

Item 33

git_comments:

1. 8 Test - special case, begin inside last slice block but outside asset len

git_commits:

1. **summary:** slice/handleFirstServerHeader: return sooner on requested range errors (#7486)
message: slice/handleFirstServerHeader: return sooner on requested range errors (#7486) (cherry picked from commit df01ace2b0bdffd3ddcc5b2c7587b6d6fed5234c)

github_issues:

github_issues_comments:

github_pulls:

1. **title:** slice/server: handleFirstServerHeader exit sooner on detected requested range errors.
body: When examining the first server response header with a bad range request the function should exit sooner. I was able to recreate a crash and added a test case for it.

github_pulls_comments:

1. Why is that? I've never heard that claim before. Testing with g++ back to 8.3, ``std::numeric_limits<int64_t>::max()`` works as a ``constexpr``, e.g. use of it causes a load immediate instruction, even at "-O0". If you want to be absolute certain, do this: ```` #include <type_traits> static_assert(std::integral_constant<int64_t, Range::maxval>::value); ```` If that compiles, it's a compile time constant.
2. I believe per the standard `numeric_limits` are `constexpr`. https://en.cppreference.com/w/cpp/types/numeric_limits/max lists it as `constexpr`. I'd say `numeric_limits` are more idiomatic for C++ than the `_MAX` macros. Out of curiosity, @traeak, did you run into an issue with `numeric_limits` that motivated this? Thanks,
3. Looks like the `handleFirstServerHeader` should return sooner when range errors are detected. `backtrace` seemed to indicate that this static var pointed to the same address as the first data member in that `Range` instance. That sent me in the wrong direction. `std::numeric_limits` has sometimes not behaved not very well with `msvc`, especially when used for default arg values.
4. Cherry-picked to v9.0.x branch. Cherry-picked to v9.1.x branch.

github_pulls_reviews:

1. These probably get optimized out but it's worthwhile cleanup.
2. It's not clear why this is being changed from `max / 4` to `max / 2`, or really why it's not just `max`. But I'll take it on faith.
3. it just has to be sufficiently large but not `max64`.

jira_issues:

jira_issues_comments: