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# **Invalid Checksum**

Forum / TapLinx Developers / Invalid Checksum

Tagged: 3DES, checksum, ev1

7. September 2020 at 16:09

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Joel Russell

★☆☆☆☆



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I am attempting to read data from a Desfire EV1 using TapLinx 1.7.

The cards have one application with multiple files and 3DES encryption.

I call (we say for example that file 2 has 8 bytes):

objDESFireEV1.authenticate(keyNo, IDESFireEV1.AuthType.Native, KeyType.THREEDES, kd); byte[] data = objDESFireEV1.readData(3,0,10, IDESFireEV1.CommunicationType.Enciphered, 10); String stringData = Utilities.bytesToString(data); Log.d(TAG, "Bytes as string: " + stringData);

Whenever I go to read the card I get SecurityException: Invalid Checksum

The authentication is cleraly working in some sense because if I change the key, I get 'Authetnication error'

Even stranger, if I switch to AuthType.ISO, I get returned bytes, but they are different and random every time! Does anyone know why this could happen?

Many thanks

+0 | -0

7. September 2020 at 16:14 Re: Invalid Checksum

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**TapLinx Support** 

I must test this code snippet on my Android device. Please give me one more day.

By the way: why do you use 3DES cipher? Do you must be compatible with an existing project? I recommend using only AES cipher as most secure cipher. All DES implementations are for backward compatibility.

The TapLinx team

+0 | -0

Re: Invalid Checksum 16. September 2020 at 11:15

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Sorry for the delay, but we all are very busy at the moment.

The authentication was also ask in previous posts. In the answers you will find code snippets and this might help you.

Please check this links:

https://www.mifare.net/support/forum/topic/authentication-error-with-taplinx-1-3-and-1-4-but-ok-with-taplinx-1-2/#post-30886

https://www.mifare.net/support/forum/topic/desfireev1-changekey-fail/#post-21296

https://www.mifare.net/support/forum/topic/desfire-ev1-cant-change-key-back-to-default/#post-22645

The TapLinx team

+0 | -0

22. April 2021 at 19:15

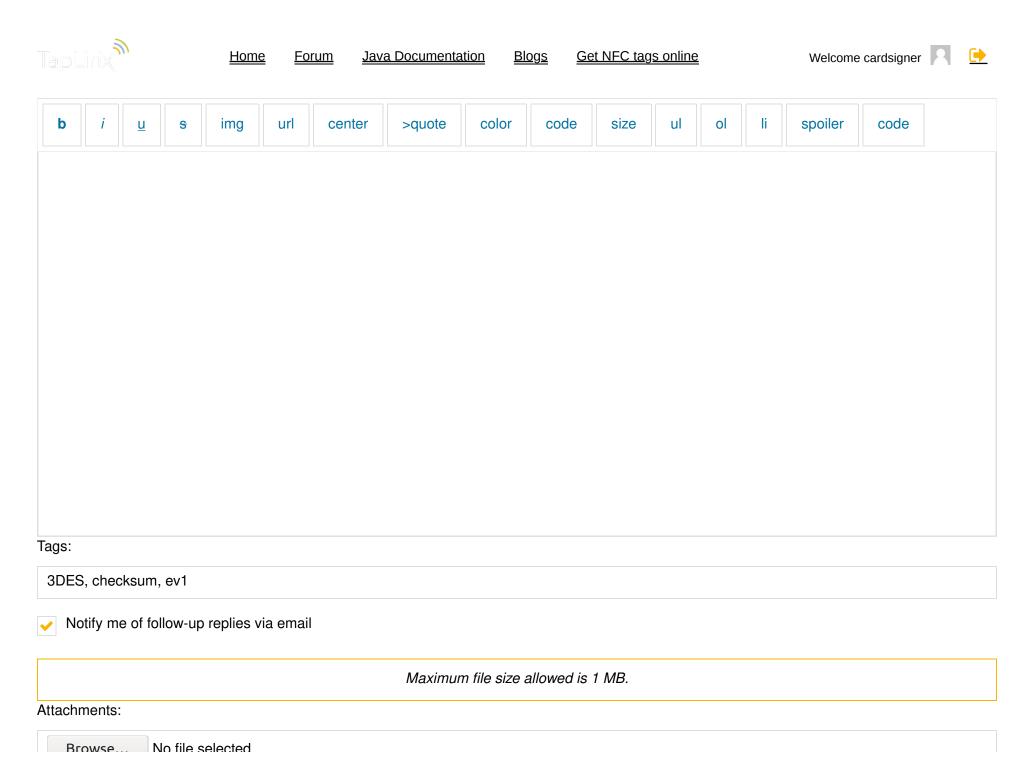
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dexter



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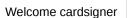
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