axiomatic-systems / Bento4 Public <> Code • Issues 421 11 Pull requests 27 Actions Projects Wiki Jump to bottom New issue out-of-memory #747 Open WorldExecute opened this issue on Aug 28 · 0 comments WorldExecute commented on Aug 28 Hi, i find 3 out-of-memory errors in Bento4. I saved all my test files here

Here are the details. For mp4audioclip with test input: test 1: ______ ==6930==ERROR: AddressSanitizer: allocator is out of memory trying to allocate 0xffffff1e0 bytes #0 0x4c560d in operator new(unsigned long) (/Bento4/install-asan/bin/mp4audioclip+0x4c560d) #1 0x5dce28 in AP4_Array<AP4_TrunAtom::Entry>::EnsureCapacity(unsigned int) /Bento4/Source/C++/Core/Ap4Array.h:172:25 #2 0x5dce28 in AP4_Array<AP4_TrunAtom::Entry>::SetItemCount(unsigned int) /Bento4/Source/C++/Core/Ap4Array.h:210:25 #3 0x5dce28 in AP4_TrunAtom::AP4_TrunAtom(unsigned int, unsigned char, unsigned int, AP4 ByteStream&) /Bento4/Source/C++/Core/Ap4TrunAtom.cpp:127:15 #4 0x5dc1f9 in AP4_TrunAtom::Create(unsigned int, AP4_ByteStream&) /Bento4/Source/C++/Core/Ap4TrunAtom.cpp:51:16 #5 0x50e852 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:438:20 #6 0x50bab9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14 #7 0x5240d7 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12 #8 0x5231a3 in AP4_ContainerAtom::AP4_ContainerAtom(unsigned int, unsigned long long, bool, AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5 #9 0x5231a3 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool, AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20 #10 0x50dcd2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20 #11 0x50bab9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14

#12 0x5240d7 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned

#13 0x5231a3 in AP4_ContainerAtom::AP4_ContainerAtom(unsigned int, unsigned long long, bool, AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5 #14 0x5231a3 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,

long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12

```
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
    #15 0x50dcd2 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #16 0x50bab9 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #17 0x541dd9 in AP4_DrefAtom::AP4_DrefAtom(unsigned int, unsigned char, unsigned int,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4DrefAtom.cpp:84:16
    #18 0x5416e8 in AP4_DrefAtom::Create(unsigned int, AP4_ByteStream&, AP4_AtomFactory&)
/Bento4/Source/C++/Core/Ap4DrefAtom.cpp:50:16
   #19 0x50e924 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:580:20
    #20 0x50bab9 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #21 0x523ea7 in AP4 ContainerAtom::ReadChildren(AP4 AtomFactory&, AP4 ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #22 0x5231a3 in AP4 ContainerAtom::AP4 ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
    #23 0x5231a3 in AP4 ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
    #24 0x50dcd2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #25 0x50bab9 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned long long&,
AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
    #26 0x5240d7 in AP4 ContainerAtom::ReadChildren(AP4 AtomFactory&, AP4 ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #27 0x5231a3 in AP4_ContainerAtom::AP4_ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #28 0x5231a3 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #29 0x50dcd2 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #30 0x50bab9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #31 0x541dd9 in AP4_DrefAtom::AP4_DrefAtom(unsigned int, unsigned char, unsigned int,
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4DrefAtom.cpp:84:16
   #32 0x5416e8 in AP4_DrefAtom::Create(unsigned int, AP4_ByteStream&, AP4_AtomFactory&)
/Bento4/Source/C++/Core/Ap4DrefAtom.cpp:50:16
   #33 0x50e924 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:580:20
   #34 0x50bab9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
    #35 0x523ea7 in AP4 ContainerAtom::ReadChildren(AP4 AtomFactory&, AP4 ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
==6930==HINT: if you don't care about these errors you may set allocator_may_return_null=1
SUMMARY: AddressSanitizer: out-of-memory (/Bento4/install-asan/bin/mp4audioclip+0x4c560d) in
operator new(unsigned long)
==6930==ABORTING
test 2:
==56759==ERROR: AddressSanitizer: allocator is out of memory trying to allocate 0xc5d400b8 bytes
    #0 0x4c571d in operator new[](unsigned long) (/Bento4/install-asan/bin/mp4audioclip+0x4c571d)
   #1 0x53dd69 in AP4_DataBuffer::ReallocateBuffer(unsigned int)
```

/Bento4/Source/C++/Core/Ap4DataBuffer.cpp:210:28

#2 0x53dd69 in AP4_DataBuffer::SetDataSize(unsigned int)

```
==56759==HINT: if you don't care about these errors you may set allocator_may_return_null=1 SUMMARY: AddressSanitizer: out-of-memory (/Bento4/install-asan/bin/mp4audioclip+0x4c571d) in operator new[](unsigned long) ==56759==ABORTING
```

