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Subject: Copy the content of a SortedVectorMap  
Posted by [forlano](#) on Wed, 07 Aug 2024 17:52:33 GMT  
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Hello,

I have two SortedVectorMap

```
SortedVectorMap<int, PlayerTB> TBVega, TBS;
```

where

```
class PlayerTB : Moveable<PlayerTB> {  
public:  
    int id;  
    int rank;  
    Vector<String> tbs;  
    PlayerTB() {}  
};
```

At some moment I would like that the content of TBVega be identical to that of TBS but without losing/destroying the content of TBS.

Of course I can iterate and copy one by one the elements. I would like to know if there is some efficient way to do it. I read about clone but the compiler complains things that I do not understand. Perhaps I need to do something on class PlayerTB.

note: copy constructor of 'PlayerTB' is implicitly deleted because field 'tbs' has a deleted copy constructor

```
    Vector<String> tbs;  
        ^
```

C:\upp\uppsrc\Core\Vcont.h:290:2: note: copy constructor is implicitly deleted because 'Vector<Upp::String>' has a user-declared move construct

or

```
    Vector(Vector&& v)          { Pick(pick(v)); }  
    ^
```

Thanks,  
Luigi

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Subject: Re: Copy the content of a SortedVectorMap  
Posted by [jjacksonRIAB](#) on Mon, 12 Aug 2024 21:14:51 GMT  
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Luigi,

I don't exactly grasp what you're trying to accomplish but if you want clone semantics you can accomplish it this way:

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

using namespace Upp;

class PlayerTB : MoveableAndDeepCopyOption<PlayerTB> {
public:
    int id;
    int rank;
    Vector<String> tbs;

    PlayerTB(const PlayerTB& other, int) {
        id = other.id;
        rank = other.rank;
        tbs = clone(other.tbs);
    }

    PlayerTB() = default;
};

template <>
inline auto Upp::AsString(const PlayerTB& props) -> String {
    return Format(
        "PlayerTB: {\n"
        "  id: %s\n"
        "  rank: %s\n"
        "  tbs: %s\n"
        "}",
        FormatInt(props.id),
        FormatInt(props.rank),
        AsString(props.tbs));
}

CONSOLE_APP_MAIN {
    SortedVectorMap<int, PlayerTB> TBVega, TBS;

    auto& t = TBVega.Add(1);
    t.id = 1;
    t.rank = 2;
    t.tbs.Append({ "test", "test2" });

    auto& t2 = TBS.Add(2);
    t2.id = 2;
```

```
t2.rank = 3;
t2.tbs.Append({ "test3", "test4"});

LOG("=== Before clone ===");
LOG(TBVega);
LOG(TBS);

TBVega = clone(TBS);

LOG("=== After clone ===");
LOG(TBVega);
LOG(TBS);
}
```

Log:

```
=== Before clone ===
{1: PlayerTB: {
  id: 1
  rank: 2
  tbs: [test, test2]
}}
{2: PlayerTB: {
  id: 2
  rank: 3
  tbs: [test3, test4]
}}
=== After clone ===
{2: PlayerTB: {
  id: 2
  rank: 3
  tbs: [test3, test4]
}}
{2: PlayerTB: {
  id: 2
  rank: 3
  tbs: [test3, test4]
}}
}}
```

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Subject: Re: Copy the content of a SortedVectorMap  
Posted by [forlano](#) on Tue, 13 Aug 2024 21:33:48 GMT  
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Thank you!

I wanted to do what you did.

Best regards,  
Luigi

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