

# Independent Tests of Anti-Virus Software



## Single Product Test

DeepInstinct scan engine

File Detection Test for VT Integration

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COMMISSIONED BY: DEEPIINSTINCT

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## Tested product

DeepInstinct is having the test performed in order to get its DeepLearning engine integrated into VirusTotal's online scanning service. According to a VirusTotal (VT) policy, any new engine to be integrated into VirusTotal requires an independent test, including an explicit check that the new solution/engine adds value to the ecosystem, and does not rely on VT results (directly or indirectly). The test has to be done with the same candidate (same solution/engine) to join VirusTotal.

DeepInstinct submitted their engine for this test. The engine was tested for its on-demand file detection capabilities the same way as it will be submitted to VirusTotal.

DeepInstinct asked to test the engine online, i.e. with access to **cloud-api.deepinstinctweb.com**. Because of this, a few checks have been done by AV-Comparatives to try to identify whether the cloud makes direct or indirect use of VT results. The scanner submits file hashes to the cloud, and does not appear to have an influence on the results (same results were reached when tested offline). The submitted engine is intended for scanning only PE files.

## File Detection Test

A file detection test using 1,000 malware samples and 1,000 clean samples has been conducted. This test evaluates how effective and accurate the DeepLearning engine of DeepInstinct reports malicious and clean files.

The used command line was as follows:

```
VirusTotalTool.exe -i <FULL/RELATIVE PATH FOR FILE TO SCAN> -o <OUTPUT PATH>
```

## Test Results

DeepInstinct engine malware detection rate	92.4%
False Alarm rate	0

As the test results confirm the submitted DeepLearning engine of DeepInstinct detected the majority of the malicious samples used in this test, showing that it adds value to the ecosystem. The above-mentioned detection rate was reached without falsely flagging any of the clean files used in this test. We can confirm that the engine does not directly nor indirectly rely on existing VirusTotal results in reaching its verdicts.

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