STEAM Works Artifact

KSIA

김동현

www.facebook.com/digitalisx

김동현 / 19

[학력 사항]

2014. 03 - 현재 : 함지고등학교 재학

[주요 활동]

영남권 정보보호영재교육원 2기 우수 장학생

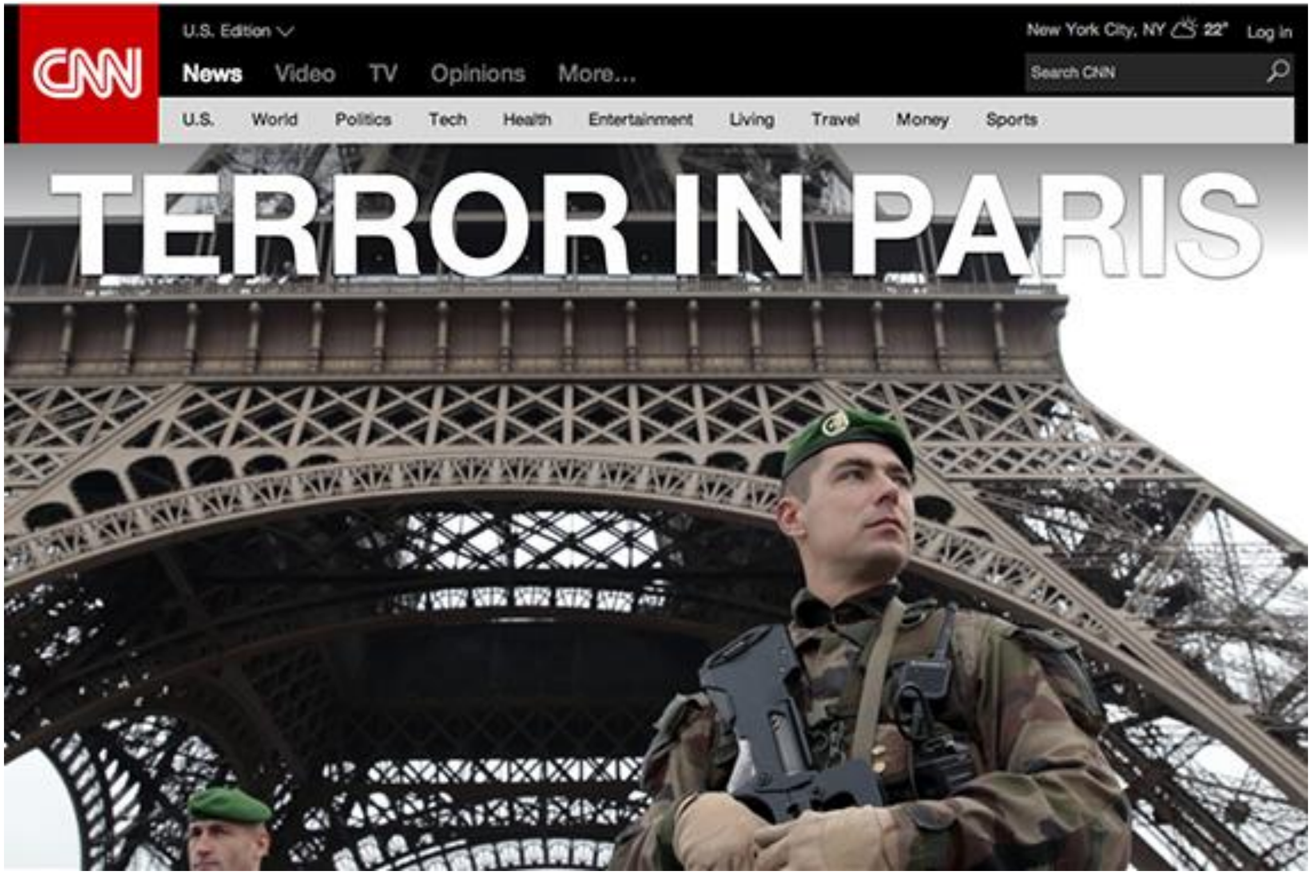
CSTEC 차세대 핵심보안 전문인력 특별과정 수료

교육청 발명영재교육원 특허출원 과정 수료

한국정보보호학회 동계학술대회 발표

한국학생IT연합(KSIA) 운영사무국원

교내 정보동아리 "ICT" 부장


CNN
U.S. Edition
News
Video
TV
Opinions
More...
New York City, NY 22°
Log in
Search CNN
U.S.
World
Politics
Tech
Health
Entertainment
Living
Travel
Money
Sports
TERROR IN PARIS

Pas Peur

ISIS used PS4 for attack!

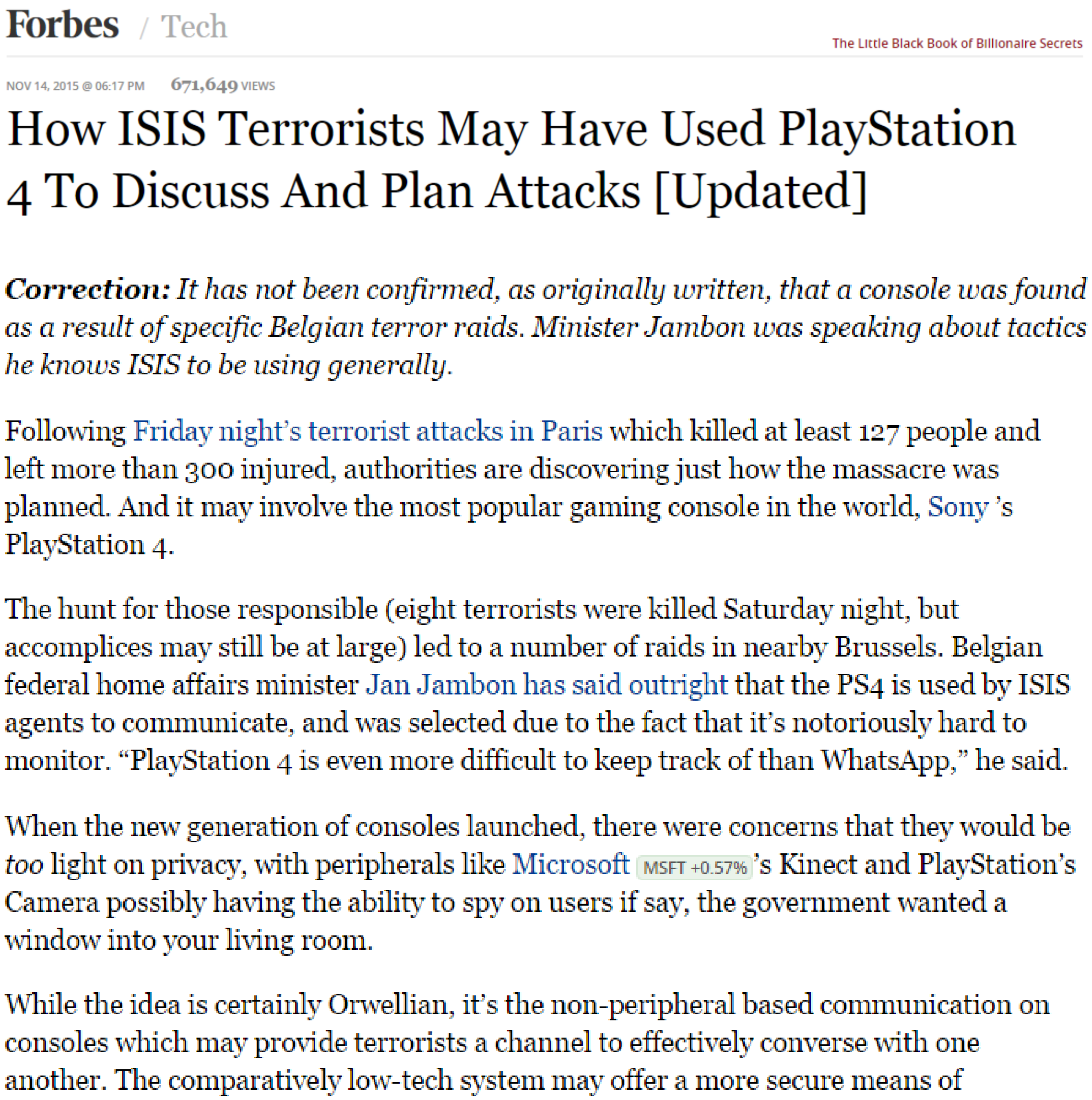
Just enjoy game? – No!

Play Station Network – PSN

게임 및 DLC 판매

각종 커뮤니케이션 기능 제공

현실은 … 해커들의 놀이터



Forbes / Tech

NOV 14, 2015 @ 06:17 PM 671,649 VIEWS

How ISIS Terrorists May Have Used PlayStation 4 To Discuss And Plan Attacks [Updated]

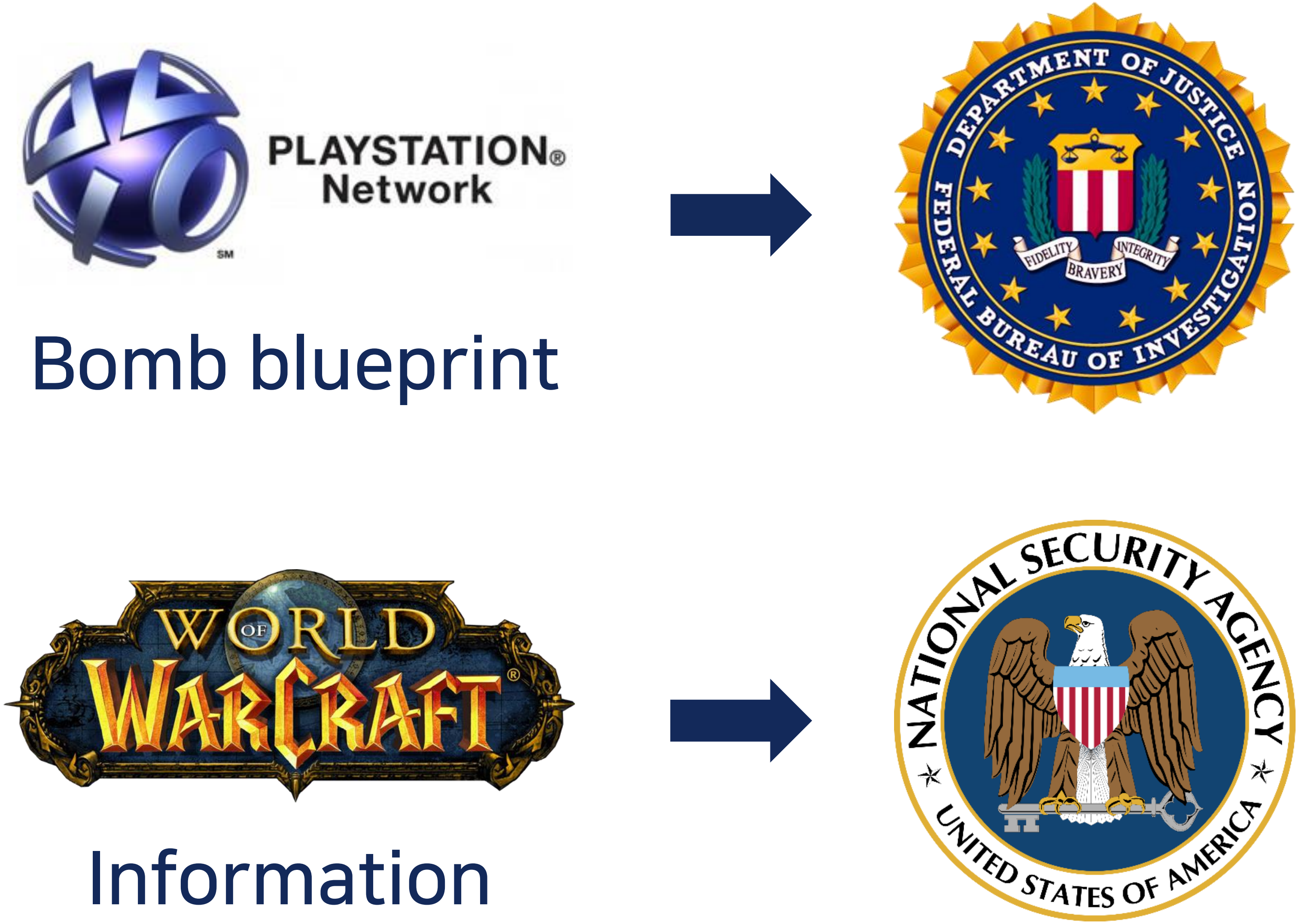
***Correction:** It has not been confirmed, as originally written, that a console was found as a result of specific Belgian terror raids. Minister Jambon was speaking about tactics he knows ISIS to be using generally.*

Following Friday night's terrorist attacks in Paris which killed at least 127 people and left more than 300 injured, authorities are discovering just how the massacre was planned. And it may involve the most popular gaming console in the world, Sony 's PlayStation 4.

The hunt for those responsible (eight terrorists were killed Saturday night, but accomplices may still be at large) led to a number of raids in nearby Brussels. Belgian federal home affairs minister Jan Jambon has said outright that the PS4 is used by ISIS agents to communicate, and was selected due to the fact that it's notoriously hard to monitor. "PlayStation 4 is even more difficult to keep track of than WhatsApp," he said.

When the new generation of consoles launched, there were concerns that they would be *too* light on privacy, with peripherals like Microsoft MSFT +0.57% 's Kinect and PlayStation's Camera possibly having the ability to spy on users if say, the government wanted a window into your living room.

While the idea is certainly Orwellian, it's the non-peripheral based communication on consoles which may provide terrorists a channel to effectively converse with one another. The comparatively low-tech system may offer a more secure means of

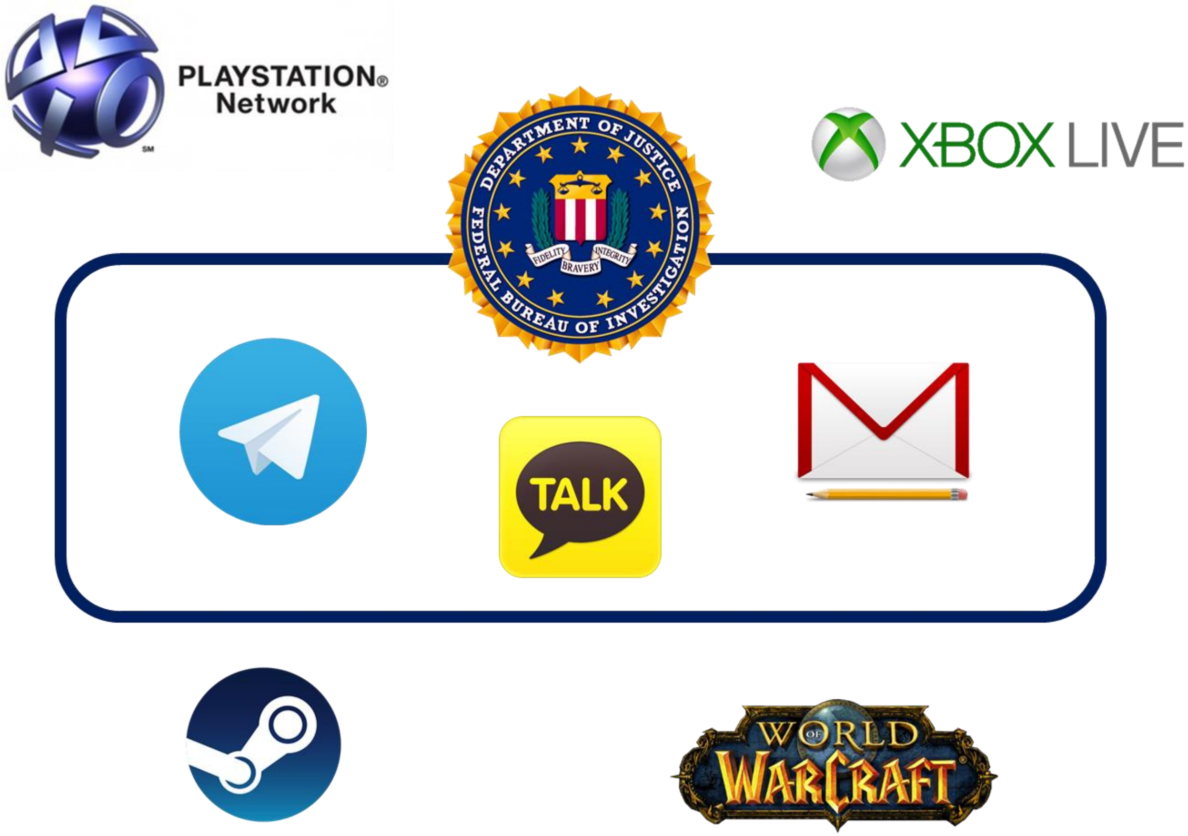


Bomb blueprint

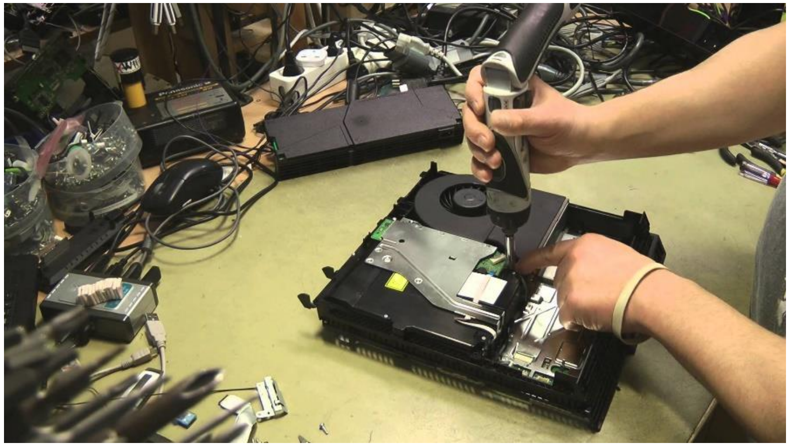
Information

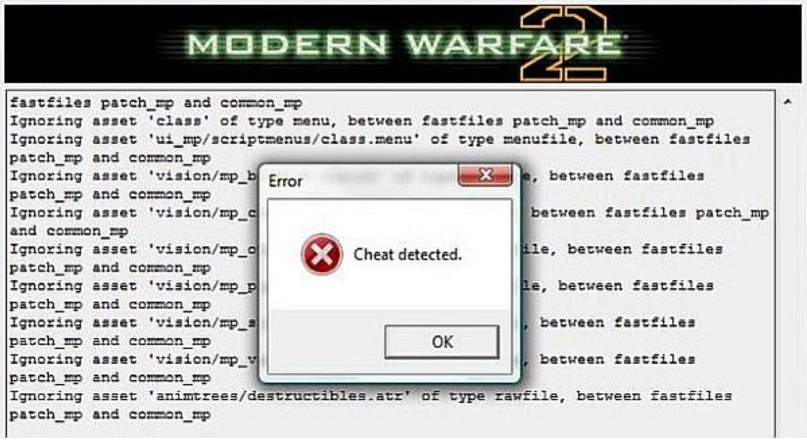
Why they use Game?

