

InvariMatch manual

InvariMatch	1
Operations	1
Scan chart	2
Scan chart quick guide	2
How to create a long URL list	5
Profile	6
Dashboard	7
API	8





InvariMatch

InvariMatch is a tool for matching of video content that compares video fragments by separate images. This way gives a lot of advantages over the other methods because system can reliably find small coincident fragments (started from 1 seconds long) even if video was modified and able to take apart mixed video that was compiled from several original sources (<u>whitepaper</u>).

Operations

The database of source video is used for video matching process. Any user can create his or her a source video set for matching of video content during scanning process. This set can be shared or hidden for other users (it can be switched <u>at the profile</u>).

• Select "Operations / ADD/SCAN" tab to add source video to the search system.

Operations

-
-
ADD

- Input URL to a video file and press "Add" button (click on vertical arrow to upload a local video file from your computer).
- You can see the list of source video at "Operations / SOURCE VIDEO".

Operations

	ope	ations		
	ADD/SCAN	SOURCE VIDEO		
				Films total 2
Film title		ID	Length	
[>] #01 Galaxy Fold broll product shots 2019-06-05 16:37:24		32736	0:01:13	間 Remove
[≥] <u>#01 Design Ambient</u> 2019-06-12 18:17:45		32737	0:00:49	圊 Remove

• Select "Operations / ADD/SCAN" tab and input URL to a video file then press "Scan" button to start **scanning process**. The matched video fragments will have been indicated by the end of scanning process.

Scan chart

The scan chart is a tool for batch scanning of video URL lists with InvariMatch. The database of source video should be prepared **before start** of scanning process.

The scan chart can be used for tracking brand promotion in video blogs inside all popular social networks.

Bloggers use different parts of the official press materials in their videos. InvariMatch can find even super small matching fragments and able to take apart mixed video that was compiled from several sources. Such statistics can provide a clear insight into how the brand materials were used during a promotion campaign.

Scan chart quick guide

The **scan chart** is a list of URLs for scanning. Follow instructions to start the scanning process and check results:

• Select "Search / Video Search" from the main menu to create a new scan chart.



• Choose a **search engine** (Bing, YouTube, Google) and input the **keywords**, then press the "Search" button.

Video Search

	KEYWORDS Enter keywords here	
	BING YOUTUBE GOOGLE	
	RELEVANCE LANGUAGE	
Language	English	~
	COUNTRY	
Region	United States	~
	O Short	
Length of video	O Medium	
VILLEO	O Long	
	All	
	SEARCH	

• Now you can see several URLs that fit your request. Make sure that there are correct results and then **add** URLs to the **scan chart**.

Video Search

Searching videos for: Galaxy Fold

Total results: 105/990

#	Film title		Film length	Published	Publisher	Creator
1		Galaxy Fold is FINALLY coming in September	00:05:30	2019-07-25 21:22:54	YouTube	CNET
2	EDALLY	Samsung Galaxy Fold is FINALLY READY ??	00:06:18	2019-07-26 01:03:50	YouTube	Pocketnow
3		Samsung Galaxy Fold Review: We Gotta Talk!	00:15:21	2019-04-26 23:50:23	YouTube	Marques Brownlee

• Input **URLs amount** number (it has different limit number depend on search engine)

Preparation to scanning

1000	WAIDABLE, 1000	
	ADD URLS	

and press "Add URLs" button.

• Now you can see a **new** scan chart that is highlighted in green color because it has not been scanned yet. There are control buttons on the right side of the line.

Scan charts

#	Chart title	Files total	Fragments total	Processed	Scanning	Date/Time	
1	Galaxy Fold - Bing	885				2019-08-26 10:19:35	≣₊±२२∎ः
2	갤럭시 노트 9, Galaxy Note 9 - Google, Bing, YouTube	1426	7	203:49:45	5:09:55	2019-07-02 23:55:04	≣+ ₺ २ २ 🗊
 Use the first button to add some other keywords and URLs to this chart. Use the second button to download scan results as CSV file 							
C	 Use the third one to start scanning every URL in this chart. 						
C	 Use the fourth button to continue scanning only unprocessed URLs. 						
C	Use the last one if you want to delete this scan chart.						

• Select "Search / Scan charts" from the main menu to see a scan chart list. Lines that are colored yellow indicate matches with source video that was added to the search system before. The column "**Fragments total**" shows a number of video fragments that have been matched.

