

Youtube Video Integration with ServiceNow

Problem Statement:

Manually retrieving and managing YouTube video details, such as titles, descriptions, and URLs, is time-consuming and prone to errors, especially when dealing with large volumes of video references for knowledge sharing, incident management, or catalog item descriptions. The lack of integration between YouTube and ServiceNow creates inefficiencies and limits the automation of video-related workflows.

Objective:

Integrate ServiceNow with YouTube using the YouTube Data API to automatically fetch and display video metadata (e.g., title, description, URL) based on a YouTube Video ID. This integration streamlines workflows, enhances user productivity, and improves the accuracy of video-related information in ServiceNow records.

TASK INITIATION

Milestone 1 : Create Youtube API Key

Activity 1: Set up a project in Google Developer Console

- 1) Go to Google Developer Console.
- 2) Login with your Google account

Activity 2 : Create a New Project

- 1) Click on "Select a Project" in the top navigation bar.
- 2) Click "New Project" and provide a name for the project.
- 3) Click "Create" to set up your project.

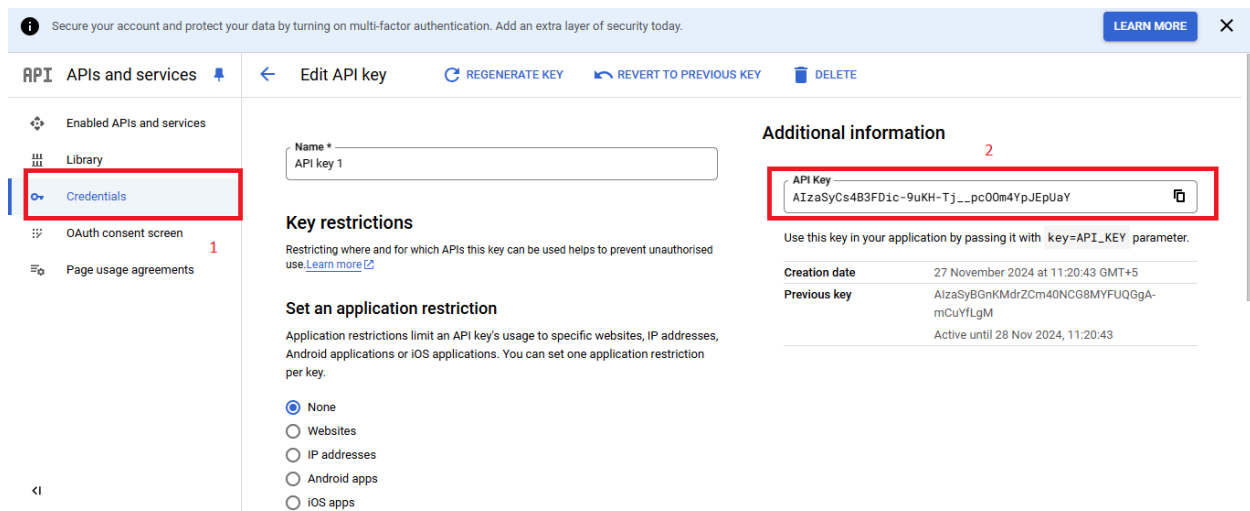
Activity 3 : Enable YouTube Data API v3

1. Navigate to the API Library.
2. Search for YouTube Data API v3 in the search bar.

3. Select the API and click "Enable".

Activity 4: Create an API Key

1. Go to the Credentials section in the Developer Console.
2. Click "Create Credentials" and select "API Key".
3. Copy the generated API key and store it securely



Secure your account and protect your data by turning on multi-factor authentication. Add an extra layer of security today. [LEARN MORE](#) ×

APIs and services

- Enabled APIs and services
- Library
- Credentials**
- OAuth consent screen
- Page usage agreements

Edit API key [REGENERATE KEY](#) [REVERT TO PREVIOUS KEY](#) [DELETE](#)

Name *
API key 1

Key restrictions
Restricting where and for which APIs this key can be used helps to prevent unauthorised use. [Learn more](#)

Set an application restriction
Application restrictions limit an API key's usage to specific websites, IP addresses, Android applications or iOS applications. You can set one application restriction per key.