1. 다소 허술한 영역


PLAYSTATION Network
DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
FIDELITY BRAVERY INTEGRITY
XBOX LIVE
TALK
WORLD OF WARCRAFT

2. 보안 기술





```
fastfiles patch_mp and common_mp
Ignoring asset 'class' of type menu, between fastfiles patch_mp and common_mp
Ignoring asset 'ui_mp/scriptmenus/class.menu' of type menufile, between fastfiles
patch_mp and common_mp
Ignoring asset 'vision/mp_b                    e, between fastfiles
patch_mp and common_mp
Ignoring asset 'vision/mp_c                     between fastfiles patch_mp
and common_mp
Ignoring asset 'vision/mp_o                    ile, between fastfiles
patch_mp and common_mp
Ignoring asset 'vision/mp_p                    le, between fastfiles
patch_mp and common_mp
Ignoring asset 'vision/mp_s                    , between fastfiles
patch_mp and common_mp
Ignoring asset 'vision/mp_v                    , between fastfiles
patch_mp and common_mp
Ignoring asset 'animtrees/destructibles.atr' of type rawfile, between fastfiles
patch_mp and common_mp
```

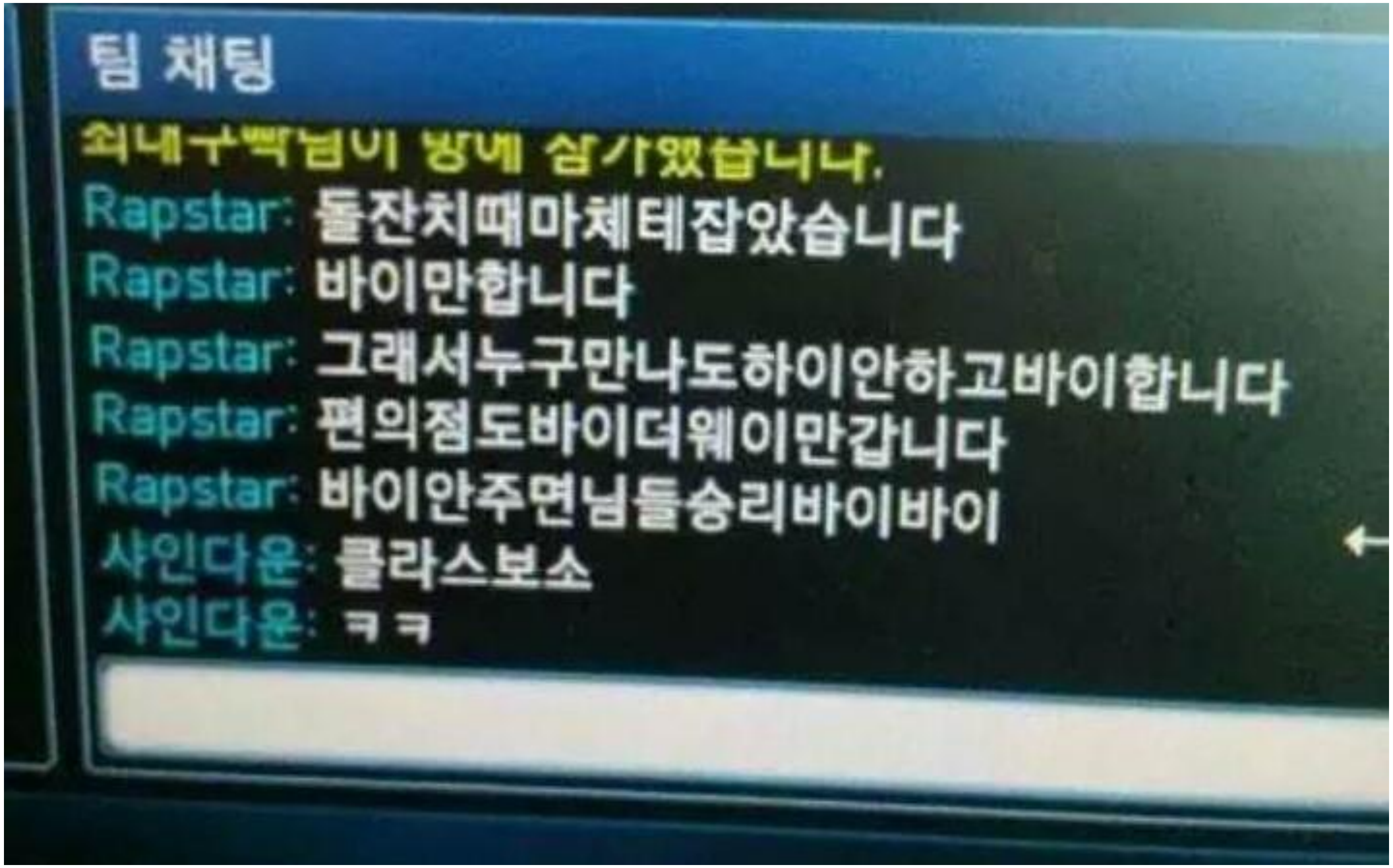
Error

Cheat detected.

User : Comfortable

Hacker : WTF?

3. 특유의 생태계



팀 채팅

쇠네구빡님이 방에 참가했습니다.

Rapstar: 돌잔치때마체테잡았습니다

Rapstar: 바이만합니다

Rapstar: 그래서누구만나도하이안하고바이합니다

Rapstar: 편의점도바이더웨이만갑니다

Rapstar: 바이안주면님들승리바이바이

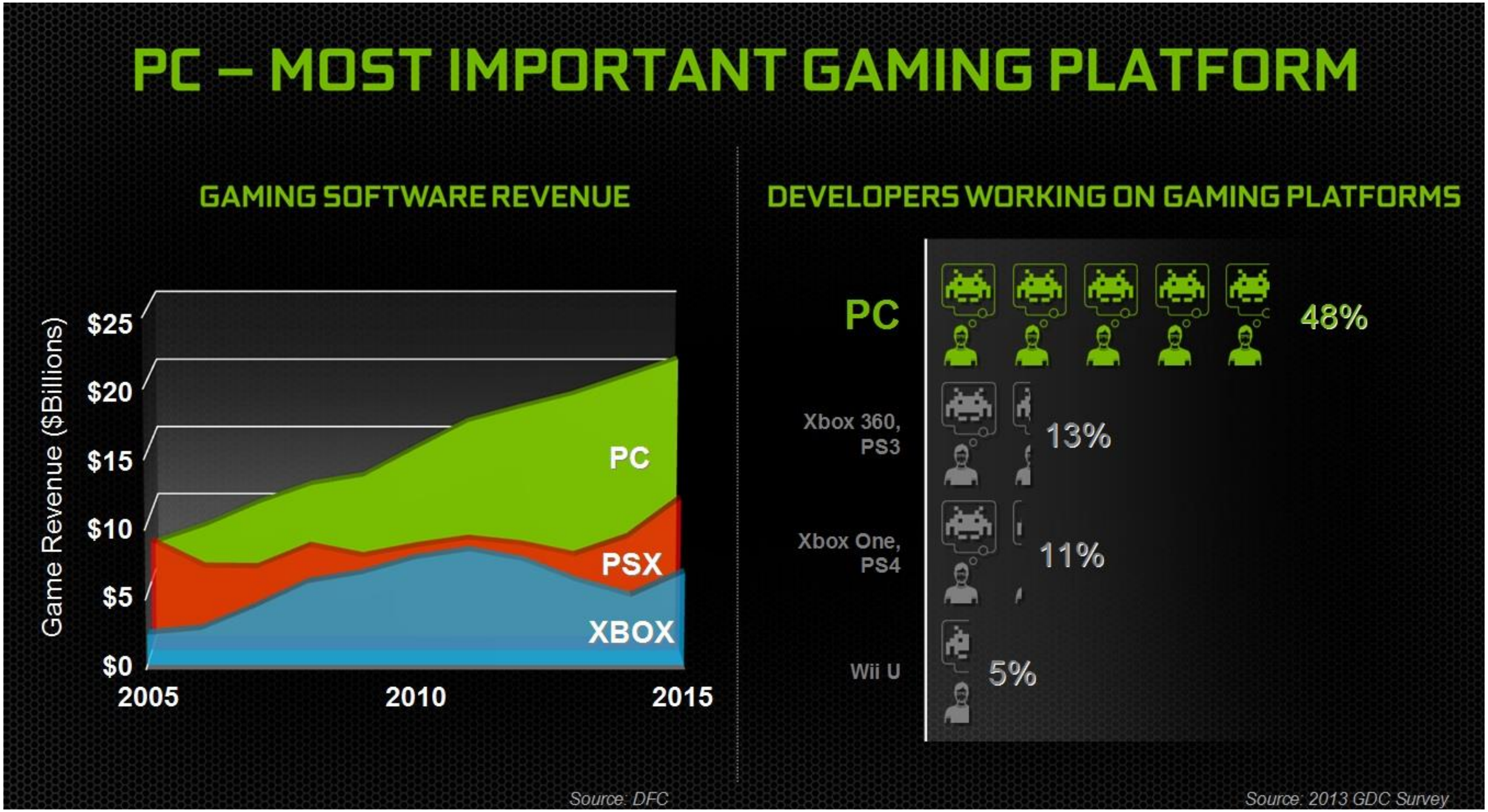
샤인다운: 클라스보소

샤인다운: ㅋㅋ

요점

- 게임 플랫폼의 커뮤니케이션 기능을 이용한 범죄 확산.
- 도 – 감청에는 제약이 존재.
- 사건 발생시 특유의 생태계로 인해 추적 및 수사가 힘듬.
- 해외의 경우 수사 협조에 상당한 시간이 소모.
- 각 생태계에 대한 지식 보유 및 증거 수집 능력 필요.

많은 종류와 비싼 가격 …



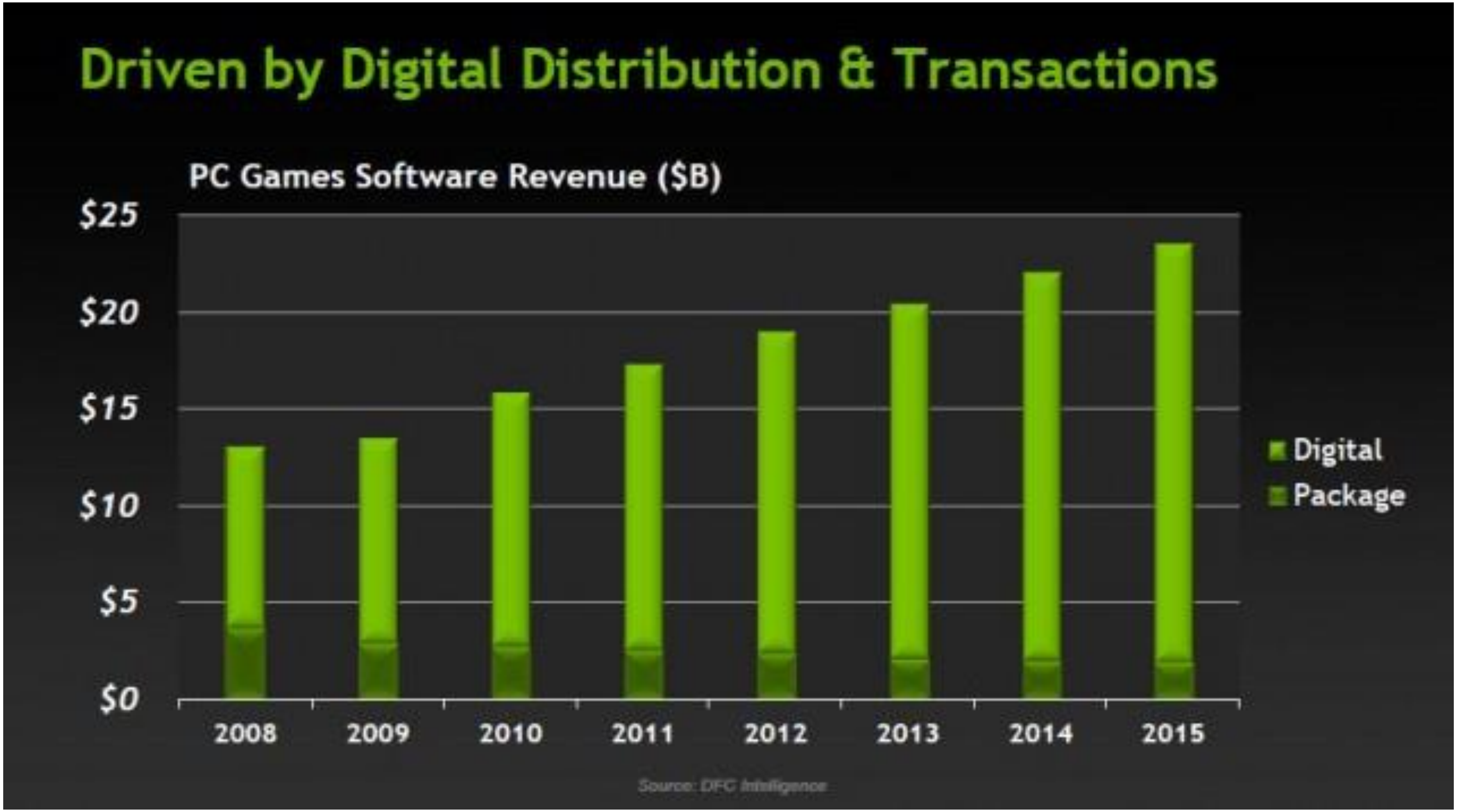
PC – MOST IMPORTANT GAMING PLATFORM

GAMING SOFTWARE REVENUE

Source: DFC

DEVELOPERS WORKING ON GAMING PLATFORMS

Source: 2013 GDC Survey



Driven by Digital Distribution & Transactions

PC Games Software Revenue ($B)

Source: DFC Intelligence

Ultimate Platform

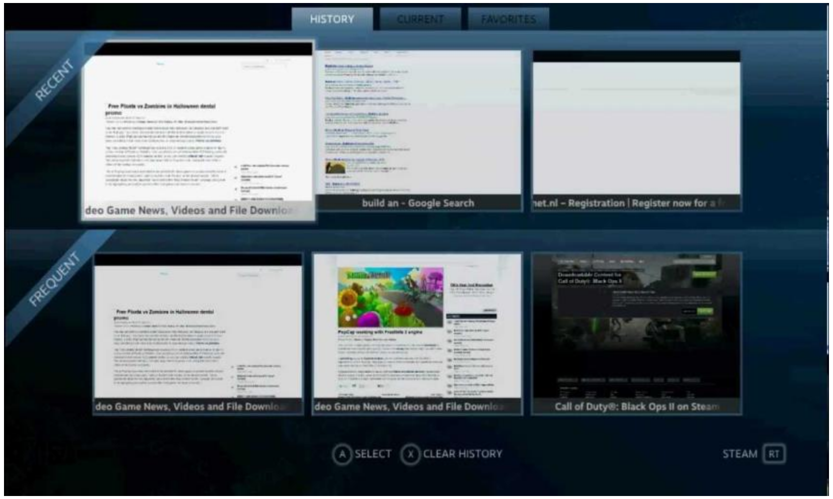
Steam

- Developed by Valve Corporation
- ESD (Electronic Software Distribution)
- DRM (Digital Rights Management)
- 4,500개 이상 의 게임 판매 (인디 – AAA)
- 사용자 1억 명 돌파 (2014년 기준)

