

FC Fibre Channel Frame Structure

Article Overview

A Fibre Channel (FC) frame is the fundamental unit of data transmission in an FC network, consisting of a header, payload, CRC, and delimiters to ensure reliable delivery.

Overview

A Fibre Channel frame is the basic building block of an FC connection, carrying data, addressing information, and control signals between source and destination ports . Frames are used for both data transfer and link control, with data frames carrying payloads and link control frames managing acknowledgments and flow control . The FC-2 layer is responsible for segmenting data into frames and reassembling them at the destination .

Frame Components

An FC frame typically has a total size of up to 2148 bytes, including the following key components :

- Start of Frame (SOF) Delimiter: Marks the beginning of the frame and helps with synchronization.
- Frame Header: Contains essential control and routing information:
- Destination ID (D_ID): Identifies the recipient port.
- Source ID (S_ID): Identifies the sender port.
- Type Field: Specifies the frame type (data, control, etc.).
- Sequence ID and Exchange ID: Manage data ordering and flow control....

Article Content

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Chapter 3.6

The Fiber Channel frame is preceded and concluded by idle frames to provide margin between frames. The structure of the FC frame

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Fibre Channel Standard

The Fibre Channel standards define two basic frame types: frame type 0 (FT-0) and frame type 1 (FT-1). The frame type is identified

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RFC 3643 FC Frame Encapsulation December 2003 Appendix A - Fibre Channel Bit and Byte Numbering Guidance Both Fibre

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Fibre Channel Overview

The intention of the Fibre Channel (FC) is to develop practical, inexpensive, yet expendable means of quickly transferring data

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Fibre Channel Layers

Fibre Channel FC-1 Overview: Fibre Channel FC-1 refers to the data link layer of the Fibre

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Fibre Channel

What is Fibre Channel? FC (Fibre Channel) is a network technology, predominantly used within storage area networks,

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Fibre Channel frame

The basic building blocks of an FC connection are the frames. They contain the information to be transmitted (payload), the address

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Fibre Channel

This chapter gives an overview of Fibre Channel at a fairly detailed level, including definitions of N_Ports, E_Ports, and

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Fibre Channel Protocol

Logically, Fibre Channel is structured as a set of hierarchical levels. The levels are labeled Fibre Channel level 0 (FC

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RFC 3643

This document describes the common Fibre Channel (FC) frame encapsulation format and a procedure for the measurement and

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Chapter 2. Fibre Channel Basics

A specific layer of fibre channel (FC-2, described in “FC-2” later in this chapter) is responsible for breaking a sequence into the frame

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Fiber Channel Network

Logically, Fibre Channel is structured as a set of hierarchical levels. The levels are labeled Fibre Channel level 0 (FC

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Presentation

“The Fibre Channel Industry Association (FCIA) is a mutual benefit, non-profit, international organization of

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Fibre Channel Protocol

Fibre Channel consists of the following layers: FC-0 -- The interface to the physical media FC-1 -- The encoding and decoding of data

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Fundamentals of Fibre Channel

Fibre channel arbitrated loop topology [FC-AL] : It is a high-speed fibre channel topology in which fibre channel

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4.3 Overview of Fibre Channel (FC) SAN Protocol

Introduction to Fibre Channel (FC) Protocol FC protocol forms the fundamental construct of the FC SAN infrastructure.

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Fibre Channel

Fibre Channel has doubled in speed every few years since 1996. In addition to a modern physical layer, Fibre Channel also added

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Fibre channel, fiber channel, layers, ports, fc topologies

Fibre channel, also written, fc is a technology that defines how data should be transmitted serially over copper and fiber optic media,

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Fibre Channel Layers

In summary, the FC-2 layer is responsible for the routing and switching of data frames in a

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Fibre Channel Functional Overview

When Fibre Channel is used as an interconnect method for SCSI, the relationship between both protocol stacks is shown in Figure 1

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Fundamentals of Fibre Channel

It is a high-speed fibre channel topology in which fibre channel ports/hubs use

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Fibre Channel over Ethernet

Fibre Channel over Ethernet (FCoE) is a computer network technology that encapsulates Fibre Channel frames over Ethernet

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Inside a Modern Fibre Channel Architecture – Part 1

FC physically consists of a minimum of two PN_Ports, each associated with a Platform, interconnected by a pair of

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Fibre Channel frame — Grokipedia

The Fibre Channel frame format was initially defined in the FC-PH standard (ANSI X3.230-1994), establishing a core structure with a

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Fibre Channel (FC) Frame Structure

The Fibre Channel (FC) Frame Structure is the fundamental unit of data transmission in a Fibre Channel network. It consists of

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Fundamentals of Fibre Channel

Fundamentals of Fibre Channel Rupin Mohan Earl Apellanes June 15, 2017 11:00 am PT

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STORAGE AREA NETWORKS

Fibre Channel frame consists of a header, useful data (payload) and a Cyclic Redundancy Checksum (CRC) (Figure 3.14). In

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Introduction to Fibre Channel

Fibre Channel Introduction 91.520 Objectives High Level Overview Learning FC Structure and Concepts Understanding FC Protocol

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