#### bunseokbot@UpRoot

- · 세종대학교 정보보호학과 15
- UpRoot Core-System Developer
- ・비오비 3기 포렌식
- · EnScript 로 집체교육때 과제 이득 몇번 본 적 있음

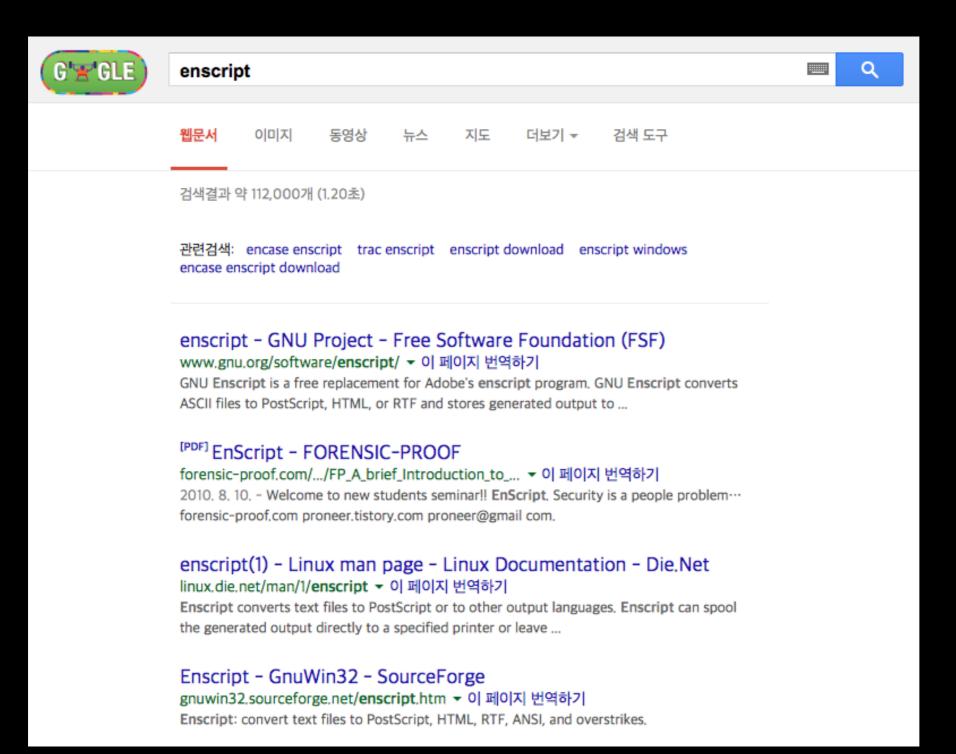
## EnScript?

- runnable script language specified for "EnCase Forensic Tool"
- but, not.. like python, ruby...
- most likely C#..? (Why "script"?)

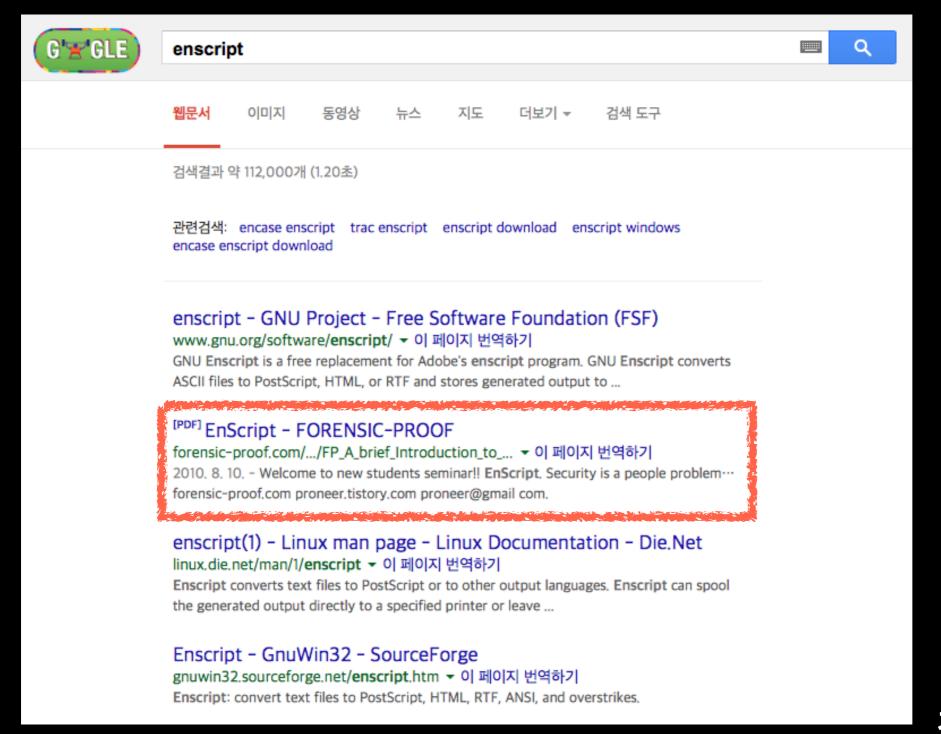
## Why EnScript?