© RICK DAHMS

Screenshot, Video

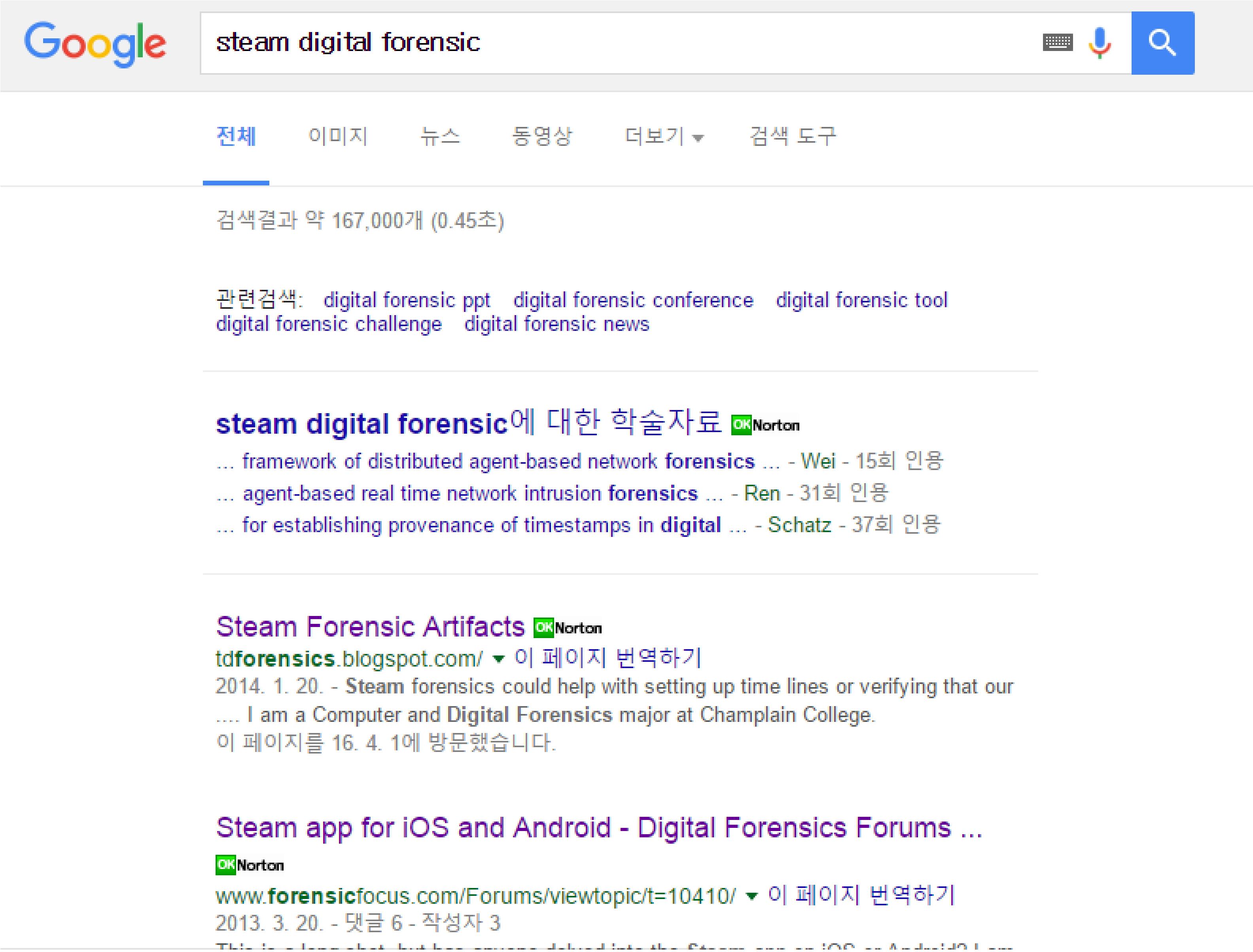
Live Stream


HISTORY
CURRENT
FAVORITES
RECENT
FREQUENT
deo Game News, Videos and File Downlo
build an - Google Search
net.nl – Registration | Register now for a f
deo Game News, Videos and File Downlo
deo Game News, Videos and File Downlo
Call of Duty®: Black Ops II on Steam
A SELECT
X CLEAR HISTORY
STEAM RT

Movie, Music

Web, Community

Digital Forensic Research



steam digital forensic

검색결과 약 167,000개 (0.45초)

관련검색: digital forensic ppt   digital forensic conference   digital forensic tool   digital forensic challenge   digital forensic news

steam digital forensic에 대한 학술자료 OKNorton

... framework of distributed agent-based network **forensics** ... - Wei - 15회 인용

... agent-based real time network intrusion **forensics** ... - Ren - 31회 인용

... for establishing provenance of timestamps in **digital** ... - Schatz - 37회 인용

Steam Forensic Artifacts OKNorton

td**forensics**.blogspot.com/ ▾ 이 페이지 번역하기

2014. 1. 20. - **Steam** forensics could help with setting up time lines or verifying that our .... I am a Computer and **Digital Forensics** major at Champlain College.

이 페이지를 16. 4. 1에 방문했습니다.

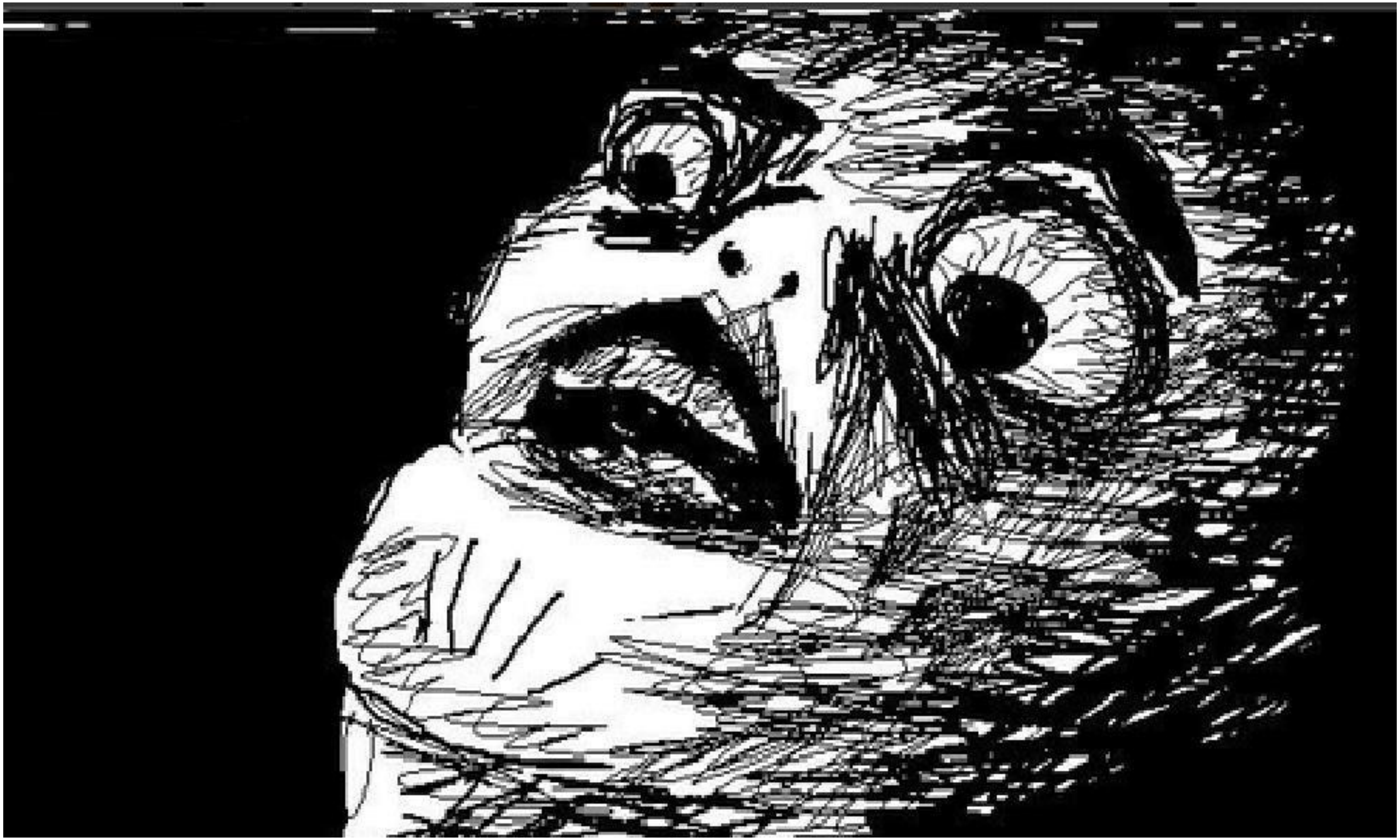
Steam app for iOS and Android - Digital Forensics Forums ...

OKNorton

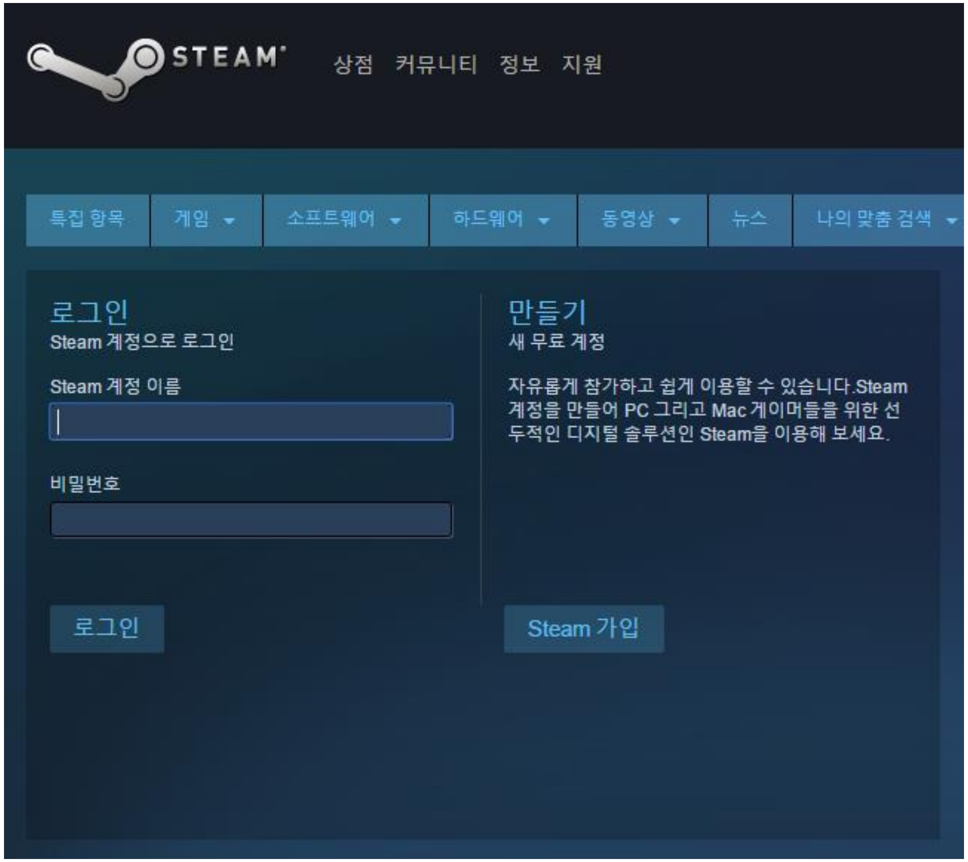
www.**forensic**focus.com/Forums/viewtopic/t=10410/ ▾ 이 페이지 번역하기

2013. 3. 20. - 댓글 6 - 작성자 3

This is a long shot, but has anyone delved into the Steam app on iOS or Android? I am



Artifact #1 – Login User



로그인

Steam 계정으로 로그인

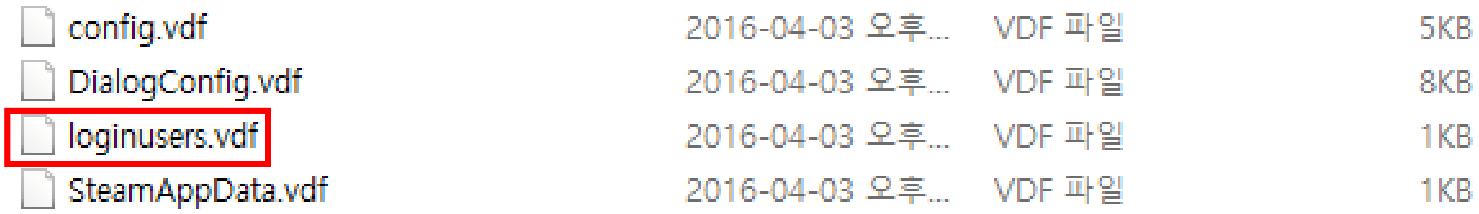
Steam 계정 이름

비밀번호

만들기

새 무료 계정

자유롭게 참가하고 쉽게 이용할 수 있습니다.Steam 계정을 만들어 PC 그리고 Mac 게이머들을 위한 선두적인 디지털 솔루션인 Steam을 이용해 보세요.



config.vdf	2016-04-03 오후...	VDF 파일	5KB
DialogConfig.vdf	2016-04-03 오후...	VDF 파일	8KB
loginusers.vdf	2016-04-03 오후...	VDF 파일	1KB
SteamAppData.vdf	2016-04-03 오후...	VDF 파일	1KB

File Location

C:₩Program Files(x86)₩Steam₩config₩loginusers.vdf

PC에 설치된 스팀 클라이언트를 통해 로그인 하였던
사용자의 Profile Link, ID 및 Username 정보

.VDF?

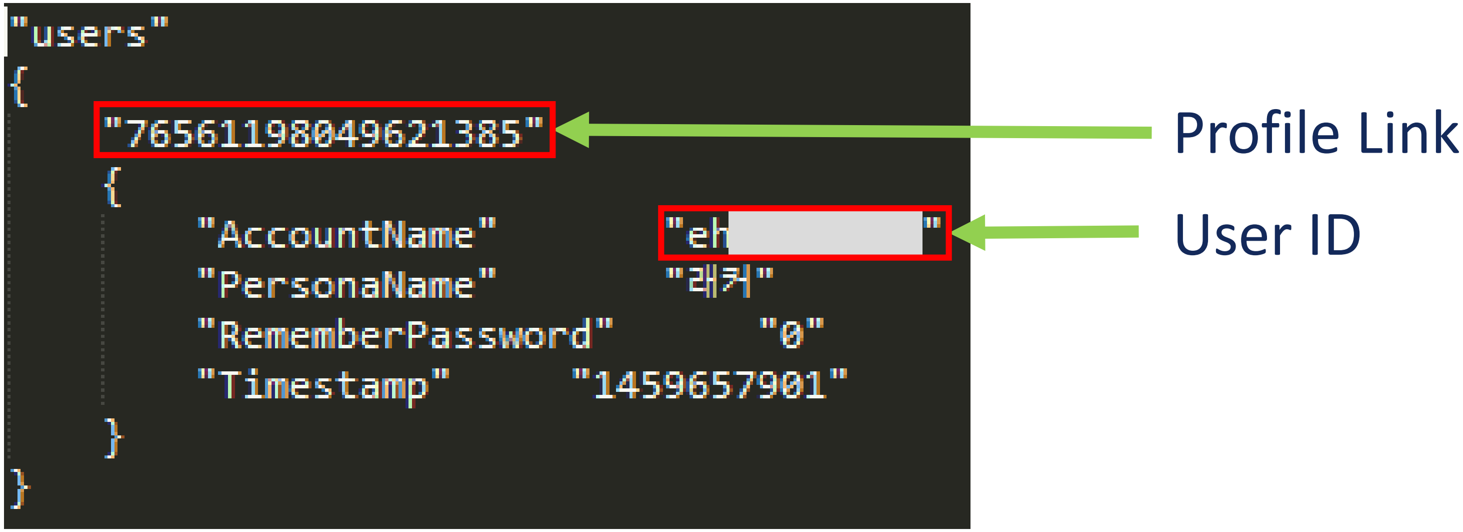
VDF Format Used by Valve Software

Installation Script, Configuration Script

How to Open?

Source SDK

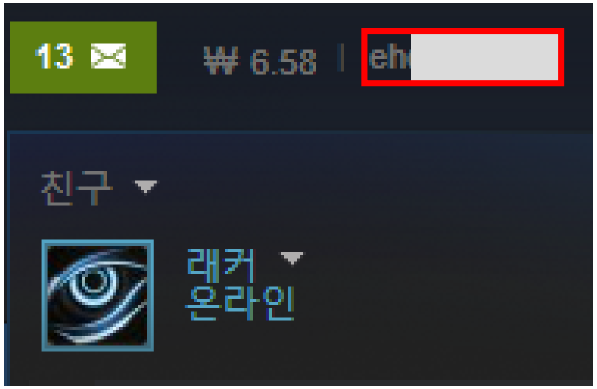
Text Editor



```
"users"
{
	"76561198049621385"
	{
		"AccountName"		"eh[redacted]"
		"PersonaName"		"래커"
		"RememberPassword"		"0"
		"Timestamp"		"1459657901"
	}
}
```

Profile Link

User ID

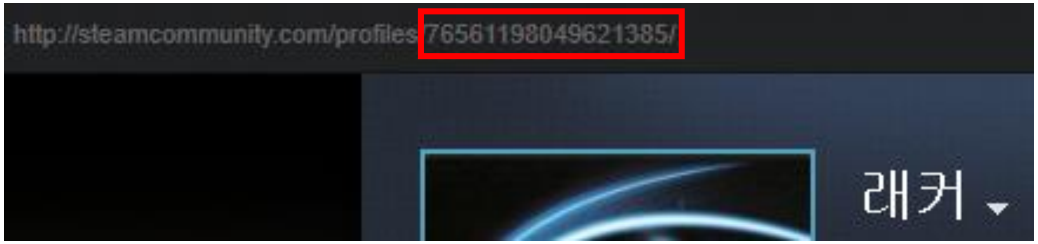


13 ✉ ₩ 6.58 | eh[redacted]

친구

래커
온라인

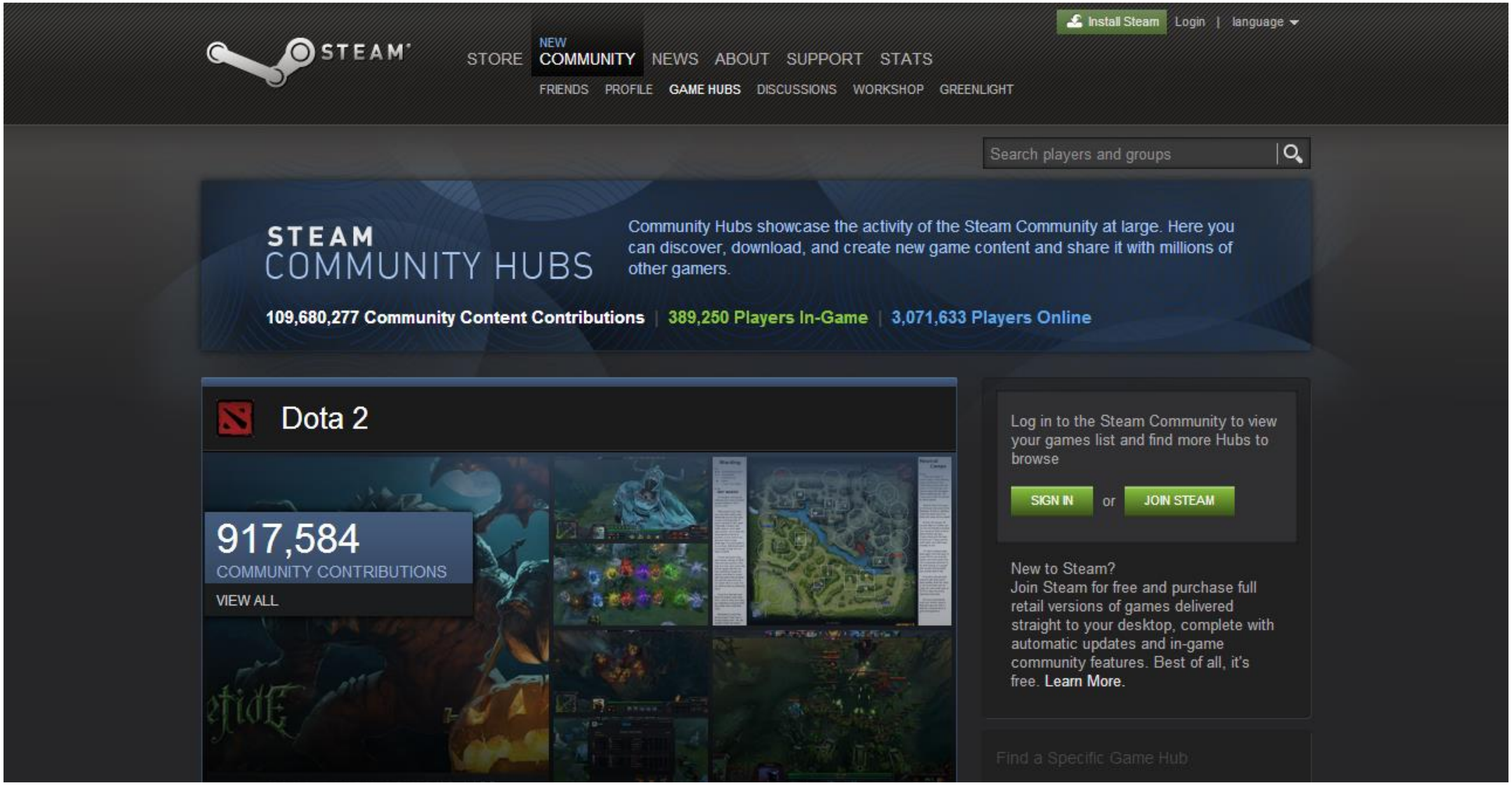
User ID



http://steamcommunity.com/profiles/76561198049621385/

래커

Profile Link



STEAM COMMUNITY HUBS

Community Hubs showcase the activity of the Steam Community at large. Here you can discover, download, and create new game content and share it with millions of other gamers.