- ☒ None
- ☐ Websites
- ☐ IP addresses
- ☐ Android apps
- ☐ iOS apps

Additional information

API Key
AIzaSyCs4B3FDic-9uKH-Tj__pc00m4YpJEpUaY

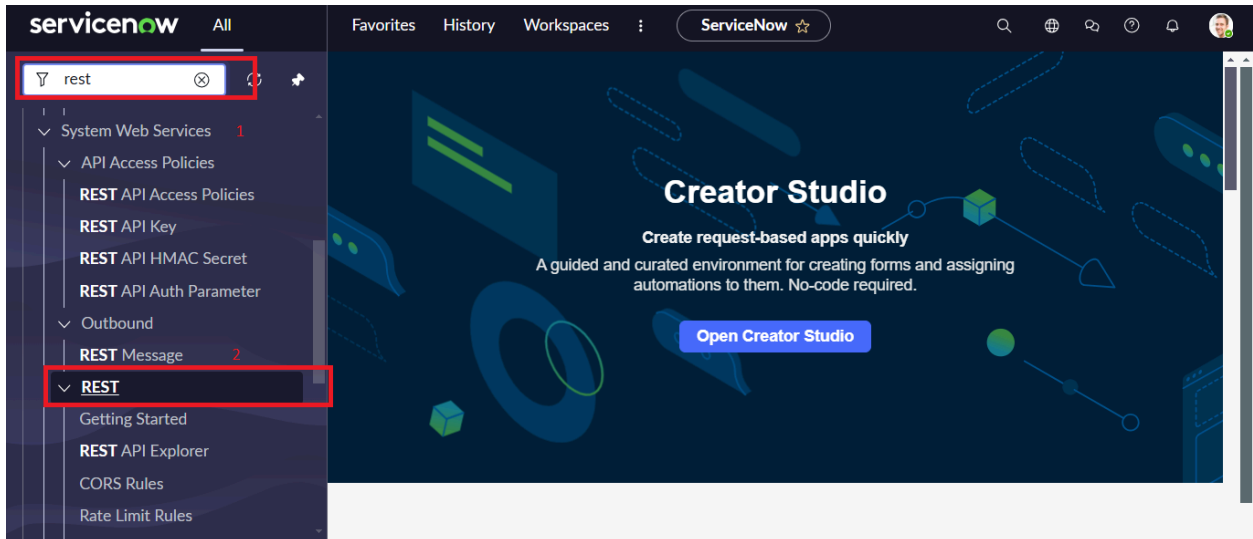
Use this key in your application by passing it with `key=API_KEY` parameter.

Creation date	27 November 2024 at 11:20:43 GMT+5
Previous key	AIzaSyBGnKMdZCm40NCG8MYFUQGgA-mCuYtLgM
	Active until 28 Nov 2024, 11:20:43

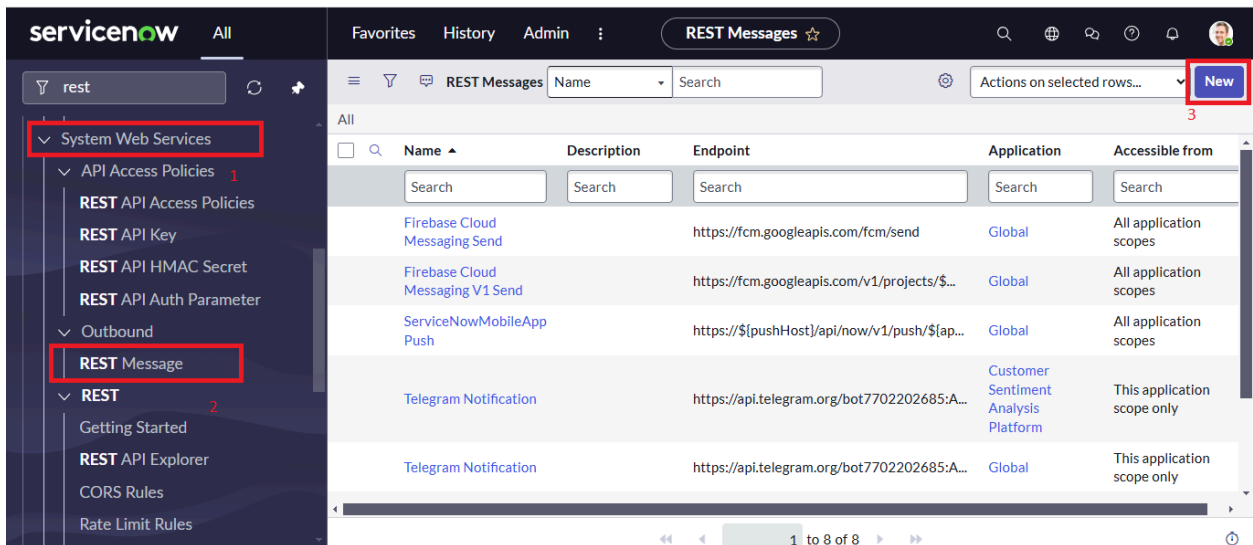
Milestone 2: Use REST API in ServiceNow

Activity 1: Create a REST Message in ServiceNow

1. Navigate to System Web Services > REST > REST Message in ServiceNow.
2. Click New to create a REST Message record.
 - Name: YouTube Video API
 - Endpoint: <https://www.googleapis.com/youtube/v3/videos>
3. Save the record.