For mp4dump with test input:

```
______
==108091==ERROR: AddressSanitizer: allocator is out of memory trying to allocate 0xf500000a0 bytes
    #0 0x4c562d in operator new(unsigned long) (/Bento4/install-asan/bin/mp4dump+0x4c562d)
   #1 0x5c35f8 in AP4 Array<AP4 TrunAtom::Entry>::EnsureCapacity(unsigned int)
/Bento4/Source/C++/Core/Ap4Array.h:172:25
    #2 0x5c35f8 in AP4_Array<AP4_TrunAtom::Entry>::SetItemCount(unsigned int)
/Bento4/Source/C++/Core/Ap4Array.h:210:25
    #3 0x5c35f8 in AP4_TrunAtom::AP4_TrunAtom(unsigned int, unsigned char, unsigned int,
AP4_ByteStream&) /Bento4/Source/C++/Core/Ap4TrunAtom.cpp:127:15
    #4 0x5c29c9 in AP4 TrunAtom::Create(unsigned int, AP4 ByteStream&)
/Bento4/Source/C++/Core/Ap4TrunAtom.cpp:51:16
   #5 0x4e5252 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:438:20
   #6 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #7 0x4f8667 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #8 0x4f7733 in AP4 ContainerAtom::AP4 ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #9 0x4f7733 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #10 0x4e46d2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #11 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #12 0x4f8667 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #13 0x4f7733 in AP4_ContainerAtom::AP4_ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #14 0x4f7733 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #15 0x4e46d2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #16 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
    #17 0x516429 in AP4 DrefAtom::AP4 DrefAtom(unsigned int, unsigned char, unsigned int,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4DrefAtom.cpp:84:16
   #18 0x515d38 in AP4_DrefAtom::Create(unsigned int, AP4_ByteStream&, AP4_AtomFactory&)
/Bento4/Source/C++/Core/Ap4DrefAtom.cpp:50:16
   #19 0x4e5324 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:580:20
   #20 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
    #21 0x4f8437 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned
```

```
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #22 0x4f7733 in AP4 ContainerAtom::AP4 ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #23 0x4f7733 in AP4 ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #24 0x4e46d2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #25 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #26 0x4f8667 in AP4 ContainerAtom::ReadChildren(AP4 AtomFactory&, AP4 ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #27 0x4f7733 in AP4 ContainerAtom::AP4 ContainerAtom(unsigned int, unsigned long long, bool,
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #28 0x4f7733 in AP4_ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #29 0x4e46d2 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #30 0x4e24b9 in AP4 AtomFactory::CreateAtomFromStream(AP4 ByteStream&, unsigned long long&,
AP4 Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
    #31 0x4f8667 in AP4_ContainerAtom::ReadChildren(AP4_AtomFactory&, AP4_ByteStream&, unsigned
long long) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:194:12
   #32 0x4f7733 in AP4 ContainerAtom::AP4 ContainerAtom(unsigned int, unsigned long long, bool,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:139:5
   #33 0x4f7733 in AP4 ContainerAtom::Create(unsigned int, unsigned long long, bool, bool,
AP4 ByteStream&, AP4 AtomFactory&) /Bento4/Source/C++/Core/Ap4ContainerAtom.cpp:88:20
   #34 0x4e46d2 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned int, unsigned
int, unsigned long long, AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:816:20
   #35 0x4e24b9 in AP4_AtomFactory::CreateAtomFromStream(AP4_ByteStream&, unsigned long long&,
AP4_Atom*&) /Bento4/Source/C++/Core/Ap4AtomFactory.cpp:234:14
   #36 0x516429 in AP4_DrefAtom::AP4_DrefAtom(unsigned int, unsigned char, unsigned int,
AP4_ByteStream&, AP4_AtomFactory&) /Bento4/Source/C++/Core/Ap4DrefAtom.cpp:84:16
==108091==HINT: if you don't care about these errors you may set allocator may return null=1
SUMMARY: AddressSanitizer: out-of-memory (/Bento4/install-asan/bin/mp4dump+0x4c562d) in operator
new(unsigned long)
==108091==ABORTING
```

You can use the following setp to reproduce all the problems.

```
git clone https://github.com/axiomatic-systems/Bento4
cd Bento4/
mkdir check && cd check
cmake ../ -DCMAKE_C_C_COMPILER=clang -DCMAKE_CXX_COMPILER=clang++ -DCMAKE_C_FLAGS="-
fsanitize=address" -DCMAKE_CXX_FLAGS="-fsanitize=address" -DCMAKE_BUILD_TYPE=Release
make -j
git clone https://github.com/WorldExecute/files.git
./mp4audioclip ./files/Bento4/mp4audioclip/out-of-memory/test_1 /dev/null
./mp4dump ./files/Bento4/mp4dump/out-of-memory/test_1
```

Thanks for your time!

Assignees		
No one assigned		
Labels		
None yet		
Projects		
None yet		
Milestone		
No milestone		
Development		
No branches or pull requests		

1 participant

