

NFD - Task #4989

Error out if both localhop_security and auto_prefix_propagate are enabled

08/30/2019 12:35 PM - Davide Pesavento

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Wenkai Zheng	% Done:	100%
Category:	RIB	Estimated time:	0.00 hour
Target version:	v0.7		
Description			
We should give a clear error message rather than misbehaving when both sections are enabled in nfd.conf. https://www.lists.cs.ucla.edu/pipermail/nfd-dev/2019-August/003755.html			
Related issues:			
Blocks NFD - Task #5045: Release 0.7.0		Closed	

History

#1 - 08/30/2019 12:39 PM - Junxiao Shi

Disagree. The proper solution of the root cause is letting every node have a different command prefix for prefix registrations, as described in [#3142](#) and [#3143](#).

#2 - 08/30/2019 01:22 PM - Davide Pesavento

Oh, I don't disagree with fixing the root issues, but given that there has been no progress in 4 years, I don't expect them to be resolved any time soon. In the meantime, we should clearly communicate to our users that the two settings are mutually incompatible.

#3 - 08/31/2019 04:59 PM - Wenkai Zheng

Hi, for error message, which part do you want it to add in nfd.conf.sample.in, on both localhop_security part and auto_prefix_propagate part?

#4 - 09/01/2019 12:58 PM - Wenkai Zheng

- Assignee set to Wenkai Zheng

#5 - 09/01/2019 03:54 PM - Davide Pesavento

You can add a note about the incompatibility in nfd.conf.sample.in, in both sections, but that's not the main goal of this task. The "error message" mentioned in the description must be raised by NFD at runtime, if the config is incorrect. That means throwing a ConfigFile::Error exception. There are plenty of similar cases in the codebase, for instance take a look at daemon/face/*-factory.cpp.

#6 - 09/01/2019 11:36 PM - Wenkai Zheng

Thanks for that example. I am thinking the config file is related with rib/service.cpp and there is a ApplyConfig function. If the section has localhop_security already and in next loop it has auto_prefix_propagate should this situation be incorrect for throwing exception.

#7 - 09/04/2019 07:48 AM - Wenkai Zheng

Is ApplyConfig function in rib/service.cpp a right place to add code ?

#8 - 09/06/2019 09:37 PM - Ju Pan

Wenkai Zheng wrote:

Is ApplyConfig function in rib/service.cpp a right place to add code ?

I think you are targeting at the correct file. But it seems more likely that the function you should work on is Service::checkConfig. E.g. if in a loop you see CFG_LOCALHOP_SECURITY and in another loop you see CFG_PREFIX_PROPAGATE, you need to throw an error.

#9 - 09/16/2019 05:06 PM - Wenkai Zheng

- % Done changed from 0 to 90

#10 - 11/02/2019 11:29 AM - Davide Pesavento

- Status changed from New to Code review

- Target version set to v0.7

Apparently NFD-Android enables both these sections in the [default config](#). Anyone knows why?

#11 - 11/02/2019 04:06 PM - Ju Pan

A basic question: what is the problem when both localhop_security and auto_prefix_propagate are enabled?

My understanding is there are only two combinations:

1. localhost + auto_prefix_propagate: prefix registrations on NFD are propagated to the connected gateway router
2. localhop: NFD expects prefix registrations from apps running on remote machines.

Why can't localhop work with auto_prefix_propagate? I must misunderstand something here.

Thanks in advance.

#12 - 11/04/2019 12:17 PM - Alex Afanasyev

Davide Pesavento wrote:

Apparently NFD-Android enables both these sections in the [default config](#). Anyone knows why?

This was done in commit:449a431db2d67d98bb7d6aaad35696fdd26ed0ca to "fix" self-learning, with the disclaimer that this is a temporary solution and be replaced with the proper trust management inside NDN android app later.

#13 - 11/04/2019 02:09 PM - Davide Pesavento

Ah thanks, I remember now. It shouldn't be a problem then. Self-learning is [switching to its own validator](#) instead of abusing the localhop validator. So NFD-Android can simply disable localhop_security again when it gets updated to the new NFD (and enable prefix_announcement_validation for self-learning).

#14 - 11/04/2019 03:00 PM - Davide Pesavento

- Blocks Task #5045: Release 0.7.0 added

#15 - 11/05/2019 11:43 AM - Davide Pesavento

- Status changed from Code review to Closed

- % Done changed from 90 to 100