109,680,277 Community Content Contributions | 389,250 Players In-Game | 3,071,633 Players Online

Dota 2

917,584 COMMUNITY CONTRIBUTIONS

VIEW ALL

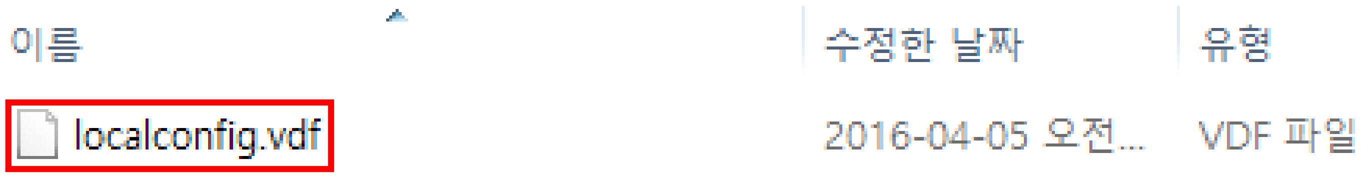
Log in to the Steam Community to view your games list and find more Hubs to browse

SIGN IN or JOIN STEAM

New to Steam?
Join Steam for free and purchase full retail versions of games delivered straight to your desktop, complete with automatic updates and in-game community features. Best of all, it's free. Learn More.

Find a Specific Game Hub

Artifact #2 – Group & Friends



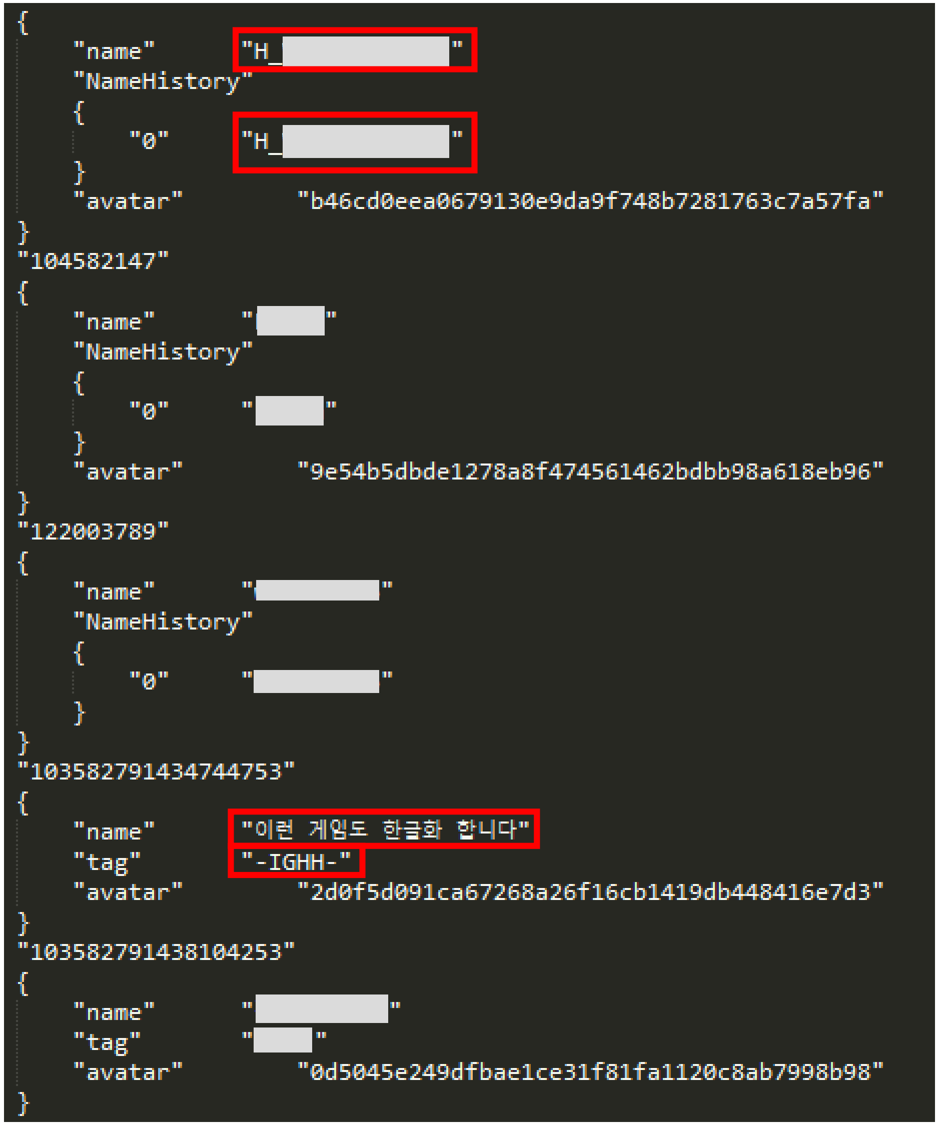
이름	수정한 날짜	유형
localconfig.vdf	2016-04-05 오전...	VDF 파일

File Location

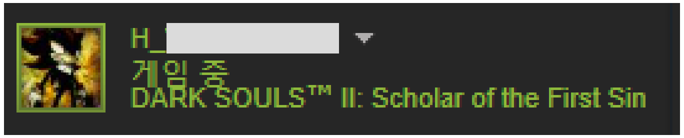
C:₩Program Files (x86)₩Steam₩userdata₩[Usernum]₩config

클라이언트로 로그인 하였던 사용자의 친구 목록 및

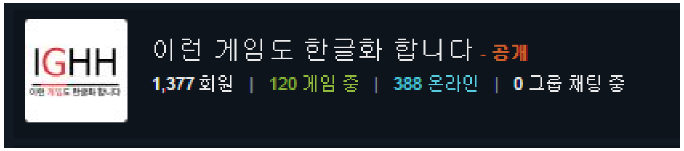
소속된 그룹의 이름 및 태그가 포함됨



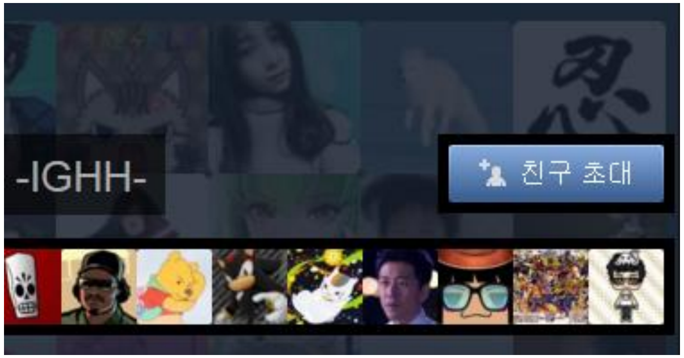
```
{
    "name"          "H_[redacted]"
    "NameHistory"
    {
        "0"         "H_[redacted]"
    }
    "avatar"            "b46cd0eea0679130e9da9f748b7281763c7a57fa"
}
"104582147"
{
    "name"          "[redacted]"
    "NameHistory"
    {
        "0"         "[redacted]"
    }
    "avatar"            "9e54b5dbde1278a8f474561462bdbb98a618eb96"
}
"122003789"
{
    "name"          "[redacted]"
    "NameHistory"
    {
        "0"         "[redacted]"
    }
}
"103582791434744753"
{
    "name"          "이런 게임도 한글화 합니다"
    "tag"           "-IGHH-"
    "avatar"            "2d0f5d091ca67268a26f16cb1419db448416e7d3"
}
"103582791438104253"
{
    "name"          "[redacted]"
    "tag"           "[redacted]"
    "avatar"            "0d5045e249dfbae1ce31f81fa1120c8ab7998b98"
}
```



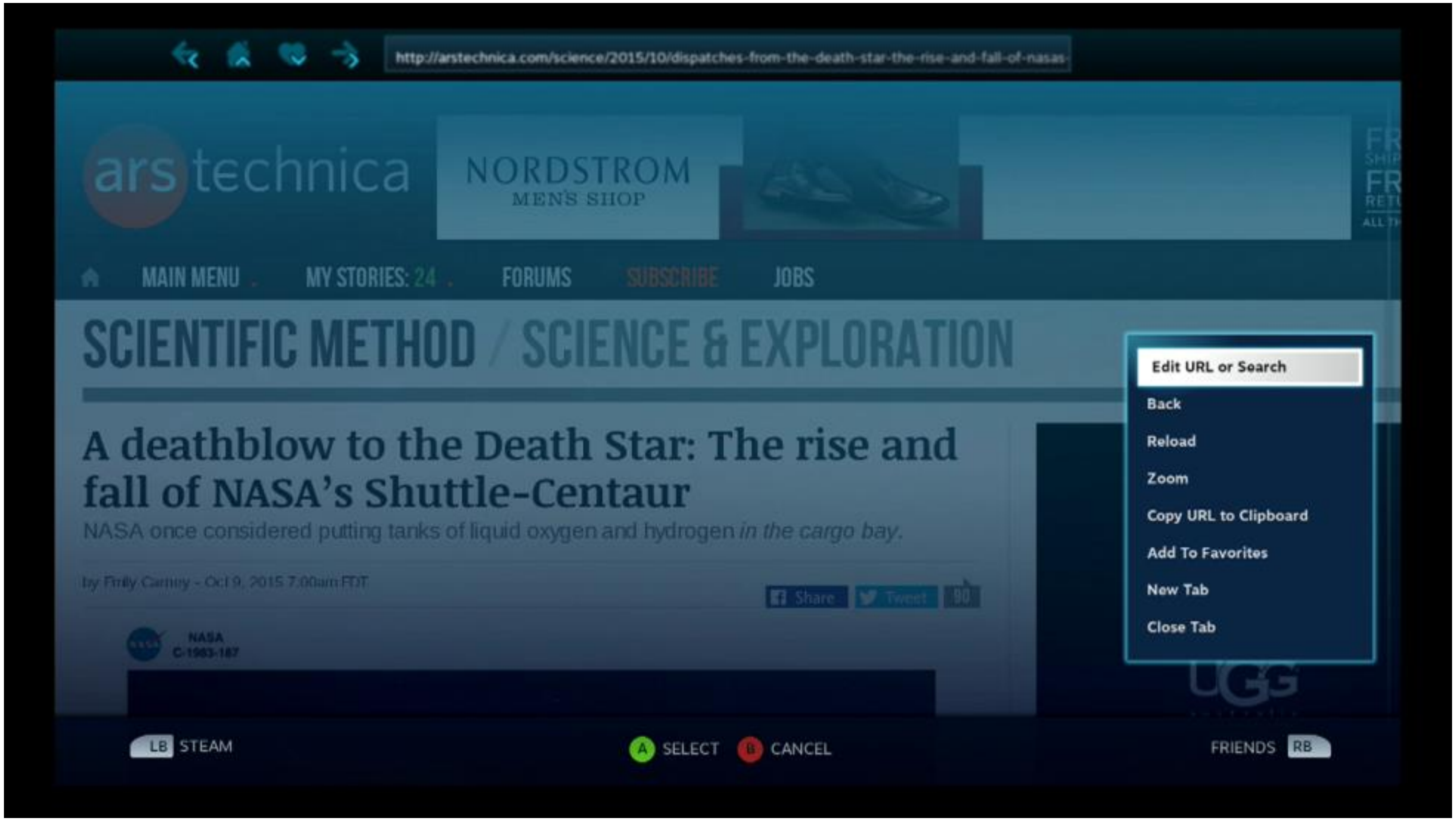
Friends Name / History


IGHH
이런 게임도 한글화 합니다 - 공개
1,377 회원 | 120 게임 중 | 388 온라인 | 0 그룹 채팅 중

Group Name



Group Tag



http://arstechnica.com/science/2015/10/dispatches-from-the-death-star-the-rise-and-fall-of-nasas-

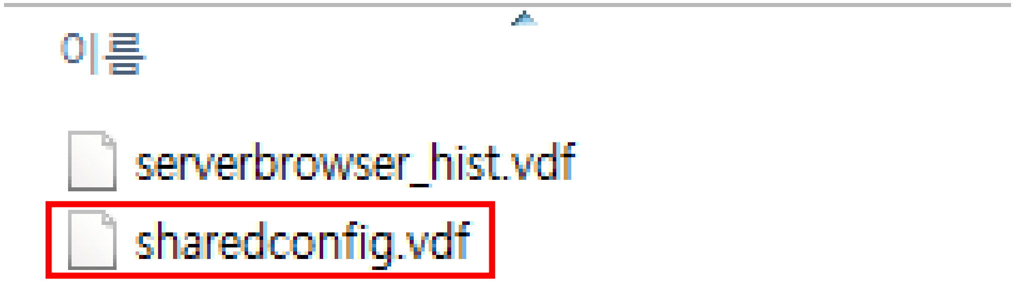
SCIENTIFIC METHOD / SCIENCE & EXPLORATION

A deathblow to the Death Star: The rise and fall of NASA's Shuttle-Centaur

NASA once considered putting tanks of liquid oxygen and hydrogen *in the cargo bay.*

by Emily Carney - Oct 9, 2015 7:00am PDT

Artifact #3 – Site Artifact



이름

serverbrowser_hist.vdf

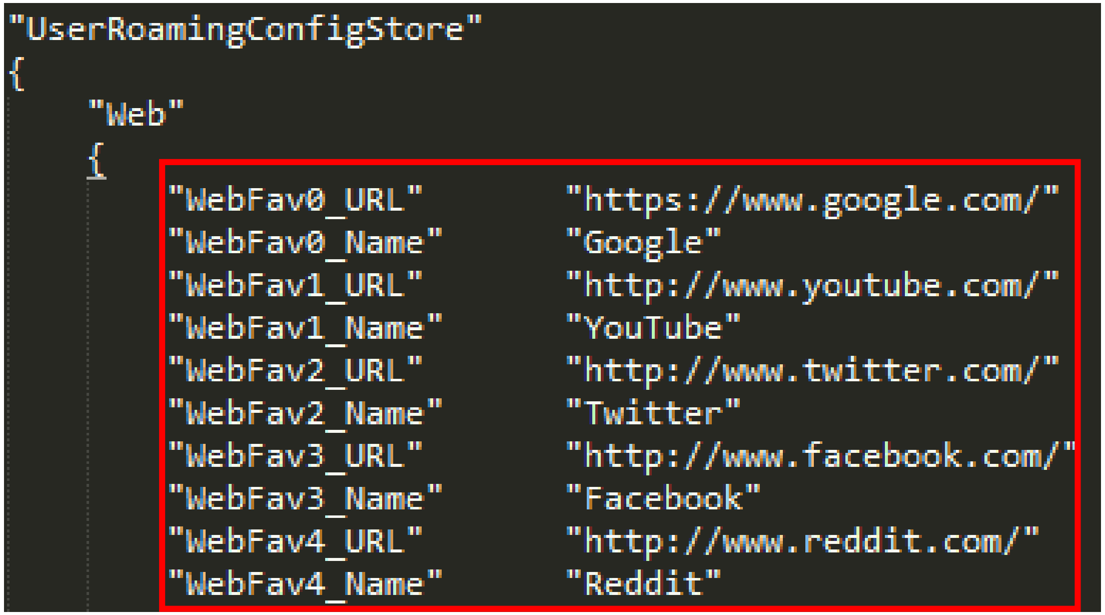
sharedconfig.vdf

File Location

C:₩Program Files (x86)₩Steam₩userdata₩[Usernum]₩7₩remote

Big Picture 모드로 실행하여 접속한 사이트 및

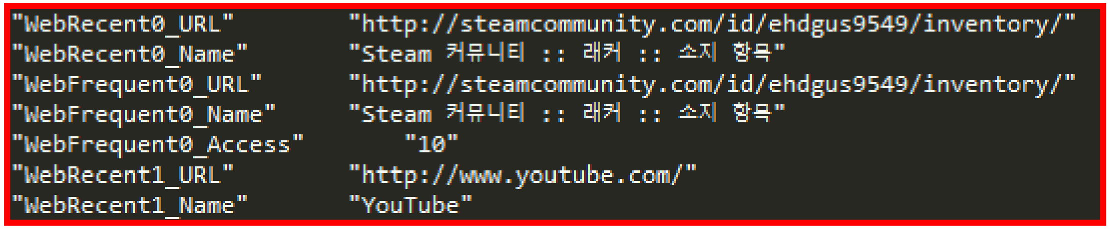
즐겨찾기로 지정한 사이트의 목록



```
"UserRoamingConfigStore"
{
    "Web"
    {
        "WebFav0_URL"         "https://www.google.com/"
        "WebFav0_Name"        "Google"
        "WebFav1_URL"         "http://www.youtube.com/"
        "WebFav1_Name"        "YouTube"
        "WebFav2_URL"         "http://www.twitter.com/"
        "WebFav2_Name"        "Twitter"
        "WebFav3_URL"         "http://www.facebook.com/"
        "WebFav3_Name"        "Facebook"
        "WebFav4_URL"         "http://www.reddit.com/"
        "WebFav4_Name"        "Reddit"
```

