

FIX Antenna Java JMX MBean reference

- [FIXEngineMBean](#)
- [FIXServerProviderMBean](#)
- [InitiatorFIXSessionProviderMBean](#)
- [AcceptorFIXSessionProviderMBean](#)

FIXEngineMBean

FIXEngineMBean provides generic functionality for engine and session creation.

MBean Details

| | |
|--------------------|-----------------------------------|
| Object Name | com.epam.fixengine:type=FIXEngine |
| Instances Per Node | 1 |

Operations:

| Name | Description | Signature | Return Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|--|--|-------------|-------------|----|--------|------------------------|--------------|--------|------------------|-------------|--------|-----------------|------------------|--------|-----------------------|--------------|--------|------------------|-------------|--------|-----------------|------------------|--------|-----------------------|------------------|--------|-------------------------------|------------|--------|---|-------------|--------|--|-----|---------|--------------------|------------|--------|-----------------------------------|------------|---------|------------------------------------|----------|--------|---------------|----------|--------|---------------|-------------|--------|--------------------------------------|----------|---------|-------------------------------------|-----------|---------|-------------------------------------|---------------|----------------|--|---------------|---------|
| createInitiator | <p>Create and register initiator FIX session.</p> <p>Return true in operation is successful.</p> <p>CompositeData should include next values (see more SessionParameters):</p> <table border="1"><thead><tr><th>Field name</th><th>Type</th><th>Description</th></tr></thead><tbody><tr><td>id</td><td>String</td><td>FIX session identifier</td></tr><tr><td>senderCompld</td><td>String</td><td>SenderCompld(49)</td></tr><tr><td>senderSubId</td><td>String</td><td>SenderSubId(50)</td></tr><tr><td>senderLocationId</td><td>String</td><td>SenderLocationId(142)</td></tr><tr><td>targetCompld</td><td>String</td><td>TargetCompld(56)</td></tr><tr><td>targetSubId</td><td>String</td><td>TargetSubId(57)</td></tr><tr><td>targetLocationId</td><td>String</td><td>TargetLocationId(143)</td></tr><tr><td>sessionQualifier</td><td>String</td><td>Additional session identifier</td></tr><tr><td>fixVersion</td><td>String</td><td>A version of FIX protocol for session level</td></tr><tr><td>applVersion</td><td>String</td><td>A version of FIX protocol for application level (for FIXT.1.1)</td></tr><tr><td>hbi</td><td>Integer</td><td>Heartbeat interval</td></tr><tr><td>remoteHost</td><td>String</td><td>Address of remote host to connect</td></tr><tr><td>remotePort</td><td>Integer</td><td>A port on a remote host to connect</td></tr><tr><td>username</td><td>String</td><td>Username(553)</td></tr><tr><td>password</td><td>String</td><td>Password(554)</td></tr><tr><td>customLogon</td><td>String</td><td>Additional tags for Logon(a) message</td></tr><tr><td>inSeqNum</td><td>Integer</td><td>An initial incoming sequence number</td></tr><tr><td>outSeqNum</td><td>Integer</td><td>An initial outgoing sequence number</td></tr><tr><td>configuration</td><td>Composite Data</td><td>Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html</td></tr></tbody></table> | Field name | Type | Description | id | String | FIX session identifier | senderCompld | String | SenderCompld(49) | senderSubId | String | SenderSubId(50) | senderLocationId | String | SenderLocationId(142) | targetCompld | String | TargetCompld(56) | targetSubId | String | TargetSubId(57) | targetLocationId | String | TargetLocationId(143) | sessionQualifier | String | Additional session identifier | fixVersion | String | A version of FIX protocol for session level | applVersion | String | A version of FIX protocol for application level (for FIXT.1.1) | hbi | Integer | Heartbeat interval | remoteHost | String | Address of remote host to connect | remotePort | Integer | A port on a remote host to connect | username | String | Username(553) | password | String | Password(554) | customLogon | String | Additional tags for Logon(a) message | inSeqNum | Integer | An initial incoming sequence number | outSeqNum | Integer | An initial outgoing sequence number | configuration | Composite Data | Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | CompositeData | boolean |
| Field name | Type | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| id | String | FIX session identifier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderCompld | String | SenderCompld(49) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderSubId | String | SenderSubId(50) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderLocationId | String | SenderLocationId(142) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetCompld | String | TargetCompld(56) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetSubId | String | TargetSubId(57) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetLocationId | String | TargetLocationId(143) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sessionQualifier | String | Additional session identifier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| fixVersion | String | A version of FIX protocol for session level | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| applVersion | String | A version of FIX protocol for application level (for FIXT.1.1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| hbi | Integer | Heartbeat interval | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| remoteHost | String | Address of remote host to connect | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| remotePort | Integer | A port on a remote host to connect | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| username | String | Username(553) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| password | String | Password(554) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| customLogon | String | Additional tags for Logon(a) message | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inSeqNum | Integer | An initial incoming sequence number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| outSeqNum | Integer | An initial outgoing sequence number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| configuration | Composite Data | Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| createAcceptor | <p>Create and register initiator FIX session.