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Financial services — Financial information eXchange session layer —

Part 2: FIX session layer

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by FIX Trading Community (as FIX Session Layer Technical Specification) and drafted in accordance with its editorial rules. It was assigned to Technical Committee ISO/TC 68, *Financial services*, Subcommittee SC 9, *Information exchange for financial services* and adopted under the "fast-track procedure".

A list of all parts in the ISO 3531 series can be found on the ISO website.

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Introduction

FIX session protocol was written to be independent of any specific communications protocol (e.g. X.25, async, TCP/IP) or physical medium (e.g. copper, fibre, satellite) chosen for electronic data delivery. It offers a reliable stream where a message is delivered once and in order. The FIX session layer is designed to survive and resume operation in the event of the loss of transport level connections caused by any type of failure, including network outage, application failure or computer hardware failures.

The session layer is concerned with the ordered delivery of data while the application level defines business-related data content. This document focuses on the ordered delivery of data using the "FIX session protocol".

The FIX session protocol is implemented using the FIX tagvalue encoding syntax for the standard header, standard trailer and the session level messages which make up the FIX session protocol. It is possible to send messages using other encodings, such as the other FIX-defined encodings (e.g. FIXML, SBE, JSON, GPB, ASN.1) or non-FIX-defined encodings (e.g. XML, FpML, ISO 20022 XML, JSON).

The Financial Information eXchange session layer is used to provide reliable and recoverable messaging for electronic trading. The protocol is intended for use by asset managers, trading firms, brokerages, trading venues, clearing houses, custodians, depositories, asset servicers and others involved in the trading life cycle activities of a wide range of financial instruments. The FIX session layer functionality is a realization of the ISO/IEC 7498-1 Open System Interconnection basic reference model level 5 session layer.

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Financial services — Financial information eXchange session layer —

Part 2:
FIX session layer

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1 Scope

This document provides the normative specification of the FIX session layer standard and its session profiles.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

3.1
session layer message
message carried over the FIX session that is integral to the operation of the FIX session

3.2
application message
message that is carried over a FIX session to accomplish some business purpose

Note 1 to entry: Examples of a business purpose include an order to buy or sell a financial instrument, reporting market data or reporting an execution of a trade.

3.3
message type
identifier (code) that defines the type of message being sent

Note 1 to entry: The message type for the FIX session is a case-sensitive string encoded in the MsgType(35) field.

3.4
valid FIX message
session or application message that is a tagvalue encoded string of octets that is properly formed according to the FIX tagvalue encoding specification

3.5
FIX session processor
combination of computer hardware, firmware and software that implements the FIX session layer

Note 1 to entry: Commonly referred to as a FIX Engine.

3.6
initiator
FIX session processor that establishes the transport layer connection and initiates the session via transmission of the initial Logon(35=A) message

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