowed image extensions are **JPG, PNG and JPEG**
* Compressed Image Name (Text)
  + Provide the name for the compressed Image
* Max Width (Number - Integer)
  + Provide the maximum width to which the image needs to be compressed.
* Max Height (Number - Integer)
  + Provide the maximum height to which the image needs to be compressed.
  + If Max Width is Inputted then Max Height is **mandatory and Vice Versa**.
  + **Max Width and Max Height is Inputted when we need to resize the image**
* Quality Factor (Number - Decimal)
  + When the user needs to **compress the image without resizing the image**, input Quality Factor.
  + The valid value range for Quality factor is 0 to 1.
  + If the Quality Factor is 0.5, the quality of the image is reduced by half without resizing the image.
  + User can input both Max Width, Max Height **and** Quality Factor Or either Max Width, Max Height **Or** Quality Factor
* Save In Folder (Folder)
  + Provide the folder in which the compressed image needs to be saved.
* Compressed Image description (Text)
  + Provide the description for the compressed Image

#### Output

* New Image Created (document)
  + Provides the generated Image document.
* Error (Text)
  + Provides true if any error occurs.
* Error Message
  + Provides the error message.