기본 지정된

즐겨찾기 목록

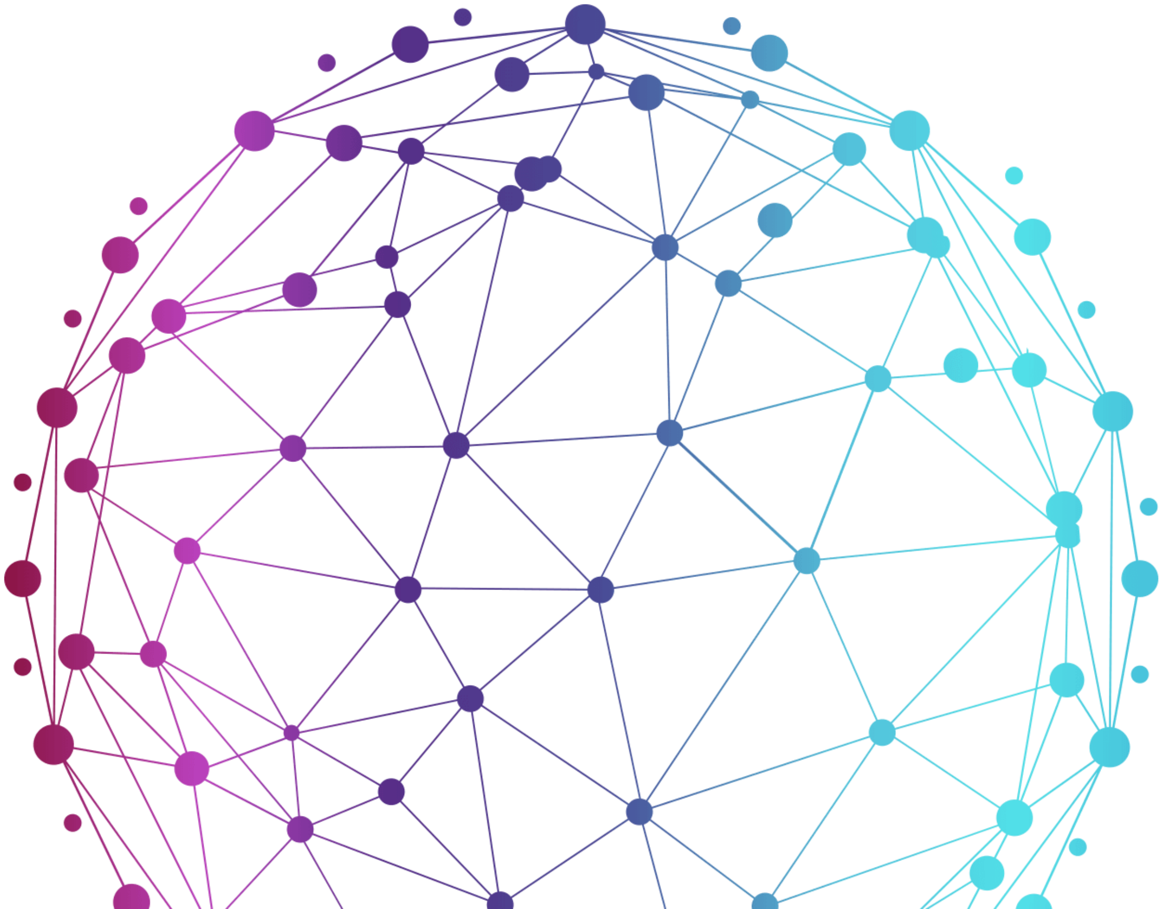


```
"WebRecent0_URL"         "http://steamcommunity.com/id/ehdgus9549/inventory/"
"WebRecent0_Name"        "Steam 커뮤니티 :: 래커 :: 소지 항목"
"WebFrequent0_URL"       "http://steamcommunity.com/id/ehdgus9549/inventory/"
"WebFrequent0_Name"      "Steam 커뮤니티 :: 래커 :: 소지 항목"
"WebFrequent0_Access"        "10"
"WebRecent1_URL"         "http://www.youtube.com/"
"WebRecent1_Name"        "YouTube"
```

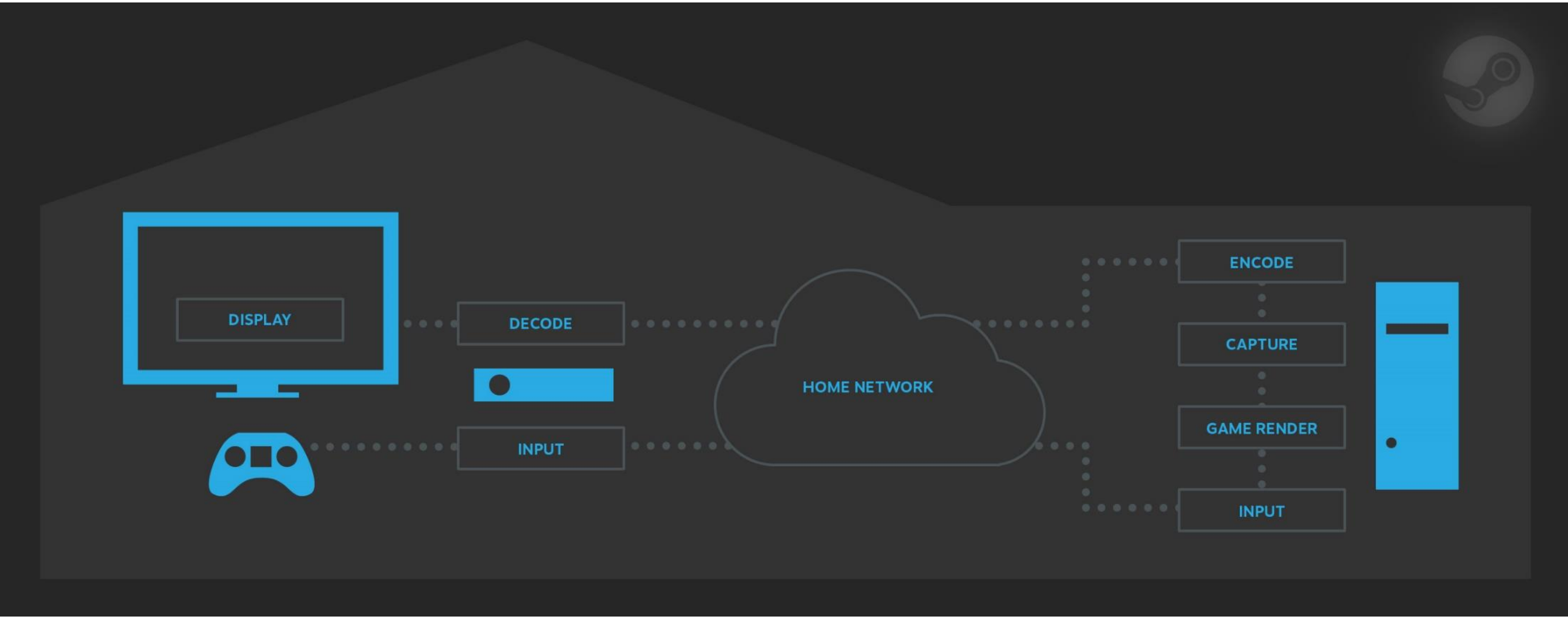
자주 방문한,

최근 방문한 사이트

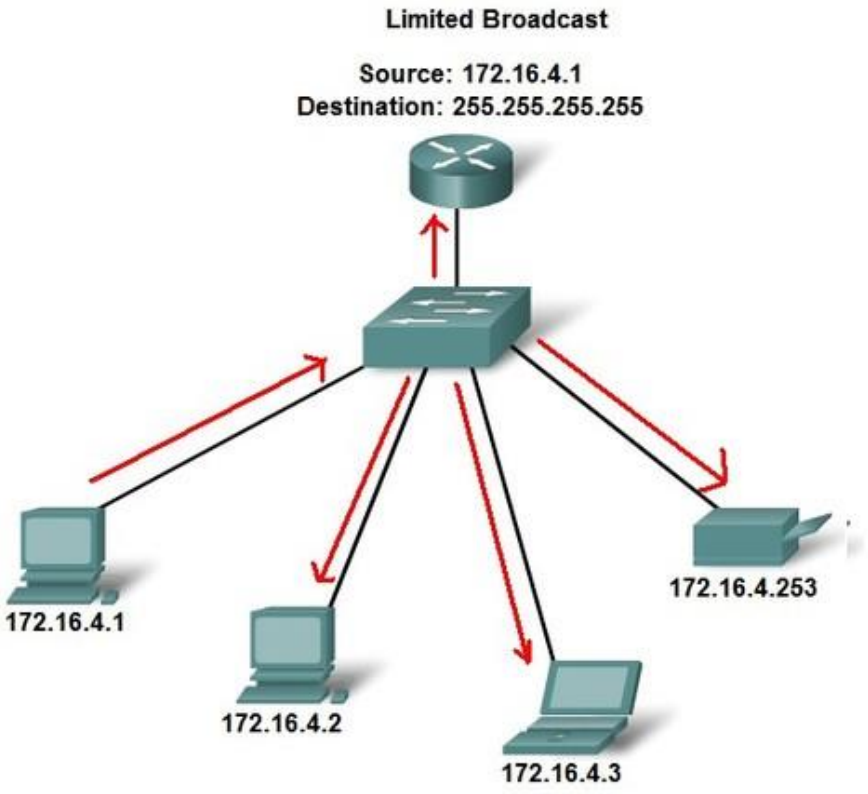
Artifact #4 – Streaming History

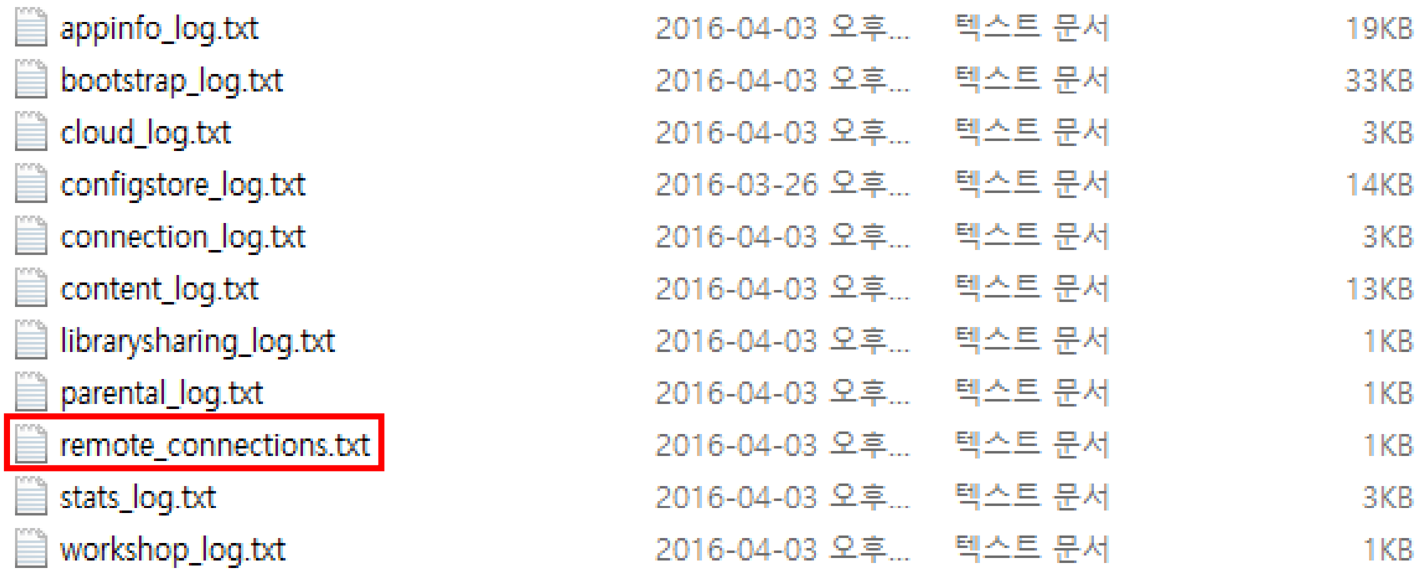


Streaming Service



Use Broadcast



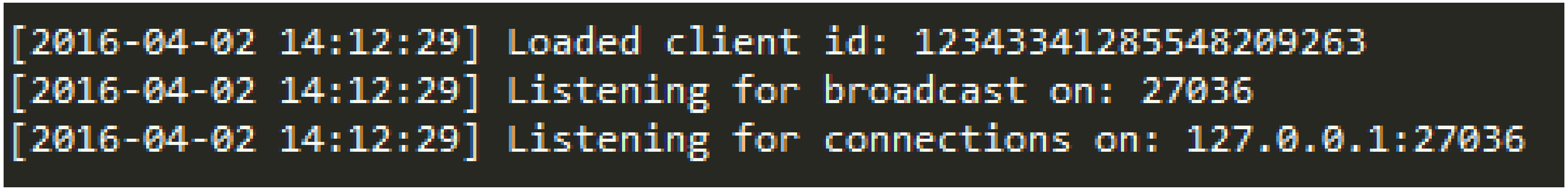


appinfo_log.txt	2016-04-03 오후...	텍스트 문서	19KB
bootstrap_log.txt	2016-04-03 오후...	텍스트 문서	33KB
cloud_log.txt	2016-04-03 오후...	텍스트 문서	3KB
configstore_log.txt	2016-03-26 오후...	텍스트 문서	14KB
connection_log.txt	2016-04-03 오후...	텍스트 문서	3KB
content_log.txt	2016-04-03 오후...	텍스트 문서	13KB
librarysharing_log.txt	2016-04-03 오후...	텍스트 문서	1KB
parental_log.txt	2016-04-03 오후...	텍스트 문서	1KB
remote_connections.txt	2016-04-03 오후...	텍스트 문서	1KB
stats_log.txt	2016-04-03 오후...	텍스트 문서	3KB
workshop_log.txt	2016-04-03 오후...	텍스트 문서	1KB

File Location

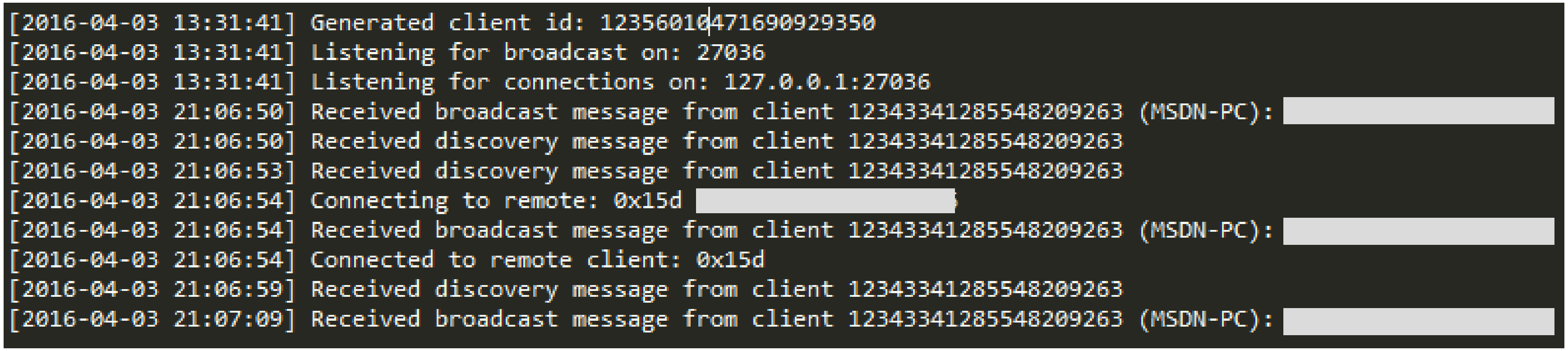
C:₩Program Files(x86)₩Steam₩log₩remote_connections.txt

게임 스트리밍 연결을 위한 네트워크 기록 (상대방 IP, PC 명)



```
[2016-04-02 14:12:29] Loaded client id: 12343341285548209263
[2016-04-02 14:12:29] Listening for broadcast on: 27036
[2016-04-02 14:12:29] Listening for connections on: 127.0.0.1:27036
```

None-Connect



```
[2016-04-03 13:31:41] Generated client id: 12356010471690929350
[2016-04-03 13:31:41] Listening for broadcast on: 27036
[2016-04-03 13:31:41] Listening for connections on: 127.0.0.1:27036
[2016-04-03 21:06:50] Received broadcast message from client 12343341285548209263 (MSDN-PC): [redacted]
[2016-04-03 21:06:50] Received discovery message from client 12343341285548209263
[2016-04-03 21:06:53] Received discovery message from client 12343341285548209263
[2016-04-03 21:06:54] Connecting to remote: 0x15d [redacted]
[2016-04-03 21:06:54] Received broadcast message from client 12343341285548209263 (MSDN-PC): [redacted]
[2016-04-03 21:06:54] Connected to remote client: 0x15d
[2016-04-03 21:06:59] Received discovery message from client 12343341285548209263
[2016-04-03 21:07:09] Received broadcast message from client 12343341285548209263 (MSDN-PC): [redacted]
```

