Item 55
git_comments:

1. asking for docs only: ok
2. sugar method (FREQS)
3. reuse
4. but make sure they work
5. we don't define what it is, but if its something else, we should look into it?
6. **comment:** now reuse the positions
   label: code-design
7. payloads don't cause an error if they aren't there
8. asking for positions, ok
9. payloads, offsets, etc don't cause an error if they aren't there
10. reuse that too
11. simple use (FREQS)
12. asking for any flags: ok
13. **comment:** termsenum reuse (FREQS)
    label: code-design
14. and it had better work
15. payloads
16. simple usage (FREQS)

git_commits:

1. **summary:** LUCENE-6271: add vectors tests for postings enum api
   message: LUCENE-6271: add vectors tests for postings enum api git-svn-id: https://svn.apache.org/repos/asf/lucene/dev/branches/lucene6271@1671160 13f79535-47bb-0310-9956-ffa450edef68

github_issues:

github_issues_comments:

github_pulls:

github_pulls_comments:

github_pulls_reviews:

jira_issues:

1. **summary:** PostingsEnum should have consistent flags behavior
   description: When asking for flags like OFFSETS or PAYLOADS with DocsAndPositionsEnum, the behavior was to always return an enum, even if offsets or payloads were not indexed. They would just not be available from the enum if they were not present. This behavior was carried over to PostingsEnum, which is good. However, the new POSITIONS flag has different behavior. If positions are not available, null is returned, instead of a PostingsEnum that just gives access to freqs. This behavior is confusing, as it means you have to special case asking for positions (only ask if you know they were indexed) which sort of defeats the purpose of the unified PostingsEnum. We should make POSITIONS have the same behavior as other flags. The trickiest part will be maintaining backcompat for DocsAndPositionsEnum in 5.x, but I think it can be done.

jira_issues_comments:

1. **body:** I agree, Terms.hasPositions(), Terms.hasFreqs(), Terms.hasPayloads(), Terms.hasOffsets() should be used for these checks up-front. For the backwards behavior, in 5.x we could use an internal flag to make this work. We still need to improve the flags anyway (e.g. to not overlap, and for the new ones to be a little simpler). This is probably good to do first, I sitll have the issue open for it.
   label: code-design

2. Commit 1662155 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1662155] LUCENE-6271: start a branch for heavy lifting
3. Commit 1662157 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1662157] LUCENE-6271: initial patch, postings() funcs switched over to not return null, callers marked with nocommits that check against null
4. Commit 1670257 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670257] LUCENE-6271: sync up with trunk
5. Commit 1670368 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670368] LUCENE-6271: fix MultiPhraseQuery's positions check
6. Commit 1670380 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670380] LUCENE-6271: simplify CheckIndex's PostingsEnum uses
7. Commit 1670384 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670384] LUCENE-6271: fix more nocommits in postings tests and solr uses
8. Commit 1670396 from [~mikemccand] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670396] LUCENE-6271: PhraseQuery -> MultiPhraseQuery in exc message
9. Commit 1670406 from [~mikemccand] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670406] LUCENE-6271: DirectPF was using the wrong PostingsEnum impl for the incoming requested flags
10. Commit 1670413 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670413] LUCENE-6271: more nocommit removals for phrase/span term
11. Commit 1670414 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670414] LUCENE-6271: change this nocommit to a TODO, actually we should test more possibilities since the codec might specialize
12. Commit 1670416 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670416] LUCENE-6271: fix postingshighlighter check
13. Commit 1670418 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670418] LUCENE-6271: fix javadocs, don't @see yourself, and make it clear you don't get positions unless you ask
14. Commit 1670419 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670419] LUCENE-6271: add verbosity to sugar method on LeafReader too
15. Commit 1670421 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670421] LUCENE-6271: fix nocommit in TestCodecs
16. Commit 1670422 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670422] LUCENE-6271: remove leftover nocommit in TestCodecs
17. Commit 1670423 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670423] LUCENE-6271: fix TestStressIndexing2 to just use hasPositions/hasOffsets, remove old crazy attributes logic that was not testing much
18. Commit 1670424 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670424] LUCENE-6271: fix nocommits in term vectors tests
19. Commit 1670425 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670425] LUCENE-6271: remove nocommit from LTC
20. Commit 1670429 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670429] LUCENE-6271: remove final nocommit
21. Commit 1670443 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670443] LUCENE-6271: fix check index on term vectors use of postings
22. Commit 1670454 from [~rjernst] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670454] LUCENE-6271: test fixes
23. Here is a patch against trunk based on the issue branch. All nocommits are gone, and tests pass at least in lucene. Still running more and heavier tests.
24. **body:** Commit 1670480 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670480] LUCENE-6271: fix confusing naming... TODO: address SortingDocsEnum too
    label: code-design
25. Commit 1670481 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670481] LUCENE-6271: fix this bad naming ref too
26. Commit 1670483 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670483] LUCENE-6271: fix bug in SortingDocsEnum
27. Commit 1670494 from [~mikemccand] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670494] LUCENE-6271: fix bug in CheckIndex: don't ask for offsets from

