

IBP

INTERNET BACKPLANE PROTOCOL

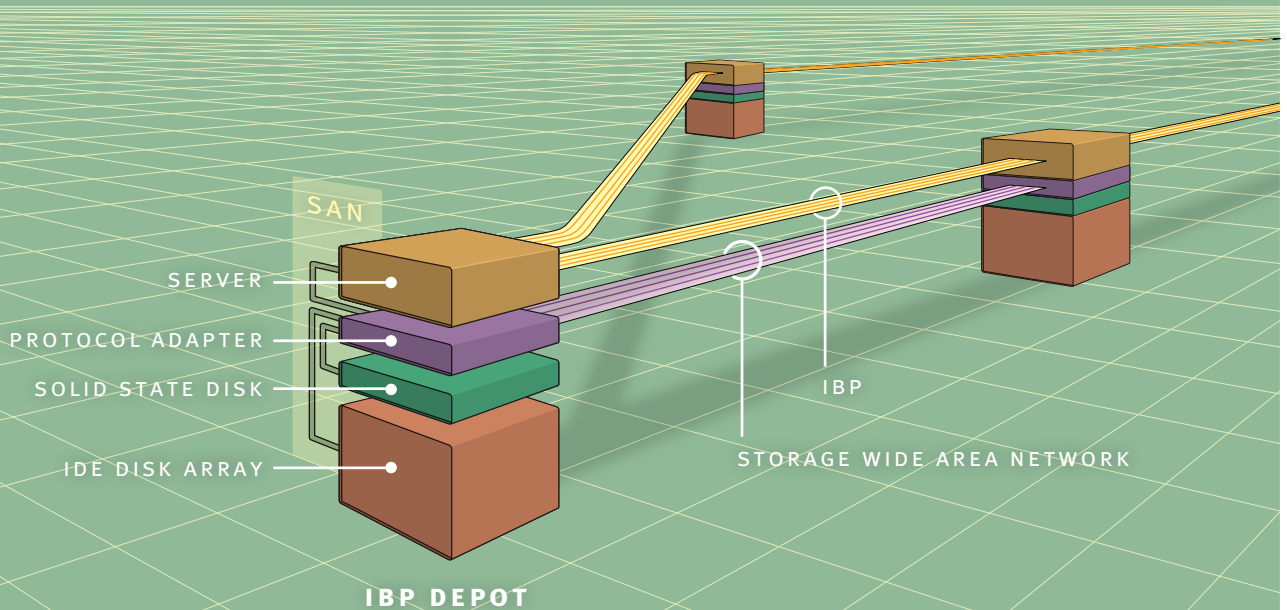
INTERNET BACKPLANE PROTOCOL

The Internet Backplane Protocol is a mechanism that implements storage of data in the network using shared physical resources to support Logistical Networking. Logistical Networking is an approach to networking that combines transmission resources (e.g. bandwidth and router capacity) with storage resources (e.g. disk and memory) to achieve overall goals of scalability and quality-of-service delivery.

- IBP provides shared buffers, explicit control over buffering
- Logistical Networking uses time-limited storage as a communication resource

IBP DEPOT CHARACTERISTICS

- Internet Backplane Protocol control and data functions are implemented over TCP/IP
- Storage Area Networking is used within depot (storage intermediate node) to connect host, disk and RAM storage
- Storage Wide Area Network is tunneled through TCP/IP, enabling efficient disk-to-disk wide area transfer that bypasses host
- Separating IBP control and bulk data traffic enables interoperability with non-standard data transfer protocols



<http://loci.cs.utk.edu/ibp>



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