Subject: Problem with copy construction of std::vector from Upp::Vector
Posted by masu on Tue, 28 Oct 2014 14:32:03 GMT
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Hi,

when trying to copy construct std::vector from Upp::Vector like this:
Vector<int> v;
v << 1 << 2 << 3;
std::vector<int> std_v(v);

I get the following error:
error: invalid user-defined conversion from 'Upp::Vector<int>' to 'std::vector<int>::size_type {aka long long unsigned int}' [-fpermissive]
std::vector constructor using iterators works well with Upp::Vector:
std::vector<int> siv(v.Begin(), v.End());
[EDIT]
Ok, the compiler takes another constructor with size_type argument since Upp::Vector is not a std::vector and therefore the copy constructor cannot be used.
It seems the easiest to use the std::vector constructor using iterators when one wants to copy an Upp::Vector to a std::vector or is there a simpler way of doing this?

Regards
Matthias

Subject: Re: Problem with copy construction of std::vector from Upp::Vector
Posted by mirek on Wed, 29 Oct 2014 08:54:14 GMT
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I think using iterators is the correct approach:

- we obviously cannot add a new copy contructor to std::vector
- it might be possible to add operator std::vector<T> to Vector, but that would be confusing at best (e.g. because of clone/pick semantics)
- besides, AFAIK vector does not have a copy constructor e.g. from deque or list, so this is the corresponding approach

Mirek