</p> <p>Return true in operation is successful.</p> <p>CompositeData should include next values (see more SessionParameters):</p> <table border="1" data-bbox="282 300 1255 1167"> <thead> <tr> <th>Field name</th> <th>Type</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>id</td> <td>String</td> <td>FIX session identifier</td> </tr> <tr> <td>senderCompld</td> <td>String</td> <td>SenderCompld(49)</td> </tr> <tr> <td>senderSubId</td> <td>String</td> <td>SenderSubId(50)</td> </tr> <tr> <td>senderLocationId</td> <td>String</td> <td>SenderLocationId(142)</td> </tr> <tr> <td>targetCompld</td> <td>String</td> <td>TargetCompld(56)</td> </tr> <tr> <td>targetSubId</td> <td>String</td> <td>TargetSubId(57)</td> </tr> <tr> <td>targetLocationId</td> <td>String</td> <td>TargetLocationId(143)</td> </tr> <tr> <td>sessionQualifier</td> <td>String</td> <td>Additional session indentificator</td> </tr> <tr> <td>fixVersion</td> <td>String</td> <td>A version of FIX protocol for session level</td> </tr> <tr> <td>appVersion</td> <td>String</td> <td>A version of FIX protocol for applicaion level (for FIXT.1.1)</td> </tr> <tr> <td>hbi</td> <td>Integer</td> <td>Heartbeat inteval</td> </tr> <tr> <td>username</td> <td>String</td> <td>Username(553)</td> </tr> <tr> <td>password</td> <td>String</td> <td>Password(554)</td> </tr> <tr> <td>customLogon</td> <td>String</td> <td>Additional tags for Logon(a) message</td> </tr> <tr> <td>inSeqNum</td> <td>Integer</td> <td>An initial incoming sequence number</td> </tr> <tr> <td>outSeqNum</td> <td>Integer</td> <td>An initial outgoing sequence number</td> </tr> <tr> <td>configuration</td> <td>Composite Data</td> <td>Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html</td> </tr> </tbody> </table> | Field name | Type | Description | id | String | FIX session identifier | senderCompld | String | SenderCompld(49) | senderSubId | String | SenderSubId(50) | senderLocationId | String | SenderLocationId(142) | targetCompld | String | TargetCompld(56) | targetSubId | String | TargetSubId(57) | targetLocationId | String | TargetLocationId(143) | sessionQualifier | String | Additional session indentificator | fixVersion | String | A version of FIX protocol for session level | appVersion | String | A version of FIX protocol for applicaion level (for FIXT.1.1) | hbi | Integer | Heartbeat inteval | username | String | Username(553) | password | String | Password(554) | customLogon | String | Additional tags for Logon(a) message | inSeqNum | Integer | An initial incoming sequence number | outSeqNum | Integer | An initial outgoing sequence number | configuration | Composite Data | Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | CompositeData | boolean |
|------------------|--|--|---------|-------------|----|--------|------------------------|--------------|--------|------------------|-------------|--------|-----------------|------------------|--------|-----------------------|--------------|--------|------------------|-------------|--------|-----------------|------------------|--------|-----------------------|------------------|--------|-----------------------------------|------------|--------|---|------------|--------|---|-----|---------|-------------------|----------|--------|---------------|----------|--------|---------------|-------------|--------|--------------------------------------|----------|---------|-------------------------------------|-----------|---------|-------------------------------------|---------------|----------------|--|---------------|---------|
| Field name | Type | Description | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| id | String | FIX session identifier | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderCompld | String | SenderCompld(49) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderSubId | String | SenderSubId(50) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| senderLocationId | String | SenderLocationId(142) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetCompld | String | TargetCompld(56) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetSubId | String | TargetSubId(57) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| targetLocationId | String | TargetLocationId(143) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sessionQualifier | String | Additional session indentificator | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| fixVersion | String | A version of FIX protocol for session level | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| appVersion | String | A version of FIX protocol for applicaion level (for FIXT.1.1) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| hbi | Integer | Heartbeat inteval | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| username | String | Username(553) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| password | String | Password(554) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| customLogon | String | Additional tags for Logon(a) message | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| inSeqNum | Integer | An initial incoming sequence number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| outSeqNum | Integer | An initial outgoing sequence number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| configuration | Composite Data | Full list of options are described in the documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| deleteAll | <p>Disconnect and delete all active sessions.</p> <p>Return true in operation is successful.</p> | (no parameters) | boolean | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

