

NFD - Feature #2219

CS policy: LRU

11/24/2014 07:57 PM - Spyros Mastorakis

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Minsheng Zhang	% Done:	100%
Category:	Tables	Estimated time:	3.00 hours
Target version:	v0.4		
Description			
Develop a Least Recently Used policy for ContentStore.			
Related issues:			
Blocked by NFD - Feature #1207: CS policy interface		Closed	02/26/2015

History

#1 - 11/24/2014 08:02 PM - Junxiao Shi

- Is duplicate of Feature #1207: CS policy interface added

#2 - 11/29/2014 06:11 PM - Junxiao Shi

- Tracker changed from Task to Feature
- Subject changed from Replacement policies in CS. to Replacement policies in CS
- Category set to Tables
- Start date deleted (11/24/2014)

#3 - 04/09/2015 10:55 AM - Junxiao Shi

- Subject changed from Replacement policies in CS to CS policy: LRU
- Description updated
- Estimated time set to 3.00 h

#4 - 04/09/2015 10:55 AM - Junxiao Shi

- Is duplicate of deleted (Feature #1207: CS policy interface)

#5 - 04/09/2015 10:55 AM - Junxiao Shi

- Blocked by Feature #1207: CS policy interface added

#6 - 07/27/2015 03:56 PM - Junxiao Shi

- Assignee set to Minsheng Zhang
- Target version set to v0.4

#7 - 07/27/2015 04:31 PM - Minsheng Zhang

Should this feature be normal LRU policy or Priority-LRU policy like the default Priority-fifo?

#8 - 07/27/2015 10:26 PM - Junxiao Shi

Reply to note-7:

This is regular LRU.
Forget about unsolicited.

#9 - 07/28/2015 10:01 AM - Minsheng Zhang

- Status changed from New to In Progress
- % Done changed from 0 to 20

#10 - 08/06/2015 01:57 PM - Junxiao Shi

Do I need to update NFD develop guide for Policy LRU?

Yes. Add a paragraph after "priority FIFO cache policy" to describe LRU policy, and how to select this policy at compile time (eg. what files to modify).

#11 - 08/07/2015 02:09 PM - Minsheng Zhang

- % Done changed from 20 to 90

NFD development guide updated

#12 - 08/12/2015 05:43 PM - Junxiao Shi

In nfd-docs:commit:95c0794f0c18ea7c83f11c1ae45ba998e9b6f172, **LRU cache policy** is described as:

At any time, when an entry is used or refreshed, its Table iterator is relocated to the head of the queue.
Or when an entry is newly inserted, its Table iterator is pushed at the tail of the queue.
When an entry is evicted, its Table iterator erased from the head of its Queue,

This means:

- Head of queue has last accessed entry, and last re-inserted (refreshed) entry.
- Tail of queue has last newly inserted entry.
- Head of queue is evicted first.

Questions:

- Why is "newly inserted" and "re-inserted (refreshed)" processed differently?
- Why is last accessed entry (head of queue) evicted first?

#13 - 08/13/2015 08:36 AM - Minsheng Zhang

- Why is "newly inserted" and "re-inserted (refreshed)" processed differently?
- Why is last accessed entry (head of queue) evicted first?

I gave wrong description about this. Re-inserted entry actually is relocated to tail of the queue. So last accessed entry is not evicted first. "Newly inserted" and "re-inserted (refreshed)" should be processed same, both put to tail of the queue.

#14 - 08/17/2015 05:48 AM - Junxiao Shi

- Status changed from In Progress to Closed

- % Done changed from 90 to 100

I confirm documentation is correctly updated in nfd-docs:commit:a40f2c402cd457702e1bedabb9bd3cd56fa92a2d.