- easy to extract "EVIDENCE"
- User-ability
- No-Ga-Da work to script?!

### Search from Google..?



#### Search from Google..?



#### Umm..

#### « Back to Courses



CPE Credits: 32\*\*

Course Level: Expert

Course Type: Recommended

Delivery Method: Group-Live, Classroom

Tuition: \$2,995.00 USD\*

Prerequisite:

#### **Expert**

#### EnCase® EnScript® Programming

This hands-on course introduces the student to the EnScript language, which is designed to allow users to fully tap into the data processing power of EnCase® software (EnCase), automate tasks, and create fully functional applications that can be shared with other EnCase® users. The class is designed for students who have fundamental programming skills and wish to enhance their investigative techniques through the use of EnScript programming.

Instructors and students will write EnScript® applications together. Practical exercises will be used to reinforce the tuition given during the course. Students will leave with the ability to write intermediate-level EnScript® programs that automate searching, interpretation, extraction, bookmarking, and external reporting of data encountered during the examination of computer systems.

#### However?

우리는 "차세대 보안리더" 이다

차세대 보안리더 양성 프로그램

**BEST OF THE BEST** 

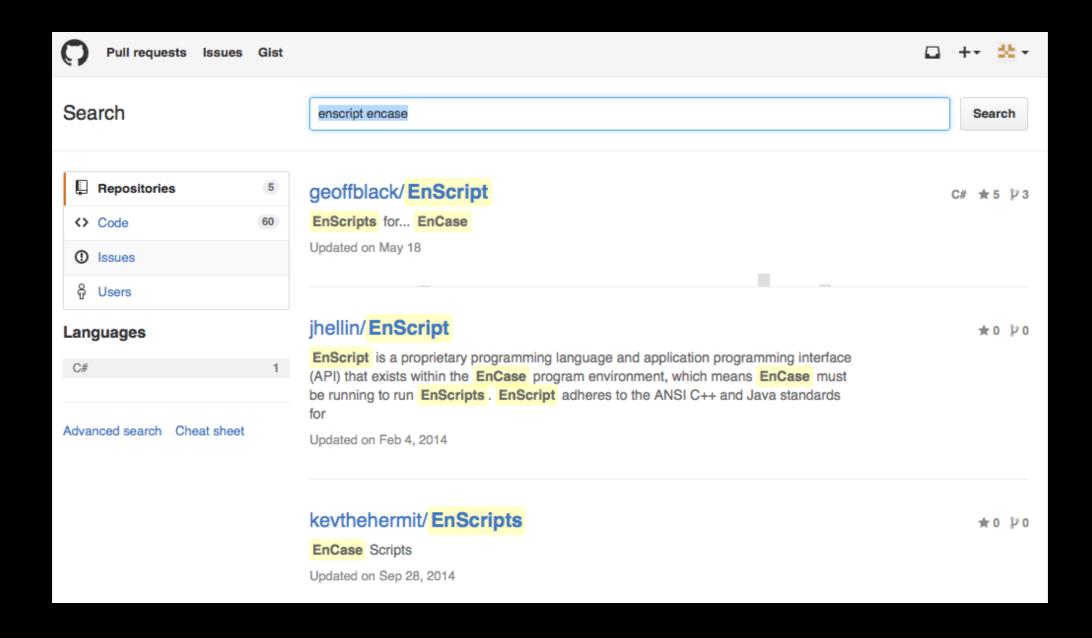
more +





아 시바 이거 말고..

