

# 윈도우 소프트웨어 Zero-Day Hunting 2주차

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# 목 차

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Crash Results

Crash Analysis

# Crash results



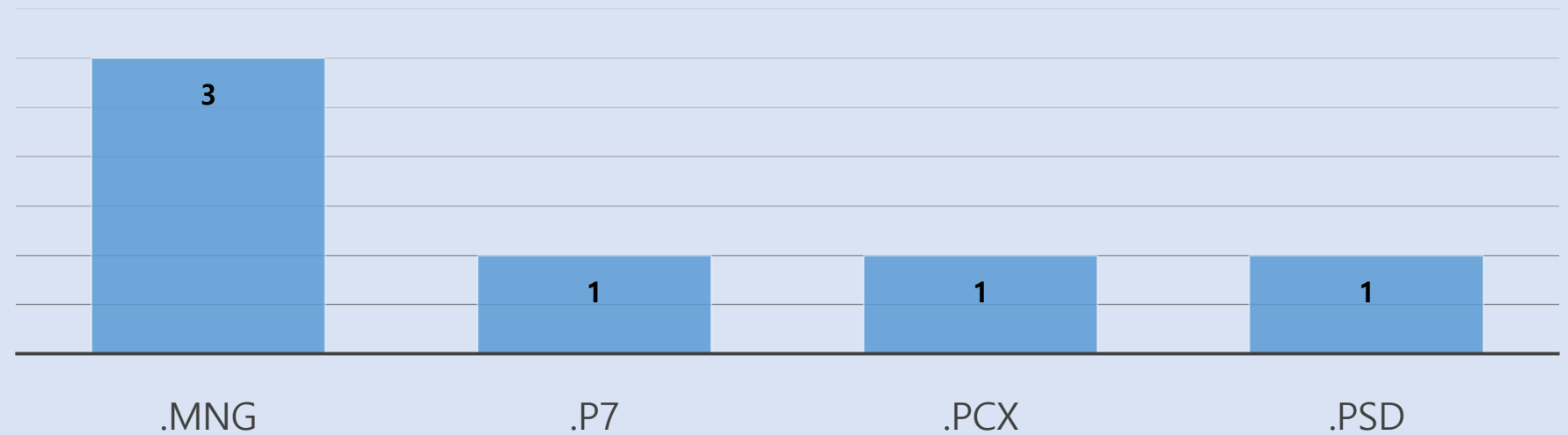
한씨

회사에서도 무료! 가볍고 빠른  
이미지뷰어

인기  | 평점 3.6 | 프리