FIXServerProviderMBean

FIXServerProviderMBean allows FIXServer management and provides notification about its state.

MBean Details

| | |
|--------------------|---|
| Object Name | com.epam.fixengine:type=FIXServer,name=FIXServer-<listening_port> |
| Instances Per Node | 0..N |

Attributes:

| Name | Description | Type | R/W |
|--------|--|---------------|-----|
| ports | Listening ports | List<Integer> | R |
| status | Current server status. Possible values: <ul style="list-style-type: none"> STOPPED STARTED | String | R |

Operations:

| Name | Description | Signature | Return Type |
|-------|--|-----------------|-------------|
| start | Start this FIX server. Server start listening for incoming connections. Return true if operation is successful. | (no parameters) | boolean |
| stop | Stop this FIX server. Server stop listening for incoming connections. Return true if operation is successful. | (no parameters) | boolean |

Notifications:

| Event | Description | Notification Type | Attribute Type | Attribute Name |
|-----------------------|---|-----------------------------|----------------|----------------|
| Server status changed | Whenever server status is changed (servers started or stopped) it sends notification. | AttributeChangeNotification | String | status |

InitiatorFIXSessionProviderMBean

InitiatorFIXSessionProviderMBean provides instruments for initiator session monitoring and management.

MBean Details

| | |
|--------------------|--|
| Object Name | com.epam.fixengine:type=FIXSession,subtype=initiator,name=<session_id> |
| Instances Per Node | 0..N |

Attributes:

| Name | Description | Type | R/W |
|------------------|--|--------|-----|
| id | Unique FIX session identifier | String | R |
| senderCompId | SenderCompID (49) tag value for this session | String | R |
| senderSubId | SenderSubID (50) tag value for this session | String | R |
| senderLocationId | SenderLocationID (142) tag value for this session | String | R |
| targetCompId | TargetCompID (56) tag value for this session | String | R |
| targetSubId | TargetSubID (47) tag value for this session | String | R |
| targetLocationId | TargetLocationID (143) tag value for this session | String | R |
| sessionQualifier | Extra session identifier | String | R |
| fixVersion | FIX protocol version | String | R |
| appVersion | Application version of FIX protocol | String | R |
| hbi | Heartbeat interval size | int | R |
| remoteHost | Remote host to connect | String | R/W |
| remotePort | Remote port to connect | int | R/W |
| inSeqNum | Current incoming sequence number | long | R/W |
| outSeqNum | Current outgoing sequence number | long | R/W |
| customLogon | Additional fields for outgoing Logon(A) message | String | R/W |
| encryptMethod | Encryption method type: <ul style="list-style-type: none"> NONE PKCS DES PKCS_DES PGP_DES PGP_DES_MD5 PEM_DES_MD5 | String | R |

| | | | |
|---------------|---|---------------|---|
| clientType | FIX session type: <ul style="list-style-type: none"> • GENERIC • CME_ILINK | String | R |
| status | Original session status | String | R |
| statusGroup | Unified session status. Possible values: <ul style="list-style-type: none"> • DISCONNECTED • CONNECTING • RECONNECTING • ESTABLISHED • PLANNED | String | R |
| backupState | Indicate which connection parameters are active. Possible values: <ul style="list-style-type: none"> • PRIMARY • BACKUP | String | R |
| configuration | Full list of options are described in documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | CompositeData | R |