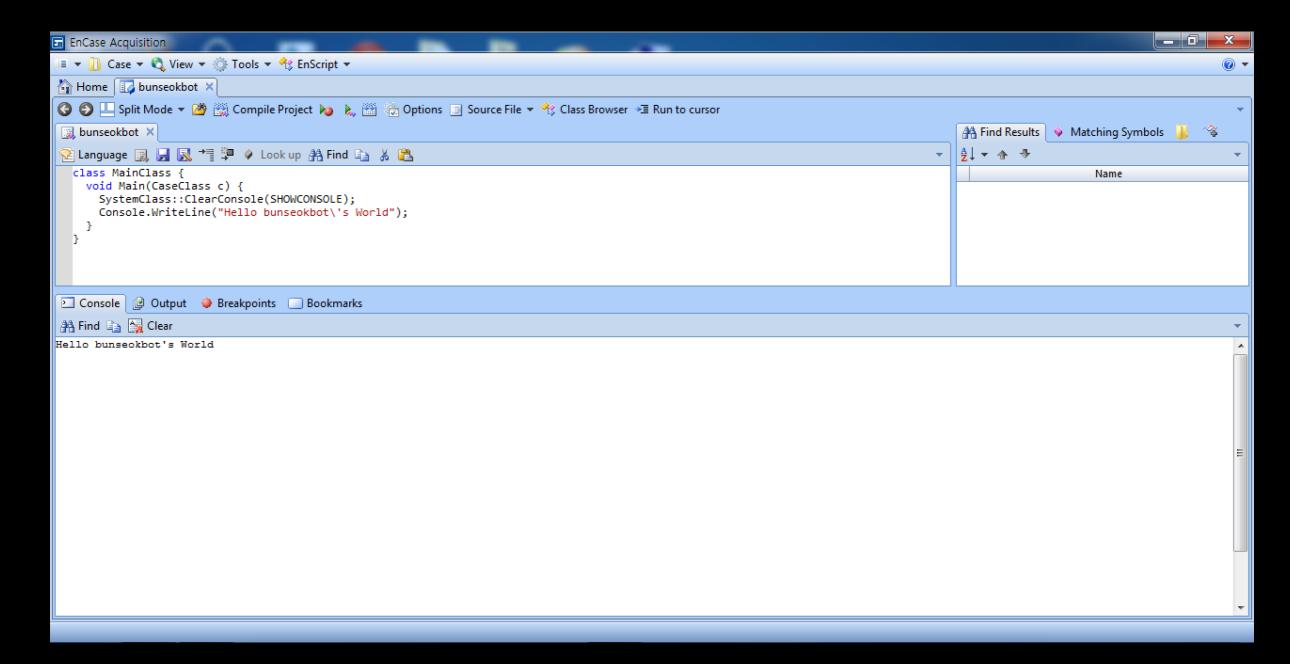
## 우리는 언제나 답을 찾을 것이다.