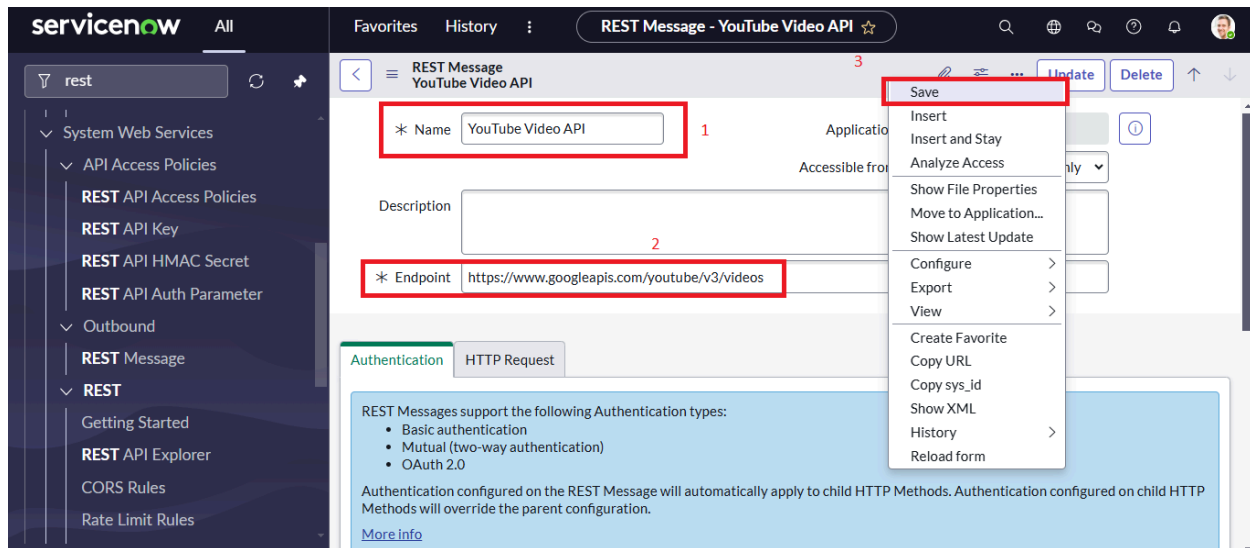


The screenshot shows the ServiceNow Creator Studio interface. On the left, a sidebar menu is visible with a search bar containing 'rest'. The 'REST' category is highlighted. The main area displays the 'Creator Studio' header with a sub-header 'Create request-based apps quickly' and a description 'A guided and curated environment for creating forms and assigning automations to them. No-code required.' A blue button labeled 'Open Creator Studio' is present.



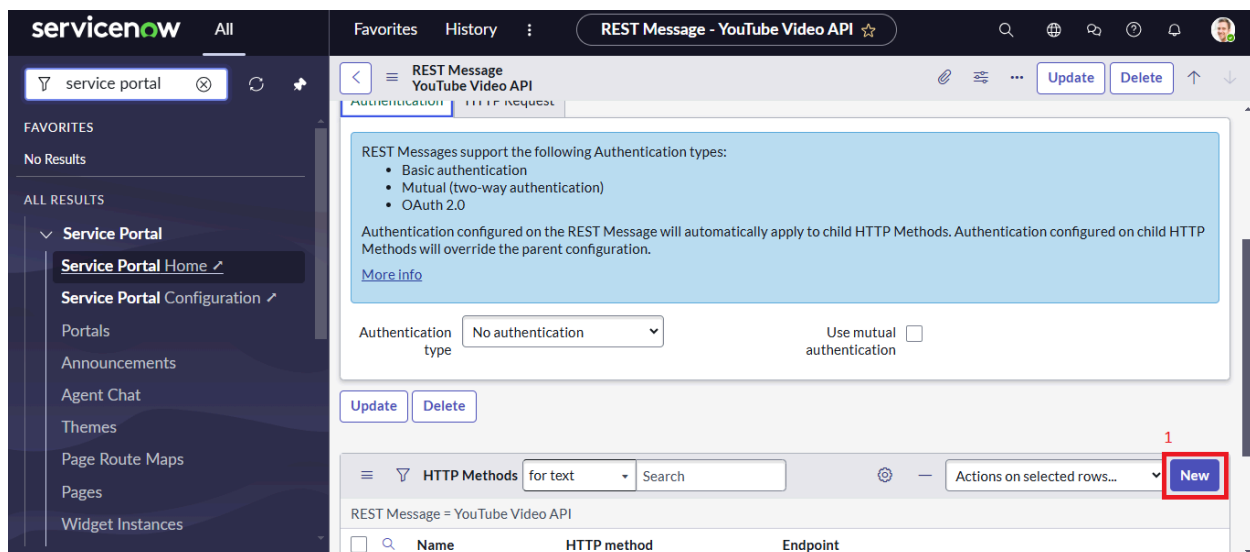
The screenshot shows the ServiceNow REST Messages interface. On the left, a sidebar menu is visible with a search bar containing 'rest'. The 'REST Message' category is highlighted. The main area displays a table of REST Messages. A 'New' button is visible in the top right corner of the table area.