Operations:

| Name | Description | Signature | Return Type |
|-----------------|--|----------------------|-------------|
| stop | Disconnect current FIX session. Return true if operation is successful. | String reason | boolean |
| delete | Remove current FIX session. Return true if operation is successful. | (no parameters) | boolean |
| resetSeqNum | Reset session sequence number (force seqnum reset logon). Return true if operation is successful. | (no parameters) | boolean |
| sendHeartbeat | Send Heartbeat(0) message. Return true if operation is successful. | (no parameters) | boolean |
| sendTestRequest | Send TestRequest(1) message. Return true if operation is successful. | String testRequestId | boolean |
| send | Send any custom FIX message (SOH should be included). Return true if operation is successful. | String fixMessage | boolean |

Notifications:

| Event | Description | Notification Type | Attribute Type | Attribute Name |
|-----------------------------|---|-----------------------------|----------------|----------------|
| Session statusGroup changed | Whenever session status group is changed it sends notification. Notification isn't sent if the session status changes within a same status group. | AttributeChangeNotification | String | statusGroup |
| Session status changed | Whenever session status is changed (servers started or stopped) it sends notification. | AttributeChangeNotification | String | status |

AcceptorFIXSessionProviderMBean

FIXAcceptorSessionMBean provides instruments for initiator session monitoring and management.

MBean Details

| | |
|--------------------|---|
| Object Name | com.epam.fixengine:type=FIXSession,subtype=acceptor,name=<session_id> |
| Instances Per Node | 0..N |

Attributes:

| Name | Description | Type | R/W |
|------------------|--|---------------|-----|
| id | Unique FIX session identifier | String | R |
| senderCompld | SenderComplID (49) tag value for this session | String | R |
| senderSubId | SenderSubID (50) tag value for this session | String | R |
| senderLocationId | SenderLocationID (142) tag value for this session | String | R |
| targetCompld | TargetComplID (56) tag value for this session | String | R |
| targetSubId | TargetSubID (47) tag value for this session | String | R |
| targetLocationId | TargetLocationID (143) tag value for this session | String | R |
| sessionQualifier | Extra session identifier | String | R |
| fixVersion | FIX protocol version | String | R |
| applVersion | Application version of FIX protocol | String | R |
| hbi | Heartbeat interval size | int | R |
| inSeqNum | Current incoming sequence number | long | R/W |
| outSeqNum | Current outgoing sequence number | long | R/W |
| customLogon | Additional fields for outgoing Logon(A) message | String | R/W |
| encryptMethod | Encryption method type: <ul style="list-style-type: none"> NONE PKCS DES PKCS_DES PGP_DES PGP_DES_MD5 PEM_DES_MD5 | String | R |
| clientType | FIX session type: <ul style="list-style-type: none"> GENERIC CME_ILINK | String | R |
| status | Original session status | String | R |
| statusGroup | Unified session status. Possible values: <ul style="list-style-type: none"> DISCONNECTED CONNECTING RECONNECTING ESTABLISHED PLANNED | String | R |
| configuration | Full list of options are described in documentation: https://corp-web.b2bits.com/FAJ_doc/fixaj-manual/page15.html | CompositeData | R |

Operations:

| Name | Description | Signature | Return Type |
|-----------------|--|----------------------|-------------|
| stop | Disconnect current FIX session. Return true if operation is successful. | String reason | boolean |
| delete | Remove current FIX session. Return true if operation is successful. | (no parameters) | boolean |
| resetSeqNum | Reset session sequence number (force seqnum reset logon). Return true if operation is successful. | (no parameters) | boolean |
| sendHeartbeat | Send Heartbeat(0) message. Return true if operation is successful. | (no parameters) | boolean |
| sendTestRequest | Send TestRequest(1) message. Return true if operation is successful. | String testRequestId | boolean |

| | | | |
|------|--|-------------------|---------|
| send | Send any custom FIX message (SOH should be included). Return true if operation is successful. | String fixMessage | boolean |
|------|--|-------------------|---------|

Notifications:

| Event | Description | Notification Type | Attribute Type | Attribute Name |
|-----------------------------|---|-----------------------------|----------------|----------------|
| Session statusGroup changed | Whenever session status group is changed it sends notification. Notification isn't sent if the session status changes within a same status group. | AttributeChangeNotification | String | statusGroup |
| Session status changed | Whenever session status is changed (servers started or stopped) it sends notification. | AttributeChangeNotification | String | status |