Commonly Used High Availability Terms

Clustering

Clustering is a technique to improve availability by configuring redundant resources such that if one instance fails it does not disrupt system availability to users.

DVIPA

Dynamic virtual IP address (DVIPA) is a z/OS Communications Server feature used to describe the automatic failover of TCP/IP stack instances within a Sysplex cluster.

See Setting up your EntireX Environment for Sysplex.

Failover

Feature used to describe the control switch between redundant resources in the event of a resource failure.

Fault Tolerance

Describes the process of delivering continuous operation in the event of an unplanned outage.

High Availability

Under High Availability we understand an environment with engineered redundancy which, if any one component fails, guarantees the integrity of the system as a whole. To achieve high availability, EntireX uses existing third-party clustering technology.

HiperSockets

HiperSockets is an IBM technology for offering TCP/IP communications between partitions at in-memory speed.

Load Balancing

A network-based technique to distribute common workload across multiple back-end services that can be evenly distributed or routed based on weighted inference of a key performance attribute (commonly called filtering).

LPAR

A logical partition (LPAR) describes the virtualization of the System z hardware platform; if one LPAR goes down it has no effect on any others running on the same hardware.

NLB

Network Load Balancing (NLB) is a clustering technology for Windows servers that enhances the scalability and availability of mission-critical, TCP/IP-based services, such as Web, Terminal Services, virtual private networking, and streaming media servers.

See Setting up your EntireX Environment for NLB

Node Convergence

The process of converging static machine addresses into a clustered IP address on Windows.

Queued Direct IO

Queued Direct IO is a System z hardware feature offering an enhanced data transfer architecture for improving data transfer speed and efficiency for TCP/IP traffic.

Sysplex

A Parallel Sysplex is a cluster of IBM mainframes acting together as a single system image with z/OS. Parallel Sysplex combines data sharing and parallel computing to allow a cluster of up to 32 systems to share a workload for high performance and high availability.

See Setting up your EntireX Environment for Sysplex

Transaction Recovery

A feature for recovering resources in the event of an unplanned outage.

VIPA

Virtual IP addressing is an IP address assigned to multiple static IP addresses to make them accessible as one address for the purpose of improving availability or load balancing.

WLM

IBM Workload Manager is a Sysplex based load balancer offering workload filtering.

24x7

A business definition for highly available applications representing 24 hours, 7 days a week availability.

99,999

A business definition for highly available applications representing a percentage very close to 100 % availability.