rgw: list bucket with delimiter wrongly skip some special keys

Description:
list with delimiter will skip subfile with directory + after_delim_s,
but the code wrongly add after_delim_s to next marker regardless it have directory.

some example: we have objects like

bucket/0/
bucket/1001
...
bucket/1999
bucket/1999#
bucket/1999+
bucket/2000

first time list get last key = bucket/1999, and the current code will add "/0xff" after 1999 to be next_marker, which cause the 1999#
and 1999+ skipped.

Related issues:
Related to rgw - Bug #47487: rgw: ordered bucket listing code clean-up Resolved
Copied to rgw - Backport #41484: mimic: rgw: list bucket with delimiter wrong... Resolved
Copied to rgw - Backport #41485: nautilus: rgw: list bucket with delimiter wr... Resolved
Copied to rgw - Backport #41486: luminous: rgw: list bucket with delimiter wr... Rejected

History
#1 - 07/23/2019 01:52 PM - Tianshan Qu
https://github.com/ceph/ceph/pull/29215

#2 - 07/23/2019 02:04 PM - Matt Benjamin
- Status changed from New to Triaged
- Backport set to nautilus,mimic,luminous

need test case(s)

#3 - 07/23/2019 02:18 PM - Casey Bodley
- Pull request ID set to 29215

#4 - 07/25/2019 05:47 PM - Abhishek Lekshmanan
- Status changed from Triaged to In Progress
@tianshan,

I've been trying to reproduce on an unpatched branch, using RGW NFS. I do have https://github.com/ceph/ceph/pull/29670, which fixes a bug with NFS-generated markers in a pseudo-directory immediately below /bucket.

I did the following, which intends to match your test case--/folder/tianshan is a bucket:

```
1211  mount -tnfs lemon:/userx /folder -o sync
1212  cd /folder
1213  ls
1214  mkdir tianshan
1215  cd tianshan/
1216  ls
```

(unmount and restart of ganesha, then remount--to ensure that a listing is done)

[root@lemon /]# ls /folder/tianshan/
```
f1001  f1002  f1999  f1999#  f1999+  f2000
```

I adjusted this slightly by creating files f1000..f1999 as well, so that f1999+ should be next_marker, but did not see it skipped.

I think we need a discrete test case.

Matt

#7 - 08/22/2019 05:53 PM - Matt Benjamin
- Status changed from 17 to Pending Backport

#8 - 08/26/2019 08:06 AM - Tianshan Qu
@Matt Benjamin

need an extra directory before the f1999+ to trigger the skip logical, such as f0/, otherwise the skip_after_delim will not have value.

#9 - 08/26/2019 02:50 PM - Nathan Cutler
- Copied to Backport #41484: mimic: rgw: list bucket with delimiter wrongly skip some special keys added

#10 - 08/26/2019 02:50 PM - Nathan Cutler
- Copied to Backport #41485: nautilus: rgw: list bucket with delimiter wrongly skip some special keys added

#11 - 08/26/2019 02:50 PM - Nathan Cutler
- Copied to Backport #41486: luminous: rgw: list bucket with delimiter wrongly skip some special keys added

#12 - 09/14/2020 09:05 PM - J. Eric Ivancich
- Status changed from Pending Backport to Resolved

#13 - 09/15/2020 08:11 PM - J. Eric Ivancich
- Related to Bug #47487: rgw: ordered bucket listing code clean-up added