



# Training: ISOBUS File Server (FS)

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# Objectives

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- Explain the purpose of a File Server (FS)
- Provide helpful information for developing a FS Client application for an ISOBUS implement

# Topics

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- What is an ISOBUS File Server (FS)?
- Advantages of developing a FS Client
- Maintaining the Connection – “Alive” Messages
- Fail-safe communication
- Private Manufacturer Specific Directories
- Standard DOS and Linux naming conventions apply
- Commands
- Types of File Servers
- Types of Volumes

## What is an ISOBUS File Server (FS)?

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- ISO 11783-13
- Much like an office network File Server
- Central place to store data

# Advantages of using a File Server

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- Centralize all data into one location
- Makes backing up and restoring data easier
- Production line can easily load settings
- Lower cost hardware
  - Eliminate the need for expensive permanent data storage on each ECU
- Easy to transfer data from machine to machine with removable volumes

# Maintaining the Connection – “Alive” Messages

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- FS->ECU: FS Status Message
- ECU->FS: Client Connection Maintenance Message

# Fail-safe communication

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- Request / Response
- Allows repetition of messages
- Transaction Number on every command message and its response

# Private Manufacturer Specific Directories

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- MCMC0000
- One on each volume
- Creation is the responsibility of the FS Client

## Standard DOS and Linux naming conventions apply

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- \* and ? are used as “wild cards”
- . is used for the current directory
- .. is used for the parent directory
- \ is used for the top of the current volume
- Exceptions
  - \\ is used to indicate the top level of all volumes
  - May use ~ as the abbreviation for the Manufacturer specific directory
  - Fewer allowed characters

# Commands

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- All commands are sent from the client to the server
- Commands include the following categories
  - Connection Management
  - Directory Handling
  - File Access
  - File Handling
  - Volume Handling

# Types of File Servers

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- Single Volume
- Multi-Volume

# Types of Volumes

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- Case-Insensitive / Case-Sensitive
- Removeable / Non-Removeable
- Support for Short / Long Filenames