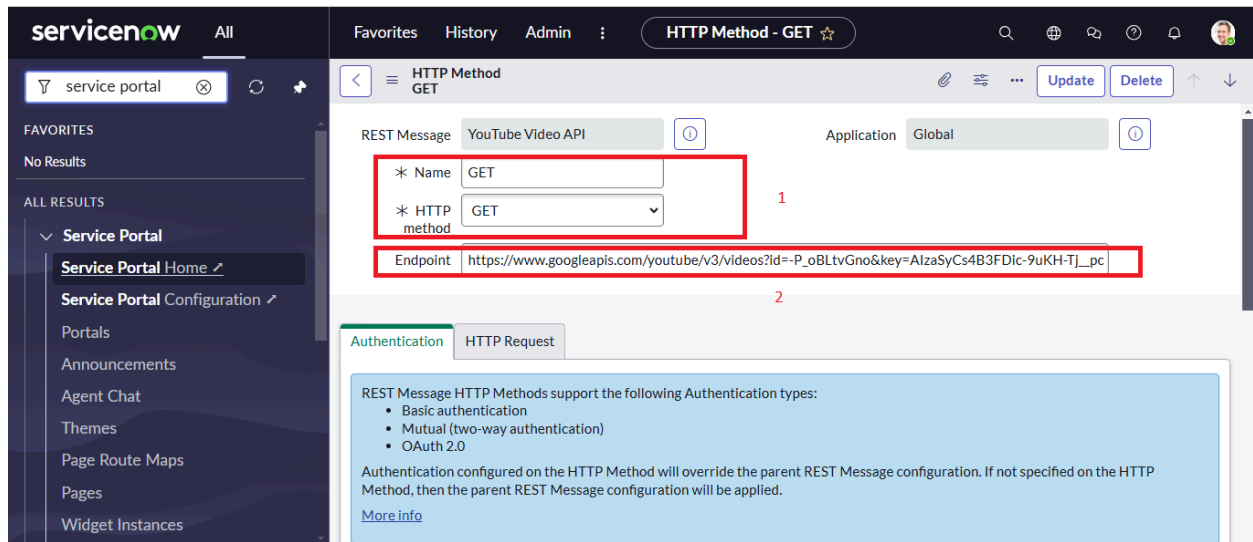
Name	Description	Endpoint	Application	Accessible from
Search	Search	Search	Search	Search
Firestore Cloud Messaging Send		https://fcm.googleapis.com/fcm/send	Global	All application scopes
Firestore Cloud Messaging V1 Send		https://fcm.googleapis.com/v1/projects/\$...	Global	All application scopes
ServiceNowMobileApp Push		https://\$[pushHost]/api/now/v1/push/\$[ap...	Global	All application scopes
Telegram Notification		https://api.telegram.org/bot7702202685:A...	Customer Sentiment Analysis Platform	This application scope only
Telegram Notification		https://api.telegram.org/bot7702202685:A...	Global	This application scope only



Activity 2 : Configure HTTP Method

1. Open the newly created REST Message 2.
2. Under the HTTP Methods tab, click New.
 - HTTP Method: GET
 - Name: Get Video Details
3. Save the HTTP Method.





Milestone 3 : Call the REST API in ServiceNow

Activity 1 : Create Script Include

1. Navigate to System Definitions >> Script Include
2. Click on New
3. Fill in the details as follows

Name : Youtiubeapi and check on active box

4. Write the script
5. And click on save.

servicenow All

script inclu

No Results

ALL RESULTS

- Activity Subscriptions
- Administration
- Script Includes**
- Metrics
- Script Includes
- MID Server
- Script Includes
- System Definition
- Script Includes
- System UI
- Script Includes

Script Include - Youtube api

Name: Youtube api

API Name: global.Youtube api

Application: Global

Accessible from: This application scope only

Client callable: ☐ 1

Mobile callable: ☐ 2

Active: ☒

Description:

Script: ☒ Turn on ECMAScript 2021 (ES12) mode

```

1 var YouTubeAPI = Class.create();
2 YouTubeAPI.prototype = {
3   initialize: function() {
4   },
5
6   // Method to get video details by video ID
7   getVideoDetails: function(videoId) {
8     var apiKey =

```

servicenow All

script inclu

No Results

ALL RESULTS

- Activity Subscriptions
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- Script Includes**
- Metrics
- Script Includes
- MID Server
- Script Includes
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- Script Includes
- System UI
- Script Includes