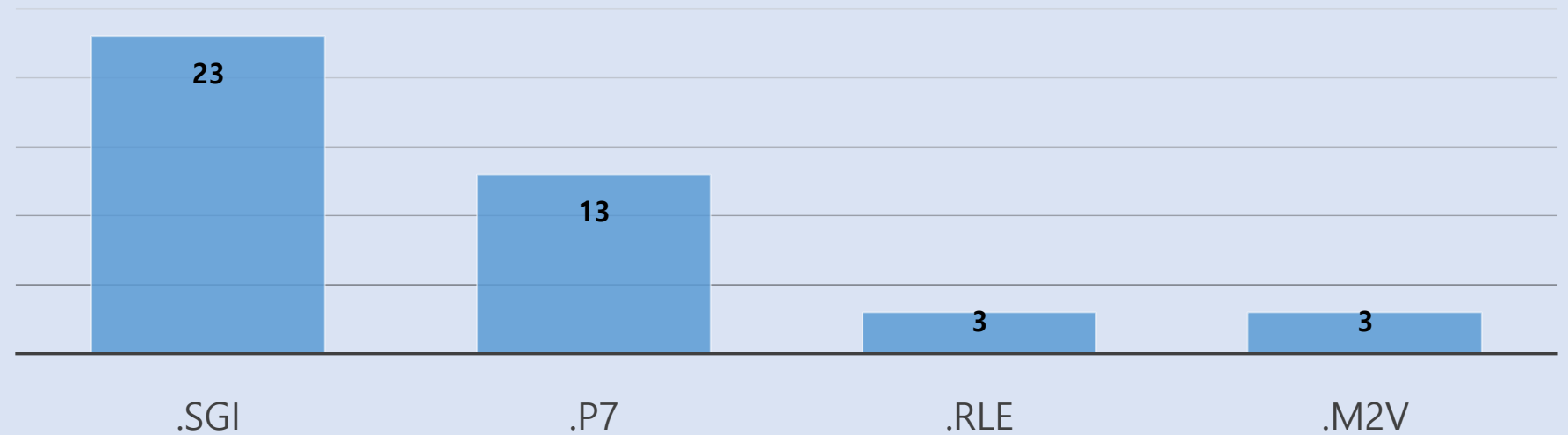
## 한씨 Exploitable Crash results



# Crash results



## 포커스온 Exploitable Crash results

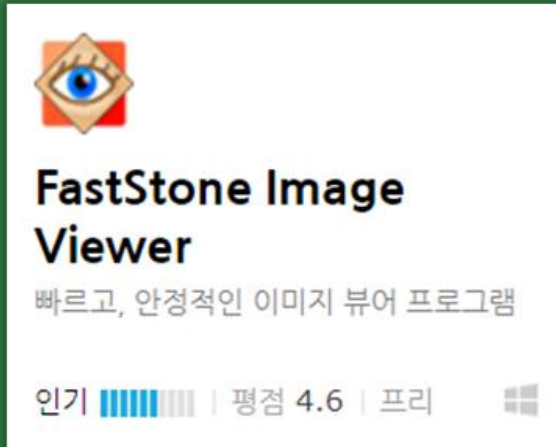


### 포커스온 이미지 뷰어

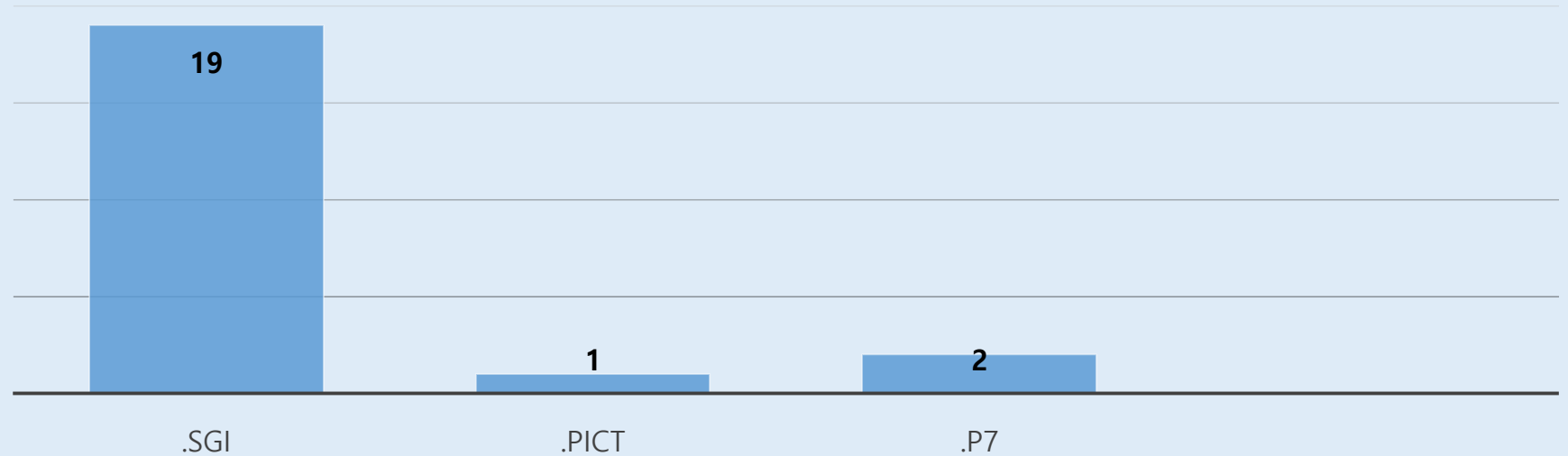
가볍고 빠른 사진 관리, 이미지 뷰어 프로그램

인기 | 평점 4.4 | 프리

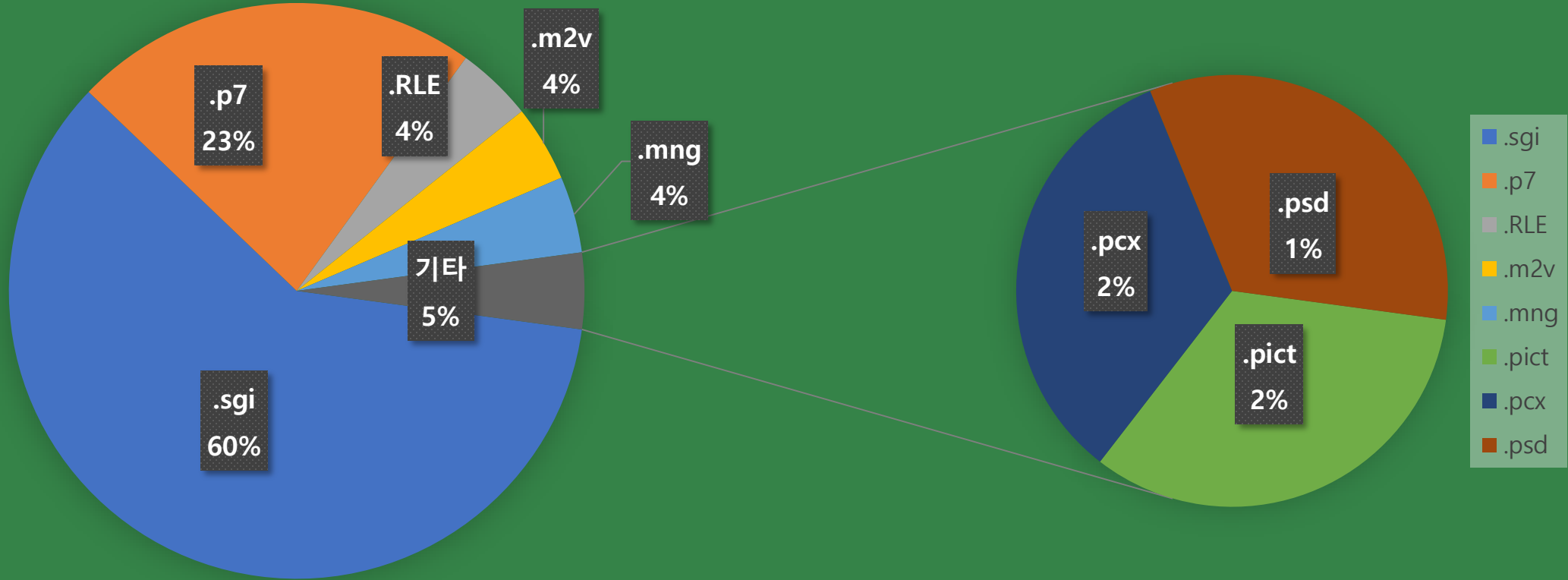
