Subject: Is there a non-allocating String similar to a string_view in NTL?
Posted by jjacksonRIAB on Sat, 28 May 2022 06:37:30 GMT
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I have a COW database that uses mmap and the String type seems to either allocate or move when I would like to just have a const pointer/len to memory itself. Is there anything in NTL that can do this?

Subject: Re: Is there a non-allocating String similar to a string_view in NTL?
Posted by Oblivion on Sat, 28 May 2022 06:41:59 GMT
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Quote:I have a COW database that uses mmap and the String type seems to either allocate or move when I would like to just have a const pointer/len to memory itself. Is there anything in NTL that can do this?

How about Upp::MemReadStream? If I understand you correctly, this seems to be what you need.

Best regards,

Oblivion

Subject: Re: Is there a non-allocating String similar to a string_view in NTL?
Posted by jjacksonRIAB on Sat, 28 May 2022 07:07:49 GMT
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Oblivion wrote on Sat, 28 May 2022 08:41Quote:I have a COW database that uses mmap and the String type seems to either allocate or move when I would like to just have a const pointer/len to memory itself. Is there anything in NTL that can do this?

How about Upp::MemReadStream? If I understand you correctly, this seems to be what you need.

Best regards,

Oblivion

Nice. How would that work though for deserialization without copy?

I try:

```
#include <Core/Core.h>

using namespace Upp;
```

```
CONSOLE_APP_MAIN {
    const char *test = "this is a test";
    MemReadStream ms(test, strlen(test));

    String test2;
    ms % test2;

    Cout() << test2;
}
```

And the result is empty. GetLine returns a new String, Put(Cout()) is also empty.

Subject: Re: Is there a non-allocating String similar to a string_view in NTL?
Posted by Oblivion on Sat, 28 May 2022 07:32:47 GMT
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Do you really need intermeadiary level?

```
    const char *test = "this is a test \n";
    MemReadStream ms(test, strlen(test));
    Cout().Put(ms); //cheap...
```

(De)serialization, which eventually involves copying if you're going to put the data into new String, can be done via Stream helpers.(Eg LoadStream, SaveStream et al.)

Best regards,
Oblivion

Subject: Re: Is there a non-allocating String similar to a string_view in NTL?
Posted by jjacksonRIAB on Sat, 28 May 2022 07:48:14 GMT
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Oblivion wrote on Sat, 28 May 2022 09:32Do you really need intermeadiary level?

```
    const char *test = "this is a test \n";
    MemReadStream ms(test, strlen(test));
    Cout().Put(ms); //cheap...
```

(De)serialization, which eventually involves copying if you're going to put the data into new String,

can be done via Stream helpers.(Eg LoadStream, SaveStream et al.)

Best regards,
Oblivion

Cool that works. ms.Put(Cout()) did not work.

Quote:
Do you really need intermeadiary level?

If it was just for display I'd be fine with copying, but suppose you wanted to perform a text search within the fields of a million mmaped records. It's a lot of unnecessary copying.