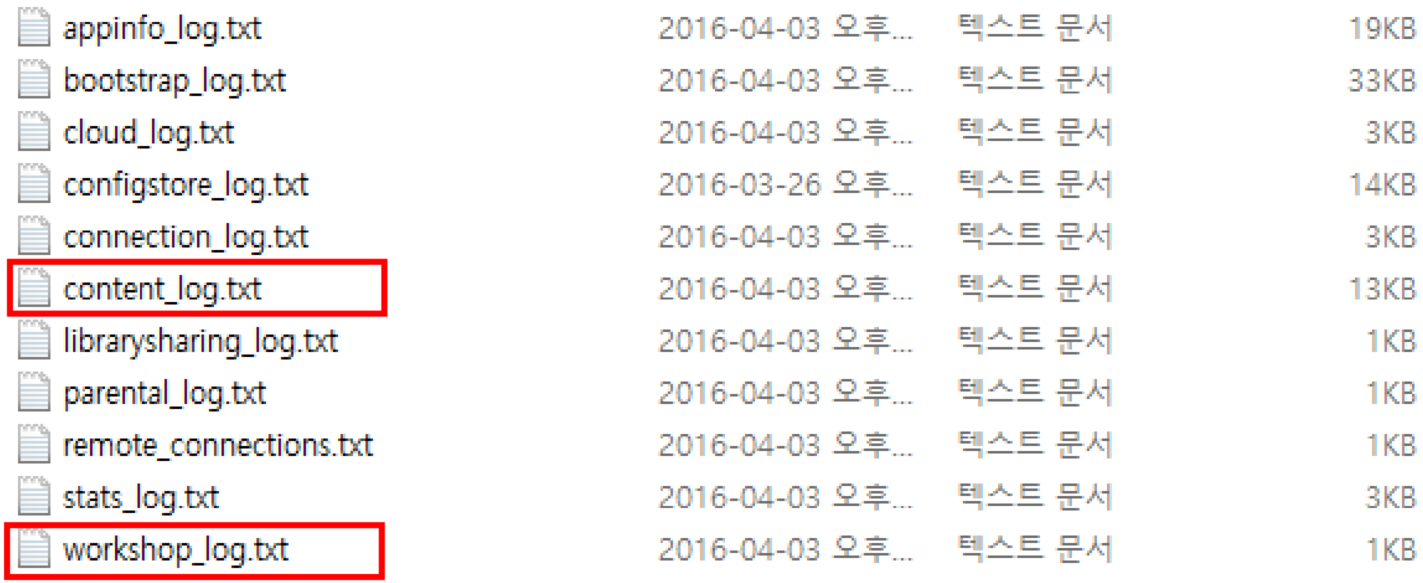
Success Connect

Artifact #5 – Contents Download

Main Game

Mod

New World



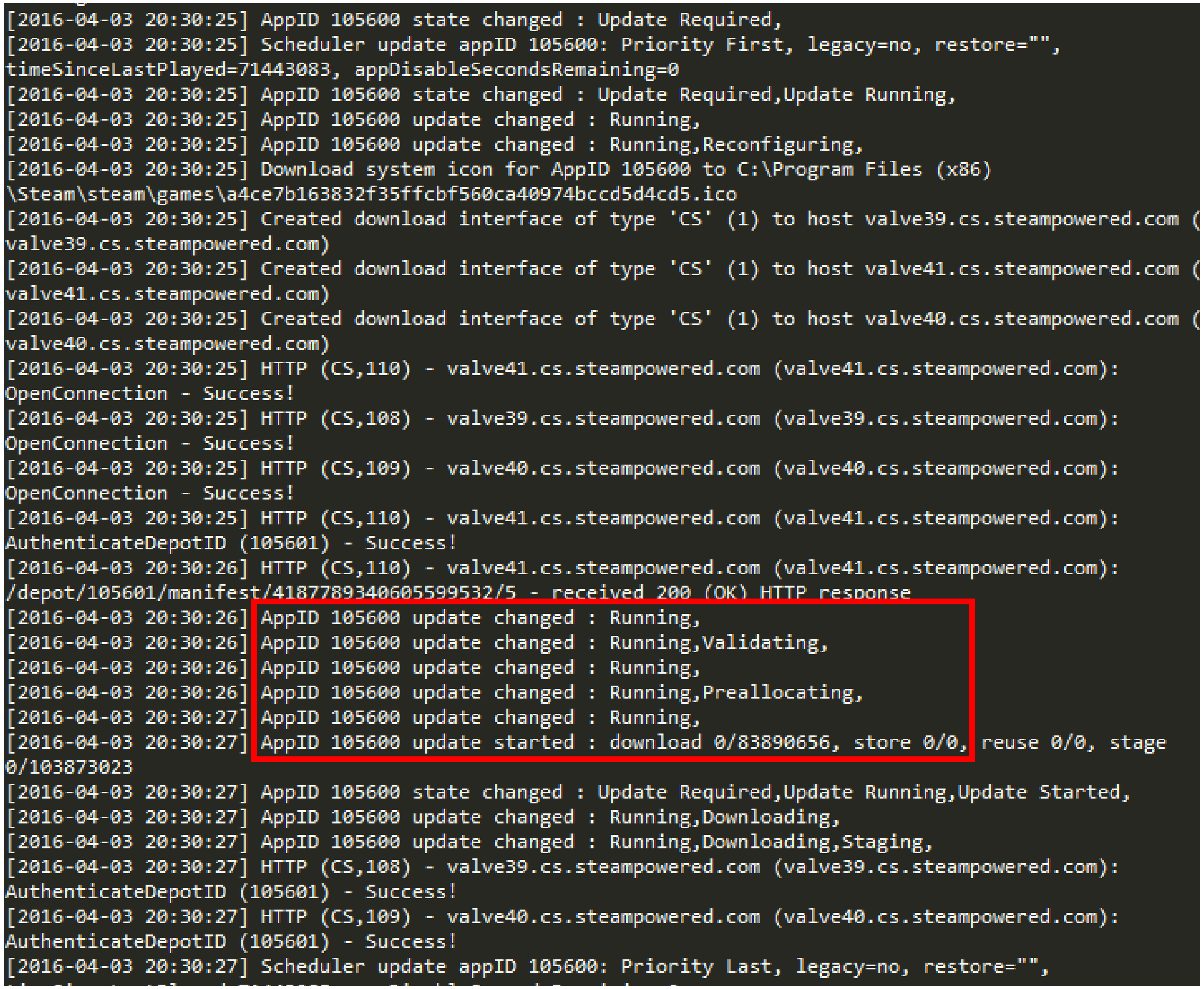
appinfo_log.txt	2016-04-03 오후...	텍스트 문서	19KB
bootstrap_log.txt	2016-04-03 오후...	텍스트 문서	33KB
cloud_log.txt	2016-04-03 오후...	텍스트 문서	3KB
configstore_log.txt	2016-03-26 오후...	텍스트 문서	14KB
connection_log.txt	2016-04-03 오후...	텍스트 문서	3KB
content_log.txt	2016-04-03 오후...	텍스트 문서	13KB
librarysharing_log.txt	2016-04-03 오후...	텍스트 문서	1KB
parental_log.txt	2016-04-03 오후...	텍스트 문서	1KB
remote_connections.txt	2016-04-03 오후...	텍스트 문서	1KB
stats_log.txt	2016-04-03 오후...	텍스트 문서	3KB
workshop_log.txt	2016-04-03 오후...	텍스트 문서	1KB

File Location

C:₩Program Files(x86)₩Steam₩log

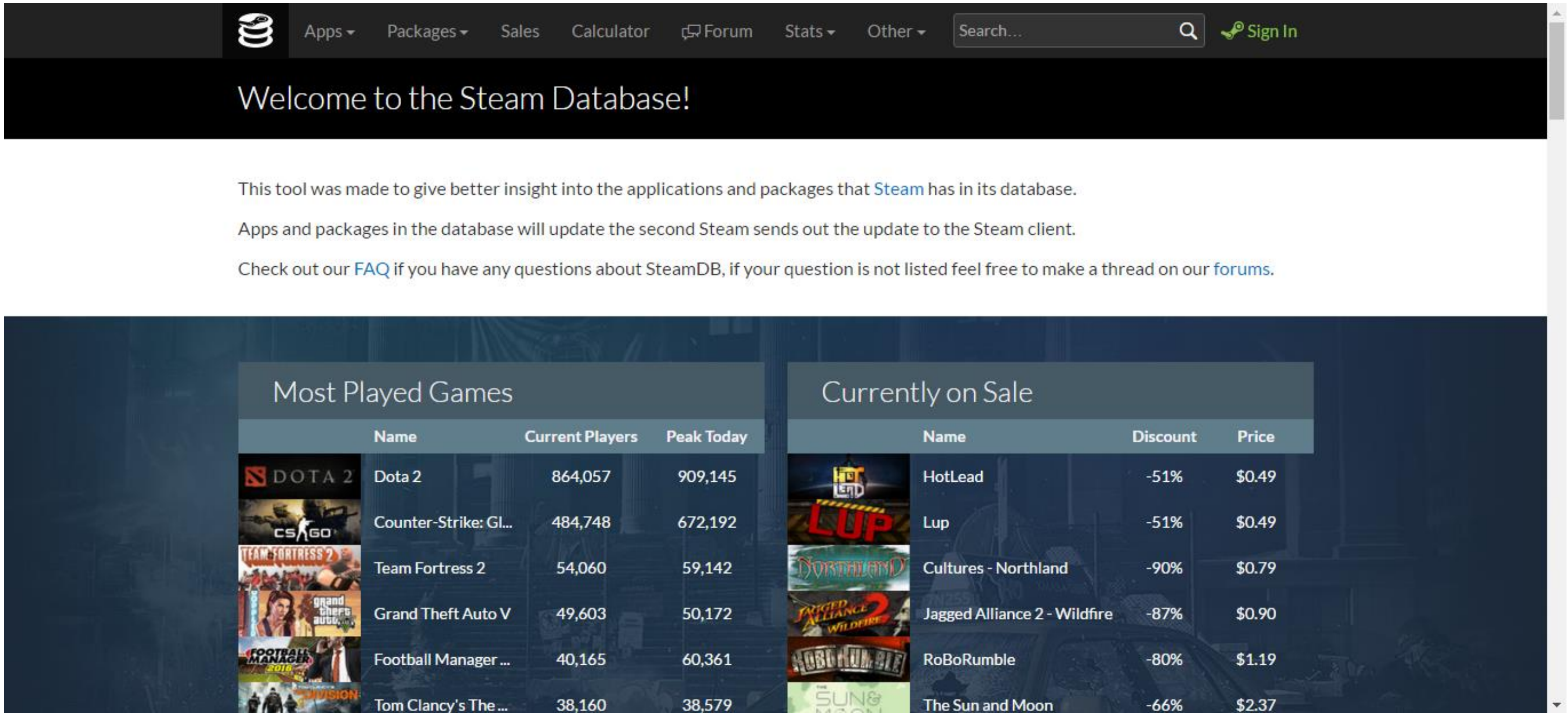
게임 다운로드 기록, 업데이트 기록, Workshop 이용 기록

Content_log.txt



```
[2016-04-03 20:30:25] AppID 105600 state changed : Update Required,
[2016-04-03 20:30:25] Scheduler update appID 105600: Priority First, legacy=no, restore="",
timeSinceLastPlayed=71443083, appDisableSecondsRemaining=0
[2016-04-03 20:30:25] AppID 105600 state changed : Update Required,Update Running,
[2016-04-03 20:30:25] AppID 105600 update changed : Running,
[2016-04-03 20:30:25] AppID 105600 update changed : Running,Reconfiguring,
[2016-04-03 20:30:25] Download system icon for AppID 105600 to C:\Program Files (x86)
\Steam\steam\games\a4ce7b163832f35ffcbf560ca40974bccd5d4cd5.ico
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve39.cs.steampowered.com (
valve39.cs.steampowered.com)
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve41.cs.steampowered.com (
valve41.cs.steampowered.com)
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve40.cs.steampowered.com (
valve40.cs.steampowered.com)
[2016-04-03 20:30:25] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,108) - valve39.cs.steampowered.com (valve39.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,109) - valve40.cs.steampowered.com (valve40.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:26] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
/depot/105601/manifest/4187789340605599532/5 - received 200 (OK) HTTP response
[2016-04-03 20:30:26] AppID 105600 update changed : Running,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,Validating,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,Preallocating,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,
[2016-04-03 20:30:27] AppID 105600 update started : download 0/83890656, store 0/0, reuse 0/0, stage
0/103873023
[2016-04-03 20:30:27] AppID 105600 state changed : Update Required,Update Running,Update Started,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,Downloading,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,Downloading,Staging,
[2016-04-03 20:30:27] HTTP (CS,108) - valve39.cs.steampowered.com (valve39.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:27] HTTP (CS,109) - valve40.cs.steampowered.com (valve40.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:27] Scheduler update appID 105600: Priority Last, legacy=no, restore="",
```

APP ID?



Welcome to the Steam Database!

This tool was made to give better insight into the applications and packages that Steam has in its database.

Apps and packages in the database will update the second Steam sends out the update to the Steam client.

Check out our FAQ if you have any questions about SteamDB, if your question is not listed feel free to make a thread on our forums.

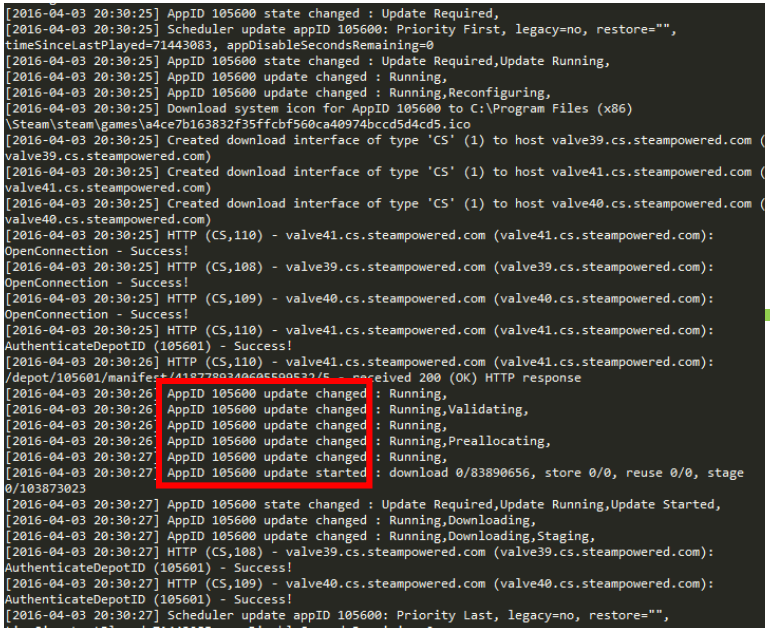
Most Played Games

Name	Current Players	Peak Today
Dota 2	864,057	909,145
Counter-Strike: Gl...	484,748	672,192
Team Fortress 2	54,060	59,142
Grand Theft Auto V	49,603	50,172
Football Manager ...	40,165	60,361
Tom Clancy's The ...	38,160	38,579

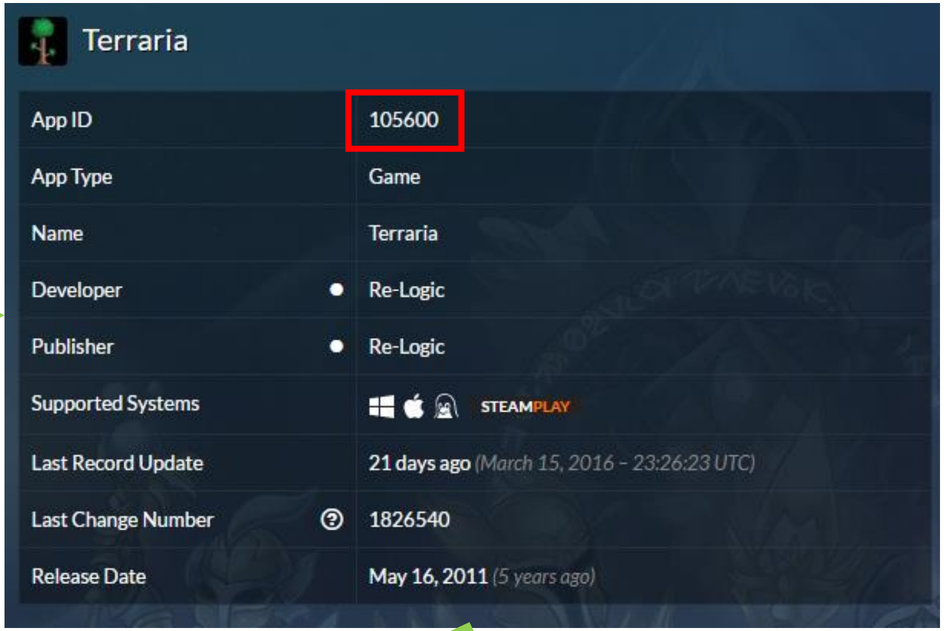
Currently on Sale

Name	Discount	Price
HotLead	-51%	$0.49
Lup	-51%	$0.49
Cultures - Northland	-90%	$0.79
Jagged Alliance 2 - Wildfire	-87%	$0.90
RoBoRumble	-80%	$1.19
The Sun and Moon	-66%	$2.37

https://steamdb.info



```
[2016-04-03 20:30:25] AppID 105600 state changed : Update Required,
[2016-04-03 20:30:25] Scheduler update appID 105600: Priority First, legacy=no, restore="",
timeSinceLastPlayed=71443083, appDisableSecondsRemaining=0
[2016-04-03 20:30:25] AppID 105600 state changed : Update Required,Update Running,
[2016-04-03 20:30:25] AppID 105600 update changed : Running,
[2016-04-03 20:30:25] AppID 105600 update changed : Running,Reconfiguring,
[2016-04-03 20:30:25] Download system icon for AppID 105600 to C:\Program Files (x86)
\Steam\steam\games\a4ce7b163832f35ffcbf560ca40974bccd5d4cd5.ico
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve39.cs.steampowered.com (
valve39.cs.steampowered.com)
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve41.cs.steampowered.com (
valve41.cs.steampowered.com)
[2016-04-03 20:30:25] Created download interface of type 'CS' (1) to host valve40.cs.steampowered.com (
valve40.cs.steampowered.com)
[2016-04-03 20:30:25] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,108) - valve39.cs.steampowered.com (valve39.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,109) - valve40.cs.steampowered.com (valve40.cs.steampowered.com):
OpenConnection - Success!
[2016-04-03 20:30:25] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:26] HTTP (CS,110) - valve41.cs.steampowered.com (valve41.cs.steampowered.com):
/depot/105601/manifest/4187789340605599532/5 - received 200 (OK) HTTP response
[2016-04-03 20:30:26] AppID 105600 update changed : Running,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,Validating,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,
[2016-04-03 20:30:26] AppID 105600 update changed : Running,Preallocating,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,
[2016-04-03 20:30:27] AppID 105600 update started : download 0/83890656, store 0/0, reuse 0/0, stage
0/103873023
[2016-04-03 20:30:27] AppID 105600 state changed : Update Required,Update Running,Update Started,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,Downloading,
[2016-04-03 20:30:27] AppID 105600 update changed : Running,Downloading,Staging,
[2016-04-03 20:30:27] HTTP (CS,108) - valve39.cs.steampowered.com (valve39.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:27] HTTP (CS,109) - valve40.cs.steampowered.com (valve40.cs.steampowered.com):
AuthenticateDepotID (105601) - Success!
[2016-04-03 20:30:27] Scheduler update appID 105600: Priority Last, legacy=no, restore="",
```