## EnScript 코드 구경

```
1  class MainClass {
2
3    void Main(CaseClass c) {
4
5         SystemClass::ClearConsole(SHOWCONSOLE);
6
7         Console.WriteLine("Hello bunseokbot\'s World");
8
9    }
10
11 }
```

## Running..



#### **Code Review**

```
class MainClass { //entry class
     void Main(CaseClass c) { //main function of class
          SystemClass::ClearConsole(SHOWCONSOLE); //clear the console
          Console.WriteLine("Hello bunseokbot\\"s World"); //write to the console
}
```

#### **Code Review**

```
class MainClass { //entry class
     void Main(CaseClass c) { //main function of class
          SystemClass::ClearConsole(SHOWCONSOLE); //clear the console
          Console.WriteLine("Hello bunseokbot\\"s World"); //write to the console
}
```

## Time is most important!

```
class MainClass {
    void Main(CaseClass c) {
        SystemClass::ClearConsole(SHOWCONSOLE);
        DateClass date;
        date.Now();
        TimeClass tc(date);
        Console.WriteLine(tc.GetDate());
    }
}
```

## Time is most important!

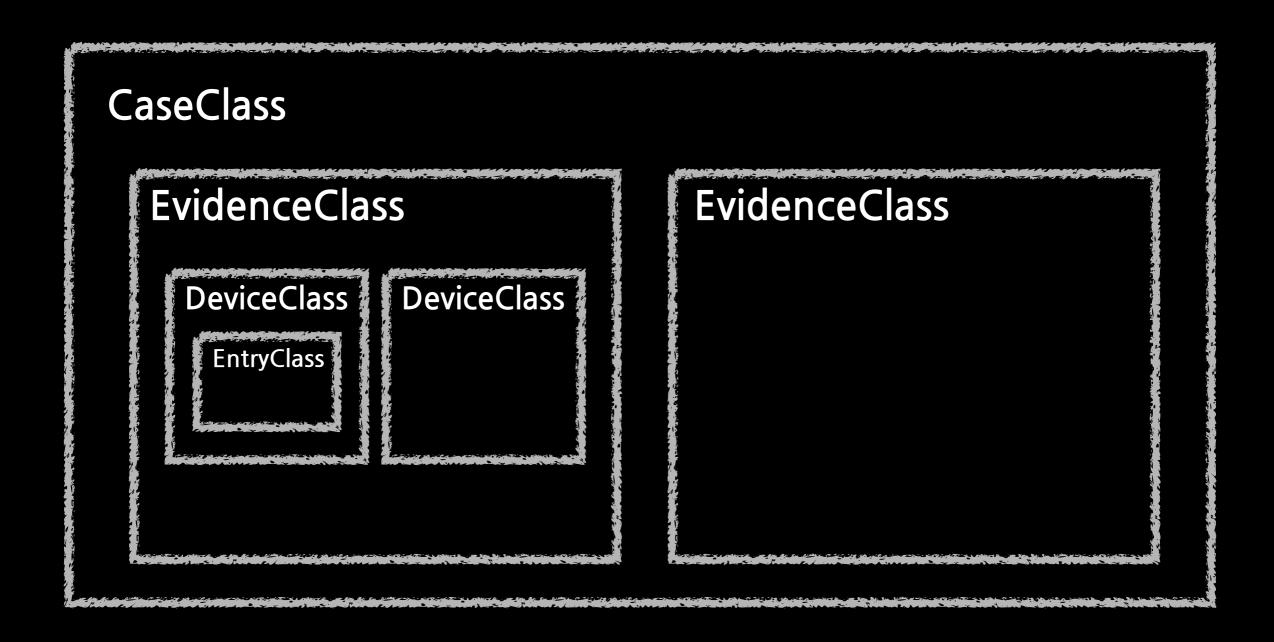
```
class TimeClass {
   DateClass Date;

TimeClass(DateClass date = DateClass::Null) :
   Date = date {}

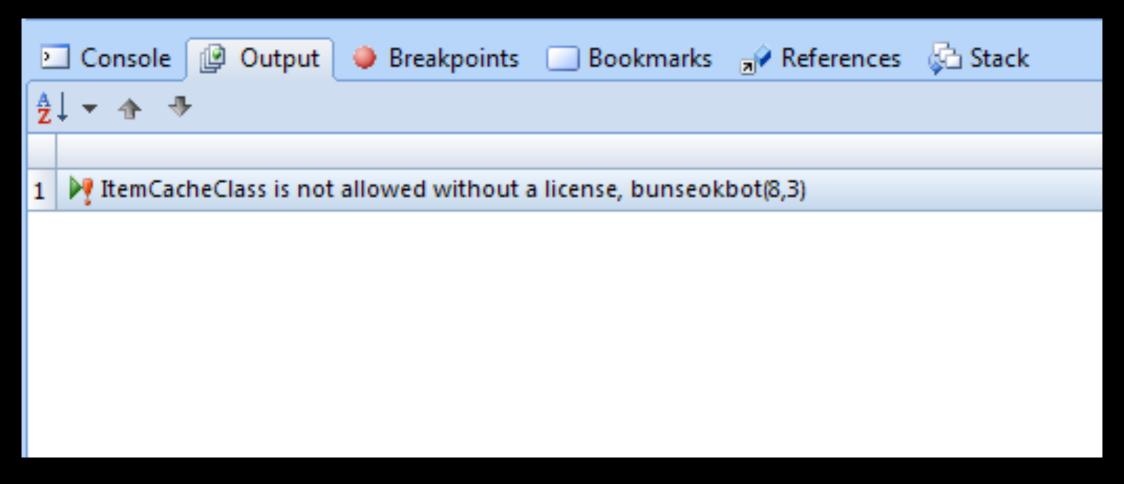
String GetDate() {
   if( Date != DateClass::Null) {
     return String::Format("Current time is {0}", Date.GetString());
   } else {
     return "Invaild DateTime";
   }
}
```