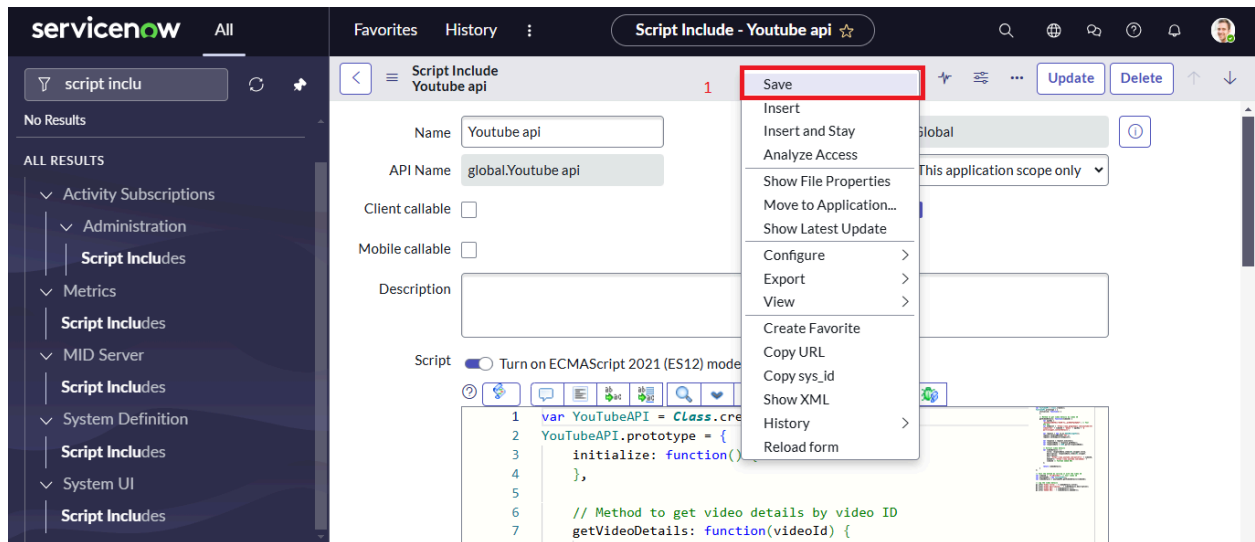
Script Include - Youtube api

1

```

1 var YouTubeAPI = Class.create();
2 YouTubeAPI.prototype = {
3   initialize: function() {
4   },
5
6   // Method to get video details by video ID
7   getVideoDetails: function(videoId) {
8     var apiKey =
9       'AIzaSyCs4B3FD1c-9uKH-Tj_pc00m4YpJEpUaY'; // Your
10      API Key
11     var endpoint = 'https://www.googleapis.com/youtube/v3/
12       videos?id=' + videoId + '&key=' + apiKey + '&
13       part=snippet,contentDetails';
14
15     var request = new sn_ws.RESTMessageV2();
16     request.setHttpMethod('GET');
17     request.setEndpoint(endpoint);
18
19     var response = request.execute();
20     var responseBody = response.getBody();
21     var responseData = JSON.parse(responseBody);
22
23     // Extract video details

```



SCRIPT :

```
var YouTubeAPI = Class.create();

YouTubeAPI.prototype = {

    initialize: function() {

    },

    // Method to get video details by video ID

    getVideoDetails: function(videoId) {

        var apiKey = 'AIzaSyCs4B3FDic-9uKH-Tj__pcOOm4YpJEpUaY'; // Your
API Key

        var endpoint = 'https://www.googleapis.com/youtube/v3/videos?id='
+ videoId + '&key=' + apiKey + '&part=snippet,contentDetails';
```

```
var request = new sn_ws.RESTMessageV2();

request.setHttpMethod('GET');

request.setEndpoint(endpoint);


var response = request.execute();

var responseBody = response.getBody();

var responseData = JSON.parse(responseBody);


// Extract video details

var videoDetails = {

    title: responseData.items[0].snippet.title,

    description: responseData.items[0].snippet.description,

    url: 'https://www.youtube.com/watch?v=' + videoId,

    embedUrl: 'https://www.youtube.com/embed/' + videoId //
    YouTube embed URL

};


return videoDetails;

}

};


// Test the method by calling it with the video ID

var videoId = '-P_oBLtvGno'; // Your video ID
```



```
var youtubeAPI = new YouTubeAPI();

var videoDetails = youtubeAPI.getVideoDetails(videoId);


// Log the video details

gs.info('Video Title: ' + videoDetails.title);

gs.info('Video Description: ' + videoDetails.description);

gs.info('Video URL: ' + videoDetails.url);

gs.info('Embed URL: ' + videoDetails.embedUrl);
```

Milestone 4 : Display the youtube video

Activity 1 : Create Ui page

1. Navigate to System UI >> UI Pages
2. Click on New
3. Fill in the details
4. Write the HTML Script
5. Save

servicenow All Favorites History UI Page - Youtube Video Embed

Filter

Self-Service

- Business Applications
- Dashboards
- Service Catalog
- Employee Center
- Knowledge
- Visual Task Boards
- Incidents
- Watched Incidents
- My Requests
- Requested Items
- Watched Requested Items

UI Page Youtube Video Embed

Name: **Youtube Video Embed** Application: Global

Category: General 1 Direct ☐

Description

HTML **KML** Turn on ECMAScript 2021 (ES12) mode

```

1 <html>
2 <head>
3   <title>YouTube Video Embed</title>
4 </head>
5 <body>
6   <h1>YouTube Video</h1>
7   <!-- Embed YouTube video using iframe -->
8   <iframe
9     width="560"
10    height="315"
11    src="https://www.youtube.com/embed/yYFZVwqS590?si=06EGy9iDe2ZLXESW"

```

servicenow All Favorites History UI Page - Youtube Video Embed

Filter

Self-Service

- Business Applications
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- Visual Task Boards
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- Watched Incidents
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- Requested Items
- Watched Requested Items