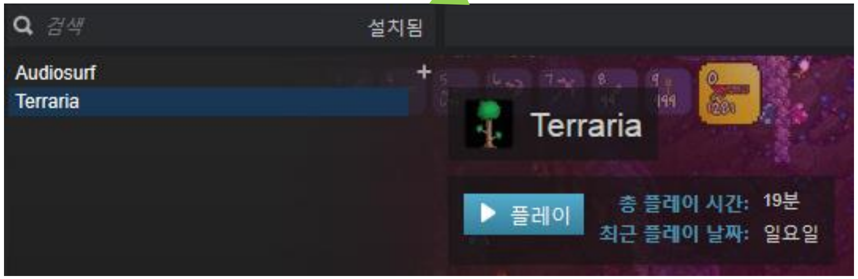


Terraria

App ID	105600
App Type	Game
Name	Terraria
Developer ●	Re-Logic
Publisher ●	Re-Logic
Supported Systems	STEAMPLAY
Last Record Update	21 days ago (March 15, 2016 – 23:26:23 UTC)
Last Change Number	1826540
Release Date	May 16, 2011 (5 years ago)

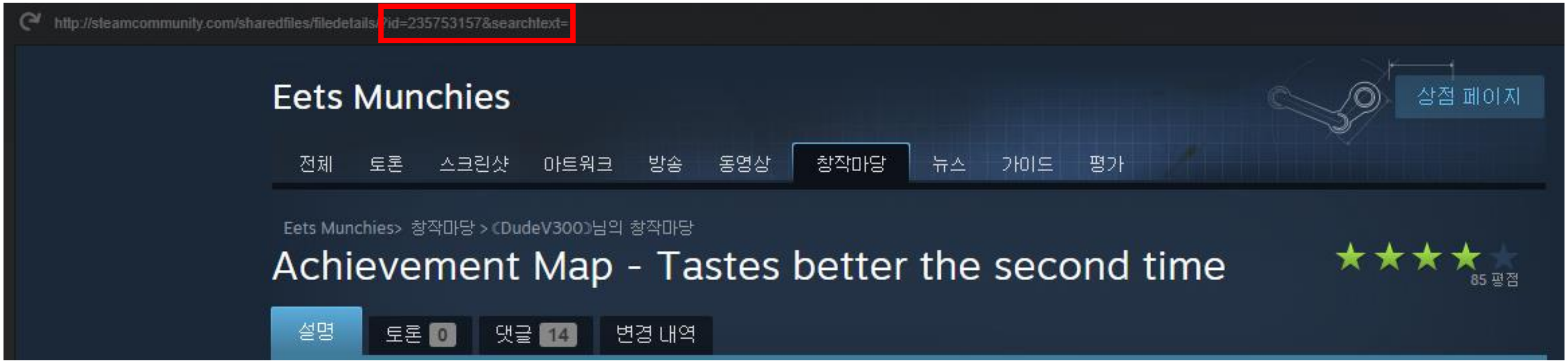
APP ID : 105600

Terraria



총 플레이 시간: 19분
최근 플레이 날짜: 일요일

Installed!

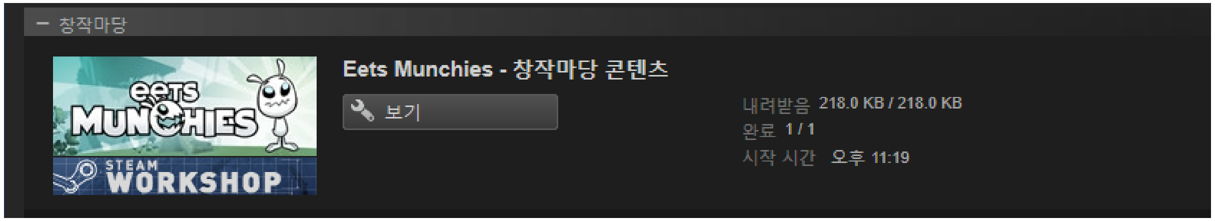


http://steamcommunity.com/sharedfiles/filedetails/?id=235753157&searchtext=

Eets Munchies

Eets Munchies> 창작마당 > 《DudeV300》님의 창작마당

Achievement Map - Tastes better the second time



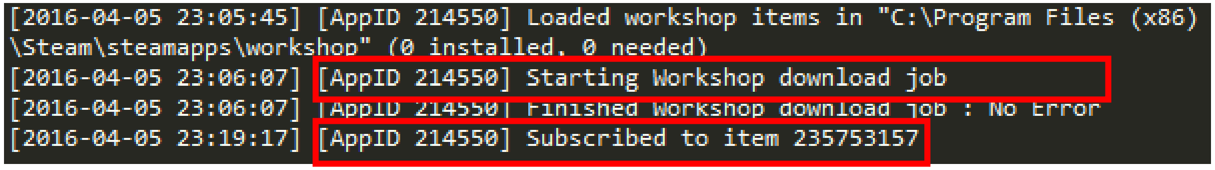
Eets Munchies - 창작마당 콘텐츠

내려받음 218.0 KB / 218.0 KB

완료 1 / 1

시작 시간 오후 11:19

Installed!

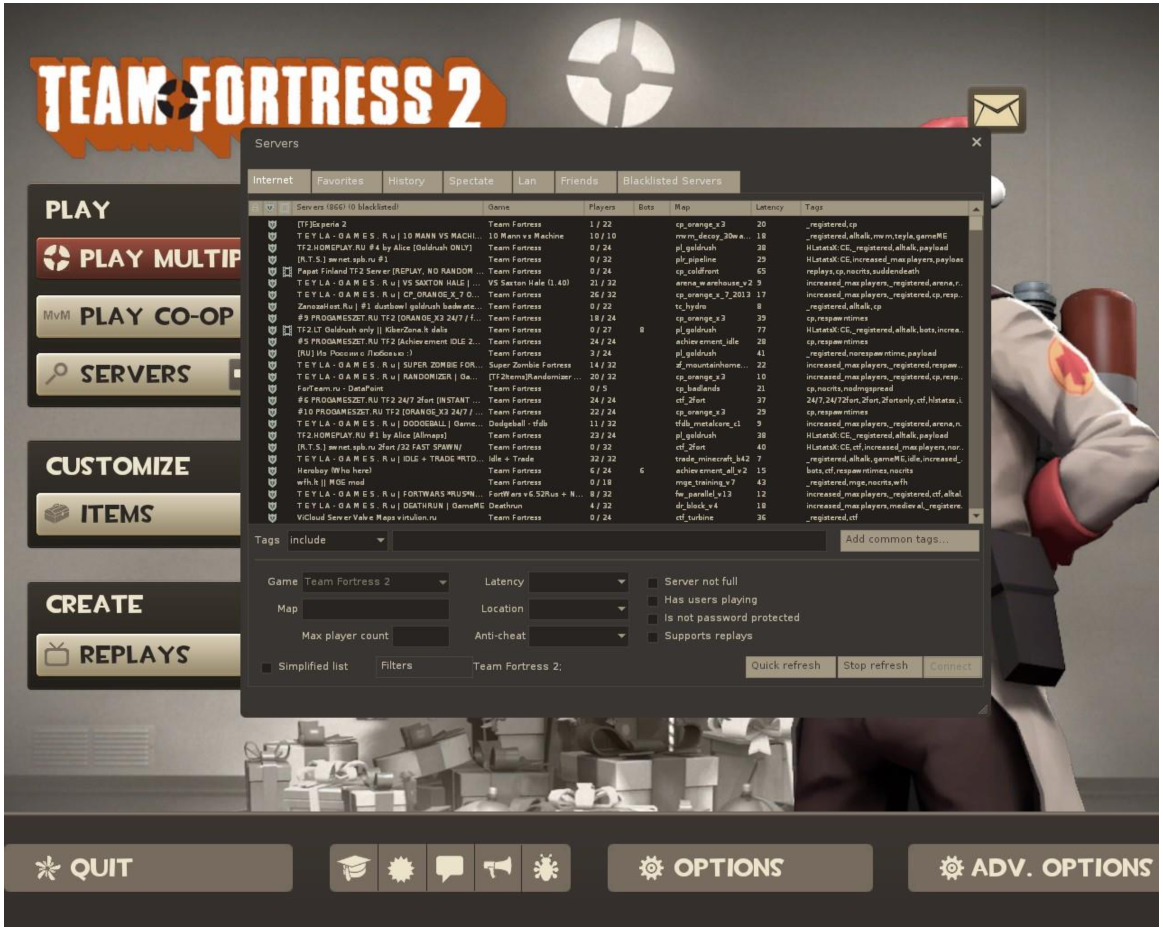


```
[2016-04-05 23:05:45] [AppID 214550] Loaded workshop items in "C:\Program Files (x86)
\Steam\steamapps\workshop" (0 installed, 0 needed)
[2016-04-05 23:06:07] [AppID 214550] Starting Workshop download job
[2016-04-05 23:06:07] [AppID 214550] Finished Workshop download job : No Error
[2016-04-05 23:19:17] [AppID 214550] Subscribed to item 235753157
```

APP ID : 214550

Item : 235753157

Artifact #6 – Connect server History



Servers (866) (0 blacklisted)	Game	Players	Bots	Map	Latency	Tags
[TF]Experia 2	Team Fortress	1 / 22		cp_orange_x3	20	_registered,cp
TEYLA-GAMES.Ru | 10 MANN VS MACHI...	10 Mann vs Machine	10 / 10		mvm_decoy_30wa...	18	_registered,alltalk,mvm,teyla,gameME
TF2.HOMEPLAY.RU #4 by Alice [Goldrush ONLY]	Team Fortress	0 / 24		pl_goldrush	38	HLstatsX:CE,_registered,alltalk,payload
[R.T.S.] swnet.spb.ru #1	Team Fortress	0 / 32		plr_pipeline	29	HLstatsX:CE,increased_maxplayers,payloac
Papat Finland TF2 Server [REPLAY, NO RANDOM ...	Team Fortress	0 / 24		cp_coldfront	65	replays,cp,nocrits,suddendeath
TEYLA-GAMES.Ru | VS SAXTON HALE | ...	VS Saxton Hale (1.40)	21 / 32		arena_warehouse_v2	9	increased_maxplayers,_registered,arena,r..
TEYLA-GAMES.Ru | CP_ORANGE_X_7 O...	Team Fortress	26 / 32		cp_orange_x_7_2013	17	increased_maxplayers,_registered,cp,resp..
ZanozaHost.Ru | #1 dustbowl goldrush badwate...	Team Fortress	0 / 22		tc_hydro	8	_registered,alltalk,cp
#9 PROGAMESZET.RU TF2 [ORANGE_X3 24/7 / f...	Team Fortress	18 / 24		cp_orange_x3	39	cp,respawntimes
TF2.LT Goldrush only || KiberZona.lt dalis	Team Fortress	0 / 27	8	pl_goldrush	77	HLstatsX:CE,_registered,alltalk,bots,increa..
#5 PROGAMESZET.RU TF2 [Achievement IDLE 2...	Team Fortress	24 / 24		achievement_idle	28	cp,respawntimes
[RU] Из России с Любовью :)	Team Fortress	3 / 24		pl_goldrush	41	_registered,norespawntime,payload
TEYLA-GAMES.Ru | SUPER ZOMBIE FOR...	Super Zombie Fortress	14 / 32		zf_mountainhome...	22	increased_maxplayers,_registered,respaw..
TEYLA-GAMES.Ru | RANDOMIZER | Ga...	[TF2Items]Randomizer ...	20 / 32		cp_orange_x3	10	increased_maxplayers,_registered,cp,resp..
ForTeam.ru - DataPoint	Team Fortress	0 / 5		cp_badlands	21	cp,nocrits,nodmgspread
#6 PROGAMESZET.RU TF2 24/7 2fort [INSTANT ...	Team Fortress	24 / 24		ctf_2fort	37	24/7,24/72fort,2fort,2fortonly,ctf,hlstatsx,i.
#10 PROGAMESZET.RU TF2 [ORANGE_X3 24/7 / ...	Team Fortress	22 / 24		cp_orange_x3	29	cp,respawntimes
TEYLA-GAMES.Ru | DODGEBALL | Game...	Dodgeball - tfdb	11 / 32		tfdb_metalcore_c1	9	increased_maxplayers,_registered,arena,n.
TF2.HOMEPLAY.RU #1 by Alice [Allmaps]	Team Fortress	23 / 24		pl_goldrush	38	HLstatsX:CE,_registered,alltalk,payload
[R.T.S.] swnet.spb.ru 2fort /32 FAST SPAWN/	Team Fortress	0 / 32		ctf_2fort	40	HLstatsX:CE,ctf,increased_maxplayers,nor..
TEYLA-GAMES.Ru | IDLE + TRADE *RTD...	Idle + Trade	32 / 32		trade_minecraft_b42	7	_registered,alltalk,gameME,idle,increased_.
Heroboy (Who here)	Team Fortress	6 / 24	6	achievement_all_v2	15	bots,ctf,respawntimes,nocrits
wfh.lt || MGE mod	Team Fortress	0 / 18		mge_training_v7	43	_registered,mge,nocrits,wfh
TEYLA-GAMES.Ru | FORTWARS *RUS*N...	FortWars v6.52Rus + N...	8 / 32		fw_parallel_v13	12	increased_maxplayers,_registered,ctf,alltal.
TEYLA-GAMES.Ru | DEATHRUN | GameME	Deathrun	4 / 32		dr_block_v4	18	increased_maxplayers,medieval,_registere.
ViCloud Server Valve Maps virtulion.ru	Team Fortress	0 / 24		ctf_turbine	36	_registered,ctf

Tags include

Add common tags...

Game Team Fortress 2

Latency

Map

Location

Max player count

Anti-cheat

☐ Server not full

☐ Has users playing

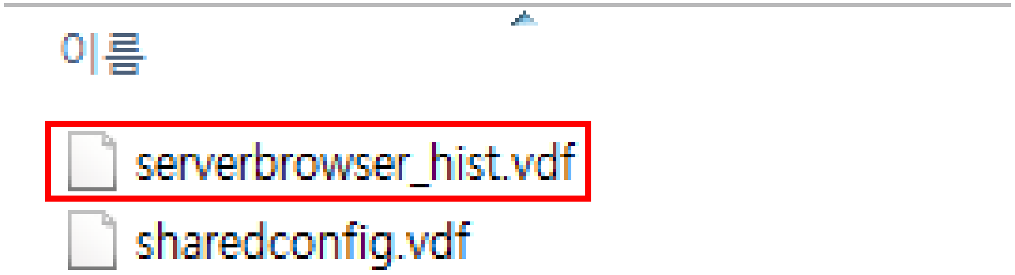
☐ Is not password protected

☐ Supports replays

☐ Simplified list

Filters Team Fortress 2;

