

ndn-cxx - Bug #2629

Exclude: cannot decode ImplicitSha256DigestComponent

03/09/2015 05:24 PM - Ilya Moiseenko

Status:	Closed	Start date:	03/09/2015
Priority:	Normal	Due date:	
Assignee:	Ilya Moiseenko	% Done:	100%
Category:	Base	Estimated time:	1.50 hour
Target version:	v0.4		
Description			
Snippet to reproduce:			
<pre>// g++ -std=c++0x x.cpp \$(pkg-config --cflags --libs libndn-cxx) #include <ndn-cxx/exclude.hpp> using ndn::Exclude; using ndn::Block; int main() { uint8_t WIRE[] = { 0x10, 0x22, // Exclude 0x01, 0x20, // ImplicitSha256DigestComponent 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd, 0xdd }; Block block(WIRE, sizeof(WIRE)); Exclude exclude; exclude.wireDecode(block); return 0; }</pre>			
Expect: no error			
Actual: Exclude::wireDecode throws ndn::Exclude::Error			

History

#1 - 03/09/2015 10:58 PM - Junxiao Shi

- Subject changed from Exclude with implicit digest to Exclude: cannot decode ImplicitSha256DigestComponent
- Description updated
- Category set to Base
- Target version set to v0.4
- Estimated time set to 1.50 h

#2 - 03/10/2015 04:28 PM - Ilya Moiseenko

- Assignee set to Ilya Moiseenko

#3 - 03/10/2015 05:10 PM - Ilya Moiseenko

- Status changed from New to Code review
- % Done changed from 0 to 100

#4 - 03/11/2015 06:19 PM - Junxiao Shi

The origin of this Bug is: a new name::Component type is introduced, but Exclude is hard-coded to recognize NameComponent type only.

The solution in commit:09392456c5213e0e1504b7f0c8165c3d5d014529 explicitly lists ImplicitSha256DigestComponent in Exclude element decode procedure.

This is a correct solution, but it cannot prevent same Bug to occur when another name::Component type is introduced (eg. [#2012](#)).

Suggested solution is:

1. introduce bool isValidType(uint32_t type) predicate as a static method of name::Component class
2. call this predicate in Exclude decode procedure, and other places where (a) testing for name::Component types is needed (b) logic does not differ by each type.

#5 - 04/03/2015 01:11 PM - Alex Afanasyev

- Status changed from Code review to Closed

Files

consumer-exclude.cpp	2.76 KB	03/10/2015	Ilya Moiseenko
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