

Pseudo-Wire Edge-to-Edge (PWE3) Working Group
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PWE3 Common Terminology

Status of this Memo

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Abstract

This document defines the terminology common to PWE3 drafts.

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1. Introduction

This document attempts to define the common terms used in PWE3. Documents produced by the IETF PWE3 WG use this common terminology, but may define additional terms unique to their technical area.

2. Terminology

Attachment Circuit (AC)	The circuit or virtual circuit attaching a CE to a PE.
Applicability Statement (AS)	Each PW service will have an Applicability Statement (AS) that describes the applicability of PWs for that service.
CE-bound	The traffic direction where PW-PDUs are received on a PW via the PSN, processed and then sent to the destination CE.
CE Signaling	Messages sent and received by the CEs control plane. It may be desirable or even necessary for the PE to participate in or monitor this signaling in order to effectively emulate the service.
Customer Edge (CE)	A device where one end of a service originates and/or terminates. The CE is not aware that it is using an emulated service rather than a native service.
Forwarder (FWRD)	A PE subsystem that selects the PW to use to transmit a payload received on an AC.
Fragmentation	The action of dividing a single PDU into multiple PDUs before transmission with the intent of the original PDU being reassembled elsewhere in the network. Fragmentation may be performed in order to allow sending of packets of a larger size than the network MTU which they will traverse.
Maximum transmission unit (MTU)	The packet size (excluding data link header) that an interface can transmit without needing to fragment.
Native Service	Processing of the data received by the PE

Processing (NSP)	from the CE before presentation to the PW for transmission across the core.
Packet Switched Network (PSN)	Within the context of PWE3, this is a network using IP or MPLS as the mechanism for packet forwarding.
Protocol Data Unit (PDU)	The unit of data output to, or received from, the network by a protocol layer.
Provider Edge (PE)	A device that provides PWE3 to a CE.
PE-bound	The traffic direction where information from a CE is adapted to a PW, and PW-PDUs are sent into the PSN.
PE/PW Maintenance	Used by the PEs to set up, maintain and tear down the PW. It may be coupled with CE Signaling in order to effectively manage the PW.
Pseudo Wire (PW)	A mechanism that carries the essential elements of an emulated service from one PE to one or more other PEs over a PSN.
PW End Service (PWES)	The interface between a PE and a CE. This can be a physical interface like a T1 or Ethernet, or a virtual interface like a VC or VLAN.
Pseudo Wire Emulation Edge to Edge (PWE3)	A mechanism that emulates the essential attributes of service (such as a T1 leased line or frame relay) over a PSN.
Pseudo Wire PDU (PW-PDU)	A PDU sent on the PW that contains all of the data and control information necessary to emulate the desired service.
PSN Tunnel	A tunnel across a PSN inside which one or more PWs can be carried.
PSN Tunnel Signaling	Used to set up, maintain and tear down the underlying PSN tunnel.
PW Demultiplexer	Data-plane method of identifying a PW terminating at a PE.

Time Domain Multiplexing (TDM)	Synchronous bit-streams at rates defined by G.702.
Tunnel	A method of transparently carrying information over a network.

3. IANA considerations

There are no IANA considerations for this document.

4. Security Considerations

The other documents produced by PWE3 will be manually checked to ensure that they do not re-define any of these terms.

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