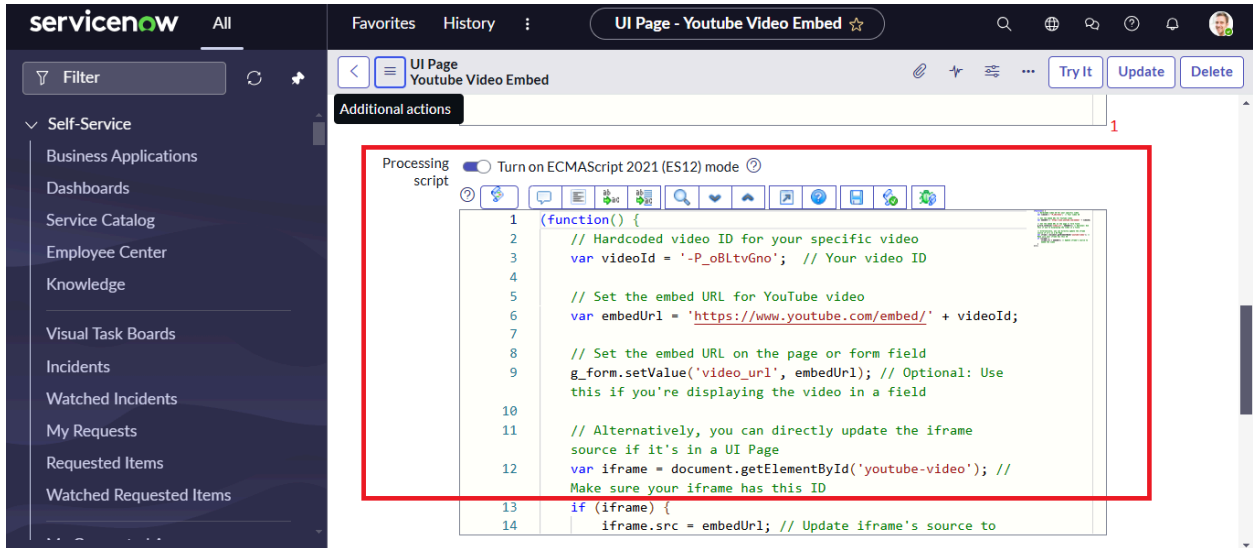
UI Page Youtube Video Embed

HTML **KML** Turn on ECMAScript 2021 (ES12) mode

```

1 <html>
2 <head>
3   <title>YouTube Video Embed</title>
4 </head>
5 <body>
6   <h1>YouTube Video</h1>
7   <!-- Embed YouTube video using iframe -->
8   <iframe
9     width="560"
10    height="315"
11    src="https://www.youtube.com/embed/yYFZVwqS590?si=06EGy9iDe2ZLXESW"
12    title="YouTube video player"
13    frameborder="0"
14    allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture; web-share"
15    referrerpolicy="strict-origin-when-cross-origin"
16    allowfullscreen="allowfullscreen">
17 </iframe>

```

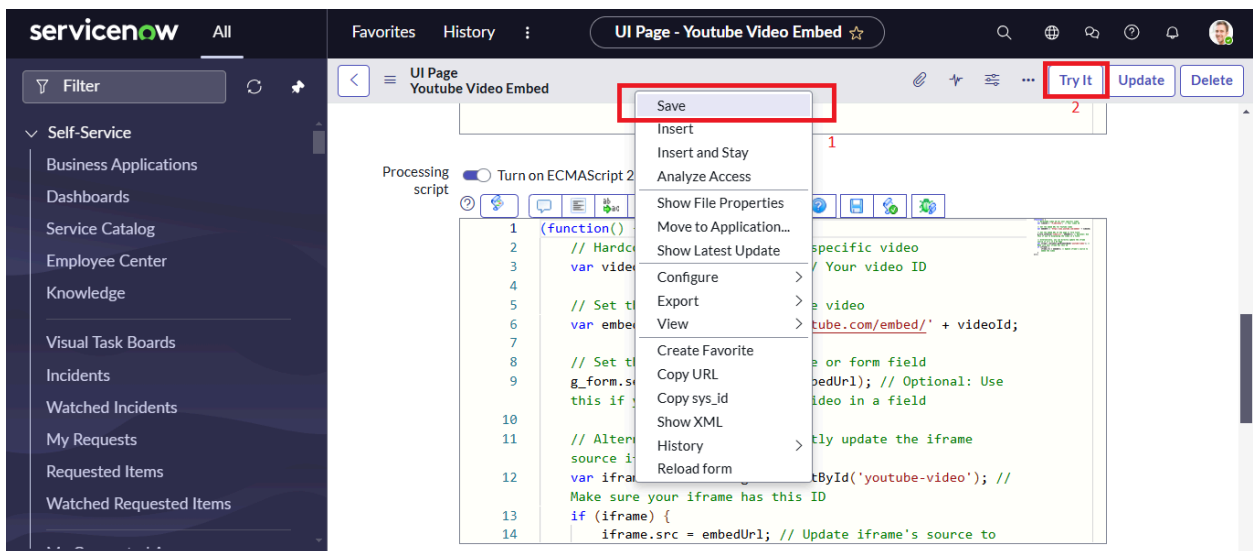


Processing script

```

1 (function() {
2   // Hardcoded video ID for your specific video
3   var videoId = '-P_oBltvGno'; // Your video ID
4
5   // Set the embed URL for YouTube video
6   var embedUrl = 'https://www.youtube.com/embed/' + videoId;
7
8   // Set the embed URL on the page or form field
9   g_form.setValue('video_url', embedUrl); // Optional: Use
10  this if you're displaying the video in a field
11
12  // Alternatively, you can directly update the iframe
13  source if it's in a UI Page
14  var iframe = document.getElementById('youtube-video'); //
15  Make sure your iframe has this ID
16
17  if (iframe) {
18    iframe.src = embedUrl; // Update iframe's source to

```



Try It

Save

```

1 (function() {
2   // Hardcoded video ID for your specific video
3   var videoId = '-P_oBltvGno'; // Your video ID
4
5   // Set the embed URL for YouTube video
6   var embedUrl = 'https://www.youtube.com/embed/' + videoId;
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8   // Set the embed URL on the page or form field
9   g_form.setValue('video_url', embedUrl); // Optional: Use
10  this if you're displaying the video in a field
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13  source if it's in a UI Page
14  var iframe = document.getElementById('youtube-video'); //
15  Make sure your iframe has this ID
16
17  if (iframe) {
18    iframe.src = embedUrl; // Update iframe's source to

```

HTML Script :

```
<html>
```

```
<head>
```

```
  <title>YouTube Video Embed</title>
```

```
</head>
```

```
<body>
```