Charts total 7

Scan charts

Charts total 7

#	Chart title	Files total	Fragments total	Processed	Scanning	Date/Time	
1	Galaxy Fold - Bing	885				2019-08-26 10:19:35	≡₊±२२∎ः
2	갤럭시 노트 9, Galaxy Note 9 - Google, Bing, YouTube	1426	7	203:49:45	5:09:55	2019-07-02 23:55:04	≣₊±२२∎ः
3	갤럭시 폴드, Galaxy Fold - Google, Bing, YouTube	1315	70	108:49:58	3:55:13	2019-07-02 22:40:36	≣+≛२२∎ः
4	갤럭시 폴드 - Google	300	18	10:31:51	0:15:59	2019-06-26 15:44:21	≡+ € २ २ 🗊

Follow links at the beginning of each scan chart to see scan details. There are lines at "Scan details" table colored yellow that indicate matches with source videos. The column "Fragments" shows a number of matched video fragments. The column "Intersections %" shows an amount of scanned content that matched to the source video in percentages. Scan details

Films total 488

<u>First pa</u>	ge 1 1	100 ··· 200 ··· 300 ··· 400 Last page			
#	Film title		Film length	Fragments	Intersections %
1		Samsung reveals more about the Galaxy Fold	00:03:30	2	33.3
2	생각시 등드 해당 해당하는	<u>삼성 갤럭시 폴드 완벽분석 (Samsung Galaxy fold Preview)</u>	00:06:12	2	31.3
3	11	Samsung Galaxy Fold - Hands On	00:03:44	1	30.4
4	11	갤럭시플드 오피셜 핸즈온 영상 - 실물은 어떨까?	00:03:30	2	28.6

Follow links at the beginning of each scan details line to see a visualization of matched video fragments at "Scanning

results" page. You can see the total percentage of matches and a list of links to the original videos. If you click on the "+" in the list, you will see two media players. Press the Play button, and you'll see matching fragments on both players.

Scanning results

Scanned film: Samsung reveals more about the Galaxy Fold Gathered fragments: 0, intersections: 33.3%



How to create a long URL list

The number of URLs that can be get for one passage depend on a search engine (Bing - 1000, YouTube - 550, Google - 350 URLs). However you can add URLs from several search engine with different search parameters to the one **scan chart**. Also you can use several variations of the keywords for searching. Each URL that has already been added to the scan chart on a previous passage will be rejected as duplicate (chart's URLs are unique).

- Create a new scan chart (look here for detail).
- Click on button **add** = to continue adding URLs to this scan chart.

Video Search for Chart

#	Chart title	Files total	Fragments total	Processed	Scanning	Date/Time
1	<u>Galaxy Fold - Bing</u>	885				2019-08-26 10:19:35
			Galaxy Fold	5		
		Language	RELEVANCE LANGL English		~	
		Region	United States	5	·)	
		Length of video	 Short Medium Long All 			
				SEARCH		
•	Use for examp	le paramete	r "Length of	video / Shor	t" for next UI	RL extraction pass (click

- "Search" and then click "Add URLs" button to finalize extraction step).
- Do these steps several times with variations of the search engines, the search parameters and the keywords.

The number of URLs that scan chart contains can be grow up above 10 thousand in such way.

Profile

The profile allows you to manage your credential information and visibility of your source video dataset for other users.



Profile visibility	The search results are shared	~	TURN OFF SHARING
o Click on "Turn	off obaring" to bide your course	video d	ataaat from other years. This action

• Click on "Turn off sharing" to hide your source video dataset from other users. This action also isolate you from datasets of other users.

Dashboard

The dashboard displays general information about your activity on InvariMatch search system.

Dashboard

You are the part of community



YEARS MONTHS DAYS HOURS

Period	Uploaded video	Total duration	Scanned video	Total duration
Last month	31	46:44:13	210456	1879:59:19
Last year	1638	1464:47:46	1605499	14526:51:21
Total	2885	2824:46:42	2152717	19656:53:54

Operation history More \rightarrow

Operation		Result	Login	Date/Time
DELETE	> The film is deleted. youtube_QYh6mYIJG2Y_mp4	OK	Some user [u34]	2019-08-26 15:05:45
SCAN	youtube_QYh6mYIJG2Y_mp4> Intersections with other video content were found: 99.6 %. https://www.youtube.com/watch? v=QYh6mYIJG2Y	OK	Some user [u34]	2019-08-26 15:05:26
ADD	Your video was successfully added to the searching system. https://www.youtube.com/watch? v=QYh6mYIJG2Y	OK	Some user [u34]	2019-08-26 15:03:25

Login	User IP	Date/Time
Some user [u34]	194.0 <mark>.</mark> 55.239	2019-08-26 15:07:38

API

The API section contains "API test" playground and "API log" viewer.

Dashboard	Operations	Search	API	Some user 🗸
			API test API log	

You can try to work with InvariMatch API on the page "API test".

API test

video.scan.start	REQUEST		
video.add.start	https://invarimatch.com/api.php?method=video.list&session_key=a2e85790b065105701dc3e5e141d5240 POST PARAMETERS		1
get.status			
get.results			1
video.list	session_key[a2e85790b065105701dc3e5e141d5240]		
video.delete	RESPONSE	*	
close			
login			
refresh_token		-	
logout	4	Þ /	1
	SEND REQUEST		

The page "API log" displays all interaction with InvariMatch API.

API log



Results total 20

Request	Time performance ms	Login	Date/Time
refresh_token	0	Some user [u34]	2019-08-26 15:25:33
video.list	0.51	Some user [u34]	2019-08-26 15:05:48
video.delete	505.04	Some user [u34]	2019-08-26 15:05:45