# Crash results



## FastStone Exploitable Crash results

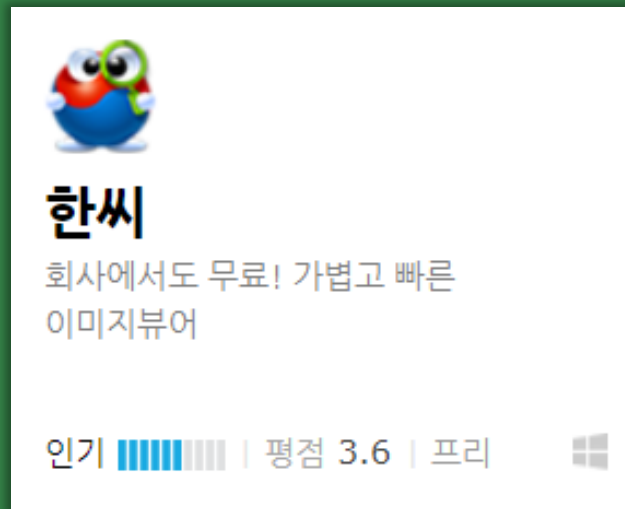


# Crash results



Extension percent

# Crash Analysis





00000A70	64	50	34	21	CF	00	00	00	0D	49	48	44	52	00	00	00	dP4!İ....IHDR...
00000A80	30	00	00	00	30	08	02	00	00	00	D8	60	6E	D0	00	00	0...0.....Ø`nĐ..