#### I want to handle the Devices!

## DeviceClass, EvidenceClass



### 그러나 쓰지 못하는 현실이여..



하하하하하하하하하핳

## 실습할꺼면 워룸 컴퓨터로 하세요

인증 하하하하하하하하하항ㅎㅎㅎㅎ 아니면 연구원님 멱살잡..고.. 협박하면 가능할겁니다

## 우리는 언제나 답을 찾을 것이다.





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APR 02

EnScript Changes From EnCase Version 6 to Version 7

엔스크립트 문법 변함

#### EnScript Changes From EnCase Version 6 to Version 7

You may know that Version 6 of EnCase keeps the majority of data in memory, which gives you fast access to the evidence items in a case, but is not conducive to handling large data sets. In addition, keeping most data in memory requires that records and entries be handled separately.

EnCase Version 7 behaves in a similar way to a database in that working through multiple evidence items is accomplished using an iterator. This makes for more stable processing and allows the EnScript programmer to handle both entries and records in a more streamlined way. It is possible, for instance, to iterate through all of the evidence items in a case (entries and e-mail attachments, for instance), quickly identifying those items that are pictures or documents.

It's very common for EnScript programmers to want to migrate their EnCase v6 workflows to EnCase v7. In doing so, it's good to consider the fact that the EnCase v7 evidence processor was designed to reduce the number of additional steps you have to take (hash and signature analysis, thumbnail creation, Registry pre-processing, etc.) before a review of the evidence in a case can begin. Taking this into account, some tasks might be better performed using a custom evidence processor module, an example of which is to be found in the following folder –

#### 어..?

프로그래머들이 개발할 때 관리를 더 잘하고, 세분화하기 위해 그리고 빠른 로딩을 위해서.. 라는데..

```
V6
forall (EntryClass entry in c.EntryRoot()) {
  Console.WriteLine(entry.Name());
V7
ItemIteratorClass iter
            (c, ItemIteratorClass::NORECURSE
                ItemIteratorClass::NOPROXY,
                ItemIteratorClass::ALL);
while (EntryClass entry = iter.GetNextEntry()) {
  Console.WriteLine(entry.Name());
```

#### 장점

- · 증거 분석이 엄청나게 빨라짐 (과제 시 엄청난 이득)
- ㆍ 자신만의 특기로 엔스크립트 스페셜리스트 등극
- · EnCase에서 지원하지 않는 기능을 본인이 제작 가능
- · 로컬라이제이션 가능

## 단점

ㆍ해보면 단점이 뭔지 알게됨

받는다 질문 안해도 된다 그냥 해본다

# 자러간다