

C++ code 9.11.9: Implementation of some methods of **RHSProvider** → [GitLab](#)

```
2 RHSProvider::RHSProvider(const If::assemble::DofHandler &dofh,  
3                          std::function<double(double)> g)  
4   : g_(std::move(g)) {  
5   // Finde nodes on the boundary  
6   const If::mesh::utils::CodimMeshDataSet<bool> bd_flags =  
7       If::mesh::utils::flagEntitiesOnBoundary(dofh.Mesh(), 2);  
8   int N = dofh.NumDofs();  
9   // Initialize the fixed vector, components for degrees of freedom associated  
10  // with nodes on the boundary are set to 1, all other to 0  
11  zero_one_ = Eigen::VectorXd(N);  
12  for (int i = 0; i < N; ++i) {  
13      zero_one_(i) = bd_flags(dofh.Entity(i)) ? 1.0 : 0.0;  
14  }  
15 }  
16  
17 Eigen::VectorXd RHSProvider::operator()(double t) const {  
18     // Just rescale the stored vector  
19     return g_(t) * zero_one_;  
20 }
```