Quick refresh Stop refresh Connect



이름

serverbrowser_hist.vdf

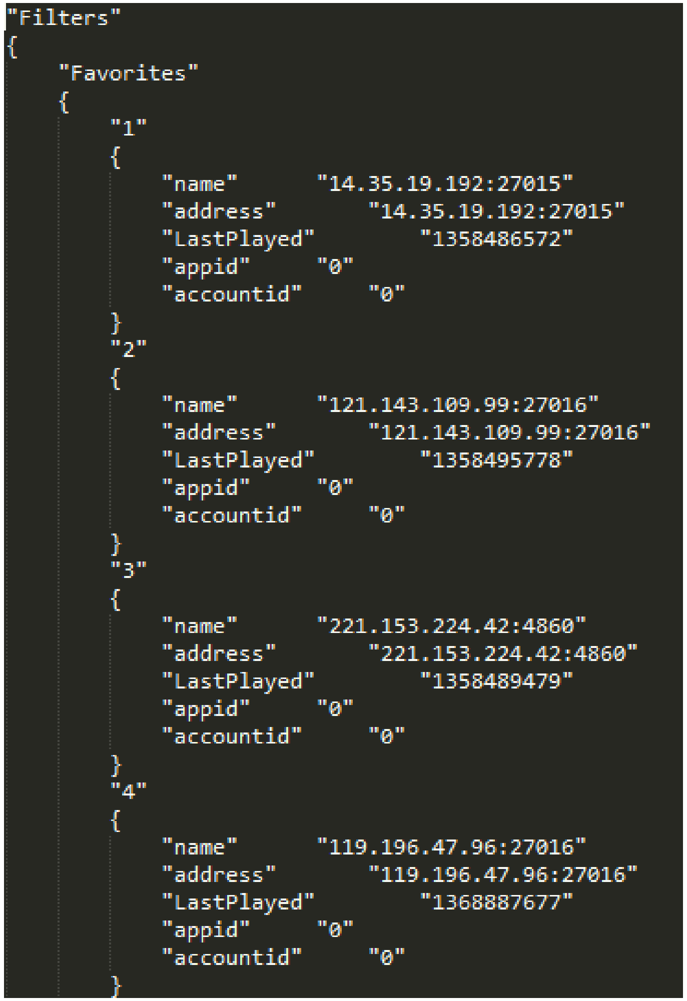
sharedconfig.vdf

File Location

C:₩Program Files(x86)₩Steam₩userdata₩[Usernum]₩7

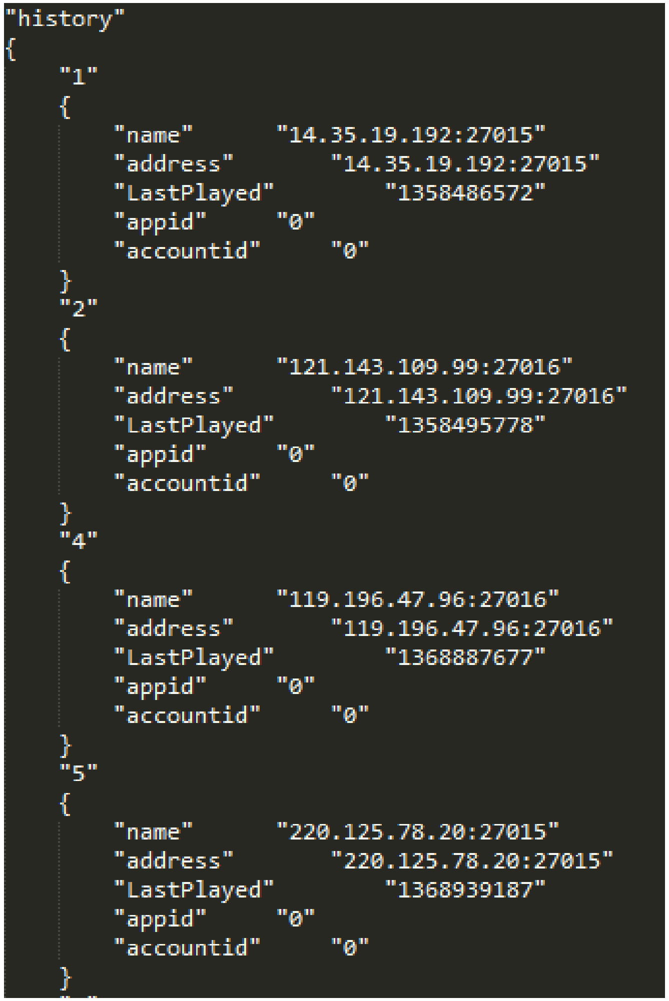
게임 내 서버 접속 기록, IP 및 즐겨 찾기 서버 IP

Favorite Server

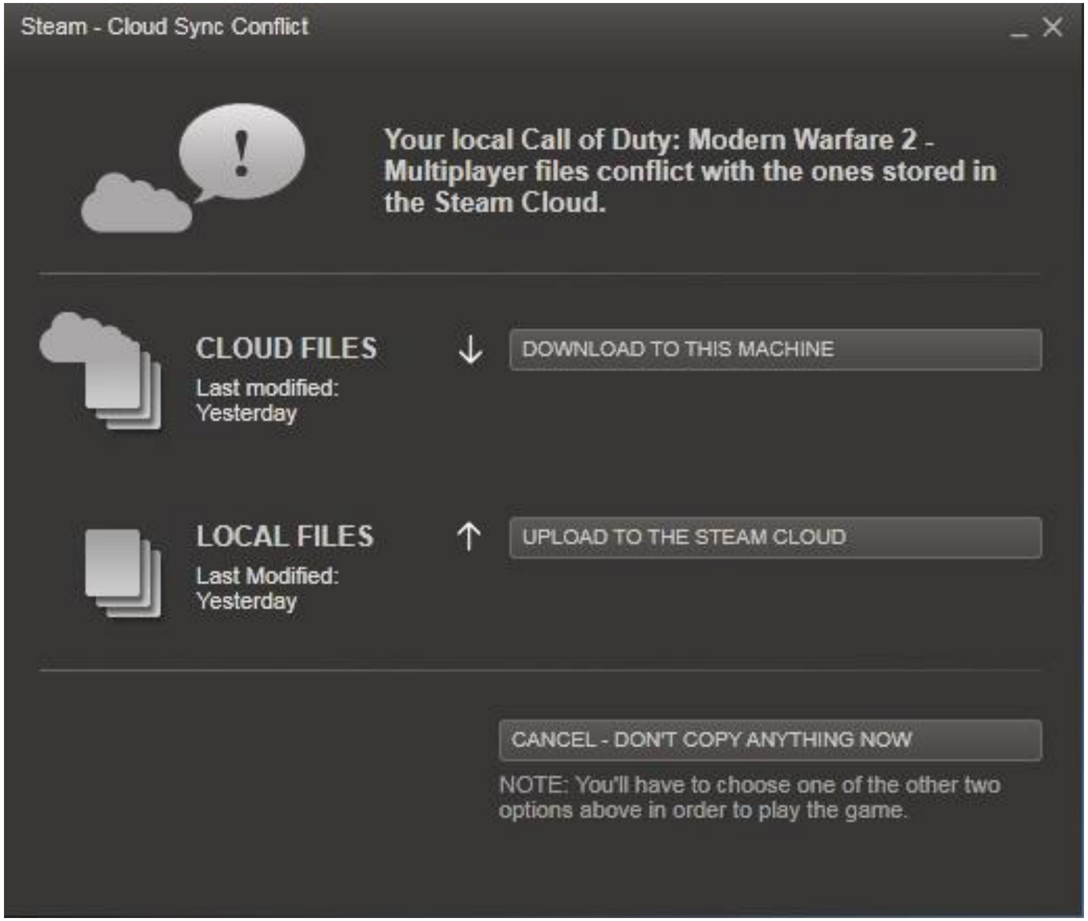


```
"Filters"
{
	"Favorites"
	{
		"1"
		{
			"name"		"14.35.19.192:27015"
			"address"		"14.35.19.192:27015"
			"LastPlayed"		"1358486572"
			"appid"		"0"
			"accountid"		"0"
		}
		"2"
		{
			"name"		"121.143.109.99:27016"
			"address"		"121.143.109.99:27016"
			"LastPlayed"		"1358495778"
			"appid"		"0"
			"accountid"		"0"
		}
		"3"
		{
			"name"		"221.153.224.42:4860"
			"address"		"221.153.224.42:4860"
			"LastPlayed"		"1358489479"
			"appid"		"0"
			"accountid"		"0"
		}
		"4"
		{
			"name"		"119.196.47.96:27016"
			"address"		"119.196.47.96:27016"
			"LastPlayed"		"1368887677"
			"appid"		"0"
			"accountid"		"0"
		}
```

Connect History



```
"history"
{
	"1"
	{
		"name"		"14.35.19.192:27015"
		"address"		"14.35.19.192:27015"
		"LastPlayed"		"1358486572"
		"appid"		"0"
		"accountid"		"0"
	}
	"2"
	{
		"name"		"121.143.109.99:27016"
		"address"		"121.143.109.99:27016"
		"LastPlayed"		"1358495778"
		"appid"		"0"
		"accountid"		"0"
	}
	"4"
	{
		"name"		"119.196.47.96:27016"
		"address"		"119.196.47.96:27016"
		"LastPlayed"		"1368887677"
		"appid"		"0"
		"accountid"		"0"
	}
	"5"
	{
		"name"		"220.125.78.20:27015"
		"address"		"220.125.78.20:27015"
		"LastPlayed"		"1368939187"
		"appid"		"0"
		"accountid"		"0"
	}
```



Steam - Cloud Sync Conflict

Your local Call of Duty: Modern Warfare 2 - Multiplayer files conflict with the ones stored in the Steam Cloud.

CLOUD FILES

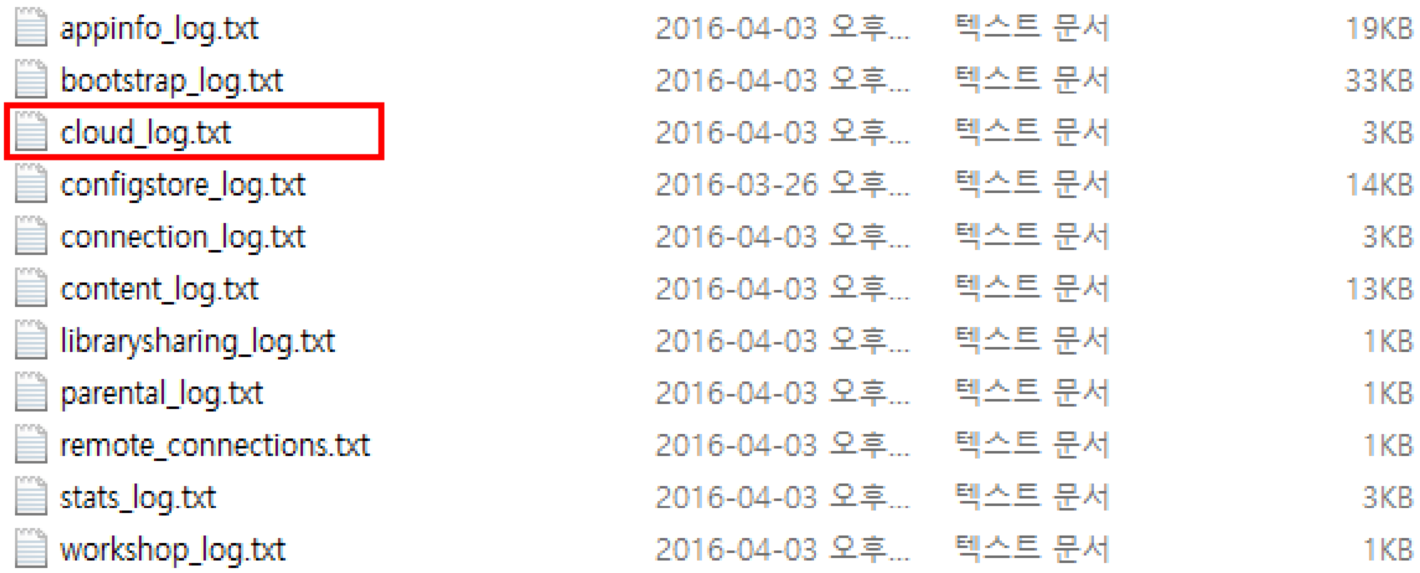
Last modified:
Yesterday

LOCAL FILES

Last Modified:
Yesterday

NOTE: You'll have to choose one of the other two options above in order to play the game.

Artifact #7 – Cloud System

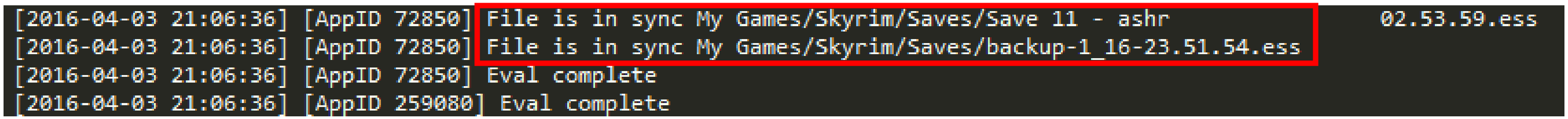


appinfo_log.txt	2016-04-03 오후...	텍스트 문서	19KB
bootstrap_log.txt	2016-04-03 오후...	텍스트 문서	33KB
cloud_log.txt	2016-04-03 오후...	텍스트 문서	3KB
configstore_log.txt	2016-03-26 오후...	텍스트 문서	14KB
connection_log.txt	2016-04-03 오후...	텍스트 문서	3KB
content_log.txt	2016-04-03 오후...	텍스트 문서	13KB
librarysharing_log.txt	2016-04-03 오후...	텍스트 문서	1KB
parental_log.txt	2016-04-03 오후...	텍스트 문서	1KB
remote_connections.txt	2016-04-03 오후...	텍스트 문서	1KB
stats_log.txt	2016-04-03 오후...	텍스트 문서	3KB
workshop_log.txt	2016-04-03 오후...	텍스트 문서	1KB

File Location

C:₩Program Files(x86)₩Steam₩log

게임의 Save File 및 Profile을 동기화 및 업로드한 기록

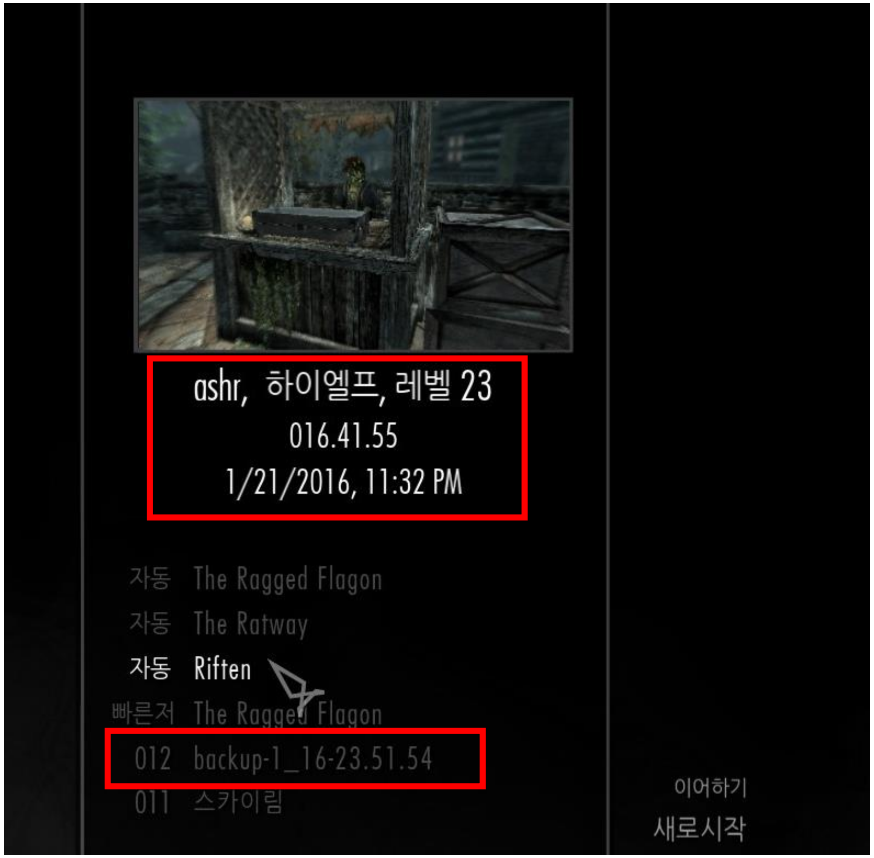


```
[2016-04-03 21:06:36] [AppID 72850] File is in sync My Games/Skyrim/Saves/Save 11 - ashr        02.53.59.ess
[2016-04-03 21:06:36] [AppID 72850] File is in sync My Games/Skyrim/Saves/backup-1_16-23.51.54.ess
[2016-04-03 21:06:36] [AppID 72850] Eval complete
[2016-04-03 21:06:36] [AppID 259080] Eval complete
```

Skyrim (SKSE)

Steam Cloud

Profile & Save File



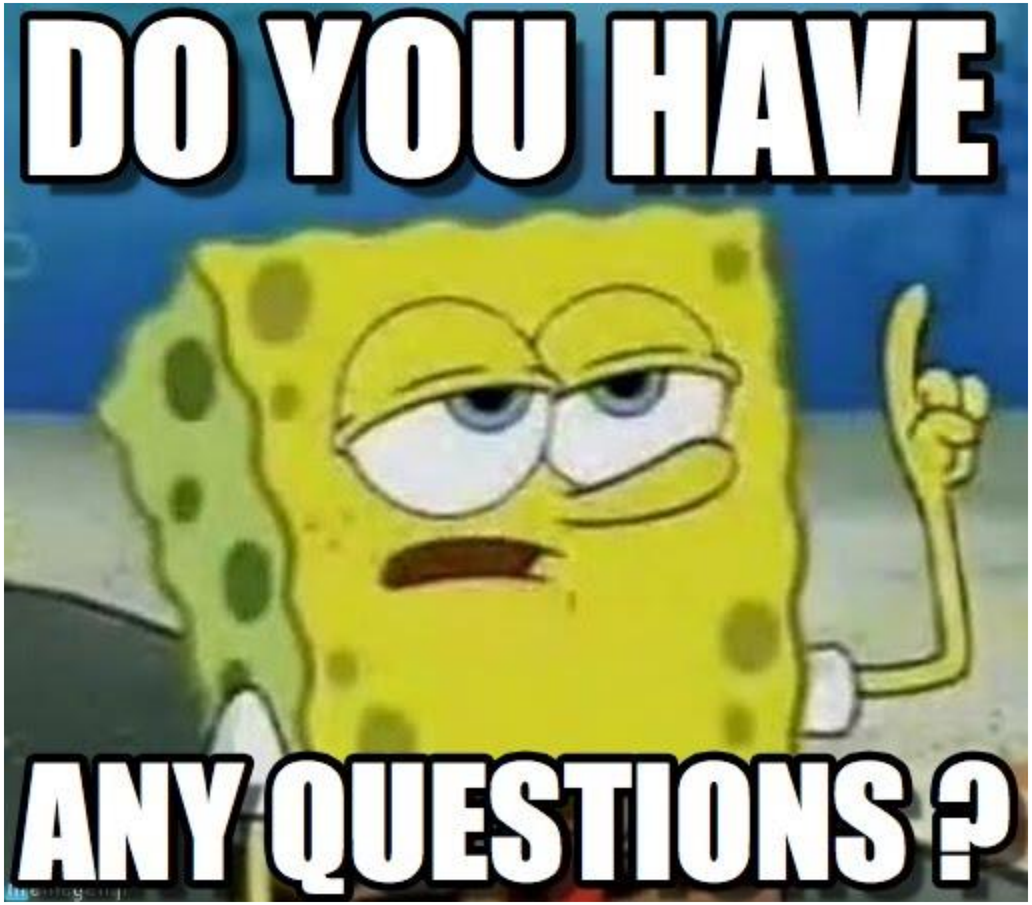
Reference

- Playing the Forensics Game (Peter Clemenko)
- Steam Forensic Artifacts (Tod Delaricheliere)
- 해외 자료 : 빈약 …
- 국내 자료 : 없음 …

결론

- 로컬 파일에서도 많은 중요한 정보를 수집이 가능.
- 계정 탈취와 관련하여 사회적 공학 기법에 활용 될 수 있음.
- 특정 증거 수집을 위해서는 배경 지식이 필요.
- 계정 내에서 얻을 수 있는 더 많은 중요 정보가 존재함.
- 이러한 게임 플랫폼에서의 증거 수집에 대한 연구 필요.

Q & A



Thank you!