postings if they didn't have them

28. Commit 1670508 from [~mikemccand] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670508] LUCENE-6271: fix test to fail faster
29. Commit 1670511 from [~mikemccand] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670511] LUCENE-6271: fix LineFileDocs to not close itself; don't set daemon threads for ThreadedIndexingAndSearchingTestCase
30. Commit 1670525 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670525] LUCENE-6271: fix another test bug (happens in nightly more often) unrelated to this branch
31. Commit 1670529 from [~rcmuir] in branch 'dev/trunk' [https://svn.apache.org/r1670529] merge unrelated nightly test bugfixes from LUCENE-6271 branch
32. Commit 1670530 from [~rcmuir] in branch 'dev/branches/branch_5x' [https://svn.apache.org/r1670530] merge unrelated nightly test bugfixes from LUCENE-6271 branch
33. Commit 1670533 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670533] LUCENE-6271: merge trunk changes up to r1670529
34. Commit 1670547 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670547] LUCENE-6271: merge trunk changes up to r1670546
35. Commit 1670548 from [~rcmuir] in branch 'dev/branches/lucene_solr_5_1' [https://svn.apache.org/r1670548] merge unrelated nightly test bugfixes from LUCENE-6271 branch
36. Commit 1670670 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670670] LUCENE-6271: add simple test
37. Attached is the latest patch. Most of the bugs we have found in tests are unrelated to this change... just found by beasting with nightly=true. I beasted lucene/core in this branch with 25 runs last night successfully.
38. Commit 1670698 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670698] LUCENE-6271: bring test up to the new world
39. Commit 1670745 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670745] LUCENE-6271: Don't let Direct get a free pass on this test
40. **body:** Commit 1670748 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670748] LUCENE-6271: remove hardcoded foo and use field parameter in this test
    label: code-design
41. **body:** Commit 1670750 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1670750] LUCENE-6271: fold these tests into BasePostingsFormatTestCase, so we know all codecs adhere. TODO: clean up BPFTC reuse hooks, TODO: do the same for vectors
    label: code-design
42. Commit 1671160 from [~rcmuir] in branch 'dev/branches/lucene6271' [https://svn.apache.org/r1671160] LUCENE-6271: add vectors tests for postings enum api
43. As ryan mentioned in the email list, this one needs to be in 5.1 or we can never fix it without a tricky semantics-only change. I will help get this in, ive been hammering tests at it the last few days and I'm satisfied there. We added lots of tests that will get tested across all codecs (including older ones) so we know there aren't sneaky bugs. Basically, this is what we are saving our users from. Please just give me a few hours for each branch.
44. Commit 1671163 from [~rcmuir] in branch 'dev/trunk' [https://svn.apache.org/r1671163] LUCENE-6271: PostingsEnum should have consistent flags behavior
45. for the backport, I will add a deprecated flag to simulate the null behavior of before. This way the Docs/DocsAndPositionsEnum have the old semantics. TestLegacyPostings tests will move to BasePostingsFormatTestCase and BaseTermVectorsFormatTestCase so all codecs (especially backwards-codecs/) are explicitly tested with both the old Docs/DocsAndPositions and PostingsEnum api.
46. Commit 1671228 from [~rcmuir] in branch 'dev/branches/branch_5x' [https://svn.apache.org/r1671228] LUCENE-6271: PostingsEnum should have consistent flags behavior
47. Commit 1671239 from [~rcmuir] in branch 'dev/branches/lucene_solr_5_1' [https://svn.apache.org/r1671239] LUCENE-6271: PostingsEnum should have consistent flags behavior
48. Bulk close after 5.1 release
49. **body:** I think in this issue we forgot to update the javadocs of org.apache.lucene.index.TermsEnum#postings(org.apache.lucene.index.PostingsEnum, int) to remove mention of null being a valid return; it should be flipped to say it isn't valid, just like the overloaded one without the flags says. For a while I thought it was valid and I kept guarding against it and in one case wrote some ugly loop that downgrades bits until non-null. I don't believe it happened in practice but the docs allowed it so... [~rjernst] If you don't want to do it or are too busy, I could simply update the

javadocs on master & 7x. CC [~romseygeek] as LUCENE-4524 was highly related and was the commit that actually has the current javadocs about null being permitted.
label: code-design

50. Commit 79c2988547274612efd7ef589dc0afff76548640 in lucene-solr's branch refs/heads/master from [~dsmiley] [https://git-wip-us.apache.org/repos/asf?p=lucene-solr.git;h=79c2988] LUCENE-6271: docs: TermsEnum.postings(...) will not return null

51. Commit f22ab1b0b2e18edb3ce7a01142161ad199aad433 in lucene-solr's branch refs/heads/branch_7x from [~dsmiley] [https://git-wip-us.apache.org/repos/asf?p=lucene-solr.git;h=f22ab1b] LUCENE-6271: docs: TermsEnum.postings(...) will not return null (cherry picked from commit 79c2988)