

Guardian OS:

- A native OS running on the Tandem Transaction Operating System (T/TOS)
- Specialised for Fault Tolerance and continuous availability in HP Nonstop Servers
- main difference between other Os's is no shared resources

Process model:

- user message - based inter - process communication (IPC)
- runs protected process pairs

Reliability: every component has a redundant pair to avoid single points of failure

Transaction management: tight integration with Nonstop Transaction manager (TMF) ensures ACID compliance

Programming Environment: supports TACL, TAL, COBOL, C and modern compilers

Open System Services (OSS)

- POSIX - Compliant environment within HPE Nonstop
- provides UNIX - like shell, standard API and open - Source tools
- runs alongside of Guardian OS for flexibility and reliability
- supports programming in C, C++, Java and scripting languages

- Enables easy porting of modern applications to Non-stop
- Builds on Guardian's Fault tolerance foundation for high availability
- Bridges modern development practices with enterprise - class reliability

POSIX: POSIX (Portable Operating System Interface) is a family of IEEE standards that define a standardized operating system interface and environment.

- A POSIX-compliant environment within HP NonStop's OSS (Open System Services) means that OSS provides a standardized Unix-like operating environment that adheres to POSIX specifications, allowing Unix/Linux applications and developers to work with familiar interfaces and behaviors on the NonStop platform.

Inter Process Communication (IPC)

Inter Process Communication (IPC) is the mechanism that allows different processes to exchange data, share information, and coordinate their activities within a computer system or across networked systems.

Enscribe File System:

- Native, record- oriented file system on Nonstop
- Optimized for high-Volume OLTP, predictable latency, strong locking, tight TMF integration
- Accessed via Guardian procedure calls Or COBOL / C language runtimes.