

# Annabelle RANSOMWARE DECRYPTION TOOL

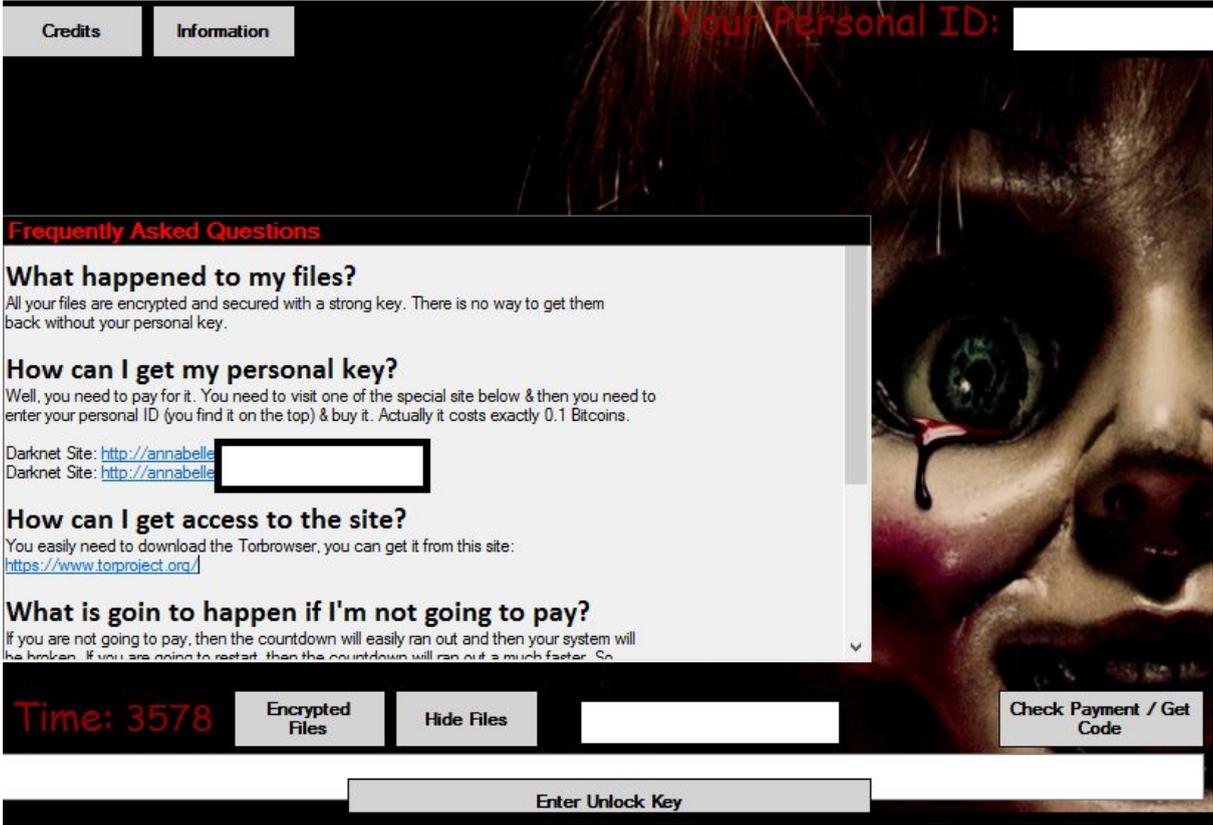
**Introduction:** This tool decrypts files encrypted by Annabelle ransomware. You can recognize this ransomware by the extension it appends to the encrypted files: (.ANNABELLE):

**clean.hivu.ANNABELLE**

The tool is available for download at the following address:

[http://download.bitdefender.com/am/malware\\_removal/BDAnnabelleDecryptTool.exe](http://download.bitdefender.com/am/malware_removal/BDAnnabelleDecryptTool.exe)

**Ransom-note:**



The screenshot displays the ransomware interface with a background image of a doll's face. At the top, there are tabs for "Credits" and "Information". A red label "Your Personal ID:" is followed by a white input field. Below this is a "Frequently Asked Questions" section with four questions and answers. At the bottom, there is a red "Time: 3578" label, a "Check Payment / Get Code" button, and an "Enter Unlock Key" input field.

**Credits** **Information** **Your Personal ID:**

**Frequently Asked Questions**

**What happened to my files?**  
All your files are encrypted and secured with a strong key. There is no way to get them back without your personal key.

**How can I get my personal key?**  
Well, you need to pay for it. You need to visit one of the special site below & then you need to enter your personal ID (you find it on the top) & buy it. Actually it costs exactly 0.1 Bitcoins.  
Darknet Site: <http://annabelle>   
Darknet Site: <http://annabelle>

**How can I get access to the site?**  
You easily need to download the Torbrowser, you can get it from this site:  
<https://www.torproject.org/>

**What is going to happen if I'm not going to pay?**  
If you are not going to pay, then the countdown will easily run out and then your system will be broken. If you are going to restart, then the countdown will run out a much faster. So

**Time: 3578** **Encrypted Files** **Hide Files**  **Check Payment / Get Code**

**Enter Unlock Key**

Annabelle encrypts user files using AES256 CBC with a hardcoded key and IV.

## Example of encrypted files:

 autoruns.am.ANNABELLE	2/23/2018 2:36 PM	ANNABELLE File	7,120 KB
 clean.hivu.ANNABELLE	2/23/2018 2:36 PM	ANNABELLE File	122,798 KB

**NOTE 1:** the malware locks the screen of the pc in the first phase and changes the MBR in the second phase. In order to be able to use the tool, the user should do the following :

- recover the MBR(replacement / change if possible via various tools)
- delete the registry keys and the malware remainans offline / rescue-CD
- use BDAnnabelleDecryptor tool to decrypt the files

**NOTE 2:** due to the encryption using AES, the size of the result message will be a multiple of 16 bytes. Therefore, upon decryption, there is a chance that a few bytes will remain at the end of the file (max 15). This should not affect the file and they cannot be removed during decryption since there is no mark of the original file size.