원본 파일

00000A70	64	50	34	21	CF	00	00	00	0D	49	48	44	52	00	00	00	dP4!İ....IHDR...
00000A80	30	00	00	33	30	08	02	00	00	00	D8	60	6E	D0	00	00	0...30.....Ø`nĐ..

Crash 파일



MNG = ( Multiple-image Network Graphics )

MNG 서명
MHDR
Frame
LOOP-ENDL
SEEK
Other Data
MEND

MNG datastream

# Crash Analysis



MNG signature
MHDR
Frame
LOOP-ENDL
SEEK
Other Data
MEND

MNG datastream

MNG signature (8-byte)

MNG datastream 최상위 data

하나 이상의 Layer

동일한 청크 반복 방지

datastream point 표시

이미지 및 기타 객체 생성

MNG datastream의 끝

Frame

하나 이상의 Layer

Layer : PNG or JNG datastream or MNG BASI chunk

```
00000A70  64 50 34 21 CF 00 00 00 0D 49 48 44 52 00 00 00 dP4!İ....IHDR...
00000A80  30 00 00 33 30 08 02 00 00 00 D8 60 6E D0 00 00 0..30.....Ø`nD..
```

PNG = ( Portable Network Graphics )

IHDR

IDAT

00000A70	64	50	34	21	CF	00	00	00	0D	49	48	44	52	00	00	00	dP4!İ....IHDR...
00000A80	30	00	00	33	30	08	02	00	00	00	D8	60	6E	D0	00	00	0..30.....Ø`nD..

IEND

PNG = ( Portable Network Graphics )

IHDR

```
00000A70  64 50 34 21 CF 00 00 00 0D 49 48 44 52 00 00 00  dP4!İ....IHDR...
00000A80  30 00 00 33 30 08 02 00 00 00 D8 60 6E D0 00 00  0..30.....Ø`nD..
```

# | Crash Analysis



<b>Length(13)</b>
<b>Chunk type(4)</b>
<b>Width(4)</b>
<b>Height(4)</b>
<b>Bit depth(1)</b>
<b>Color Type(1)</b>
<b>Compression method(1)</b>
<b>Filter method(1)</b>
<b>Interlace method(1)</b>

# Crash Analysis



```
00000A70 64 50 34 21 CF [00 00 00 0D 49 48 44 52 00 00 00 dP4!İ....IHDR...
00000A80 30 00 00 33 30 08 02 00 00 00 00] D8 60 6E D0 00 00 0..30.....Ø`nD..
```

Length = 00 00 00 0D

Chunk type = 49 48 44 52

Width = 00 00 00 30

Height = 00 00 33 30

Bit depth = 08

Color Type = 02

Compression method = 00

Filter method = 00

Interlace method = 00

Length(13)
Chunk type(4)
Width(4)
Height(4)
Bit depth(1)
Color Type(1)
Compression method(1)
Filter method(1)
Interlace method(1)

# Crash Analysis



This exception may be expected and handled.

```
eax=03f58fff ebx=0000001e ecx=03f58fff edx=00000010 esi=0000001e edi=02e4c9a0
eip=006daae9 esp=0019f788 ebp=0019f790 iopl=0         nv up ei pl nz na po nc
cs=0023  ss=002b  ds=002b  es=002b  fs=0053  gs=002b             efl=00210202
HanSee+0x2daae9:
006daae9 0fb67102          movzx    esi,byte ptr [ecx+2]          ds:002b:03f59001=??
```

First chance exceptions are reported before any exception handling.

This exception may be expected and handled.

```
eax=03620000 ebx=0000004d ecx=03620000 edx=0000001f esi=00000090 edi=02cfca10
eip=006daaf0 esp=0019f788 ebp=0019f790 iopl=0         nv up ei pl nz ac po nc
cs=0023  ss=002b  ds=002b  es=002b  fs=0053  gs=002b             efl=00210212
HanSee+0x2daaf0:
006daaf0 885902          mov     byte ptr [ecx+2],bl          ds:002b:03620002=90
```





감사합니다

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