OpenFabrics Software (OFS) is a suite of open source software components for networking focused on improving system performance, scalability, efficiency and reliability by applying advanced techniques such as Remote Direct Memory Access (RDMA) and kernel bypass to network operations. OpenFabrics Software is developed by OFA member companies and other members of the open source community working under the guidance of the OpenFabrics Alliance.

OpenFabrics Software includes user level libraries, operating system drivers, and associated services which adhere to APIs defined by the OpenFabrics Alliance. Consumers of OFS include user level applications, kernel applications such as iSER, SRP, or NVMe, and communications middleware such as MPI.

OFS is used in business, research and scientific environments that depend on highly efficient networks to improve elements such as overall application performance, scalability, efficiency and reliability. OFS is often applied in fields such as storage applications, parallel or distributed computing, analytics, financial infrastructures and other demanding applications. Typical applications include its use in parallel message passing (MPI), distributed memory architectures, sockets-based data exchange (e.g. RDS, SDP), NAS and SAN storage (iSER, NFS-RDMA, SRP) and file system and database applications. OFS in general supports both kernel- and user-level applications.

OFS is available for many Linux and Windows distributions, including: Red Hat Enterprise Linux (RHEL), Novell SUSE Linux Enterprise Distribution (SLES), Oracle Enterprise Linux (OEL), and Microsoft Windows Server operating systems.