Smart
Internz

<h1>YouTube Video</h1>



SMARTBRIDGE
Let's Bridge the Gap
a Veranda Enterprise

<!-- Embed YouTube video using iframe -->

<iframe

width="560"

height="315"

src="https://www.youtube.com/embed/yYFZVwqS590?si=06EGy9iDe2ZLXESW"

title="YouTube video player"

frameborder="0"

allow="accelerometer; autoplay; clipboard-write; encrypted-media;
gyroscope; picture-in-picture; web-share"

referrerpolicy="strict-origin-when-cross-origin"

allowfullscreen="allowfullscreen">

</iframe>

</body>

</html>

Milestone 4 : Testing

Activity 1 : Rest Api test

1. Navigate to rest message
2. Under the HTTP method
3. Open GET
4. Scroll down a click on Test.

servicenow All

rest mes 1

FAVORITES
No Results

ALL RESULTS

- System Web Services
 - Outbound
 - REST Message 2

REST Message - YouTube Video API

Authentication type: No authentication ☐ Use mutual authentication

Update Delete

HTTP Methods for text Search Actions on selected rows... New

REST Message = YouTube Video API

Name	HTTP method	Endpoint 3
GET	GET	https://www.googleapis.com/youtube/v3/vi...
Default GET	GET	https://www.googleapis.com/youtube/v3/vi...

1 to 2 of 2

servicenow All

rest mes

FAVORITES
No Results

ALL RESULTS

- System Web Services
 - Outbound
 - REST Message

HTTP Method - GET

Update Delete

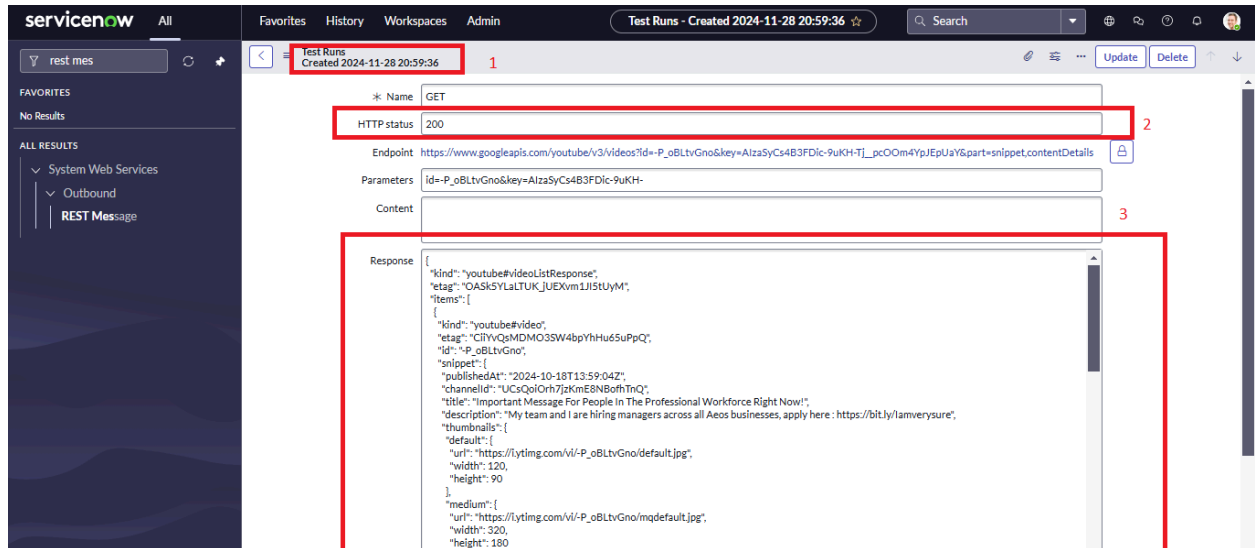
Related Links

- [Auto-generate variables](#)
- [Preview Script Usage](#)
- [Set HTTP Log level](#)
- [Test 1](#)

Variable Substitutions Test Runs (9)

Method = GET

Name	Escape type	Test value
No records to display		



Activity 2 : Testing Script Include

1. Navigate to System Definition >> Scripts-Background
2. Write the previous script include code here
3. Click on Run Script
4. We can see the result on the youtube video we have integrated

Running freeform script can cause system disruption or loss of data.

Run script (JavaScript executed on server)

```

1 var YouTubeAPI = Class.create();
2 YouTubeAPI.prototype = {
3   initialize: function() {
4   },
5
6   // Method to get video details by video ID
7   getVideoDetails: function(videoId) {
8     var apiKey = 'Alza5yCs4B3FDic-9uKH-Tj_pc0m4YpJEpdlAY'; // Your API Key
9     var endpoint = 'https://www.googleapis.com/youtube/v3/videos?id=' + videoId + '&key=' + apiKey + '&part=snippet,contentDetails';
10
11     var request = new sn_ws.RESTMessageV2();
12     request.setHttpMethod('GET');
13     request.setEndpoint(endpoint);
14
15     var response = request.execute();
16     var responseBody = response.getBody();
17     var responseData = JSON.parse(responseBody);
18
19     // Extract video details
20     var videoDetails = {
21       title: responseData.items[0].snippet.title,
22       description: responseData.items[0].snippet.description,
23       url: 'https://www.youtube.com/watch?v=' + videoId,
24       embedUrl: 'https://www.youtube.com/embed/' + videoId // YouTube embed URL
25     };
26
27     return videoDetails;
28   }
29 };
30
31 // Test the method by calling it with the video ID
32 var videoId = 'P_oBLtvGno'; // Your video ID
33 var youtubeAPI = new YouTubeAPI();
34 var videoDetails = youtubeAPI.getVideoDetails(videoId);
35
36 // Log the video details
37 gs.info('Video Title: ' + videoDetails.title);
  
