
**Financial services — Financial
information eXchange session layer —
Part 3:
FIX session layer test cases**



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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. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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 FIX-defined encodings (e.g. FIXML, SBE, JSON, GPB, ASN.1) or other non-FIX defined encodings (e.g. XML, FpML, ISO 20022 XML, JSON).

Financial services — Financial information eXchange session layer —

Part 3: FIX session layer test cases

1 Scope

This document provides a set of mandatory and optional conformity tests applicable to all versions of the FIX session layer standard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 11404, *Information technology — General-Purpose Datatypes (GPD)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 11404 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 FIX session layer test cases

4.1 Applicability

This document was last revised September 20, 2002 at which time FIX version [4.3](#) with Errata 20020930 was the latest version of the FIX Protocol. Note that future amendments to this document can be found on the FIX website and any version of this document published on a later date takes precedence over this version of the document. This document is applicable to all supported versions of the FIX session layer ([4.2](#), [4.4](#), FIXT) except where explicitly indicated.

4.2 Test cases

These test cases are from the perspective of the FIX system being tested. The FIX system receives the “condition/stimulus” and is expected to take the appropriate action as defined by “expected behaviour”.

4.3 Buyside-oriented (session initiator) Logon and session initiation test case

4.3.1 Scenario 1B Connect and Send Logon message

Mandatory