

**FIX Session Layer Errata**

**Technical Proposal**

**November 2020**

**v0.1**

**Proposal Status: Draft**

**For Global Technical Committee Governance Internal Use Only**

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| --- | --- | --- | --- |
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# Table of Contents

Contents

[Table of Contents 3](#_Toc56589606)

[Document History 4](#_Toc56589607)

[1 Introduction 5](#_Toc56589608)

[1.1 Authors 5](#_Toc56589609)

[2 Requirements 6](#_Toc56589610)

[2.1 Business Requirements 6](#_Toc56589611)

[2.1.1 Clarification of Maximum Message Size 6](#_Toc56589612)

[2.2 Technical Requirements 6](#_Toc56589613)

[3 Issues and Discussion Points 7](#_Toc56589614)

[3.1 Resolved Issues 7](#_Toc56589615)

[3.2 Compatibility 7](#_Toc56589616)

[4 References 7](#_Toc56589617)

[5 Relevant and Related Standards 8](#_Toc56589618)

[6 Intellectual Property Disclosure 8](#_Toc56589619)

[7 Definitions 8](#_Toc56589620)

[8 Technical Standard: FIX Session Layer 8](#_Toc56589621)

[8.1 Specification 8](#_Toc56589622)

[Appendix A - Usage Examples 9](#_Toc56589623)

[Appendix B – Compliance Strategy 9](#_Toc56589624)

[Compliance Test Suite 9](#_Toc56589625)

# Document History

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Author** | **Revision Comments** |
| v0.1 | Nov 18, 2020 | Hanno Klein, FIXdom | Initial draft |
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# Introduction

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, among 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 7498-1:1994 Open System Interconnection basic reference model level 5 session layer.

## Authors

|  |  |  |  |
| --- | --- | --- | --- |
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|  |  |  |  |

# Requirements

Requirements added since the publication of the refactored Technical Specification in June 2020.

## Business Requirements

### Clarification of Maximum Message Size

An issue was raised in the discussion forum of the FIX website (<https://forum.fixtrading.org/t/confusing-maxmessagesize-383-in-the-fixt-online-technical-standard-june-2020/15228>). The description of the usage of MaxMessageSize(383) in the Chapter 4.3 *Establishing a FIX connection* is apparently ambiguous and should be clarified.

The initiator and acceptor may specify the maximum message size supported in the MaxMessageSize(383) field in the Logon(35=A) message.

Either peer may terminate a FIX connection due to inability to process the maximum message size specified by the other peer by sending a Logout(35=5) message.

The peer terminating the FIX connection should specify the reason in the Text(58) field of the Logout(35=5) message by setting it to “MaxMessageSize(383)=InboundValue exceeds maximum message size of maximum message size”.

Specifically, it created the impression that MaxMessageSize(383) may have to be identical for both peers of a FIX connection. This is not the case. The following text is proposed to replace the description in Chapter 4.3.6 *Maximum message size*.

The maximum message length in octets that the FIX session processor (initiator) is able to receive may be specified in the MaxMessageSize(383) field in the Logon(35=A) message sent to the peer (acceptor). The MaxMessageSize(383) value may be used to control message fragmentation at the application layer for those application messages that support fragmentation.

The acceptor may terminate the FIX session if the MaxMessageSize(383) received from the initiator is not sufficient. Termination should occur by sending a Logout(35=5) message and setting the Text(58) field to “MaxMessageSize(383) = InboundValue < required message size M” (where InboundValue is the value received from the initiator and M is the value required by the acceptor).

The values for MaxMessageSize(383) may be different between peers. If the value received from the initiator is sufficient for the acceptor then the acceptor responds with a Logon(35=A) message and can use the MaxMessageSize(383) field to specify the maximum message length in octets that the acceptor is able to receive. This value may be different from the value previously sent by the initiator. The initiator may then terminate the FIX session as described above if the MaxMessageSize(383) received from the acceptor is not sufficient.

## Technical Requirements

NONE

# Issues and Discussion Points

## Resolved Issues

Issues were tracked in GitHub. These issues were resolved and accepted for the Errata version Nov 2020. See [issues](https://github.com/FIXTradingCommunity/fix-simple-binary-encoding/issues) and [pull requests](https://github.com/FIXTradingCommunity/fix-simple-binary-encoding/pulls) in GitHub for details and changes.

|  |  |
| --- | --- |
| Issue | Description |
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## Compatibility

FIX Session Layer with Errata November 2020 is fully interoperable with the refactored Technical Specification for the FIX Session Layer published in June 2020.

# References

|  |  |  |  |
| --- | --- | --- | --- |
| **Reference** | **Version** | **Relevance** | **Normative** |
| [FIX Session Layer Technical Specification](https://www.fixtrading.org/standards/fix-session-layer-online/) | June 2020 | Previous specification of refactored FIX Session Layer. | Yes |
| [FIX Session Layer Test Cases](https://www.fixtrading.org/standards/fix-session-testcases-online/) | June 2020 | Test cases for the FIX Session Layer supporting session profiles FIX.4.2, FIX4, FIXT, and LFIXT. | Yes |
| [FIX Transport (FIXT) V1.1 Errata – Technical Standard](https://www.fixtrading.org/packages/fixt-1-1-specification-documents-pdf/) | March 2008 | Previous specification of FIX Session Layer for FIX Specification Version 5.0. | Yes |
| GitHub project  [FIXTradingCommunity/fix-session-layer-standards](https://github.com/FIXTradingCommunity/fix-session-layer-standards) |  | Final specifications as well as working drafts and issue tracking. |  |

# Relevant and Related Standards

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| --- | --- | --- | --- | --- |
| **Related Standard** | **Version** | **Reference location** | **Relationship** | **Normative** |
| None |  |  |  |  |
|  |  |  |  |  |

# Intellectual Property Disclosure

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| --- | --- | --- | --- |
| **Related Intellection Property** | **Type of IP**  **(copyright, patent)** | **IP Owner** | **Relationship to proposed standard** |
| None |  |  |  |
|  |  |  |  |

# Definitions

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| --- | --- |
| **Term** | **Definition** |
|  |  |
|  |  |

# Technical Standard: FIX Session Layer

## Specification

Full specification for the FIX Session Layer is available in a separate document (*FIX Session Layer Technical Specification with Errata Nov 2020*). The standard defines session layer messages and workflows. The document is a snapshot of drafts now being developed in GitHub project

[FIXTradingCommunity](https://github.com/FIXTradingCommunity/fix-session-layer-standards)[/fix-session-layer-standards](https://github.com/FIXTradingCommunity/fix-simple-binary-encoding) (non-public).

# Appendix A - Usage Examples

Examples are provided in the specification document.

# Appendix B – Compliance Strategy

## Compliance Test Suite

The FIX technical standard process requires that to be promoted to final specification, a draft standard must have at least two interoperable implementations. A compliance test suite ([*FIX Session Layer Test Cases*](https://www.fixtrading.org/standards/fix-session-testcases-online/)) was published together with the specification in June 2020.