

## NFD - Feature #4805

### Process CanBePrefix and drop Selectors

01/13/2019 03:38 PM - Junxiao Shi

|  |             |                        |            |
|--|-------------|------------------------|------------|
| <b>Status:</b>   | Closed      | <b>Start date:</b>     |            |
| <b>Priority:</b>   | Normal      | <b>Due date:</b>       |            |
| <b>Assignee:</b>   | Junxiao Shi | <b>% Done:</b>         | 100%       |
| <b>Category:</b>   | Tables      | <b>Estimated time:</b> | 9.00 hours |
| <b>Target version:</b>   | v0.7        |                        |            |
| <b>Description</b><br>In PIT and CS, <b>process Interest CanBePrefix element</b> and stop processing deprecated Selectors. This includes necessary adjustments to PIT structure, as well as deleting old test cases. |             |                        |            |
| <b>Related issues:</b><br>Blocks ndn-cxx - Feature #4567: Encode Interest into v0.3 format and drop sup... <b>Closed</b>   |             |                        |            |

#### History

##### #1 - 01/13/2019 03:38 PM - Junxiao Shi

- Blocked by Feature #4567: Encode Interest into v0.3 format and drop support for v0.2 format added

##### #2 - 01/13/2019 03:40 PM - Junxiao Shi

- Description updated

##### #3 - 04/11/2019 05:58 AM - Junxiao Shi

- Status changed from New to In Progress

- Assignee set to Junxiao Shi

##### #4 - 04/11/2019 06:47 AM - Junxiao Shi

<https://gerrit.named-data.net/5399> eliminates Selectors from CS tests; it also promotes FindFixture to CsFixture for simplifying CS policy tests.

Rationale for changes in TestCs/Find suite:

- EmptyInterestName: deleting because zero-component Interest name is forbidden by spec
- ExactName: splitting to ExactName (CanBePrefix=false) and ExactName\_Cbp (CanBePrefix=true)
- EmptyDataName: changing to FullName\_EmptyDataName with implicit digest included in Interest name, because zero-component Interest name is forbidden by spec
- Leftmost: renaming to PrefixName and adding CanBePrefix=true; also creating PrefixName\_NoCbp with CanBePrefix=false
- Rightmost, MinSuffixComponent, MaxSuffixComponent, DigestOrder, DigestExclude: deleting because Selectors are gone

##### #5 - 04/16/2019 05:50 AM - Junxiao Shi

<https://gerrit.named-data.net/5402> stops processing ChildSelector in CS implementation. It also converts some function objects into template arguments for better performance.

Processing of other Selectors comes from Interest::matchesData that belongs to [#4913](#).

##### #6 - 04/16/2019 05:50 AM - Junxiao Shi

- % Done changed from 0 to 50

##### #7 - 04/16/2019 08:21 AM - Junxiao Shi

Currently, I'm simply removing ChildSelector processing without further optimization.

I recognize the opportunity of reducing "prefix range" when CanBePrefix is unset, but I'd defer that to [#4914](#).

##### #8 - 04/19/2019 08:18 AM - Junxiao Shi

From <https://gerrit.named-data.net/5402>:

code is fine but this should be merged after [#4916](#)

I disagree. According to [0.6.5 release notes](#):

Note that this is the last release that encodes to NDN packet format version 0.2.1. A future release will continue to decode v0.2.1 format, but will encode to v0.3 format.

There's no need to wait for any more releases.

**#9 - 05/07/2019 12:28 PM - Junxiao Shi**

- % Done changed from 50 to 70

<https://gerrit.named-data.net/5443> eliminates Selectors from PIT tests.

**#10 - 05/08/2019 09:27 AM - Junxiao Shi**

- Status changed from In Progress to Code review

- % Done changed from 70 to 100

Given the changes needed to drop Selectors processing in PIT is minimal, they are now part of Change 5443. There are a lot of optimization possible after these changes, but they should belong to another issue.

**#11 - 05/09/2019 09:48 AM - Junxiao Shi**

- Blocked by deleted (Feature #4567: Encode Interest into v0.3 format and drop support for v0.2 format)

**#12 - 05/15/2019 01:50 PM - Junxiao Shi**

- Status changed from Code review to Closed

**#13 - 07/20/2019 11:57 AM - Davide Pesavento**

- Blocks Feature #4567: Encode Interest into v0.3 format and drop support for v0.2 format added