

- **The R API: entry points for C code**
- **Memory allocation**
- **Transient storage allocation**
- **User-controlled memory**
- **Error signaling**
- **Error signaling from Fortran**
- **Random number generation**
- **Missing and IEEE special values**
- **Printing**
- **Printing from Fortran**
- **Calling C from Fortran and vice versa**
- **Fortran character strings**
- **Fortran LOGICAL**
- **Numerical analysis subroutines**
- **Distribution functions**
- **Mathematical functions**
- **Numerical Utilities**
- **Mathematical constants**
- **Optimization**
- **Integration**
- **Utility functions**
- **Re-encoding**
- **Condition handling and cleanup code**
- **Allowing interrupts**
- **Platform and version information**
- **Inlining C functions**
- **Controlling visibility**
- **Using these functions in your own C code**
- **Organization of header files**