DEFINITIONS

City of Dublin
OHIO, USA
Dublink

Bit A bit is the basic unit of information in computing and digital communications. A bit can have only one of two values, and may therefore be physically implemented with a two-state device. These values are most commonly represented as either a 0 or 1.

Byte A byte is a unit of digital information that most commonly consists of eight bits. Historically, the byte was the number of bits used to encode a single character of text in a computer and for this reason it is the smallest addressable unit of memory in many computer architectures.

Kilobit Symbolized as (kb) or (kbit). Using the common byte size of 8 bits, 1 kb is equal to 125 bytes.

Megabit Symbolized as (mb) or (mbit). Using the common byte size of 8 bits, 1 megabit is equal to 125 kilobits (kb).

Gigabit Symbolized as (gb) or (gbit). Using the common byte size of 8 bits, 1 gigabit is equal to 125 megabits (mb).

Terabit Symbolized as (tb) or (tbit). Using the common byte size of 8 bits, 1 terabit is equal to 1000 gigabits (mb).

Broadband In telecommunications, broadband is a wide bandwidth data transmission with an ability to simultaneously transport multiple signals and traffic types. The medium can be coaxial cable, optical fiber, twisted pair, as well as wireless broadband (which includes mobile broadband).

Conduit A conduit is a tube used to protect and route wiring in a building or structure. Conduit may be made of metal, plastic, fiber, or fired clay. Orange is the color of choice for most fiber networks.

Dark Fiber A dark fiber or unlit fiber is an unused optical fiber, available for use in fiber-optic communication.

Data Center A data center is a safe and secure facility used to house computer systems and associated components, such as servers, telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g., air conditioning, fire suppression) and various security devices. Large data centers are industrial scale operations using as much electricity as a small town.

Edge Device A networking devie that connects a Local Area Network (LAN) in a building to Dublink via a lateral

HIPAA Compliant HIPAA is a set of standards introduced by the U.S. Congress in 1996. The Act consists of rules governing protected health information (PHI) including security, privacy, identifiers, transactions, and code sets. The purpose of the HIPAA Security Rule is to promote the protection and privacy of sensitive PHI used within the healthcare industry by organizations called "covered entities". As a result of the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009, both covered entities and business associates are now accountable to the U.S. Dept. of Health & Human Services HHS for appropriately safeguarding private patient information.

Lateral The extension of the fiber network from the street to inside the building, data center or structure

Latency Latency is a term for a measurement of network time. In a packet-switched network, it is measured either one-way (the time from the source sending a packet to the destination receiving it), or round-trip delay time (the one-way latency from source to destination plus the one-way latency from the destination back to the source). Round trip latency is more often quoted, because it can be measured from a single point. Note that round trip latency excludes the amount of time that a destination system spends processing the packet.

For additional information about Dublink, go to:
http://dublinohiousa.gov/Dublink

"Meet Me" Room A location in a building where a telecommunications & Internet Service Providers can connect to one another, offering choice to building tenants

Multi-Carrier A multi-carrier system provides connections to multiple Internet Service Providers (ISPs) through BGP to provide resiliency within a network and blended Internet connectivity.

OARnet The Ohio Academic Resources Network (OARnet) is a dedicated, statewide, high-speed fiber-optic network that serves Ohio K-12 schools, college and university campuses, academic medical centers, public broadcasting stations and state and local/state government. OARnet is considered one of the most advanced statewide telecommunications networks dedicated to research, education and economic competitiveness in the nation. OARnet is connected in Cleveland to Internet2, the United States' most advanced nationwide research and education network. OARnet also maintains direct connections to New York's NYSERNet, Michigan's Merit network, and OmniPoP in Chicago. OARnet offices are located on the West Campus of The Ohio State University in Columbus, Ohio, United States.

Ohio Supercomputer Center (OSC) Established in 1987, the Ohio Supercomputer Center (OSC) is a partner of Ohio universities and high tech industries, providing researchers with high performance computing, advanced cyberinfrastructure, research and computational science education services.

Optical fiber Optical fiber is a flexible, transparent fiber made by drawing glass (silica) or plastic to a diameter slightly thicker than that of a human hair. Optical fibers are used to transmit light between the two ends of the fiber, which permits data transmission over longer distances and at higher bandwidths than wire cables.

Packet A formatted unit of data routed between an origin and destination

PCI Compliance The Payment Card Industry Data Security Standard (PCI DSS) is a widely accepted set of policies and procedures intended to optimize the security of credit, debit and cash card transactions and protect card holders against misuse of their personal information. The PCI DSS was created jointly in 2004 by four major credit companies: VISA, MasterCard, Discover, and American Express.

Point to Point A fiber network connection that establishes network connectivity between two points, such as a data center and a company location.

Rack Also known as a computer or server cabinet that can be secured in a data center.

Redundancy Redundancy is the duplication of critical components or functions of a system with the intention of increasing its reliability, usually in the form of a backup or fail-safe. Terms such as N+1 are commonly used, indicating the "Need + 1" of any redundant device, such as power or air cooling.

Smart Hands Services MDC provides experienced resources equipped to assist you and your business with our managed services team.

SOC 2 Audit SOC 2 is an auditor prepared document (to opinion) based on the American Institute of Certified Public Accountants (AICPA) analysis Guide Reporting on controls at a service organization relevant to security, availability processing, Integrity, confidentiality and privacy.