## Steps for decryption:

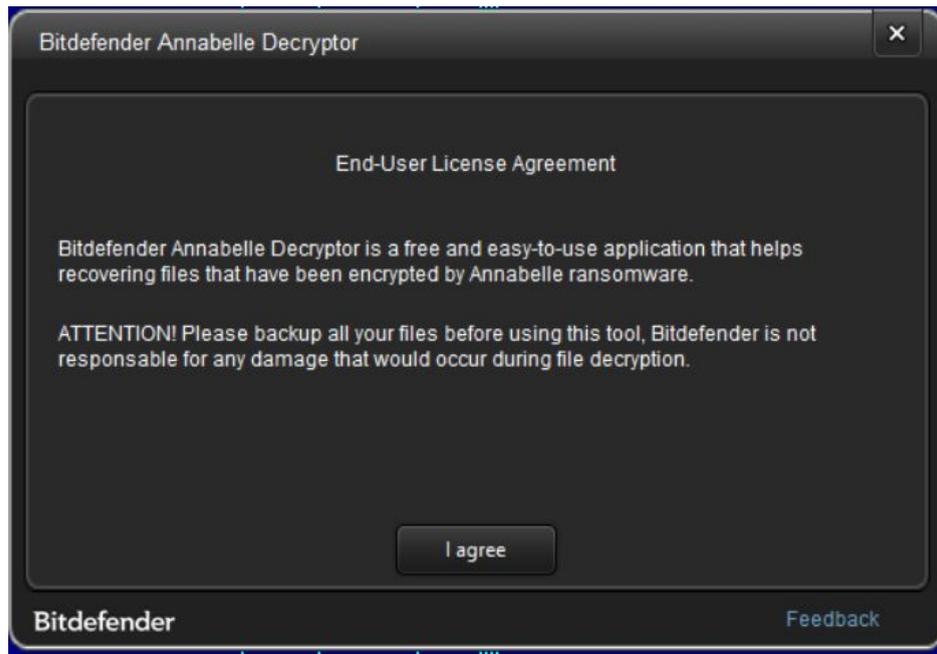
**Step 1:** Download the decryption tool from

[http://download.bitdefender.com/am/malware\\_removal/BDAnnabelleDecryptor.exe](http://download.bitdefender.com/am/malware_removal/BDAnnabelleDecryptor.exe) and save it somewhere on your computer

**Step 2:** Double-click the file (previously saved as BDAnnabelleDecryptor.exe) and allow it to run by clicking Yes in the UAC prompt.

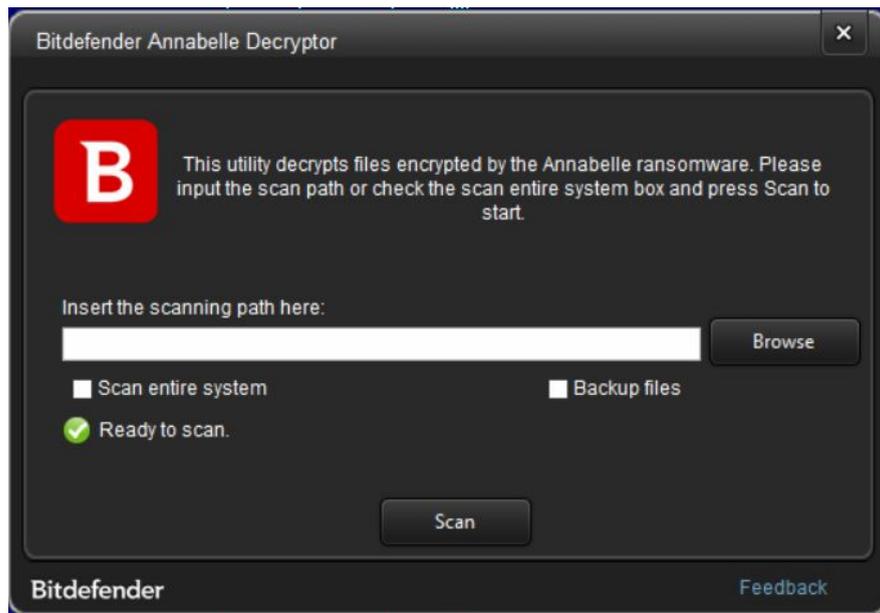


**Step 3:** Select “I Agree” for the End User License Agreement



**Step 4:** Select “Scan Entire System” if you want to search for all encrypted files or just add the path to your encrypted files.

We strongly recommend that you also select “Backup files” before starting the decryption process, should anything occur while decrypting. Then press “Scan”.



At the end of this step, your files should have been decrypted.

If you encounter any issues, please contact us at [forensics@bitdefender.com](mailto:forensics@bitdefender.com).

If you checked the backup option, you will see both the encrypted and decrypted files. You can also find a log describing decryption process, in `%temp%\BDRemovalTool` folder:

```
Decrypt Files:
Decrypt [C:\Users\
Decrypt [C:\Users\
Decrypt [C:\Users\
encryptedNautoruns.arp.ANNABELLE]: [SUCCESS]
encryptedNbla.ANNABELLE]: [SUCCESS]
encryptedNclean.hiv.ANNABELLE]: [SUCCESS]
```

### Acknowledgement:

This product includes software developed by the OpenSSL Project \* for use in the OpenSSL Toolkit (<http://www.openssl.org/>)"