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Subject: Re: Eigen and UPP? (STL question?)  
Posted by [mr\\_ped](#) on Fri, 13 May 2011 13:10:55 GMT  
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Eigen has it's own Matrix type, which has it's own "to std::string" conversion routine.  
Which makes `std::cout << Eigen::MatrixXd` to compile without problem.

`Cout()` is not `std::ostream` (or what's the base output stream in STL/C++, I have no idea), it's `Upp::output stream` (not sure about exact class name either).

So the compiler can't find the conversion function from `Eigen::MatrixXd` to `Upp::String` (which is most common input format for "<<" for `Upp::ostream`).

And dolik did just supply you with one conversion function for such situation.

`NAMESPACE_UPP` is macro to open `Upp::` namespace, so you are with the next code defining `Upp::String Upp::AsString(const Eigen::MatrixXd& m)` function.  
Then later during compiling "`Cout() << m`" that new method is perfect fit for silent auto conversion.

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