

Eigen::SimplicialCholesky  
::\_solve\_impl

Eigen::SimplicialCholesky  
Base::\_solve\_impl

Eigen::SparseSolverBase  
::\_solve\_impl

Eigen::internal::solve  
\_sparse\_through\_dense  
\_panels

```
graph LR; A[Eigen::SimplicialCholesky::_solve_impl] --> D[Eigen::internal::solve_sparse_through_dense_panels]; B[Eigen::SimplicialCholeskyBase::_solve_impl] --> D; C[Eigen::SparseSolverBase::_solve_impl] --> D;
```

The diagram illustrates the inheritance and delegation of the `_solve_impl` function in Eigen's sparse solvers. Three public-facing implementation functions on the left (white boxes) all delegate the actual solving work to a single internal function on the right (gray box). The functions are: `Eigen::SimplicialCholesky::_solve_impl`, `Eigen::SimplicialCholeskyBase::_solve_impl`, and `Eigen::SparseSolverBase::_solve_impl`. They all point to `Eigen::internal::solve_sparse_through_dense_panels`.