```

https://dau273207.xenix-snow.com/oucs/scripts/mnufers.dn | global

Record for rollback? ☒ Execute in sandbox? ☐ Execute as scriptlet? ☐ Cancel after 4 hours ☒

Run Script

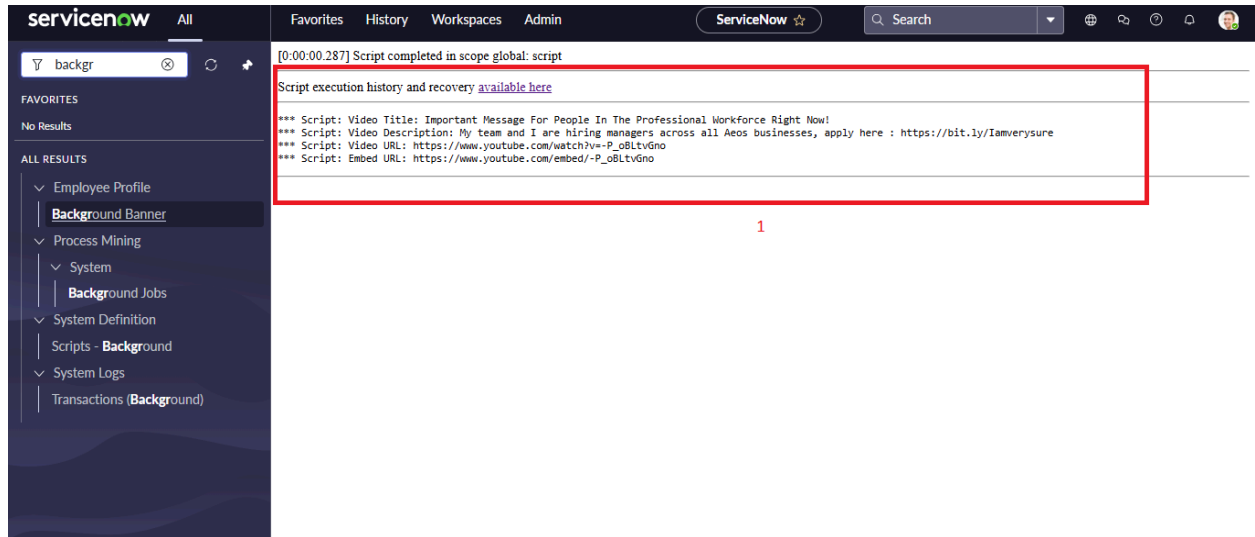
```

20 var videoDetails = {
21   title: responseData.items[0].snippet.title,
22   description: responseData.items[0].snippet.description,
23   url: 'https://www.youtube.com/watch?v=' + videoId,
24   embedUrl: 'https://www.youtube.com/embed/' + videoId // YouTube embed URL
25 };
26
27 return videoDetails;
28
29 };
30
31 // Test the method by calling it with the video ID
32 var videoId = 'P_oBLtvGno'; // Your video ID
33 var youtubeAPI = new YouTubeAPI();
34 var videoDetails = youtubeAPI.getVideoDetails(videoId);
35
36 // Log the video details
37 gs.info('Video Title: ' + videoDetails.title);
38 gs.info('Video Description: ' + videoDetails.description);
39 gs.info('Video URL: ' + videoDetails.url);
40 gs.info('Embed URL: ' + videoDetails.embedUrl);
41
  
```

1

Run Script in scope Record for rollback? ☒ Execute in sandbox? ☐ Execute as scriptlet? ☐ Cancel after 4 hours ☒

+ Instance Scripts



Activity 3 : Test UI Page

1. Navigate to System UI >> UI Pages
2. Open the UI page created previously
3. Click on Try It.
4. We can see the video which we have integrated
5. Play the video

servicenow All

ui page

FAVORITES
No Results

ALL RESULTS
System UI
UI Pages

UI Page - Youtube Video Embed

UI Page
Youtube Video Embed

Try It Update Delete

Name Youtube Video Embed Application Global

Category General Direct

Description

HTML XML Turn on ECMAScript 2021 (ES12) mode

```

1 <html>
2 <head>
3   <title>Youtube Video Embed</title>
4 </head>
5 <body>
6   <h1>Youtube Video</h1>
7   <!-- Embed YouTube video using iframe -->
8   <iframe
9     width="560"
10    height="315"
11    src="https://www.youtube.com/embed/yYFZVmqS590?si=06EGy9iDe2ZLXESW"
12    title="YouTube video player"
13    frameborder="0"

```

servicenow All

ui page

FAVORITES
No Results

ALL RESULTS
System UI
UI Pages

ServiceNow

Search

YouTube Video

The ServiceNow platform explained

Watch Later Share

The ServiceNow Platform Explained

Watch on YouTube

